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Power Politics: The Political Economy of Russia's Electricity Sector Liberalization

By  
Susanne Alice Wengle

A dissertation submitted in partial satisfaction of the  
requirements for the degree of  
Doctor of Philosophy  
in  
Political Science  
in the  
Graduate Division  
of the  
University of California, Berkeley

Committee in charge:

Professor Steven Vogel, Co-Chair  
Professor Kiren Chaudhry, Co-Chair  
Professor Jason Wittenberg  
Professor Yuri Slezkine

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Power Politics: The Political Economy of Russia's Electricity Sector Liberalization

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## Abstract

### Power Politics: The Political Economy of Russia's Electricity Sector Liberalization

by

Susanne Alice Wengle

Doctor of Philosophy in Political Science

University of California, Berkeley

Professor Steven Vogel and Professor Kiren Chaudhry, Co-Chairs

This dissertation tells the story of the post-Soviet electricity system and the politics of its transformation from a ministry to a market. A core concern of the project is the process of building institutions for new markets. The aim of my research is to provide an empirically grounded analysis of how markets are constructed in the post-Soviet context. Who has been able to shape post-Soviet markets, how and why? And what does this process tell us about the emergence of market institutions more generally?

Dominant theories of state-market relations tend to regard the Russian state as captured by either oligarchs or corrupt bureaucrats: either oligarchs prevented the creation of markets, or institutions were shaped to enable rent-seeking by the most powerful oligarchs or bureaucrats. Neither approach successfully accounts for significant sub-national variation in the institutional architecture of newly created electricity markets. Many observers have also argued that with political recentralization, the Russian state has veered toward full-fledged economic re-nationalization. I find, rather, that different tiers of the Russian government have been combining market forces with state control, pursuing a developmentalist agenda that aims at integrating a more economically robust Russia into the international economy. A central aim of the dissertation is to highlight a developmental strand in Russian economic policy, which at its broadest aims to create strong domestic economic actors who can compete internationally while generating employment domestically.

The prevailing paradigm of how liberal reforms happen in Russia rests on an anemic logic: liberalizing forces in the government make concessions to opponents of reform to buy their approval. These concessions are usually considered rents, or rent-seeking opportunities. I found that during the transformation of the electricity sector interactions between the state and Russia's new private entrepreneurs followed a different logic: the government, first at the regional and later at the federal level, made concessions to opponents of full liberalization to enlist their

assistance for broader social and developmental aims, rather than to buy approval or for the narrow goal of creating rent-seeking opportunities. During the 1990s, regional governments sought to cooperate with regional oligarchs in their attempts to cushion the impact of liberal reforms emanating from Moscow. Subsequent institutional outcomes in the electricity sector resulted from President Putin's strategy to selectively grant concessions to different types of oligarchic conglomerates – with either an energy or an industrial lead-firm – in return for their contributions to the federal government's developmentalist agenda.

The dissertation considers two further elements central to the transformation of the electricity sector from ministry to market: the influence of competing experts and the legacy of Soviet-era industrial geography. Two aspects of the governments' developmental agenda shed light on each of these questions. First, international integration, a key component of the government's developmental agenda, contributed to the replacement of Soviet-era technical experts with managerial experts over the course of reforms. These new managers promised to modernize the electricity sector in a way that would further the competitiveness of electricity companies and Russia's economy more broadly, making the electricity sector legible for both domestic and international investors.

Secondly, the government's development strategies often aimed at keeping elements of the Soviet-era industrial structure intact. Even as production chains were torn apart and reassembled during the turbulent post-Soviet collapse and transition period, some elements were preserved and shaped the politics of electricity sector reforms. Depending on the industrial geography of a region, conglomerates' interests vis-à-vis the electricity sector differed across regions. Up-stream energy conglomerates and down-stream industrial producers ended up influencing the transformation of the electricity sector differently in Siberia, European Russia and the Far East, which resulted in the different ownership and subsidy regimes in the newly created electricity markets. The broader implications of these findings concern the boundaries of new "zones" of regulation that are created during liberalization. My findings suggest that the boundaries of emerging regulatory zones cannot be taken for granted: they may or may not overlap with established political boundaries, they are themselves subject to political conflicts and industrial geography is an important factor shaping new regulatory zones.

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Completing this project would not have been possible without the support of a great many colleagues, friends, family members and, of course, Russian electricity sector professionals.

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In Russia, I have benefitted greatly from the support of friends, colleagues and strangers, who volunteered their time, and shared their experience of a difficult period in Russian history. First and foremost, I am deeply grateful for the people who agreed to be interviewed for this project. Often on weekends and in their spare time, and usually over *chai*, they shared their views and experiences, and told me about their role in the transformation of the electricity system. With every detail they added an invaluable puzzle piece to my understanding of the matter. I am particularly indebted to Margarita Mezonshnik and Alexey Klaptsov, who opened countless doors, behind which I learned more about the electricity sector's transformation than anywhere else. I also thank the people who have generously opened their personal archives, i.e. their collection of newspaper articles that seemed particularly important to them, often stretching back years. In three different cities, three such personal archives produced gems that I would not have been able to locate by myself. Lasting friendships with Kostya Dyakonov, Sasha Vylegshanina, Margarita and Alexey were the reason why I always looked forward, and still do, to going back to Russia.

Last but not least, I would like to thank my parents, who have always supported me and my travels, no matter how outlandish the project, or how far-flung the destination. The dissertation is dedicated to Jay and Oren Rehm, whose contributions defy words on paper, but who are, both in their own ways, responsible for the completion of this dissertation.

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## **Chapter 1: From Ministry to Market**

1. *Introduction – “Power Politics”*
2. *Competing theoretical approaches*
3. *Four themes:*
  - *The oligarchs*
  - *The state*
  - *Ideas and interests*
  - *Center-region dynamics and liberalization*
4. *Methodology and logic of comparison*
5. *Conclusion: the Russian experience and theories of development*
6. *Overview of the dissertation*



*“Chubais wants electricity to be a purely commercial good.  
Well, it never was and it never will be.”<sup>1</sup>*

*Electricity sector economist, Khabarovsk, Oct.2007*

## **1. Introduction: “Power Politics”**

The Russian winter of 2005-2006 was the coldest in a generation. Electricity consumption nationwide rose steadily during the economic recovery after 1998. When heaters and lights were turned on all over the country in January 2006, consumption levels reached their peak since the collapse of the Soviet Union.<sup>2</sup> The electricity infrastructure strained to keep up with demand, and the media was full of reports of imminent blackouts, emergency measures, and unfortunate provincial towns left in the dark, without heat for hours and days.

The physical pressures on electricity grids in post-Soviet Russia became a metaphor for the political forces fighting for influence on the transformation of the Soviet-era electricity system. All eyes turned to UES (United Energy Systems, or *Единые Энергетические Системы*), the state-owned electricity monopoly that had been the guarantor of heat and power since the early days of Soviet Union. UES was in the midst of one of the most ambitious liberalization projects of post-Soviet history, which amounted to a monopoly orchestrating its own dissolution: privatizing power plants, creating competitive markets for electricity, and ending state control over the price of power. This transformation, pushed ahead by a group of reformers around Anatoly Chubais, was as controversial as it was ambitious. Since the mid-1990s, the future of electricity production and of exceptionally valuable power plants had been subject to fierce political battles, pitting shifting alliances against the reformers and their vision of private actors trading power on competitive markets. The threat of blackouts and surging demand for electricity in that cold winter of 2006 in particular, and in the years since 1998 more generally, served as an argument for privatization, the “only way,” it was argued, to raise vast sums needed for the technological updates and the capacity increases.

In January 2006, at the height of the winter’s cold, liberal reformers announced an ambitious investment plan to upgrade ailing Soviet-era infrastructure. It was named “*GOELRO-2*,” after the original *Plan GOELRO*, Lenin’s 1920 initiative to bring electricity to the newly created Soviet Union.<sup>3</sup> Lenin had conceived of electricity as the basis for the spread of modern industry and technology, captured in the slogan “Communism = Soviet Power + Electrification of the whole country.”<sup>4</sup> Contemporary reformers similarly stressed that electricity was a key

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<sup>1</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>2</sup> Dobruskes, *Energia Rossii*, January 2006 2006. And Associated Press, *AP Press Release*, January 19, 2008. Unlike in the US, heat in Russia is produced centrally in the same plants as electricity, so-called combined heat and power plants, rather than in individual apartments and houses.

<sup>3</sup> GOELRO stands for *Государственная комиссия по электрификации России*/State Commission for the Electrification of Russia.

<sup>4</sup> See for example in a 1920 letter by Lenin to the engineer in charge of electrification, Krizhzhanovsky, in V. I. Lenin, *O Razvitií Tiasholoi Promyshlennosti I Elektrifikazii Strany/on the Development of Heavy Industry and Electrification* (Moscow: Progress Publisher, 1972), p.49.

infrastructure sector, “the backbone” of the economy, providing a service that turns night into day.<sup>5</sup> Yet, *GOELRO-2* entailed the *privatization* of the state’s stake in the majority of the country’s power plants.<sup>6</sup> Ironically, but perhaps typical in post-Soviet politics, liberal reformers strategically mobilized Lenin’s legacy by relying on the symbolic capital imbued in turbines, grids and wires since Lenin’s era to gain support for their reform agenda.

In early 1999, an analyst remarked that UES still looked more like a ministry than a company.<sup>7</sup> Electricity production was a vertically integrated, fully state-owned monopoly, centrally orchestrated by a ministry that regulated and administered production and investment decisions. Barely ten years later, by 2008, contemporary reformers had largely succeeded in realizing their vision of change: an electricity industry with private actors competing for profits and a set of new regulatory institutions. In a country with long, cold and dark winters and energy inefficient industries, these reforms affected everyone, as the cost of living and producing were closely connected to the irrevocable reorganization of the way power is produced.<sup>8</sup>

This dissertation tells the story of the post-Soviet electricity system and the politics of its transformation from a ministry to a market. A core concern of the project is the process of building institutions for new markets. The aim of my research is to provide an empirically grounded analysis of how markets are made in the post-Soviet context. *Who has been able to shape post-Soviet markets, how and why? And what does this process tell us about the emergence of regulatory institutions more generally?* Markets have expanded as organizing principles of economic and social life during the last decades of the twentieth century, both geographically and in new spheres of life. Governments are faced with unprecedented regulatory challenges everywhere. In Russia, the government had to deal with fragmenting chains of sovereign authority and the emergence of “oligarchs,” who, especially in the Yeltsin-era, succeeded in undermining the authority of the state and its ability to regulate. Under Putin, the central government has tamed the oligarchs, but still relies on them for the realization of its promise of prosperity and wellbeing for all of Russia’s regions.

I examine the process of building institutions that underpin new markets in this context. I rely on a close observation of the transformation of Russia’s electricity sector as a lens to understand this process. Dominant theories of state-market relations see the Russian state as captured either by oligarchs or corrupt bureaucrats. Neither approach accounts for significant sub-national variation in the institutional architecture of newly created electricity markets; predicting either that oligarchs prevented the creation of markets, or that institutions were shaped to enable rent-

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<sup>5</sup> Chubais biography by Andrey Kolesnikov, *Neizvestnyi Chubais: Stranizy Is Biographii* (Moscow: Zakharov, 2003), p. 133.

<sup>6</sup> The overall sum increased over the years that GOELRO-II was discussed, up to 400 – 500 billion rubles for the period until 2030 (according to a presentation by A.V.Chubais at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007). This is a large sum, more than Gazprom, one of the world’s largest companies planned to invest over the same period. Reported in *Kommersant*, “РАО ЕЭС пересчитало источники финансирования,” February 28, 2007.

<sup>7</sup> Semenenko, I. “Electric Dreams,” *Moscow Times*, March 2, 1999. A similar statement was made to describe Dal’energo, the regional electricity company in Primorsky Krai – “it looked more like a government agency than a company for most of the 1990s.” Interview #33 with journalist covering electricity sector, Vladivostok, 20070921.

<sup>8</sup> According to Carbajo et.al. in the EU, industry typically accounts for between one third and one half of total electricity demand; in Russia, the figure is 60%, see Jose Carbajo and Steven Fries, “Restructuring Infrastructure in Transition Economies,” (London: EBRD Office of the Chief Economist, May 1997), p.7.

seeking by the most powerful oligarchs or by bureaucrats.<sup>9</sup> Many observers have also argued that with the recentralization of political authority, the Russian state has veered toward economic re-nationalization. I find, rather, that different tiers of the Russian government have been combining market forces with state control, pursuing a developmentalist agenda that aims at integrating a more economically robust Russia into the international economy.

A core aim of the dissertation is to highlight a developmental strand in Russian economic policy, which at its broadest, aims to create strong domestic economic actors, who can compete internationally and employ Russians domestically. This developmentalism has deep roots in the tradition of Soviet-era planning. At the same time, contemporary planning bears faint resemblance to that of its predecessor. It is similar to the Soviet-era in that plans are often designed centrally – for the people and regions, rather than by the people and regions. The key difference is that Russia’s development agenda today embraces market forces. It is an agenda that accepts the need for integrating domestic actors into market structures, but seeks to prevent de-industrialization, unemployment and labor migration that turns provincial cities into ghost towns. For contemporary planning, cost and prices matter in a way they did not under Soviet planning; all actors are acutely aware of domestic and international prices, of competitiveness and arbitrage. Moreover, the state is dealing with private actors closely tied to these markets, and has had to find strategies to align them with its agenda.<sup>10</sup> A few key aspects of post-Soviet developmentalism are particularly important; but before introducing them, I want to show the implications of taking seriously the developmental goals of successive governments for our understanding state-market relations in post-Soviet Russia.

The prevailing paradigm of how liberal reforms happen in Russia relies on an often quite anemic logic: liberalizing forces in the government make concessions to opponents of reform in order to “buy” their approval.<sup>11</sup> These concessions are usually considered rents, or rent-seeking opportunities. I found that the interaction between the government and Russia’s new private entrepreneurs during the transformation of the electricity sector followed a different logic: the government, first at the regional and later at the federal level, shaped the sector’s transformation by making concessions to opponents of full liberalization to *enlist* their assistance for *broader* social and developmental aims, rather than for the narrow goal of creating rent-seeking opportunities. The difference between the “buying off” and the “enlisting” logic rests on a different understanding of the government’s primary aims. I am stressing that for most of the post-Soviet period – for regional administrations under Yeltsin and for the Putin administration – the integration of a stronger Russia into international markets and preventing de-industrialization were overarching political rationales. This meant that concessions to conglomerates center

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<sup>9</sup> Predictions about how electricity sector reforms proceeded based on these approaches are discussed in more detail below.

<sup>10</sup> Chaudhry on the difficulty of for new states to regulate private actors, Kiren Chaudhry, "The Myths of the Market and the Common History of Late Developers," *Politics and Society* (1993).

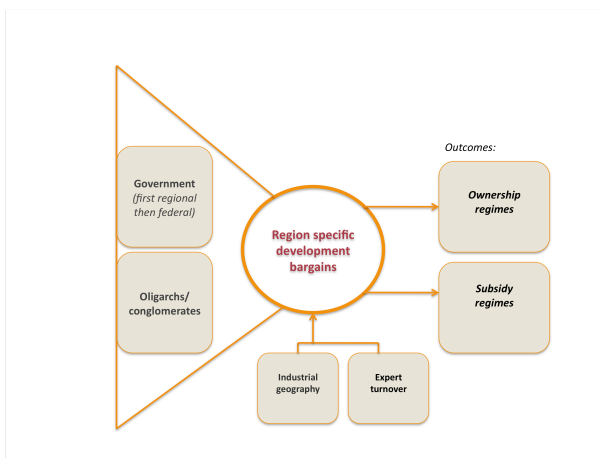
<sup>11</sup> Shleifer and Treisman argue that liberal reforms succeeded “through a combination of expropriation and cooptation of stakeholders.” Andrei Shleifer and Daniel Treisman, *Without a Map: Political Tactics and Economic Reform in Russia* (Cambridge MA: Massachusetts Institute of Technology Press, 2000), p.18.

around the conditions of their international competitiveness, and on their ability to provide employment, rather being merely the rent-seeking opportunities.<sup>12</sup>

It also means that the government was combining markets and state control, both as tools, but not ultimate ends, of economic policy. With this analytical lens, we can also explain why some elements of the sector were liberalized while others were not, something that often appears puzzling to observers intent on discerning either a dominant liberal or a statist motive. Since the state embraces both hands-on planning *and* market forces, it thus makes little sense to interpret its action as *either* the invisible hand *or* primarily a grabbing hand. More broadly, thus, highlighting developmentalism will help illuminate the Russian government’s policy of marketizing some sectors, while “re-nationalizing” others.<sup>13</sup>

In the electricity sector, cross-regional differences in the trajectory and outcome of market reforms resulted from evolving bargains between the government and Russia’s conglomerates, which were ultimately shaped by the government’s developmental agenda, rather than the predatory motives of oligarchs or bureaucrats. Key institutional outcomes – including patterns of public-private ownership and tariff regulation (which I call ownership and subsidy regimes) – were forged in such bargains. During the 1990s, regional governments sought to enlist local oligarchs in their efforts to cushion the impact of liberal reforms emanating from Moscow; they used the electricity sector as a tool to compensate new private owners for their contribution to these goals. In the most recent period, institutional outcomes in the electricity sector were the result of President Putin’s strategy to selectively grant concessions to different types of oligarchs – either energy-based or industry-based conglomerates – in return for their contribution to the federal government’s developmentalist agenda.

### *Overview: Political Economy of Russia’s Electricity Sector Liberalization*



<sup>12</sup> Etchemendy observed a similar logic in Spain: he argues that the country’s integration into the EU did not actually prioritize liberal reforms. The government combined liberal and “illiberal” policies, to strengthen “national champions.” Sebastian Etchemendy, "Models of Economic Liberalization: Compensating The "Losers" In Argentina, Spain, and Chile" (Dissertation, University of California, Berkeley, 2004).

<sup>13</sup> One of the most common question that I am asked is why is Russian liberalizing electricity, while increasing state control in other energy sectors?

What then were the main characteristics of the post-Soviet developmental agenda? First, post-Soviet developmentalism relied on state cooperation with Russia's new oligarchs and conglomerates. Conglomerates in turn relied on the state; this applied in particular to the period since the strengthening of the Russian federal government under Putin, but "good relations" with regional governors were important during the 1990s as well. In the electricity sector, this mutual dependence meant that oligarchic interests have shaped rather than impeded new market arrangements.<sup>14</sup> This claim runs counter to dominant theories of Russia's economic transformation, which typically stress the detrimental effects of oligarchic influence. My research confirms a mainstay of the post-Soviet literature – the substantial influence of large industrial conglomerates. Yet, because I focus on *how* conglomerates shaped new markets, I found it useful to analyze how various conglomerate's interests differ vis-à-vis the electricity sector, rather than relying on the stylized view of oligarchic behavior as rent-seeking. Institutional outcomes in fact depended on the influence of different types of oligarchs: energy-led conglomerates, industry-led conglomerates and electricity companies each had different aims during electricity sector reforms.

A second key element of post-Soviet development strategies was that they ultimately aimed at integrating the Russian economy into international markets. While international integration was a key goal, regional and federal administrations' views concerning the role of the state in assuring Russia's global competitiveness changed over time. Ultimately, a belief prevailed that the global competitiveness of Russian firms could not rest solely on a given company's merits, but must be furthered by specific policy interventions.<sup>15</sup> Despite this belief in "created competitiveness," the government ultimately favored private ownership of power plants and wanted to secure private investment for infrastructural updates. This dual strategy of international integration, combining state intervention with private ownership contributed to the replacement of Soviet-era technical experts with managerial experts over the course of reforms. New managers promised to modernize the electricity sector in a way that would further the competitiveness of the electricity sector and of Russia's economy more broadly. The central government under Putin thus supported Chubais' efforts to replace technical with managerial experts at the commanding heights of the electricity sector, a policy that had important consequences for the legitimacy of liberal reforms.

Thirdly, development strategies often aimed at keeping elements of the Soviet-era industrial structure intact. Especially in recent years, this also included national strategies to counteract overdependence on natural resource. Under Putin, these aims were pursued by creating "national champions," i.e. using state resources to promote key sectoral players who could employ Russians domestically and compete internationally. Focusing on national champions entailed a commitment to instilling competitiveness and modernizing *existing* industrial structures. Interestingly, this meant that elements of Soviet-era industrial geography were at least partially

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<sup>14</sup> The work by Pauline Jones-Luong has emphasized mutual dependence. Jones-Luong and Weinthal emphasize cooperation and mutual dependence of the government and the Russian oil companies after the 1998 crisis, Pauline Jones Luong and Erika Weinthal, "Contra Coercion: Russian Tax Reform, Exogenous Shocks, and Negotiated Institutional Change," *American Political Science Review* 98, no. 1 (2004).

<sup>15</sup> This view of competitiveness is not unique to post-Soviet Russia. See Gary Herrigel, *Industrial Constructions : The Sources of German Industrial Power*, *Structural Analysis in the Social Sciences*, 9 (Cambridge [England]; New York: Cambridge University Press, 1996).

maintained. One implication of this strategy was that industrial geography became an important part of the state-oligarch bargains that shaped the institutional underpinning of electricity markets. Depending on the industrial geography of a region, energy-led conglomerates and industry-led conglomerates have different physical links to the electricity sector across Russia. This is important for the story of the sector's transformation for two reasons. First, Soviet era industrial structures shaped conglomerates' interests vis-à-vis the electricity sector: "up-stream" energy conglomerates are interested in different power plants and policies than "down-stream" industrial producers. In a second step, conglomerates relied on rhetorical strategies that emphasized the importance of keeping existing structures intact in political battles with liberal reformers. Liberals were not usually in favor of preserving existing industrial structures and considered physical facts ultimately as malleable, given the right economic incentives. Stressing the "naturalness" of physical links helped conglomerates legitimize their political position, and contributed to their victories over liberal reformers

The developmental aspect of state-market bargains meant that the electricity sector's transformation did not follow one trajectory across Russia's regions. In response to weakness of the Yeltsin administration and their inability to regulate the economy from the center, President Putin and the liberal reformers in his government initially declared that they wanted to create one market, with one set of rules. The centralization of political power under Putin undercut the hold of regional governors on the electricity sector. In the electricity sector, however, the centralization did *not* led to the creation of *one* set of rules for new markets, but to the diversity of institutional outcomes evident today – an outcome that is best explained by regionally specific developmental bargains.

In very short summary, cross-regional differences in Russia's new electricity sector follow these broad patterns. (1) In European Russia, most power plants were privatized and newly liberalized pricing mechanisms enable owners to profit from investments in technological upgrades. The energy behemoth Gazprom sought this outcome; it allows the fuel provider control over income streams from domestic electricity production that is based on subsidized fuel inputs. (2) In Siberian regions, by contrast, where industrial conglomerates dominate, ownership is only partly private and pricing mechanisms allow for electricity to be sold below national market prices to industrial customers. Electricity intensive industries, aluminum companies in particular, sought this outcome because it effectively maintains a separate low-cost zone that helps to keep their production costs low, enhancing their international competitiveness. (3) In Far Eastern regions, where interests of electricity companies have outweighed both upstream fuel providers and downstream industries, generation assets have not been privatized and electricity prices remain regulated. This outcome protects Far Eastern electricity companies from low-cost Siberian competition and allows for the continuation of direct government subsidies that these companies have relied on for years.

Table 1: Ownership and Subsidy Regimes

	Electricity sector outcomes	Development bargains
<b>European Russia</b>	power plants privatized  subsidies generally decrease	Government & Gazprom (upstream energy conglomerate)
<b>Siberia</b>	power plants privatized  industrial subsidies continue	Government & Rusal (downstream industrial conglomerate)
<b>Russian Far East</b>	no privatization  subsidies continue	Government & electricity companies

A sub-argument of the dissertation is that the political centralization under Putin and the elimination of regional governors' influence on the electricity sector was a key prerequisite for the implementation of liberal reforms. Putin's strategy in the electricity sector might be summarized as "centralize to liberalize."<sup>16</sup> In the Yeltsin-era regional governors and oligarchs were the main challenges to the authority of the state, limiting its ability to regulate the economy and control the use of natural resources. In order to create and regulate new markets, the Putin government had to undercut sub-national challengers. This hypothesis is based on an over-time comparison of two reform attempts. The first attempt to reform the sector, in 1997, largely failed to effect change, while a second attempt, beginning in 2002/3, marked the beginning of the current far-reaching transformation in the sector. After the centralization of political power and the weakening of regional authorities, oligarchs continued to influence reforms but the site of the bargaining *shifted* from the regional to the federal level. The Putin government then forged various bargains with different types of oligarchs in different regions. The focus of the dissertation is directed to state-oligarch bargains at the regional level for the nineties, and to the federal level for the Putin period.

Finally, an important caveat: while this narrative stresses post-Soviet developmentalism, there were always different factions within the government and different tiers of the government, proposing and competing for different paths to secure future prosperity and international integration. A developmental agenda with the characteristics that I describe was by no means

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<sup>16</sup> I am indebted to David Woodruff's reading of Polanyi. He stresses that the creation of self-regulating markets depend on the prior concentration of economic power within the national state, eliminating authority at the sub-national level. David M. Woodruff, *Money Unmade: Barter and the Fate of Russian Capitalism* (Ithaca: Cornell University Press, 1999), p.4.

uncontested, or even at all times the dominant rationale of Russian economic policy. It was not the case that conglomerates' interests always overlapped with the government's development strategy, which my emphasis on mutual dependence might suggest. Rather, we see evolving alliances between the conglomerates and different factions and power centers, regional and federal. These alliances and compromises between different factions proved crucial for the transformation of the electricity sector. Despite factionalism and shifting alliances, I emphasize the continuity of a developmental agenda that characterized the government's position vis-à-vis the oligarchs, first of regional governors, and later of the federal government under President Putin.<sup>17</sup> No faction of the government wanted return to full state-ownership of factories and power plants, which meant that successive governments needed and relied on enterprises and private sector entrepreneurs.

What are the broader implications of these findings for comparative political economy beyond Russia? What can a single-sector study of market institutions in Russia tell us about governance of markets more generally? The electricity sector is regulatory intensive in all countries, and provides a socially and economically important infrastructure service. An institutional history of the sector may provide an optic to understand the challenges faced by other states that have relinquished their role as providers of key public services, only to be confronted with the difficulties of governing new markets and regulating private actors.<sup>18</sup>

I draw particular attention to “new geographies” of regulation. In the Russian electricity sector, I show that in the process of re-regulating, new zones of governance have emerged: economic regulation on the regional (*oblast*) level was replaced with regulation at the level of newly constituted supra-regions. An important consequence of this finding is that the scope or the “zones” of regulation cannot be taken for granted; they may or may not overlap with established political boundaries within states. The boundaries of regulatory zones are themselves subject to politics and the political dynamics of regulation shift in the process. Specifically, I address how industrial geography shaped the boundaries of emerging regulatory zones.

I show how the intricate web of power plants and factories that matured over a century continued to matter during electricity sector reforms because developmental strategies were tailored to protect at least part of the inherited industrial structures. To the extent that this is the case elsewhere, we can expect the creation of rules for electricity markets to be regionally patterned, reflecting vulnerabilities and strengths of regional industries. In other words, where liberal forces that desire *one* market with *one* set of rules fail to achieve full political victories, the subsequent compromises and sub-national regulatory regimes are likely to reflect a country's industrial geography in interesting ways. After three decades of liberalization and re-regulation, territories of economic governance have become destabilized everywhere, and such questions related to shifting boundaries of regulatory zones are likely arise in other contexts.

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<sup>17</sup> Arguing that the Russian state during the Putin era is engaged in forging new institutions, attempting to address the problems of the post-Soviet economic transformation is currently unconventional. Note, that it does not in fact conflict with the more common assessments of the Putin government's undemocratic, increasingly nationalist and even irredentist tendencies.

<sup>18</sup> Chaudhry, "The Myths of the Market and the Common History of Late Developers."



Russia's post-Soviet electricity reforms mirror a worldwide trend of states giving up their role as producers and service providers, becoming regulators of private actors instead. At the same time, reformers trying to create markets and privatize utilities in post-Soviet Russia faced particular challenges, including the following points. The Russian state had little experience as a regulator of private actors, and the institutional infrastructure was constructed with a combination of innovation and imitation. Institutions that regulate markets had to be built during an exceptionally turbulent period, marked first by a severe economic crisis and the fragmentation of sovereignty, and later by attempts to strengthen state authority during an oil boom.<sup>19</sup>

Just as in most other sectors of the Russian economy, the electricity sector was embroiled in virulent battles over property and entangled in conflicts over the course and speed of economic liberalization. Russia's electricity infrastructure was also plagued by at least a decade of serious underinvestment, as public finance dwindled to a trickle during the economic crisis of the nineties. Already reliant on energy inefficient technologies, electricity production and transmission became even more wasteful, as losses tend to increase when infrastructure ages.<sup>20</sup> The accelerating obsolescence of turbines and grids worried electricity sector insiders and upset consumers affected by outages and failing networks.<sup>21</sup> Reformers used the acute need for investment as a rationale for privatization and liberalization – “only the reforms make investment possible.”<sup>22</sup> Liberal reformers thus tended to overemphasize the need for investment – Chubais talked of an “explosion of investment needs” and “catastrophically urgent investments,”<sup>23</sup> although sector insiders knew well, that capacity bottlenecks varied hugely across regions.<sup>24</sup>

Finally, the Russian electricity sector reforms have been particularly embattled precisely because the Unified Electricity System was more than a collection of turbines and grids. More than simply “one of the big achievements of the Soviet Union,”<sup>25</sup> it also embodied key norms and standards of the Soviet order -- norms hard-wired in the physical infrastructure. As some elements of the physical infrastructure were preserved even as the sector was re-ordered, these norms, too, continued to exist. Other elements proved malleable and were readily transformed

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<sup>19</sup> Institutions are never built from scratch, instead they are built on existing institutional legacies. See David Stark and Laszlo Bruszt, *Postsocialist Pathways: Transforming Politics and Property in East Central Europe* (Cambridge: Cambridge University Press, 1998).

<sup>20</sup> “Assets are very depreciated,” noted one expert, interview #1 with electricity sector expert at an international financial institution, Moscow, 20060721.

<sup>21</sup> References to underinvestment, accelerating obsolescence and aging are abound. For Siberia, for example, *Материалы к энергетической стратегии сивури*, Siberian Section of the Russian Academy of Sciences, Novosibirsk, 1997, chapter 7, pp.79; or *Основные проблемы и направления обеспечения энергетической безопасности*, Siberian Section of the Russian Academy of Sciences, Irkutsk 2001, p.19. For the Far East, this was mentioned in interview #32 with electricity sector economist, Vladivostok, 20070918: “there was no investment in the Far Eastern electricity sector for 15 years.”

<sup>22</sup> Remark by Chubais at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007.

<sup>23</sup> Ibid.

<sup>24</sup> While generation capacity was strained in Moscow, this was not the case Primorsky Krai. This cross-regional variation was mentioned, for example, in interview #7 with electricity sector expert at financial institution, Moscow, 20061005. There is also the additional point that the electricity companies could have increased debt, rather than sell equity, as they generally had a very low debt/equity ratio. “From a corporate finance perspective, debt would make more sense,” interview #23 with electricity sector expert at international financial institution, Moscow, 20070210. See chapter 3 for details.

<sup>25</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

during the post-Soviet period. The dissertation provides an account of this transformation, in which some elements of the physical infrastructure came undone while others proved resilient and were “recombined.” In documenting a particular instance of this heterogeneous change, the dissertation finally addresses debates about the importance of “legacies”, which have preoccupied the literature on post-Soviet countries. I show how “memories” of Soviet-era norms reasserted themselves -- the memories of economic planning, of political decisions, of technological achievements, and most broadly, memories of modernity and humanity. Based on these observations, I conclude that the discursive mobilization of legacies and of memories of Soviet-era norms might be important factors shaping post-Soviet outcomes.

## **2. Competing theoretical approaches**

At its broadest, this dissertation traces the creation of a set of rules for new markets. A solid consensus has emerged in the political economy literature that markets cannot function without institutions – the “rules of the game” – and that institutional arrangements hold the key for economic growth.<sup>26</sup> The experience of post-Soviet countries has done much to confirm the axiom that economic development is essentially an institutional transformation, first formulated by Douglass North.<sup>27</sup> What are the existing theoretical approaches to institutional change and how do new institutions emerge? In particular, what is our understanding of this process for *regulatory institutions* that underpin markets? In studies on Western Europe, differences in institutional outcomes are often the explanatory variables, accounting for variation in growth rates and innovation across regions.<sup>28</sup> It is by now well recognized that the creation of regulatory institutions outside the industrialized West does not follow the trajectory of advanced industrial countries, but research on place- and sector-specific market institutions in these contexts is still scarce. In Russia, institutions have been changing dramatically over the last fifteen years and looking at institutions *as outcomes* has been identified as a priority.<sup>29</sup>

The literature on post-Soviet economies has often either stressed the absence of structural reforms and institutional changes (*reform framework*), or viewed institutional reform as having been captured by oligarchic interests (*capture framework*).<sup>30</sup> The intellectual heritage of the

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<sup>26</sup> For the post-Soviet context see, for example, Alice Amsden, Jacek Kochaniwicz, Lance Taylor, *The Market Meets Its Match: Restructuring the Economies of Eastern Europe* (Cambridge MA: Harvard University Press, 1998) or Joseph Stiglitz, "Who Lost Russia?," in *Globalization and Its Discontents* (New York: W.W.Norton, 2003). More generally, this is a widely accepted argument. According to Rodrik there is now a widespread agreement that “institutional quality holds the key to prevailing patterns of prosperity around the world” Dani Rodrik, *One Economics - Many Recipes* (New Haven: Princeton, 2007), p.184.

<sup>27</sup> Douglass North, *Structure and Change in Economic History* (New York: Norton, 1981), Douglass North, *Institutions, Institutional Change and Economic Performance* (Cambridge: University Press, 1990).

<sup>28</sup> John Zysman’s work is one among many examples, see John Zysman, "Building on the Past, Imagining the Future: Competency Based Growth Strategies in a Global Digital Age," in *Brie Working Paper # 181* (Berkeley Roundtable on the International Economy, 2007). There are fewer examples in the post-Soviet literature. Barnes examines how changing institutional frameworks condition the struggles for post-Soviet property in the last fifteen years, Andrew Barnes, *Owning Russia: The Struggle over Factories, Farms and Power* (Ithaca: Cornell, 2006).

<sup>29</sup> See for example Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*, p.494. Hanson also points out that the post-Soviet context is a unique opportunity to study the origin of institutional arrangements; see Philip Hanson, "The Russian Economic Recovery: Do Four Years of Growth Tell Us That the Fundamentals Have Changed?," *Europe-Asia Studies* 55, no. 3 (2003).

<sup>30</sup> See for example Gaddy and Ickes for a prominent opinion about the absence of reforms: Clifford and Barry Ickes Gaddy, "Russia's Virtual Economy," *Foreign Affairs* 77, no. 5 (1998). See Hellman for the primary source on

reform framework dates to the early 1990s, and was based on the then widespread belief that markets arise naturally, as functional solutions to transaction cost problems. As markets did not develop equally “well” across post-Socialist economies, the research in the reform framework turned to measuring degrees of progress and identifying obstacles in the way of reforms.<sup>31</sup> I find that both approaches tend to underestimate the extent of structural and institutional change that has taken place over the last decade, and the extent to which functioning markets have been created in recent years. Both approaches also lack the analytical tools necessary to distinguish between different actors’ interests, and fail to identify the *types* of influence behind institutional change. They also cannot account for the variation of influence of private actors across sectors and regions. A smaller set of contributions to the post-Soviet political economy literature documents the emergence of institutions in a particular historical, political and social context, drawing on the tools of economic sociology (*sociological approaches*).<sup>32</sup> These theoretical points are discussed in more detail below, in the discussions of the main themes of the dissertation.

The literature on the institutional foundations of development more generally – outside a particular geographical region – is large and diverse. Yet a number of prominent tendencies have led this literature to neglect interesting perspectives. Institutional analyses sometimes tend to implicitly or explicitly distinguish between “good” and “bad” institutions.<sup>33</sup> Analyses of particular country cases often end up being prescriptive, with a focus on how institutions *should* look.<sup>34</sup> Drawing these kinds of conclusions is not the aim of my study, partly because it is too early to determine which set of institutions will ultimately increase economic welfare in the sector and beyond. More importantly, I chose another mode of analysis because I concur with the growing group of observers who note that there is no single superior institutional design irrespective of context.<sup>35</sup> Furthermore, research on the institutional foundations of development

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capture: Joel Hellman, "Winners Take All: The Politics of Partial Reform in Postcommunist Transitions," *World Politics* 50 (1998). Further sources follow in the discussion below.

<sup>31</sup> Studies that measure the degree of progress were often based on the transition scores published by the EBRD (European Bank for Reconstruction and Development). These cross-national measures, published annually provided scholars with a convenient tool to compare how far a country had come in its transition.

<sup>32</sup> Woodruff, *Money Unmade*, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*., Juliet Johnson, *A Fistful of Rubles: The Rise and Fall of the Russian Banking System*, ed. Cornell University (Ithaca: Cornell University, 2000), Jessica Allina-Pisano, *The Post-Soviet Potemkin Village: Politics and Property Rights in the Black Earth* (Cambridge: Cambridge University Press, 2008).

<sup>33</sup> See for example work on federalism that distinguishes between market-preserving federalism and federalism detrimental to markets, Rui deFigueiredo and Barry Weingast, "Pathologies of Federalism, Russian Style: Political Institutions and Economic Transition," in *Conference on "Fiscal Federalism in the Russian Federation," Higher School of Economics* (Moscow: 2002), [www.faculty.haas.berkeley.edu/rui/mpfrussia.pdf](http://www.faculty.haas.berkeley.edu/rui/mpfrussia.pdf). The distinction used by the World Bank is institutions compatible or incompatible with incentives for entrepreneurs. World Bank, *World Development Report 1997* (1997), p.31.

<sup>34</sup> For an example on the electricity sector, see World Bank, "Power for Development: A Review of the World Bank Group's Experience with Private Participation in the Electricity Sector World Bank Operations Evaluation Department," (Washington 2003).

<sup>35</sup> Rodrik, *One Economics - Many Recipes*, p.190. On the difficulties with “institutional transplants,” see also Gerard Roland, "The Political Economy of Transition," *Journal of Economic Perspective* 10, no. 1 (2002). On institutional borrowing and imitation see Wade Jacoby, "Inspiration, Coalition, and Substitution: External Influences on Postcommunist Transformations," *World Politics* 58, no. 4 (2006).

has tended to focus on property rights.<sup>36</sup> These studies provide information on how secure investors perceive their assets to be, but little on *how* particular institutions actually provide security.<sup>37</sup> Arguably, research on “how” institutions emerge and function is more important, since there are as many ways to regulate an industry, as there are experts in the field. In-depth analyses of how market institutions change as a result of liberalization and globalization are still the exception, especially in developing and transition contexts.<sup>38</sup>

My research on the creation of institutions in the electricity sector draws on economic sociology. To contextualize the creation of market institutions in time and space, I propose an approach that focuses on the political battles surrounding the creation of markets. It tries to bridge the gap between economic sociology and the developmental state literature in an effort to offer an alternative perspective to the theoretical framework currently dominating the field of post-Soviet studies.<sup>39</sup> Following a Polanyian logic, a political approach to market making embodies the key assumption that markets are man-made and socially constructed institutions. Instead of “fixing” the state and firms as actors with a given set of motivations,<sup>40</sup> the aim of my research is to explore how institutional change results from bargains between political and social actors that evolve over time and differ across space. Understanding a particular institutional outcome requires tracing the history of that institution’s making and its makers.

Before previewing the dissertation’s narrative, I want to briefly address two other sets of theoretical arguments that have informed discussions of liberalization: one concerning the role of international organizations, another that emphasizes domestic electoral competition. Unlike the

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<sup>36</sup> Clarke points out that these institutions are particularly important for foreign investors, but argues that there many other important institutions that warrant analyses: Simon Clarke, *The Development of Capitalism in Russia* (New York: Routledge, 2007), p.19.

<sup>37</sup> Rodrik, *One Economics - Many Recipes*. This kind of research is based on surveys of foreign and domestic investors, which is why it measures perception rather than the actual workings of institutions. Rodrik also argues that different types of institutions secure property rights.

<sup>38</sup> This kind of approach has been used for the institutions advanced industrialized countries (see for example Steven Vogel, *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*, (Cornell University Press, 1996). Some recent studies on how changes in global production networks affect states and institutions (*production networks literature*) have begun to confront these problems. For an overview and for how this literature is different from the Varieties of Capitalism literature, see Gary Gereffi, "The Global Economy: Organization, Governance and Development," in *The Handbook of Economic Sociology*, ed. Richard Swedberg (Princeton: Princeton University Press, 2005).

<sup>39</sup> I am referring in particular to the economic sociology that is based on the classical formulation by Karl Polanyi’s account of how states make markets; see for example, Peter Evans, *Embedded Autonomy: States and Industrial Transformation* (Princeton: Princeton University Press, 1995); Fred Block and Peter Evans, "The State and the Economy," in *The Handbook of Economic Sociology*, ed. Richard Swedberg (Princeton: Princeton University Press, 2005).; Neil Fligstein, *The Architecture of Markets: An Economic Sociology of Twenty-First Century Capitalist Societies* (Princeton: Princeton University Press, 2001), Charles Sabel, "Flexible Specialisation and the Re-Emergence of Regional Economies," in *The Post-Fordism Reader*, ed. Ash Amin (Oxford: Blackwell, 1994).

<sup>40</sup> Mostly motivations are fixed as seeking rents and undermining markets or reducing transaction costs and building institutions. One of the most prominent post-Soviet texts that place rent-seeking firms and bureaucrats center stage are Anders Aslund, *Building Capitalism: The Transformation of the Former Soviet Bloc* (Cambridge: Cambridge University Press, 2002), — — —, *How Capitalism Was Built: The Transformation of Central and Eastern Europe, Russia, and Central Asia* (New York: Cambridge University Press, 2007). See also Andrei Shleifer and Robert W. Vishny, *The Grabbing Hand: Government Pathologies and Their Cures* (Cambridge, MA: Harvard University Press, 1998). Seeing the state as a result of private actors seeking to reduce transaction cost war originally formulated by North (see North, *Institutions, Institutional Change and Economic Performance*.)

“capture” and the “predatory state” hypotheses, these arguments were formulated based on liberalization trajectories outside the post-Soviet space. The role of international organizations and IFIs have been singled out as important factors to explain the trajectory of institutional transformation in Eastern Europe, in particular the role of the European Union and its influence on accession countries leading up to EU enlargement.<sup>41</sup> As Russia is not part of this process, the EU’s role in Russia’s post-Soviet transformation is much smaller than in Eastern Europe. The World Bank, the IMF, the EBRD and foreign consultancies did have some influence during the planning of electricity reforms in the 1990s and provided support for the reform team at UES.<sup>42</sup> The WTO accession negotiations also repeatedly put pressure on the federal government to end subsidies and liberalize the sector.<sup>43</sup> The role of these international institutions generally declined during the Putin period, however, when rising oil prices freed Russia from reliance on international lenders. Their influence also fails to account for cross-regional variation, as they backed the liberal faction of the Putin government that advocated “one set of rules” to govern all of Russia.

The literature on market reforms in Latin America is shaped by the region’s dual transition, in which political democratization accompanied privatization and liberalization. This research examines how new social and political actors shaped liberalization pathways and how this, in turn, affected the redistribution of costs and benefits of liberalization. Electoral competition and partisan politics seem to be the decisive political dynamics, and parties, organized labor and even civil society organizations have shaped the process of re-regulation.<sup>44</sup> While Russia’s transition was initially accompanied by political democratization and some key institutions of representative democracy were created in the early 1990s, they soon proved to be weak and were undermined during the recentralization of political authority under Putin. In addition to the weakened communist successor party, two parties continue to exist as a “shadow” opposition –

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<sup>41</sup> The role of the EU, see the work of Wade Jacoby (for example, Jacoby, "Inspiration, Coalition, and Substitution: External Influences on Postcommunist Transformations.") and Milada Anna Vachudova, *Europe Undivided : Democracy, Leverage, and Integration after Communism* (Oxford; New York: Oxford University Press, 2005), Wade Jacoby, "The Imitation-Innovation Trade-Off: Does "Borrowing Dull the Edge of Husbandry"?", *Comparative Political Studies* 34, no. 3 (2001). The role of IOs/IFIs on liberalization more generally is large and diverse, see for example Bruce Kogut, Nancy Brune, and Geoffrey Garrett, "The Imf and the Global Spread of Privatization," *IMF staff papers* 51, no. 2 (2004).

<sup>42</sup> In fact, a later influential advisory committee to the board on reform matters was initially established as a condition for an EBRD loan, interview #1 with electricity sector expert at an international financial institution, Moscow, 20060721. The EBRD reform committee set up, ended up being an “important organ,” was mentioned in interview #11 with electricity sector expert, Moscow, 20061018. The role of foreign consultancies was discussed in interview #16 with electricity sector consultant, Moscow/phone, 20061030; consultancies were also mentioned in interview #57 with electricity sector economist, Irkutsk, 20071122.

<sup>43</sup> This was mentioned for example, in interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>44</sup> Snyder’s work on the different pathways of re-regulation of Mexico’s coffee sector examines the conditions under which civil society actors can play a role, see Richard Snyder, "After Neoliberalism: The Politics of Reregulation in Mexico," *World Politics* 51, no. 2 (1999), — — —, "Politics after Neoliberalism Reregulation in Mexico," Cambridge University Press. Murillo stresses the role of electoral competition and partisan politics as the determinants of the liberalization pathways of Latin America’s electricity and telecom sectors Maria Victoria Murillo, "Political Bias in Policy Convergence: Privatization Choices in Latin America," *World Politics* 54, no. 4 (2002), — — —, *Political Competition, Partisanship, and Policymaking in Latin American Public Utilities* (New York: Cambridge University Press, 2009). Etchemendy’s work emphasized the Argentine government’s coalitions with business and organized labor in Argentina, in Sebastian Etchemendy, "Models of Economic Liberalization : Compensating The "Losers" In Argentina, Spain, and Chile" (2004).

Just Russia (SR, Spravedlivaya Rossiya) and Zhirinovskiy's Liberal Democratic Party (LDP). SR and LDP have been unwilling or unable to oppose Kremlin policies, and their function has been to rubber stamp legislation introduced by United Russia, the party loyal to President Putin. This general picture of Russia's party politics is mirrored in the politics of electricity sector reforms: various political parties of both the left and right opposed reform in the 1990s, and managed to block the passage of legislation paving the way for privatization and liberalization.<sup>45</sup> These parties were either marginalized or disappeared altogether after United Russia started dominating the Duma in 2003, and they have essentially played no role during the actual implementation of reforms.<sup>46</sup>

### **3. Four themes**

The dissertation's broad argument entails four interrelated sub-arguments – one concerning the role of Russia's new oligarchs, a second regarding the role of the Russian state, a third on post-Soviet economic governance, and the last concerning center-regional dynamics. The remainder of this chapter discusses in more detail how each of these four sub-arguments differs from existing approaches to the post-Soviet transition and how they contribute to the literature on development and transition more broadly. I want to stress that I do not intend to disprove the existing literature on post-Soviet political economy, but to emphasize an element – a developmental agenda – that has hitherto been neglected.

#### *Theme 1: The oligarchs – theory and evidence*

Economic actors have always played an important role in explaining post-Soviet Russia's history. Whether old Soviet enterprise directors turned owners, nomenklatura youths turned oligarchs, or state-owned industrial complexes turned global conglomerates, such actors have arguably exercised more power than parties, social movements and unions. While parties and social movements have mattered in the past, my research focuses on the influence of Russia's new corporate actors on institutional outcomes in the electricity sector. The evidence from the electricity sector confirms the influence of oligarchs; an observer notes, for example, that “at all levels of authority, they [the Siberian electricity and aluminum interests] have participated in all processes related to the preparation of the reform and related to the creation of a Siberian market zone.”<sup>47</sup> But it also suggests a revision of the focus of this literature.

The literature on the influence of economic actors on institution building has mostly treated firms as actors that rig domestic legislation to maximize rents.<sup>48</sup> Private influence on reforms is almost always treated as an obstacle to the creation of markets. Operating in the reform-framework,

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<sup>45</sup> A range of parties opposed reforms, including the liberal *Yabloko* Party, Lushkov's Fatherland Party (*Otechestvo*) and the Communist Party.

<sup>46</sup> “Just Russia” and the LDP have broadly taken up the issue of “rising cost of living” for Russia's most vulnerable groups, which relates to the issue of increasing utility prices during liberalization. At the same time, neither party has formulated an alternative plan for the electricity sector.

<sup>47</sup> In Russian: “... на всех уровнях власти, участвуют во всех процессах, связанных с подготовкой реформы и созданием зонального рынка Сибири.” In “Кто правее, Есапов или Чубайс?” *Komsomol'skaya Pravda*, November 13, 2002.

<sup>48</sup> Exceptions to this trend are Woodruff, *Money Unmade*, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*.

these scholars assume that rent-seeking “inevitably creates distortions.”<sup>49</sup> Probably the most influential account of the influence of economic actors is Joel Hellman’s first article on state capture.<sup>50</sup> Hellman argues that the collusion between corrupt officials and powerful oligarchs resulted in failed or incomplete reforms. He showed that the “winners” of the early transition phase, benefitting from “partial reform equilibrium,” prevented the implementation of structural changes that would have brought Russia closer to a market economy.<sup>51</sup> His account was a useful corrective to earlier conceptualizations of an overbearing state, whose “grabbing hand” prevented entrepreneurs from reaching their potential.<sup>52</sup> Yet, writing in 1997, Hellman sought to explain the *absence* of reforms and structural change.

A few years later, Andrei Shleifer and Daniel Treisman, provided a revision of the capture account, arguing that there have been failures *and* successes in implementing market reforms.<sup>53</sup> They emphasized the ability of the government to co-opt key stakeholders, but still held on to a stylized view of industrial interests as rent-seekers creating new distortions in emerging markets.<sup>54</sup> They also did not distinguish between reform as policy and reform as institution building. Partly as a result of this, they overestimated the importance of shrewd strategy by reform-minded politicians and underestimated the complexity of structural change and the variability of outcomes.<sup>55</sup> An important contribution to this literature is the work by Jones-Luong and Weinthal, who stressed that institutions in Russia are built through mutually beneficial contracts between the government and a set of powerful economic actors, rather than being imposed by a dominant actor.<sup>56</sup> Apart from these contributions, the capture framework generally continues to be the dominant paradigm to understand the influence of Russian firms on post-Soviet market reforms, among academics, journalists and policy-analysts.

While research on oligarchs has centered on the question how they relate to political insiders, rarely is it asked *what* they lobby for in different reform arenas, or *how* this lobbying actually affects institutions formed during the reform process.<sup>57</sup> Predictions about how large industrial firms influence the reform process based on the capture approach fail to account for differences in reform outcomes across regions. The influence of private actors on institutions cannot be predicted based on the assumption that all firms seek to rig institutional outcomes to maximize

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<sup>49</sup> Shleifer and Treisman, *Without a Map: Political Tactics and Economic Reform in Russia*, p. 19.

<sup>50</sup> Hellman, "Winners Take All: The Politics of Partial Reform in Postcommunist Transitions."

<sup>51</sup> A group that includes enterprise managers, local officials and Mafiosi, according to Ibid.: p.204.

<sup>52</sup> “Grabbing hand”, see Timothy Frye and Andrei Shleifer, "The Invisible Hand and the Grabbing Hand," *American Economic Review Papers and Proceedings* 87 (1997), Aslund, *Building Capitalism*.

<sup>53</sup> Shleifer and Treisman, *Without a Map: Political Tactics and Economic Reform in Russia*.

<sup>54</sup> Frye also finds that firms use different tools and that the relation between business and the state is better characterized as “exchange” rather than “capture,” see Timothy Frye, "Capture or Exchange? Business Lobbying in Russia," *Europe-Asia Studies* 54, no. 7 (2002): p.1017.

<sup>55</sup> See critique by Hanson for a review of several assessments of reform attempts in the early 2000s; Hanson, "The Russian Economic Recovery: Do Four Years of Growth Tell Us That the Fundamentals Have Changed?."

<sup>56</sup> Jones-Luong and Weinthal argue that the creation of Russia’s fiscal institutions “represents a negotiated settlement between the Russian government and the most powerful set of domestic economic actors—the Russian oil companies.” Jones Luong and Weinthal, "Contra Coercion: Russian Tax Reform, Exogenous Shocks, and Negotiated Institutional Change."

<sup>57</sup> This is partly due to the view of markets as either competitive or fraught by rent-seeking firms, partly a question of methodology that does not compare survey results with “real-world” institutional outcomes.

profits or reduce transaction costs.<sup>58</sup> These theories cannot explain why different industrial interests have diverse aims and therefore influence the sector differently. I found that three very large, federal oligarchs – Gazprom (Russia’s gas monopolist), UES (the electricity monopoly) and Rusal (Russia’s, and one of the world’s, largest aluminum producer) – all wielded influence over how electricity reforms proceeded. Yet, each had very different aims in the politics of market making in the electricity sector. Moreover, capture approaches consider rent-seeking as a behavior *preventing* the creation of competitive markets. They cannot explain that in European Russia reforms proceeded farthest – and arguably with fewest “market subverting” concessions to industrial interests<sup>59</sup> – despite the fact that Gazprom, the largest and undoubtedly most powerful of all Russian firms, played a key role in electricity reforms in this region.

The trajectory and outcomes of electricity sector reforms suggest that we need to understand *which* firms seek to influence a particular set of institutions, and *how* they influence particular, localized institutional structures. In the electricity sector, I found that an analysis of different types of oligarchs or conglomerates – energy and industrial conglomerates – clarifies these questions. I found that variation in the new electricity sector institutions between European Russia, Siberia and the Russian Far East can be explained by identifying the industrial actors able to influence the government’s development strategies. Different types of oligarchs shaped new markets by gaining ownership, and thereby influencing the pattern of public-private control and the degree of unbundling of the vertically integrated monopoly. Oligarchs also shaped reforms by securing a set of subsidies that helped them compete in international markets.<sup>60</sup> Finally, markets are shaped by the oligarch’s efforts to protect the separation of pricing zones, characterized by different price levels and different types of subsidies.

Importantly, energy and industrial conglomerates, located upstream and downstream of the electricity sector, have very different goals for how the electricity sector should adapt to the new post-Soviet realities, and therefore influenced the sector differently. In a pattern typical of European Russia’s regions, where energy lobbies dominate, most generation assets have been privatized and pricing mechanisms enable new owners to profit from investments in technological upgrades. Gazprom and a few other fuel companies have acquired valuable power-plants during each stage of privatization. Upstream lobbies have sought this outcome, because it allows them to control income streams from electricity production based on subsidized fuel inputs. Since domestic gas prices remain regulated at a low level, selling gas on international markets yields two to three times as much as selling it to domestic electricity companies. In contrast, in many Siberian regions, where the industrial lobbies dominate, ownership of large power plants is shared between energy intensive industries and the government, and pricing mechanisms allow for electricity to be sold below regional market prices. Downstream lobbies sought this outcome because it effectively maintains a separate low-cost zone, which benefits the electricity intensive industries by reducing the cost of production and enhances their

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<sup>58</sup> Transaction cost approaches relying on the work of North. Rent seeking approaches based on the literature on regulatory capture spearheaded by George Stigler, "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 2 (1971).

<sup>59</sup> Subsidies are usually thought of as market-subverting concessions to industrial interests in this literature.

<sup>60</sup> I define a *subsidy regime* in the electricity sector as a type of arrangement that involves governments, regulators, utilities and industrialist in the provision of electricity below long-run average cost to achieve certain political, economic and social goals.



competitiveness on international markets. In Far Eastern regions, the interests of electricity companies have outweighed both the upstream of the downstream industries: generation assets have not been privatized and electricity prices remain regulated. Far Eastern electricity companies have sought this outcome, because it protects them from low-cost Siberian competition and allows for the continuation of direct government subsidies that they have relied on for years.

Distinguishing between the interests of upstream and downstream “neighbors” in a sector’s production chain might be useful in light of a number of problems of the more conventional ways of conceptualizing the private sector’s influence on public policy in the post-Soviet context; it provides a perspective on *how* influence works. The most common way to conceptualize private sector influence on public policy is “lobbying,” i.e. the attempt to influence legislation by organized interest groups.<sup>61</sup> The post-Soviet context presents a series of problem for this way of conceptualizing influence: First, channels of interest group influence were not formally institutionalized. Lobbying implies a distinction between private actors and government officials, which is often not very realistic in Russia. Also, the locus of power has constantly shifted over the last fifteen years, and the private sector has had to adjust the “target” of influence – from mayors and regional governments, to the *polpredy*, to various factions of Kremlin insiders. Second, the post-Soviet period has seen several significant shifts in the government’s policy agenda in a relatively short time. Both these points have meant that agreements between the private sector and government are open to constant challenge and renegotiation. Finally, unstable and competing ownership claims (Chapter 3) further complicate the conceptualization of private sector influence. Much of the private sector’s influence with powerful Kremlin figures was used to consolidate and extend ownership claims and property rights, rather than to push a certain policy agenda.

### *Theme 2: The state*

While industrial interests are important for understanding how the electricity sector evolved, so is the government. I found that regional governors and later the federal government under Putin were actively pursuing a developmental agenda. These development strategies were responses to the myriad of challenges created by the collapse of the Soviet command economy and the integration of Russia into international markets. The electricity sector featured prominently in these development strategies, both at the regional and federal level. Governments took a particularly keen interest in the sector precisely because the economic collapse of 1990 was associated with electricity outages. Politicians at all levels of government felt they could not afford to ignore the problems of the electricity sector, because power and heat outages and suffering pensioners brought home the image of a failing state, falling short of providing the most basic services necessary for a “civilized,” modern life.<sup>62</sup> Government strategies for

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<sup>61</sup> Lobbying is a concept that takes on meaning along a spectrum, from a benign and legitimate form of influence to the illegitimate and harmful capture of policy making.

<sup>62</sup> For example, reports of outages were accompanied with the fact that civilized life is only possible with electricity, “В ноги с цивилисацией,” *Krasnoyarskii Rabochii*, June 9, 1992. This was also because reports of outages were described as causing suffering, for example, “Острый Сигнал: Прошли выборы – отключили бататри,” *Utro Rossii*, January 15, 1994.

modernizing the economy could not do without a plan to deal with the problem of the electricity sector. But what was the role of the state in these development strategies?

Given the pace of change in Russia's political life, theories about the nature of the post-Soviet state have already cycled through several revisions over the last fifteen years. In the early post-Soviet period, influenced by views of the Soviet government, the Russian state was seen as a predatory Leviathan.<sup>63</sup> This characterization was soon revised in view of the weakness, or dependence of the Yeltsin government on the new class of oligarchs. For much of the second half of the nineties, the Russian state was considered captured,<sup>64</sup> with powerful business interests dominating the public agenda. For assessments of the state under Putin, however, capture approaches tend to underestimate the ability of the state to shape economic outcomes. With the reassertion of state authority under Putin, recent assessments acknowledge that the state is stronger vis-à-vis economic actors, while observing that it is increasingly authoritarian and illiberal in other arenas.<sup>65</sup> Since the 2004 "renationalization" of Yukos, Russia's largest oil company, and the imprisonment of its owner, , the state's role in the economy is typically portrayed as corrupt and unaccountable, arbitrarily applying the rule of law for the personal enrichment of insider elites while in pursuit of misguided great-power politics in international affairs.<sup>66</sup> While these observations account for salient developments, they are less well suited to explain the role of the state in creating institutions that underpin markets.

I suggest highlighting the developmental goals of the Russian state.<sup>67</sup> Short of calling Russia an ideal-typical developmental state, I want to emphasize the fact that the Russian government

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<sup>63</sup> For the predatory state argument, see for example, Aslund, *Building Capitalism*, Frye and Shleifer, "The Invisible Hand and the Grabbing Hand."

<sup>64</sup> For arguments about a weak and captured state, see Michael McFaul et al., *Privatization, Conversion, and Enterprise Reform in Russia* (Boulder: Westview Press, 1995), Hellman, "Winners Take All: The Politics of Partial Reform in Postcommunist Transitions.", Joel Hellman and et al., "Seize the State, Seize the Day: State Capture and Influence in Transition Economies," *Journal of Comparative Economics* 31, no. 4 (2003), Shleifer and Treisman, *Without a Map: Political Tactics and Economic Reform in Russia*, Richard Ericson, "Does Russia Have A "Market Economy"?", *East European Politics and Societies* 15, no. 2 (2001).

<sup>65</sup> M. Steven Fish, *Democracy Derailed in Russia* (Cambridge: Cambridge University Press, 2005), Michael McFaul and Kathryn Stoner-Weiss, "The Myth of the Authoritarian Model: How Putin's Crackdown Holds Russia Back," *Foreign Affairs* 87, no. 1 (2008). Also a very common chorus in the news media, see for example, Georgy Bovt, "King of the Hill," *Moscow Times* 2008, July 31.

<sup>66</sup> A recent assessment of the Russian state as an arbitrary predator can be found in McFaul and Stoner-Weiss, "The Myth of the Authoritarian Model: How Putin's Crackdown Holds Russia Back." For an account of Russia's great-power ambitions, see Michael McFaul and James Goldgeier, "What to Do About Russia?," *Policy Review* No.133 (2005). Before the 2004 re-nationalization of Yukos prominent observers credited Putin's government for setting in motion a "far-reaching process of market-friendly change" and for "improving the Russian business environment, praise that acknowledged fiscal reforms seen as exemplary by many foreign observers, see Hanson, "The Russian Economic Recovery: Do Four Years of Growth Tell Us That the Fundamentals Have Changed?," p.365 and 74.

<sup>67</sup> Georgi Derlugian understands the Soviet Union as a developmental state, see Georgi M. Derlugian, *Bourdieu's Secret Admirer in the Caucasus: A World-System Biography* (Chicago: University of Chicago Press, 2005). See Wade for a discussion of the developmental state and the liberalization of international markets: Robert Hunter Wade, "What Strategies Are Viable for Developing Countries Today? The World Trade Organization and the Shrinking Of "Development Space", *Review of International Political Economy* 10, no. 4 (2003). Curiously, the conceptualizing the Russian state as a developmental state is a theoretical move that has not explicitly been made. This might be due to the prevailing focus on the deterioration of democratic freedom (see McFaul and Stoner-Weiss 2008) and underlying assumptions that "all bad things go together." As developmental states have historically not

actively seeks strategies to “modernize” the economy, through regulatory functions, industrial policies and other tools.<sup>68</sup> In the contemporary Russian context, “modernization” has taken on its own meaning. It no longer necessarily means capital accumulation and industrialization, as in post-War East Asia. It does refer to catching up with advanced industrialized countries, but has a particular Russian starting point: preventing de-industrialization, by combining state intervention and state-led investment with the creation of markets and other, very liberal reforms.<sup>69</sup> The point is not to attach a new label to the Russian state, but to draw attention to a characteristic of post-Soviet economic policy that has hitherto been relatively neglected. A state that simultaneously creates energy markets *and* uses energy subsidies is contradictory for the *reform framework*, because subsidies are antithetical to competitive markets. The literature on the developmental state does not have difficulties in grasping tendencies that are contradictory for a reform-framework: they reflect both conscious strategies as well as struggles between competing elites and different levels of government (central versus regional) to meet the challenges of the post-Soviet transformation.<sup>70</sup> Finally, this approach opens new angles for comparison that do not rely on measuring the degree of reform progress and juxtapositions with Eastern Europe. A developmental state framework makes Russia a “normal” country,<sup>71</sup> in the sense that it is undergoing similar structural transformations as other industrialized and developing countries. At the same time, it does not predict a given path for restructuring and reform.

While the development strategies of regional governors will be introduced in passing in the chapters to come, President Putin’s strategy will feature more prominently. While the Russian

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been champions of democracy and often accused of corruption, the backsliding on democracy does not necessarily undermine the argument that Russia is a developmental state.

<sup>68</sup> Given that the term “developmental state” has been used in many different context, no one definition of the concept captures the type of state it refers to. Situating a developmentalist state strategy as a set of policies distinct from both ISI and the liberal alternative can help narrow down the concept: unlike ISI, developmental states turned to international markets as a source of capital for domestic industrialization and development. At the same time, however, the integration into world markets was not seen as a goal in itself. States were actively managing the terms of international integration through industrial policies, protection of infant industries and investment guarantees in pursuit of industrialization and capital accumulation.

<sup>69</sup> The liberal reforms include the tax laws and the bankruptcy code. The dirigist policies include attempts to boost high-tech industry, for example, as evidenced for example, in the reinvention of Dubna, a formerly closed city and the location for research on nuclear technology as Russia’s Silicon Valley, “Dubna's Tale,” *The Economist*, July 31 2008.

<sup>70</sup> During the nineties the disaggregation of “the state” as competing central-regional authorities was more common Nikolai Petrov, “How Have the Presidential Envoys Changed the Administrative-Political Balance of Putin's Regime,” in *The Dynamics of Russian Politics: Putin's Reform of Fedral-Regional Relations*, ed. Reddaway and Orttung (Oxford: Oxord UP, 2005), Kathryn Stoner-Weiss, *Local Heroes: The Political Economy of Russian Regional Governance* (Princeton: Princeton UP, 1997), Daniel Treisman, *After the Deluge: Regional Crises and Political Consolidation in Russia* (Michigan University Press, 2001), Yoshiko Herrera, *Imagined Economies: The Sources of Russian Regionalism* (Cambridge: Cambridge University Press, 2005). A few observers of Russia’s political economy have stressed the importance of struggles between competing factions at the center for institution building (Woodruff, *Money Unmade*, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*.)

<sup>71</sup> “Normal” for Shleifer and Treisman means that Russia is comparable with other emerging markets with similar levels of development: Andrei Shleifer and Daniel Treisman, “A Normal Country: Russia after Communism,” *Journal of Economic Perspectives* 19, no. 1 (2005). They are interested in this kind of “normality” for an argument that the laws of economics are applicable to Russia. I use “normal” in a different sense: to suggest that in Russia, like elsewhere, market institutions and thus development trajectories are bound by particular historic circumstances and a particularly Russian vision of the past and the future.

state under Putin is indeed more authoritarian and chauvinistic, fairly unaccountable and corrupt, I find that these conceptualizations neglect another important aspect of state power: the ability to “govern” the economy. The reassertion of sovereign authority under Putin was not only about eliminating challengers to the central government and about reestablishing the rule of law.<sup>72</sup> It was also about rebuilding a state with the ability to govern and plan, returning to the modern axiom that the state provides for progress and economic growth. Putin has brought back the state with a self-image of its responsibility for progress through hands-on planning, rather than through the invisible hand. The core of the Putin administrations’ development strategy has been to promote the creation of markets and the integration of Russia into global markets, while at the same time regaining control of energy resources as a strategic tools for development. It combines the use of energy policy to avoid deindustrialization and depopulation of remote areas, with the liberalization of sectors as different as electricity, telecommunications, finance and insurance, real estate and land markets, and social services.<sup>73</sup> Importantly for the electricity sector, these strategies rely on infrastructure and energy subsidies as key tools for government planning.

What does this mean for theories of state-market *interaction*? Together with the role of the state and the nature of industrial influence, this has been a key question in post-Soviet political economy. During the 1990s, observers often saw state-business relations as a zero-sum game, with either the enterprise or the state as the dominant player.<sup>74</sup> More recent approaches find that these relations are better described as an exchange based on mutual interest: Shleifer and Treisman envision the state and politically powerful firms interacting as players in successive rounds of reforms. They argue that the state interacts with firms by co-opting key stakeholders and by creating new rent seeking opportunities.<sup>75</sup> Timothy Frye similarly finds the state and firms engaged in a “quid pro quo,” an “elite exchange where successful lobbyists gain influence by providing benefits to state officials.”<sup>76</sup> These approaches capture the dynamic nature of the interactions that produce institutional outcomes as political bargains, rather than functional solutions to transaction cost problems. At the same time, a tendency to de-contextualize these interactions from both the development strategies of the state and the profit-making strategies of industrial lobbies makes it difficult to understand the particular compromises forged between the state and industrial interests.

This contrasts with studies in the tradition of economic sociology that examine state-market interactions at the regional level, which have stressed the importance of local context to

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<sup>72</sup> These aims are captured in the slogans of the Putin era: neutralizing oligarchs to rebuild the “verticality of power” and fighting “legal nihilism.”

<sup>73</sup> Approaches that rely on measuring reform progress have difficulties grasping what these developments imply for their scales and indices: how to weigh the implementation of “text-book tax reforms,” with flat taxes and low corporate taxes, against the re-nationalization of Yukos, one of the countries most successful corporation? The shortcomings of the dichotomous reform-frameworks, measuring progress or failure to reach certain goals have long been apparent (see below).

<sup>74</sup> Andrei Yakovlev provides a synopsis of capture before and after the Yukos affair, Andrei Yakovlev, “The Evolution of Business – State Interaction in Russia: From State Capture to Business Capture?,” *Europe Asia Studies* 58, no. 7 (2006).

<sup>75</sup> Shleifer and Treisman argue that cooptation works by creating incentives for stakeholders not to exercise veto power, often by creating new rent opportunities for them; Shleifer and Treisman, *Without a Map: Political Tactics and Economic Reform in Russia*, p.9 and p. 19.

<sup>76</sup> See Timothy Frye, *Brokers and Bureaucrats: Building Marke Institutions in Russia* (Ann Arbour: University of Michigan, 2000), Frye, “Capture or Exchange? Business Lobbying in Russia,” p.1021.

understand *how* oligarchic influence works.<sup>77</sup> While regional autonomy was largely revoked during the Putin administration, I show that interactions between the state and industrial actors are nevertheless “place-specific” bargains.

### *Theme 3: Ideas and interests*

Observers of Russian capitalism often describe it as a post-ideological space: “ideas” don’t matter, while interests determine outcomes.<sup>78</sup> Evidence from the electricity sector does not warrant such disregard for the ideological dimensions of post-Soviet politics. I find that the strict dichotomy between interests and ideas tends to break down.<sup>79</sup> The dissertation explicitly addresses two ways in which politics, ideas and interests are mutually constitutive.

One observation is that economic interests can only be realized if they are resonant in an ideationally defined political context. We see this in the way interests based on industrial geography entered political discourse. On the one hand, industrial geography shaped interests: the aluminum company Rusal was primarily interested in gaining ownership of Siberian hydro-electric power plants, for example. Interests were only realized, however, because they are legitimized and gain political clout in a particular worldview. Or, in other words, these interests are validated in a particular discursive framework, which makes them a legible political position. To draw on the above example, in the case of Rusal, it was a political position that values the existence of industrial centers in remote areas. Without the ideas that legitimized interests, interests cannot be realized. This dynamic has also led to an assembly of interests and ideas that is particularly post-Soviet: to validate their political position for electricity sector reforms, liberal reformers repeatedly resorted to the symbolic toolbox assembled in the days since Lenin. During the decades of Soviet planning, power plants were powerful signs of progress and development. Post-Soviet proponents of infrastructure reform mobilized this symbolic capital. The argument is not merely that Chubais “sold” his interests and ideas as a continuation of the Soviet-era electrification project, but that his version of modernization became politically feasible by being understood in this way.

A second way interests and ideas were related concerns the direction ideas gave to interests. Weber’s formulation is a helpful starting point here: “It is interests, and not ideas which have directly governed the actions of human beings. But the worldviews that have been created by ideas have very often, like switches, decided the lines on which the dynamic of interests has propelled behavior.”<sup>80</sup> In the conflict between technical and managerial experts, the *energetiki*

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<sup>77</sup> Regine Abrami, David Woodruff, "Toward a Manifesto: Interpretive Materialist Political Economy" (paper presented at the American Political Science Associations Annual Conference, August 24 2004), Herrera, *Imagined Economies: The Sources of Russian Regionalism*.

<sup>78</sup> Dmitri Trenin, "Russia Redefines Itself and Its Relations with the West," *The Washington Quarterly* 30, no. 2 (2007). P.95

<sup>79</sup> I draw on interpretative political economy, a theoretical framework that questions this dichotomy between ideas and interests, which pervades much of the research on political economy. Abrami and Woodruff stress that there is no reason why interpretive approaches and interest-based approaches are mutually contradictory. They suggest that “interpretive accounts of the pursuit of interests” are useful perspectives; Woodruff and Abrami, "Toward a Manifesto: Interpretive Materialist Political Economy", p.2.

<sup>80</sup> Max Weber, *Gesammelte Aufsätze zur Religionssoziologie*, 1920, quoted in *The Max Weber Dictionary: Key Words and Central Concepts*, Richard Swedberg and Ola Agevall, p.130.

By Richard Swedberg, Ola Agevall

and the *managery*, over the commanding heights of the electricity sector we see this dynamic at play. Both groups had clearly defined sets of interests, which were, however, based on very different worldviews. As the worldview of the *managery* came to dominate the electricity sector (over time, the worldview of the *energetiki* was associated with a bygone past, and that of the *managery* with a bright future), it also dominated the understanding of the interests of electricity companies, consumers and even of the country as a whole.

#### *Theme 4: Center-regional dynamics and liberal reforms*

Historically, economic development in Russia tended to be formulated *for* the regions, rather than *by* the regions.<sup>81</sup> As Gerschenkron noted a long time ago, Russia's economic development is characterized by a strong government. Seeking to compress several developmental stages into a short period, successive Russian governments have forced development ahead to catch up with the advanced industrialized West.<sup>82</sup> A characteristic feature of Soviet planning was that regional development strategies were designed to serve "*All-Union*" needs and goals, instead of serving the parochial needs of regions. For example, the development of Siberia was part of the GOSPLAN vision for building socialist modernity. Neither the wartime eastward shift of factories beyond the Urals, nor the post-war construction of Siberian mega-factories, were designed as development strategies for Siberia, but rather as puzzle pieces within a larger program of Soviet modernization.<sup>83</sup> Even as they were hailed as unprecedented achievements in Siberia's modernization, regional prosperity and well-being were not the primary concern. As the intensive push to industrialize was associated with significant social and ecological cost, this was more than an academic distinction for Siberians. In the eyes of central planners, the costs of damming rivers and constructing huge, polluting industrial plants were outweighed by the extraction of vast Siberian resources.<sup>84</sup>

Gorbachev's *Perestroika* and the decentralization it promised were an exception to the trend of centralized development. In the late 1980s, the Soviet "all-union division of labor"<sup>85</sup> gave way to way to regions formulating alternative development perspectives that aimed at promoting economic growth for the region. Decentralization of economic decision making started as a policy to address the Soviet economy's shortage problems. After 1991, decentralization rapidly became a *de facto* reality, as Soviet era chains of command lost force and the new command structures were often not able to contend with the regional power centers that had emerged. Regional administrations were devising strategies for the future of their economies under market conditions; a task that was actively embraced by some regions, while studiously avoided by others.<sup>86</sup> Under Putin, the authority of regions to plan for their own development was once again

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<sup>81</sup> Michael J. Bradshaw and Peter Kirkow, "The Energy Crisis in the Russian Far East : Origins and Possible Solutions," *Europe-Asia Studies* 50, no. 6 (1998).

<sup>82</sup> Alexander Gerschenkron, *Economic Backwardness in Historical Perspective* (Cambridge: Belknap Press 1962).

<sup>83</sup> Alekseev, V.V. *Электрификация Сибири*, published by Nauka/Hayka, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, 1973.

<sup>84</sup> This is important, because some regions initially formulated regional development strategies in the post-Soviet period as a response to this neglect of regional well-being by Soviet planners.

<sup>85</sup> Bradshaw and Kirkow, "The Energy Crisis in the Russian Far East : Origins and Possible Solutions," p. 114.

<sup>86</sup> Some regions had extensive regional development goals, usually the more independent regions. Interestingly, many Russian regional scholars turned to theories of agglomeration and industrial clusters as theoretical frameworks for framing development plans for their regions.

curtailed. By and large, regional development strategies became the domain of federal ministries and the Ministry of Regional Development became increasingly more influential after 2000.<sup>87</sup>

A comparison of reform attempts under Yeltsin and under Putin suggests that this strategy – combining markets and subsidies – was only possible after the centralization of political power and administrative authority, which freed important institutions and assets from the grasp of regional governors. In the 1990s, regional governors were able to control the assets and institutions of the electricity sector. Alliances between governors and regional industrialists often mattered more than central government decrees for how assets in the sector were to be privatized and how subsidy regimes run. Political and administrative centralization after 2000, however, substantially weakened the autonomy of regional governments, undercutting regional governors ability to use the sector as a source of household and industrial subsidies. The over-time comparison of reform attempts makes clear that Putin “centralized to liberalize.” By 2004, decisions about electricity subsidies and arbitration of ownership conflicts had shifted to the central government.

The centralization of political authority under President Putin was initially accompanied by rhetoric and policies aimed at creating a unified national market.<sup>88</sup> At the same time, however, various government ministries worked out regional development plans, which emphasized the need to adapt policy tools to regional challenges and opportunities; regional and supra-regional (but sub-national) development plans have subsequently taken center stage in the country’s “modernization” plans.<sup>89</sup>

#### **4. Methodology and logic of comparison**

Power is a key input for most economic interests as well as a socially important service; reform outcomes matter for a broad spectrum of interests. Highly politicized electricity sector reforms are an interesting case to examine how different constituencies have influenced the institutional transformation from ministry to market. My research tools are primarily drawn from economic sociology.<sup>90</sup> I rely on descriptive statistics, newspaper and interview data. My research design relies on a series of structured comparisons – over-time and across regions – to examine this process. Each chapter contains an over-time comparison, tracing the differences between Yeltsin and Putin-era attempts to reform the Soviet-era electricity monopoly. The core of the study compares institutional outcomes across Russia’s regions.

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<sup>87</sup> The Ministry of Regional Development was headed first by Yakovlev then taken over by Dmitri Kozak, a sign how its importance has increased over the years.

<sup>88</sup> President Putin proclaimed in early 2000: “We must aim to make life equally good in all Russian regions. We will not achieve that without a unified legal and economic space in Russia.” (Reported by *Interfax*, March 22, 2000, also by RFE/RL Newsline “Putin calls for new, improved federalism,” *RFE/RL Newsline*, March 23, 2000).

<sup>89</sup> The central government under Putin has increasingly promoted regional solutions to the challenge of how to promote employment and expanding real incomes for a number of reasons; this is a development that partly follows the development strategies that were initiated during the fragmentation of central authority under President Yeltsin, partly as concessions to regionally based industrialists.

<sup>90</sup> For studies on the electricity sector in the economic sociology tradition see Jonathan Coopersmith, *The Electrification of Russia* (Ithaca: Cornell University Press, 1992).; Thomas Parke Hughes, *Networks of Power : Electrification in Western Society, 1880-1930* (Baltimore: Johns Hopkins University Press, 1983).; Granovetter and McGuire, “The Making of an Industry: Electricity in the United States,” pp.147 – 173 in Michel Callon, *The Laws of the Markets* (Oxford: Blackwell Publishers, 1998).

Temporal comparisons reveal differences in the political dynamics during the Yeltsin and Putin periods. Key dates for the over-time comparison are two reform attempts: one in 1997, which largely failed to effect meaningful change in electricity production and distribution, and the second after 2002/3, which has marked the beginning of a set of far-reaching structural changes to the sector. Three related arguments, introduced in more detail above, emerge from the over-time comparison. First, the site of regulation shifted from the regions to the center. Second, bargains between the government and the oligarchs also moved from the regions to Moscow. Finally, with the implementation of reforms and the political recentralization, new zones of governance emerged during the Putin-era.

Spatial comparisons explain contrasting trajectories and outcomes across regions. I use ownership data and electricity tariff data to establish the three broad patterns that I label with the geographical region in which they were most prevalent: European Russia, Siberia and the Far East.<sup>91</sup> Cross-regional comparisons trace how subsidy and ownership regimes evolved differently across Russia's regions. The unit of analysis is initially the Russian region (*oblast*),<sup>92</sup> which at the outset of reform coincided with regional vertically integrated electricity monopolies, the so-called Energos. Regions and Energos are a suitable basis for comparison, because they share relatively similar post-Soviet histories and were the target of the same set of reform attempts by UES and the central government. It was the Energos that were subject to ownership battles for most of the post-Soviet period, and regional political dynamics were decisive for the subsidy politics.<sup>93</sup> I compare regions in several ways, relying both on qualitative and quantitative data to understand the variation in institutional outcomes. The cross-regional comparison includes in-depth qualitative case studies of three regions – Moscow, Irkutsk and Primorsky Krai, with their respective regional Energos, Mosenergo, Irkutskenergo and Dal'energo – as well as quantitative analysis of regional-level tariff and ownership data.

I use ownership and tariff data to establish the three broad patterns – one of European Russia, Siberia and the Far East respectively. Evidence of ownership changes relies on media sources of privatization processes and asset sales. I trace how control and ownership varied across regions, by identifying the owners who gained control of the majority of power plants, and the most valuable power plants of the three supra-regions. Comparisons of tariff data are based on 30 regions, the 12 largest electricity producing regions in European Russia, the 10 such regions in Siberia and 8 in the Far East.<sup>94</sup> Tariff data serves to identify the type of subsidies that emerged

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<sup>91</sup> This triptych of three broad, geographically situated categories of reform trajectories and outcomes was first brought to my attention by a veteran electricity sector insider in interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>92</sup> Currently, the Russian Federation is divided into 85 sub-national regions. The Federation is asymmetric: different types of regions vary in the degree of autonomy they enjoy, depending on their status as an *ethnic republic*, *oblast*, *krai*, *okrug* or a city that function as separate regions (although these formal differences mattered more during the 1990s, as overall regional autonomy has lessened drastically over the last years). There used to be 89 regions, before recent administrative reforms merged some of the smallest regions with larger neighbors. A number of these mergers of regions are planned for the near future.

<sup>93</sup> As the Energos were dissolved during the reforms, I use ownership data of power plants to calculate “privatization outcomes” at the end of reforms (see chapter 3 for details).

<sup>94</sup> Since European Russia is the largest of the three, I initially selected the twelve largest regions in terms of electricity production. For Siberia and the Far East, I initially take all regions, but I proceed to a second step in the analysis, where I exclude the tiny regions from the analysis. I end up with 30 regions, each representing the “larger producing regions” within their supra-region. I use a data set on electricity tariffs obtained from the UES Strategy



during the 1990s and were institutionalized during reforms. I identify the prevalence of three types of subsidies: household subsidies, industrial subsidies and direct budgeted transfers to electricity companies. I show that different “subsidy regimes” emerged across regions.

Ownership and tariff data also reveals that Moscow, Irkutsk and Primorsky Krai – the regions where I conducted in-depth fieldwork – are representative “typical” cases for the larger, supra-regional patterns that the dissertation traces. In each of these regions, the electricity sector has played an important role in regional politics over the last fifteen years. I was able to locate academic and private institutions with extensive expert knowledge. In regional newspapers I found on-going and detailed coverage of the ownership battles and subsidy regimes. Finally, the most important source of information were the over 65 experts and commentators I interviewed during the 11 months of fieldwork in 2006 and 2007, which included representatives of electricity companies, regulatory institutions, academics and journalists. Interviewees were identified through the “snowball-method:” I relied on existing interview subjects to identify other persons. Interviews are semi-structured conversations, typically lasting between 45 minutes and an hour and a half (see appendix 1 for a list of interviews).<sup>95</sup>

A few caveats necessarily accompany any story that claims to represent reality. First, the institutions of the electricity sector have changed dramatically over the last fifteen years. Even though the reform architects claim the “mission is completed”, ownership structures and regulatory regimes may continue to change. This dissertation has dealt with this by accounting for *both* trajectories and outcomes as of the date of writing. A second caveat concerns inferences about “influence” in post-Soviet politics. I am interested in the different actors and constituencies that shaped institutional infrastructure. The problem with constituencies in Russian politics is that they are often not easily intelligible, especially if compared with countries where established and well-organized interest groups exist. More often than not, influence is exerted informally, rather than via partisan politics, business association or labor unions.<sup>96</sup> At the same time, important meetings and decisions between various factions of “power politics” were extensively reported in regional and national newspaper. While I draw extensively on media coverage of the sector, the information from expert interviews was invaluable for contextualizing media reports.

## **5. Conclusions: the Russian experience and theories of development**

After the collapse of the Soviet Union, Russia’s economy and polity underwent a series of radical transformations including the introduction of private property and markets and the creation of institutions that at least formally allowed for democratic accountability. Studies of these changes often relied on opposing a stylized version of the Soviet planned economy and the

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Committee for Reforms in December 2006; it contains the tariffs set by all Regional Energy Commissions between the years 1995 and 2005, broken down also by household, rural and industrial prices. As far as I know, this data is not publicly available anywhere.

<sup>95</sup> In the dissertation I compare these results from “typical regions” with selected neighboring regions to establish variation within my larger regions: Krasnoyarsk for Irkutsk, Khabarovsk for Primorsky Krai. In European Russia, I look at two “special cases:” Tatarstan and Bashkortostan, two ethnic republics that enjoyed substantial autonomy in the 1990s.

<sup>96</sup> This is not to say that business associations have not mattered, see Stanislav Markus’ research on business association, Stanislav Markus, “Capitalists of All Russia, Unite! Business Mobilization under Debilitated Dirigisme,” *Polity* 39, no. 3 (2007).

one-party state with liberal democracy and free markets. The fallacy of this dichotomy was noted in the late 1990s,<sup>97</sup> which has opened avenues for alternative ways of understanding post-Soviet politics.

Post-Soviet developmentalism is a form of economic planning that charts a region's integration into domestic and international markets.<sup>98</sup> These strategies rely on a wide variety of policy tools, including seminars to instruct citizens on how market economies function.<sup>99</sup> Infrastructure and energy subsidies, however, have been among the most important tools of post-Soviet government planning.<sup>100</sup> This also means that my findings are pertinent to those sectors deemed most relevant for economic development (see chapter 7).

Does highlighting the developmental aspect of Russia's economic policy allow us to advance general theories of "developmentalism"? The "developmental state" argument dates back to the 1980s, when it was used to explain the rapid post-War growth of Japan and other East Asian economies. Developmentalist approaches emphasize that developing countries face different challenges as "late developers,"<sup>101</sup> and that *timing* is an important element of the state's response to the challenges of a particular historic moment: the nature of challenges that new institutions have to address depend on international competition and the technological frontier at a particular time.<sup>102</sup> With the ascendancy of the liberal development paradigm that held out freer markets and more integration as goals in themselves, two core elements of the developmental state approach were discredited. First, the policies typical of the developmental state strategies – industrial policies, trade barriers, subsidies – were no longer considered viable. Secondly, the need to adapt institutions to a historically particular set of challenges was replaced with recommendation to

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<sup>97</sup> For example by Stephen Collier and Lucan A. Way, "Beyond the Deficit Model: Social Welfare in Post-Soviet Georgia," *Post-Soviet Affairs* 20, no. 3 (2004), Michael and Katherine Verdery Burawoy, ed., *Uncertain Transitions: Ethnographies of Change in the Postsocialist World* (Boulder: Rowman & Littlefield, 1999), Woodruff, *Money Unmade*.

<sup>98</sup> Some of my interviewees, were skeptical that this kind of economic planning documents ultimately matter much (for example, interview #30 with policy analyst, Vladivostok, 20070914, and interview #31 with journalist covering electricity sector, Vladivostok, 20070915. Development strategies seem to contain a paradox: they set out a series of objectives and visions that may be far too ambitious, often seen as evidence of a state's aspirations for a national and regional development rather than as realistic goals. Despite well-founded skepticism, post-Soviet planning provides direction or the script for economic development, even if it fails to usher in the kind of development it projects; this point is taken up in chapter 7.

<sup>99</sup> "О рынке расскажут бесплатно," *Vostochno Sibirskaiia Pravda*, September 2, 1992.

<sup>100</sup> I am relying on a strategy document by the Ministry of Regional Development, "Концепция совершенствования региональной политики в Российской Федерации," which I will call *Konzeptsia*, in what follows. The *Konzeptsia* is a document that lays out the principles of regional development in general and for each of the seven Federal Okrugs (approved annually by Presidential Decree), available on the Ministry's website, <http://www.minregion.ru>. For a reference to the importance of infrastructure, see for example, see *Konzeptsia* 2008, p.4.

<sup>101</sup> Following Gerschenkron's 1962 account of development in England, Germany and Russia; Gerschenkron, *Economic Backwardness in Historical Perspective*.

<sup>102</sup> For Gerschenkron timing was the position of late developers in relation to early developers, and the implications of this for the technological frontier and the competition they faced in international markets; *ibid.*

adopt a set of fixed policies that would ensure the “fundamentals” of economic growth, regardless of place and time.<sup>103</sup>

Today, theories about the developmental state are in an odd place. On the one hand, the modified or “augmented Washington consensus”<sup>104</sup> recognizes institutions as key determinants of economic growth and development, restoring to prominence the state’s role in development. At the same time, thinking about appropriate institutions has lagged, and not yet grappled with the particular challenges developing countries face today. The mode of analysis of the “augmented Washington consensus” tends to prescribe a set of institutions and policies that have worked in one context for countries that face very different challenges. Evidence is mounting that the “best-practice” model of institutional reform may be harmful.<sup>105</sup> Yet, the argument that there are *several* and *diverse* institutional solutions to the problem of developing countries remains far from widely accepted.<sup>106</sup>

The history of Russia’s electricity sector has significant implications for thinking about the developmental state today. Governments in developing countries are predominately conceptualized as the “grabbing hand,” interfering in economic realms, or alternatively as weak and captured. While neither of these conceptualizations is necessarily wrong, they may both be inadequate to understand the political origin of the institutional architecture of new markets. Relations between the government and private interests are more than corrupt deals between power hungry, rent-seeking bureaucrats and corrupt oligarchs: in Russia’s electricity sector, they reflect an attempt to forge pathways for the Russian economy after the collapse of the Soviet Union.

Secondly, analyses of regulatory frameworks of “real-world” markets can tell us more about the nature of capitalism than prescriptive models of institutions on which ideal markets should be built. Similarly, abandoning “efficient institutions” and “perfectly competitive markets” as reference points has more benefits than drawbacks. While this study tries to gain insights on theoretical questions about economic development, states and markets, it is also a place-specific study of a particular instance of the post-Soviet transformation. The place-specificity of state-market relations has become increasingly accepted in the study of advanced industrialized economies.<sup>107</sup> Thirdly, the appropriate level of analysis of new institutional outcomes might be

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<sup>103</sup> Usually this refers to the Washington consensus, but it is a broader set of prescriptions. Wade points to the WTO rules as another set of “rules” that developing countries today are expected to abide by; Wade, “What Strategies Are Viable for Developing Countries Today?.”

<sup>104</sup> Rodrik, Dani, “The Developing Countries’ Hazardous Obsession with Global Integration.” Available at <http://ksghome.harvard.edu/~drodrik/papers.html>, 2001.

<sup>105</sup> Rodrik, Dani, “Second-Best Institutions.” Available at <http://ksghome.harvard.edu/~drodrik/papers.html>, 2008: p.2. Weighing up these benefits with the dangers of this kind of conceptual framework makes the departure from this framework more urgent.

<sup>106</sup> Ibid.

<sup>107</sup> Looking at sub-national economies, industrial clusters and regional production networks is common in the literature of advanced capitalist economies since the late 1980s. When regional economies, such as the Silicon Valley, or industrial districts in Northern Italy, became the key drivers for growth and innovation for national economies, regions became an indispensable unit of analysis for understanding the changes in global production. In Western Europe, the devolution and decentralization of authority over economic development programs, welfare and vocational training to sub-national governments, became key strategies to encourage public and private actors to adapt to rapidly changing economic relations, see Sabel, “Flexible Specialisation and the Re-Emergence of Regional

sub-national.<sup>108</sup> Diverse institutional outcomes across regions suggest that an analysis of *national* development strategies would not yield the same insights into emerging institutions. Analyzing sub-national outcomes provides new perspectives on state responses to the differing vulnerabilities and industrial geographies of particular regions.<sup>109</sup> I show how new geographic boundaries are drawn in political contests about regulation. This not only shifts the scope of regulation, but the political dynamics that underlie regulatory institutions.

## **6. Overview of the dissertation**

Two of the most fundamental questions of the post-Soviet period have been what happened to the authority of the Soviet state and what happened to factories, farms, and other tangible assets after 1991. The story of the electricity sector as told in this dissertation speaks to both these “big” questions and opens discussion on two relatively new themes – the role of geography and experts. The chapters deal with these issues in turn, in other words, the dissertation’s structure is thematic rather than chronological or geographical. I chose this structure deliberately, hoping to leverage the electricity sector’s trajectory for a reevaluation of key thematic issues.

Chapter 2 introduces the politics of electricity reforms that have shaped new ownership and subsidy regimes. Both a key infrastructure and an energy sector, electricity became a center point of relations between the government and Russia's newly created economic empires. The main aim of the chapter is to show how the new institutions of the electricity sector are a result of bargains between the Russian government and conglomerates about the provision of infrastructure services. I trace political conflicts and evolving bargains, first between regional governments and regional oligarchs, then between the federal government and consolidated, national conglomerates. I argue that the logic of the interaction between the government and the conglomerates was often not one of “buying off the opposition,” but rather one in which the government “enlists” conglomerates for its developmental aims.

Chapter 3 traces how the assets of the electricity sector changed hands over the fifteen years following the collapse of the Soviet Union. In this chapter I argue that the success and failure of contested ownership claims depended on shifting political coalitions, and “privatization outcomes” evolved from a series of negotiations between private and public actors. I examine the success and failure of ownership claims in the electricity sector and establish who emerged as new owners after repeated rounds of privatization. The chapter documents the political bargains involved in the privatization of electricity assets. In the 1990s, the ownership redistribution started as a process that depended on regional governors and their attempts to build a local power base. By the end of the current round of privatizations, it was the federal government that bargained with large industrial conglomerates over the most valuable assets of the sector. The

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Economies," p.129.) Some scholars focusing on the politics of local and regional governments often concluded that these matter more than national development strategies (for example Zysman, "Building on the Past, Imagining the Future: Competency Based Growth Strategies in a Global Digital Age.")

<sup>108</sup> Looking at subnational units is most common in the sociological tradition of political economy, see for example, Herrigel, *Industrial Constructions : The Sources of German Industrial Power*, Snyder, "After Neoliberalism: The Politics of Reregulation in Mexico."

<sup>109</sup> Wade suggests the concept of “policy-non convergence”, with “policies that are tailored to the different vulnerabilities” as a way to think beyond the current liberal consensus on development; Wade, "What Strategies Are Viable for Developing Countries Today?."

new ownership structures vary starkly across Russia's regions, with different industrial lobbies having gained control over assets in European Russia and Siberia, while the federal government regained control of the electricity assets in the Far East.

Chapter 4 demonstrates that despite the centralization of political authority under Putin, key differences in the institutional infrastructure of the electricity sector persist. This chapter traces how various "subsidy regimes" have emerged over the last fifteen years, and then compares them across regions. Subsidy regimes are arrangements involving governments, regulators, utilities and industrialists that enable the provision of electricity at below long-run average cost in an effort to achieve certain political, economic and social goals. Energy subsidies are key tools of Russian politics and industrial policy, and they are administered and distributed in myriad ways. This chapter shows that Russia's regions have ended up with different subsidy regimes and different rules – formal and informal – that govern price-making.

Chapter 5 turns to the question of why development strategies are region specific, and why they rely on various ways of deploying energy subsidies and promoting infrastructure development. The chapter argues that economic geography is an important part of the explanation of cross-regional variation. Geography matters for two reasons: first, it shapes conglomerates' interests vis-à-vis the assets and subsidies that are at stake in sector reform. This does not mean, however, that electricity sector outcomes are pre-determined by a region's geography. Secondly, in each of the three regions oligarchs mobilized particular aspects of the physical environment – a tight "physical link" between the electricity sector and gas pipelines or rivers in particular – to justify special privileges in bargains with the government.

Chapter 6 looks in more detail at two groups of experts who played a role in electricity sector reforms. The chapter traces the history of conflict between technical experts and new managers in the sector that unfolded during the marketization of the electricity sector. The former – the *energetiki* – are electricity sector professionals with long-standing experience, specialized technical expertise and loyalties to their work collective. The latter are young economists recruited by the reform team at UES to modernize the sector. The fault-lines of the conflict between these two groups turn on key issues of sector liberalization, such as the degree of unbundling of vertically integrated monopolies, public versus private ownership, pricing mechanisms, etc. I show how the young economists increasingly gained influence at the expense of the *energetiki*, and explain why they eventually emerged as the winners of reform.

Chapter 7 suggests how the Russian experience might be relevant beyond the post-Soviet context. It places the electricity sector's transformation in cross-sectoral and cross-national perspective. I compare the Russian experience with the politics of utility liberalization in the European Union and select US states. Concluding the dissertation, the chapter highlights the implications of the Russian experience for understanding regulatory challenges of industrialized economies elsewhere.

CHAPTER 1 APPENDIX

*Appendix 1: Interviews, location and dates*

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Interviews conducted 2006/2007

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<i>Position</i>	<i>Place</i>	<i>Date</i>	<i>No.</i>
Electricity sector expert at international financial institution	Moscow	20060721	1
Journalist covering electricity sector	Moscow	20060806	2
Employee of electricity company	Moscow/phone	20060904	3
Journalist	Moscow/phone	20060912	4
Electricity sector expert at international financial institution	London	20060920	5
Academic	London	20060920	6
Electricity sector analyst at financial institution	Moscow	20061005	7
Economist at financial institution	Moscow	20061006	8
Electricity sector analyst at financial institution	Moscow	20061008	9
Journalist covering electricity sector	Moscow/phone	20061009	10
Electricity sector expert	Moscow	20061018	11
Academic	Petersburg	20061023	12
Academic	Petersburg	20061023	13
Electricity sector expert	Moscow	20061026	14
Electricity sector analyst at financial institution	Moscow	20061027	15
Electricity sector expert/consultant	Moscow	20061030	16
Electricity sector expert	Moscow	20061101	17
Journalist covering electricity sector	Moscow	20061109	18
Academic/policy analyst	Moscow	20061122	19
Electricity sector analyst at financial institution	Moscow	20061126	20

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Electricity sector economist/consultant	Moscow	20061214	21
Electricity sector expert at financial institution	Moscow	20070210	22
Electricity sector expert at international financial institution	Moscow	20070210	23
Regulator/Ministry for Economic Development	Moscow	20070214	24
Journalist	Moscow	20070217	25
Energy sector expert/policy analyst	Berkeley	20070613	26
Energy sector expert/policy analyst	Berkeley	20070613	27
Academic	Vladivostok	20070912	28
Academic	Vladivostok	20070913	29
Policy analyst	Vladivostok	20070914	30
Journalist covering electricity sector	Vladivostok	20070915	31
Electricity sector economist	Vladivostok	20070918	32
Journalist covering electricity sector	Vladivostok	20070921	33
Academic/Employee of electricity company	Vladivostok	20070923	34
Regulator	Vladivostok	20070924	35
Program officer at international organization	Vladivostok	20070924	36
Electricity sector executive	Vladivostok	20071002	37
Academic	Vladivostok	20071003	38
Electrical engineer/electricity sector expert	Vladivostok	20071004	39
Pensioner	Vladivostok	20071004	40
Journalist covering electricity sector	Vladivostok	20071005	41
Academic	Vladivostok	20071005	42
Electricity sector economist	Khabarovsk	20071010	43
Electricity sector economist	Khabarovsk	20071010	44

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Employee of electricity company	Khabarovsk	20071011	45
Academic	Khabarovsk	20071011	46
Businessman	Vladivostok	20071017	47
Academic	Irkutsk	20071113	48
Academic	Irkutsk	20071114	49
Businessman	Irkutsk	20071115	50
Academic	Irkutsk	20071115	51
Electricity sector economist	Irkutsk	20071117	52
Employee of electricity company	Irkutsk	20071119	53
Businessman	Irkutsk	20071120	54
Employee of electricity company	Irkutsk	20071120	55
Journalist	Irkutsk	20071120	56
Electricity sector economist	Irkutsk	20071122	57
Academic	Irkutsk	20071124	58
Politician/former executive at electricity company	Irkutsk	20071130	59
Energy company executive	Irkutsk	20071203	60
Employee of electricity company	Irkutsk	20071205	61
Electricity sector expert	Moscow	20071210	62
Executive of electricity company	Moscow	20071212	63
Electricity sector expert at international financial institution	Moscow	20071212	64
Electricity sector expert at financial institution	Moscow	20071213	65

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Journalist covering electricity sector	Moscow	20071213	66
Electricity sector expert/economist	Berkeley	20080414	67
Academic/Employee of electricity company	Berkeley	20080417	68
Electricity sector expert at international organization	Paris/email	20070212	69
Regulator/electricity sector	Washington DC/email	20090317	70

Note: Interviewees were identified through the “snowball-method:” I relied on existing interview subjects to identify other persons. Interviews are semi-structured conversations, typically lasting between 45 and 90 minutes. Interviews were conducted in person, with the exception of three cases in which conversations happened over the phone (#3, 4 and 10). Two extensive and ongoing email conversations are listed separately at the end (#69 and 70). Repeat interviews are listed separately only if substantially new information was obtained and significant time had passed between interviews; this happened in three cases (interviews #1, 23 and 64; interviews #17 and 62; and interviews #18 and 66, respectively, are with the same person).

***Appendix 2: Major Russian newspaper sources used for this research:***

<b>Vedomosti</b>	<i>Ведомости</i>	National
<b>Kommersant'</b>	<i>Коммерсантъ</i>	National
<b>Gazeta</b>	<i>Газета</i>	National
<b>Vostochno Sibirskaiia Pravda</b>	<i>Восточно Сибирская Правда</i>	Irkutsk
<b>Utro Rossii</b>	<i>Утро России</i>	Vladivostok
<b>Krasnoyarskii Rabochii</b>	<i>Красноярский рабочий</i>	Krasnoyarsk

## **Chapter 2: Power Politics**

- 1. Introduction: bargains for development*
- 2. Power Politics I: regional bargains during the Yeltsin years*
- 3. Power Politics II: an unlikely alliance*
- 4. Power Politics III: developmental bargains under Putin*
- 5. Three Regions, three strategies, three bargains*
- 6. Conclusion*

*“Infrastructure development is a key tool for the socio-economic development of Russia’s regions”<sup>110</sup>*

Ministry of Regional Development

## **1. Introduction: bargains for development**

Different actors are keeping the lights on across Russia. The Russian government has created markets and opportunities to earn profits in European Russia’s electricity sector, while it continues to subsidize electricity consumers in Siberia and the Far East. Why did these regions end up with different institutional arrangements in the same sector? And what does this tell us about the process of institutional change in post-Soviet Russia?

This chapter addresses the politics that have shaped new ownership and subsidy regimes in the electricity sector – “power politics.” Power politics refers to the shifting coalitions between a set of actors, their motivations, and their views for the future of the electricity sector. Four actors and their shifting alliances take center stage: the liberal reformers, regional and federal governments and Russia’s oligarchic conglomerates. We will see that the government was a divided entity: regional, or *oblast* administrations and the federal government often had antithetical aims, and the federal government itself was constituted of different factions. I trace power politics over roughly twenty years, from the late Soviet, through the Yeltsin to the Putiner. During this period, Russian politics have been turbulent. Characterized by several rounds of elite replacements and ephemeral coalitions, political conditions for the economic reforms constantly changed. Moreover, change came fast and recurring crises have shaken up alliances. Finally, real life politics in Russia centered precisely on questions such as ownership changes and energy subsidies.

According to one veteran policy analyst – “short-term politics and long-term strategy” characterized power politics.<sup>111</sup> Alliances with different political factions and with industrial or energy conglomerates were key short-term goals that regional (*oblast*<sup>112</sup>) and federal governments pursued. The federal government’s attempt to recentralize authority, strengthening its ability to regulate the economy and control natural resources, was an important long-term goal of the Putin administration.<sup>113</sup> The dissertation argues that long-term economic development

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<sup>110</sup> In Russian: “Важнейшим инструментом влияния на социально-экономическое развитие субъектов Российской Федерации (...) является размещение и развитие (...) инфраструктуры.” in “Концепция совершенствования региональной политики в Российской Федерации” (*Konzeptzia 2008*, in what follows), Ministry of Regional Development, p.3.

<sup>111</sup> Interview #19 with academic and policy analyst, Moscow, 20061122.

<sup>112</sup> I will call regional level governments “oblast” governments, although not all of Russia’s regions are “oblasts.” For the status of Russia’s sub-national units, see methodology section chapter 1.

<sup>113</sup> The state’s loss and attempts to regain control over natural resources is one of the core issues in comparisons of the Yeltsin and Putin years; mentioned, for example in interview #49 with an academic, Irkutsk, 20071114.

strategies were central objectives of regional and federal governments, during both the Yeltsin and Putin period. While the developmental agenda that successive Russian governments pursued has varied over the years, there have been some important similarities in the developmental approach of regional governors in the 1990s and the Putin government after 2002. As chapter 1 introduced, development strategies were a form of post-Soviet planning that charts Russia's regions' integration into global markets. Economic modernization strategies tended to favor top-down initiatives, rather than trickle-up strategies.<sup>114</sup> The focus was often on providing, rather than enabling.<sup>115</sup> Notably, developmental strategies often relied on infrastructure and energy subsidies as key tools for government planning. In addition to their economic importance, infrastructure projects secured legitimacy for the government, providing the promise of future growth. Even if the projects end up falling short of realizing their promises, they are a symbol of a state that builds the foundations for future well-being. "The fate of the electricity and energy sector (энергокомплекс), is directly and naturally connected to the preservation of the state, and the political and economic sovereignty of Russia," was a widely shared attitude.<sup>116</sup>

To realize these long-term developmental strategies and goals, different tiers of the government entered into the Russian version of public-private partnerships, trying to enlist conglomerates for their goals. Rather than a government that is "buying off the opponents," governments made concessions to conglomerates in return for their role in development strategies. One key difference between the "buying off" and "enlisting" logics is that electricity sector bargains rested on overlapping interests and mutual dependence. Both the government and Russia's oligarchs were interested in power plants and grids, as electricity is both a key infrastructure and an energy sector.<sup>117</sup> For the government, electricity played an important role in the post-Soviet developmentalism. For the new private sector, concessions in the provision of infrastructure services and the influence on underlying institutions provided a competitive advantage in domestic and international markets. At the same time, neither side of the bargain was able to dictate the terms of their cooperation – we will see that each side depended on the other in important ways.

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<sup>114</sup> These are two paradigms of development promotion, with infrastructure projects characterizing one, micro-finance the other.

<sup>115</sup> The Russian word *zhizneobespechenia* (жизнеобеспечение), which means literally "provision for livelihood" often serves as the goal for public projects, contains the connotation of the state as a provider. For example in "Ради социальной стабильности," *Utro Rossii*, February 8, 1994.

<sup>116</sup> Veronika Belusova, "Под флагом борьбы с монополизмом," *Utro Rossii*, January 14, 1997. Another observer notes that infrastructure projects provide "perspectives," a word that in Russian entails the promise of opportunities in the future, in "Сталин греет Красноярск," *Krasnoyarskii Rabochii*, August 31, 1993.

<sup>117</sup> A note on terminology: Russia's new class of powerful magnates was initially known as the "oligarchs." After two decades of ownership changes and power struggles within this group, only few of the original oligarchs have remained in Russia and in control of the economic empires they amassed. Also, many of the oligarchic empires were consolidated in the period after the 1998 collapse and during the elite turnover at the regional and federal level. I am using the term oligarch and conglomerate more or less interchangeable to refer to the economic empires that gained control of the *Energos*, although I tend to use "oligarchs" when referring to the 1990s, and "conglomerates" when referring to later periods.

**Summary Table: Evolving Bargains that shape electricity sector outcomes**

	Yeltsin presidency	Putin presidency; 2000 - 2003	Putin presidency; 2004 - 2008
Opposition and obstacles to the sector's liberalization	<b><i>Bargains between regional governors and industrial and energy companies prevent reforms</i></b>	Governors' influence is eliminated. Oligarchs influence shifts to federal level, and bargains with govt. shift to fed. level	No formal opposition to reforms; but liberal reformers have to make concessions to conglomerates.
Proponents of reform	Liberal reformers and the federal government want reform, but fail to effect change	Liberal reformers succeed in initiating reforms, bc of an alliance between "liberalizers" and "centralizers"	<b><i>Bargains between fed. government and industrial and energy conglomerates shape the terms of reforms</i></b>

This table summarizes the evolving bargains that shaped electricity sector outcomes over the eighteen years between 1991 and 2008. Note that the dichotomy of "opponents" and "proponents" of reforms broke down at some point during Putin's first presidency. What remained constant over the years is that Russia's emerging conglomerates entered into bargains with different tiers of the government about tariffs and ownership changes in the electricity sector.

The chapter divides the discussion power politics into four parts: the first part addresses the political dynamics during the Yeltsin period, marked by the autonomy of regional governors. A second part addresses the first years of Putin's presidency, and explains how an unlikely alliance

made the initiation of liberal reforms possible. The third part turns to the five years of the Putin presidency between 2003 and 2008, when reforms were implemented. The fourth and final part details the political bargains between the government and the energy and industrial oligarchs in each of the three sub-national zones.

## **2. Power Politics I: regional bargains during the Yeltsin years**

A major fault line in Russian politics during the Yeltsin period was the tension between the central government's liberal reformers and regional governors.<sup>118</sup> At the center, Yeltsin's liberal reform team – the “young reformers” – devised plans to comprehensively restructure and reform the Russian economy.<sup>119</sup> Anatoly Chubais, who later became head of UES and the main architect of electricity reform, was one of the core members of the liberal reform team; he has been called a “neo-liberal Rasputin at Yeltsin's court.”<sup>120</sup> Chubais was firmly committed to the creation of markets in Russia. In his vision, “the market is the ideal and a unique model to allocate resources. (...) It is [just] the most effective way.”<sup>121</sup> He was also known to be a skilled politician, able and willing to accept compromises in pursuit of his main goal.<sup>122</sup> At the same time, his opponents claimed that he had little understanding of the “social aspects” of economic governance. One regional administrator noted that Chubais “considers the social sphere secondary” and that he seemed to have had no hesitations to drastically cut UES' expenditures on “social programs.”<sup>123</sup>

Regional elites were powerful opponents of Moscow's reformers, sharply limiting the center's ability to implement market reforms.<sup>124</sup> Aligned with old nomenklatura and new entrepreneurs, they often defied directives emanating from Moscow. In the second half of the nineties, a handful of the strongest regional governors organized as a powerful political group in federal-level politics, vying to nominate a successor to the ailing President Yeltsin.<sup>125</sup> A weak federal government that is challenged by powerful sub-national power centers led some commentators to

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<sup>118</sup> For a discussion see Hanson, “The Center versus the Periphery in Russian Economic Policy,” *RFE-RL Research Report* 3:17, 1994.

<sup>119</sup> For an interesting account by the insiders of this process, see Sergei Vasiliev, A. B. Chubais, and Andrei Illarianov, *Ten Years of Russian Economic Reform : A Collection of Papers* (London: Centre for Research into Post-Communist Economics, 1999).

<sup>120</sup> Perry Anderson “Russia's Managed Democracy,” *London Review of Books*, 29/2, 2007.

<sup>121</sup> Remark by Chubais at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007.

<sup>122</sup> See for example the portrait of Chubais in David E. Hoffman, *The Oligarchs : Wealth and Power in the New Russia* (New York: Public Affairs, 2003).

<sup>123</sup> Opinion of Pavel Shtein, head of the Bureiskaya district of Amur oblast; he notes “социальную сферу он считает делом второстепенным” interview with Shtein “Конфликт интересов решаем дипломатично,” *Dal'nevostochnyi Kapital*, May 2005, No.5/57, p. 44.

<sup>124</sup> See for example Peter Kirkow, “Regional Warlordism in Russia: The Case of Primorskii Krai,” *Europe-Asia studies*. 47, no. 6 (1995). Or Andrew Yorke, “Business and Politics in Krasnoyarsk Krai,” *Europe-Asia Studies* 55, no. 2 (2003). As in other post-Soviet countries, the lines between the politicians and private influence were blurred – politicians were businessmen, and entrepreneurs had to play the political game, see for example, Regine A. Spector, “Securing Property in Contemporary Kyrgyzstan,” *Post-Soviet Affairs* 24, no. 2 (2008).

<sup>125</sup> At their strongest in the late nineties, regional governors formed a powerful political coalition led by Evgeni Primakov – the “All-Russia/Fatherland alliance.” For some time, they were seen as the most viable successors to the Yeltsin “family” and as such clearly the most threatening elite group for the *siloviki* and Putin.

speculate about the return of a feudal power system under Yeltsin.<sup>126</sup> The feudal analogy was also applied to the fragmentation of regulation in the electricity system: the term “electric energy feudalism” was used to describe the *de facto* independence of regional monopolies from UES, and the federal governments inability to direct UES itself.<sup>127</sup> “During [...the] period of 1994-97, the government has effectively lost control over UES’ activities.”<sup>128</sup> The similarities between the political disintegration and the fragmentation of electricity sector regulation are a useful starting point to understand power politics during the nineties.

The governing style, ability and motivations of Russia’s regional governors varied widely, and observers have emphasized different aspects of regional independence. Hellman privileged the governors’ ability to block market reforms, as they were the early “winners” of reforms.<sup>129</sup> Stoner-Weiss sees some of them as “local heroes” who governed well in turbulent times.<sup>130</sup> Woodruff stresses that regional governors were the first in line to respond to social consequences of the economic collapse and the “unacceptable disasters” it caused, or threaten to cause.<sup>131</sup> These disasters were reflected in the coverage of economic and social life in regional newspapers, which report unpaid wages, strikes, the double-digit inflation that wiped out savings, and the “social tension” that result from it. This did not escape regional governors, who were called to action, for the sake of “social stability.”<sup>132</sup> Woodruff, Stoner-Weiss and Hellman’s offered different interpretations of the governor’s motivations, but they all pointed to the fundamental tension between the central government, that wanted to push ahead market reforms, and the regional governors, who had to deal with the effect of these policies and many other problems created as the structures of the command economy and the Soviet party-state fell apart. Many governors passed resolutions, decrees and decisions aimed at helping companies to “find their place in the market”<sup>133</sup> and to “decrease social tensions.”<sup>134</sup>

Regional autonomy had initially been encouraged by Yeltsin as an incentive to unite support in the fight to defy the forces intent on conserving the Soviet Union.<sup>135</sup> In 1991 Yeltsin famously

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<sup>126</sup> For a discussion of the “feudal analogy”, see Charles Fairbanks, “The Feudal Analogy,” *Journal of Democracy* 11.3 (2000) pp.34.

<sup>127</sup> The term “энергетического федерализма,” is used in an article in the journal *Expert*, “Энергетика абсурда,” *Ekspert*, No.14, April 13, 1998, p. 29. The term “energy principalities” is another reference to feudal structures and power of region, “Удельные княжества копят энергию,” *Segondia*, December 18, 1998.

<sup>128</sup> Alexander Burgansky, “Hydro Power: Super-Profits or Super-Regulation?,” in *Utilities Research Report* (Moscow: Renaissance Capital, 2005), p.13.

<sup>129</sup> “Local officials (...) have prevented market entry into their regions to protect their share of local monopoly rents” Hellman, “Winners Take All: The Politics of Partial Reform in Postcommunist Transitions,” p.204.

<sup>130</sup> The core of Stoner-Weiss’s study is an examination why “local heroes,” which are “higher-performance governments” existed in some regions, but not in others, Stoner-Weiss, *Local Heroes: The Political Economy of Russian Regional Governance*, p.10.

<sup>131</sup> Woodruff, *Money Unmade*, p.114.

<sup>132</sup> Reference to social tensions/социальное напряжение, in Ради социальной стабильности,” *Utro Rossii*, February 8, 1994.

<sup>133</sup> Interview #54 with businessman, Irkutsk, 20071120.

<sup>134</sup> One among many examples, a decree by the governor of Krasnoyarsk oblast “Decree on measures to reduce social tensions on enterprises, in Russia “Постановление: “О Мерах по снижению социальной напряженности на предприятиях,” in “В Администрации Края,” *Krasnoyarskii Rabochii*, June 10, 1994.

<sup>135</sup> For an account of these dynamics of the Yeltsin – Gorbachev struggle, see George W. Breslauer, *Gorbachev and Yeltsin as Leaders* (New York: Cambridge University Press, 2002).

called on the regions to grab as much autonomy as they could digest.<sup>136</sup> Once centrifugal forces were unleashed, however, they led to the fragmentation of political and bureaucratic authority. From the perspective of a regional observer, this created a situation in which “there was no direction, no cooperation and everything threatened to fall apart.”<sup>137</sup> Regions ended up with significant *de facto* autonomy in several realms of political and economic life.<sup>138</sup> The challenges this created for regional governors were enormous. As one Primorsky Krai observer noted – “Primorsky Krai was *de facto* burdened with a whole series of government functions, without the necessary means – financial or otherwise, to fulfill these functions.”<sup>139</sup> While this was clearly a burden, many governors also embraced regional autonomy, since they believed, as the governor of Irkutsk did, that “each region has its particular circumstances, particular relationship, each region is inhabited by people with a different frame of mind, and each region has a different climate,”<sup>140</sup> and that not everything could, or even should, be decided in Moscow. In either case, the effect was that political decisions, political battles and alliances often became localized; for example, in many regions, the most salient political battles were fought between regional governors and the mayors of major cities.

Regional autonomy meant that regional governments devised their own solutions to the peculiar problems and challenges of the post-Soviet transformation. The governor of Irkutsk, Yuri Nozhikov remembered being propelled to action by citizens surrounding him in the streets, telling him of their hardship and hunger (although Nozhikov may have been among the most responsive and responsible governors).<sup>141</sup> Governors’ responses were often crafted in alliances with the emerging private entrepreneurs and the new class of oligarchs. The former director of Irkutskenergo, now a senator of the oblast, described collaborating with the regional industries and administration in the following terms – “we worked with regional industries and with the regional administration to provide (*обеспечить*) for the region’s people.”<sup>142</sup> Whether oligarch or small-scale businessman, connections to regional governments were an important aspect of Russia’s state-market relations during the nineties. We will see in chapter 3, that privatization

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<sup>136</sup> Breslauer 2002, *ibid.*, p.125. See also Richard Sakwa, *Russian Politics and Society* (Routledge, 2008), pp.246. The centrifugal forces unleashed during the early nineties and threat of secession was among the most hotly discussed issues of the 1990s.

<sup>137</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>138</sup> Gail W. Lapidus, "Asymmetrical Federalism and State Breakdown in Russia," *Post-Soviet Affairs* 15, no. 1 (1999).

<sup>139</sup> In Russian “(...) целый ряд (...) общегосударственных задач окасались фактически возложенным на Приморский край без предоставления ему достаточных для реализации этих функции финансовых и иных ресурсов” in “Ради социальной стабильности,” *Utro Rossii*, February 8, 1994.

<sup>140</sup> In Russian “на каждой территории – свои условия, свои отношения, свой менталитет населения, свой климат, наконец.” Biography of Yuri Nozhikov, “Я это видел – или жизнь российского губернатора, рассказанная им самим,” Irkutsk Oblast Typography No.1, Irkutsk, 1998, p. 155.

<sup>141</sup> “When you, the head of the administration, the governor, are surrounded by people on the street, who tell you that they have nothing to feed their children, then that hardship cannot appear secondary. Then, to change this situation, no effort should be spared.” In Russia: “Когда тебя, главу администрации, губернатор, на улице окружают люди и говорят, что нечем кормить детей (...), то это кажется (...) второстепенным. И, чтобы изменить эту ситуацию, никаких сил не жалко.” Nozhikov, *ibid.*, p. 166.

<sup>142</sup> Interview #59 with politician/former electricity executive, Irkutsk, 20071130. He used the word *обеспечить* – to provide for/care for, a term deeply rooted in Soviet-era planning terminology.



decisions were an important component of these alliances, since the Russian private sector was only just emerging amidst turbulent and high-stakes ownership struggles.<sup>143</sup>

The terms of this cooperation varied; in some regions they seem to have been relatively stable, while in others they shifted as different factions – for example, the mayor of the capital city versus the governor – were pitted against each other.<sup>144</sup> What they had in common, on the whole, was the tendency to protect regional businesses from having to shut down operations and close factories and enterprises and to help them adjust to market conditions.<sup>145</sup> Regional elites had first hand knowledge of the difficulties companies faced in “finding their place in a market economy.”<sup>146</sup> Regional governments often came up with plans for regional development that protected the region’s industrial base. Governors used whatever means they could – energy subsidies are at the center of the story told here, but they also include credits and tax breaks.<sup>147</sup>

One of the challenges that regional governors had to deal with was the task of reliably providing electricity to residents and industry. As one Far Eastern observer noted, “without fail, all of the regional administrations’ problems in the realm of regional economic and social development were in one way or the other related to electricity.”<sup>148</sup> Governors could influence regional development by distributing energy subsidies, by authorizing privatization decisions or influencing property disputes. One regional commentator put it succinctly: “regional authorities were rather quickly convinced that the regional energy companies [the Energos] remained the only lever (*рычаг*) to influence the economic and social processes in a region” as other infrastructure sectors important for everyday life, gas and railways, were less easily controlled at the regional level.<sup>149</sup> Electricity tariffs and ownership changes became important issues in

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<sup>143</sup> Solnik and Barnes are landmark studies of privatization and property battles: Steven Solnick, *Stealing the State: Control and Collapse in Soviet Institutions* (Columbia University Press, 1999), Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*. See Alina-Pisano’s work for rural Russia and Ukraine, Alina-Pisano, *The Post-Soviet Potemkin Village: Politics and Property Rights in the Black Earth*.

<sup>144</sup> The constant battles between the mayor of Vladivostok and the governor of Primorsky Krai are well known and well documented, see for example “Паны дерутся...,” *Utro Rossii*, 1997, January 21, among many articles in *Utro Rossii* on this issues. See also Stoner-Weiss’ work on regional governments, Stoner-Weiss, *Local Heroes: The Political Economy of Russian Regional Governance*. She finds that in regions where industry is concentrated, governance is better, as alliances are more stable.

<sup>145</sup> Woodruff, *Money Unmade*, p.115. Protection of regional industry was mentioned several times as the motivation for regional governor’s interest in electricity, for example, in interview #60 with energy company executive, Irkutsk, 20071203.

<sup>146</sup> These difficulties were reported almost daily in the regional media. For example, a report in 1995 states that “a significant part of enterprises have not yet found their place in the market economy, don’t have a healthy number of orders to complete, and work irregularly. “Значительная часть предприниматели еще не нашла своего места в рыночной экономике, не имеет устойчивых заказов и работает неравномерно” in “Как живется – можется?” *Vostochno Sibirskaiia Pravda*, September 7, 1995.

<sup>147</sup> “Город накормить непросто,” *Vostochno Sibirskaiia Pravda*, January 26, 1994. Article about how local sausage factory got a credit from regional administration, which allowed its continued operation. Tax collection was a fundamental challenge for both federal and regional authorities, see for example, *Vostochno Sibirskaiia Pravda*, “Бюджетное послание Губернатора Овласти,” October 17, 1995.

<sup>148</sup> “Все проблемы регионального развития в экономической и социальной сфере месным валстями в той или иной степени оязательно связываются с энергоснавжением.” Anna Lobunec, “Перспективы Развития энергтеики приморского края с учетом интеграционных процессов в северо-восточной Азии,” *Dissertation Abstract*, Vladivostok, May, 17, 2004, p.15.

<sup>149</sup> In Russian: “Региональные власти достаточно быстро убедились, что для воздействия на экономические и социальные процессы у себя в регионе у них остался только один рычаг – местные энергокомпании.” In

regional politics, both as a tangible challenge of providing power for residents and enterprises, and as a symbolically important commodity. Electricity thus also became an important aspect of the relationship between governors and new private owners, and their bargains ended up shaping the transformation of the electricity sector in this period.

The history and structure of Russia's power system was conducive to regional control: each region had its own vertically integrated monopoly provider – the so-called Energo. The Energos were named after their region, Mosenergo for Moscow's Energo, Irkutskenergo for Irkutsk, for example.<sup>150</sup> As a vital infrastructure, Energos had been subordinated to the control of the second Party secretary during Soviet times. As other regional elites, Energo managers were often part of the old regional nomenklatura. They remained in charge for most of the 1990s, which facilitated the tight connection between regional administrations and the Energos.<sup>151</sup> As one commentator put it: “the structure of RAO-UES is such that the resolution of many key questions is impossible without the agreement of governors.”<sup>152</sup> Governors firmly held control of the Energos in the 1990s, which made it difficult for the central government to implement market reforms.<sup>153</sup>

Controlling the Energos served governors well. Keeping household tariffs low was a successful strategy to cushion the effect of economic crisis and to appeal to citizens traumatized by skyrocketing inflation. Rural households, and households with electric instead of gas appliances, had been paying less for electricity in Soviet times and continued to have special tariff rates.<sup>154</sup> Other categories of consumers that were affected by the collapse of government budgets, such as hospitals, education facilities, research institutes and military facilities also usually paid very low rates or did not have to pay at all.<sup>155</sup> Controlling power plants was also a way to subsidize industrial consumers and reward loyal enterprises for their contribution to the regional budget, or for in-kind contributions to regional well-being.<sup>156</sup> Governors also wanted to control the Energos to keep the electricity sector's tax revenues from flowing to Moscow.<sup>157</sup> Finally, for at least some governors, the electricity sector probably also served as a treasure trove: for example, by generating bribes from regional industrialists in return for cheap rates.

Well aware of the importance of influencing privatization decisions and utility tariffs, Yeltsin's liberal reformers were hardly pleased with the *de facto* regional control of Energos. Much like regional governors, Chubais and his team of young reformers realized how useful control of the electricity sector was. While they were strongly opposed to regional control, they were also essentially powerless to do anything about it. How and why were regional administrations and

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“Энергетика абсурда,” *Ekspert*, No.14, April 13, 1998, p. 29. The word “leverage/ричар” is often used in this context, interview #32 with electricity sector economist, Vladivostok, 20070918 and 20070925.

<sup>150</sup> With some exceptions, Primorsky Krai's Energo is called *Dalenergo*.

<sup>151</sup> These connections were mentioned in several interviews, for example, interviews #45 with employee of electricity company and #46 with academic, both in Khabarovsk, 20071011.

<sup>152</sup> “Кака известно, холдинг РАО ЕЭС России представляет собой структурау, в которой решение многиз ключевых вопросов невозможно без согласия губернатора,” *Izvestia*, August 12, 2000.

<sup>153</sup> Why? In the electricity sector regional autonomy led to property disputes, unpaid bills and the opaque, volatile and decentralized tariff regulation. See chapters 3 and 4 for details.

<sup>154</sup> See chapter 4 for sources of price and subsidy data.

<sup>155</sup> Interview with Kudryavy published in *Ekspert*, No.14, April 13, 1998, pp.32.

<sup>156</sup> Vladivostok's soccer stadium has been sponsored by Dalenergo for years; Amurenergo was asked to do the same. Interview #30 with policy analyst, Vladivostok, 20070914.

<sup>157</sup> “Президент тоже ошибается,” *Krasnoyarskii Rabochii*, September 25, 1992.

the Energos able to defy central government's directives in the sector? Subsequent chapters will address these questions in detail. The broader context was the dissolution or the weakening of the Soviet-era bureaucratic structures that characterized much of the nineties. As one observer noted, "the authority of the federal government and federal laws has fallen to such low levels, that many don't even consider it necessary to take them into consideration."<sup>158</sup> Against this background, governors used a number of strategies to pursue their own goals for the electricity sector. One of the concrete ways in which Russia's regions gained autonomy over the regulation in the electricity sector was by including the sector in so-called bilateral treaties.<sup>159</sup> Russia's asymmetric federalism was a result of the combination of a weak central government and the apparent *carte blanche* that Yeltsin had handed to the regions. Regions with natural resources and strong leaders negotiated special status and privileges that went beyond those granted in the constitution. Yeltsin also granted these treaties to regions with the most credible threat of secession, i.e. ethnic republics, regions with natural resources and with strong governors.<sup>160</sup>

Treaties granted *de jure* autonomy in the electricity sector to the strongest regions, whose governors enjoyed the support of the Yeltsin administration: Tatarstan, Bashkortostan, Sverdlovsk, Irkutsk, Khabarovsk and Yakutia had treaties with special clauses on the electricity sector.<sup>161</sup> Some regions without a treaty agreement negotiated price levels directly with the federal government. This was the case for regions with a strong bargaining position due to the fact that they were electricity surplus regions: Khakassia, one of Siberia's big electricity producers, negotiated a ten-year moratorium on price increases.<sup>162</sup> "All the [electricity] surplus regions ran to Yeltsin (...) asking for special rules," recalled one observer.<sup>163</sup> Other regions sought special prerogatives to regulate the sector in times of crisis, when outages threatened to disrupt local economies.<sup>164</sup> These treaties and agreements were a double-edged sword for the federal government: on the one hand, they regularized the relationship between the region and the federal center on important issues such as fiscal authority and tariffs regulation. On the other hand, they created a patchwork of regulation that privileged the stronger regions and did not allow the federal government to redistribute across regions. In the electricity sector, a constant struggle was fought between low-cost regions that did not want to export electricity to neighboring high-cost regions. Irkutsk oblast, for example, wanted to make sure local industry and local residents benefitted from low-cost hydro-electricity, rather than subsidizing neighboring Buryatia.

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<sup>158</sup> In Russian: "авторитет федерального власти и законов упал так низко, что считаться с ними многие уже не считает необходимым." This was a comment on the Tyumen government's attempt to capture ownership of Tyumenenergo in blatant defiance of federal directives, see "Удельные княжества копят энергию," *Segondia*, December 18, 1998.

<sup>159</sup> For a reference to Irkutsk Oblast's treaty with the federal government and the provisions on electricity, see "Опять двадцать пять – энергетический спор продолжается," *Vostochno Sibirskaiia Pravda*, January 17, 1997.

<sup>160</sup> Treisman, *After the Deluge: Regional Crises and Political Consolidation in Russia*. Daniel Treisman, "Deciphering Russia's Federal Finance: Fiscal Appeasement in 1995 and 1996," *Europe Asia Studies* 50, no. 5 (1998).

<sup>161</sup> The Irkutsk treaty was discussed in interview #50, with businessman, Irkutsk, 20071115.

<sup>162</sup> *Burgansky*, "Hydro Power: Super-Profits or Super-Regulation?."

<sup>163</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>164</sup> "Красноярск отобрал собственность у ПАО ЕЭС," *Segonia*, December 4, 1998.

Finally, many regions gained *de facto* autonomy, rather than negotiating a legal framework on the parameters of regional rights and responsibilities. Regional governors' *de facto* sovereignty was manifest in multiple ways; they could, for example, stop fiscal transfers to the federal government.<sup>165</sup> Or they could appoint loyalists as representatives to federal agencies in the oblasts, which augmented their control even to issues that were formally beyond regional jurisdiction.<sup>166</sup> In the electricity sector, regional governors sometimes initiated commercial agreements with countries or provinces across Russia's border, proposing to sell electricity abroad. UES and federal level politicians objected to this practice, because they wanted to decide about how to allocate the low-cost electricity and profit directly from foreign sales. Regional initiatives were particularly unwelcome if the region happened to be a low-cost region that refused to subsidize other regions within Russia, while trying to fetch a higher price for locally produced electricity abroad. Irkutsk was guilty of this offense; the region was selling electricity to nearby Chinese and Mongolian regions, while refusing the federal government's plea to subsidize Buryatia.<sup>167</sup> Siberian governors – including Kress from Tomsk, Poleshaev from Omsk, Tulev from Kemerovo, Tolokonski from Novosibirsk, Surikov from Altai, Lebed from Krasnoyarsk and Nozhikov from Irkutsk – were particularly autonomous in the electricity sector. These governors also spearheaded the opposition to the liberal reform plans formulated at the center.<sup>168</sup>

The politically relevant actors during the Yeltsin government were thus the following: (1) the liberal reformers at the center, who had the ear of the Yeltsin government, but lacked the strength to implement controversial reform steps without the support of governors or other powerful groups, (2) the regional governors, and (3) the regional oligarchs. The political dynamics between these three groups created a situation in which market reforms were planned at the center, but could not be implemented across Russia, because alliances of regional governments and emerging private owners resisted the implementation of reforms. Yeltsin's liberal reform team, some of whom have continued to hold important positions in the Putin administration, realized that liberalization would require centralization.

For much of the nineties, the politics in the electricity sector mirrored broader center-region tensions. One of the liberal reformers' key goals was to dissolve the vertically integrated Energos, a step that was a prerequisite for liberalization and for breaking the governor's hold on the sector. Their plans were highly unpopular – “nobody liked Chubais' plan.”<sup>169</sup> Chubais, the architect of the reform plans in the electricity sector remembers – “who was against us when we started? (...) Governors, most parties in parliament, big business, minority shareholders,

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<sup>165</sup> For example, “Иркутск област отказывается платить в Федеральную казну,” *Vostochno Sibirskaiia Pravda*, February 2, 1994. See also Vadim Volkov, “Standard Oil and Yukos in the Context of Early Capitalism in the United States and Russia,” *Demokratizatsiya Demokratizatsiya* 16, no. 3 (2008): p.250.

<sup>166</sup> See Sakwa, *Russian Politics and Society*, p. 227. Subsequent chapters will show that this mattered crucially for the appointments to the regional energy commissions, REKS and as the directors of *Energos*.

<sup>167</sup> This was mentioned in the interview #54 with businessman, Irkutsk, 20071120. The regional administration even initiated the construction of high-voltage grids for this purpose, see Sherbakov A.S. and Tertyshnik, I. “Мировая экономика и внешнеэкономическая деятельность иркутского предбайкаля,” Irkutsk State University, Irkutsk, 2000, p.235. See also “Китай отверг российскую электроэнергию,” *Kommersant*, September 15, 2000.

<sup>168</sup> “Маским Шандоаров, Анатолия Чубайса холодно встретили в Сибири,” *Kommersant*, November 11, 2000.

<sup>169</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

scientists from the academies, and that's not the whole list.”<sup>170</sup> Governors and “big business” were the key opponents of reforms: governors wanted to continue their ability to influence the future of the electricity sector.<sup>171</sup> “Big business,” interested in securing their preferences in the provision of electricity, had turned to regional governors.<sup>172</sup>

In the Duma, liberal reformers faced a broad, but heterogeneous coalition led by regional governors and industrialists. They were joined by a group of reform opponents that included the communist party, the liberal Yabloko party and a group of electricity sector professionals, the *energetiki*.<sup>173</sup> Referring to the outcome of earlier round of privatizations under the auspices of Chubais, any opponents feared that national resources would be squandered, that well-connected insiders would grab valuable assets (a *prikhvatizatsia*, a word play, combining the words “privatizatsia” and *khvatat’* – to grab).<sup>174</sup> They also worried about the impact of rising electricity tariffs on the social and economic development of their regions, a fear that split the liberal camp. Grigory Yavlinsky, the head of Yabloko, Russia’s most established liberal party, opposed the young reformers of the Yeltsin team on these grounds.<sup>175</sup> Electricity sector experts (the “scientists in the academy” in Chubais’ list of opponents mentioned above), who thought liberal reforms were a bad idea included prominent bureaucrats in the energy ministry such as deputy energy minister Viktor Kudryavy.<sup>176</sup> They opposed reforms because they were highly skeptical of introducing markets as an organizational principle for providing electricity.<sup>177</sup> Together, these groups managed to stall electricity reforms in the Duma for years – from the mid-nineties up until 2003.<sup>178</sup>

While the Duma was one of the arenas of power politics, the effective opposition by the regional governors, and their firm hold on regional Energos, were the main reasons why plans to liberalize the sector remained blueprints. Yeltsin took steps to centralize power, but it was not until the Putin presidency that a strengthening of the federal government vis-à-vis the regions attained highest priority. Liberal reformers were not alone, though, in their assessment that regional independence was a threat to the Kremlin’s ability to govern, let alone “modernize” the country.

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<sup>170</sup> Interview with Chubais, in Craig Mellow, "Is This a Way to Create Capitalism? Maybe So," (Institutional Investor: 2003).

<sup>171</sup> Regional industrialists in Irkutsk support governor, see “Выборы,” *Vostochno Sibirskaiia Pravda*, February 15, 1994.

<sup>172</sup> They also had turned to regional and federal industrial associations and to governors who had been able to guarantee special privileges.

<sup>173</sup> Yabloko was Russia’s liberal democratic parties founded in the early nineties. It did not clear the 5% hurdle to make it into the Duma in the 2003 elections and received even less votes in the 2007 Duma elections.

<sup>174</sup> “Энергетика России: реформа или прихватизация?” *Vostochno Sibirskaiia Pravda*, November 14, 2000.

<sup>175</sup> Leon Aron, "Privatizing Russia's Electricity," in *Russian Outlook*, ed. American Enterprise Institute for Public Policy Research (Washington: American Enterprise Institute for Public Policy Research, 2003).

<sup>176</sup> Kudryavy, deputy minister of Energy was an outspoken critic of electricity reforms, see interview in *Ekspert*, No.14, April 13, 1998, pp.32. Kudryavy also appears in chapter 6.

<sup>177</sup> Chapter 6 will deal with this in more detail.

<sup>178</sup> Yabloko and Communist factions voted against reforms even in 2002/2003, but were a minority by then, see Aron, op.cit. note 64.

### **3. Power Politics II: an unlikely alliance**

When Putin became president, the political dynamics in Russia changed dramatically. Putin's efforts to eliminate two perceived challenges to the central government's sovereignty – the governors and the oligarchs – dominated Russian politics. A third aim of the federal government was the re-assertion of the center's ability to regulate the economy, to centralize economic policy-making<sup>179</sup> and to create a "unified economic zone."<sup>180</sup> These aims were wrapped into the promise to increase economic prosperity across all of Russia: "we must aim to make life equally good in all Russian regions. We will not achieve that without a unified legal and economic space in Russia."<sup>181</sup> While the fight against oligarchs and regional governors are much better known than the third aim, the steps taken towards all three have mutually reinforced each other.

President Putin largely succeeded in centralizing power during the first four years of his presidency. We will see that centralization also helped set in motion far-reaching changes in the electricity sector, as Putin united two different political factions unhappy about the autonomy of the regions: the liberal wing of the Putin administration led by Alexei Kudrin, German Gref and Mikhail Kasyanov and the *siloviki* – an unlikely and overlooked alliance.<sup>182</sup> The *siloviki* are a group of FSB insiders that are the core of Putin's power base.<sup>183</sup> For the *siloviki*, the rebellious regions were an unacceptable challenge to the central government's authority. They were also an acute threat to their interests as a political group, as governors were well-placed to succeed Yeltsin's entourage in the late nineties.<sup>184</sup> For the liberal faction in the Putin administration, the regions' autonomy was a problem because it complicated the implementation of various reforms. Chubais wanted to separate electricity sector reforms from regional politics, to "de-politicize" electricity, in other words.<sup>185</sup> Undercutting the governors' autonomy would weaken their hold on Energos. Interestingly, the aims of the liberal faction of the Putin government and the *siloviki* thus coincided. When Putin vowed to strengthen the authority of the state by establishing a "verticality of power" these two, ideologically opposed groups supported him.<sup>186</sup>

The position of the liberal faction towards electricity reform was unambiguous: they strongly supported Chubais' approach to sector reform.<sup>187</sup> The liberal party Soyuz Pravykh Sil (SPS,

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<sup>179</sup> An assessment of the trend of the centralization of economic policy making, see "Региональная Экономика," *Voprosy Ekonomiki*, No.7, 2006, p.73.

<sup>180</sup> Quote by Putin in chapter heading, see note 1.

<sup>181</sup> Ibid.

<sup>182</sup> The liberal faction of the Putin government included Kudrin, Gref, Chubais, who were Yeltsin era reformers who survived the elite transition between the Yeltsin and Putin periods. See for example Ian Bremmer and Samuel Charap, "The Siloviki in Putin's Russia: Who They Are and What They Want," *The Washington Quarterly* 30, no. 1 (2007).

<sup>183</sup> For an account of the rise of the *siloviki*, see Olga Kryshnanovskaya and Stephen White, "Putin's Militocracy," *Post-Soviet Affairs* 19, no. 4 (2003).

<sup>184</sup> Bremmer and Charap, "The Siloviki in Putin's Russia: Who They Are and What They Want." Note that *siloviki* as a faction also include members of Putin's Petersburg circles who did not have a background in the FSB.

<sup>185</sup> Interview #63 with electricity company executive, Moscow, 20071212.

<sup>186</sup> For an account of Putin's political reforms, see Reddaway and Ortung, ed., *The Dynamics of Russian Politics: Putin's Reform of Federal-Regional Relations*, vol. I (Oxford: Oxford, 2004), — — —, ed., *The Dynamics of Russian Politics: Putin's Reforms of Federal-Regional Relations*, vol. II (Oxford: Oxford UP, 2005).

<sup>187</sup> The position of the government's liberal faction in the electricity sector was represented by the so-called "Gref team", "Veliki Stoianie," *Vedomosti*, August 18, 2001. See chapter 6 for details on the position of the Gref team.

“Union of Rightist Forces”) also supported reforms, as Chubais was the leader of *SPS*.<sup>188</sup> The *siloviki*’s position has been less well-defined, but it usually includes a belief in statism as an economic policy program,<sup>189</sup> a position that the liberals call *goskapitalism*, literally “state-capitalism.” The reassertion of state control over the oil and gas sectors is a core part of the *siloviki*’s vision of a strong state to direct Russia’s economic future.<sup>190</sup> The *siloviki* and their allies in the Kremlin favored the creation of an energy-behemoth that unified the control of all energy assets – oil, gas and electricity – in the hands of Gazprom. A prominent proponent of *goskapitalism*, Igor Shuvalov, opposed the privatization of electricity, not wanting the state to lose control of energy, instead wanting Gazprom to be “an arm of the government.”<sup>191</sup> While electricity sector politics during the first few years of the Putin administration reflects the unlikely alliance of liberal reformers and *siloviki*, we will see that their views conflicted once reforms were actually implemented.

Many observers have wondered why the statist Putin and the liberal Chubais collaborated on electricity reforms. Their cooperation makes sense against the backdrop of opponents they faced: it was inspired by their mutual aim to sideline governors, the *Energetiki*, the communist party, and the liberal wing led by Yabloko – who had been trying to prevent the liberalization of the electricity sector. Indeed, with the creation and the President’s promotion of a “party of power,” United Russia, the political competition in the Duma was stifled. The parties that had had a certain influence on reforms, including the party backed by regional governors (Fatherland All Russia) and Chubais’ party (*SPS*), were either marginalized or disappeared altogether after United Russia started dominating the Duma in 2003.<sup>192</sup>

Governors were a key target of Putin’s attempts to shore up the authority of the central government. They had held considerable influence, because they were able to determine day-to-day politics, and because of the strength of their coalition in federal level politics. Under Putin, some particularly rebellious governors were “forced” to resign, notably Primorsky Krai’s Nazdratenko.<sup>193</sup> In a well-documented series of events, governors became subject to increasing oversight from the central government starting in 2000. In a zero-sum struggle for authority, regions began losing and the center began winning.<sup>194</sup> The first step was the creation of seven new supra-regional administrative structures – the “federal *okrugs*.” Each of these seven *okrugs*

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<sup>188</sup> Some say *SPS* was funded through money from the electricity sector. This was mentioned in interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>189</sup> Bremmer and Charap, “The Siloviki in Putin’s Russia: Who They Are and What They Want,” p.89.

<sup>190</sup> Putin had apparently formulated these ideas in a doctoral dissertation, according to Marshall I. Goldman, *Petrostate : Putin, Power, and the New Russia* (Oxford; New York: Oxford University Press, 2008).

<sup>191</sup> Igor Shuvalov said in an interview: “We don’t need Gazprom purely as a business – we want Gazprom to be an arm of the government (...).” Interview in *Russian Investment Review*, Vol.3/3, p.9, available online at [www.russiainvestors.com/pdf/v3n3/theRIRinterview.pdf](http://www.russiainvestors.com/pdf/v3n3/theRIRinterview.pdf)

<sup>192</sup> In addition to the weakened communist successor party, two parties continue to exist as a “shadow” opposition – Just Russia (SR, Spravedlivaya Rossiya) and Zhirinovskiy’s Liberal Democratic Party (LDP). SR and LDP have been unwilling or unable to oppose Kremlin policies, and their function has been to rubber stamp legislation introduced by United Russia.

<sup>193</sup> Nazdratenko was offered a leadership position in the fisheries ministry in Moscow to remove him from the governorship, clearly an offer he could not refuse (2001). Interview #31 with journalist covering electricity sector, Vladivostok, 20070915.

<sup>194</sup> Petrov, “How Have the Presidential Envoys Changed the Administrative-Political Balance of Putin’s Regime,” pp.33.

was placed under the supervision of a *polpred*, also called the “super-governor”<sup>195</sup> or presidential envoys, who were charged with ensuring that central government policies were enacted. A number of measures then subordinated regional administrative structures to these envoys, whose powers have been expanding rapidly.<sup>196</sup> Probably the most important and radical shift in center-region relations was the 2004 presidential decree that abolished the regional level election of governors, who are instead appointed by the president. As a result, a governor’s constituents are now no longer regional citizens, but the Kremlin’s power brokers.<sup>197</sup> As a regional journalist noted about a governor, his “capital city status” is now far more important than his reputation in the region.<sup>198</sup>

With Chubais’ ambition to break up, liberalize, and privatize the regional power monopolies, the stage in the electricity sector was similarly set for the conflict between reformers in Moscow and the regional governors. The threat to the governor’s influence in the electricity sector was real: Chubais’s reform plan explicitly rested on creating as much distance as possible between politics and the structures of the new electricity sector, for example by creating “de-territorialized” electricity companies (i.e. companies owning power plants in different regions across Russia).<sup>199</sup> Chubais wanted to create *one* market for electricity, with *one* set of rules.<sup>200</sup> While liberal reformers recognized the importance of a state that can create and enforce rules, and were willing to ally with the forces that sought to strengthen the authority of the central government, they also ultimately wanted to limit the role of the state in the electricity sector. “In my eyes state-capitalism is a dead-end,”<sup>201</sup> said Chubais. And in response to a question about why the state could not provide the needed investment for power plants, he answered: “the state can put up maps with lamps (*плакаты с лампочкой*)” – a reference to Lenin’s map with light bulbs to model the Soviet electrification project – “but that does resolve the [current] problems.”<sup>202</sup>

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<sup>195</sup> Interview #8 with electricity sector expert at financial institution, Moscow, 20061006.

<sup>196</sup> Petrov, "How Have the Presidential Envoys Changed the Administrative-Political Balance of Putin's Regime," pp.33. By 2007, *Novaya Gazeta* concluded that regional governors were left with so little autonomy that the presidential envoys were no longer needed, Andrei Ryabov, “Order For Taking the Regions,” *Novaya Gazeta*, October 8, 2007.

<sup>197</sup> Apparently a relatively small circle of Putin’s advisors in charge of appointments. Interview #19 with academic and policy analyst, Moscow 20061122. See also Nikolai Petrov, *Карнеги Брифинг*, 8/3, 2006.

<sup>198</sup> Capital city status in Russian: “столичный статус,” an interesting concept, to which I was introduced in interview #33, journalist covering electricity sector, Vladivostok, 20070921.

<sup>199</sup> The creation of “de-territorialized” electricity companies was high on the agenda in 2001; see “Низкие цены – враг экономики,” *Kommersant*, December 6, 2001. Interview #63 with electricity company executive, Moscow, 20071212. More broadly, the reorganization of the electricity sector was motivated by the ideal that there should be “less political involvement in business” and that the practice of “politically appointed heads of enterprises” should end, a liberal goal that was stressed in interview #43 with electricity sector economist, Khabarovsk, 20071010. This also implies that liberal reformers thought that electricity should be a business, see chapter 6.

<sup>200</sup> Interview #63 with electricity company executive, Moscow, 20071212.

<sup>201</sup> In Russian: “Я считаю госкапитализм тупиком.” Remark in response to question asked by Catherine Belton, journalist for the Financial Times, about an announced merger between SUEK and Gazprom, at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007.

<sup>202</sup> Chubais’ remark at the same conference.



Finally, Chubais' reforms were also widely expected to lead to price increases, although too much talk of this was a political taboo.<sup>203</sup>

Putin's strategies to undercut the authority of governors contributed greatly to the realization of the liberal reformers' plans in the electricity sector – namely, reducing the governor's ability to challenge reform plans or to pursue independent policies. “Disempowering regional governors and REKs [the regional regulatory bodies] was a key consideration in the reforms,” confirmed an insider.<sup>204</sup> And an observer from Primorsky Krai noted “[Governor] Darkin had no choice but to implement [Chubais'] reforms.”<sup>205</sup> Subsequent chapters will describe this process in more detail. In short, the Putin government cancelled the special privileges of regional governors negotiated under Yeltsin. In property and tariff disputes, federal agencies gained authority and federal courts consistently ruled in favor of UES and the central government, something that was not the case in the nineties.<sup>206</sup> Finally, and maybe most importantly, a set of administrative reforms created new regulatory bodies with more “teeth” at the center,<sup>207</sup> and reorganized the regulatory agencies in a way that increased oversight of regional regulators by the *polpredy*.<sup>208</sup> “Without the agreement of the office of the presidential envoy [*polpredstvo*], nothing happens,” said an electricity sector executive in Primorsky Krai.<sup>209</sup> As a result of these shifts in power to the center, the “political power of local monopolies, [the Energos], was broken down progressively” ... which led to the “evaporation of regional control.”<sup>210</sup> And “regional authorities have not been influential in shaping reforms [in the power sector].”<sup>211</sup>

What was the role of the oligarchs and Russia's new private owners during this period? As with the governors, they were key targets in the Kremlin's attempt to regain sovereignty. Unlike the governors, however, some of the largest conglomerates were able to retain influence, though the site of influence and the site of bargaining shifted from the regional to the federal level.

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<sup>203</sup> It was nevertheless discussed in the media, see interview with UES executive, “Низкие цены – враг экономики,” *Kommersant*, December 6, 2001

<sup>204</sup> Interview #11 with electricity sector expert, Moscow, 20061018.

<sup>205</sup> Interview #34 with academic and employee of electricity company, Vladivostok, 20070923.

<sup>206</sup> Chapter 3 will outline details of the court battle surrounding *Irkutskenergo*. Another example is a ruling by the federal arbitration court, that ruled in favor of *Dalenergo*, against the decision of the Primorsky Krai Regional Energy Commission, “Дальэнерго нашла защитников,” *Kommersant*, February 18, 2000.

<sup>207</sup> This is evident from a dataset of prices statistics that compares FEK and REK rates, obtained through EBRD/London.

<sup>208</sup> According to one source, governors are convened several times a year by the *polpred* to coordinate federal and regional policy in the electricity sector; interview #33 with journalist covering electricity sector, Vladivostok, 20070921.

<sup>209</sup> Interview #37 with electricity sector executive, Vladivostok, 20071002.

<sup>210</sup> Interview #16 with electricity sector consultant, Moscow/phone, 20061030. Statement to the same effect, “now governors hardly play a role” was made in interview #57 with electricity sector economist, Irkutsk, 20071122.

<sup>211</sup> Interview #1 with electricity sector expert at international financial institution, Moscow, 20060721. Another observer noted that the governor of Primorsky Krai, Darkin, “is pro-market, but has nothing to do with electricity.” This was reportedly based on an agreement between Chubais and Darkin, where Chubais promised to solve the region's energy problem and “create order,” but asked the governor to stay clear of electricity. Interview #39 with electrical engineer and electricity sector expert, Vladivostok, 20071004.

While the influence of the Russian oligarchy in the nineties can hardly be overestimated,<sup>212</sup> their position vis-à-vis the government changed radically under Putin. The first four years of the Putin administration were marked by a decline of the oligarchs' overt influence in Russian politics.<sup>213</sup> This happened in various ways. First, the assets of Russia's oligarchs were consolidated in the hands of a few powerful conglomerates. After the crisis in 1998, many of the smaller, regionally based enterprises were swallowed by larger conglomerates, often the FIGs (financial-industrial groups).<sup>214</sup> The remaining oligarchs were rendered compliant with a combination of carrots and sticks. The stick for a few of the high profile oligarchs was arrest, labor camp, or exile.<sup>215</sup> The most notorious move to eliminate oligarchic power was the re-nationalization of Yukos and the imprisonment of Mikhail Khodorkovsky. The government offered two sweet carrots to loyal oligarchs: immunity for those assets already won and the ability to acquire more assets to complete their vertically integrated business empires.<sup>216</sup>

Not wanting to jeopardize assets acquired during the tumultuous nineties, most remaining oligarchs "behaved well" and followed the wishes of the center. The taming of the oligarchs had a very direct influence on the electricity reforms. First, the influence of some of the oligarchs was eliminated. The regional or "local oligarchs have been significantly less influential,"<sup>217</sup> noted one observer. Then, a number of the big national oligarchic empires were broken up, first and foremost Khodorokovsky's Yukos. Yukos had owned Tomskenergo and on several occasions had challenged UES' plans for unbundling, corporate restructuring and the creation of the new supra-regional generation company.<sup>218</sup> Second, along with the taming of the "well-behaved" oligarchs, the site of their influence shifted from the regional to the federal level. Designated

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<sup>212</sup> Their role in President Yeltsin's reelection to his second term unambiguously signaled their dominance, which manifested itself in many other ways, see, for example, Hoffman, *The Oligarchs: Wealth and Power in the New Russia*.

<sup>213</sup> Orttung, ed., *The Dynamics of Russian Politics: Putin's Reforms of Federal-Regional Relations*, Petrov, "How Have the Presidential Envoys Changed the Administrative-Political Balance of Putin's Regime."

<sup>214</sup> For the changing nature and role of FIGs, see Barnes (2006) Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*. For an account specifically about Siberian enterprises, see Maksim Shandarov, "Siberian Federal Okurg," in *The Dynamics of Russian Politics: Putin's Reform of Federal-Regional Relations*, ed. Robert Orttung and Peter Reddaway (Oxford: Rowman and Littlefield, 2004), p. 214. The most important ones include Potanin's Interros, Deripaska's Rusal.

<sup>215</sup> Including the media tycoons Berezovsky and Gusinsky and the oil magnate Mikhail Khodorkovsky. As is well known, these moves were the basis for virtually complete state control over broadcast media, the de facto, "re-nationalization" of Yukos, the largest private oil company, and more generally, the neutralization of oligarchs as political actors. See for example, Keith Gessen, "Review of Richard Sakwa: The Quality of Freedom: Khodorkovsky, Putin and the Yukos Affair," *The London Review of Books* 32, no. 4, Richard Sakwa, *The Quality of Freedom: Khodorkovsky, Putin, and the Yukos Affair* (Oxford: Oxford University Press, 2009).

<sup>216</sup> Masha Lipman called this "property rights earned by good behavior." Talk given at ISEES/BPS, UC Berkeley, in March 2007.

<sup>217</sup> Interview #7 with electricity sector analyst at financial institution, Moscow, 20061005.

<sup>218</sup> Nadia Popova, "Court postpones Ruling on TGK-11 Asset Split," *St.Petersburg Times*, April 1, 2008.

“champions of national industry,” and “strategically important enterprises”<sup>219</sup> they received special privileges from the federal government.<sup>220</sup>

An analogy between the challenge of the Energos and the challenge of regional governors to the central government that was popular in the media around this time may go some way to explain why President Putin supported Chubais. The media nurtured the idea that the challenge by the Energos to UES was a mirror image to the challenge by governors and regional oligarchs to the central government’s authority. Parallel to Putin’s attempt to oust the rebellious governors, Chubais at the head of UES took steps to appoint loyalists to the head the Energos. This was called “changing the face of the Energos”, i.e. replacing the old guard of regionally based directors with new managers, often with no ties to the region, as chapter 6 will illustrate in detail.<sup>221</sup>

As the Duma opposition led by regional governors and oligarchs was neutralized, an important set of legislations was passed in the fall 2002 and early 2003.<sup>222</sup> These laws marked the beginning of more orderly reform in the sector. As such, it was an important watershed for all stakeholders, even though the law only set out the basic contours of reforms. It ended a period of “legal disorder,” in which “everybody could do what they wanted.”<sup>223</sup> And it charted the broad liberalization course that was to define the next stage: divestiture of the government stake in generation and retail, to create markets and competition, but reassertion of state control over transmission networks.<sup>224</sup> I have argued so far that a powerful alliance allowed liberal reformers to get reforms off the ground. We will see, however, that electricity nevertheless was not de-

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<sup>219</sup> A list of strategically important enterprises was compiled and approved by the Kremlin in 2004 (by presidential decree No. 1009, from August 4, 2004). The list is available on the Kremlin’s website, <http://archive.kremlin.ru/text/docs/2004/08/75174.shtml>.

<sup>220</sup> Goldman, *Petrostate : Putin, Power, and the New Russia*, pp.97. Champions of national industry: they promote the state’s goals – domestically and internationally, in return for a large share of the domestic market and special privileges.

<sup>221</sup> The replacement of old management had been one of Chubais’ priorities while he was the head of privatization, he is quoted to have said with the old directors “there remain the same instincts, habits, connections and the same bend in the spine”, Thane Gustafson, *Capitalism Russian-Style*, ed. Cambridge (1999), p.37. See chapter 6 for details on the replacement of the old guard.

<sup>222</sup> These laws passed in three readings in the Duma, see, for example, Alla Startseva, “Deputies Vote to Break Up Power Grid,” *Moscow Times*, October 10, 2002. The electricity package consists of six legislative measures: two federal laws ‘On electricity’ and ‘On the implementation of the law “On electricity”’ (Federal Law No. 35-FZ dated March 26, 2003 "On the Electric Power Industry" and Federal Law No. 36-FZ dated March 26, 2003 "On the Specifics of Electric Power Industry Functioning during the Transition Period") as well as four bills amending other pieces of legislation: the Civil Code (part 2), the law ‘On natural monopolies’, the law ‘On the state regulation of electricity and heating tariffs’, and the law ‘On energy saving,’ William Tompson, "Electricity Legislation Passes Second Reading " in *Prospects for the Russian Federation Project*, ed. Royal Institute of International Affairs: Russia and Eurasia Programme (London: 2003).

<sup>223</sup> According to one observer, the lack of a legal basis for the changes in the 90s was partly responsible for the electricity crises of the 1990s; interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>224</sup> Secure control of transmission networks – partly because it is a natural monopoly, partly because it can be a “cash cow” in the words of one analyst. Interview #15 with electricity sector analyst at financial institution, Moscow, 20061027.

politicized and the “big battle” continued.<sup>225</sup> One observer thought, “the 2003 version of the law was very radical, [and] corrections were called for.”<sup>226</sup> Liberal reformers officially won some of the key battles in the sector, but these “corrections” were political concessions they had to make along the way. Corrections and concessions ended up creating the three different zones in European Russia, Siberia and the Far East. It was not clear around 2002, however, that the three regions would emerge with different reform trajectories and outcomes. The federal law, for example, designated the Far East a “special case,” but made not explicit provisions how this was to influence reforms.<sup>227</sup>

#### **4. Power Politics III: post-Soviet economic planning**

A different set of political forces influenced reforms after the passage of the 2002/3 laws. Policies were no longer contested in the Duma, and governors were losing much of their clout, but this did not mean that electricity sector outcomes were not subject to political battles. Conflicts continued between the different factions of the government and between conglomerates with different interest vis-à-vis the electricity sector.

Liberal reformers initially wanted to create thousands of new power companies and one market, with one set of rules.<sup>228</sup> The reforms ended up creating 22 new companies and regional differences new ownership and regulatory regimes persisted. These differences reflect the compromises that liberal reformers had to make with Russia’s large energy and industrial conglomerates and the *siloviki*. The political dynamic that necessitated these compromises is rooted in relationship between the Putin government, the oligarchs, and the two factions he relies on – the statist *siloviki* and the liberal reformers. As in earlier periods, the logic of electricity sector bargains combines short-term political calculations and long-term developmental goals.

On one level, electricity sector bargains reflected a balancing strategy – Putin accommodated both the liberal and the statist factions, but also forced both sides to compromise. Again, we see that the model of a liberalizing government “buying off” its opponents does not adequately describe the logic of the bargain between the various interested parties. Since liberalization was not the primary goal, liberals had to make concessions to the *siloviki*, who also were unable to dominate the agenda. Liberals did win important victories: they were granted free reign to dismantle the Soviet-era electricity monopoly and create new market institutions. And as chapter 6 will argue, managers committed to the liberal vision of markets run most electricity companies. Most of the country’s power plants have been privatized, rather than being handed below market value to Gazprom. But liberal reformers also had to make concessions to the supporters of *goskapitalism*. The state did indeed retain control over many important power plants, and Gazprom was granted ownership of important assets – something that the *siloviki* and *goskapitalist* faction had been pushing for.

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<sup>225</sup> In Russian “большая борьба,” interview #39 with electrical engineer and electricity sector expert, Vladivostok, 20071004.

<sup>226</sup> Interview #52 with electricity sector economist, Irkutsk, 20071117. How “radical” these laws were, was also mentioned in Interview #57 with electricity sector economist, Irkutsk, 20071122. Note, that both these informants were “*energetiki*,” the old guard of electricity sector professionals (see chapter 6).

<sup>227</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>228</sup> Interview with Chubais by Craig Mellow, in Mellow, “Is This a Way to Create Capitalism? Maybe So.”

On another level, and I will focus on this element below, the transformation of the electricity sector was shaped by the state's attempts to use the electricity sector, in the words of one observer, as a "mechanism for development."<sup>229</sup> Preventing de-industrialization was a key feature of the developmental strategy of regional governors throughout the Soviet period. Even though during the nineties these kinds of "activist" developmentalist policies were not a priority of the liberal reformer at the center, this mattered less, since the regional arena was the key site of electricity sector regulation during at that time. Attempts to keep industrial enterprises going led to ad hoc measures to prevent the closure of particular factories, with regional and federal governments extending credit lines, adjusting import and export duties to the needs to the enterprise, accepting delays in tax obligations, etc. Under Putin, a more comprehensive strategy focused on attempts to diversify economic activity beyond the oil sector.

At the same time, two competing models of how to achieve diversification continued to coexist. They broadly overlapped with the positions of the liberal and the *goskapitalist* factions of the Putin government. They both shared a belief in markets, but diverged on their views of the origins of competitiveness. The liberal faction of the Putin government insisted that diversification is consistent with reforms that eliminate subsidies, liberalize the gas industry, and eliminate various special protections. They wanted to achieve diversification by letting "genuine winners" emerge, a strategy that is premised on the belief that only they can be genuinely competitive in the long-run.<sup>230</sup> In this view, the government's role should be limited to currency management, i.e. preventing the appreciation of the ruble due to the influx of hydro-carbon profits. The more activist and statist faction of the Putin government believed that competitiveness is created in a particular policy and international economic context, rather than based on only on a company's merits. At the core of this activist strategy was state support for a few select "national champions," companies that are endowed with the necessary resources to employ Russians domestically, while competing internationally.<sup>231</sup> Note, while critics thought of this strategy as propping up unsustainable operations, proponents view it as a way to create and realize the potential inherent in Russian industry to be at the cutting edge of their sectors.<sup>232</sup>

The concessions that liberals had to make to the large energy and industrial conglomerates reflected the predominance of the activist conception of international competitiveness. One important reason for this dominance concerned the implication of the two models for the mobility of Russian citizens. At the core of the two models are two diverging future scenarios for labor mobility, and more broadly, for the spatial allocation of Russian towns and cities and with it, people's lives. The laissez-faire model is premised on the axiom that Soviet planners have bequeathed to Russia a profound "spatial misallocation of people," as cities and towns are

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<sup>229</sup> Interview #52 with electricity sector economist, Irkutsk, 20071117, he also called it an "economic mechanism to develop regions."

<sup>230</sup> "Genuine winners" is an expression used in the World Bank Russian Economic Report, March 2005, p.14, available, <http://web.worldbank.org/>

<sup>231</sup> Putin's doctoral dissertation (entitled "Strategic Planning of the Reproduction of the Resource Base" elaborated on the merits of national champions, see Harley Balzer, "Vladimir Putin's Academic Writings and Russian Natural Resource Policy," *Problems of Post-Communism* 53, no. 1 (2006), Goldman, *Petrostate : Putin, Power, and the New Russia*. See also Laura Solanko, "The policy of national champions and Russian competitiveness," Expert Position, 6/2007, published by the Institute for Economies in Transition at the Bank of Finland, available at <http://www.bof.fi/>.

<sup>232</sup> State funding of science initiatives is a core part of this agenda as well, see for example, "Dubna's Tale."

located in places that are either too cold (thermal misallocation),<sup>233</sup> in too few large urban centers, and too concentrated on one industry, most importantly, in the shrinking military-industrial complex.<sup>234</sup> Soviet planners did not have to be concerned about the future returns on investments, and they made investment decisions based on political grounds. Post-Soviet liberal reformers, however, argued that the physical geography – i.e. the cities and factories that resulted from these decisions – is too costly to be maintained in a market economy. Misallocations can only be corrected by letting northern and mono-industrial towns shrink to a size that is viable in a market economy. This would happen once the special privileges for remote fringe regions are cut – as an influential policy document called for.<sup>235</sup>

The *goskapitalist* model, on the other hand, rejected this argument as essentially suicidal. Rather than abandoning cities, activists wanted to transform, and “modernize” existing population centers. Not surprisingly, it was regionalist movements that initially rejected the argument that the depopulation of their cities was inevitable. A key demand of the Siberian regionalist movement was the retention of local resources, with the aim to transform Soviet-era cities, rather than writing them off as non-viable fringe.<sup>236</sup> Towards the late 1990s, regionalist movements have waned, and with the centralization of political power and economic resources, federal level policy towards regions became more important. With the liberal and the statist factions pulling in two directions, the federal government often pursued a dual strategy. On the one hand, direct state entitlements to citizens were either eliminated or greatly reduced.<sup>237</sup> On the other, the federal government ultimately remained committed to supporting and maintaining Soviet-era industrial enterprises, as a way towards economic diversification and to avoid turning provincial cities into “ghost towns.” To achieve this end, it put private companies in charge of providing employment and social benefits, in return for providing them with state assistance.<sup>238</sup> As Rutland points out, oligarchs were “expected to play an active role in helping the Kremlin to realize its political, economic and social agenda.”<sup>239</sup> At the same time, conglomerates were endowed with state resources and special provisions to increase their international competitiveness. State-oligarch agreements thus are in many ways quite similar to the regional level bargains of the 1990s.

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<sup>233</sup> Fiona Hill and Clifford Gaddy, *The Siberian Curse: How Communist Planners Left Russia out in the Cold* (Washington D.C.: The Brookings Institutions, 2003). Andrew C. Kuchins, “Russia after the Fall,” 2002, Brookings Institutions Press, Washington DC.

<sup>234</sup> Clifford G. Gaddy, *The Price of the Past : Russia's Struggle with the Legacy of a Militarized Economy* (Washington, D.C.: Brookings Institution, 1996). See also “Structural Changes in the Russian Economy: Spatial Reallocation,” working paper of the Centre for Energy Policy and Economics (CEPE) at the ETH Zurich available at [www.cepe.ethz.ch/education/UrbanSpatial/CEM\\_SectionC.pdf](http://www.cepe.ethz.ch/education/UrbanSpatial/CEM_SectionC.pdf)

<sup>235</sup> This is noted in the Gref Programme 2000, quoted in Michael Rasell, “Neoliberalism in the North: The Transformation of Social Policy in Russia's Northern Periphery,” *Polar Geography* 32, no. 3&4 (2009): p.99.

<sup>236</sup> The idea of retaining resources in a particular location runs counter to the *laissez-faire* model that wants to see them allocated to the most efficient user, thus also to the highest paying bidder.

<sup>237</sup> Susanne Wengle and Michael Rasell, “The Monetisation of L'goty: Changing Patterns of Welfare Politics and Provision in Russia,” *Europe-Asia Studies* 60, no. 5 (2008), Rasell, “Neoliberalism in the North: The Transformation of Social Policy in Russia's Northern Periphery.”

<sup>238</sup> Niobe Thompson, *Settlers on the Edge: Identity and Modernization on Russia's Arctic Frontier* (Vancouver: UBC Press, 2008).

<sup>239</sup> According to Rutland oligarchs are “expected to play an active role in helping the Kremlin to realize its political, economic and social agenda.” Peter Rutland, “Business-State Relations in Russia,” Paper presented at the at the World Congress of the International Council for Central and East European Studies, Berlin, 26-30 July 2005

While the federal government's short-term political goals likely influenced by concerns about Putin's support base among Kremlin insiders, long-term developmental goals concern his legitimacy beyond the walls of the Kremlin. To gain popular legitimacy as Russia's leaders Putin needed to do more than to win over bureaucrats, to coerce or co-opt new the oligarchs and to reassert the center's authority over the regions. Even if Putin managed to strengthen the central government, he still had to provide solutions to the problems that regional governors already grappled with in the 1990s, or at least make a credible promise to bring about prosperity and stability. Many called for the central government to coordinate industrial policy, to "systematically" help regions to integrate into markets, as "the most important factor in the destruction of regional industries all over Russia, was the fact that the government abstained totally from regulating [industry]." <sup>240</sup> The central government did in fact turn increasingly to regional development strategies, which led to what one observer called "the rebirth of interest for regional programs as documents of strategic planning." <sup>241</sup> New private owners were enlisted to contribute in a myriad of ways to this challenging task, with various incentives, including valuable power plants and energy subsidies. <sup>242</sup>

Infrastructure projects became an important focus of the relation between the government and the oligarchs, <sup>243</sup> partly, I argue, because legitimacy for both Putin and regional governors (while they were still elected) was closely connected with their ability to provide economic growth and project confidence about future well-being. Infrastructure projects are not only materially a necessary prerequisite for economic growth; they also are symbolically useful "down payments" on future prosperity. The Putin government is relying explicitly on infrastructure projects to foster economic growth: "Infrastructure development is a key tool for the socio-economic development of Russia's regions." <sup>244</sup> "Territorial planning documents," key documents defining official development strategies, provide direction and justification for large-scale state-funded investment projects, including important infrastructure projects and the so-called "national priority projects" a set of state-funded investment projects in health, education and housing. <sup>245</sup> Finally, public spending as percentage of GDP was high in Russia, and public works projects are important drivers of economic development and employment.

What about Russia's large industrial and energy conglomerates? What were their motives in this cooperation? In general terms, Russia's conglomerates had an interest in cooperating with the government, because the newly strengthened presidency could wield a whole "cornucopia of

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<sup>240</sup> In Russian: "Выражу мнение, и не только мое, что самое большую роль бе разбале промышленности регионов и всей России сыграло то, что государство полностью отказалось от ее регулирования." Opinion by Shepshelev, an industrialist from Barnaul; in *Eko*, No.2, 2006, p.96.

<sup>241</sup> Alexander Granberg and Alexander Pelyasov, in a conference paper, "Programs of regional development revisited - case of the Russian Federation," delivered at the 45<sup>th</sup> Congress of the European Regional Science Association, August 2005 at Vrije Universitet Amsterdam. According to Granberg and Pelyasov, the number of federal programs for regional development has increased since the late nineties; with seven in 1996, fourteen in 1997, 23 in 1998; and "dozens" today.

<sup>242</sup> In Russian political discourse this is known as "corporate social responsibility," see for example Timothy Frye, "Original Sin, Good Works, and Property Rights in Russia," *World Politics* 58, no. 4 (2006).

<sup>243</sup> While this is true everywhere, it may be particularly important in Russia, where the Soviet emphasis on the material-technical basis of economic activities still resonates.

<sup>244</sup> See quote at the beginning of the chapter. See also p.6 of the *Konzeptsia 2008*.

<sup>245</sup> Putin introduced these national priority projects were introduced in 2005 in pursuit of his stated goal of social and economic development (see <http://www.rost.ru/> for details).

carrots and sticks” to achieve compliance.<sup>246</sup> Russia’s conglomerates were also interested in consolidating their control over certain sectors, including the electricity sector. Generally, they sought to pursue vertical integration as a strategy to insulate themselves against the uncertainties of doing business in the post-communist environment, i.e. to lower the risks of unpredictable contracts with companies in the electricity sector.<sup>247</sup> More specifically, however, we will see in future chapters that energy and industrial conglomerates had different interests vis-à-vis the electricity sector, targeting different assets and pushing for different kinds of subsidy regimes. The state’s policy was explicitly to balance interests between different private interests; an explicit priority in the electricity sector’s reforms was that the state should “balance the interests of electricity providers and consumers.”<sup>248</sup>

I will focus on the influence of the two conglomerates, Gazprom and Rusal, in particular.<sup>249</sup> Note one preliminary factor that may have contributed to Gazprom’s and Rusal’s success in influencing the central government is that gas and aluminum sectors have among the most highly concentrated ownership in the Russian economy.<sup>250</sup> In general, ownership in the Russian economy was fairly concentrated, as a result of both Soviet patterns of industrialization and privatization trajectories of the 1990s.<sup>251</sup> The Soviet economy had typically far fewer firms in each industry than in Western capitalist economies.<sup>252</sup> It was also common that industries were located in one or a few sites. In sectors where there are only a few owners, the conglomerates’ influence depended on the relationship of one company or one oligarchic empire to the Kremlin’s power brokers and their influence was not hindered by the struggles between competing oligarchs.<sup>253</sup>

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<sup>246</sup> Peter Rutland, “The Oligarchs and Economic Development” in Wegren, 2009 Stephen Wegren and Dale Herspring, *After Putin's Russia: Past Imperfect, Future Uncertain* (Lanham, Md.: Rowman & Littlefield ).

<sup>247</sup> This tendency has been widely observed, for example by Rutland, *ibid.* According to Volkov: “target selection for hostile takeovers was governed by the logic of vertical integration” Volkov, “Standard Oil and Yukos in the Context of Early Capitalism in the United States and Russia,” p.252. This applies to the electricity sector in particular, according to interview #9 with electricity sector analyst at financial institution, Moscow, 20061008. For a reference to this strategy, see “Кто правее, Есапов или Чубайс?” *Komsomol'skay Pravda*, November 13, 2002.

<sup>248</sup> In Russian: “достижение баланса экономических интересов поставщиков и потребителей электрической энергии.” This is listed as one of the key functions of government regulation of electricity markets, in V.V. Khlebnikov, *Rynok Elektroenergii V Rossii* (Gumanitarnyi isdatel'skii zentr VLADOS 2005), p.181.

<sup>249</sup> Gazprom’s importance for Russia’s economy can hardly be overstated: the company produces almost 90% of Russia’s gas, which accounts for about 8% of GDP and for a large share of Russia’s export revenue, according Daniel Simmons and Isabel Murray, “Russian Gas: Will There Be Enough Investment?,” *Russian Analytical Digest* 27 (2007).

<sup>250</sup> Sergei Guriev and Andrei Rachinsky, “The Role of Oligarchs in Russian Capitalism,” *Journal of Economic Perspectives* 19, no. 1 (2005). Also in Guriev and Rachinsky, “Ownership concentration in Russian industry,” a background paper for the World Bank’s Country Economic Memorandum (CEM) for Russia 2004, <http://www.worldbank.org/>

<sup>251</sup> For a post-Soviet history of the aluminum sector, see, for example, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*. For the developments in the gas sector, see Gustafson, *Capitalism Russian-Style*, Jonathan P. Stern, *The Future of Russian Gas and Gazprom*, ed. Oxford Institute for Energy Studies (Oxford: Oxford University Press, 2005).

<sup>252</sup> Olivier and Michael Kremer Blanchard, “Disorganization,” *The Quarterly Journal of Economics* 62, no. 4 (1997): p.1093.

<sup>253</sup> Chapter 5 will address the role of industrial geography in more detail.



## 5. Three regions, three strategies, three bargains

This section of the chapter will introduce the developmental bargains between the government and the large conglomerates in the three supra-regions European Russia, Siberia and the Far East. These bargains, I argue, are key to understanding the different patterns of ownership and subsidy regimes addressed in subsequent chapters. Broadly speaking, developmental bargains were the negotiations by different tiers of government designed to prevent de-industrialization during the integration of a region into domestic and international markets. A few aspects of these negotiations between the government and Russia's conglomerates are important. First, they rested on development strategies that are region specific, because they build on specificities of regional economies and regional geography, as chapter 5 will explain in more detail. They thus entailed modalities of infrastructure provision and energy subsidies that map on to economic geographies of a region. Second, they created a situation in which the state and the oligarchs are mutually dependent. Third, important similarities exist between the bargains struck between newly emerging oligarchs and regional governments in the nineties, and between the consolidated conglomerates and the federal government after 2003. A set of ideas about regional development and a list of projects had gained currency in the 1990s and earlier, were carried over to the Putin-era bargains.<sup>254</sup> Unlike in the 1990s, however, today, the Ministry of Regional Development is supposed to oversee the formulation and implementation of regional development strategies, though in coordination with regional administrations.<sup>255</sup> According to several observers, coordination remains a problematic issue, and "temporary dis-organization" prevails.<sup>256</sup>

One of the main problems of regional development programs was that they were often underfinanced.<sup>257</sup> Just as with regional governors in the 1990s, the central government has tried to enlist the cooperation of Russia's conglomerates for these programs, as well as their social and economic development agenda.<sup>258</sup> In return, conglomerates were able to shape development strategies in general, and the energy and electricity sectors in particular, a process that reflects the mutual dependence of oligarchs and the various tiers of the state. In broad terms, oligarchs cannot operate without the "protection" of the state, while the state, in turn, relies on conglomerates as the basic decision-making units in a market economy. In more concrete terms, mutual dependence is manifest in the myriad details of the complex interaction between conglomerates and regional and federal authorities. For example, while the company

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<sup>254</sup> They are also often based on elements of a script and a vocabulary that gained currency in an earlier period.

<sup>255</sup> Ministry of Regional Development, *Kontseptzia 2008*. Note that the geographical scope of various development strategies overlaps: strategies are simultaneously formulated as national level documents (National Energy Strategy, the "Putin Plan"), for large meta-regions (Federal Development Strategy for the Transbaikal and Far East), and on the "oblast," i.e. regional level (Irkutsk Oblast Development Strategy). Each of the seven "federal *okrug*" has a development strategy, most of the "oblasts," there is a national energy strategy, etc.

<sup>256</sup> The Ministry of Regional Development admits that there is a problem with coordinating these various levels of economic planning, see *Kontseptzia 2008*. See also Sozinov, who discusses how this "временная дезорганизация" is the result of a number of contradictions in the way regional regulation is attempted, Sozinov, V.A. "Регулирование экономического развития на уровне субъекта Федерации," *Эко*, No.3, 2006.

<sup>257</sup> Granberg and Pelyasov, in "Programs of regional development revisited," argue that "constant under-financing" was the curse of regional development programs, especially in the late 1990s.

<sup>258</sup> Some of the oligarchs were "put in charge" of regions; Roman Abramovitch in Chukhotka, for example, who provides "provider of humanitarian aid in the form of flour, sugar, oil, fish hooks and nets." Mumin Shakirov "Chukotka's Smitten With Roman Abramovich," *St. Petersburg Times*, August 7, 2001.

Irkutskenergo owns and controls the physical installations of power plants – all the turbines, grids and switches – it only leases the actual dam from the federal government, as the dam was not privatized along with the power plant attached to it. Irkutskenergo, and its owner Rusal, therefore depends on the government to uphold and periodically renegotiate the terms of the lease agreement.<sup>259</sup>

In what follows, I identify elements of development strategies that are relevant for the electricity sector and show for each region how these strategies rely on contributions by Russia's conglomerates. These are only the broadest outlines of the “developmental bargains;” chapters 3 and 4 will provide a more in depth picture.

*European Russia: the national energy strategy and Gazprom's bargains*

In European Russia, Gazprom ended up with a large share of the region's power plants, thus consolidating its hold on a vertically integrated energy production chain. At the same time, electricity subsidies were decreasing, and prices were rising. This meant that the company gained access to new and important ways to earn profits in the energy sector.<sup>260</sup> Gazprom received these concessions in return for contributions to successive government's development reliance on the “use” the gas monopoly as a key lever for influencing domestic economic development in European Russia.<sup>261</sup> Of course the bargains between Gazprom and the government were complex and subject to shifting priorities.<sup>262</sup> Yet, at the core of the government-Gazprom bargain was a crucial pact: Gazprom supplies gas to domestic industry and domestic consumers at heavily discounted prices. The Russian government's energy strategy repeatedly assured that “guaranteeing the provision of affordable energy resources to the population, to socially and strategically important entities is one of the most important task of the state's energy policy.”<sup>263</sup> This meant that how much gas to reserve for domestic consumers and at what prices are key questions in Russian domestic politics. The most significant advantage Gazprom gets in return for providing subsidized energy is a monopoly on gas exports, making it the sole beneficiary of international sales of the world's largest natural gas reserves.

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<sup>259</sup> Interview #53 with employee of electricity company, Irkutsk, 20071119; see also interview with Vladimir V. Kolmogorov, general director of Irkutskenergo, in *Свет Негасимый: Энергетике Приангарья 50 Лет*, published by Восточно Сивирская Издательская Компания, Irkutsk, 2004, p.10.

<sup>260</sup> Miller announced in 2006 “We have acquired assets in the electric power industry. (...) We are receiving already the dividends from these investments, and plan to increase our presence in this sector of the energy business.” See later chapters for details. Statement by Alexey Miller, Chief Executive of Gazprom, at the 23<sup>rd</sup> World Gas Conference, Amsterdam, June 6, 2006. <http://www.gazprom.ru/eng/articles/article19731.shtml>.

<sup>261</sup> I am relying on the National Energy Strategy for the domestic role of Gazprom (“Energy Strategy of the Russian Federation until 2010,” approved in 2003). Commentary, for example, Goldman, *Petrostate : Putin, Power, and the New Russia*, Sakwa, *The Quality of Freedom: Khodorkovsky, Putin, and the Yukos Affair*. I am relying here on “European Russia” as a unit of analysis, although one could also conduct a much more fine-grained analysis of development strategies for smaller geographical regions – the Southern provinces, the North West, for example. These regional strategies are important especially for the more independent “ethnic Republics” within Russia (Tatarstan, for example) and a number of Southern regions, and are left aside here for reasons of space only.

<sup>262</sup> For an analysis of the shifting relations between GP and the government, see Stern, *The Future of Russian Gas and Gazprom*.

<sup>263</sup> In Russian “одной из важнейших задач государственной энергетической политики является гарантированное обеспечение энергетическим ресурсам населения, социально значимых и стратегических объектов по доступным ценам,” Energy Strategy of the Russian Federation, to the year 2020/Энергетическая Стратегия России на период до 2020 года, p.45.

In the electricity sector, the bargain between Gazprom, UES and the government had several dimensions. Electricity companies were Gazprom's biggest customers and the price of gas supplied to power plants has been subject to enduring battles between the company, its downstream customers and the government. For most of the 1990s, this conflict between UES and Gazprom lingered. It came to a head in 2000 during the period of elite turnover between the Yeltsin and Putin administrations. In an example of how energy prices are the stuff of Russia's "real life politics," the chairman of Gazprom, Rem Vyakhirev, threatened to cut gas deliveries to electricity companies in April 2000 unless the companies' debt was paid in full and paid at prices that had previously been agreed to.<sup>264</sup> Putin, newly elected president, and his deputy prime minister Khristenko had been hostile to UES' leadership just a few months earlier, which probably contributed to Vyakhirev's audacity to demand an end to Gazprom's sponsorship of failing Energos. After a few days of uncertainty, Putin resolved the UES-Gazprom standoff by supporting the electricity sector, ordering Gazprom to supply UES and the Energos with the required gas. Similarly, Gazprom's demands for higher gas prices were denied.<sup>265</sup> Putin therefore sided with domestic industry and the electricity sector, continuing the policy that they should be entitled to subsidized energy. Soon after this "rebellion" by Vyakhirev, he lost the position of the board chairman, and Putin made sure the company's board and managers were replaced with his loyalists.<sup>266</sup> Most analysts agree that under the new leadership Gazprom has adhered to its side of the bargain and continues to play an important role in subsidizing Russian domestic industry.<sup>267</sup>

A further aspect of the bargain between Gazprom, UES and the government concerns a proposed switch from gas to coal in domestic energy consumption.<sup>268</sup> Gazprom long demanded that UES substitute gas for other thermal energy sources – coal in particular – in order to free up gas for export.<sup>269</sup> Since one rationale of electricity sector reforms is to promote more energy efficient and cleaner technologies, the move to coal seems paradoxical, much criticized by environmentalists. The liberal reformers were not initially in favor of switching to coal, but they apparently had to make concessions to the political forces who considered this important. One

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<sup>264</sup> Instead of the 26 billion cubic meters, Gazprom threatened to provide only 22, for the second quarter of 2000. *Izvestiya*, April 12, 2001. According to *Kommersant*, April 11, 2000.

<sup>265</sup> *Ibid.*

<sup>266</sup> To ensure that Gazprom would play the role the Kremlin devised for it, one of the first moves as president was to make sure that Gazprom's company's board and managers were replaced with his loyalists. Miller replaced Vyakhirev and the board was staffed with Putin's loyalist from St.Petersburg in 2001.

<sup>267</sup> Most analysts agree that gas will be supplied to domestic consumers at relatively low prices, Stern, *The Future of Russian Gas and Gazprom*. Opinions about the magnitude of this type of energy subsidy is disputed, Litwack and Tompson, *OECD Economic Survey of the Russian Federation*, ed. OECD (Paris: 2002). For a Russian observer's prediction that gas subsidies for residential consumer and other budget organizations are likely to continue, because of their "social importance" ("в связи с большой социальной нагрузкой"), see Loginov, E.L., et.al. in *Экономика региона*, 8/23, 2005, Либерализация национального рынка газа: проблемы реформирования российской экономики (p.35).

<sup>268</sup> Remark by Chubais at a conference "Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?" Moscow, February 13, 2007.

<sup>269</sup> The amount of gas supplied for electricity production has always been a key point of contention between Gazprom and UES. "Естественные противоречие," *Izvestia*, September 26, 2000.

UES executive articulated this compromise: “UES is not interested in favoring coal, (...) but it is in the interest of the country as a whole.”<sup>270</sup>

The National Energy Strategy called for a shift from gas to coal in electricity production, amounting to a doubling of coal-fired electricity production.<sup>271</sup> Such a switch in European Russia’s gas-fired power plant would significantly reduce domestic gas consumption, freeing up gas for lucrative export. Transitioning to coal-fired power production was also made a condition of privatization of European power plants, as the investment components of privatization agreements specify a particular type of technology updates. As part of the negotiations with new private owners of European Russia’s electricity companies, the Russian government included commitments to install more coal-fired power plants (both plans for new coal-fired generation capacity and for turning older gas-fired plants into coal).<sup>272</sup> Chubais confirmed this in 2007, “the [electricity sector] investment program will change the overall fuel mix in the economy – less gas, more coal”<sup>273</sup> This element of the energy strategy was another clear footprint of Gazprom on electricity sector reforms.

Finally, a note on the “independence” of Gazprom from the state, or lack thereof. Gazprom was undoubtedly Russia’s most powerful company and it held a curiously ambiguous status in its relation to the government. On the one hand, it often maintained that it is a “normal” enterprise, an independent, profit-maximizing company.<sup>274</sup> On the other hand, the government today owns 51% of the company’s shares, high-level government officials staff Gazprom’s board of directors, and the company is often seen as an arm of the Kremlin rather than an independent private company.<sup>275</sup> However, even if the government formally controlled the company via a majority stake (and this has only been the case since 2004), the politics of the Gazprom-government relationship was still a dynamic, political issue, subject to negotiations between the various factions within the Kremlin and the corporation itself. In other words, Putin did not “control” Gazprom in the sense that he single-handedly determines what role the company plays domestically and internationally. Importantly, however, this ambiguous relationship with the state was not unique to Gazprom, but more or less characterized most of Russia’s big companies.<sup>276</sup>

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<sup>270</sup> Remark by a UES executive at a conference “Roundtable on the attractiveness of the companies of the Russian electricity sector/Круглый Стол: инвестиционная привлекательность компаний российской электроэнергетики” Moscow, February 8, 2007.

<sup>271</sup> Coal is generally speaking the dirtiest fuel for electricity production. Most of Russia’s coal fired plants are old, built in the 50s and 60s or earlier, and are far from meeting emission standards now considered minimal from environmental and public health perspectives, Igor Artemiev and Michael Haney, “The Privatization of the Russian Coal Industry, Wps 2820,” in *Policy, Research working paper*, ed. World Bank (Washington: 2002).

<sup>272</sup> Ibid.

<sup>273</sup> Remark by Chubais in response to the future fuel balance, топливный баланс страны, at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007.

<sup>274</sup> Gazprom’s status as a “private” company has changed over the years; the government’s stake was around 30% for much of the 1990s, but has increased to just over 50% during the re-nationalization of the oil and gas sectors beginning in 2004.

<sup>275</sup> Some members of the Putin administration *want* Gazprom to serve as an arm of the government, for example, Igor Shuvalov, interview in *Russian Investment Review*, Vol.3/3, p.9.

<sup>276</sup> Rutland in Wegren and Herspring, *After Putin's Russia: Past Imperfect, Future Uncertain*.

### *Siberian industrial development and the aluminum sector's bargain*

Rusal gained special privileges during the transformation of Siberia's electricity assets. The aluminum giant negotiated special conditions in the electricity sector in return for regional employment and co-financing of new power plants.<sup>277</sup> Concessions to Rusal were part of a regional development strategy that tries to halt de-industrialization.<sup>278</sup> Since the late Tsarist period, successive Russian governments pushed the development of heavy industry in Siberia. Soviet planners prioritized the industrialization of northern and eastern territories and used various means to encourage settlement in these territories.<sup>279</sup> Metallurgy, pulp and paper manufacturing, and chemical fertilizer were all industries designed to take advantage of the region's resources and led to the construction of some of the world's most northern cities. During the 1990s, the threat of de-industrialization intensified. Liberal reformers argued that their remote location and the "cost of the cold" – the cost of maintaining populations centers in such northern climes – made these areas unsuitable for market conditions. The logical conclusion of this argument was that they should be evacuated rather than sustained "artificially" with subsidies.<sup>280</sup> Liberal reformers in Moscow, however, were ultimately not able to insist on an agenda that was perceived to presage deindustrialization of Siberia.

Not surprisingly, regional governments vehemently opposed the de-population and de-industrialization of northern regions. The relationship between regional governments and Siberia's conglomerates thus centered on solving the problem of marketizing and integrating these territories into regional and global markets, while avoiding de-industrialization. In Irkutsk oblast, for example, as a result of Soviet-era industrialization drives, two sectors were at the core of Irkutsk oblast's industry: electricity and aluminum.<sup>281</sup> These enterprises were in a unique position to negotiate with the government about a range of issues, including taxation, energy subsidies and the conditions of privatization.

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<sup>277</sup> I am relying primarily on evidence from Irkutsk oblast as a lens for the Siberian region more generally. The development strategies for the Siberian regions are part of various documents with different geographical scope, the "Economic and Social Development of the Russian Far East and the Trans-Baikal Area until 2013" is an important document at the federal level (the oblast's regional development strategy and various media sources on regional development). I am draw specifically on evidence from the "Program for the socio-economic development of the Irkutsk Oblast for the period 2006 -2010" – referred to as "Irkutsk Development Program" in what follows;

*Программа социально-экономического развития Иркутской области на 2006-2010 годы*, available from the Irkutsk Oblast administration in hard copy as well as on their website, [www.govirk.ru](http://www.govirk.ru) --- link to "programma"

<sup>278</sup> Irkutsk Development Program, pp.30. Siberia's industry has long been its response to the challenge posed by its riches and its remoteness While the region's resource wealth is its promise, its remoteness and difficult climatic conditions have been seen as its peril, or its "curse" as some have called it. See also Gaddy and Hill, who argue that the "cost of the cold" makes many Siberian cities unviable in market conditions, Hill and Gaddy, *The Siberian Curse: How Communist Planners Left Russia out in the Cold*.

<sup>279</sup> This process accelerated dramatically when Stalin decided to relocate Soviet industrial production beyond the Urals. GOSPLAN's post-War industrialization fundamentally reshaped the region's economic geography and forever changed Siberian's way of life. Siberian peasants, who had left their villages to fight the German forces during the Second World War, came back to build factories and to a life in the new cities that formed the center of the so-called territorial-industrial complexes (TPKs), see chapter 5.

<sup>280</sup> Hill and Gaddy, *The Siberian Curse: How Communist Planners Left Russia out in the Cold*. For politics of the North, see Anna Stammler-Grossmann, "Reshaping the North of Russia: Towards a Conception of Space," in *Northern Research Forum* (Anchorage: 2008).

<sup>281</sup> "Electricity and aluminum were almost the two only working companies" said one Irkutsk observer, interview #56 with journalist covering electricity sector, Irkutsk, 20071120.

By the time I did my fieldwork, in 2006/7, Rusal had gained control of Irkutskenergo and bargaining had shifted from the regional to the federal level.<sup>282</sup> A key aspect of the bargains between Rusal and the government were the so-called “northern benefits,” a set of special subsidies – including electricity subsidies – that have their roots in Soviet planning.<sup>283</sup> Northern benefits were supposed to offset the disadvantages of remoteness. In their post-Soviet incarnation, they compensated the population and companies for the “cost of the cold.” The cost of rail-cargo, for example, remained heavily subsidized, which allows Siberian industries to ship products to international markets.<sup>284</sup> In Irkutsk oblast, not surprisingly, the aluminum sector was particularly skillful in negotiating special treatment. Affected by the decline of orders by the Russian military, the country’s metal sector was seeking to sell on international metals markets. To reduce the cost of production, the aluminum industry sought a set of special policies. For most of the nineties, aluminum companies managed to negotiate “tolling arrangements,” which allowed aluminum companies to import raw materials and export processed aluminum duty-free.<sup>285</sup> The tax obligations of these companies were subject to special negotiations.<sup>286</sup>

If the aluminum oligarchs were so successful in negotiating privileges, what did they provide in return, or why did the government grant these concessions? Successive bargains with industrialists centered on employment in northern regions and on the co-financing of new infrastructure projects. In the nineties, regional governors needed employment and tax revenues in cash, a scarce resource during the barter crisis. Under Putin, in addition to the issues of employment and taxes, the government needed financing to update existing hydro-electric power plants<sup>287</sup> and, more importantly, for the construction of new hydro-electric dams, which require huge upfront investments. In the last decades of the Soviet Union, a whole series of hydro-electric dam projects were planned or initiated.<sup>288</sup> These capital-intensive projects were abandoned in the turmoil of the early 1990s, and no financing was available for the rest of the decade. “The government is in no state to finish these projects, there is no money,” lamented an electricity sector insider at the time.<sup>289</sup> After 2000, a few of these projects were revived, including the enormous Boguchansk hydro-electric dam.<sup>290</sup> A representative of the government’s

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<sup>282</sup> Kramer on Deripaska’s bargain with Putin, Andrew Kramer, “Deripaska’s Climb from Farm to Empire,” *Moscow Times*, August 22 2006.

<sup>283</sup> ADD SETTLERS ON THE EDGE

<sup>284</sup> On railway subsidies see Russell Pittman, “Chinese Railway Reform and Competition: Lessons from the Experience in Other Countries,” *Journal of transport economics and policy*. 38, no. 2 (2004).

<sup>285</sup> Multiple sources on “tolling,” for example “Копейка са помол, пом ком звонит толлинг,” *Novaya Gazeta*, No.36/559, September 27 – October 3, 1999; Open letter to Vladimir V. Putin by Siberian governors, in *Izvestia*, November 17, 1999; and “Изменение режима толлинга в России окажет влияние на мировой рынок алюминия,” *Izvestia*, November 19, 1999. Also interview #50, businessman, Irkutsk, 2007115.

<sup>286</sup> Unfortunately, I was unable to locate documentation to confirm this. I tried for weeks to get information on the sources of tax revenues from Irkutsk Oblast Admin, with no avail.

<sup>287</sup> An early agreement between Chubais and Sibal (precursor of Rusal) to finance technological upgrades at Sayano-Shushenskaya Hydro-electric power plant. “Чубайс договорился с металлургами,” *Kommersant*, July 27, 1999.

<sup>288</sup> Interview #55 with employee of electricity company, Irkutsk, 20071120. She these projects as “lining Siberia’s rivers like pearls on a necklace.”

<sup>289</sup> In Russian, “Государство не в состоянии ее достроить, денег нет.” Remark was made by Victor Borovsky about the Boguchansk, in an interview in *Ekspert*, no.14, April 13, 1998, p. 35.

<sup>290</sup> The Soviet Union had already invested large sums in the construction of this dam, but the Russian state needed private finance for the projected US\$1.7 billion to complete construction. Aluminum oligarchs were happy to oblige

hydro-electricity company enthusiastically named it the “second wave of investment in hydro-capacity,” thus comparing the new wave of constructions to the huge boom in dam building in the late 1960s and 70s.<sup>291</sup>

Since the completion of these dams was under discussion again, co-financing by Rusal was debated.<sup>292</sup> The conditions of the financing for the completion of Boguchansk were highly contested for years. Only the contours of the negotiations between Chubais and Deripaska, and the political battles that accompanied them were public knowledge. As each side was trying to align support in the Kremlin on their side, the terms of these negotiations have surfaced in the media over the years. Rusal only agreed to participate if UES and the federal government guaranteed a significant ownership stake *and* long-term agreements to sell electricity at reduced prices.<sup>293</sup> Rusal and the Russian government eventually agreed to share ownership of Boguchansk, with each owning a 50% stake. They also seemed to have agreed that the price of electricity for Rusal was to be tied to the London Metal Exchange Price for aluminum,<sup>294</sup> although negotiations about how much capital Rusal had to provide in return for these concessions continue to this day.<sup>295</sup> While the aluminum company contributed significantly to the construction cost of Boguchansk and technological updates of other major dams, the benefits from controlling hydro-assets and the ability to obtain low-cost electricity were likely to outweigh the cost. A veteran Russian policy analyst called Boguchansk a “huge gift” for Rusal.<sup>296</sup> The government’s plan for Siberia’s re-industrialization in turn, relied on the construction of hydro-capacity and securing co-financing for large infrastructure projects from private companies, as a way to power Siberian heavy industry.

### *The Far East’s Integration into NE Asia and Electricity Sector Bargains*

In the Far East’s electricity sector, unlike in European Russia and in Siberia, the state retained ownership of vertically integrated electricity companies and upheld a commitment to subsidize the electricity sector directly, protecting the region’s electricity producer from low-cost Siberian electricity. Direct support of the sector goes back to the early 1990s, when the Far East’s electricity sector was mired in a particularly severe crisis. Power and heat outages were common in most of Russia’s regions, especially in villages.<sup>297</sup> But nowhere were outages such a persistent

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in return for a share in the new power plants. For years the conditions of the Boguchansk deal have been highly contested: Chubais and Deripaska have had endless arguments about the conditions of this bargain.

<sup>291</sup> Remark by a Hydro-OGK representative at a conference “Second annual conference on the functioning of electricity companies in a market context/Вторая ежегодная конференции – Работа электроэнергетических компаний в рыночных условиях,” Moscow, December 13, 2006.

<sup>292</sup> “РАО ЕЭС возводит плотины,” *Kommersant* November 3, 2000.

<sup>293</sup> “РАО ЕЭС ищет партнера который мог бы достроить Богучанскую ГЭС,” *Vedomosti*, March 24, 2003. For further sources on Rusal’s attempt to secure low rates for electricity, see chapter 4.

<sup>294</sup> “Конец большой дружбы,” *Vedomosti*, June 1, 2000. The *aluminshiki*’ attempts to link the price of electricity with the world market prices for aluminum is also mentioned in interview #60 with energy company executive, Irkutsk, 20071203.

<sup>295</sup> Negotiations about how much finance Rusal has to provide continue to this day. Yuri Humber, *Bloomberg*, April 21, 2009.

<sup>296</sup> Nikolay Petrov (Carnegie Moscow Center), conversation with author, April 20, 2007; Petrov was one of the visitors in the Mellon-Sawyer Seminar series at ISEEEES, UC Berkeley.

<sup>297</sup> Even in Irkutsk oblast, a region with abundant hydro-electric power, see “Без тепла и света, под боком ГЭС,” *Vostochno Sibirskaiia Pravda*, November 1, 1995, for a typical report about outages. In this case in the villages

problem as in the Far East and in Primorsky Krai.<sup>298</sup> Outages started in the early nineties. In 1994, a Vladivostok newspaper reported, “it isn’t the first year that the inhabitants of building N.10 on Babushkina street in the town of Artyem are suffering from the cold.”<sup>299</sup> It wasn’t the last time. Outages in Primorsky Krai were common for most of the nineties.<sup>300</sup> One resident remembered that in 1996 – “that winter the lights were usually out three times a day, each time for three to four hours.”<sup>301</sup> Many residents voted with their feet, and outmigration became one of the biggest concerns of regional and federal authorities.<sup>302</sup> While much of the government’s response was *ad hoc* crisis management, both regional and federal governments wanted to formulate a more sustainable solution to deal with the energy crisis and came up with plans for how to modernize the sector, as part of regional economic development.<sup>303</sup>

Development strategies had to deal with fact that the Far East was a relatively isolated region and weakly industrialized, and much of its industry was dedicated to defense purposes. As one local resident put it “we were always at the end of the line,”<sup>304</sup> implying that the Soviet industrialization drive did not quite make it to the Far East. At the end of the Soviet-period, the Russian Far East was *de facto* isolated from both Europe and Asia’s economic centers – eleven time zones away from Moscow and with only informal and weak ties to neighboring countries. With international borders practically closed, cross-border trade had been almost non-existent, limited to the shadow economy. Despite its geographical proximity to the economic miracles of East Asia, the region remained strangely isolated from its booming neighbors. Vladivostok, only a few hundred miles away from South Korea and Japan, could not have been more distant from these booming sites of post-war capitalism. The homeport of the Soviet Union’s Pacific fleet, it was a “closed” city, sealed off not only from neighboring regions, but from other Russian cities as well. Besides defense related industries and services, the Far East’s economy relied on light industry, fisheries and forestry in Primorsky Krai, and raw material extraction, such as gas in Sakhalin. With the end of the Soviet planned economy came a sharp contraction of defense budgets and an economic crisis. In Primorsky Krai, for example, this meant that regional economic activity was reduced to fisheries and cross-border smuggling of used Japanese cars.<sup>305</sup>

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Bolshoe and Malye Goloustnoe, which are not far from Irkutsk, but are powered by diesel generators, not receiving electricity from the hydro-power stations in the oblast.

<sup>298</sup> See for example Bradshaw and Kirkow, 1998, p.1043. For regional newspaper sources, see footnotes below.

<sup>299</sup> In Russian: “Не первый год жильцы многоквартирного дом N 10 по улице Бабушкина в Артеме страдают от холода.” In “Острый Сигнал: Прошли выборы – отключили бататри,” *Utro Rossii*, January 15, 1994.

<sup>300</sup> Fuel shortages leading to outages, for example, in “Готовь буржуйки летом?” *Utro Rossii*, January 11, 1995. Outages were often scheduled as “special regimes of electricity provision (осовый режим энергоснабжения промышленных и коммунальных потребителей)” in “Миллиарды на топливо,” *Utro Rossii*, January 20, 1994.

<sup>301</sup> Report by Dima Motovilov in Lothar Deeg, “Kunst und Albers in Vladivostok/Кунст и Альберс Владивосток,” Книга издана по заказу Посольства ФР Германия в России, 2002. See also chapter 3 on outages.

<sup>302</sup> Interview #32 with electricity sector economist, Vladivostok, 20070918; interview #33 with journalist covering electricity sector, Vladivostok, 20070921.

<sup>303</sup> Federal government development strategy was mentioned by several interviewees in the Far East, including, interview #32 with electricity sector economist, Vladivostok, 20070918.

<sup>304</sup> Interview #38 with academic Vladivostok 20071003, and interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>305</sup> Development program for Primorsky Krai, Стратегия социально-экономического развития Приморского Края на 2004-2010 гг. ”



With a few exceptions, industrial production was greatly reduced.<sup>306</sup> Integration with North East Asia became the Far East's promise to a better future, and the government's overarching regional development strategy.<sup>307</sup>

What did this integration with neighboring countries entail for the electricity sector? Post-Soviet development strategies for the Far East were framed as the challenge of dual integration – into Russia and into East Asia's powerful economies, China, Japan and Korea. The most important aspect of the Far East's integration was cross-border cooperation on energy-related issues.<sup>308</sup> The Russian Far East has relatively low demand for energy, while having abundant and relatively untapped resources. The adjacent countries in turn, have high demand for energy, but few of their own resources.<sup>309</sup> At the same time, Russian integration strategies aimed to get away from exporting raw materials, towards local value-adding production. Rather than exporting gas and coal, therefore, Primorsky Krai's regional development strategy was to process energy resources domestically; the electricity sector is a potential value-adding node in the energy chain and thus a source of employment. One regional electricity sector professional thus stressed "it is worth it to export electricity. This is much more profitable than selling coal or gas. Electricity is a processed good, and thus more expensive than the underlying raw materials."<sup>310</sup> Various projects were discussed over the years, one with the name "Electrobridge to China."<sup>311</sup>

The aim was thus to preserve and expand the region's electricity production, even if it meant subsidizing a high-cost zone and isolating it from neighboring low-cost zones. To this end, the

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<sup>306</sup> Retooled defense companies, interview #41 with journalist covering electricity sector, Vladivostok, 20071005. Textile companies experienced a short boom, when South Asian producers moved to Russia, after fulfilling their production quotas as specified by the Multifiber Agreement (MFA). This boom proved short-lived, however, as the MFA expired, textile production shrank again, interview #31 with journalist covering electricity sector, Vladivostok, 20070915.

<sup>307</sup> Interview #38 with academic, Vladivostok, 20071003.

<sup>308</sup> Kalashnikov, V.D. and Gulidov, R.V. "Основные Предпосылки в Анализе Развития ТЭК дальнего Востока," *Стратегия развития дальнего востока: возможности и перспективы, Том I*. Khabarovsk, 2003, pp.99, and Kalashnikov, V.D., "Инфраструктура международного экономического сотрудничества в СВА," *Перспективы развития российских регионов: Дальний Восток и Забайкалье*. Khabarovsk, 2001, pp.49. Also interviews #43 and #44 with electricity sector economists, Khabarovsk, 20071010. See also Anna Lobunec "Перспективы Развития энергетики приморского края с учетом интеграционных процессов в северо-восточной Азии," Автореферат/Dissertation Abstract, Vladivostok, Far Eastern State University, 2004, p.19.

<sup>309</sup> *Economic Cooperation between the Russian Far East and Asia-Pacific Countries*, Pavel Minakir ed. 2007, Khabarovsk, pp.7.

<sup>310</sup> In Russian "Электроэнергию стоит экспортировать. Это гораздо выгоднее, чем продавать за границу уголь или нефть. Энергия ХХ это конечный продукт, который дороже, чем исходное сырье." Remark by Victor Minakov, director of *Vostokenergo*, as Dalenergo was called for a while; in an interview in *Dalnevostochny Kapital*, October 2003, No. 10/38, p.49. The dissertation of Anna Lobunec concludes practically with the same recommendation: "Мы считаем развитие экспорта электроэнергии и создание межгосударственных электроэнергетических связей (...) более перспективным и выгодным вариантом как для Дальнего Востока в целом, так и для Приморского края в частности." pp.20. Anna Lobunec, "Перспективы Развития энергетики приморского края."

<sup>311</sup> Interview #32 with academic and electricity sector economist, 20070918; interview #33 with journalist covering electricity sector, Vladivostok, 20070921; as well as interviews #43 and #44 with electricity sector economists, Khabarovsk, 20071010. For an optimistic account, see article by Klimenko "Энергомост в Кита," *Dalnevostochny Kapital* July 2005, No. 7/59, p.12/13. A few years later, when I was doing fieldwork in the fall of 2007, negotiations are bogged down over the question of the price of electricity, for example, interview #41 with journalist covering electricity sector, Vladivostok, 20071005.

federal government is subsidizing the sector, as chapter 4 will demonstrate in more detail. To the same end, Primorsky Krai's development strategy calls for investment in a series of infrastructural upgrades in the region's power plants. In sum, the political proponents of the plan to protect the Far East as a separate zone, with the federal government as the majority owner, won the argument.

## **6. Conclusion**

At the end of Putin's presidency, in 2008, Chubais claimed success in creating a market for electricity and Putin claimed success in unifying the country and defeating challengers to the central government's sovereignty. UES, the vertically integrated monopoly dating back to Lenin's electrification ceased to exist on July 1, 2008, with all its operations taken over by new successor companies.

Gazprom now owns some of the country's most valuable thermal generation plants. This did not please the liberal faction of Putin's government, who hoped for a "real" privatization of electricity assets and were opposed to the prominence of Gazprom as a new owner.<sup>312</sup> For the liberal reformers, the prominent role of Gazprom was a threat to their vision of electricity markets. After all, Gazprom was controlled by the state, even if it claimed to be acting purely as a business entity.<sup>313</sup> Yet, the liberal reformers had to make concessions to the gas giant. This is true in both Siberia and the Far East: while the liberal reformers managed to radically change the way electricity is produced and distributed, the modalities of infrastructure provision were shaped in political bargains with the country's big conglomerates.

The chapter introduced the politics of the electricity sector, arguing that a particular type of post-Soviet developmentalism shaped the bargains between the government and the conglomerates. Initially, the strategies between the liberal reformers at the center, who emphasized marketization of the electricity sector, came in conflict with governors in the regions, who developed development strategies to protect their regions from the impact of liberal reforms. To this end, regional governors tried to enlist regional industrialists, at times writing their own laws and circumventing laws emanating from the federal government. The oblast level thus became the *de facto* site of political bargains and economic regulation.

When President Putin centralized political power, regional governors' hold on the institutions was undercut. Regional pacts were replaced by bargaining at the federal level. Putin selectively accommodated the oligarch's demands in the electricity sector, in return for their contribution to regional development. In regional specific bargains the government accommodated different conglomerates – industrial conglomerates, energy conglomerates and the electricity sector itself – each with different interests in the process of the sector's transformation. Gazprom and Rusal were particularly successful in shaping the ownership and subsidy regimes in the electricity

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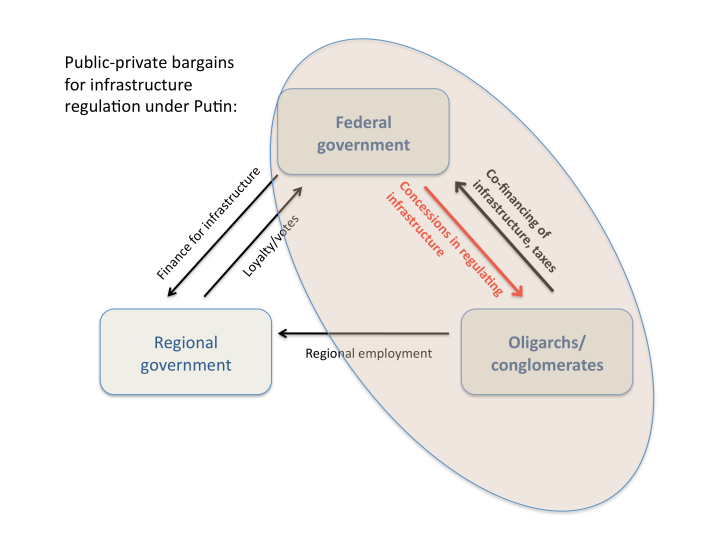
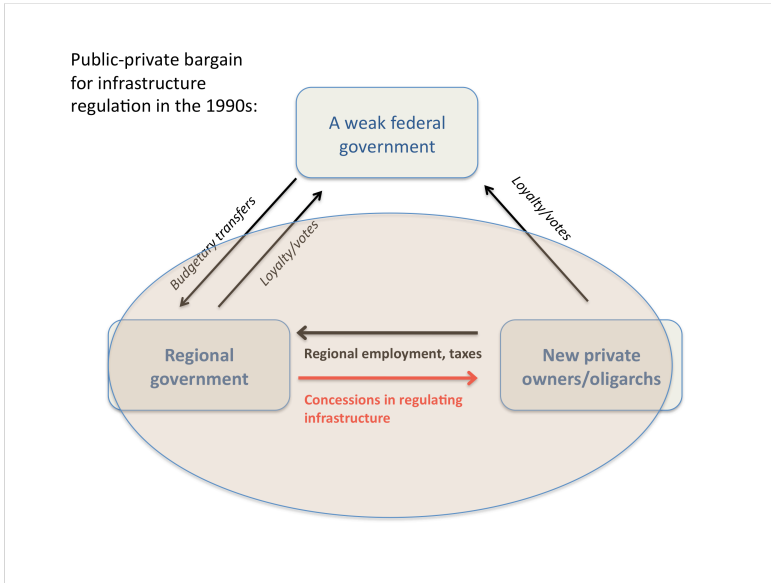
<sup>312</sup> Interview #63 with electricity company executive, Moscow, 20071212.

<sup>313</sup> Gazprom has stressed that it wants to acquire electricity assets purely for business reasons. Much is at stake in this claim: the Russian gas giant wants to acquire Energy assets in Western Europe, which has made Western European government's nervous about the influence of the Russian government. For years, Putin has tried to mollify these concerns by claiming that Gazprom is only a company after all. As long as the gas giant maintains its role as a clearinghouse for energy subsidies, however, business and political rationales will remain intertwined.

sector. The next chapters will turn specifically to the battles over ownership and trace the success and failure of multiple claims to gain control of the Soviet Union's valuable power plants.

CHAPER 2 APPENDIX

*Illustration 1: Bargains shift from regional to federal level*



## **Chapter 3: Privatization – Competing Claims and New Owners**

1. *Introduction: privatizing Soviet assets*
2. *Theoretical implications: typology of new owners*
3. *Russia's electricity privatization*
4. *Competing ownership claims*
  - 4.1 - *Ownership claims by the federal government*
  - 4.2 - *Ownership claims by regional governments*
  - 4.3 - *Ownership claims by oligarchs and conglomerates*
  - 4.4 - *Ownership claims by foreign companies*
5. *Conclusion*

## **1. Introduction: privatizing Soviet assets**

Privatization of state-owned enterprises (SOEs) was a favorite policy tool of conservative governments starting in the late 70s and 80s. From Chile to the United Kingdom, privatization became an apparently simple solution to a set of complex problems. The transfer of ownership from public to private entities was an easy way to off-load the expense of SOEs from public budgets, undercut the political clout of public sector unions and to raise private capital for new infrastructure investments. In post-socialist countries, privatization of the vast holdings of the socialist governments topped the list of reforms of the first post-socialist governments. It is now well known by now that privatization in Eastern Europe and the former Soviet Union has been vastly more complex than anticipated: the sheer scale of the privatization attempt was enormous. The difficulties that arose from the weakly established property rights and the lack of institutions to value assets were only the most visible complications of privatization.<sup>315</sup> As the Polish Privatization Minister put it: “Privatization is when someone who doesn’t know who the real owner is and doesn’t know what it is really worth sells it to someone who doesn’t have any money.”<sup>316</sup>

A characteristic of post-Soviet privatization has been the multiple and complex shifts in ownership and control over the last 20 years. The term “privatization” is thus often not entirely appropriate to describe these shifts and transformations. Factories, oil rigs, coal mines, apartment buildings, electricity grids, hydro-electric dams and myriad other assets have been subject to competing ownership claims over the years, with different “winners” emerging after successive rounds of ownership transfers.<sup>317</sup> Importantly, privatization outcomes were often highly political, in the sense that the winning bidder’s political connections were decisive for the award of ownership rights.<sup>318</sup> Another characteristic of the privatization process in Russia was the fact that sometimes *de jure* ownership was no guarantee for *de facto* control, or *de facto* owners could bend rules to gain *de jure* property rights.<sup>319</sup> The privatization auctions and other processes, in

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<sup>314</sup> Kolesnikov, *Neizvestnyi Chubais: Stranizy Is Biographii*, p.133.

<sup>315</sup> Katherine Verdery, *The Vanishing Hectare: Property and Value in Postsocialist Transylvania* (Cornell University Press, 2003), Solnick, *Stealing the State: Control and Collapse in Soviet Institutions*, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*. An example from Irkutsk to illustrate the scale of privatization: in Irkutsk oblast 1608 enterprises had been privatized by January 1, 1994, “Иркутская область: шаги приватизации.” *Vostochno Sibirskaiia Pravda*, January 25, 1994.

<sup>316</sup> Quoted in Verdery, *The Vanishing Hectare: Property and Value in Postsocialist Transylvania*, p.1.

<sup>317</sup> For the most comprehensive account of this process in Russia, see Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*.

<sup>318</sup> This was not just a Russian phenomenon, Spector, “Securing Property in Contemporary Kyrgyzstan.”

<sup>319</sup> The literature on the emergence of Russia’s property rights is vast; for view on how different Russia’s property rights regime is from what Western investors are looking for, see for example, Karla Hoff and Joseph Stiglitz, “After the big bang? Obstacles to the emergence of the rule of law in post-communist societies.” *American Economic Review* 94/3 (2004):753-6, and Hoff and Stiglitz, “Exiting a Lawless State.” Policy Research Working Paper 4520. World Bank Development Research Group (2008).

which ownership changed hands often took place in a legal grey zone, and, according to an assessment by an insider, were hardly ever fully transparent.<sup>320</sup>

The privatization of electricity assets in post-Soviet Russia was no exception. Instead of a simple transfer of property rights from the state to private companies, it involved a long process of shifting, overlapping and conflicting ownership claims. Several public and private owners simultaneously claimed ownership to the same assets. Conflicts between different claimants were a constituent part of politics at all levels of governance – federal, regional and municipal – for most of the post-Soviet period. The privatization of electricity sector assets was also often “non-transparent, much like other privatizations,”<sup>321</sup> and “marred by numerous examples of unfair, illegal or intransparent privatisation deals.”<sup>322</sup> This was a particular a problem in the valuation of assets, which were, according to one observer, “arbitrary, murky and inconsistent.”<sup>323</sup> The most contested electricity sector assets were the largest regional monopolies (the Energos), or the most valuable power plants within the Energos.

This chapter broadly examines the question: who emerged as the winners from one of history’s largest assets sale – the “sale of the century”?<sup>324</sup> And what can we say about the political dynamics that underlie these privatization deals? It is well known that the Russian privatization program failed to distribute Soviet-era property widely among its citizens as it promised in the early nineties.<sup>325</sup> Instead of creating millions of new owners, it created a handful of oligarchs who now control most of Russia’s factories. This is essentially what happened in the electricity sector. How did this happen? Whose ownership claims failed, and whose succeeded?<sup>326</sup> What can we add to the conventional wisdom about Russia’s privatization, namely that “winners took all”?<sup>327</sup>

The success and failure of ownership claims depended on shifting political coalitions and on evolving negotiations between private and public actors. The chapter documents the politics of ownership changes, documenting the rationales of regional and federal governments and the conglomerates that gained control over the years. As introduced in chapter 2, different tiers of the governments often had regional development and economic modernization in mind, when trying to influence the privatization of electricity assets. Conglomerates, on the other hand, were targeting the “missing links” in their vertically integrated production chains.

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<sup>320</sup> Alfred Kokh, meeting at the Institute for East European and Eurasian Studies (ISEEES), Berkeley, April 2009. Kokh was deputy prime minister under Yeltsin, and headed the State Property Committee for about a year between the fall of 1996 and 1997.

<sup>321</sup> Interview #1 with electricity sector expert, international financial institution, Moscow, 20060721.

<sup>322</sup> Burgansky, "Hydro Power: Super-Profits or Super-Regulation?," p.12.

<sup>323</sup> Interview #7 with electricity sector analyst at financial institution, Moscow, 20061005.

<sup>324</sup> Term coined by Chrystia Freeland, *Sale of the Century : Russia's Wild Ride from Communism to Capitalism* (New York, N.Y: Crown Business, 2000).

<sup>325</sup> Studies with a focus on the role of oligarchs include the following, Ibid, McFaul et al., *Privatization, Conversion, and Enterprise Reform in Russia*, Stiglitz, "Who Lost Russia?," Aslund, *Building Capitalism*, Hoffman, *The Oligarchs : Wealth and Power in the New Russia*.

<sup>326</sup> Barnes notes that the institutional and political contexts of different waves of privatization have been key to understanding who emerged as the new owners; Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*.

<sup>327</sup> Hellman, "Winners Take All: The Politics of Partial Reform in Postcommunist Transitions."

These rationales are reflected in the cross-regional differences in ownership outcomes. We will see that a conglomerate with an *energy lead firm* emerged as a dominant owner in European Russia, a conglomerate with an *industrial lead firm* in Siberia, while in the Far East the government still holds a majority stake in the electricity sector.<sup>328</sup> One of the noteworthy outcomes of the Russian privatization is that, as the vertically integrated electricity monopolies were undone, new owners created *new* vertically integrated production chains. In other words, production chains in the electricity sector are unbundled and broken up, but power plants completed the establishment of other production chains. In European Russia, electricity assets were re-integrated into energy production chains, and in Siberia into industrial, or more precisely into non-ferrous metals production chains. In the Far East, the government was trying to craft export-led energy production chains that incorporate the region's electricity sector as a value-adding node. Each of these three production chains depended on exports, but was also a key driver of regional economic development.

I take a closer look at privatization histories in the electricity sector through the prism of privatization histories of three regional electricity monopolies – Mosenergo, Irkutskenergo and Dal'energo. Specifically, I trace the success and failure of four different ownership claims: the ownership claim by the *federal* government, by *regional* governments, by the oligarch's new *conglomerates*, and by *foreign investors*. I am using these four claimants as a way to organize the chapter, introducing the ownership claims by the federal government first, and then outlining in turn how regional government and new private owners contested the federal claim in each of the three regions – Moscow, Irkutsk and Primorsky Krai. I roughly identify four time periods: spontaneous privatization (1989-91), voucher and auction privatizations (1993-94), period of hostile take-overs (1998-2002) and the most recent round of privatization during the reform program led by Anatoly Chubais (2005-2008).<sup>329</sup> Most scholarly attention on Russia's privatization is focused on the voucher privatization of 1992-94. In fact, the process of privatizing Russia's state owned enterprises lasted much longer, starting in the last years of the Soviet Union continuing until today.<sup>330</sup> During this longer period, the political context has been almost in constant flux, new actors have appeared on the scene entering ephemeral political coalitions, while old actors disappeared. This is important, because shifting political coalitions have influenced privatization outcomes over the years.

The chapter provides the basis for the analysis in chapter 4, which proceeds to show how these stakeholders influence tariff regulation. Note however, that the relationship between privatization and tariff regulation does not follow neat chronology, “first privatization – *then* – influence by new owners.” Instead, they were mutually reinforcing processes.

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<sup>328</sup> I am borrowing the concept of a “lead-firm” from the production chain literature. See Gary Gereffi, “Shifting Governance Structures in Global Commodity Chains, with Special Reference to the Internet,” *American Behavioral Scientist* 40, no. 10 (2001).

<sup>329</sup> The type of ownership changes in the electricity sector mirror some of the key events in other sectors well documented in the literature on Russia's privatization. Yet, as the privatization timeline of every sector, the electricity sector's is unique.

<sup>330</sup> Barnes and Volkov make this point. Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*, Vadim Volkov, “Hostile Enterprise Takeovers: Russia's Economy in 1998-2002,” *Review of Central and East European Law* 29, no. 4 (2004).



Finally, a note on the claims about ownership stakes: especially in the 1990s, it was often not known who owns large shares of Russian firms. Even for publicly traded firms, reporting requirements were either disregarded and no meaningful ownership information is publicly available, or real owners hid behind shell-companies. The claims in this chapter are based on newspaper reports, company statements and broker reports.

## **2. Theoretical implications: typology of new owners**

I will draw on the Energo's histories to revisit some of the conclusions of the privatization literature. Two theoretical points emerge from the over-time and cross-regional comparisons of Energo privatizations. The first claim concerns prerequisites for the "liberal" privatization spearheaded by Anatoly Chubais. Comparing the trajectory of Energo privatization in the Yeltsin and Putin years, we will see that all three Energos share a similar fate: regional contenders for control and ownership were successful for most of the 1990s, but they had lost the battle for assets by the second term of the Putin administration. Instead, vertically integrated conglomerates (VICs), controlled by a handful of oligarchs, have acquired substantial stakes in the newly privatized electricity companies. This confirms a hypothesis introduced in chapter 1: the centralization of ownership and political control during the Putin period was a prerequisite for the liberal reforms after 2004.

A second finding concerns new owners. I suggest that rather than thinking of new owners as "rent-seeking oligarchs" it is useful to think of them as conglomerates, and economic actors that control specific types of production chains.<sup>331</sup> Production chains are networks that link producers and consumers from raw-materials to the finished product and final consumer.<sup>332</sup> I borrow the concept of lead-firm from the literature on production chains and derive from it the typology of new owners that is relevant for Russia, namely conglomerates with energy-lead firms and conglomerates with industrial lead-firms. This distinction between different types of conglomerates is a way to characterize reform outcomes that does not rely on judgment calls about more or less reforms across different regions in Russia.

What are the broader implications of the privatization outcomes in Russia's electricity sector? The literature on privatization is large and diverse, often dealing with privatization as an element of a broader liberalization agenda. I am suggesting that a typology of new owners that takes into account their role in production chains, could be an interesting addition to the broader privatization literature. In the Russian electricity sector, the relevant production chains are energy and energy-intensive metallurgical industries. In other contexts, it is likely that other types of production chains and different lead-firms are new owners; the point is to conceptualize

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<sup>331</sup> Much of the Russia literature lumps oligarchs and the economic empires they control into one category. Sometimes the literature distinguishes between the loyal and disobedient oligarchs, and "big" and small oligarchs. I am not aware of studies that have investigated how their political influence depends on their interest as different types of businesses, or conglomerates.

<sup>332</sup> The production chain literature originates in economic sociology and tends to stress the importance of the government regulation and for how production chains evolve. Some observers have analyzed government regulation of production chain in the context of industrial districts and regional economic clusters; see for example Sabel, "Flexible Specialisation and the Re-Emergence of Regional Economies." The focus of this research, however, has been to explain divergent economic outcomes, rather than to question the *origin* of different regulatory regimes.

new owners not as rent-seeking firms, but as companies tied into various types of production chains. How can this point contribute to the existing privatization literature?

Privatization of public service entails a promise that competition among private actors will turn inefficient and corrupt bureaucracies into efficient enterprises, reduce cost and improve service.<sup>333</sup> The political justification has always been the long-term benefits for consumers. The unifying theme of the privatization literature has thus been – what does it take to realize privatization’s promise? According to their answers, I roughly divide this literature into two waves: the first wave took efficiency gains from privatization for granted and examined the political conditions conducive to the realization of reform plans.<sup>334</sup> Identifying potential winners and losers of reforms, they modeled the behavior of these groups before, during and after privatization.<sup>335</sup> These approaches were interested in the question of who emerges as the new owners only in so far as they wanted to predict the likelihood of new owners to restructure enterprises to make them more efficient.<sup>336</sup> A second wave of privatization literature has been more hesitant to assume that the efficiency gains are easily attained. A key criticism of the first wave literature concerns their lack of attention to the institutional environment in which privatization is enacted and the institutions that are built to regulate newly privatized industries.<sup>337</sup> For privatization to be successful and for efficiency gains to materialize, states have to regulate new private actors in a way that benefits consumers. The second wave literature examines why this may not be an easy task and why reforms, once implemented, do not necessarily deliver on the promises they had entailed.<sup>338</sup> Establishing effective regulation of the privatized firms demands of the state administrative capacities and the ability to evade capture by

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<sup>333</sup> The liberal reform agenda in the electricity sector entail a further promise: more efficient use of scarce energy resources and therefore also of a “greener” way of producing power for growing economies. This argument is salient in the post-Soviet economies, where factories are particularly energy inefficient. More energy is used per GDP, see Samuel Fankhauser and Jan Cornillie, "The Energy Intensity of Transition Countries " in *Working Paper Series (Paper No.72)* (London: EBRD, 2002).

<sup>334</sup> Varied approaches, for example, Adam Przeworski, *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America* (New York: Cambridge University Press, 1991), Stiglitz, "Who Lost Russia?," Shleifer and Vishny, *The Grabbing Hand: Government Pathologies and Their Cures*.

<sup>335</sup> A common presumption is that concentrated cost, but diffuse benefits prevent reforms: a large, but weakly organized group stands to gain – all consumers of electricity, for example, while a smaller group – the producers and state-sector employees lose privileges they enjoyed under a state-owned system. For privatization to happen, the large group of beneficiaries needs to overcome collective action problem or the reformist government must be insulated from pressures that oppose privatization is a key concern for this literature. This literature is particularly influenced by the Latin American experience, where the post-ISI liberalizations were one of two conditioned either by a simultaneous democratization or by a authoritarian regime

<sup>336</sup> Shleifer and Vishny, *The Grabbing Hand: Government Pathologies and Their Cures*.

<sup>337</sup> Van de Walle notes that “privatization is unlikely to generation the major gains in efficiency, unless it is accompanied by other reforms, which alter the relative prices in the economy.” Nicolas van de Walle, "Privatization in Developing Countries: A Review of the Issues," *World Development* 17, no. 5. For a study of regulatory effectiveness in the electricity sector, see John Cubbin John Stern, "Regulatory Effectiveness: The Impact of Regulation and Regulatory Governance Arrangements on Electricity Sector Outcomes, Policy Research Paper 3536," in *Development Research Group* (Washington: World Bank, 2005).

<sup>338</sup> Privatization programs fail differently in different parts of the world. See for example David M. Woodruff, "Property Rights in Context: Privatization's Legacy for Corporate Legality in Poland and Russia," *Studies in Comparative International Development* 38, no. 4 (2004), van de Walle, "Privatization in Developing Countries: A Review of the Issues." For Russia, see Massimo Florio, "Economists, Privatization in Russia and the Waning of the 'Washington Consensus'," *Review of International Political Economy* 9, no. 2 (2002).

powerful lobbies.<sup>339</sup> This literature is interested in new owners as the private actors that need to be regulated.<sup>340</sup>

As the literature on privatization has increasingly focused on how states regulate new private owners, a new typology of post-privatization owners opens avenues to understand their preferences during privatization and later, for the regulation of the privatized sector. Arguably, regulatory challenges appear in a different light, if we have a new way of understanding the preferences of actors involved. The concept of production chains might be a useful tool for the privatization literature at this juncture. Examining actors' preferences vis-à-vis the newly privatized sector in the context of their relation within a production chain, rather than isolating a link of the chains, can illuminate state policies towards newly privatized industries. More broadly, looking at a production chain makes visible the network of relations that ties the sector to other firms, and thus opens way for an analysis of how these firms can influence the sector in question. It shows how the sector is linked – via upstream and downstream “neighbors” – to regional and international markets. For example, while the electricity sector produces almost all power for domestic consumption, the two ends of the chain – gas and aluminum – are sold to consumers across the world.

### **3. Russia's electricity privatization**

Russia's privatization was motivated by far more than a concern for economic efficiency. Privatizing large swaths of Soviet-era factories was the single most important political project of Yeltsin's reform team, the “young reformers” Gaidar, Chubais and Vasiliev. The young reformers' plan was to make the end of the Soviet Union and its plan economy irreversible. In the early 1990s, Yeltsin's hold on power was tenuous, as incumbent communist party elites, factory directors and other stalwarts of the old order were trying to regain power.<sup>341</sup> Even more fragile was the position of the young reformers. Their rationale for large-scale privatization was the creation of actors with vested interest in a capitalist system, a new class of property owners. Protecting newfound property, they would mobilize to prevent the re-nationalization and the reconstitution of the Soviet planned system. As Chubais, the key architect of the privatization

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<sup>339</sup> van de Walle, "Privatization in Developing Countries: A Review of the Issues," p. 602. Stigler, "The Theory of Economic Regulation.", Chaudhry, "The Myths of the Market and the Common History of Late Developers." The literature on capture has also contributed to this revision, see George Stigler, "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 2 (1971). Regulating infrastructure sectors may be even more challenging. One key challenge is that governments have to ensure a minimum level of service provision in places, or times, when doing so is not profitable for private companies. Emery Roe and Paul R. Schulman, *High Reliability Management: Operating on the Edge* (Stanford University Press, 2008). These challenges are also not confined to developing countries, with weak and corrupt bureaucracies. Due to the increasing focus on the vulnerability of critical infrastructure (be that because of ageing capital stock, as terrorist targets, or as environmental hazards), the debates how private ownership can be reconciled with public interests, and how regulators can contribute to this, has been rekindled in the US and elsewhere.

<sup>340</sup> Whether efficiency gains seem attainable or elusive, analysts agree that privatization entails redistribution of the costs, benefits, risks and profits of service provision. The political weight of the actors able to shape the process of privatization are thus key to understand both how the redistribution works and how the new private owners behave, once they control the former SOEs. Different approaches rely on different political actor for their predictions – the first wave, on interest groups and voter blocks, the second wave on corporate and industrial lobbies – and implicit assumptions of how these actors relate to the state.

<sup>341</sup> See for example Liliia Shevtsova, *Yeltsin's Russia : Myths and Reality* (Washington, D.C.: Carnegie Endowment/Brookings Institution Press, 1999).

program put it: “every enterprise ripped out of the state and transferred to the hands of a private owner was a way of destroying Communism in Russia.”<sup>342</sup>

For a number of reasons, electricity was an important sector for Yeltsin’s reform team. First, electricity is a key infrastructure sector and as such, its destiny was a key concern to just about everybody in the country. According to Chubais “electricity is the heart of the economy.”<sup>343</sup> UES (United Energy Systems) was also one of the “natural monopolies” targeted for reform. Like the other “natural monopolies” in Russia – railroads and gas, electricity had enjoyed privileged status in the allocation of investments for decades. For most of the post-Soviet period, UES and its subsidiaries (the Energos) produced about 70% of Russia’s electricity.<sup>344</sup> UES was also the country’s largest producer of heat, an important function in a country where most housing units are heated by centrally produced steam plants.<sup>345</sup> Second, the assets of the electricity sector are valuable. While electricity companies were plagued with a myriad of problems – non-paying customers, debt, fuel-shortages, ailing infrastructure – they also formally owned incredibly valuable assets. UES owned majority stakes in 53 Energos, and in 19 others, it owned stakes just under 50%. It also directly owned 34 of the country’s biggest power plants.<sup>346</sup> The majority of power plants, transmission and distribution networks, and other companies such as maintenance services, research institutes, etc. were thus part of UES.<sup>347</sup> Finally, UES was also one of the biggest employers in Russia, with over 700 000 employees.<sup>348</sup>

The literature on Russia’s privatization initially focused on two types of actors: insiders and outsiders. Insiders are the managers and workers of firms, while outsiders are investors not related to the management of a firm.<sup>349</sup> In the political discourse of the early transition period, insiders – factory directors and labor collectives – were thought to have both a moral and practical claim to these assets, a right earned during decades of working in these factories. This

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<sup>342</sup> Chubais in Hoffman, *The Oligarchs : Wealth and Power in the New Russia*, p.192.

<sup>343</sup> Chubais in Kolesnikov, *Neizvestnyi Chubais: Stranizy Is Biographii*, p. 133. And interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>344</sup> In 2005 UES produced 655 terawatt hours of electricity. UES is also the country’s largest heat producer, with 465 million gigacalories delivered in 2005 (most of Russian apartments are heated not by individual heating systems, but by municipal heating networks). Other electricity producers include the few independent Energos and Rosenergoatom, a fully state-owned company, which assumed the responsibility for all nuclear generators. Nuclear reactors remain state owned and are excluded from the current privatization; according to <http://www.rao-ees.ru/ru/info/history/>

<sup>345</sup> See Stephen Collier in Aihwa Ong and Stephen J. Collier, *Global Assemblages : Technology, Politics, and Ethics as Anthropological Problems* (Malden, MA: Blackwell Pub., 2005). Similar to electricity, in Russian cities, steam is produced in steam factories (*kotelniki*), and often in so called co-generation plants together with electricity.

<sup>346</sup> So called GRES, which stands for *Государственная районная электростанция*, or "state regional electric station." During the post-Soviet transformation, the abbreviation lost its literal meaning, and is now used to refer to the large thermal power station.

<sup>347</sup> According to one source, UES’s holdings included over 60 research institutes and over twenty construction companies, see *Ekspert*, No.14, April 13, 1998, p.27. Like other Soviet enterprises, electricity companies also owned a whole host of non-related (*ne-profilny*) companies, such as employee housing units, sanatoria, kindergartens. According to one expert, Dal’nergo even owned a pig farm, in addition to hospitals and childcare centers; interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>348</sup> Since Chubais has taken over power, this has been reduced to something above half a million; see successive annual reports, <http://www.rao-ees.ru/ru/investor/reporting/show.cgi?content.htm>

<sup>349</sup> An account of the debates about insiders/outsider privatization, see Hoffman, *The Oligarchs : Wealth and Power in the New Russia*.

view was important, as insiders were a political force that Yeltsin's reform team had to appease.<sup>350</sup> The young reformers and their foreign advisors were less than thrilled about the influence of insiders. They thought outsiders would do a better job turning the new private enterprises into competitive companies, which in their eyes essentially entailed cutting jobs and reliance on government subsidies. By now, however, the *insider/outsider* distinction has lost its utility, partly because new actors have entered the stage and partly because the privatization literature has moved on to ask new questions.

### *Introducing the three Energos*

I am relying on the privatization histories of three Energos as the primary evidence for the claims on how ownership regimes in the electricity sector shifted during the post-Soviet period: Mosenergo, Irkutskenergo and Dal'energo, located in Moscow, Irkutsk Oblast and Primorsky Krai.

These three Energos are broadly representative of the privatization histories of Energos in the broader geographical region – European Russia, Siberia and the Far East. The new owners of the three Energos are the largest owners of assets in their respective supra-regions: Gazprom in European Russia, Rusal in Siberia and the Federal Government in the Far East. The three Energos are also the largest electricity producers in their respective geographical territory. Finally, the three Energos are all located in “rebel regions” – particularly independent regions in the 1990s and therefore characteristic cases for the center-region conflict that has shaped privatization history. While I emphasize the histories of these regional Energos as representative examples, I will also address how other Energos' trajectories diverged from these prototypes.

Each of the Energos is also unique in its own way: Mosenergo was the world's largest thermal power companies, and Russia's largest and oldest Energo. Power consumption in the city of Moscow was stable even as the rest of the country's economy collapsed and has been growing rapidly during the recent economic boom. Mosenergo was distinct from some of the other Energos in the 1990s in that it was one of the most profitable companies in Russia. Moscow, the city and its residents, suffered less from the economic crisis than the rest of the country and Mosenergo had not nearly as many non-paying customers as the typical Russian Energo.<sup>351</sup> Unlike most other Energos, it was an attractive investment for Russian and foreign investors and Mosenergo shares were one of the country's earliest “blue-chip” assets.<sup>352</sup>

Irkutskenergo was at the center of a particularly troubled ownership transformation. Irkutskenergo is Russia's second largest regional electricity company, and counts some of the largest hydroelectric power plants in the world among its assets. Harnessing the powerful flow of Siberia's largest rivers, they were hailed as construction sites of Soviet socialism in Siberia and

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<sup>350</sup> Ibid.

<sup>351</sup> Moscow was the undisputed center of the post-Soviet “wild west capitalism,” and it acted like a funnel through which the country's money flowed abroad.

<sup>352</sup> Mosenergo course is a mirror image of Russia's political history as perceived by the West. Whenever something happened, a sacked Prime Minister, for example, Mosenergo shares plummet (interview #8 with economist at financial institution, 20061006.)

symbols of man's victory over nature.<sup>353</sup> Deploying a generation of *Komsomol* youths and path-breaking technologies, they were built to produce vast amounts of electricity to power the regions post-war industrialization.<sup>354</sup> An additional historical quirk made the power plants of Irkutskenergo particularly valuable: having been built under the Soviet planned economy, where capital was allocated, rather than borrowed against interest, post-Soviet enterprises did not inherit an obligation to service a debt.<sup>355</sup> This is particularly important for hydro-power plants, where the costs of initial construction are huge compared to the cost of producing a marginal unit of power. Unlike hydro-electric dams built in the West, therefore, Irkutskenergo's cost structure does not include capital costs and the power it produces is among the world's cheapest.<sup>356</sup>

Unlike Mosenergo and Irkutskenergo, the destiny Primorsky Krai's Dal'energo faced under market conditions were bleak and it was not likely to be a hot commodity involved in take-over battles.<sup>357</sup> Dal'energo was caught between a rock and a hard place, between non-paying customers and striking coal-miners. More so than Moscowites and Irkutianki, Dal'energo's customers were unable to pay for the electricity they consumed: the military industrial sector and the so-called "budget-organizations" (schools, hospitals and other public organizations financed from government budgets) were either exempt from having to pay for electricity or simply did not pay.<sup>358</sup> A large portion of household consumers had the status of *l'gotniki* – these are veterans, pensioners, etc. entitled to reduced prices for electricity.<sup>359</sup> In the Far East, as many as 70% of households were entitled beneficiaries of various types of *lgoty*.<sup>360</sup> Even more than other Energos, Dal'energo was saddled with unpaid bills, and therefore a constant shortage of cash and debt. This meant that Dal'energo could not pay coal miners and repair workers.<sup>361</sup> The breakdown of ties between the electricity company's debtors and creditors led to fuel shortages and black-outs in many regions.<sup>362</sup> Outages were nowhere as prolonged and severe as in Primorsky Krai, where for many years, there were months in which electricity was only turned on for a few hours a day.<sup>363</sup>

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<sup>353</sup> In the 50s and 60s enthusiastic young patriots joining the work crews that built Siberian dams was the thing to do for; see Alekseev, V.V., *Электрификация Сибири*, published by Nauka/Наука, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, 1973.

<sup>354</sup> These were often technologically highly ambitious projects (note also that cold war era competition for size of turbines was also an element of this construction boom); technological feats were stressed, for example, in interview #55 with employee of electricity company, Irkutsk, 20071120.

<sup>355</sup> Interview #16 with electricity sector expert/consultant, Moscow/phone, 20061030, and interview #21 with electricity sector economist, Moscow, 20061214. The sheer value of Irkutskenergo's assets in a market economy was also stressed in other interviews, for example, interview #54 with businessman, Irkutsk, 20071120, and interview #60 with energy company executive, Irkutsk, 20071203.

<sup>356</sup> See chapter 4 for details on electricity tariffs.

<sup>357</sup> Interview #41 with journalist covering electricity sector, Vladivostok, 20071005.

<sup>358</sup> See Bradshaw and Kirkow, "The Energy Crisis in the Russian Far East : Origins and Possible Solutions."

<sup>359</sup> Wengle and Rasell, "The Monetisation of L'goty: Changing Patterns of Welfare Politics and Provision in Russia."

<sup>360</sup> Bradshaw and Kirkow, "The Energy Crisis in the Russian Far East : Origins and Possible Solutions."

<sup>361</sup> Ibid. as well as Woodruff, Woodruff, *Money Unmade*.

<sup>362</sup> "Посмотрел бы на нас цюрупа," *Utro Rossii*, February 12, 1994.

<sup>363</sup> Kirkow, Rosenblum pp.301. See also repeated references to blackouts in regional newspapers of Primorsky Krai, for example, "Что же происходит?" *Utro Rossii*, April 8, 1997; "Кто отключает свет?" *Utro Rossii*, April 16, 1997 and "Почему сидим во тьме?" *Utro Rossii*, April 19, 1997. See also chapter 1.

Table 1: Case Studies of Three Energos

<i>Region</i>	<i>Energo</i>	<i>Control and/or ownership in 1990s:</i>	<i>Ownership in 2008</i>
		<i>Governor/Mayor</i>	<i>Conglomerate</i>
Moscow (European Russia)	<b>Mosenergo</b>	Luzhkov	Gazprom = energy conglomerate
Irkutsk (Siberia)	<b>Irkutskenergo</b>	Nozhikov	Rusal = industrial conglomerate
Primorsky Krai (Far East)	<b>Dal'energo</b>	Nazdratenko	Not privatized

#### **4. Competing ownership claims**

##### **4.1 Ownership claims by the federal government: constitutionally binding, factually contested**

Because electricity is an important infrastructure sector, the federal government tried to keep control of the bulk of power plants and grids – with varying levels of success across regions and over time. While the ownership claims by the federal government were constitutionally binding, in reality they were contested and controversial. To untangle overlapping and competing ownership claims, I will start with an overview of the contested claims by the federal government from the beginning of the post-Soviet period through to the present date, then turning in more details to the claim regional governors, the oligarchs and foreign investors – vis-à-vis the federal government. Note that the discussion on the federal government's and the conglomerates' claims covers the entire period from 1991 through today, while regional claims were important during the 1990s.

Ironically, the first step towards the privatization of the Soviet-era Unified Electricity System was a presidential decree that *reserved* a large share of the sector's asset for the federal government: the Presidential Decree No. 922.<sup>364</sup> The Decree was passed in 1991 at a moment in which the authority of the central government was in crisis, as Soviet-era chains of command were disintegrating and reassembled as the bureaucracy of the Russian Federation. Decree No. 922 was not part of a comprehensive plan to restructure the sector; instead it was a measure to stem the tide of spontaneous privatizations in the sector. Spontaneous privatization was a process in which well-placed nomenklatura insiders spun off the most profitable parts of state-owned enterprises for their own businesses.<sup>365</sup> In this way, new stakeholders had acquired *de facto* property rights to assets in the sector prior to the actual privatization of the Energos.

<sup>364</sup> Burgansky, "Hydro Power: Super-Profits or Super-Regulation?," p.12.

<sup>365</sup> This happened through various deals between nomenklatura insiders, for example, one person would authorize the privatization of a certain section of a company to a new owner in return for a stake in the company. For details,

Decree No.922 intended to keep most electricity assets under control of the federal government, giving the state a majority stake, if not full ownership.<sup>366</sup> It also “commercialized” the electricity assets of the Soviet ministry, creating the company UES and its daughter companies, the Energos, the regionally vertically integrated electricity companies. The most important element of the decree was the following: it ruled that UES was to own the country’s biggest power plants and receive majority stakes in all the regional Energos.<sup>367</sup> Most controversial was the proposition that the country’s largest power plants -insiders sometimes call them the crown jewels of the electricity system – were to be directly controlled by UES and owned by the federal government, rather than by the respective regional Energos. This includes all hydro-electric power plants and the largest and newest thermal electric plants, the most valuable assets in the system.

Like many other unpopular Presidential directives, the legitimacy of Decree No.922 was disputed immediately by many actors – governors, mayors, Duma deputies and the newly emerging private sector interests, who saw their own influence over the electricity sector under threat.<sup>368</sup> Opponents interpreted the federal government’s action as a claim on the “most delicious pieces” of the pie,<sup>369</sup> particularly alarming to contenders, who were trying to claim ownership themselves. All over the country, valuable power plants and Energos were withheld from the federal government, and their assets were transferred to new owners in ways that defied directives of Decree No.922.<sup>370</sup> The federal government’s inability to do anything about contending claims led to overlapping and competing claims to the control and ownership of electricity assets.

Competing claims were brought to light when the federal government’s reform team initiated the reforms of the electricity system in 1997. Even though the federal government was formally the legal owner of UES and the Energos, it was unable to force compliance. Formal control meant little at that time. For example, the federal government’s reform team appointed a new director of UES, Boris Brevnov (a personal friend of Boris Nemtsov, the reformist Prime Minister at the time, and the key early proponent of electricity sector reforms).<sup>371</sup> Energo directors rallied behind

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see Solnick, *Stealing the State: Control and Collapse in Soviet Institutions*. A reference to the ongoing spontaneous privatization (*стихийная раскатывания имущества*) in the electricity sector, see “Какие монстры нам нужны,” *Vostochno Sibirskaiia Pravda*, July 8, 1992.

<sup>366</sup> Details on the Decree, see Khlebnikov, *Рынок Электроэнергии V Rossii*.

<sup>367</sup> The regional structure and the regionally integrated monopolies grew out of the Soviet-era organization of the electricity sector and had been administered by regional branches of the Soviet Ministry of Energy. The Energos have grown out of the Soviet era structure of the localized *energosistema*. On the continuity of Soviet and post-Soviet structure of the electricity system, see Kristine Petrosyan, “What Is the Current Status of Russian Electricity Sector in the Light of Restructuring Laws and Rao Ues Breakup Strategy?,” (University of Dundee, Centre for Energy, Petroleum and Mineral Law and Policy, 2004). On the structure of the Soviet electricity system, see Brill, R. and Kheister, I. *Экономика социалистической энергетики*, published by Высшая Школа/Vyshe Shkola, Moscow, 1966; pp.13, or Melentiev, L.A., *Очерки истории отечественной энергетики*, published by Наука/Nauka, Moscow, 1987; pp.140.

<sup>368</sup> Various interviews, for example, interview #49 with academic, Irkutsk, 20071114. See also Burgansky, “Hydro Power: Super-Profits or Super-Regulation?,” Mellow, “Is This a Way to Create Capitalism? Maybe So.”

<sup>369</sup> An observer from Krasnoyarsk Krai asks whether the Krai will be able to resist the “cutting off of the tasty parts” of the electricity pie: “Сумеет ли край противостоять отресанию лакомых кусков? На тебе, боже, што нам негоже,” *Krasnoyarskii Rabochii*, February 11, 1993.

<sup>370</sup> See for example Burgansky, who emphasizes the hydro-power plants; Burgansky, “Hydro Power: Super-Profits or Super-Regulation?.”

<sup>371</sup> Interview #16 with electricity sector consultant, Moscow/phone, 20061030.



the incumbent director, Anatoly Dyakov, and boycotted Brevnov's appointment. Dyakov promised to leave the decentralized nature of the system intact and give regional authorities discretion in how to run the Energos.<sup>372</sup> Unable to force regional Energos and regional governors to comply with his steps to reform the system, Brevnov only lasted a few months as the director of UES.<sup>373</sup>

While the Decree No.922 was contested on many fronts, it did manage to reserve a large share of Russia's electricity sector for the federal government. This meant that the majority of the sector's assets (many valuable power plants and most of the catastrophically inefficient and loss-making enterprises) remained in state hands during the nineties, until the final round of privatization after 2004.<sup>374</sup>

The final phase of electricity privatization and ownership changes took place during the recent reform program between 2004 and 2008. Spearheaded by Chubais, it was initiated after the legislation that came to underpin the sector's restructuring passed the Duma in 2003. The ownership changes the legislation called for were based on the vision of a competitive market in electricity generation. A key step was the reduction of the role of the state in the generation segment; Chubais repeatedly stated "the aim is to have zero state ownership in the generation sector."<sup>375</sup> During the years leading up to the state's divestiture of assets, minority and foreign shareholders feared that oligarchs would receive the most valuable assets without having to pay market prices. Yeltsin-era oligarchs had had their eyes on electricity assets, as we will see in more detail below. According to one source, they approached Chubais in the late nineties, privatization minister at that time, with a plan how to carve up UES between a group of high-profile oligarchs.<sup>376</sup> In the years leading up to reforms, Chubais insisted that electricity assets were to be privatized to the highest bidder, intent on *not* living up to his reputation, acquired for giving away assets in rigged auctions during the "loans for shares" deals.<sup>377</sup> According to reform plans the government was supposed to regain control over networks and hydro-electric dams, some of which had been lost during the nineties.<sup>378</sup> Regaining control of networks was particularly important, as networks are natural monopolies and guaranteeing equal access to networks is a prerequisite for competition in the generation and retail segment (plus, transmission is said to be a "cash cow").<sup>379</sup>

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<sup>372</sup> For a fascinating account by Brevnov of his dispute with UES' incumbent management and with Dyakov, see Boris Brevnov, "From Monopoly to Market Maker? Reforming Russia's Power Sector," in *Whither Russia*, ed. Belfer Center/Strengthening Democratic Institutions Project (Cambridge, MA: Harvard University, 1998). See also Woodruff, *Money Unmade*, pp.197.

<sup>373</sup> Ibid.

<sup>374</sup> It also meant that the electricity assets were not included in the "loans-for-shares" deals, the egregious asset grab by a few politically connected, emerging oligarchs.

<sup>375</sup> Remark by Chubais at a conference "Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?" Moscow, February 13, 2007.

<sup>376</sup> Hoffman tells the story how two rival oligarchs, Potanin and Smolensky, wanted to divide up the telecoms and electricity sector between themselves; Hoffman, *The Oligarchs : Wealth and Power in the New Russia*.

<sup>377</sup> Ibid.

<sup>378</sup> Nuclear power plants had been excluded from reforms from the start. They had remained under the control of the federal government as a SOE, Rosenergoatom.

<sup>379</sup> As oligarchs had gained ownership over some networks and a few key hydro-electric power plants, the federal government tried to swap assets with oligarchs. The government wanted to swap ownership of power plants to

By 2008 the federal government sold controlling stakes in most of the country's thermal power plants: in the power generation sub-sector 20 companies were created and sold off.<sup>380</sup> This final round of asset redistribution was not without its own competing claims, as we will see below. The federal government also secured its monopoly on all foreign sales of electricity.<sup>381</sup> We will also see that the government *retained* control of key assets – either via Hydro-OGK, the government's holding company for hydro-electric assets, or via Inter-RAO, a daughter company of UES that was initially created to buy assets in former CIS countries and Eastern Europe (but has also incorporated Russian power plants that have not found private investors).<sup>382</sup> Finally, the federal government interestingly has been seeking control of electricity assets in other CIS countries; Inter-RAO has gradually increased its role in Georgia, Armenia, Moldavia, Tajikistan and Kazakhstan, controlling large parts of the electricity generation in Georgia and Armenia.<sup>383</sup>

A second important step of the most recent reforms was the unbundling of the vertically integrated Energos and the creation of a set of new companies in the sub-segments of the sector. Power plants were to be separated from grid and network assets and merged into new companies, the so-called OGKs and TGKs (which stands for wholesale and territorial generation companies; six OGKs and fourteen TGKs were created). A side effect of this restructuring, though not an unintended one, was that the electricity sector came to be directed through far fewer and far more centralized structures. This centralization of the management of the electricity sector mirrored the political centralization going on at the same time.<sup>384</sup>

#### **4.2 Ownership and control by regional governments: first strong, then weak**

The politics of ownership changes in the 1990s arise from the peculiar center-region dynamic that characterized the first post-Soviet decade. Governors across Russia sought control or ownership of regional electricity generators, wanting to anchor their ability to provide cheap

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regain control of network, for example. Comment about transmission being a “cash cow,” in interview #15 with electricity sector analyst at financial institution, Moscow, 20061027.

<sup>380</sup> Note that Russian electricity insiders call this process “privatization” even when new owners are not only private companies, see for example *UES Press Release*, June 30, 2008, or summary of reform up to summer 2008 by Nadia Popova, *Moscow Times*, July 1, 2008.

<sup>381</sup> Concretely, this means that the federal government is in charge of negotiating with foreign governments about the operation and construction of cross-border transmission grids; for example the high-voltage line planned in the Far East, from Blagoveshensk to China; interview #33 with journalist covering electricity sector, Vladivostok, 20070921.

<sup>382</sup> While the government owns a majority stake in these two new para-statals – *Hydro-OGK* and *InterRao*, different factions within the government continue to compete for control of these companies. Following a major accident at the *Sayano-Shushenskaya* Hydro-Power station in August, *Kommersant*’ reported in October that the company’s Siberian holdings are now managed by somebody loyal to Deripaska “все ее сибирские станции, в том числе проект восстановления Саяно-Шушенской ГЭС, будет теперь контролировать выходец из структур Олега Дерипаски.” In “РусГидро” сливает команду,” *Kommersant*’, October 27, 2009. A further sign of these power struggles is the replacement of the director of Hydro-OGK in November 2009. The new director, Evgenii Dodd, is rumored to be close to Igor Sechin, one of the key Kremlin power-brokers, who is also on the board of Inter-Rao, “Vor Strom-Fusion in Russland; Neuer Chef für Russhydro” *Neue Zürcher Zeitung*, November 24, 2009, p.29.

<sup>383</sup> According to one source, *Inter-RAO* controls more than 85% of generation capacity in Armenia.

*Dal’nevostochnyi Kapital*, July 2004 No. 6/58, p.11.

<sup>384</sup> Some of these companies have offices in Moscow, even if they are officially located in the regions. Interview Electricity sector expert at financial institution, Moscow, 20061005, 7.

electricity, a useful policy tool in time of economic and political crisis.<sup>385</sup> Governors often tried to keep factories open, which also meant securing low-cost electricity for them, or allowing an ownership transfer that seemed to stave off factory closures and de-industrialization, which the federal reform agenda was feared to cause. Side-payments probably also played a role in these decisions; the point here is that governors' motivations were broader and included the logic of wanting to control regional electricity assets in pursuit of regional development goals.

In some regions, governors saw that spontaneous privatizations were already ongoing and wanted to rescue important assets from passing into private hands.<sup>386</sup> Sometimes regional governors acted in the absence of federal directives. Sometimes they defied federal legislation and authorized the transfer of ownership to the regional government (or loyal regional enterprises) through regional legislation in blatant conflict with federal directives. Other times, regional governments could acquire ownership stakes in lieu of tax arrears by regional Energos.<sup>387</sup> A number of ownership disputes were also brought to regional courts. Under the influence of regional authorities, regional courts decided in favor of regional actors. Finally, in many regions, governors had personal ties to the Energo directors, which served as a conduit for control even when governors did not gain ownership. Importantly, this meant that in all three cases discussed below, the *de facto* control of Energos by regional administrations in the 1990s far outweighed their *de jure* ownership stake.

#### *Mosenergo and de facto regional control*

Mosenergo was a token in a political contest between the city's mayor, the charismatic and highly influential Yuri Mikhailovich Luzhkov, and the federal governments' reform team. From the early days of the privatization, the city's mayor took an interest in Mosenergo as one of Moscow's most valuable enterprises. Luzhkov opposed Chubais's privatization plans for Mosenergo, and more generally, the liberal reformers approach to privatization, thus often called "Chubais' worst enemy."<sup>388</sup> The mayor was keenly aware of the value of the city's municipal infrastructure. Specifically, he clashed with Chubais over the size of the city's stake in the Energo and more generally about whether the electricity sector should be privatized at all.<sup>389</sup>

Luzhkov thought of Moscow city's assets as an invaluable tool for governing the city. He wanted to keep control of Mosenergo's assets, as a way to direct the economic future of the capital, for example, by controlling the process of property transfers to new owners. He wanted or "pick the

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<sup>385</sup> The narrative below will focus on Mosenergo, Irkutskenergo and Dal'energo. But regional governors elsewhere similarly sought control. In Tyumen, for example, the regional government contested UES's property rights through a Duma motion, see "Удельные княжества копят энергию," *Segondia*, December 18, 1998.

<sup>386</sup> See Nozhikov's commentary on this very early "wave" of privatization, which he considered highly destructive, p. 139, and again p.159. Yuri Nozhikov, *Я это видел – или жизнь российского губернатора, рассказанная им самим*, Irkutsk Oblast Typography No.1, Irkutsk, 1998.

<sup>387</sup> During the non-payment and barter crisis, Energos ran up debt vis-à-vis regional tax authorities, see Brevnov, "From Monopoly to Market Maker? Reforming Russia's Power Sector.", Woodruff, *Money Unmade*. How this translated into ownership, see for example, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*, p. 164.

<sup>388</sup> Interview #8 with economist at financial institution, Moscow, 20061006.

<sup>389</sup> Rybalchenko, "Power Industry 1991-2000," *Kommersant*, November 13 2001.

winners,” as a way to reward loyalty to his vision of post-Soviet change.<sup>390</sup> He became one of the main opponents of the young reformers around Chubais and one of the most vocal opponents of privatization plans for the electricity sector. The two – Luzhkov and Chubais – continued to be political foes for most of the nineties; also because both were potential successors of Yeltsin in the late nineties and both headed a political party.

As the electricity sector had become an arena of the competition in Moscow, both sides used all available resources at their disposal to influence Mosenergo. As a way to exert control, Luzhkov maintained personal relationships first with Dyakov, UES’s director until 1997, and then with Remezov, Mosenergo’s director. Dyakov was backed by Luzhkov and other regional governors, because, unlike his successor, Brevnov, he did not threaten their control.<sup>391</sup> The young reformers tried to oust Dyakov, and when Chubais became director of UES, he tried to oust Remezov, the mayor’s loyalist at Mosenergo.<sup>392</sup> In response, Luzhkov resorted to use the city’s administrative powers to blackmail Chubais. He ordered a raid on Mosenergo, a tax audit ordered by city administration that was supposed to prove UES’s mismanagement of Mosenergo.<sup>393</sup> Luzhkov also tried to increase the city’s stake in the Energo through additional share-issue, something that would only work with Remezov as a director.<sup>394</sup> Luzhkov used electricity black-outs as occasions for vitriolic attacks on Chubais for bad leadership of the electricity sector, for earning “excess profits” in the sector, and for selling out the country’s most valuable assets *again* (Chubais had been architect of the voucher privatization, and was much reviled by ordinary Russians for selling Soviet-era factories on the cheap).<sup>395</sup> This campaign was important in as much as Luzhkov could mobilize significant support in the Duma and in street protests to block key legislation that reformers needed to start the restructuring of the sector.<sup>396</sup> The mayor’s Fatherland/All-Russia party controlled 67 Duma seats and enough additional allies to block the legislation proposed by Chubais.<sup>397</sup> Although the city administration ended up with only a small share of the Energo, about 3%, while UES owned 51%, the mayor’s ability to control Mosenergo was always larger than the city’s formal ownership suggested.

In recent years, Moscovites often say that Luzhkov’s bark is louder than his bite is strong. Indeed, he did not manage to increase the city’s formal ownership and his ability to influence reforms was increasingly limited. After 2003, when the Duma became dominated by Putin’s “United Russia,” Luzhkov gave up his opposition to electricity privatization. Although he held out until the last minute, blocking the passage of key legislative documents, he finally relented. Officially, he was promised “greater control over the distribution of (...) companies that will be

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<sup>390</sup> Hoffman, *The Oligarchs : Wealth and Power in the New Russia*. See also Michael Brie in Alfred B. Evans and Vladimir Gel'man, *The Politics of Local Government in Russia* (Lanham, Md.: Rowman & Littlefield Publishers, 2004).

<sup>391</sup> Stephanie Baker-Said, "Chubais' Shocking New Job," *Moscow Times*, June 30 1998.

<sup>392</sup> Remezov was replaced in July 2001, Rybalchenko, "Power Industry 1991-2000."

<sup>393</sup> *Raids* in the Russian context refer to audits of various kinds, sometimes achieved by force; they are a tool often used in Russia’s hostile take-over battles. Volkov, "Hostile Enterprise Takeovers: Russia's Economy in 1998-2002."

<sup>394</sup> The city was trying to increase its stake to 5% through an additional shares issue. This was a plan that the city’s municipal property department came up with, but not something that was approved by UES.

<sup>395</sup> “Mosenergo government audit ends,” *RFE/RL Business Watch*, August 16, 2001. Note that the term “excess profits” echoes Soviet-era language.

<sup>396</sup> Alla Startseva, “Deputies Vote to Break Up Power Grid,” *Moscow Times*, October 10, 2002

<sup>397</sup> Mellow, "Is This a Way to Create Capitalism? Maybe So."

created from Mosenergo's current assets," but it is rumored that more was at stake in the deal between the two old foes.<sup>398</sup>

### *Irkutskenergo under regional control*

Unlike Mosenergo, Irkutskenergo was one of the country's four important Energos that were "privatized" to the regional administration and were therefore independent of UES and the federal government. The first post-Soviet governor of Irkutsk oblast, Yuri Nozhikov maintained that this strategy was pursued to protect the region from the detrimental effect of Moscow's policies. The legality of this "privatization" to the regional government was contested for most of the 1990s, mostly because Irkutskenergo owns a few of the country's most valuable power plants – most importantly, the Bratsk, Ust-Ilymsk and Irkutsk hydro-electric power plants.

The value of Irkutskenergo was particularly obvious to two groups: electricity sector insiders, the *energetiki*, and to those who work in the regional enterprises reliant on cheap electricity – most of all the *aluminshiki*, the aluminum industries. Yuri Nozhikov, belonged to the former group: he was a high-profile member of the *energetiki*. Before becoming governor, Nozhikov had been a high-ranking official at Bratsk hydroelectric dam, one of the world's largest power plant.<sup>399</sup> Closely connected to the *energetiki* and thoroughly familiar with the electricity sector's importance for the region's economy, the governor had plans of his own for the region's power plants and opposed the federal government's plans. Nozhikov was also one of the most independent governors of the early Yeltsin years, and one of the leaders of the political alliance of governors.<sup>400</sup> He was able to defy presidential decrees by relying on a strong regional support base; Irkutsk is a relatively rich region and a contributor to the national budget. Finally, residents of Irkutsk tended to stress, he was a free spirit and a critical thinker.

When Yeltsin sought the allegiance of regional elites in the fight against communist hard-liners, he promised them "as much sovereignty as they can digest."<sup>401</sup> Taking Yeltsin by his word, Nozhikov claimed ownership of Irkutskenergo for the regional administration.<sup>402</sup> Well aware of the threat of spontaneous privatizations, the regional administration acted swiftly, "taking on the responsibility" to determine who will become the new owners.<sup>403</sup> The key stake was a 40% share of Irkutskenergo – which was claimed by both the regional administration's and the federal

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<sup>398</sup> Alla Startseva, "Deputies Vote to Break Up Power Grid," *Moscow Times*, October 10, 2002.

<sup>399</sup> Nozhikov biography, on his experience at Братскэнерго and in the electricity sector spanning over 32 years, see for example, p.110 and 117. Yuri Nozhikov, *Я это видел – или жизнь российского губернатора, рассказанная им самим*, Irkutsk Oblast Typography No.1, Irkutsk, 1998. His connection with the *energetiki* was also mentioned in interview #49 with an academic, Irkutsk, 20071114, and in interview #60 with energy company executive, Irkutsk, 20071203.

<sup>400</sup> "Губернаторы показали силу," *Vostochno Sibirskaya Pravda*, January 20, 1994. See also Nozhikov biography, *Я это видел*, pp.179. Nozhikov refused to support Yeltsin in this regard, and almost lost Yeltsin's support, because he vehemently disagreed with the unequal treatment of the different subjects of the federation. Nozhikov's ability to defy federal level directives was mentioned in several interviews, for example, interview #48 with academic, Irkutsk, 20071113.

<sup>401</sup> Nozhikov explicitly remembers this *carte blanche*, Nozhikov biography, *Я это видел*, p.138.

<sup>402</sup> Nozhikov biography, *Я это видел*, p.173. Also in interview #13 with academic, St.Petersburg, 20061023; interview #49 with an academic, Irkutsk, 20071114; interview #53 with employee of electricity company, Irkutsk, 20071119.

<sup>403</sup> "Какие монстры нам нужны," *Vostochno Sibirskaya Pravda*, July 8, 1992.

government's property committees.<sup>404</sup> Nozhikov wanted to "defend our electricity"<sup>405</sup> and keep control of hydro-electric resources at the regional level.<sup>406</sup> His explanation was simple: "the economy or our region relies on it," and "if our electricity belongs to us, it will be cheap – goods and services will be cheap, utility bills [the *kvarplata*] will be cheap, etc. If our electricity will *not* be ours – everything will become more expensive, and profits will be diminished."<sup>407</sup> Finally, Irkutskenergo is one of the biggest taxpayers in the region.<sup>408</sup> The regional government probably reckoned it would have a much easier time collecting taxes and securing them for the regional administration's coffers if it controlled a significant stake in the company.

When the Kremlin's reformers tried to reassert the central government's control over the power sector with Decree 922, the Irkutsk governor resisted.<sup>409</sup> Nozhikov not only refused to give back the region's share in Irkutskenergo, he also mobilized a coalition of Siberian governors that put forth an alternative plan of sector reform, putting regional administrations in charge of their Energos.<sup>410</sup> The Siberian governors rejected Decree 922 on the basis that it was harmful to regional economic wellbeing and as unconstitutional.<sup>411</sup>

When the opposition to the decree failed, Irkutskenergo became the center of a decade long ownership battle, as the region refused to cede ownership to UES. Several rounds of federal and regional court cases did not bring clarity.<sup>412</sup> The case was brought to Russia's constitutional court by the Irkutsk regional parliament.<sup>413</sup> After extended deliberation and political maneuvering, the court ruled very ambiguously that both the regional and the central government should have a say in the future of Irkutskenergo. The case remained unresolved, and for several years, governor

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<sup>404</sup> M.A. Ukolova, "Передел собственности: борьба за Иркутскэнерго," in *Актуальные Вопросы государственного регулирования регионального развития*, published by the Baikal State University of Economics and Law, Irkutsk, 2002 and Burgansky, "Hydro Power: Super-Profits or Super-Regulation?."

<sup>405</sup> Nozhikov biography, *Я это видел*, p.173.

<sup>406</sup> Interview #49 with an academic, Irkutsk, 20071114.

<sup>407</sup> "Мы отстаивали нашу энергетику. На ней держится все хозяйство области, она – основа всей экономики. Будет своя, дешевая энергия – будут дешевые товары и услуги, кварплата и так далее. Не будет своей – все будет дороже, и доходы тоже уйдут на сторону." Nozhikov biography, *Я это видел*, p.173.

<sup>408</sup> "Энергетическая схватка продолжается," *Vostochno Sibirskaiia Pravda*, January 13, 1993. The article mentions that the ownership struggle around Irkutskenergo continues, precisely because it is one of the biggest taxpayers of the region.

<sup>409</sup> Irkutsk oblast's opposition to the federal government's regulation of the electricity sector is well documented in the regional newspapers. An early article is "Республиканцы поддержали Ножикова," *Vostochno Sibirskaiia Pravda*, September 9, 1992.

<sup>410</sup> "Выкручивание Рук энергетикам Приангарья продолжается," *Vostochno Sibirskaiia Pravda*, November 19, 1992. The other Siberian governors were Kress of Tomsk, Tuleev of Kemerovo and the governor of Krasnoyarsk Krai. Also discussed in interview #49 with an academic, Irkutsk, 20071114.

<sup>411</sup> See "Республиканцы поддержали Ножикова," *Vostochno Sibirskaiia Pravda*, September 9, 1992. And "Решение: Об обращении в конституционный суд Российской Федерации," *Vostochno Sibirskaiia Pravda*, November 26, 1992. And "Иркутская Делегация встретила с Гайдаром," *Vostochno Sibirskaiia Pravda*, September 30, 1992, for an account of a high-level delegation from Irkutsk traveled to Moscow to try to prevent the passing of the Decree or to negotiate an exception for the oblast during the fall of 1992.

<sup>412</sup> For an account of the conflict by one of the insiders, General Director of Irkutskenergo in the late 1990s, Victor Borovsky, see *Ekspert*, No.14, April 13, 1998, pp.34. Also, interview #50 with businessman, Irkutsk, 20071115. Legal uncertainty was also mentioned in interview #56 with journalist, Irkutsk, 20071120, and interview #60 with energy company executive, Irkutsk, 20071203.

<sup>413</sup> "Решение: об обращении в Конституционный суд Российской Федерации," *Vostochno Sibirskaiia Pravda*, November 26, 1992.

Nozhikov, UES and Yeltsin continued to debate this matter.<sup>414</sup> UES and the federal government tried to resolve the issue several times, but the tariffs that regional consumers were to pay remained a sticking point.<sup>415</sup> While the legal status of Irkutskenergo was disputed, in reality the regional government controlled the Energo because the close personal relationship between the regional administration and Irkutskenergo persisted.<sup>416</sup> Regional *Energetiki*, for example, Victor Borovsky, sat on the board of Irkutskenergo, was also elected to lead the Irkutsk oblast legislature.<sup>417</sup> It was not until 2001 that a federal court decision restituted control by the federal government in 2001, forcing the regional government to give up control.<sup>418</sup> Even after this, however Irkutskenergo remained one of the four “independent Energos,” that were not included in the UES reform plan.

In Khakassia, another Siberian region with a large electricity producing region, the regional governor also tried to keep the regions hydro-electric power plant, Sayano-Shushenskaia Hydroelectric Power Plant (*SSGES*, Russia’s largest power plant today) from passing into federal ownership in the mid-1990s. The governor of Khakassia was less successful than his counterparts Irkutsk: the hydro-damn continued to be controlled by UES, although Khakassia managed to negotiate a moratorium on price increases.<sup>419</sup> In 2003, Khakassia’s regional administration tried again and launched a suit to contest UES ownership of *SSGES*, claiming that the region should own a larger stake. UES threatened to register *SSGES* in neighboring Krasnoyarsk, which would be no less than a catastrophe for Khakassia’s regional budget. The case went nowhere, *SSGES* was incorporated into the UES reform plan and is now the federal government’s largest hydro-electric power plant.

In Krasnoyarsk, the region’s largest power plant, and the country’s second largest hydro-electric power plant, Krasnoyarsk Hydroelectric Plant, was privatized to the regionally controlled aluminum plant. Although UES kept control of Krasnoyarskenergo, it lost control of another huge hydro-electric plant.<sup>420</sup> There was a movement afoot to transfer a second major hydro-electric plant, Boguchansk, to the ownership of the Krasnoyarsk regional government.<sup>421</sup> This never happened. Instead an aluminum company and the federal government that took control of Boguchansk, as we will see below.

### *Dal’energo and regional control*

In the 1990s, Dal’energo was not likely to be a very profitable company: not only was it at the epicenter of the Far Eastern energy crisis, its cost of production are very high, because of its

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<sup>414</sup> Electricity assets were included in the bilateral agreements between the oblast authorities and the Yeltsin government. Gubogly, Collection of Bilateral Treaties of the Yeltsin Years.

<sup>415</sup> “Пять вариантов кабалы,” *Vostochno Sibirskaiia Pravda*, January 19, 1993.

<sup>416</sup> For the ties between regional governments and the *energetiki*, see also chapter 6.

<sup>417</sup> His title was председатель законодательного собрания. See M.A. Ukolova, “Передел собственности: борьба за Иркутскэнерго,” in *Актуальные Вопросы государственного регулирования регионального развития*, published by the Baikal State University of Economics and Law, Irkutsk, 2002.

<sup>418</sup> Ibid. The final court decision was taken on February 5, 2001. See also “Борьба за Иркутскэнерго вступила в завершающую стадию,” *Novaya Gazeta*, September 30, 2001.

<sup>419</sup> In fact, Sayano-Shushenskaia Hydroelectric Power Plant is Siberia’s only large power plant in which UES (and now Hydro-OGK’s) and the federal government own a large majority.

<sup>420</sup> “РАО ЕЭС восстановила контроль над Красноярской ГЭС,” *Kommersant*, April 4, 1998.

<sup>421</sup> “Берем чужое – отдаем свое,” *Krasnoyarskii Rabochii*, May 22, 1992.

antiquated capital stock and the reliance on burning low-caloric local coal or on the costly transport of coal from Siberia.<sup>422</sup> Yet, like all the Energos, it was a regional monopolist, providing a basic infrastructure service. Regional control, though not ownership, became the source of contention in the conflict between the regions' notoriously defiant governor – Evgeny Nazdratenko – and the federal government's young reformers, Nemtsov, Kirienko and Chubais.<sup>423</sup>

While the regional government did not formally own a stake in Dal'energo, Nazdratenko did manage to control the company through the regional energy commission and by installing his loyalists as directors of Dal'energo and the region's most important regional power plants.<sup>424</sup> As with the conflict with Moscow's major Luzhkov, the electricity sector was a key site of conflict between the regional heavy-weight and Moscow's reformers. The enmity between Nazdratenko and the young reformers started in the early 1990s, when the governor consolidated his power by building a regional alliance of factory owners, who defied federal regulation in all kinds of ways – from fishing quotas to regulations on importing used cars from Japan.<sup>425</sup> Chubais and Nazdratenko differed fundamentally on the future of the sector – Nazdratenko was “against markets and for 100% state ownership.”<sup>426</sup>

The region's energy crisis turned out to be a focal point of the conflict between Nazdratenko and the liberal reformers in Moscow, who sought a reason to remove him from office. Nazdratenko blamed the energy crisis on liberal reformers, making them responsible for the skyrocketing cost of living in the Far East, for the non-payment crisis, and literally for the “darkness” brought about by electricity outages. He opposed the electricity reforms of the electricity sector, not wanting to lose influence over the sector.<sup>427</sup> Nazdratenko's grip was so tight, that the young

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<sup>422</sup> “Дальэнерго меняет партнеров?” *Utro Rossii*, January 14, 1997. Also interview #31 with journalist covering electricity sector, Vladivostok, 20070915.

<sup>423</sup> The conflict between Nazdratenko and Chubais was mentioned in several interviews, for example, in interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004 and interview #31 with journalist covering electricity sector, Vladivostok, 20070915. An aspect of the conflict that was often mentioned is that Nazdratenko's regional opponents sided with the young reformers in Moscow and Chubais. See for example “Губернатор намерен стоять до конца,” and “Оставьте губернатора в покое,” both articles in *Utro Rossii*, June 17, 1997. Also “Приморский Кризис: возможны варианты,” *Utro Rossii*, June 18, 1997.

<sup>424</sup> Nazdratenko's appointments were particularly controversial after 1999, when Chubais actively tried to install a new management. Nazdratenko managed to get his men, Yuri Likhoida to lead Dal'energo, and Yuri Basharov at Lutek (Lutek is comprised of Primorsky GRES and Luchegorsk coal mine. The Primorsky GRES is Primorsky Krai's most valuable power plant is, and was one of the large power plants that were transferred to federal ownership according to Decree 922). The appointment of Likhoida was an explicit provocation of Chubais, since he was legally entitled to do so, see “Чубайс сдал Приморе,” *Kommersant*, August 8, 2000, and “Чубайс смеил начальников Приморья,” *Izvestia*, August 9, 2000. The alliance between regional governors and the Energo directors common elsewhere, for example, the head of Khabarovskenergo, Popov, is a close associate of the governor of Khabarovsk (see chapter 6).

<sup>425</sup> Bradshaw and Kirkow, “The Energy Crisis in the Russian Far East : Origins and Possible Solutions.”, Kirkow, “Regional Warlordism in Russia: The Case of Primorskii Krai.”

<sup>426</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>427</sup> A detailed statement of the regional government's position was published by the press service of the regional administration in “О ситуации в топливно-энергетическом комплексе Приморья,” *Utro Rossii*, August 19, 1997; an interesting perspective is an open letter by the governor himself on the cover of *Utro Rossii*, October 11, 1997. Chubais blamed Nazdratenko with no uncertain words for the electricity crisis, “Чубайс проиграл Приморье,” *Kommersant*, February 11, 2000. An one regional observer put it succinctly: “if the current way of



reformers, Nemtsov and Chubais decided that the energy crisis could only be solved by removing him from office.<sup>428</sup> Despite concerted efforts, it took years until Nazdratenko was forced out of office. He finally resigned in early 2001, forced out of office by his opponents in Moscow.<sup>429</sup> Soon thereafter, the management of Dal'energo was completely changed: Chubais put in place an “anti-crisis team,” a group of outside managers to reform Far Eastern Energo.<sup>430</sup> While Primorsky Krai and the open defiance of Nazdratenko were certainly extreme, other Far Eastern governors acted similarly.<sup>431</sup>

The histories of Mosenergo, Irkutskenergo and Dal'energo are remarkably similar in the rise and decline of regional influence. While regional governors had considerable leverage over the electricity sector in the 1990s, Putin recentralization of the political system essentially deprived them of autonomy in the realm of economic policy, including their ability to control assets in the electricity sector. We will see below that electricity assets accumulated in the hands of a small number of new private owners. This mirrors a larger trend in Russia's political economy: political centralization was paralleled by a consolidation of economic assets in the hands of a small number of oligarchs.

#### **4.3 Ownership by oligarchs and conglomerates**

Russia's oligarchs were no less interested in choice assets of the electricity sector than government actors. While Decree No.922 reserved majority stakes in most Energos for the federal government, minority shares have been sold and re-sold since the mid-1990s. As introduced in chapter 2, privatization outcomes are part of bargains between new private owners and different tiers of the government: in the 1990s, new private owners allied with regional governors, while under Putin, they negotiated with the federal government and UES.

Looking at the way the asset of Mosenergo, Irkutskenergo and Dal'energo changed hands, ownership of Russia's electricity consolidated in the hands of a few powerful vertically integrated conglomerates (VICs). Russia's conglomerates have tried to consolidate control over vertically integrated production chains as a way to reduce uncertainty and vulnerability to hostile takeovers. In 2002, one observer noted, “in many regional electricity companies, we observe an increase of the share of industrial enterprises as shareholders.”<sup>432</sup> In addition, the type of conglomerates that emerged as dominant owners of power plants varied across Russia, with an energy-led conglomerate becoming the new owner of European Russia's most valuable asset and an industrial conglomerate gained ownership of Siberia's power plants. The federal government retains ownership in the Far East.

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managing the sector is abolished, the government will lose its ability to influence it. In Russian: ...нарушится управляемость отраслью, уменьшится возможность государственного влияния на нее.” Op-ed by Veronika Belousova, *Utro Rossii*, January 14, 1997.

<sup>428</sup> “Приморский Кризис: возможны варианты,” *Utro Rossii*, June 18, 1997.

<sup>429</sup> Interview #31 with journalist covering electricity sector, Vladivostok, 20070915.

<sup>430</sup> “Чубайс остается,” *Izvestia*, February 2, 2001. The anti-crisis team was rather dramatically called the антикризисного штаба (АКШ), interview #33 with journalist covering electricity sector, Vladivostok, 20070921.

<sup>431</sup> Khabarovsk governor Ishaev was also a long-standing proponent of regional control, interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004, and interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>432</sup> “Кто правее, Есапос или Чубайс?” *Komsomolskaya Pravda*, November 13, 2002.

The means by which oligarchs initially gained control and the assets that were available changed over the years. One way in which Energo shares are likely to have changed hands is via rigged auctions in which regionally influential oligarchs were able to “convince” regional authorities to sell stakes in Energos to loyalists.<sup>433</sup> More importantly, however, the oligarchs, had the requisite cash to buy assets. The most common way in which oligarchs initially consolidated their holdings of electricity assets was probably by buying shares that were publicly traded. Holders of privatization vouchers could bid for shares of Energos. The voucher privatization of 1993-94 is a story of shattered hopes: citizens were promised valuable stakes in the country’s factories and farms, which on the whole rarely materialized.<sup>434</sup> As this is a story that is extensively documented elsewhere, I will keep the discussion of these events short.<sup>435</sup>

The important outcome of voucher privatization is that it actually facilitated the concentration of ownership, rather than its dispersal. Key to this development were the *ЧИФ (Чековий инвестиционный фонд)*, the investment funds for the management of privatization vouchers, which mushroomed in the mid-nineties as people started selling and reselling privatization vouchers.<sup>436</sup> These funds were weakly regulated financial intermediaries. They worked because they had information about which shares were valuable, information they used to target and buy vouchers from people with little or no information of this kind. Funds sent out their emissaries all over Russia to buy vouchers from local residents in exchange for cash, or “live money” as it is called in Russia, and sell them on to larger investment funds based in Moscow.<sup>437</sup> A young entrepreneur, turned fund manager, explained to me why Energo shares were a particularly good business. Cash was scarce everywhere in Russia and particularly outside of Moscow, especially during the years of the non-payment and barter crisis. It was worth much more to people than the vouchers that promised an elusive future profit. In turn, certain Energo shares were sought after by both Russian and foreign investors and smaller funds could always find a willing buyer for them in Moscow.<sup>438</sup> Hence “[Energo]vouchers fell into the hands of *spekulanty* – [speculators].”<sup>439</sup> And, in this way, “regional oligarchs acquired blocking stakes [in Energos].”<sup>440</sup>

Oligarchs further increased their shares in Energos during the heyday of the period of hostile-takeovers, from about 1998 to 2002. Hostile take-overs in Russia entailed the use of

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<sup>433</sup> Interview #54 with businessman, Irkutsk, 20071120.

<sup>434</sup> See for example “Энергия – Народу,” *Vostochno Sibirskaiia Pravda*, January 5, 1994, an article that describes how people opted to buy vouchers of Irkutskenergo, being encouraged by the regional administration that tried to privilege poor regional residents (бюджетники и малоимущие) over the “powerful investors from Moscow” (крупные московски инвесторы). Over the years, the former lost ownership to the latter.

<sup>435</sup> See for example Hoffman, *The Oligarchs : Wealth and Power in the New Russia*, Allina-Pisano, *The Post-Soviet Potemkin Village: Politics and Property Rights in the Black Earth*, Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*.

<sup>436</sup> Hoffman, *The Oligarchs : Wealth and Power in the New Russia*.

<sup>437</sup> Interview #50 with businessman, Irkutsk, 20071115.

<sup>438</sup> Initially, only Mosenergo and Irkutskenergo shares were traded as valuable commodities. By the early 2000s, however, as investors started to believe that Chubais would pull through his reforms, other Energo shares were sought after by Moscow’s brokerages. Between 2003 and 2007 the key was knowledge and information about the new generation companies that were created on the basis of the old Energos, some bound to be more valuable than others. I interviewed two of these investment fund “entrepreneurs” in Irkutsk and Vladivostok (interview #50 with businessman, Irkutsk, 20071115 and #47 with businessman, Vladivostok, 20071017).

<sup>439</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>440</sup> Interview #7 with electricity sector analyst at financial institution, Moscow, 20061005.

administrative or coercive means by the buyer to force a change of management, which often ultimately resulted in a change of ownership.<sup>441</sup> It often literally involved “guys with guns,” either private security firms or the special armed forces sent by tax authorities, who helped one group of managers displace another. When formal ownership of Energos was contested, what mattered most was placing loyalists on the company's board (*soviet direktorov*).<sup>442</sup> Chubais tried to place his loyalists where he could, and competing oligarchs tried the same for the Energos they were interested in. Where UES had uncontested control of an Energo, Chubais could staff the board of directors to his liking.<sup>443</sup> In regions, where UES did not have controlling stakes or where minority shareholders boycotted restructuring of the Energos, replacing boards of directors was accomplished with a number of “creative” and or extralegal ways.<sup>444</sup>

During the most recent round of privatizations, between 2005 and 2008, the conglomerates targeted select electricity assets: the “missing links” in their production chains.<sup>445</sup> Gazprom’s chairman Alexey Miller noted in 2006 for example, “Gazprom [is making] good progress, developing as a global vertically integrated energy company.”<sup>446</sup> Whether the conglomerates were able to do so depended on the one hand on capital, on the other on their connection to the federal government. Export oriented conglomerates – which included Gazprom and Rusal – had the requisite means to acquire companies to consolidate their vertical production chains. After about 2003, influence in Moscow mattered crucially to determine who became the new owners in the privatization of generation companies. Powerful and well-connected Russian conglomerates used political influence to gain ownership, and foreign competitors gained only limited access.

As chapter 2 introduced, the outcome of this battle was a compromise. Chubais was able to restructure the electricity sector and abolish the vertically integrated regional monopolies, but the reform process also served as a re-allocation of assets to the “loyal oligarchs” and could not ward off the infringement of Russia’s large conglomerates on the liberal ideal-type of a power market.

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<sup>441</sup> See Volkov, "Hostile Enterprise Takeovers: Russia's Economy in 1998-2002." In the electricity sector, change in the board of directors often resulted in a change of ownership in the following way: the new management could issue new shares that were then sold to the owner that controlled management, thereby increasing its stake.

<sup>442</sup> Even at UES itself there were often changes in the composition of the board; interview #11 with electricity sector expert, Moscow 20061018.

<sup>443</sup> See chapter 6 for details on the changing management of Energos.

<sup>444</sup> Novosibirskenergo is another one of the four independent Energos, as UES owned only a 14% stake in Novosibirskenergo, partly because of an additional share issues in the 1990s had reduced UES’ stake. UES’ attempt to change the Energos’ management was met with resistance (see also chapter 6; and “Запрет не подействовал,” *Vedomosti*, April 26, 2001; “РАО ЕЭС готовит силовые акции в Новосибирске,” *Kommersant*, May 11, 2001 and “Новосибирскэнерго без боя не сдается,” *Kommersant*, May 16, 2001. Finally, “РАО ЕЭС России решило конфликт в Новосибирскэнерго,” *Izvestia*, July 13, 2001. It is rumored that UES and Novosibirskenergo came to be under the same patronage roof – the Yeltsin “family.” As a result several key managers of Novosibirskenergo moved to the highest position at UES, including the Board of Directors.

<sup>445</sup> As introduced in chapter 2, vertical integration was a strategy pursued to secure assets and activities in the context of political uncertainty. Interview #9 with electricity sector analyst at financial institution, Moscow, 20061008. Volkov shows that “oligarchs undertook vertical integration to ensure that their core enterprises remained stable and to prevent takeovers by competitors”, Volkov, "Hostile Enterprise Takeovers: Russia's Economy in 1998-2002," p.254.

<sup>446</sup> "Energy for the Planet," statement by Alexey Miller, Chief Executive of Gazprom, at the XXIII World Gas Conference, Amsterdam, June 6, 2006; available at <http://www.gazprom.ru/eng/articles/article19731.shtml>

The sale of the government's stake in the OGKs and TGKs, the newly created power companies, was a clear victory for the liberal reformers.<sup>447</sup> But Chubais had initially planned to create “thousands” of new private electricity companies – modeled on the US electricity market.<sup>448</sup> A mere 20 new private generation companies was compromise, appeasing the factions of the government reluctant to give up control of a strategic sector. The liberal reformers also fought for the inclusion of foreign strategic investors, a goal they only partly achieved – as the last section of the chapter will show.

### *Mosenergo and the VICs*

In European Russia, the latest round of privatizations resulted in the incorporation of the large and economically and strategically important electricity assets into the Gazprom empire, a semi-statal energy-led conglomerate. Mosenergo was taken over by the country's most powerful vertically integrated conglomerate: Gazprom. During the 1990s, Mosenergo, like most other European Energos, ran up a debt vis-à-vis Gazprom.<sup>449</sup> Rem Viakhirev, Gazprom's first director, wanted to settle the Energos' debts by increasing Gazprom's stake in UES in a debt for equity swap, a common practice in Russia's early transition years. By the late 1990s, Gazprom had secured a 25% stake Mosenergo, and a 5% stake in UES. By 2003 Gazprom's stake in Mosenergo had increased to 30%.<sup>450</sup> After the restructuring of the Energos into new companies, Mosenergo's power plants were bundled into the company TGK-3 (which stands for Territorial Generation Company No.3). After the most recent round of privatization in 2007/8, Gazprom increased its stake in TGK-3 to 75%.<sup>451</sup> Although Chubais openly complained that Gazprom was not the new private actor he had been hoping for,<sup>452</sup> it seems as if Gazprom had privileged access, or “first dibs” at the most valuable electricity assets in European Russia.

How representative is Mosenergo's history for the Energos in European Russia? It is representative in that Gazprom gained ownership of European Russia's most profitable electricity assets. Overall, Gazprom now owns at least 25% of European Russia's electricity assets and more, at least 30%, if we exclude nuclear power plants (which were never included in

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<sup>447</sup> The sale was achieved through what were called *IPOs* – initial public offerings. This was a misleading term, though, since OGKs and TGKs comprised the assets of the old Energos, which had long issued shares on the market, but served to emphasize that OGKs and TGKs were *new* companies. IPOs were a political victory for Chubais, since they were, from a corporate finance perspective, not necessarily called for. As one analyst observed “Russian electricity companies are still under-leveraged. They could increase the amount of debt, would not necessarily need to sell equity” and “everybody knows that equity sales are not necessarily called for.” The reason why equity is sold is to “dilute the government's stake and decrease the role of the government.” The move to sell equity is political; OGKs and TGKs could increase debt. “They hardly have debt, and utilities, as regulated companies, tend to be highly leveraged.” Interview #23 with electricity sector expert, international financial institution, Moscow, 20070210.

<sup>448</sup> Mellow, “Is This a Way to Create Capitalism? Maybe So.”

<sup>449</sup> This is a recurring theme of the relationship between the Energos and Gazprom; see, for example “Автономное плавание,” *Izvestia*, April 7, 2000.

<sup>450</sup> Stern, *The Future of Russian Gas and Gazprom*, p.186.

<sup>451</sup> “Gazprom continues electricity sector expansion,” *RFERL Newslines*, September 12, 2007.

<sup>452</sup> Chubais has made several remarks to this effect, for example, at a press conference outlining the investment program in electricity; Simon Shuster, “Chubais Says Ues Requires \$118bn,” *The Moscow Times*, February 14, 2007.

the privatization program).<sup>453</sup> Overall, European Russia has a more diverse set of new owners, more so than Siberia and the Far East, because it is more a diverse and larger space. However, Gazprom was able to gain ownership of the most profitable new companies – including Moscow and St.Petersburg’s TGKs and some of European Russia’s most valuable power plants bundled into the new OGKs.<sup>454</sup> This created a conflict between Gazprom and a foreign strategic investor that was interested in the same assets. In the case of St.Petersburg’s generation company (TGK-1), it came to a conflict between Gazprom and a Finnish company, Fortum.<sup>455</sup> While it was widely expected that Fortum should receive the block of shares sold by UES in 2007, it was Gazprom who eventually “won” the auction, having convinced the government that the asset is of “strategic importance.”<sup>456</sup>

*Table 2: New Owners in European Russia’s Power Sector (2008)*

<i>European Russia</i>	<i>Installed capacity*</i>	<i>Type of new owner</i>
<b>Gazprom</b>	<b>30%</b>	<b>Energy conglomerate (russian/government)</b>
Hydro-OGK	13%	Russian government’s hydro-electric holdings
KES	12%	Industrial conglomerate (russian/private)
Enel	9%	Energy conglomerate (foreign)
Inter-RAO	8%	Electricity company (russian/government)
E.On	6%	Energy conglomerate (foreign)
<b>Tatenergo</b>	<b>6%</b>	<b>Energy company (regional government/private)</b>
NorNickel	5%	Industrial conglomerate (russian/private)
<b>Lukoil</b>	<b>3%</b>	<b>Energy conglomerate (russian/private)</b>
Others		

\*Installed capacity: 100% = all major power plants of European Russia, excluding nuclear power plants. *Sources:* combined press reports on ownership changes in 2007 and 2008; UES publications for installed capacity; see Appendix I for details.

Two important exceptions in European Russia’s ownership pattern are Tatenergo and Bashenergo. They are located in Tatarstan and Bashkortostan, two “ethnic Republics,” the sub-national regions that managed to claim the most extensive formal autonomy in Russia’s asymmetric federalism during the 1990s. UES tried to gain 51% of Bashkirenergo’s assets

<sup>453</sup> See appendix *Table I* for details.

<sup>454</sup> This includes OGK-2 and OGK-6, “Gazprom continues electricity sector expansion,” *RFERL Newswire*, September 12, 2007. The Federal Anti-Monopoly Agency (FAS) also followed the expansion of Gazprom in the electricity sector, see “Gazprom controls 50% of Mosenergo,” FAS Press Release, available at [http://www.fas.gov.ru/english/news/n\\_12937.shtml](http://www.fas.gov.ru/english/news/n_12937.shtml) (accessed Feb.13, 2009).

<sup>455</sup> The Finnish company Fortum had gained about 40% stake in Lenenergo/TGK-1 during the decade leading up to reforms. This was accompanied by a broader agreement between Finland and Russia to cooperate on matters related to energy trade. The Fortum/Lenenergo partnership was often mentioned as a successful example of foreign ownership, e.g. interview #9 with electricity sector analyst at financial institution, Moscow, 20061008, interview #15 with electricity sector analyst at financial institution, Moscow, 20061027.

<sup>456</sup> An 18% stake was for sale in 2007. Through a number of assets purchases, Gazprom today controls TGK-1 via a 46% stake (see TGK-1s website, <http://tgc1.ru/>).

following the Presidential Decree of the early nineties, but only got 15%, for example.<sup>457</sup> Along other energy related assets in these regions – oil resources and refineries—the regional governors of Tatarstan, Mintimer Shamiev, and of Bashkortstan, Murtaza Rakhimov, gained control of their respective Energos.<sup>458</sup> Neither UES nor the federal government were able to regain ownership to this day. They remain under the ownership of the regional governor’s family, and were not transferred to Gazprom, nor any other new private owner.<sup>459</sup> However, because they are owned by the same owners as Tatneft and Bashneft, Tatenergo and Bashenergo are also part of a vertically integrated energy-led conglomerates (“mini-VICs” compared to Gazprom, but they control energy assets in their respective regions).

### *Irkutskenergo and the VICs*

The aluminum interests – the *aluminshiki* – enter the battle for Siberia’s electricity assets in the second half of the 1990s. The aluminum sector underwent its own struggles over the consolidation of assets that came to be known as the “aluminum wars.” Pitting an illustrious cast of ruthless entrepreneurs against one another, they resorted to using means such as illegal corporate take-overs, contract killings and a marriage to a member of Yeltsin’s family.<sup>460</sup> Striking deals with regional leaders was also in the repertoire, including deals in the electricity sector. Oleg Deripaska eventually emerged victorious, not only in becoming Siberia’s undisputed aluminum czar, but in building a global empire that includes bauxite mines in Guyana as well as practically all of the former Soviet Union’s largest aluminum smelters from the Volga to Tajikistan.<sup>461</sup> One observer noted, that, during these battles, “the *aluminshiki* realized that they cannot exist without cheap electricity.”<sup>462</sup> In Siberia, Rusal owns aluminum smelters in Bratsk (BrAZ), Novokuznets (NkAZ), Saianogorsk (SaAZ) and Irkutsk (IrkAZ) – each of which is located close to one of Siberia’s hydroelectric dams, which Rusal tries to control as much as it can.

Over the course of the nineties, Rusal had acquired around 40% of Irkutskenergo's capital. Rusal had been buying shares offered by regional and national investment funds, that had gathered them from holders of privatization vouchers.<sup>463</sup> With the ambiguity between the federal and regional authorities persisting, what mattered was who controlled the board of directors (*soviet*

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<sup>457</sup> Burgansky, "Hydro Power: Super-Profits or Super-Regulation?," p.12.

<sup>458</sup> Interview #9 with electricity sector analyst at financial institution, Moscow, 20061008.

<sup>459</sup> Robert Ortung, “Business and Politics in the Russian Regions,” *Problems of Post-Communism*, 51, March/April 2004.

<sup>460</sup> The history of KrAZ was at the epicenter of the aluminum wars. See Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*, pp. 137, Kramer, "Deripaska's Climb from Farm to Empire."

<sup>461</sup> Ibid. Chubais is said to have helped Deripaska to consolidate aluminum holdings at key moments. For example, Chubais helped Deripaska to change the management of the Novokuznets Aluminium Plant (NkAZ): “using” Kuzbassenergo to bring bankruptcy proceedings against NkAZ, resulted in a hostile takeover of NkAZ by Deripaska. These events were well known, see “Энергетический Тупик,” *Nezavisimaya Gazeta*, June 27, 2000, and “На том же месте в тот же час: энергетики и алюминщики снова поругались,” *Izvestia*, May 15, 2001. See also Volkov, "Standard Oil and Yukos in the Context of Early Capitalism in the United States and Russia," p. 253.

<sup>462</sup> Interview #60 with energy company executive, Irkutsk, 20071203.

<sup>463</sup> Interview #50 with businessman, Irkutsk, 20071115 and interview #60 with energy company executive, Irkutsk, 20071203.

*direktorov*). In a classic case study of a hostile take-over battle,<sup>464</sup> the *aluminshiki* were able to usurp control of the board of directors and install a loyal director by mobilizing regional courts and the support of the regional governor at the time, Boris Govorin, who needed the aluminum company's support for an upcoming election.<sup>465</sup> In early 2001, a minority shareholder representing aluminum interests called for a shareholder meeting that conflicted with the meeting set up by the existing board of director. The open secret was their intention to replace the board of directors, which could then change the company statutes for electing a general director. Each side had decisions by different district courts to back them, and it came to a standoff with the armed guards of the regional court ensuring that the first shareholder meeting – the one called by the existing Irkutskenergo leadership – did not take place.<sup>466</sup> By 2001, the *aluminshiki* had won the battle, having installed both their own director – Kolmogorov, who had previously worked for a Rusal owned hydroelectric power plant in Krasnoyarsk – and placed their representatives in the majority of board positions.<sup>467</sup> Today local Irkutsk residents call Irkutskenergo Deripaska's *karmannaya kompania*,<sup>468</sup> literally a “pocket company” as Rusal controls probably about half, if not more, of Irkutskenergo's capital and its board of directors.<sup>469</sup>

How representative is Irkutskenergo's history for other Siberian Energos? The outcome of the ownership battle is representative: Rusal controls 42% of Siberia's electricity production, and either a large or a controlling stake in all of the regions hydroelectric plants.<sup>470</sup> The federal government's Hydro-OGK controls the remaining hydro-electric plants; and it is rumored that Deripaska can influence Hydro-OGK by placing his loyalists on the board of directors.<sup>471</sup> In regions *with* hydroelectric dams, we see a very similar pattern: regional administrations tried to keep control of the most valuable electricity assets for some years, but lost their share to the *aluminshiki* and to the federal government.

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<sup>464</sup> See Volkov's study of the period of hostile take-overs; Volkov, "Hostile Enterprise Takeovers: Russia's Economy in 1998-2002."

<sup>465</sup> According to Ukolova, Govorin decided to support the *aluminshiki*, because he depended on their support for his reelection – “на предстоящих летних выборах алюминщики могут оказать неоценимую поддержки, если он поддержит их...” Ukolova, “Передел собственности: борьба за Иркутскэнерго,” p.148.

<sup>466</sup> With the ambiguity over the states share in Irkutskenergo persisting, the minority shareholders Rusal and Sual (the *aluminshiki*) were able to challenge the existing board of directors (*soviet direktorov*). Two competing shareholder meetings were called for April 28, 2001 – one at 10am, called by the existing Irkutskenergo management, and a second one at 3pm, called by the *aluminshiki*, the minority shareholders; Ukolova, “Передел собственности: борьба за Иркутскэнерго,” p. 149.

<sup>467</sup> A telling sign was that the July board meeting took place in Moscow, rather than Irkutsk; Ukolova, “Передел собственности: борьба за Иркутскэнерго,” p. 150.

<sup>468</sup> Interview #53 with employee of electricity company, Irkutsk, 20071119.

<sup>469</sup> It is not entirely clear how much of Irkutskenergo's capital is controlled by Rusal; since intermediary companies might be holding shares in custody for Rusal. In 1999, Rusal's share was already close to 40% (Ukolova, 2002). According to one interview, Rusal's ownership stake today is closer to 60%, interview #48, with academic, Irkutsk, 20071113.

<sup>470</sup> Measured in terms of installed capacity; see appendix table II.

<sup>471</sup> See “РусГидро” сливает команду,” *Kommersant*, October 27, 2009.

Table 3: New Owners of Siberia's Electricity Companies

<i>Siberia</i>	<i>Installed capacity</i>	<i>Type of new owner</i>
<b>Rusal</b>	<b>41.5</b>	<b>Industrial conglomerate (russian/private)</b>
Hydro-OGK	20.1	Russian government's hydro-electric holdings
SUEK	19.5	Energy conglomerate (russian/private)
Novosibirskenergo	5.5	Electricity company (russian/private)
<b>Norilsk Nickel</b>	<b>4.8</b>	<b>Industrial conglomerate (russian/private)</b>
E.On	3.3	Electricity company (foreign)
Gazprom	2.7	Energy conglomerate (russian/government)
<b>Others: Mechel, Evras</b>	<b>2.5</b>	<b>Industrial conglomerates (russian/private)</b>

Source: combined press reports on ownership changes in 2007 and 2008; see Appendix II for details.

Siberia's hydro-electric plants are the region's most valuable assets. So, although the combined percentage of energy conglomerates that have become new owners (SUEK, E-On and Gazprom) is not negligible, it is Rusal that has captured the most valuable power plants, including Irkutskenergo with almost 13 000 and Krasnoyarsk Hydroelectric Power Plant with 6000 kilowatt hours of installed capacity.<sup>472</sup> Outside of Irkutsk, Krasnoyarsk region's power plants were similarly coveted by aluminum magnates, although they gained control over the region's hydroelectric dam earlier than in Irkutsk. While Krasnoyarskenergo was owned by UES, Krasnoyarsk Hydroelectric Power Plant (Krasnoyarsk GES), the regional Energo's most valuable asset has been owned by Rusal since the mid-nineties. Krasnoyarsk's second large hydro-electric dam, Boguchansk Hydroelectric Power Plant (Boguchansk GES), is also under "shared custody" of Rusal and the government.<sup>473</sup> An industry-led VIC gained control over large parts of Siberia's power plants, in particular the valuable hydro-electric plants.

Regions without hydroelectric power plants differ from the prevalent pattern of ownership change in Siberia. Siberia's regions without hydro-power rely on coal-fired plants, which were uninteresting to Rusal. Instead, they were acquired by coal companies—SUEK and MDM. The large thermal power plants, such as Kuzbassenergo, were also subject to ownership struggles. Other coal-fired Energos – Chitaenergo, for example, was not a hot commodity and SUEK had few competitors.

#### *Dal'energo and the VICs*

In the Far East, no private interests were vying to gain control, and Dal'energo did not become the target of an oligarch's expansion strategy. The Russian government ended up with a controlling stake in the Far Eastern electricity sector. This was not a forgone conclusion,

<sup>472</sup> See Rusal website, <http://rusal.ru/history.aspx>.

<sup>473</sup> Construction had started under Brezhnev, but was halted during the economic turmoil of the late eighties and nineties. UES needed Rusal to contribute to the huge cost of finishing the construction of the dam; see chapter 2 for details.



however; Sergei Kirienko, one of Yeltsin's young reformers (and appointed as Energy Minister just a few months later), visited the Far East in the summer of 1997 and concluded that the solution to the region's energy crisis should be built on "market forces" and that unprofitable power plants should be closed.<sup>474</sup> Chubais also initially wanted to sell the state's majority stake there and privatize Dal'energo like any other Energo.<sup>475</sup> But, ultimately, "the federal government did not want to give away control of Far Eastern generation plants to private owners,"<sup>476</sup> they "decided against competition,"<sup>477</sup> and electricity companies remained majority owned federal government. Chapter 2 has argued that the government's concerns about the region's economic development and its integration with East Asian markets were the underlying rationale of this decision.

While Chubais conceded to the opponents of privatization, he did not want to leave the Energos "as is," as that would have meant leaving them to be controlled by regional administrations. The Energos of Primorsky Krai and of neighboring Khabarovsk Krai were "neutralized" by first unbundling the Energos, and then merging their respective generation, transmission and retail sub-sectors, into a holding company, DEUK (Far East Energy Management Company) in 2001.<sup>478</sup> DEUK later merged with other Far Eastern Energos to form EES Vostoka (Energy company of the East). Both DEUK and EES Vostoka are majority owned and controlled by the federal government. Despite the fact that the federal government kept control, the regional governors' intentions to increase or maintain their role was still discussed in 2005, when governors were trying to place representatives among the board of directors of newly formed electricity companies.<sup>479</sup> This idea was ultimately rejected, and by the time I did my fieldwork in 2007, it was said that regional governor are no longer involved in the electricity sector.<sup>480</sup>

While the Far Eastern electricity sector was not as coveted as Siberia's power plants and some of European Russia's prized assets, it was not the case that government ownership was simply a default option, as no private investors could be mobilized. Russia's largest coal company, SUEK gradually increased its share in *DEUK*. Like Gazprom, the coal company pursued a strategy to as part of its strategy to acquire downstream assets.<sup>481</sup> However, unlike Gazprom, SUEK's share in DEK is hardly a key to great wealth: Primorsky Krai's coal reserves are important for the local

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<sup>474</sup> Interview by Veronica Belusova with Kirienko, *Utro Rossii*, June 10, 1997.

<sup>475</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>476</sup> Interview #41 with journalist covering electricity sector, Vladivostok, 20071005.

<sup>477</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>478</sup> DEUK was initially called DVUEK (Дальневосточная энергетическая управляющая компания, ДВЭУК); the company was initially created on the basis of the assets of Dal'energo and Lutek, in 2003 the assets of Kamchatenergo and Sakhalinenergo were also integrated. DEUK in turn was a holding company, with full control of a generation, transmission and retail companies, respectively called DGK (generation), DRSK (transmission), and DEK (retail).

<sup>479</sup> "Another difference of the Far Eastern version of electricity sector reforms is the participation of regional administrations. It has been suggested that governors of Far Eastern Krai and Oblasts are to sit on the board of directors of new electricity sector companies." In Russian: "Еще один отличие дальневосточного варианта энергореформа – участие в них местных властей. Предполагается, что в совет директоров Дальневосточной энергетической компании войдут некоторые губернаторы краев и областей Дальнего Востоке." Opinion by Oleg Klimenko, in *Dal'nevostochnyi Kapital*, p. 10.

<sup>480</sup> Interview #34 with academic and employee of electricity company, Vladivostok 20070923.

<sup>481</sup> However, its share in DEK is hardly SUEK's key to great wealth: Primorsky Krai's coal reserves are important for the local economy, but are small compared to Siberian reserves.

economy, but are small compared to SUEK's Siberian reserves. It is likely that the ownership stake SUEK was able to acquire is similarly part of a developmental bargain for the Far East introduced in chapter 2.

Is Primorsky Krai representative of the Energos in the Far East? In terms of ownership, the outcome across regions is similar: all Far Eastern Energos were unbundled and their constituent generation and retail companies are controlled by the holding company EES Vostoka, also sometimes called "mini-UES" – as it is controlled by the federal government.<sup>482</sup> The Far East's only hydro-electric power plant, Bureiskaya Hydroelectric Company, is owned by Hydro-OGK, a newly created holding company, which is also majority owned by the federal government.<sup>483</sup>

To conclude the discussion of the growing role of Russia's conglomerates in the electricity sector, I want to emphasize the following points. The oligarchs and later the conglomerates consolidated their control over the electricity sector gradually. They first cooperated with regional governors to gain ownership rights. As regional governments were losing their hold on electricity companies and as the cronies of regional governors were expelled from the Energos board of directors, the VICs further consolidated their holdings. However, oligarchs are more than just power-hungry individuals; they control different types of production chains. Gazprom, acquired electricity assets to reassemble an energy production chain, Rusal for an industrial production chain.

#### **4.4 Foreign ownership claims**

Foreign investors have not been protagonists in the battle about ownership of electricity assets, but they have played an important role. Two types of foreign investors are usually distinguished: portfolio investors and strategic investors. While the actual line between them can become blurred, the former are interested in short-term capital gains, the latter in gaining market shares and long-term involvement in Russia's electricity sector.<sup>484</sup> Chubais has always wanted to attract foreigners and increase foreign participation,<sup>485</sup> ostensibly as a guarantor for investment and technology transfers, but also to support his reform agenda. "It's a sign of the quality [of the Russian electricity sector], if world leaders want to invest" he argued.<sup>486</sup> He succeeded at some key junctures, but had to make compromises at others.

UES and a few of the most profitable Energos have been selling shares to foreign investors since 1996. Until about 2006, foreign investors were drawn to Russian electricity assets for one simple

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<sup>482</sup> The expression "mini-UES" or "mini-RAO" was mentioned in the interview #43 and #44 with electricity sector economists, Khabarovsk, 20071010. There are more fine-grain distinctions between Far Eastern regions; Khabarovsk and Primorsky Krai, the two largest regions, have fought over the location of the headquarters and tax revenues of the new *EES Vostoka*. Khabarovsk is said to have secured a better deal than Primorsky Krai, as the headquarters and therefore tax revenues of the new generation company are located there. Interview #34 with academic and employee of electricity company, Vladivostok 20070923.

<sup>483</sup> 2003 legislation stipulates that Hydro-OGK should be 75% owned by the federal government. See for example Khlebnikov, *Rynok Elektroenergii V Rossii*.

<sup>484</sup> Interview #5 with electricity sector expert, international financial institution, London, 20060920. At that point, in mid-2006, he doubted that there was going to be much interest by strategic investors.

<sup>485</sup> Interview #8 with economist at financial institution, Moscow, 20061006.

<sup>486</sup> Remark by Chubais at a conference "Electricity: Locomotive or Brake on Economic Development?/ Энергетика: тормоз или локомотив развития экономики?" Moscow, February 13, 2007.

reason: they seemed to be undervalued as measured by asset price/kilowatt hour of capacity.<sup>487</sup> This promised a profitable investment, if Chubais succeeded in de-politicizing the electricity sector and pushing through price liberalization.

Portfolio investors played an important role at a few critical junctures, most importantly during first years of Chubais' chairmanship. When Chubais became director of UES in 1998, he skillfully used the fact that foreigners controlled a minority package in the company to remain at the head of the electricity asset. One of his first moves as head of UES was to push through a modification of UES' shareholder agreement, increasing the quorum of votes needed to replace the chairman of the board – i.e. himself – from 50% to 75%. At that point, UES already had almost 30% foreign shareholders.<sup>488</sup> This move thus de facto positioned veto power about his own fate beyond Russia's borders and outside of Russia's political arena.<sup>489</sup> It proved to be a crucial strategic move: during his first six years at UES the Duma passed over 60 motions to remove him from chairmanship.<sup>490</sup>

Foreign strategic investors also played an important role at different times. The EBRD first invested in UES in 2001, and created the UES Restructuring Committee as a condition for the loan.<sup>491</sup> The committee turned out to be one of the key institutions in which reform issues were debated.<sup>492</sup> Foreign strategic investors became new owners of a few select power plants, mostly in European Russia. This is the result of politically negotiated asset swaps, in which foreign companies are allowed to gain ownership of important (though "non-strategic") assets in return for a Russian company's access to foreign-based assets. As foreign companies were only interested in the companies that were likely to be very profitable, they clashed with Gazprom, who had similar interests. It seems that foreign owners were allowed to gain ownership due to an international agreement between the European Union and Russia, called the "reciprocity clause." EU policy allows Russian companies to participate in European energy retail, only if European companies are allowed to gain access to Russia's Energy assets.<sup>493</sup> Gazprom thus "traded" access to infrastructure with foreign power companies. The German E.On has gained a large stake in the

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<sup>487</sup> Asset price/kilowatt hour is the rough comparison that is used by traders. Even if discounted for political risk and the need for capital investments, Russian electricity assets were cheap for the years while reforms were debated. Most analysts admit that models based on this valuation are "guesswork." Different models, and the need for new models were discussed by analysts at a conference, "Second annual conference on the functioning of electricity companies in a market context/Вторая ежегодная конференции – Работа электроэнергетических компаний в рыночных условиях," Moscow, December 13, 2006.

<sup>488</sup> A 1998 law had formally restricted foreign ownership to 25%, although foreign investors circumvented the law by using local companies as intermediaries. Petrosyan, "What Is the Current Status of Russian Electricity Sector in the Light of Restructuring Laws and Rao Ues Breakup Strategy?," p.9.

<sup>489</sup> At the same time, Chubais was popular in the US; according to one source, he spent many a lobbying dollar in Washington DC to further his popularity among US policy making circles; "Чубайс платит американским лоббистам по 700 тыс. долларов в год," *Gazeta*, April 1, 2005.

<sup>490</sup> This was between 1998 and 2004, according to Petrosyan, "What Is the Current Status of Russian Electricity Sector in the Light of Restructuring Laws and Rao Ues Breakup Strategy?," p.11.

<sup>491</sup> EBRD is the European Bank for Reconstruction and Development. See EBRD Press release, "Powering change in Russia's electricity sector," September 8, 2006. See <http://www.ebrd.net/new/stories/2006/20060908.htm>.

<sup>492</sup> Interview #11 electricity sector expert at financial institution, Moscow, 20061018.

<sup>493</sup> On the reciprocity of these deals, see for example, Goldman, *Petrostate : Putin, Power, and the New Russia*.

power company *OGK-4* and the Italian Enel in *OGK-5*.<sup>494</sup> In return, Gazprom and E.On have collaborated in joint-ventures with these companies in other energy sectors – for example the Nord-Stream pipeline that will bring Russian gas under the Baltic Sea to Western Europe.<sup>495</sup> Gazprom has also been insistent on acquiring stakes in German and Italian gas distribution assets to directly profit from retail sales, which apparently “cost” them a few profitable power plants in European Russia.

## **5. Conclusion**

Competing ownership claims were resolved in different ways over the years: primarily through the sale of assets, but also through corporate restructuring, hostile takeovers and court decisions. The chapter has shown how the trajectory of these ownership changes are closely tied to larger political dynamics in Russia, in particular the center-regional dynamics and the relationship between the government and Russia’s conglomerates. Ownership outcomes are clustered into three large supra-regional patterns: energy conglomerates gained dominant ownership in European Russia, an industrial conglomerate in Siberia, and the government retained majority ownership in the Far East.

How are these ownership outcomes evidence for the kind of developmental bargains introduced in chapter 2? The chapter has stressed the strategies of conglomerates, acquiring electricity companies as key links in their vertical production chains. Throughout the chapter, however, these acquisitions would not have been possible without explicit approval – first from regional governors, later from the federal government. As chapter 2 introduced, Gazprom was allowed to acquire choice assets in European Russia, Rusal in Siberia and foreign owners acquired a few select power plants, because they play a role in the government’s vision for national and regional economic development. The political logic was thus not one of “buying off” opponents, but one of selectively accommodating different conglomerates in return for their contribution to regional development. Chapter 4 will turn to a second key aspect of the electricity sector’s transformation – tariff reform – demonstrating a similar political logic.

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<sup>494</sup> Both stakes are currently around 40%, but both companies have stated the intent to raise their stakes to over 50%, according to *The Economist*, November 22, 2007.

<sup>495</sup> Nord-Stream and Siberia's Yuzhno-Russkoye oil and gas field are only largest and high-profile of a number of ongoing asset swaps and joint ventures between E.On and Gazprom.

### **CHAPTER 3 APPENDIX TABLES**

The first three columns of the Appendix tables are compiled based on “*Teplovyie Generiruyushie Kompanii RAO EES Rossii*” a publication by RAO/UES, 2006, as well as information about Hydro-OGK from Hydro-OGK website and websites of the various independent power plants. The column on “New Owner” is based on press-reports of take-overs and on self-reporting by these power plants, as indicated in footnotes in text above. The tables were initially compiled with the help of Tatiana Gavrilova.

**Table I: European Power Plants**

<b>Power Plant</b>	<b>Company Name</b>	<b>Installed Capacity</b>	<b>New Owner*</b>
Permskaya GES	OGK-1	2400	InterRAO
Nizhneartovskaya GRES	OGK-1	1600	InterRAO
Iriklinskaya GRES and GES	OGK-1	2130	InterRAO
Urengoiszkaya GRES	OGK-1	24	InterRAO
Kashirskaya GRES-4	OGK-1	1580	InterRAO
Verkhnetagil'skaya GRES	OGK-1	1497	InterRAO
Pskovskaya GRES	OGK-2	430	Gazprom
Stavropolskaya GRES	OGK-2	2400	Gazprom
Serovskaya GRES	OGK-2	526	Gazprom
Surgutskaya GRES-1	OGK-2	3280	Gazprom
Troizkaya GRES	OGK-2	2059	Gazprom
Yuzhnouralskaya GRES	OGK-3	882	NorNickel
Kostromskaya GRES	OGK-3	3600	NorNickel
Cherepetskaya GRES	OGK-3	1425	NorNickel
Yavinskaya GRES	OGK-4	600	EON
Surgutskaya GRES-2	OGK-4	4800	EON
Shaturskaya GRES-5	OGK-4	1100	EON
Smolenskaya GRES	OGK-4	630	EON
Nevinnomysskaya GRES	OGK-5	1290	Enel
Sredneuralskaya GRES	OGK-5	1182	Enel

Reftinskaya GRES	OGK-5	3800	Enel
Konakovskaya GRES	OGK-5	2400	Enel
Cherepovezkaya GRES	OGK-6	630	Gazprom
Ryazanskaya GRES	OGK-6	2650	Gazprom
GRES-24	OGK-6	310	Gazprom
Kirishskaya GRES	OGK-6	2100	Gazprom
Hovochepkasskaya GRES	OGK-6	2112	Gazprom
Volzhszkaya GES	HydroOGK	2541	HydroOGK
Zhigulevskaya GES	HydroOGK	2300	HydroOGK
Kaskad Kubanskikh GES	HydroOGK	463	HydroOGK
Nizhnegorodskaya GES	HydroOGK	520	HydroOGK
Saratovskaya GES	HydroOGK	1360	HydroOGK
Kaskad Verkhnovolzhskikh GES	HydroOGK	456	HydroOGK
Zelenchukskie GES	HydroOGK	160	HydroOGK
Sualenergo	HydroOGK	400	HydroOGK
Zagorskaya GAES	HydroOGK	1200	HydroOGK
Votinskaya GES	HydroOGK	1020	HydroOGK
Kamskaya GES	HydroOGK	501	HydroOGK
Cheboksarskaya GES	HydroOGK	1370	HydroOGK
Gergebilsakay GES	HydroOGK	18	HydroOGK
Chiryurtskie GES	HydroOGK	81	HydroOGK
Miatlinsaia GES	HydroOGK	220	HydroOGK
Churkeiskaya GES	HydroOGK	1000	HydroOGK
TGK-1	TGK-1	6162	Gazprom
TGK-2	TGK-2	1393	RWE
Mosenergo	Mosenergo	10611	Gazprom
TGK-4	TGK-4	3284	Czech and Korean company
TGK-5	TGK-5	2467	KES
TGK-6	TGK-6	2919	KES
TGK-7	TGK-7	6880	KES/Gazprom
TGK-8	TGK-8	3312	Lukoil
TGK-9	TGK-9	2590	KES
TGK-10	TGK-10	3253	E-On/GdF
Tatenergo	Tatenergo	6986	Republic of Tatarstan

Bashkirenergo	Bashkirenergo	2796	Republic of Bashkortostan
Severo-Zapadnaya TEZ	Severo-Zapadnaya TEZ	900	InterRAO

**Table II: Siberian Power Plants**

<b>Power Plant</b>	<b>Company Name</b>	<b>Installed Capacity</b>	<b>New Owner</b>
Gusinoozerskaya GRES	OGK-3	1100	NorNickel
Khranorskaya GRES	OGK-3	430	NorNickel
Berezovskaya GRES	OGK-4	1500	EON
Krasnoyarskaya GRES	OGK-6	1250	Gazprom
Sayano-Shushenskaya GRES	HydroOGK	6721	HydroOGK
Zeiskaya GES	HydroOGK	1330	HydroOGK
Hovosibirskaya GES	HydroOGK	455	HydroOGK
Bureiskaya GES	HydroOGK	670	HydroOGK
TGK-11	TGK-11	2051	SUEK
TGK-12	TGK-12	4392	SUEK
Yushnokusbasskaya GRES	Yushnokusbasskaya GRES	554	Mechel
Zapadno-Sibirskaya TEZ	Zapadno-Sibirskaya TEZ	600	EvRaz
TGK-13	TGK-13	2458	SUEK
TGK-14	TGK-14	643	NorNickel
Novosibirskenergo	Novosibirskenergo	2522	Novosibirskenergo
Irkutskenergo	Irkutskenergo	12925	Rusal
Krasnoyarskaya GES	Krasnoyarskaya GES	6000	Rusal

## **Chapter 4: The Price of Power**

- 1. Introduction: rules that regulate prices*
- 2. Prices and subsidies in the nineties*
- 3. Subsidies during the centralization of political power under Putin*
- 4. Subsidy regimes after 2004*
- 5. Conclusion: one market or many?*



*"We must aim to make life equally good in all Russian regions. We will not achieve that without a unified legal and economic space in Russia"*<sup>496</sup>

*Vladimir Putin, 2000.*

## **1. Introduction: rules that regulate prices**

The literature on advanced industrialized countries has demonstrated that liberalization in the context of globalized markets entails “more rules” and effectively amounts to “re-regulation,” rather than deregulation.<sup>497</sup> Attempts to introduce competition in network and infrastructure sectors also necessitate the creation of new sets of regulation and new regulatory bodies. In fact, these sectors are particularly difficult to regulate, partly because of their importance for social and economic life, partly because network sectors combine elements of natural monopolies with potentially competitive markets. In the electricity sector, no rules are more controversial than the regulations that govern prices and subsidies. “Tariffs are the most controversial part of reforms”<sup>498</sup> determined one observer in Moscow. This is the case, because the new “rules of the game” affect a broad set of interests across all of Russia. The price at which electricity is bought and sold, and the mechanisms to determine the price are highly contested, because they affect the cost of living and producing in the regions.<sup>499</sup> In the words of a regional journalist from Krasnoyarsk –“electricity tariffs play a very important role in the economic life of our [region].”<sup>500</sup>

Electricity subsidies are tied up with the larger question of energy subsidies, and more generally with the distribution and redistribution of energy resources and energy wealth. The subsidization of industrial and household consumers via low-priced energy, sometimes referred to as the “cheapening of energy resources,”<sup>501</sup> is a key feature of Russia’s domestic economy and

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<sup>496</sup> In a speech given in Kazan in March 2000, acting President Putin also said that relations between the center, the regions, and localities must be improved, reported by *Interfax*, March 22, 2000, also reported by RFE/RL Newswire “Putin calls for new, improved federalism,” *RFE/RL Newswire*, March 23, 2000.

<sup>497</sup> Vogel, *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*, . Specifically for the electricity sector, see Marc Tenbrueck, "Der Staat Auf Dem Rueckzug: Neue Formen Der Regulierung Klassischer Infrastrukturen," *Politische Studien* 56, no. 400 (2005): p.99.

<sup>498</sup> Interview #1 with electricity sector expert, international financial institution, Moscow, 20060721.

<sup>499</sup> A number of observers have also stressed the role of electricity subsidies in the “demonetization” of the Russian economy in the 1990s, as money surrogates were particularly prevalent in electricity. OECD 2002, Woodruff, *Money Unmade*. According to the UES dataset price discrimination based on level of consumption was very common as well – i.e. utilities gave discounts below a certain amount of kWh (source details, see chapter 1/methodology).

<sup>500</sup> In Russian: “Тарифы на электроэнергию играют очень большую роль в экономической жизнь нашего края” interview with director of Krasnoyarskenergo, V.A.Bulankin, in “Тариф экономике опора,” *Krasnoyarskii Rabochii*, January 15, 1999.

<sup>501</sup> In Russian: “удешевления энергетических ресурсов,” see for example E. Gurevich, “Оценка эффекта удешевления энергетических ресурсов,” *Energeticheskaja Politika*, No.3, 1997.

domestic politics.<sup>502</sup> The news about Russia increasing gas prices for Ukraine after the Orange Revolution went around the world. There are many domestic equivalents of these kinds of disputes related to energy subsidies, though less widely reported outside of Russia. Energy subsidies are often seen as a fundamental aspect of electricity sector regulation; one observer lists the “protection of citizens from unreasonable price increases of electricity and heat”<sup>503</sup> among the core responsibilities of the regulator.

Like ownership, the extent of price liberalization was a significant choice. Keeping more control over prices allowed authorities to use energy resources to subsidize select groups of consumers; this can be a useful tool in pursuit of particular development strategies or social goals. Keeping less control over prices implied ending subsidies, and tying local electricity prices to global prices for energy. For the liberal reformers, the introduction of wholesale markets and price liberalization were the ultimate aim of reforms, a *sine qua non* for the functioning of new markets. Reformers were adamant that allowing price signals to determine allocation, or “letting prices speak” was crucial; they considered the silencing of price signals under state socialism to be responsible for its demise.<sup>504</sup> Thus, liberal reformers wanted to introduce the discipline of the market to the electricity sector, by teaching customers the right behaviour of markets – by “teach(ing) how to pay”<sup>505</sup> and by “teach(ing) how to economize.”<sup>506</sup> In the nineties, Russia’s international creditors, the IMF in particular, also insisted on the necessity of ending subsidies in the electricity sector.<sup>507</sup> In contrast, opponents of UES reforms, advocates of regional autonomy, statist and industrialists, preferred to keep more control of tariffs, to be able to use electricity subsidies as a policy tool. Opponents in low cost regions also resisted the equalization of prices across Russia, since this would have led to price hikes in their regions.

Over the course of Russia’s electricity sector reforms, both proponents and opponents of price liberalization have shaped the emergence of regulatory institutions. Different types of electricity subsidies have played a role over time and across regions in these reforms. We will see how regions vary in the types of subsidies that were negotiated in the evolving deals between the government and electricity consumers. This chapter traces the emergence of different electricity *subsidy regimes* over the last fifteen years. A subsidy regime is a type of arrangement that involves different tiers of the government, regulators, utilities, fuel providers and industrialists in the provision of electricity below long-run average cost to achieve certain political, economic and social goals. Energy subsidies are key tools in Russian industrial and social policy, administered and distributed in myriad ways.<sup>508</sup> Three types of subsidies have played a

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<sup>502</sup> Litwack and Tompson, *OECD Economic Survey of the Russian Federation*. OECD estimate of magnitude: conservative estimates around 5% of GDP, up to 30% of GDP if energy prices are compared with market prices, p.127.

<sup>503</sup> Khlebnikov, *Rynok Elektroenergii V Rossii*, p. 180. Also interview #24 with regulator at the Ministry for Economic Development, Moscow, 20070214, who mentioned that FEK decisions are always made with an eye to the inflationary effects of tariff increases.

<sup>504</sup> According to Khlebnikov, *Ibid*.

<sup>505</sup> “Надо Научиться платить,” *Utro Rossii*, February 10, 1994, that people should be “taught how to pay,” was a remark by the Minister of Energy, Yuri Shafranik.

<sup>506</sup> “Экономить тепло и свет,” *Utro Rossii*, January 19, 1994.

<sup>507</sup> Open Media Research Institute Daily Digest (OMRI/DD in what follows), August 30, 1996.

<sup>508</sup> Arguably, the term “subsidy” is misleading, as it implies a deviation from a neutral market price. This is a problematic assumption. I am relying on the term “subsidy” for lack of an easily understood alternative.

particularly important role in the electricity sector: *cross-subsidies*, which involve the subsidization of household consumers through increased prices for industrial consumer; *budget transfers*, which involve direct payments to electricity companies; and *industrial subsidies*, which have been used in two ways: either by setting prices for industrial consumers at a low level, or through the protection of low-cost production zones in certain industrial regions.<sup>509</sup>

I will show that Russia's regions have ended up with different subsidy regimes and different rules – formal and informal – that govern price-making. As a result, at least three distinct sub-national “zones” or patterns have emerged – in European Russia, Siberia and the Far East.<sup>510</sup> In chapter 3 we saw that ownership of power plants varies across these three regions. An energy conglomerate owns most power plants in European Russia, an industrial conglomerate gained control of Siberia's valuable power plants, and the government still holds a majority stake in the Far Eastern electricity sector. This chapter develops the argument that was introduced in chapter 2, that the different subsidy and price regimes reflect outcomes of the developmental bargains between new owners of power plants and the government. Though at times it may appear that the government's and the conglomerates' interests overlapped, it is important to remember that factional struggles within the government persist throughout the post-Soviet period. While the energy-led conglomerates' interests overlapped with the aims of the liberal governing faction in European Russia; in Siberia, conglomerates aligned with the statist faction of the Putin administration. In each case, bargains were struck between the government and a conglomerate. In the process, the liberal faction was forced to compromise, as the Putin government selectively accommodated the needs of conglomerates to enlist them for a larger developmental strategy.

As in previous chapters, I am comparing the process of institution building over time and across regions in Russia. The core of the over-time comparison traces a shift in the site of regulation from regional governments to the federal level. The first part of the chapter focuses on the role of prices and subsidies during the 1990s. The second part tells the story of the battle over prices between the regions and the center during Putin's first four years in office (from 2000-2004). The third section shows how different regions ended up with distinct regulatory regimes during the recent reforms. Each section compares the institutionalization of subsidy regimes across European Russia, Siberia and the Far East.

## **2. Prices and subsidies in the nineties**

In the 1990s, being able to determine the “price of power” was the main motivation for various political forces to seek control of the electricity sector. As we've seen in previous chapters, the federal government faced serious obstacles in regulating the economy from the center for much of the 1990s.<sup>511</sup> This was particularly evident in the central government's failed attempts to

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<sup>509</sup> This kind of subsidy is common all over the world. They tended to benefit electricity intensive industries, such as aluminum plants and chemical plants. More recently these kind of subsidies have been sought by companies like Google and Microsoft for their server farms; see "Down on the Server Farm: The Real-World Implications of the Rise of Internet Computing," *The Economist*, May 24 2008.

<sup>510</sup> Within the supra-regional zones, European Russia, Siberia and the Russian Far East, important differences remain in terms of the informal agreements and ownership structures; these will be dealt with in less detail.

<sup>511</sup> This inability to regulate arose from the fragmentation of political authority and bureaucratic structures after the end of the planned economy and the absence of fundamental institutions that underpin market economies elsewhere.

regulate tariffs for the regional electricity monopolies. The ability to influence electricity prices was a cornerstone of regional control over the sector. Many governors felt like Khabarovsk Governor Ishaev, who considered it essential that tariff regulation remained in the domain of regional leaders, or that “the electricity system’s boundaries should coincide with political boundaries.”<sup>512</sup> Because of regional control, Energos were often described as fiefdoms, with Energo directors and governors ruling the vertically integrated regional monopolies, taking few cues from the UES headquarters in Moscow.<sup>513</sup>

The shift to more regional autonomy in electricity regulation started in the late Soviet period. In Soviet times, prices were set by the State Committee on Prices (*Goskomzen*), which centrally determined a fixed price of electricity for different types of consumers across the Soviet Union.<sup>514</sup> As part of Gorbachev’s decentralization efforts, a 1990 law gave regional authorities the right to increase or decrease electricity tariffs according to regional needs. The law set a strict ceiling on how much regions could divert from the centrally determined tariff: governors could change tariffs by a limited coefficient, either increasing or decreasing the centrally mandated prices for electricity and heat in their region.<sup>515</sup> After the collapse of the Soviet Union, a 1991 presidential decree “On the Liberalization of Prices” created the Federal Energy Commission (FEK) and the Regional Energy Commissions (REKs); the responsibility for price setting was transferred from *Goskomzen* to these newly established institutions. REKs were to be composed of representatives of regional administrations, electricity companies and major industrial consumers.<sup>516</sup>

In reality, the Federal Energy Commission was often ineffective. REKs were formally charged with implementing the energy policy and price directives recommended by the FEK, which, in turn, was legally supposed to coordinate and supervise REKs. In actual fact FEK’s price level recommendations were routinely ignored. Regional Energy Commissions were the main lever governors used to influence electricity tariffs. In Kemerovo, for example, governor Tuleev had his own idea of what the appropriate price for electricity should be. He did not want to allow price hikes, because “price increases lead to factory closures and propel our region backwards.”<sup>517</sup> He is one of a number of governors who consistently used his influence within the REK throughout most of the nineties to challenge federal directives.

“The governor of Kemerovo Oblast Aman Tuleev signed instruction entitled “On Electricity Tariffs for the Population,” in which he confirmed his unwillingness to fulfill the [federal] government’s resolution on electricity tariffs. The governor of Kemerovo

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See for example Woodruff, *Money Unmade*, Allina-Pisano, *The Post-Soviet Potemkin Village: Politics and Property Rights in the Black Earth*.

<sup>512</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010, 2007. That Ishaev wanted to regulate electricity on the regional level was also mentioned in interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>513</sup> Peter Rutland, "Power Struggle: Reforming the Electricity Industry," in *The Dynamics of Russian Politics*, ed. Orttung and Reddaway (eds.) (Rowman and Littlefield, 2005).

<sup>514</sup> Federal Tariff Service (FST), *Informatizionno-analiticheskii Biulleten': Tarify v Elektroenergetike*, co-published by the FST and the Akademiia Nardnogo Khoziaistva, Moscow, September 2004, p.11.

<sup>515</sup> Ibid.

<sup>516</sup> Ibid.

<sup>517</sup> “Рост тарифов приведет к закрытию предприятий, откинет регион назад,” press release of the Kemerovo Administration, “Пресс-релиз, пресс служба администрации кемеровской област, ” *Izvestia*, June 5, 2001.

officially supported the recent decision by the Regional Energy Commission (REK), confirming that (...) tariffs for the population of Kemerovo oblast should be kept at 15 kopek per kilowatt hour. At the same time, a resolution by the federal government of the Russian Federation determined that that household tariffs for Kemerovo should be 23 kopek per kilowatt hour. (...) Aman Tuleev, with a strict position on this issue, allied in rebellion with the Kemerov REK, and expressly stated his intention to “stand to the end” and not allow theft of [...] residents, which the government’s tariffs would amount to (...).”<sup>518</sup>

FEK was in practice thus unable to force the regional governors and REKs to comply with its directives. The federal body has been described as either hopelessly overburdened or as a gentlemen’s club, where important energy related matters were discussed, but that lacked tools to monitor implementation.<sup>519</sup> In a number of regions, REKs did not even formally exist until the late nineties and the REK was often simply an office in the regional administration that set prices for electricity.<sup>520</sup> In Krasnoyarsk, for example, the REK was a commission under the direction of the regional administration until 1998, rather than an independent regulator.<sup>521</sup> Such proximity of the regulator to the regional administration, not surprisingly meant that the regional administration’s priorities influenced the REK’s decision making. In 1993 the Krasnoyarsk REK had supported a call for totally free electricity for a community, Krasnoturansk, deciding that this would be an “enormous support for people during the difficult period of the economic collapse.”<sup>522</sup> Similarly, the Irkutsk REK felt at times that free electricity was called for.<sup>523</sup>

Although tariffs were a vital point of contention that governors and REKs cared about, FEK’s authority was disputed on a number of levels. The time periods for which prices could be set was challenged by REKs, since regional governors wanted more flexibility and frequent tariff changes, while FEK wanted predictability and at the most annual adjustments.<sup>524</sup> FEK also regulated the so-called “subscription fee,” a payment the Energos owed to UES. This was ostensibly for the use of UES’ high-voltage grids, but in essence was the continuation of a Soviet-era payment scheme through which money collected in the regions was channeled to the center.<sup>525</sup> Regions often complained that this “levy” was too high, that its use lacked transparency

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<sup>518</sup> “Лампочка Амана Гумировича,” *Izvestia*, August 3, 2000. A full explanation of Tuleev's opposition to price increases and the reforms of Chubais can be found in a press release of the Kemerovo Administration, published in *Izvestia*, June 5, 2001, see note 22. REK decisions were often publicized in regional newspapers, for example, “Тарифы – Те Же!” *Utro Rossii*, February 4, 1997, or “Региональная энергетическая Комиссия Приморского Край: Постановление N. 46,” *Utro Rossii*, June 18, 1997.

<sup>519</sup> Interview #16 with electricity sector expert/consultant, Moscow, 20061030.

<sup>520</sup> Federal Tariff Service (FST), *Informatizyonno-analiticheskii Biulleten’*: *Tarify v Elektroenergetike*, p.13.

<sup>521</sup> A so-called “societal agency within the Krai administration (in Russian “общественны орган при администрации края”) according to director of Krasnoyarskenergo, V.A.Bulankin, in “Тариф экономике опора,” *Krasnoyarskii Rabochii*, January 15, 1999.

<sup>522</sup> In Russian: “Жители Краснотурнского района будут бесплатно пользоваться электроэнергией до 1 января 1994 года. В сложный период экономического спада это огромное подспорье для людей.” in “Электронэнергия – бесплатно,” *Krasnoyarskii Rabochii*, June 22, 1993.

<sup>523</sup> “The regional electricity system has served customers for free, for two months already/Уже два с половиной месяца регионалнаа энергосистема обслуживает потребителей бесплатно” reported in “Энергия – даром?” *Vostochno Sibirskaiia Pravda*, February 17, 1994.

<sup>524</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>525</sup> Interview #7 with electricity sector analyst at financial institution, Moscow, 20061005.

and that it was therefore illegitimate. Kemerovo oblast governor Tuleev argued that it was a levy illegitimately taken from regional electricity bills.<sup>526</sup> Energos that owned their own high-voltage grids, including Irkutskenergo, were most successful in disputing the legitimacy of this payment, since it was ostensibly to be used for grid maintenance, but other Energos also failed to pay for years.<sup>527</sup> In 2005, for example, the subscription fee was not paid by the Energos in Bashkortostan, Tatarstan, Novosibirsk, Irkutsk and Dal'energo.<sup>528</sup>

Officially, the mode of price regulation in post-Soviet Russia was the so-called “cost-plus” method, where prices are set at a level that covers cost, plus an additional “investment component,” a sum intended for capital improvements. Determining the cost of electricity production and the investment component involves some degree of arbitrariness for regulators in every country. “Costs can be easily inflated,”<sup>529</sup> for example, by tweaking the rate of asset depreciation. In the post-Soviet context, where the cost of capital is a relatively new concept, asset depreciation depends even more on the eye of the beholder. Moreover, as the cost of energy was a political decision, tariff regulation has even less firm grounding and is open to the governors’ interpretation.<sup>530</sup> Governors were also sometimes blamed for inflating the investment component as a way to finance pet projects or line their own pockets.<sup>531</sup>

Governors used electricity tariffs as a tool to subsidize household and industrial consumers of electricity throughout the nineties.<sup>532</sup> Household consumers were beneficiaries of the so-called cross-subsidies: industrial consumers are charged more than household consumers, even though the cost of providing electricity to households is higher.<sup>533</sup> Low cost electricity for households has been a politically sensitive issue for most of the post-Soviet period. The politics of household subsidies revolves around the so-called *kvarplata*—a consolidated bill for a number of housing related charges – gas, heat, water, and repair services. As wages lost their real value during the periods of high inflation in the nineties, but the cost of living increased, households were particularly sensitive to increases in the monthly *kvarplata* payments. “What a silly idea to increase the *kvarplata*; nobody can pay it,” was a recurring complaint by my landlady in Vladivostok.<sup>534</sup> As in many other low-income households, she has to spend a large part of her monthly income, which in her case is a pension, on the *kvarplata*. It is not uncommon for low-

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<sup>526</sup> “Пресс-релиз, пресс служба администрации кемеровской област, ” *Izvestia*, June 5, 2001.

<sup>527</sup> The dispute over the subscription fees (*abonentnaia plata*) was quite heated and in many ways is carried more symbolic than actual monetary significance; it was a way for the Energos to resist Chubais. See “В сетях РАО ЕЭС растёт напряжение,” *Kommersant*, July 21, 2001. Conflict over “subscription fees” discussed in interview #7 with electricity sector analyst at financial institution, Moscow, 20061005, and interview #53 with employee of electricity company, Irkutsk, 20071119. See also interview with Kuimov, Irkutskenergo executive, who disputes the legitimacy of the *abonentnaia plata*, in *Ekspert*, No.14, April 1998, p.36/37.

<sup>528</sup> According to *Вестник региональной энергокоммиссии Красноярского Краия*, January, 2005, pp.9.

<sup>529</sup> Interview #7 with electricity sector expert at financial institution, Moscow, 20061005.

<sup>530</sup> “Electricity costs are politicized” interview #32 with electricity sector economist, Vladivostok, 20070925.

<sup>531</sup> According to Bradshaw the ‘investment component’ was often the source for private money flows, Bradshaw and Kirkow, “The Energy Crisis in the Russian Far East : Origins and Possible Solutions,” p.1051.

<sup>532</sup> In 2000 the FEK assessed only 48 of the existing 68 REKS as functioning according to federal legislation, Litwack and Tompson, *OECD Economic Survey of the Russian Federation*.

<sup>533</sup> One observer calls cross-subsidies a “terrible disease,” interview #39 with electrical engineer and electricity sector Expert, Vladivostok, 20071004.

<sup>534</sup> Interview #40 with pensioner in Vladivostok, as well as in an ongoing conversation during September and October 2007, Vladivostok.

income households to spend more than half of their income on the *kvarplata*.<sup>535</sup> Finally, in some cities and for some neighborhoods, the provision of the combined “housing services” (which included electricity) and the maintenance of the physical infrastructure, have been so bad, even “inhuman,” as residents of one building in Irkutsk put it, that they wondered “what are we paying for?”<sup>536</sup>

Not surprisingly, the promise to keep the utility prices stable or even to lower payments ahead of an election was a popular strategy for politicians. “Cheap electricity was an effective slogan,” noted one observer from the Far East.<sup>537</sup> The promise of low utility bills resonated in particular with pensioners, who live on small pensions, but tend to be avid voters. A study found that governors would decrease tariffs before gubernatorial elections, only to increase them again after they had been reelected.<sup>538</sup> In addition to keeping household tariffs generally low via a cross-subsidy from commercial users, it was also common to give subsidies to select categories of household consumers. For example, household in rural areas and residents of apartment buildings outfitted with electric stoves received special tariffs, as did various categories of war and labor veterans, and pensioners and other populations that were considered vulnerable.<sup>539</sup>

As important as controlling a household’s electricity tariffs was the ability to set prices for a region’s industrial enterprises. Industrial enterprises consume just over half of Russia’s

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<sup>535</sup> This is based on an opinion survey by FOM (Фонд Общественное Мнение) conducted in 2005, available on the FOM website, [http://bd.english.fom.ru/report/cat/humdrum/zhilicshno-komunalnoe\\_hozyaistvo/ed053823](http://bd.english.fom.ru/report/cat/humdrum/zhilicshno-komunalnoe_hozyaistvo/ed053823). The interviews were conducted nationwide, on September 17-18 2005 in 100 residencies in 44 regions, sample size of 1500 respondents with additional polls of the Moscow population, with a sample of 600 respondents. Results were also published as an appendix to Susanne Wengle, “Power Politics: Electricity Sector Reforms in Post-Soviet Russia,” *Russian Analytical Digest* 27 (2007).

<sup>536</sup> “What are we paying such a high *kvarplata* for, if we live in inhuman conditions?/За что мы платим такую большую кварплату, если живем в нечеловеческих условиях?” in the section “Письма,” *Vostochno Sibirskaiia Pravda*, October 17, 1992, where letters from readers are published. Apparently the problem has continued over the years. Prices have risen, but services remain bad and people did not want to pay. They ask “what for? For radiators that don’t heat up, and water that is turned off/За что? То батарей не греют, то воду отключают” in “Почем литр воды? О кварплата и тарифах на коммунальных услуги,” *Vostochno Sibirskaiia Pravda*, September 14, 1995. The discussion of the problems of the Komunal services (ЖКХ) is vast, both in national and regional media. For a description of the situation in the Far East, see “Жилищно-Коммунальное Бесхозяйство,” *Dal’nevostochnyi Kapital*, April 2004, No. 4/44, pp.12.

<sup>537</sup> Interview #32 with electricity sector economist, Vladivostok, 20070918.

<sup>538</sup> Yudashkina and Popochy analyzed regional tariffs during years of governor elections and found that between 1998 and 2003, regional governors decreased prices in the quarter ahead of elections. Yudashkina and Popochy, “Regulation of the Electricity Sector in Russia: Regional Aspects ” in *Economics Education and Research Consortium Working Paper Series* (2007). As reforms at the center tightened control over regional regulators, this practice became less common. Apparently the governor of Primorsky Krai made a noisy announcement in 2003 that he was lowering electricity prices, but this turned out to be only a temporary measure. Interview #33 with journalist covering electricity sector, Vladivostok, 20070921.

<sup>539</sup> In Primorsky Krai, for example, veterans received special tariffs; see “За Свет буюм платить так,” *Utro Rossii*, May 26, 1998. That rural residents also often receive special tariffs was mentioned in interview #43 with electricity sector economist, Khabarovsk, 20071010. The whole system of subsidies for pensioners, veterans, disabled people and other *l’gotniki* (beneficiaries of in-kind benefits) underwent a wholesale revision in 2005, with very mixed results. See Wengle and Rasell, “The Monetisation of L’goty: Changing Patterns of Welfare Politics and Provision in Russia.”

electricity.<sup>540</sup> Keeping tariffs low for select industrial consumers was a way for regional administrations to prevent de-industrialization. The governor “was trying to prevent the negative influence on regional development,” said one observer from Irkutsk.<sup>541</sup> An executive at Irkutskenergo remembers one instance in particular: “Chimprom, one of eight major enterprises in our oblast, supports the whole region. It is a promising enterprise with export potential. But it ceased to operate for nine months. Now it is back on its feet, after we agreed on the basis for our cooperation. (...) The factory survived thanks to the reduction of tariffs (...).”<sup>542</sup> While governors had employment in mind, preferential tariffs were probably also part of the arsenal of favors that a governor could dispense to loyal elites, and his “political friends.”<sup>543</sup> Governors kept lists of industrial customers that were eligible for reduced electricity tariffs.<sup>544</sup> A place on the list was usually reserved for companies with many employees, but sometimes this privilege was also granted to companies owned by friends and family of the governor.<sup>545</sup> Sometimes entrepreneurs without connections to regional elites were charged far more than companies with regional owners.<sup>546</sup> This tended to be a problem for smaller and newer enterprises that lacked the connections that large, established factories enjoyed.<sup>547</sup> Alliances with regional oligarchs and industrialists in turn were important for governors during the nineties; their ability to act in defiance of the federal government – in the electricity sector and in other realms—often depended on alliances with regional industrialists or regional oligarchs.

In addition to selective subsidies, both regional and federal government agencies also compiled lists of consumers who could also not be cut off, even if they did not pay their bills. This usually included schools, hospitals, public transport, and other infrastructure, such as water and transport infrastructure.<sup>548</sup> The director of Krasnoyarskenergo reports special agreements with the Russian

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<sup>540</sup> According to UES’ website, in 2006, the main consumer groups were the following: industrial 53%, residential 23%, transport 11%, service sector 11%, agriculture 4%, [http://www.rao-ees.ru/en/info/about/main\\_facts/show.cgi?str\\_potreb.htm](http://www.rao-ees.ru/en/info/about/main_facts/show.cgi?str_potreb.htm).

<sup>541</sup> Interview #52 with electricity sector economist, Irkutsk, 20071117.

<sup>542</sup> Interview with Kuimov, *Ekspert*, No.14, April 1998, p.35. In this case the “cooperation” refers explicitly to the cooperation between Irkutskenergo and Chimprom, but it implicitly includes the regional government that brokered and supported these kinds of deals.

<sup>543</sup> Interview #34 with academic and employee of an electricity company, Vladivostok, 20070923.

<sup>544</sup> These “lists” come up in conversations and in media coverage. Interviewees tended to mention one or two companies that are certainly on the list; for example, the companies BOR (chemicals) and SPASK (cement) in Primorsky Krai were mentioned as being on the list by several interviewees. Interview #32 with electricity sector economist, Vladivostok, 20070918; interview #33 with journalist covering electricity sector, Vladivostok, 20070921; interview #34 with academic and employee of an electricity company; and interview #41 with journalist covering electricity sector, Vladivostok, 20071005.

<sup>545</sup> Interview #32 with electricity sector economist, Vladivostok, 20070918 and interview #46 with academic, Khabarovsk, 20071011.

<sup>546</sup> Bradshaw and Kirkow, “The Energy Crisis in the Russian Far East : Origins and Possible Solutions,” p.1051. See also reference to this in Krasnoyarsk, where companies outside the aluminum industry paid more, “Красноярск пошел по приморскому пути,” *Segonia*, September 12, 1997.

<sup>547</sup> Interview #34 with academic and employee of an electricity company and interview #50 with businessman, Irkutsk, 20071115.

<sup>548</sup> Kudryavy notes “[electricity companies] were well advised to not allow the cutting-off of certain customers/Некоторых потребителей вам совесть не позволит отключить.” Interview with Kudryavy in *Expert*, No. 14, April 13, 1998, p.33.



railway, which are also common in other regions of Siberia.<sup>549</sup> A host of other socially or strategically important organizations, for example military installations and defense related industries, were also on such lists, usually in the name of “energy security.”<sup>550</sup> In the Far East, where much of the local economy depended on the military industrial complex, stories circulate about how defense related industries converted to producing other goods – refrigerators, as one story has it – but continued to benefit from their special exempt status and thus got away with not paying for their electricity.<sup>551</sup>

Regional governments used other means to control electricity tariffs, too: they could use their control over regional distribution networks. Controlling networks meant that governors in high cost regions could not allow industrial consumers to buy electricity in lower cost regions (or later on, on the newly established wholesale market).<sup>552</sup>

Governors could also use their authority to pressure consumers to pay for electricity, or, as also happened frequently, to condone non-payment – one of the most serious problems of the Russian economy during the mid-nineties. Governors thus influenced the sector via their role in the non-payment and barter crisis.<sup>553</sup> While the Energo’s debt was partly due to the low *regulated* prices, it also arose from the fact that many industrial customers simply did not pay their bills. The cause of non-payment of bills was, on one level, quite simple: “why don’t the consumers pay for electricity? Because *they* don’t get paid for whatever they produce” – said one observer.<sup>554</sup> By the time enterprise directors collected some revenues, and probably would have been able to pay for at least part of the electricity bill, many had realized that electricity bills could go unpaid without much consequence, which was not the case for salaries and other day-to-day expenses. It is also said that the Energo-directors benefitted from barter payments, as they made it easy to conceal side-payments and creative ways of double book-keeping.<sup>555</sup> One journalist speculated – “the larger the share of barter payments, the larger are the rooms in the country home of the Energo director.”<sup>556</sup>

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<sup>549</sup> “Relations with the railways function according to special contracts/Мы работаем с железнодорожниками по специальным договорам,” says Kolmogorov, director of Krasnoyarskenergo, “Раскалять амбиции не продуктивно,” *Krasnoyarskii Rabochii*, March 5, 1998.

<sup>550</sup> The rationale of “energy security” is mentioned in the case of Krasnoyarsk. See reference to the Altai region’s military installations not paying their electricity bills, “Энергетики Сибири борются с неплатежами военных,” *Izvestia*, February 29, 2000.

<sup>551</sup> Interview #41 with journalist covering electricity sector, Vladivostok, 20071005.

<sup>552</sup> Litwack and Tompson, *OECD Economic Survey of the Russian Federation*.

<sup>553</sup> Woodruff, *Money Unmade*.

<sup>554</sup> In Russian: “Почему потребители не платят за электроэнергию? (...) Все очень просто: им тоже не платят выпущенную продукцию.” “Стреноженный монстр,” *Vostochno Sibirskaya Pravda*, August 12, 1992.

<sup>555</sup> References to double book-keeping tend to refer to attempts to end it and restore order. For example, Kolmogorov, the director of Krasnoyarskenergo, reports in 1998 that “[w]e have to create the elementary levels of order. Eliminate double book-keeping, and make this clear to every consumer and every energy sector employee (*energetiki*), what we have decided and what we have set out to do.” In Russian: “Приходится наводить элементарный порядок. Прекращать двойную бухгалтерию, делать для всех потребителей, да и для энергетиков, понятными наши действия и решения.” In “Раскалять амбиции не продуктивно,” *Krasnoyarskii Rabochii*, March 5, 1998.

<sup>556</sup> In Russian: “Чем выше доля оплаты бартером - тем больше комнат в усадьбе директора АО Энерго.” *Expert*, No.14, April 13, 1998, p.30.

By the late nineties, UES and the Energos were owed large sums. Electricity companies negotiated various settlements of this debt, via barter, off-set agreements and by issuing promissory notes (the so-called *veksels*). This response “infected” the fuel suppliers with problems of the barter economy as it widened the cycle of non-payment.<sup>557</sup> One insider outlined the situation as follows: “As the 1990s progressed, customers accumulated a huge debt of more than \$4.3 billion — a figure comparable to the annual income of UES holdings. In other words, the industry has been subsidizing the Russian economy by continuing the supply of electricity and heat to nonpaying customers. A large portion of payments was accepted in barter and mutual debt write-offs”<sup>558</sup>

Local authorities were often involved in tolerating non-payment and barter transactions.<sup>559</sup> The governor of Krasnoyarsk, for example, allowed debtors of the electricity sector to settle accounts via barter, and in turn decreed that electricity companies could do the same to decrease their debt vis-à-vis the regional administration, thus actively trying to help with barter agreements.<sup>560</sup> Woodruff shows that governors in many regions condoned non-payment, partly by not authorizing the cut-off of non-paying customers, or by encouraging the rise of surrogate monies and barter.<sup>561</sup> As a result of these practices, few of the Energo’s and UES’ bills were paid in cash for most of the nineties. According to Boris Brevnov, who was briefly the chairman of UES, “over 90% of receipts were in non-cash forms of payment, principally barter, mutual settlements, and *veksels* (promissory notes).”<sup>562</sup> UES reported that it collected only about 20% of receivables in cash in the nineties and the regional Energos were equally affected.<sup>563</sup> The lack of cash at Energos continued to be a problem for years. Not only did it lead to unpaid wages, it also meant that the Energos had to postpone infrastructure updates and investments past their due dates.<sup>564</sup>

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<sup>557</sup> For reference to barter and how debt is paid via off-sets from Vladivostok, see for example, “Взаимовыручка познается в веде,” *Utro Rossii*, April 22, 1997.

<sup>558</sup> Palamarchuk, Voropai and Podkovalnikov, *The Electricity Journal*, Volume 14, Issue 8, October 2001, pages 52-58. The regional Energo’s debt was also a constant source of debate in regional newspapers. For references to Dal’energo’s debt, see for example “Сами себя загнали в угол,” *Utro Rossii*, January 13, 1994; “Без Ресурсов,” *Utro Rossii*, January 26, 1994. For reference to Krasnoyarskenergo’s debt, see “Раскалять амбиции не продуктивно,” *Krasnoyarskii Rabochii*, March 5, 1998.

<sup>559</sup> In a note on the state of the regional budget, the Irkutsk oblast administration declared “the administration will continue to try to deal with the indebtedness and non-payment [of enterprises] with off-sets and *veksels*” see “Бюджетное послание Губернатора Овласти,” *Vostochno Sibirskaiia Pravda*, October 17, 1995. Woodruff shows how the de facto price concessions were condoned or even coerced by regional authorities, Woodruff, *Money Unmade*, pp. 114.

<sup>560</sup> “В Администрации Края,” *Krasnoyarskii Rabochii*, June 10, 1994.

<sup>561</sup> Woodruff shows how the de facto price concessions were condoned or even coerced by regional authorities, Woodruff, *Money Unmade*, pp. 114.

<sup>562</sup> Brevnov, "From Monopoly to Market Maker? Reforming Russia's Power Sector."

<sup>563</sup> For example Komienergo, the Komi Republic electricity monopoly is said to have bartered a brand new glass and steel headquarters in return for offsetting unpaid electricity bills. Baker-Said, "Chubais' Shocking New Job."

<sup>564</sup> The problem of “износ”/obsolescence of ailing infrastructure was a great concern, see for example, “Раскалять амбиции не продуктивно,” *Krasnoyarskii Rabochii*, March 5, 1998. For another source on the concern over the obsolescence of infrastructure in the sector, see “Энергоаудит на службе энергосбережения,” *Dal’nevostochnyi Kapital*, No.8, August 2003, p.54.

The cumulative effect of regional price regulation was a price-freeze in electricity from the mid-to late 1990s.<sup>565</sup> It drove many Energos to the edge of bankruptcy, although regional administrations varied in the extent that they allowed the Energos to recover costs. In Primorsky Krai, the governor kept prices at low levels for a long time and customers ran up particularly large debt.<sup>566</sup> As a result, Dal'energo was unable to cover running costs or pay taxes, and practically went bankrupt.<sup>567</sup> One regional observer remembers the situation as follows: “The difficulties of Dal'energo began in the year 1994, when, pursuant to a decision by the regional administration and the regional energy commission, electricity prices were frozen for two years, while, at the same time, prices for fuel continued to rise. As a result, Dal'energo turned from being an economically and financially sound company, into an unprofitable operation.”<sup>568</sup>

At Dal'energo, workers repeatedly protested the governor's policies, and even went on hunger strikes.<sup>569</sup> At Irkutskenergo, salaries also went unpaid at times, but the situation was less severe, and the *energetiki* decided that strikes were not an option.<sup>570</sup> Not just at Dal'energo, but in most Energos, the *energetiki* (the electricity sector professionals) suffered from wage arrears and were concerned about service outages. The directors of the Energos were either powerless to improve the situation, or were politically aligned with the governors.<sup>571</sup> Also, like other major industrial conglomerates of a region, the Energos were involved in a complex bargain with the regional government: sometimes, governors waived tax obligations in return for providing cheap energy to various consumers. Alternatively, Energos could “pay” taxes with power deliveries to publicly owned institutions – an arrangement that placed the electricity sector at the center of Russia's barter economy.

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<sup>565</sup> “Тарифы на электроэнергию остаются прежними,” *Vostochno Sibirskaiia Pravda*, December 28, 1993. As well as Litwack and Tompson, *OECD Economic Survey of the Russian Federation*.

<sup>566</sup> For a report of a REK meeting that centered around the discussion that tariffs should remain low and on the non-payment problem, see “Тарифы – те же!” *Utro Rossii*, February 4, 1997.

<sup>567</sup> Who owed whom how much was often disputed, see for example the dispute between Dal'energo and the Vladivostok city administration: “According to the [city] administration, it was not them who owed Dal'energo 540 billion rubles; on the contrary the *energetiki* owned the city 26 billion rubles.” In Russian: “По мнению администрации, не они должны выплатить АО ‘Дальэнерго’ пятьсот сорок миллиардов рублей, а наоборот – энергетике задолжали городу двадцать шесть миллиардов.” In “Война энергетиков?” *Utro Rossii*, January 15, 1997. This dispute was tied to a perennial battle between the mayor of Vladivostok, Cherepkov, and the Krai administration, on which see also “Паны дерутся....,” *Utro Rossii*, January 21, 1997.

<sup>568</sup> In Russian: “Сложности ‘Дальэнерго’ начались в 1994 году, когда по решению местной администрации и региональной энергетической комиссии тарифы энергосистемы были заморожены на 2 года при том, что цены на топливо продолжали расти. В результате ‘Дальэнерго’ превратилось из достаточно эффективной в экономическом и финансовом плане энергосистемы в убыточную.” Anna Lobunec, “Перспективы Развития энергетики приморского края с учетом интеграционных процессов в северо-восточной Азии,” Dissertation, Far Eastern State University, 2004, section 2.2.

<sup>569</sup> See for example “Нет зарплаты – нет энергетиков,” *Utro Rossii*, September 17, 1997. See also several reports of *OMRI/DD*: At Primorsky power station “300 workers have been on hunger strike for nine days to protest a five-month delay in the payment of their wages.” *OMRI/DD* August 2, 1996, and *OMRI/DD* September 9, 1996. The problem was not confined to the Far East, however. *Vostochno Sibirskaiia Pravda*, for example, did not pay workers between February and July 1996, *OMRI/DD* September 5, 1996.

<sup>570</sup> “Бастовать энергетикам не могут. Но хотят,” *Vostochno Sibirskaiia Pravda*, November 23, 1995.

<sup>571</sup> An example is the close personal relationship between Popov and Ishaev in Khabarovsk. On this also see chapter 3.

### *Regional varieties of subsidies*

Subsidy regimes in Siberia and the Far East have a few distinguishing features, that continue to this day, but first crystallized during the nineties.

#### *Siberia:*

A unique aspect of the Siberian subsidy regime is that prices can be kept low by keeping the Siberian consumers separate from other markets. Electricity in Siberia is cheap, because it is produced in the region's huge hydroelectric power plants, where the marginal cost of a kilowatt is very low. If prices are low in the region, because costs are low, why is this a subsidy? It is an implicit subsidy, because low prices depend on intentionally reserving Siberian electricity for the large Siberian industrial consumers, and not exporting it to European Russia, the Far East or abroad, to China and Mongolia, where consumers would pay far more.

UES had been trying to equalize prices across Russia for most of the nineties by creating a national wholesale market, which would lead to higher prices for Siberians. A competitive nation-wide wholesale market could allocate electricity to the highest bidder, which would move electricity from energy-abundant to energy-deficient regions and would level out prices. Siberian governors prevented this from happening, because they firmly believed that Siberian consumers should benefit from the region's low cost electricity. The prevailing opinion of Siberian politicians, academics and electricity sector professionals was that the price level in Siberia should be kept low, by reserving cheap energy for local industries.<sup>572</sup> Following this maxim, Siberian governors in effect created subsidies for regional industries by preventing a unified price zone, and by granting regional industrial consumers privileged access at very low prices. An Irkutskenergo executive describes their relationship to industrial consumers: "we began to reduce tariffs for select consumers in specific ways and under specific circumstances."<sup>573</sup> In Krasnoyarsk, similar agreements lowered tariffs for the main consumers of Krasnoyarskenergo – the Krasnoyarsk Aluminum Plants. "Tariffs for them [the aluminum industry] were lowered from the get-go," said one observer about the relationship between the regional Energo and the aluminum industry.<sup>574</sup> In return for lowering electricity tariffs and taxes for the aluminum companies, the aluminum magnate Oleg Deripaska kept residents of Krasnoyarsk employed, and, it is said, helped Aleksei Lebed to be elected governor.<sup>575</sup> Whatever

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<sup>572</sup> This position is detailed in *Материалы к энергетической стратегии сивии*, Novosibirsk, РАН Сибирское отделение, July 1997, chapter 10, p.102. This is also a recurring theme in regional newspapers, for example, "Дешевой энергии на всех не хватит," *Vostochno Sibirskaiia Pravda*, January 6, 1997.

<sup>573</sup> In Russian: "Мы начали проактировать снижение тарифов для определенных потребителей, в определенных рамках и на определенных условиях", Sergei Kuimov, *Expert*, No.14, April 13, 1998, p.35. That these agreements were supported by regional administrations is implied, and confirmed in interview #60 with energy company executive, Irkutsk, 20071203.

<sup>574</sup> In Russian: "Тарифы для них [предприятие алюминиевой промышленности] были занижены изначально." "Красноярск пошел по приморскому пути," *Segonia*, September 12, 1997. The observer also notes that this increased prices for all the other industrial consumers. About two thirds of Krasnoyarskenergo's electricity is produced in the Krasnoyarsk hydro-electric power plant; Krasnoyarsk Aluminum Plant uses all of Krasnoyarskenergo's high-voltage output; *Вестник региональной энергокомиссии Красноярского Края*, January, 2005, p.27.

<sup>575</sup> Barnes, *Owning Russia: The Struggle over Factories, Farms and Power*, p.138.

the rationale for these agreements, they resulted in the fact that energy-intensive industries in the region had “first-dibs” and privileged access to the low-cost power generated by Siberian rivers.

### *The Far East:*

In the Far East, subsidies took the form of direct payments to regional governments and fuel deliveries for the regional Energos. Unlike in Siberia, where struggles over tariffs and ownership were due to the abundance of resources and the valuable, low-cost hydro-electric generators, electricity in the Far East was scarce for much of the nineties. Power in the region was also the most expensive in all of Russia.<sup>576</sup> Technology of Far Eastern power plants was particularly dated and losses were high.<sup>577</sup> More importantly, the Far East was the epicenter of the blackouts in the Russian electricity sector. Coal production was privatized early and many coal-mines were closed when demand collapsed during the economic crisis and the few remaining clients were unable to pay.<sup>578</sup> Many of the Far Eastern Energos lacked sufficient coal supplies to get through the winter.<sup>579</sup> This led to widespread electricity outages, which remain fixed in residents’ memory as “dark times.”<sup>580</sup>

To bridge the bottlenecks, the federal government stepped in with direct budget transfers to the Far Eastern regional governments and by organizing the delivery of diesel or coal shipments.<sup>581</sup> In a typical intervention from the federal government, a 1997 Presidential Decree, for example, promised the “allocation of financial means to be given to Primorsky Krai from the federal budget” to “normaliz[e] the situation in the heat and electricity sector of the Krai.”<sup>582</sup> Federal budget funds went to Far Eastern Energos, Dal’energo in particular, to pay off the electricity companies’ debt, and to coal miners.<sup>583</sup> Almost every year, in the so-called “preparation for

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<sup>576</sup> UES price data. See also various references to the cost of electricity in the Far East in local media, for example “Дальэнерго меняет партнеров?” *Utro Rossii*, January 14, 1997. Also interview #32 with electricity sector economist, Vladivostok, 20070918 and interview #34 with academic and employee of an electricity company, Vladivostok, 20070923.

<sup>577</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>578</sup> In recent years, coal production in the Far East has recovered. Nevertheless, local coal is relatively inefficient (because it is low-caloric) compared to Siberian coal and the cost of electricity production is high.

<sup>579</sup> For example “Острый Сигнал: Прошли выборы – отключили бататри,” *Utro Rossii*, January 15, 1994; and “Дефицит света...” *Utro Rossii*, March 12, 1996.

<sup>580</sup> Conversations with Primorsk residents repeatedly confirmed this point, for example. Anthropologists have traced the breakdown of electricity to a jolt to pre-modern times, see Stephanie Platz, “The Shape of National Time: Daily Life, History and Identity During Armenia's Transition to Independence 1991 - 1994,” in *Altering States: Ethnographies of Transition in Eastern Europe and the Former Soviet Union*, ed. Daphne Berdahl et al. (Ann Arbor: University of Michigan Press, 2000).

<sup>581</sup> “Комиссия по чрезвычайным ситуациям предпринимает конкретные шаги по разрешению топливного кризиса,” *Utro Rossii*, January 14, 1997. Anti-crisis measures and subsidies/support from the central government include in-kind fuel deliveries: almost 20 thousand tons of diesel fuel were allocated from the federal government’s resource committee. This is a recurring theme in local newspapers, for an earlier reference see “Миллиарды на топливо,” *Utro Rossii*, January 20, 1994. See also several interviews, for example, interview #39 with electrical engineer/electricity sector Expert, Vladivostok, 20071004, and interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>582</sup> “УКАЗ Президента Российской Федерации: О дополнительных правах и обязанностях полномочного представителя президента Российской Федерации в Приморском крае,” *Utro Rossii*, June 10, 1997.

<sup>583</sup> “Energy Minister Yurii Shafranik (...) said that Moscow earmarked 4.6 trillion rubles for bailing out the region’s fuel and energy sector.” *OMRI/DD* August 6. “Primoriye to receive federal funds” in *OMRI/DD* September 23, 1996.

winter season,” Primorsky Krai found itself unable to locate funds to buy fuel and had to call for help to the federal government. In addition to direct budget transfers and coal deliveries, cross-subsidies are relatively high in Far Eastern regions.<sup>584</sup>

In theory, electricity companies were the main beneficiaries of the federal budget transfers to the Far East. The actual beneficiaries, however, depended largely on how the regional administration handled the apportioned funds. As the central government was unable to oversee how funds were spent, it was up to the governors to distribute the federal funds. In some regions, governors used federal transfers to keep the general price level down, for both household and industrial consumers. The governor of Primorsky Krai, Nazdratenko, was well known for using subsidies to “leverage” his influence in the region.<sup>585</sup> For the population, Nazdratenko’s handling of the electricity sector was a mixed blessing: Primorsky Krai has had the lowest electricity tariffs in all of the Far East, but the highest rate of blackouts.<sup>586</sup> At the same time, Nazdratenko was notorious for the misuse of federal transfers: funds either vanished or he subsidized electricity tariffs for companies owned by loyal followers. The governor of the neighboring Khabarovsk, Ishaev, has a better reputation for his handling of the electricity sector. A Soviet-era apparatchik, Ishaev declared electricity a priority. He appointed a close personal ally to head Khabarovskenergo and actually seemed to have channeled federal subsidies to the regional Energo.<sup>587</sup> He also allowed the REK to set prices consistently higher than neighboring Primorsky Krai, and was less generous with industrial subsidies and less lenient on non-payment by both industrial and household customers. As a result, blackouts were less common than in neighboring Primorsky Krai.

### **3. Subsidies during the centralization of political power under Putin**

Up until 1998, the regions’ independent price politics described above were more or less tolerated, even though the liberal reformers of the Yeltsin government – the “young reformers” Gaidar, Nemtsov and Chubais–wanted to tackle the problems of bankrupt Energos, improve payment discipline and raise electricity tariffs. Their efforts were mostly futile; partly because they were unable to match the influence of regional governors over the Energos, partly because they lacked allies within UES. One of the first steps of Boris Brevnov’s at UES was to order an audit by an international accounting firm, which he viewed as a prerequisite for creating payment discipline and financial stability. The audit was, however, boycotted by UES’s incumbent management.<sup>588</sup> Once Chubais became head of UES in 1998, however, the fight for the authority to determine electricity tariffs, to collect the Energo’s outstanding bills and end “double book-keeping,” started for real. In chapter 3, we’ve see that one of the core prerequisites for the beginning of Chubais’ reforms was reclaiming ownership and *de facto* control for UES. A

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<sup>584</sup> UES price data. Anna Lobunec, “Перспективы Развития энергетике приморского края,” Dissertation, Far Eastern State University, 2004, which contains an analysis of cross-subsidies in the Far East, p.108; confirmed in interview #34 with academic and employee of an electricity company, Vladivostok, 20070923.

<sup>585</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010. For example in Khabarovsk, Amur-Metall has traditionally been a beneficiary.

<sup>586</sup> Interview #32 with electricity sector economist, Vladivostok, 20070918. For media reports, see for example, “В режиме отключений...” *Utro Rossii*, 1997 September 24, for further media reports on blackouts, see chapter 2.

<sup>587</sup> Interview #45 with employee of electricity company, Khabarovsk, 20071011.

<sup>588</sup> Brevnov, "From Monopoly to Market Maker? Reforming Russia's Power Sector." UES management complained that the auditors asked “too many questions, “like the CIA”...” (p.19).

second issue in conflict between Chubais and the regional governors concerned prices and subsidies, and the cash-flow of the Energos.<sup>589</sup>

A telling sign of Chubais' success was that the Energos did eventually manage to collect more of receivables in cash. "Money flows became real" under Chubais, said one observer.<sup>590</sup> After 2000, UES and the Energos were able to enforce payment discipline by cutting off non-paying customers, something that both the federal government and regional governors had been extremely reluctant to authorize in the 1990s.<sup>591</sup> Also, the end of barter trade and the normalization of cash accounting made it easier for UES to supervise the financial flows of the Energos and to take measures against the abuses of cheap electricity as a political favor. Finally, media campaigns exhorted, cajoled and threatened households to pay for their electricity bills.<sup>592</sup> Yet, the enforcement of payment discipline had its cost and was accompanied by social protests.<sup>593</sup> These protests achieved little, however, as regional governors, who had been responsible for underwriting low tariffs and for tolerating non-payment, were steadily losing their ability to influence the sector.

We've seen in chapter 2 that Chubais gained an ally in Putin, as the president's quest to curtail the authority of the regional governors dovetailed with UES directors' attempts to undercut the governor's hold on the electricity sector. Chubais wanted to de-politicize the electricity sector, to create a nationwide power market, to establish a regulatory regime that was independent from political pressures, and to undercut the governor's hold on the Energos. Putin wanted a "unified legal and economic space in Russia."<sup>594</sup> We will see below that even as Putin managed to centralize power, liberal reformers only partially succeeded in their mission.

The realignment of the federal government's regulatory bodies was an important step toward achieving both Chubais' and Putin's goals. Most important was the creation of a new body, FST, *Federalnaia Slushba Tarifov*, to replace the weak FEK. FST was designed to be a strong, independent institution to regulate the energy monopolies and the newly created wholesale market.<sup>595</sup> In the electricity sector, the implementation of FST directives was now directly

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<sup>589</sup> Ibid. One of Brevnov's first reform initiatives was to reform the Energo accounting system, in an attempt to make these more transparent to UES and to potential outside investors. This was likely one of the reasons why he lasted only a few months at UES.

<sup>590</sup> Interview #16 with electricity sector consultant, Moscow/phone, 20061030.

<sup>591</sup> See article in "Мер жесткая, но вынужденная," *Energia Rossii*, No. 13/14, July 2000. Komienergo, for example, temporarily shut off the electricity supply to 85 organizations that were indebted to Komienergo, see "Автономное плавание," *Izvestia*, April 7, 2000.

<sup>592</sup> TV campaigns were mentioned by several people, for example, interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004. When I was in Khabarovsk in October 2007, I saw TV commercials that urged household consumers to pay and threatened them with cut-off.

<sup>593</sup> Protests in response to tariff increases occurred primarily between 1999 and 2001. See for example, Rutland, "Power Struggle: Reforming the Electricity Industry."

<sup>594</sup> See note 1.

<sup>595</sup> Interview #15 with electricity sector analyst at financial institution, Moscow, 20061027. FST has a mandate beyond the electricity sector: "FST sets prices (tariffs) and controls issues related to determination and application of prices /tariffs/ in the electric power industry; gas industry; transmission of oil and oil derivatives through main pipelines; railroad transportation; services of cargo terminals, ports and airports; services on generally available electric and postal communications; products of nuclear fuel cycle; defense products; vodka, liquor and other alcoholic beverages (...). FST examines disputes between executive power bodies of the constituents of the RF in the field of the state regulation of tariffs, regulated organizations and consumers." FST website, <http://www.fstrf.ru/>

supervised by the *polpredy*, the presidential envoys to the region, whose offices were endowed with substantial authority. “Everything and everybody is more closely scrutinized now.”<sup>596</sup> REKs were no longer accountable to regional governors, but to FST and to the presidential envoys. Indeed, these reforms seemed to work: by 2005, all REKs complied with FST recommended electricity tariffs.<sup>597</sup> In addition to strengthening the FST, a few other measures were supposed to increase the transparency of the mechanisms that regulate prices in the electricity sector. The period of price regulation was set to one year. Previously, governors had been able to manipulate prices quarterly, which led to much confusion and little predictability for electricity consumers.<sup>598</sup> Optimistically, the legislation also ruled that prices for all consumers had to be publicized and that the REKs could be brought to trial for infringement of federal laws. A lawyer for the Primorsky Krai REK, who was not particularly interested in my questions about special tariffs for industrial consumers, had a standard answer for all my questions: because of this new aspect of the law, everything at the REK was as it was supposed to be—“everything according to the law.”<sup>599</sup>

### *Regional varieties of subsidy politics during Putin’s centralization*

On the whole, regional governors across Russia shared similar goals and strategies, but they could rely on different allies in their fight against the reformers. Most regional governors did not want to give up their control of the Energos. If the Energos were unbundled and their components re-aggregated into supra-regional holding companies and then privatized – as the reform plans envisaged, governors would lose control over these companies and over electricity tariffs. Yet, Chubais ran up against different types of opposition in response to his attempts to regain control over prices, subsidies and the Energos’ cash-flow.

We will see that power politics varied, depending largely on the types of subsidies that had previously been negotiated at the regional level. Moreover, regional governors and Energos were more successful in opposing the central government if the region did not have to rely on sponsors outside of the region and if they could count on the strong support of regional beneficiaries. *Beneficiaries* of electricity companies are the consumers that receive electricity at low cost (the electricity sector’s downstream connection in a production chain). *Sponsors* are the fuel providers receiving low prices for the energy they deliver to the electricity sector (the electricity sector’s upstream connection). We saw in chapter 3 that the strongest of these beneficiaries and sponsors gained ownership of electricity assets in European Russia and Siberia. The final section of this chapter will show that they were able to retain their influence over the electricity sector in the subsequent phase of political struggles that took place throughout the 1990s.

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<sup>596</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>597</sup> UES price data, obtained through EBRD, 2006. The way FST regulation worked for some years was that it mandated a “price band,” giving REKS a minimum and maximum price level; interview #35 with regulator at regional electricity commission, Vladivostok, 20070924.

<sup>598</sup> Yudashkina and Popochy, "Regulation of the Electricity Sector in Russia: Regional Aspects ". Also interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>599</sup> In Russian: “все по законам.” Interview #35 with regulator at regional electricity commission, Vladivostok, 20070924. She also said, however, that “concrete numbers are a secret,” in Russian: “конкретный циффры у нас тайна.”



### *European Russia:*

In most of European Russia, a governor's ability to oppose Chubais ultimately depended on Gazprom. The gas giant essentially "underwrote" the subsidies that regional governors were giving out: regional governors and Energos could keep prices low because Gazprom gave them credit for gas deliveries and delivered gas below market prices.<sup>600</sup> Gazprom was generally not allowed to cut off gas deliveries to power plants that owed them back-payments during the nineties.<sup>601</sup> Many of the Energos remained in constant arrears with gas payments, even as gas prices for the Energos were already low. Ultimately, however, Gazprom was able to swap its debt for equity in power plants in which it was interested, thereby regaining control of regional subsidies. Around 2000, the government also started selectively allowing Gazprom to temporarily cut off non-paying Energos. Gazprom and Chubais thus in some cases collaborated to get the Energo's regional customers to pay.<sup>602</sup>

Not surprisingly, then, in European regions that did *not* depend on Gazprom, i.e. that had their own fuel resources, the resistance to the center and to Chubais' plans was most successful. Regional governors tried to control fuel resources, whether gas or coal.<sup>603</sup> The two most successful cases of regional resistance were Tatarstan and Bashkortostan, where the Energos could count on fuel from Tatneft and Bashneft, which are regionally controlled energy companies. Because of this dependence on fuel suppliers, the European Russian opposition to the center was confined to certain strong regions, which often also had their own energy or other natural resources. Unlike in Siberia, no collective action of regions opposing the central government developed in European Russia.

### *Siberia:*

In Siberia the opposition to reforms was defined as Siberia's struggle as a whole against the central government. Regional governors acted collectively, as most large producers were not dependent on sponsorship of regional subsidies, either from Gazprom or from the federal budget. In the mid-1990s they formed the "Siberian Agreement," an organization whose aim it was to coordinate the attempts by Siberia's regions to gain more autonomy for regional administrations and to retain the proceeds from Siberia's natural resources at the regional level.<sup>604</sup>

The Siberian opposition to Chubais has two, probably related, characteristics: governors were well-organized and they were aided by the region's industrial conglomerates. Siberian governors

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<sup>600</sup> See for example Gustafson, *Capitalism Russian-Style*, p.55.

<sup>601</sup> Although they did sometimes cut supplies temporarily and partially to particularly indebted consumers In Tver, for example "Gazprom has cut supplies to the city by 45%, until it pays its debt of 210 billion rubles (\$40 million)." *OMRI/DD* October 2, 1996.

<sup>602</sup> "The natural monopolies were sometimes forced to cooperate, as they, with the help of the [federal] government, could put pressure on the regions," in "Автономное плавание," *Izvestia*, April 7, 2000.

<sup>603</sup> Interview #11 with electricity sector expert, Moscow 20061018.

<sup>604</sup> See James Hughes, "Regionalism in Russia: The Rise and Fall of the Siberian Agreement," *Europe Asia Studies* 46, no. 7 (1994). About Siberian separatists aspirations, see "Сивирь – не колоня," *Vostochno Sibirskaiia Pravda*, September 22, 1992; and a later account of the progress of the Agreement, "Центр обещает пересмотреть отношения с регионами," *Vostochno Sibirskaiia Pravda*, January 19, 1999. A similar movement in the Far East that suggested the creation of a "Far Eastern Republic" was far less successful. See for example, "Кто провоцирует сепаратизм," *Utro Rossii*, December 12, 1995.

were the most organized and unified opposition to the central government's plans for the electricity sector. The question of how much of Siberia's energy resources should benefit Siberians and Siberian industry, versus how much of it should be shared with the rest of the country was at the core of the conflict with Moscow.<sup>605</sup> In the electricity sector the "Siberian Agreement" mobilized governors around the question of how much of the region's cheap hydro-electricity should be allocated to local industry and how much should be exported to other regions of Russia or abroad. In an early meeting with Siberian governors, Chubais found that the governors were unanimously opposed to his reform plans.<sup>606</sup> The Siberian governors opposed to Chubais' plan tried to put forth a counterproposal to the UES reform plan, developed at the Siberian branch of the Russian Academy of Sciences. This alternative plan for sector "modernization" was a strategy to keep the Energos, the vertically integrated monopolies—and the region's influence over them, intact.<sup>607</sup>

In Siberia, the sponsor of subsidies was Mother Nature, or, more precisely, Father Angara, as Irkutianki call the Angara river that generates much of the region's hydro-electric power. Unlike in European Russia, where the *sponsor* of subsidies ultimately mattered most in the political battles over electricity reforms, in Siberia it was the *beneficiaries* who mattered most. As introduced in chapter 2, Siberian governors struck bargains with powerful regional electricity consumers. This coalition of regional governors and industrialists (which also often included the region's *energetiki* and Energos) did everything to protect Siberia's low-cost zone, where industrial clients could benefit from the low-cost electricity. A high-placed electricity sector professional in Irkutsk noted his objection to liberal reform plans: "under no circumstance should the large hydro-electric power plants be admitted to the wholesale market."<sup>608</sup> This is a reiteration of the position outlined above, namely that the cheap power produced by Siberian hydro-power plants should not be sold to the highest bidder, but should be used locally at regional prices. In Krasnoyarsk, the local aluminum plant, KrAZ, for years benefitted from very low electricity prices.<sup>609</sup> When Chubais tried to re-write the rules of Siberian electricity sector, he had to contend with these interests. We will see below that even as the opposition of Siberian governors ultimately proved futile, under the reformed regime, some of Siberia's large industries were able to retain the privileges they had secured in regional bargains.

### *The Far East:*

In the Far East, there were no strong regional sponsors of subsidy regimes. Far Eastern coal miners were for a while the reluctant sponsors of the non-payment in electricity – as the bankrupt Energos failed to pay for the coal they received. Coal miners sought higher prices for coal and payment of the Energo debts, but they also wanted to prevent local Energos from buying higher quality coal in Siberia. One headline highlighted this, declaring: "Coal miners are prepared to

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<sup>605</sup> A journalist asks the rhetorical question "whom do the riches of Siberia accrue to?" In Russian: "Чи богатства прирастают сибирью?" *Vostochno Sibirskaiia Pravda*, January 6, 1996.

<sup>606</sup> "Анатолия Чубайса холодно встретили в Сибири," *Kommersant'*, November 11, 2000.

<sup>607</sup> See chapter 6.

<sup>608</sup> In Russian: "Не в коем случае не допустить выхода этой ГЭС на ФОРЕМ." Interview with Victor Borovsky, *Expert*, April 13, 1998, No.14, p.35.

<sup>609</sup> According to the new manager of Krasnoyarskenergo, V. Kolmogorov, in "Раскалять амбиции не продуктивно," *Krasnoyarsky Rabochii*, March 5, 1998.

fight for the regional coal market.”<sup>610</sup> Instead of receiving higher prices, they had to contend with ad hoc payments and were forced to deliver coal to defuse the yearly recurring energy crises. A share of the federal government’s subsidies was meant to go to them, but especially in Primorsky Krai, they had to battle with the electricity sector to receive these funds. In fact, one of the most enduring political battles in Primorsky Krai was a ferocious conflict between the coal miners and the electricity companies over prices, unpaid deliveries, and a share of the federal subsidies.<sup>611</sup>

The most significant sponsor of the Far Eastern electricity subsidies was the federal government, which supplied the bulk of the region’s subsidies as budget transfers. Chubais tried to leverage this fact into greater control by the central government over the regional Energo. Initially, this did not work. Electricity outages in the Far East became a media story that potently symbolized the failure of the Yeltsin government to realize the promise of the post-Soviet transition. The central government had little choice but to continue sending coal and subsidies. While Chubais and UES blamed Nazdratenko for blackouts, the governor in turn blamed Chubais and UES. In a political game typical of the fractious politics of the late 1990s, each side cultivated their loyalists and enemies in the Yeltsin administration<sup>612</sup> and Nazdratenko stayed on as governor until he was finally ousted in 2001.

Finally, what role did the Energos play in these center-region conflicts? We saw above that workers were unhappy about wage-arrears, resulting from the Energo’s role in the non-payment crisis. The Energo directors were sometimes unhappy about the tariff politics of regional governors, which often left them teetering on the brink of bankruptcy because of the low regulated prices. Nevertheless, they were often aligned with regional authorities against UES and the central government. Chubais’s campaign to appoint new managers threatened the position of incumbent electricity sector professionals, the *energetiki*, many of whom were skeptical about the merits of his plans to privatize and unbundle the Energos (see chapter 6).

These conflicts played themselves out during the first Putin administration – until about 2004. With the centralization of political authority and the consolidation of industrial conglomerates, the site of regulation gradually shifted from the region to the center. By 2004, Chubais could claim success for launching the electricity sector reforms and for “de-politicizing” electricity. When the Energos were dissolved into supra-regional holding companies in 2004 and 2005, the possibility of regionally based electricity policy seemed to have ended. At the same time, Putin was up for re-election and could claim success in unifying the country and in defeating challengers to the central government’s sovereignty. Does this mean that the proponents of “one market” have succeeded and that the electricity sector has been separated from political boundaries? We will see that elements of these subsidy regimes that developed in the 1990s persisted throughout the restructuring of the sector and some of the beneficiaries were able to retain their privileges.

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<sup>610</sup> “Дальнеэнерго меняет партнеров?” *Utro Rossii*, January 14, 1997.

<sup>611</sup> For example, see the following reports: “Strikes continue in Far East,” *OMRI/DD*, August 1, 1996; “Miners Strike Ends in Primorye,” *OMRI/DD*, August 6, 1996; “Miners ready to Walk Out Again,” *OMRI/DD*, August 22, 1996; “Energy Workers Strike Begins in Primorye,” *OMRI/DD*, September 16, 1996.

<sup>612</sup> In 1996, for example, Nazdratenko was cleared of allegations of embezzling federal budget funds by a Presidential Oversight Commission; *OMRI/DD* reports, August 14 and 15, 1996.

#### **4. Subsidy regimes after 2004**

What happened after 2004, when Chubais' reforms started to be implemented? On the one hand, electricity in Russia is now increasingly traded as a commodity and prices on the wholesale market are gradually being liberalized. On the other hand, the new markets are subject to a set of formal and informal rules that shape who can buy and sell power at what price. As in the 1990s, energy issues and the price of electric power lie at the core of these bargains. In many regions of Russia, household consumers are still protected and key industrial consumers continue to receive subsidies.

A key part of the story that I am telling about electricity liberalization in this dissertation is that these new rules are the outcome of the political dynamic during President Putin's second term in office. As introduced in chapter 2, Putin was keen on mobilizing both the discipline of market forces and the tools of state planning for his agenda of strengthening Russia's economy. To achieve this goal, he pragmatically enlisted the cooperation of Russia's new private owners. In evolving bargains with the new owners of electricity assets, the federal government granted concessions in return for their contributions to infrastructure investment and regional economic development more generally (see chapter 2).

The type of concessions varied across Russia. The sections below detail the differences in the formal rules and informal practices that regulate contracts between producers and consumers in European, Siberian and Far Eastern electricity markets. These arrangements reflect the influence of the electricity sector's new dominant owners: in European Russia the interests of the energy giant Gazprom are reflected in increasing prices and the phasing out of electricity subsidies. In Siberia, the new institutional infrastructure protects downstream consumers, especially the aluminum company Rusal and industries that the federal government wants to subsidize. In the Far East, electricity companies are protected through direct budget transfers and through the separation of the high-cost Far Eastern zone from the neighboring low-cost Siberian zone.

A key aim of reformers has been the creation of wholesale markets, with liberalized tariffs that would allow prices to work as signals for market participants. The wholesale market and key institutions for unregulated contracts have indeed been created. An increasing share of the long-term bilateral contracts is "free," i.e. with prices agreed between buyers and sellers. Price liberalization has been scheduled to progress gradually over a five-year period, from 2006 to 2011. At the same time, reformers made various political concessions in terms of subsidies and the mechanisms that determine price levels – to the new owners of electricity, and to the regional governments, who were reluctant to give up the levers of price making.

For the moment, the central government retains the final say over the pace of liberalization. The law leaves the government room to pace the liberalization according to "socio-economic development."<sup>613</sup> In 2003, for example, ahead of the 2004 presidential elections, Putin increased electricity tariffs, but only as much as the general inflation level, which was less than what the reformers had hoped for.<sup>614</sup> As price liberalization in the sub-sector of power generation is the

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<sup>613</sup> Interview #24 with regulator/economist at the Ministry for Economic Development, Moscow, 20070214.

<sup>614</sup> A Russian daily newspaper *Vremya* speculates that this will benefit Putin's party, United Russia, as well as Chubais' party, the Union of Rightist Forces. "Is the Electricity Monopoly playing Politics?" *RFERL Newslite*, October 23, 2003.

condition for liberalized power markets, a slow-down of the scheduled liberalization would mean that electricity remains a regulated commodity. So far, however, the promised liberalization of wholesale markets seems to have been on schedule.

Second, the government retains the ability to subsidize household consumers and “other socially important groups.” The government is keenly aware that rising electricity prices are unpopular. In a 2006 survey, almost 60% of respondents stated that rising utility bills have had a “significant negative effect on their life.”<sup>615</sup> Against the background of liberalization and reforms, the government has also created an alternative mechanism to allocate subsidies to household consumers. In a 2005 amendment to the electricity law, the government designated so-called “guaranteeing suppliers” to sell electricity to “households and other socially-important consumer groups” at prices set by the government.<sup>616</sup> A key question will be whether price increases on the wholesale market will be passed through to retail consumers. Only time will tell how the government will handle price regulation for households, but with the institution of the guaranteeing suppliers, the government has built a new mechanism to regulate prices for household consumers into the liberalizing system.

### *Regional variation in subsidy regimes at the end of reforms*

The reformers’ efforts to abolish the old types of subsidies have brought mixed success. In different regions of Russia, different types of subsidies persist, reflecting the influence of the electricity sector’s new owners.

*Table 1: Summary of cross-regional difference in subsidy regimes*

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<b>Region</b>	<b>Subsidy regime</b>
<b>European Russia</b>	Subsidies are generally decreasing, with the exception of Tatarstan and Bashkortostan
<b>Siberia</b>	Industrial subsidies persist in large hydro-electric regions
<b>Far East</b>	Cross-subsidies to households persist or have increased; subsidies in the form of direct budget transfers persist or have increased

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<sup>615</sup> Almost two thirds (57%) of respondents in a 2005 survey reported that rising electricity tariffs “negatively affect their lives.” Of this group, 39% reported that they will adjust spending habits as a result of rising utility prices. The 39% is divided up into the following groups: 18% report that “I will save (on transport, clothing, food),” 15% report “I will look for additional income,” 6% report “I will use public utilities less.” Based on FOM survey (Фонд Общественное Мнение), see note 42.

<sup>616</sup> Interview #15 with electricity sector analyst at financial institution, Moscow, 20061027. A UES press release states somewhat ambiguously: “The price level (...) should be stable enough, on the one hand, and on the other hand it should ensure a certain level of profitability for suppliers of electricity. *UES Press Release*, 2003, Moscow, 23 May, available online in press release archive of UES site, <http://www.rao-ees.ru/>

### *Cross-subsidies and direct budget transfers*

Phasing out cross-subsidies was one of the aims of liberal reformers, since they are considered one of the main price-distortions. Cross-subsidies in European Russia and Siberia have declined since 2000, while they persist in the Far East. Table 2 shows levels of cross-subsidies as a percentage of industrial tariffs for Russia's largest energy producing regions (between 2000 and 2005).<sup>617</sup> European Russia's large electricity producing regions saw cross-subsidies decline from relatively high levels. Unlike in European Russia, Siberian regions have not generally had significant cross-subsidies, as the price level in Siberia is generally low. This is particularly true for the large Siberian regions. Smaller regions that did have cross-subsidies tended to reduce them over this five year period, similar to the European regions.

In the Far East, in contrast, cross-subsidies have remained relatively high, as is evident in Table 2 (below).<sup>618</sup> An observer of the Far Eastern electricity sector even argues that these cross-subsidies, and the government's intention to retain them, was one of the reasons why the region was not included in the reform program for the rest of Russia.<sup>619</sup> The government also continues to pay direct subsidies to Far Eastern electricity companies in the form of direct budget transfers.<sup>620</sup> In contrast, only one region in European Russia, Arkhangelsk, received subsidies in the form of direct federal transfers and those subsidies were reduced in 2004 (compared to previous years).<sup>621</sup> Although direct budget transfers continue in the Far East, they are now no longer administered via regional administrations. Rather than budget transfers from federal to regional budgets, the federal government directly subsidizes the regional electricity company, DEK, to compensate for the high cost of producing power in the region.<sup>622</sup>

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<sup>617</sup> 2005 is the last year in the UES cross-regional dataset. I confirmed these trends with interviews and newspaper data.

<sup>618</sup> Interview #41 with journalist covering electricity sector, Vladivostok, 20071005. See also interview with Klimenko, in *Dal'nevostochnyi Kapital*, August 2005, 8/60, p.10.

<sup>619</sup> "Another reason [for why the Far East is undergoing a different reform trajectory] is the high level of cross-subsidies in the Far East/Еще один фактор — значительный объем перекрестного субсидирования, которое по-прежнему сохраняется на Дальнем Востоке," according to Klimenko, *ibid*.

<sup>620</sup> *Tarify v Elektroenergetike*, Federalnaia Slushba Po Tarifam/Federal Tariff Service, p. 46.

<sup>621</sup> 283million rubles in 2004, compared to 500mln rub in 2003 and 2002. *Ibid*.

<sup>622</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010.

Table 2: Cross-subsidies as percentage of industrial tariffs between 2000 and 2005 <sup>623</sup>

<b>European Russia</b>			<i>%</i>	<i>change</i>	<b>Siberia</b>			
Moscow	2000	35.8			Irkutsk	2000	7.5	
	2005	4.7	-31.1			2005	3.6	-3.9
Sverdlovsk	2000	10.5			Krasnoyarsk	2000	39.4	
	2004	-5.3	-15.8			2005	15.8	-23.6
Saratov	2000	50.9			Kuzbass	2000		
	2005	12.1	-38.8			2005	no cross subs	
Leningrad Oblast	2000	47.1			Khakassia	2000		
	2005	21.9	-25.2			2005	no cross subs	
Kursk	2000	29.1			Novosibirsk	2000	29.1	
	2004	23.2	-5.9			2005	24.2	-4.9
Perm	2000	29.5			Omsk	2000	50.1	
	2005	27.5	-2			2005	31.9	-18.2
Tver	2000	55.7			Chita	2000	30.8	
	2005	52.1	-3.6			2005	9.2	-21.6
Samara	2000	40.7			Tomsk	2000	30.2	
	2005	-5.2	-45.9			2005	21.8	-8.4
Rep. of Bashkortostan	2000	35.5			Altaiskii Krai	2000		
	2005	29.8	-5.7			2005	no cross subs	
Tatarstan	2000	20.3			Buryatia	2000		
	2005	11.1	-9.2			2005	no cross subs	
Moscow Region	2000	48.5			<b>Far East</b>			
	2005	15.2	-33.3		Primorsky Krai	2000	30.2	
Smolensk	2000	35.5			Krai	2005	44	13.8
	2005	31.8	-2.6			Amurskii Krai	2000	17.5
					Krai	2004	23	5.5
						Khabarovsk	2000	44.5
						2005	40.1	-4.4
						Yakutia	2000	45.1
						2005	52.9	7.8
						Sakhalin	2000	15.1
						2005	27.9	12.8
						Magadan	2000	13.3
						2002	12.6	-0.7
						Kamchatka	2000	68.3
						2003	no cross subs	
						Chukotka	2000	3
						2005	47.6	44.6

Source:  
calculated based on UES tariff data

<sup>623</sup> I look at whether the difference between household and industrial tariffs as a percentage of industrial tariffs has increased or decreased over the 2000 – 2005 period (if 2005 is not available, I use the most recent available year).

*Table 3. List of regions receiving direct budget transfers in 2004<sup>624</sup>*

Oblast	Million RRub (allocated by federal budget/actually allocated)	Supra- Region
Primorsky Krai	460/283	RFE
Khabarovsk	460/283	RFE
Amurskaya Oblast	85/52	RFE
Kamchatka	680/418	RFE
Magadan Oblast	50/30	RFE
Chukotka	80/49	RFE
Sakhalin	225/138	RFE
<b>Arkhangelsk</b>	<b>460/283</b>	<b>EUR</b>
Yakutia	100/61	RFE

Source: *Tarif y Elektroenergetike*, published by the FST (Federal Tariff Service), p. 46.  
*Industrial Subsidies*

The key to understanding industrial subsidies in the current institutional setting is that ownership matters: if the owner and consumer are one and the same entity, industrial subsidies are likely to persist. This is particularly significant in Siberia, but also in a few regions in Europe.

Industrial subsidies are more difficult to ascertain from tariff data than other types of subsidies. They have always been based on informal negotiations, first in the regions and now increasingly at the level of the central government. The special deals for select industrial enterprises are concealed in the average industrial tariff data that is publicly available. As a rough proxy for likely occurrence of price discrimination, I compare industrial subsidies in different oblasts with the average prices in the larger supra-regions. If a region has much lower industrial tariff averages than neighboring regions, I take this as a sign that industrial subsidies may still play a role.

In Siberia, industrial subsidies continue to exist. In a number of Siberian regions, companies continue to receive electricity at low cost and do not have to rely on market prices for electricity. “They, [Irkutskenergo], give cheap electricity to aluminum companies.”<sup>625</sup> As we saw in chapter 3, Rusal controls almost all strategic hydro-electric dams in Siberia, or shares control with the government’s Hydro-OGK. And, Rusal has continued its quest to secure electricity at low prices. As the main producers are at the same time the main consumers of electricity, selling and buying of electricity are intra-enterprise matters, rather than market transactions. As long as Rusal can keep ownership of power plants, the new rules of the electricity markets will not change this arrangement. Until 2007, the aluminum companies and other large consumers could buy electricity at low regulated prices, enjoying substantial industrial subsidies that regional

<sup>624</sup> Note that Primorsky Krai and Khabarovsk were allocated the same amount, though as Khabarovsk has a smaller population, the per capita amount is larger in Khabarovsk (306rr/capita) than in PK (230rr/capita).

<sup>625</sup> Interview #52 with electricity sector economist, Irkutsk, 20071117. Statements to the same effects were also made in interview #15 with electricity sector Expert at financial institution, Moscow, 20061027; in interview #53 with employee of electricity company, Irkutsk, 20071119; and in interview #54 with businessman, Irkutsk, 20071120.



regulatory commissions set.<sup>626</sup> With the new rules of the wholesale market and the liberalization of prices that is planned until 2011, the electricity generators could increase prices for all consumers and sell more electricity on the wholesale market. The formal institutions mandate that regulated bilateral contracts (so-called “RDD”) will be replaced by unregulated bilateral contracts (so-called “SDD”). However, buyers and sellers are free to contract at whatever prices they see fit under the rules that govern SDDs, and aluminum companies “hope they can continue to get low prices via bilateral contracts.”<sup>627</sup> Because of the particular ownership structures that have emerged in Siberia, it is not likely that electricity will be traded to achieve the highest profits. Over half of the region’s electricity is produced in hydroelectric plants, which are owned by market participants who are not interested in maximizing revenues by selling to the highest bidders.<sup>628</sup> It also means that much of Siberia’s hydro-electric power continues to be sold below market prices to the adjacent industrial plants or to government owned consumers, like the Siberian railway.<sup>629</sup>

The essence of the Siberian subsidy regimes is thus that, *de facto*, much of the electricity is being sold at prices that are much lower than the average Russian tariffs and well below prices on the newly created Siberian wholesale market (see tables 6 and 7 below). Rusal, not surprisingly, is the main beneficiary. In 2006, Rusal was reportedly able to “buy electric power at \$0.012 per 1 kW/hr, which [wa]s so cheap because some of them bought out power stations.”<sup>630</sup> The company pays very little for electricity: its power costs are estimated at \$120 per ton of aluminum, which is far less than that of major aluminum smelters outside of Russia.<sup>631</sup> The government is the second largest owner of power plants in Siberia, through the company Hydro-OGK. Electricity for the Siberian railways is heavily subsidized; this allows the valuable cargo from Siberian mineral deposits to reach domestic and international markets without paying the price of their remoteness. While “the way tariffs are determined for hydro-electric power is not very transparent”<sup>632</sup> – there is clear evidence that “much of Irkutsk’s hydro electric power goes straight to aluminum companies and other big clients, that get a special rate.”<sup>633</sup>

An important caveat for the Siberian outcomes is that there is a sharp distinction between the large and small electricity producing regions. Siberia’s smaller regions look more like European Russia in terms of their subsidies: with decreasing household subsidies, no industrial subsidies

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<sup>626</sup> Ibid. As well as interview #50 with businessman, Irkutsk, 20071115.

<sup>627</sup> Interview #57 with electricity sector economist, Irkutsk, 20071122.

<sup>628</sup> One observer noted that owners of Irkutskenergo are not interested in profits from electricity generation, because “profits are made in another place; in aluminum, (...), that’s where profits are made.” Interview #54 with businessman, Irkutsk, 20071120.

<sup>629</sup> Rail subsidies were mentioned in several interviews, for example, interview #50 with businessman, Irkutsk, 20071115; interview #60 with energy company executive, Irkutsk, 20071203.

<sup>630</sup> Compared to aluminum companies in Europe Rusal pays little for electricity, approximately \$0.03 per 1 kW/hour, see “Норвежская построит завод в России; Если договорится о цене на электроэнергию,” *Kommerant*, January 12, 2006. Deripaska’s quest to secure low-cost electricity is also often reported in regional and national news, see for example, “Русский алюминий” ищет дешевую энергию,” *Kommersant* November 30, 2001.

<sup>631</sup> Pirani compares this with the costs that are typically estimated for the two US based companies, Alcoa and Kaiser: Alcoa \$289 per ton, Kaiser \$330; Simon Pirani, “Rusal Leaves Competitors Counting Their Costs,” *Metal Bulletin* 2002, no. 9 (2002).

<sup>632</sup> Interview #43 with electricity sector economist, Khabarovsk, 20071010.

<sup>633</sup> Interview #50 with businessman, Irkutsk, 20071115.

and no budget transfers. This means, however, that Siberia's smaller regions share an interest with their bigger neighbors in keeping Siberia a separate price zone, since they receive some of the low-priced energy from their hydro-powered neighbors. All this amounts to Siberia remaining a separate market, separately regulated, characterized less by competition than by mutual agreement between stakeholders, making "very unlikely that there will be competition [in Siberia]."<sup>634</sup>

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<sup>634</sup> Interview #16 with electricity sector consultant, Moscow/phone, 20061030.

*Table 4: Evidence of industrial subsidies*

<b>European Russia:</b> <i>Regional Average 107.6</i>				<b>Siberia:</b> <i>Regional Average 85.2</i>			
Moscow	Ind. Tariff difference	113.4 5.8		<b>Irkutsk</b>	IT difference	28.2 <b>-57</b>	<i>Yes</i>
<b>Sverdlovsk</b>	IT difference	<b>77.5</b> <b>-30.1</b>	<i>Yes</i>	<b>Krasnoyarsk</b>	IT difference	54.7 <b>-30.5</b>	<i>Yes</i>
Saratov	IT difference	106.4 -1.2		<b>Kuzbass</b>	IT difference	63.5 <b>-21.7</b>	<i>Yes</i>
Len. Oblast	Ind. Tariff difference	105 -2.6		<b>Khakassia</b>	IT difference	28.6 <b>-56.6</b>	<i>Yes</i>
Kursk	IT difference	114.1 6.5		Novosibirsk	IT difference	110.2 25	
Perm	IT difference	95.1 -12.5		Omsk	IT difference	120.3 5 35.15	
Tver	IT difference	154.6 47		Chita	IT difference	104 18.8	
Samara	IT difference	92.7 -14.9		Tomsk	IT difference	89.5 4.3	
<b>Rep. of Bashkortostan</b>	IT difference	<b>82.6</b> <b>-25</b>	<i>Yes</i>	Altaiskii Krai	IT difference	137.3 52.1	
<b>Tatarstan</b>	IT difference	<b>83.3</b> <b>-24.3</b>	<i>Yes</i>	Buryatia	IT difference	115.8 30.6	
Moscow Reg.	IT difference	113.1 5.55		<b><i>Far East, regional average of PK, Amur and Khab. 138.9</i></b>			
Smolensk	IT difference	112.9 5.3		Primorsky Krai	IT difference	150 11.1	
<i>Source: calculated based on UES tariff data<sup>635</sup></i>				<b>Amurskii Krai</b>	IT difference	<b>100.7</b> <b>-38.2</b>	<i>Yes</i>
				Khabarovsk	IT difference	166 27.1	

Comparing industrial tariffs across European Russia's region suggests that industrial subsidies remain concentrated in Tatarstan and Bashkortostan, and possibly Sverdlovsk. As we've seen previously, these three regions have remained generally more independent than other regions in European Russia, having negotiated bilateral treaties with Yeltsin, for example. Tatenergo and

<sup>635</sup> Price differentials across regions can serve as a proxy indicator for industrial subsidies. While data on industrial subsidies would be preferable, I doubt that such data exists. They have always been based on informal negotiations, and special deals for select industrial enterprises are concealed in the average industrial tariff data that is publicly available. In addition to price data, interviews and other sources confirm that industrial subsidies still matter.

Bashenergo have not been integrated into the new supra-regional holding companies (the TGKs and OGKs).<sup>636</sup> Prices have remained lower in these regions than in the regional average and they seem to retain the practice of subsidizing regional industry. With the exception of these regions in European Russia, subsidies to industrial and household consumers have generally declined and prices have been rising.

Comparing industrial tariff with supra-regional averages works less well for the Far East, where many of the electricity systems are isolated and are thus not connected. Comparing the three largest connected regions in the Southern Far East tentatively suggests that industrial tariffs may continue in Amurskii Krai, where electricity is generated in a large hydro-power plant. This is, however, a regional outlier that follows the Siberian trajectory.

## **5. Conclusion: one market or many?**

The institutions of the wholesale market have been created, and prices are gradually being liberalized, but at least three “zones” exist in the new market. Initially, the volume traded on the wholesale market at liberalized prices was a small share of total bilateral contracts: 15% in European Russia and 5% in Siberia during the period of 2003-06. Starting in 2007, the liberalized segment has been increased annually according to a schedule set by the government, which ranges from 5 to 15% per year. The plan is currently to phase out the regulated segment by 2011. In late 2007 a UES reformer stated confidently, “as of January 1, 2011 electric power will be sold only at free (competitive) prices.”<sup>637</sup> In addition to the liberalized bilateral contracts, electricity is also sold freely on the day-ahead market, where consumers buy electricity, should actual demand exceed projected demand as agreed in the long-term contracts. Although volumes traded in this way are far smaller than the volumes traded in bilateral contracts, liberalized day-ahead markets – also called “spot-markets” – are a key feature of liberalized electricity systems.<sup>638</sup>

The wholesale market is divided into the European and Siberian “zone.” The European zone is called the first price zone, the Siberian is called the second price zone, the Far East is the “un-priced” zone (*nezennovaia zona*).<sup>639</sup> Currently, these markets are practically separate. Almost all of Siberia’s electricity is sold in the Siberian market.<sup>640</sup> The preceding chapters have shown that this division is the result of the government’s ownership and subsidy bargains with different conglomerates. Electricity sector experts also predict that the three markets are likely to remain separate for the foreseeable future.<sup>641</sup> Whether these markets will merge or remain separate is in

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<sup>636</sup> These two Energos control large market shares in their respective regions, which is a cause for concern for competition experts; Pittman, “Chinese Railway Reform and Competition: Lessons from the Experience in Other Countries.”

<sup>637</sup> See RAO Website on reforms, <http://www.rao-ees.ru/en/reforming/market/show.cgi?market.htm>. Interview #63 with electricity company executive, Moscow, 20071212, statement to the same effect.

<sup>638</sup> Volumes traded on the spot market fluctuate; in a peak month in 2007, around 14% of total electricity traded in European Russia and around 8% of that traded in Siberia was on spot markets. See “Цены на электроэнергию в конце августа побили рекорды самых холодных дней зимы” *Interfax*, August 28, 2007.

<sup>639</sup> All price statistics by ATS (the system administrator of the Russian electricity grid) are divided into these three zones; see ATS website, for example, <http://www.np-ats.ru/>

<sup>640</sup> About 95% according to interview #61 with employee of electricity company, Irkutsk, 20071205.

<sup>641</sup> In Russian: “Объединение ценовых зон и неценовых не планируется,” quote by Dmitry Ponomarev, ATS director, *Vedomosti*, August 22, 2007.

part a technological issue related to the interconnectivity of high-voltage grids.<sup>642</sup> At the same time, interconnectivity is a policy question. High-voltage transmission grids would have to be strengthened if the Siberian market were to be linked more closely to Europe and the Far East. For the foreseeable future, however, Siberia and the Far East are likely to remain separated to prevent cheap Siberian electricity from entering the Far East and European Russia.

The European and Siberian markets differ in a number of respects other than the ones outlined so far. The Siberian market has far fewer participants, and the volume of electricity that is actually traded on the liberalized segments of the wholesale market is far smaller in Siberia than in European Russia. In 2005, out of the total 68 billion kWh traded on the wholesale market, only 3 billion kWh were traded in Siberia. While the share of electricity produced in Siberia is about a third of the electricity produced in European Russia, the volume of Siberian electricity traded on the wholesale market is less than 5%. There are also far fewer participants in the Siberian wholesale market than in the European wholesale market. In 2006, out of the 249 registered participants in the wholesale market, only 33 were Siberian participants.<sup>643</sup> While the European share of Russia's electricity production is about 3.3 times larger than Siberia's, the share of European wholesale market participants is 7.5 times larger than Siberian participants. The low level of trading on the wholesale market is due to the fact that major Siberian electricity consumers have not switched to buying on the wholesale market.

In Far East, and in two regions in the European Far North – Komi and Arkhangelsk – the government retains full control over price levels. The Far East therefore remains a separate zone, and power generators do not sell on the wholesale market. Some of the Far East's regions are "isolated systems", meaning they are not technically connected to the national grid, because they are located in remote areas (Kamchatka, Yakutia, Chukotka). In these regions, it is not surprising that tariffs remain fully regulated, as little competition would be possible. The largest producers of the southern Far East (Primorsky Krai, Amur and Khabarovsk, especially), however, *are* linked to Siberia and could technically be integrated into the nationwide system. Keeping the Far East a separate zone is a policy decision to protect the local electricity and coal sectors.

#### *Price differentials persist*

Regulated prices have increased everywhere in Russia during the 2000-2004/05 period (see table 5). But as of 2005, marked differences between price levels remain across Russia.<sup>644</sup> The price differentials of the regulated prices are an indicator of different cost structures of power generation across the regions. They are also a mark, however, that different price zones exist, partly due to persistent differences in subsidy regimes.

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<sup>642</sup> Historically, the Siberian and the European grids were connected with a high-voltage transmission link that went via Kazakhstan. As the Soviet Union broke up and Kazakhstan became an independent country, they started charging for transmission. Interview #52 with electricity sector economist, Irkutsk, 20071117.

<sup>643</sup> In 2005 there were 169 Russian European participants and 27 Siberian participants in each region's respective market; *UES Annual Reports 2005 and 2006*, available online <http://www.rao-ees.ru/en/archive/>.

<sup>644</sup> That prices differ was mentioned several times in interviews, for example, interview #52 with electricity sector economist, Irkutsk, 20071117.

The price dynamics on the liberalized segment of the wholesale market are also telling. Prices in the Siberian zone have been consistently lower than in the European zone, even as price liberalization has progressed (see Tables 6 and 7).

*Table 5: Price increases between 2000 and 2005  
Average of all price increases: household, urban, rural and industrial*

<b>European Russia</b>	<b>%</b>	<b>Siberia</b>	<b>%</b>	<b>Russian Far East</b>	<b>%</b>
Moscow	164	Tyumen	78	Primorsky Krai	67
Sverdlovsk	82	Irkutsk	216	Amurskii Krai	136
Saratov	160	Krasnoyarsk	123	Khabarovsk	174
Leningrad Oblast	90	Kemerovo	165	Yakutia	106
Kursk	152	Khakassia	156	Sakhalin	192
Perm	110	Novosibirsk	167	Magadan	130
Tver	179	Omsk	182	Kamchatka	29
Samara	189	Chita	136	Chukotka	274
Rep. of Bashkortostan	65	Tomsk	97		
Tatarstan	109	Altaiskii Krai	267		
Moscow Region	187	Buryatia	142		
Smolensk	123				

*Source: calculated based on UES tariff data*

*Table 6: Levels and differentials for regulated prices, in 2005<sup>645</sup>*

<b>Average price for all consumers</b>	<b>RR/kwH</b>
European Russia without Tat and Bash:	0.93
Large Siberian Hydro Regions	0.37
Russian Far East	1.48

*Source: calculated based on UES tariff data*

<sup>645</sup> Based on averages of the largest producing regions in each of these supra-regions (same regions as Tables 1, 2 and 3).

*Table 7: Price differentials in the liberalized segment of the wholesale market, 2009*

<b>Average price wholesale market, July 2009<sup>646</sup></b>	<b>RR/kwH</b>
European Russia	0.69
Siberia	0.30
Russian Far East	<i>prices not liberalized</i>

*Source: ATS*

Reformers have claimed a full political and “moral” victory in privatizing and liberalizing the Soviet era monopoly.<sup>647</sup> The most visible and most symbolic organizations – UES and the Energos – have disappeared and new, supra-regional companies have taken their places. The dismantling of the old structures and the demolition of Soviet-era monopolies, however, has not translated into the creation of a nation-wide competitive market. Regional differences in tariff regulation have emerged along larger geographical boundaries, which are reflected in different price levels across regions. Most observers agree that price levels in the future will depend on how the “differentiation” of prices will develop. According to Chubais, this in turn depends on many different factors, including the “development of regions, the development of sectors; (...) myriads of different interests are involved.”<sup>648</sup> The central government under the Putin administration allowed liberal reforms to happen, but has also been the arbiter of disputes between the reformers, energy interests and industrial interests.

Chapter 1 posed the question—who shaped Russia’s new infrastructure markets? The last three chapters pieced together an answer: liberal reformers played a key role in dismantling the old monopoly structures and setting up new wholesale markets, yet they had to compromise with other political forces. I argued that the Putin administrations’ overarching agenda was developmental, not a liberal or a statist transformation *per se*. Liberal reformers were therefore forced to make concessions to energy and industrial conglomerates. In return for their contribution to the government’s developmental agenda, conglomerates received special privileges in the ownership restructuring and in the new set of rules that govern prices and subsidies.

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<sup>646</sup> According to ATS data and press release, “Итоги работы оптового рынка электроэнергии и мощности за 24.07.2009 – 30.07.2009,” *ATS Moscow*, July 31, 2009.

<sup>647</sup> *UES Annual Report 2007*. UES executive Gozman claimed the reforms are a “moral victory,” see chapter on members of the UES board; available at <http://www.rao-ees.ru/en/invest/reporting/reports/report2007/>.

<sup>648</sup> Remark by Chubais at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007.

## **Chapter 5: Industrial geography, or, how “things” matter**

1. *Introduction*
2. *Soviet planning and industrial geography*
3. *How “things” matter*
  - *The link between Gazprom and European Russia’s electricity sector*
  - *The link between Rusal and Siberia’s electricity sector*
  - *The link between Far Eastern coal mines and power plants*
4. *Theoretical implications*



*The electricity system – it was never built for a market, and there will always be limits.*

*Former electricity sector executive, Irkutsk, December 2001.*<sup>649</sup>

## **1. Introduction: the role of industrial geography**

Both at the regional and later at the federal level, the government's development strategy relied on modernizing elements of Soviet-era industrial structures, rather than abandoning factories and turning scores of cities into ghost towns. One element of this strategy has been the creation of national champions. At least in part, existing industrial facilities were the "chosen" drivers for economic growth, development and diversification beyond the oil sector. The liberal faction of the Yeltsin and later Putin governments saw this as the protection of unviable behemoths. Dominant factions, however, have always viewed the support of regional and national "champions" as a way to *create* competitiveness. A central theme of the dissertation is that economic policy and reform trajectories reflect the dominance of the view that the competitiveness of Russian firms is created in the context of domestic economic policy. Reforms and policies are adapted to the needs and interests of the "champions," equipping them to compete internationally and employ Russians domestically.<sup>650</sup> As we have seen previously, this strategy was largely a response to the trauma of the economic collapse of the 1990s, which came to be understood as the wholesale failure of the liberal model and the need to "adjust" it to the Russian context. Interestingly, this development strategy meant that certain elements of Soviet-era industrial geography were maintained and even strengthened, as they became part of the post-Soviet strategy for economic development.

This chapter turns to the role of industrial geography in the electricity sector's transformation. With industrial geography I refer to the complex spatial map of gas pipelines, coal mines, dams, power plants, factories, etc. If we think of Russia's industrial geography as a three-dimensional structure, the post-Soviet collapse was a sharp blow that destroyed many of its constitutive elements and relations between them. Yet, as relations between these elements were undone and reshaped, some of the physical ties that bound them together proved resilient, and large chunks of the Soviet structure were left intact.<sup>651</sup> Industrial geography, I argue, continued to matter precisely because of an ongoing government strategy to protect and modernize certain elements of Soviet-era industrial organization. (We saw previously that protection took various forms, including energy subsidies, government investment, and the enlisting of successful oligarchs to run ailing industries.) In the electricity sector, power plants remained closely tied to their fuel providers and a number of electricity intensive industries. The chapter examines how these ties played a role in the transformation of the electricity sector's transformation, thus dealing with the question how the physical aspects of the electricity system feature in the political bargains.

In short, industrial structures mattered in two ways. First, industrial geography configured conglomerates' interests vis-à-vis the electricity sector in a particular way. Second, elements of

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<sup>649</sup> Interview #60 with energy company executive, Irkutsk, 20071203.

<sup>650</sup> This support has taken many forms, see chapter 2.

<sup>651</sup> This is a mirror image of the institutional recombination described by Stark and Bruszt, *Postsocialist Pathways: Transforming Politics and Property in East Central Europe*, p. 12.

the industrial structures were mobilized as justifications in political arguments with the liberal reformers, who would have preferred not to make concessions to conglomerates and create one set of rules for all. Before fleshing out these claims, we need to first understand what aspects of the industrial geography were particularly important. What mattered for the transformation of the electricity sector in particular were the *physical ties* that linked electricity to the gas sector in Europe, to industrial interests in Siberia, and to the coal sector in the Far East. These ties are largely the legacy of Soviet-era industrialization patterns. The Soviet Unified Electricity System built predominately gas-fired power plants in European Russia; Siberia's industry is largely powered by huge hydro-electric dams; and Far Eastern power plants rely on regionally mined coal.<sup>652</sup> Soviet industrialization bequeathed the post-Soviet electricity sector with ties to adjacent upstream and downstream sectors: connecting power plants and gas pipelines in European Russia, large industrial consumers to Siberian hydro-electric plants, and Far Eastern coal mines to coal fired power plants. Soviet planners saw these ties as the basis for efficient production, and deliberately built them to be strong and tight.

There are two arguments about the role of geography that help clarify the alternative path this chapter will chart: one, technology and geography are largely irrelevant, because they are transformed in the process of market reform, and two, on the contrary, they determine outcomes because they are immutable and natural "givens." In a liberal model, upstream and downstream ties between electricity companies, fuel providers and industrial consumers should be malleable and physical ties should not matter much. Just as each kilowatt should go to the highest bidding consumer, so should each cubic meter of gas, and every ton of coal, give and take transport cost. The same logic also wants to award assets to the investor who offers most, and thus values ownership most. The alternative position places a great deal of importance on the underlying industrial structures to explain political outcomes. When I asked Russian electricity sector experts about the politics of ownership changes, prices and subsidies, they often answered – "it's not politics, it's technology."<sup>653</sup> The argument is that the Soviet-era decisions about the type of power generation – for example Stalin's "gasification" campaign that turned coal fired plants in European Russia into gas fired plants – predetermined who will gain influence over the post-Soviet electricity sector. One observer argued, for example, that the Siberian zone remains separate and different, because "here, 50% of electricity is generated via hydro-electric plants" and because the regions' "industry is very energy intensive"<sup>654</sup> – thus privileging industrial geography as a key determinant of reform outcomes in the electricity sector. This suggests a type of geographic determinism: Soviet industrial geography hardwired post-Soviet privatization and reform outcomes. According to this logic, the division of the Russian electricity sector into three zones is natural, rather than political, because it mirrors underlying production technologies.

The evidence I found suggests a somewhat different story. Ownership and subsidy regimes are spatially organized in the way outlined in chapters 3 and 4 principally for two reasons: first, industrial structures configured conglomerates' interest vis-à-vis the electricity sector in a particular way. The ties between the electricity sector and adjacent upstream and downstream "neighbors" mattered initially because they shaped the interests of conglomerates in the

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<sup>652</sup> These are the dominant patterns: there are hydro-electric plants in European Russia as well, and many of the outlying regions in Siberia rely on coal-fired power plants.

<sup>653</sup> Interview #37 with electricity sector executive, Vladivostok, 20071002.

<sup>654</sup> Interview #52 with electricity sector economist, Irkutsk, 20071117.

electricity sector: Gazprom was particularly interested in European Russia's utilities, while Rusal targeted Siberian hydro-electric power plants. Far Eastern electricity companies have seen their future depend on the regional coal mines. This alone would not necessarily have guaranteed that the interests of Gazprom, Rusal and Far Eastern power plants were met, however. Physical links would not necessarily have shaped reform outcomes, had the conglomerates (and in the Far East, the electricity sector) not won the political battle with liberal reformers to leave physical ties intact and even strengthen them through ownership and subsidy decisions. In other words, the conglomerates' interest would not have been realized, had it not been for their political victory over the liberals in key points.

The rhetorical mobilization of industrial structures contributed to this victory. The second way in which industrial geography mattered for the way ownership and subsidy regimes emerged is thus as discursively constructed reality in the political battles about sector reform. More precisely, I found that discursive strategies that "naturalized" the privilege of certain conglomerates as a necessary consequence of geography were particularly powerful. This meant that physical facts mattered both as structural determinants of interests *and* as rhetorical constructions. The point is to emphasize the importance of political strategies that manipulated the boundary between "things" and "politics" – between what is politically negotiable and what is technologically necessary or naturally given.<sup>655</sup>

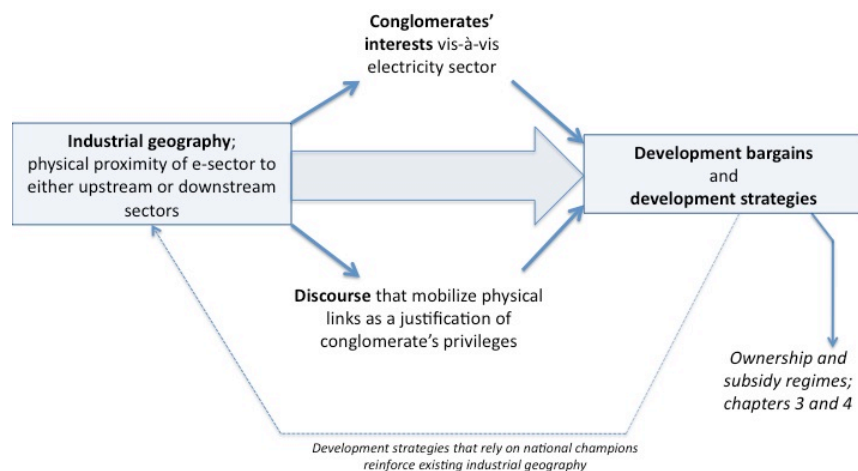
We see this process at play if we compare how political actors – the liberal faction and the conglomerates – have referred to geography and technology, how they have mobilized the physical elements of the system differently. Liberal reformers wanted to do away with physical boundaries by creating "one market" and to overcome technological givens that may be obstacles on the way. They have stressed that technology and geography are malleable, and, given enough capital investment, can be updated, adjusted and wholly rebuilt. Russia's conglomerates, on the other hand, have stressed the physical aspects of the system as natural, as the naturalness of technological and geographical givens justifies their special privileges. Only because the conglomerates successfully mobilized the physical links in the political arena, have new boundaries dividing electricity markets in European Russia, Siberia and the Far East been created. And only because of this successful mobilization, have the ties between the electricity sector and the upstream/downstream sectors were maintained and even strengthened. Arguably, these elements of the industrial structure would have been torn asunder or slowly unraveled, had the liberal *laissez-faire* model gained the upper hand. Thus, industrial geography shapes outcomes both as concrete things and as discursively constructed physical reality.

Another way of summarizing the role of industrial geography is to argue that it conditioned, rather than determined the outcomes of political bargains about energy subsidies and infrastructure provision. It conditioned bargains by delimiting the set of possibilities for bargains between conglomerates and the government in two ways: it shaped conglomerates' interests and it made possible the rhetorical strategies that constructed physical facts as natural givens. This interpretation of physical geography combines two apparently competing strains in my argument – one that relies on political negotiations to explain outcomes, and another that highlights material conditions inherited from the Soviet period, the physical "things" dotting the landscape.

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<sup>655</sup> Mitchell 2004 draws attention to this dynamic, Timothy Mitchell, *Rule of Experts : Egypt, Techno-Politics, Modernity* (Berkeley: University of California Press, 2002), e.g. pp.29.

*Illustration I. Relationship between industrial geography and developmental bargains*



The chapter thus adds an explanation of *how* conglomerates have managed to shape markets to the narrative of the dissertation. It also adds an additional layer to the explanation of the three divergent trajectories. Industrial geography is an important explanatory element of the emergence three zones, because it configured the regionally specific political bargains. I show in this chapter that the three different trajectories were created because different industrial structures shape the interests of Russia’s conglomerates *and* because conglomerates have successfully mobilized their physical proximity to the electricity sector to argue that they should become new owners, and that subsidy regimes should operate in a certain way. The result was that ownership and subsidy regimes varied across the country; it turned out “there is no one recipe for all; the restructuring of different companies took into account the differences of the regions it was located in, their economic and natural particularities,” as one sector insider observed.<sup>656</sup>

The chapter is different from previous ones in that I stress similarities in the mechanisms that enabled the three conglomerates to get their way. Previous chapters developed the argument that subsidy and ownership regimes were the result of developmental bargains between the government and the conglomerates with different preferences vis-à-vis the electricity sector. Here I outline the differences in the physical links that tie the electricity sector to either upstream fuel providers or downstream consumers. But I also highlight that conglomerates used similar strategies to mobilize these ties in political arguments.

Finally, the chapter addresses the question of Soviet-era legacies – with industrial geography being the “legacy” in question. The debate on how institutional and cultural features of the Soviet social, political and economic order persist, and how these legacies shape post-Soviet

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<sup>656</sup> “Кто правее, Есапов или Чубайс?” *Komsomol'skay Pravda*, November 13, 2002.

outcomes, is large and diverse.<sup>657</sup> Legacies tend to be viewed as static factors that shape post-Soviet politics.<sup>658</sup> Almost by definition legacies are causal factors situated in the past, therefore not alterable and static. The role of legacies in the electricity sector, however, suggests that even physical infrastructure, arguably one of the most static and apparently fixed elements of the Soviet-era inheritance shaped the post-Soviet electricity sector transformation not only because it structurally conditioned particular outcomes, but also because it entered political battles,

The legacies I address in this chapter are elements of economic geography: the close and tight physical ties between the electricity sector and either upstream fuel providers or downstream consumers. While some studies have included geography as a communist legacy,<sup>659</sup> it has also been argued geography is “largely autonomous from the structures and institutions of communist rule.”<sup>660</sup> If we extend the definition of geography from rivers and mountains to include aspects of human geography, in particular industrial and economic geography, they clearly feature as important legacies. The point here however, is not to add another type of legacy to the already long list that is typically examined. The argument is that economic geography, arguably one of the most static legacies, does not determine outcomes, but, instead, shapes interests and is mobilized by post-Soviet actors in political arguments. This suggests something about the workings of legacies more generally: they may be as important as discursively and selectively mobilized tropes as mechanistic causal factors.<sup>661</sup> Legacy continues to be important, not because of their *inherent* fixity or un-changeability, but because political actors have portrayed them as natural to justify the privileges they secured during the transition period.

To disentangle these arguments about the role of economic geography and physical “things” in political bargains, I proceed in three steps: I address briefly how the current economic geography is a result of Soviet-era planning, and the world-views and ideals it embodied. I then discuss how physical landscapes built in Soviet times shape the interests of the conglomerates involved in the bargains about the restructuring of the electricity sector in the post-Soviet period. Concretely, I describe the ties that bind electricity to the gas sector in European Russia, to industrial consumers in Siberia, and to coal companies in the Far East, and how these ties shaped interests and were mobilized in political arguments. Finally, I conclude with observations on how this argument about geography may be relevant beyond the case of Russia’s electricity sector.

A last introductory note is methodological: a weakness of this chapter is that it is difficult to muster evidence of the discourse that contributed to the conglomerates’ success. I don’t know the words and arguments that were used in the bargains between the government and the oligarchs.

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<sup>657</sup> For a survey of this literature see Jody LaPorte and Danielle Lussier, "Revisiting the Leninist Legacy: Conceptualization and Measurement for Meaningful Comparison," in *Annual meeting of the APSA 2008 Annual Meeting* ( Boston, Massachusetts: 2008).

<sup>658</sup> Markus is critical of approaches that overemphasize legacies, as he sees legacies based explanations as “historically deterministic.” Stanislav Markus, "Corporate Governance as Political Insurance: Firm-Level Institutional Creation in Emerging Markets and Beyond," *Socio-Economic Review* 6, no. 1 (2008): p.74.

<sup>659</sup> For example, Grigore Pop-Eleches, "Historical Legacies and Post-Communist Regime Change " *The Journal of Politics* 69 no. 4 (2007).

<sup>660</sup> LaPorte and Lussier, "Revisiting the Leninist Legacy: Conceptualization and Measurement for Meaningful Comparison."

<sup>661</sup> Obviously, this will depend on the type of legacy. I am suggesting that it may be worth considering if the second way legacies work, as mobilized memories or tropes, is concealed as the former, more straightforward causal mechanism.

We can see, however, that arguments about the naturalness, the necessity and the efficiency of maintaining the connection between the electricity sector and respective adjacent sectors turn up in various documents – newspapers, business strategy documents, and academic writing. The inference that conglomerates shaped public and academic discourses about regional development is not particularly controversial. Most Russians are convinced, for example, that regional newspaper coverage is often “bought” and that companies pay for what is called “white PR” – reporting that reflects the views of the company and makes the company itself appear in a good light, while demonizing competitors or opponents.<sup>662</sup> The same is sometimes said of academic institutions, although academics generally enjoy a better reputation than journalists.<sup>663</sup> I draw mostly on regional newspaper sources, regional development reports and business strategies of the respective companies to illustrate how they mobilized physical ties to justify the particular ownership and subsidy regimes that characterize the three zones.

## **2. Soviet-era planning and industrial geography**

Human geographers have long stressed that social activity is always embedded in “space” – that landscapes and geographies are reshaped by human activity, which in turn condition social life down the road.<sup>664</sup> Soviet planning fundamentally altered the geography of the Russian empire, collectivizing farms, building factories, power plants and dams, university towns, military installations, to just name a few of the important ways economic geography was reshaped. These tangible “things” have, in turn, shaped the post-Soviet trajectory of social change.<sup>665</sup> In this study, I primarily focus on the physical connections between electricity plants, and either the downstream industrial giants or the upstream fuel providers. Other aspects of Russia’s geography also matter at times: for example, references to climatic conditions in particular regions, or of Siberia and the Far East as frontier regions. The discussion below focuses on industrial geography.

While I address mostly the post-Soviet transformation, I will briefly introduce how the imperatives of Soviet planning have congealed in certain ways, in as much as they are relevant to understanding the post-Soviet period. During the early Soviet period, electrification, and later, the creation of ever-higher capacity to produce electric power, were among the highest priorities of economic planning. The utopian project of bringing light to all corners of the Soviet state rendered the projection of state power over the economy synonymous with the modernization of social life that was to be brought about with the expansion of the electricity grid: “communism = soviet power plus electrification.”<sup>666</sup> Even as electricity was increasingly taken for granted over

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<sup>662</sup> The director of Krasnoyarskenergo, Kolmogorov, hints at this in “Раскалять Амбиции не продуктивно,” *Krasnoyarsky Rabochi*, March 5, 1998.

<sup>663</sup> The proximity of the Siberian branch of the Russian Academy of Sciences with regional industrialists was mentioned in interview #58 with academic, Irkutsk, 20071124.

<sup>664</sup> See for example Mike Crang and Nigel Thrift, *Thinking Space* (London; New York: Routledge, 2000).

<sup>665</sup> Stephen Collier’s work concerns heating pipes, chapter on pipes in S. Harrison, Steve Pile, and Nigel Thrift, *Patterned Ground : Entanglements of Nature and Culture* (London: Reaktion Books, 2004), pp.50.

<sup>666</sup> Brill, R. and Kheister, Экономика социалистической энергетики, published by Высшая Школа, Moscow, 1966.

the decades of the twentieth century, it continued to carry a symbolic association with modernity as a basic prerequisite for modern life.<sup>667</sup>

This high priority meant that during seventy years of planning, every aspect of the physical structure of the electricity system was shaped by the imperatives of Soviet industrialization, however imperfectly plans were implemented and negotiated along bureaucratic hierarchies. The geographical distribution of industries, the monopolistic structure of the economy, and the geographical map of power plants and transmission grids profoundly reflect the logic of Soviet industrialization.<sup>668</sup> The production of electric power was designed as an integrated system to serve as the backbone of the planned economy. Electrification and industrialization were parallel projects, which meant that the electricity system closely tied electricity generation to industrial capacity.<sup>669</sup> As a factory or a gas pipeline was planned and built, electric power plants were constructed simultaneously, often building the two in close proximity to enhance overall efficiency.

Soviet planners are famous for their preference of “company towns” and *gradobrazuyushchee predprini-matelstvo*, literally translated, city-forming enterprises – where huge, integrated companies were the primary employer in a particular city.<sup>670</sup> Soviet city planning was also based on the premise that production and living space were integrated systems. This meant that electricity grids literally became the physical ties that keep people’s work places and living quarters connected.<sup>671</sup> This was particularly obvious with the construction of hydro-electric dams in Siberia: “as a result of the development of hydro-electric plants during Soviet times, [we now have] tight links between industry and electricity.”<sup>672</sup> Similar ties also exist in industrial towns in European Russia, which were built along with gas pipelines, or towns in the Far East that clustered around coal mines. While the disorganization that followed the introduction of market reforms undid many of the Soviet-era industrial structures,<sup>673</sup> some have remained intact.

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<sup>667</sup> Ong and Collier, *Global Assemblages : Technology, Politics, and Ethics as Anthropological Problems*, Platz, "The Shape of National Time: Daily Life, History and Identity During Armenia's Transition to Independence 1991 - 1994."

<sup>668</sup> For the ideal-typical formulation of the planned economy, Janos Kornai, *The Socialist System : The Political Economy of Communism* (Princeton, N.J.: Princeton University Press, 1992). For an anthropologist’s perspective, Katherine Verdery, *What Was Socialism, and What Comes Next?*, Princeton Studies in Culture/Power/History (Princeton, N.J.: Princeton University Press, 1996). See also Gaddy on the militarized economy, Gaddy, *The Price of the Past : Russia's Struggle with the Legacy of a Militarized Economy*.

<sup>669</sup> Coopersmith, *The Electrification of Russia*.

<sup>670</sup> Ivan Szelenyi, Gregory Andrusz, and Michael Harloe, *Cities after Socialism : Urban and Regional Change and Conflict in Post-Socialist Societies*, Studies in Urban and Social Change (Oxford; Cambridge, Mass., USA: Blackwell, 1996). Stephen Collier, chapter 20, in Ong and Collier, *Global Assemblages : Technology, Politics, and Ethics as Anthropological Problems*.

<sup>671</sup> And heating pipes, Stephen Collier’s chapter on pipes in Harrison, Pile, and Thrift, *Patterned Ground : Entanglements of Nature and Culture*, pp.50.

<sup>672</sup> Interview #57 with electricity sector economist, Irkutsk, 20071122

<sup>673</sup> Blanchard, "Disorganization."

### **3. How “things” matter in European Russia, Siberia and the Far East**

#### *European Russia: Physical link between Gazprom and the electricity sector*

Controlling most gas fields in the country and thousands of miles of pipelines stretching from Siberia to Poland, Gazprom’s influence on economic policy is undoubtedly national, rather than regional. Why then has Gazprom been particularly influential in European Russia’s electricity reforms?

It appears that Gazprom was influential European Russia’s electricity sector transformation, because there is a physical link that connects the gas-giant to power plants. In European Russia, gas and electricity production are linked via a tangible network of domestic gas distribution pipelines. These domestic pipelines date back to the “gasification” campaigns initiated under Stalin in the mid 1940s.<sup>674</sup> Like the “electrification” the “gasification” was an ambitious project, aiming to fuel industrialization in the service of the Soviet planning imperatives. Today, Gazprom’s largest customers are power plants: 37% of Gazprom’s domestic supplies go to power companies.<sup>675</sup> For European Russia’s electricity companies, in turn, Gazprom is the single largest supplier: over 80% of European Russia’s electricity is produced in gas-fired plants, and Gazprom produces almost 90% of Russian gas.<sup>676</sup> Unlike electrification, however, which reached almost all corners of the Soviet Union by the 1970s, many Russian regions are still awaiting “gasification.”<sup>677</sup> Only European Russia is “gasified,” meaning that only factories, power plants and households in European Russia are connected to Gazprom’s pipelines.<sup>678</sup> Only 3% of Gazprom’s domestic sales go to Siberia and the company does not supply the Far East.<sup>679</sup> Siberian and Far Eastern power plants lack ties to Gazprom, because power plants there are largely hydro-powered or coal fired. Even though the vast majority of gas originates in Western Siberia, most of Siberia is *not* “gasified.”

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<sup>674</sup> The first natural gas pipeline between Moscow and Saratov was constructed in 1946, see Stern, *The Future of Russian Gas and Gazprom*.

<sup>675</sup> Gazprom website, <http://www.gazprom.com/marketing/russia/>, last accessed 04102009.

<sup>676</sup> *Тепловые генерирующие компании ПАО ЕЭС РОССИИ*, published by UES, Moscow, 2006. On Gazprom’s overall role in Russia, see Simmons and Murray, “Russian Gas: Will There Be Enough Investment?.”

<sup>677</sup> The Sakhalin peninsula in the Russian Far East, for example, is the site of one of Gazprom’s largest gas fields, but much of the island is still awaiting “gasification.” The fields are located in the North of the peninsula and off-shore in the Sea of Japan, but Sakhalin’s main urban center, Yuzhno-Sakhalinsk, was never connected to the gas grid. This fact became the subject of a political scandal. The pipeline was supposed to be built in 2003, but nothing happened. Interview #38 with academic, Vladivostok, 20071003.

<sup>678</sup> The Ural region is included in my definition of the European Russian zone.

<sup>679</sup> Gazprom website, <http://www.gazprom.com/marketing/russia/> last accessed 04102009.



Graphic I: Regional distribution of Gazprom's Russian domestic gas sales, 2008



Source: Gazprom website, <http://www.gazprom.com/marketing/russia/>

(Note: the regional designations refer to the seven federal districts/federalnyye okruga)

How and why did these physical links between the two sectors translate into special privileges for Gazprom? The physical link between the gas and the electricity sector made European Russian electricity assets particularly attractive targets for take-over and integration into the Gazprom empire; it thus shaped Gazprom's interest vis-à-vis the electricity sector. During electricity sector reforms, Gazprom used the physical connection to the gas sector as part of the same production chain as a justification why it *should* own electricity assets. In its business strategy, the company stated that its aim is to “achieve synergies by combining natural gas and electric power businesses. The major focus is (...) improving the efficiency of natural gas fired power generation, which will provide for the effective use of natural gas in the context of growing energy demand of the Russian economy.”<sup>680</sup> Since power plants are only in European Russia part of Gazprom's production chain, this argument was only relevant in European Russia, and the company's influence was most salient there.

Secondly, because it is European Russia that is largely “gasified,” industrial consumers of gas are the main beneficiaries of subsidized gas. The increase in electricity prices that has accompanied price liberalization has compensated Gazprom for having to subsidize European Russia's domestic industry. More generally, the national energy strategy also reflected the influence of Gazprom. One of President Putin's most central political strategies has been the reassertion of control of key energy resource. Since 2000, the state has not only claimed back a much larger share of oil and gas profits as taxes, it also sought to re-gain ownership of energy

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<sup>680</sup> Gazprom business strategy and Gazprom electricity sector strategy, available on Gazprom website, <http://old.gazprom.ru/eng/articles/article8523.shtml> last accessed 04102009. Alexey Miller, Chief Executive of Gazprom has also frequently stated that Gazprom wants to be a “global vertically integrated energy company”, see for example his statement at the XXIII World Gas Conference, Amsterdam, June 6, 2006.

assets that had been privatized in the 1990s.<sup>681</sup> At the same time, it has long been Gazprom's strategy to become an energy empire, controlling all the links of the energy production chain – from the production of extraction equipment, oil and gas extraction, transport and distribution pipelines, to electricity production and energy retail.<sup>682</sup> Note that both the state's energy strategy and Gazprom's corporate strategy relied on consolidating ownership of the energy production chain.

This overlap between its corporate goals and the country's energy strategy can serve as evidence of Gazprom's influence. The company's unofficial slogan "*what is good for Gazprom, is good for Russia*,"<sup>683</sup> captures its own understanding of influence well; and, of course, previous chapters have presented evidence of this influence as well. It is difficult to say whether the government or the company initiated these strategies. Ultimately, I think this distinction will remain blurred in the Russian context. Trying to locate agency either in private interest or the government is ultimately arbitrary, as Gazprom's leadership and Kremlin insiders are practically the same set of people. What we can assess, however, is the outcome of the interaction between Gazprom and the government: with the acquisition of important electricity assets in European Russia, Gazprom is a step closer to completing its own corporate strategy, of becoming a global vertically integrated energy company, or in the words of observers an "energy behemoth."<sup>684</sup>

The importance of economic geography in explaining Gazprom's influence on the electricity sector is confirmed by a closer look at European Russia's regions *without* a close link to Gazprom. Tatarstan, Bashkortostan and Sverdlovsk are three regions where regional leaders in the 1990s were exceptionally independent. In Tatarstan and Bashkortostan all energy assets were privatized into ownership of family of regional leaders. As a result, fuel for regional electricity companies is *not* supplied by Gazprom and there is thus no physical link between the electricity sector and the gas giant. In Sverdlovsk, gas is supplied by Itera, Russia's largest independent gas company.<sup>685</sup> As outlined in chapter 3 and 4, Gazprom has not had a similar influence on the electricity sector in these regions: Tatenergo and Bashenergo have remained independent electricity companies, and Sverdlovsk continues to subsidize downstream industrial production.

Note again, however, that my argument about importance of the physical link between the two sectors is not one of geographic determinism; there is nothing that was natural or necessary about this outcome. Gazprom is connected to other downstream industries that did not fit into its corporate strategy and that the company was not interested in.<sup>686</sup> Also, more importantly, Gazprom did not end up owning *all* of European Russia's power plants; as we've seen in chapter

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<sup>681</sup> See Goldman, *Petrostate : Putin, Power, and the New Russia*.

<sup>682</sup> This strategy goes beyond the electricity sector, a proposed merger with SUEK, a major coal company, and the construction of LNG facilities, for example. Interviews #26 and #27 with energy sector experts, Berkeley, 20070613; interview #17 with electricity sector expert at financial institution, Moscow, 20061101.

<sup>683</sup> See for example Trenin, "Russia Redefines Itself and Its Relations with the West."

<sup>684</sup> Note that Gazprom acquired a whole series of businesses in the oil sector after the break up of Yukos.

<sup>685</sup> See Stern, *The Future of Russian Gas and Gazprom*, p.181. See also Loginov, E.L., et.al. in Экономика региона, 8/23, 2005, Либерализация национального рынка газа: проблемы реформирования российской экономики, p.35.

<sup>686</sup> Gazprom also supplies the communal housing sector, for example, but is hardly interested in taking over household level distribution of gas within Russia.

3, foreign owners with no physical links to Russian electricity assets have been granted ownership at times.

*Siberia: aluminum and electricity and the “territorial industrial complexes”*

How was Rusal able to negotiate special privileges in the political bargains surrounding Siberia’s electricity sector? Rusal’s prominent role in Irkutsk oblast’s economy certainly played a role.<sup>687</sup> Yet, there was nothing that was guaranteed about the company’s ability to receive special privileges; de-industrialization was a wide-spread problem in Russia and only few industries were able to negotiate special electricity rates. Much like Gazprom in Europe, Rusal benefitted from a regional development discourse that upheld the importance of the aluminum industry as a vital aspect of the region’s well-being. This discourse “naturalized” the industrial conglomerate’s connection to Siberia’s power plants, mobilizing it as an argument why Rusal *should* benefit.

*Rusal* is linked to Siberia’s most valuable electricity assets by a close physical connection that originated in Soviet industrial planning, a fact that is routinely mentioned and mobilized in arguments about the future of the electricity sector. “We are closely connected with our industrial consumers, we depend on them. Therefore we need to care for them and together adjust our price policies,”<sup>688</sup> argued a prominent electricity sector executive. One of the most important reasons why Siberian industrial lobbies were able to capitalize on their material connectedness with the electricity sector was that they were thought to be complementary elements of the so-called Territorial Industrial Complexes (*ТПК*, территориально-производственный комплекс). ТПКs are the Soviet version of industrial clusters or company towns, consisting of closely connected industries that use local resources. Importantly, the idea of a ТПК was that its “unity,” i.e. the synergies that are created through the proximity of upstream and downstream industries, was its strength. ТПКs were thought of as the solution to the problem of underdevelopment of remote areas. The city of Bratsk, in Irkutsk Oblast, is an example of a typical Siberian ТПК. Created on a river bend of the Angara river in Eastern Siberian, Bratsk was a tiny rural settlement until a prison camp was located there in 1947 and tens of thousands of prisoners were shipped in to serve as the first labor force of Siberia’s industrialization.<sup>689</sup> The crowning height of Bratsk Soviet-era history is the construction of Bratsk hydro-electric dam, which powered the industrial enterprises located in the town.<sup>690</sup> Bratsk became a “company town” for the new industries.

Soviet planning had invested great symbolic value in the unity of the ТПКs. It thereby fixed the “connectedness” of power plants and adjacent factories as a natural fact in the minds of regional residents. In the post-Soviet period, regional elites and regional political discourse argued that

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<sup>687</sup> See for example, Sherbakov A.S. and Tertyshnik, I. “Мировая экономика и внешнеэкономическая деятельность иркутского предбайкалья,” published by Irkutsk State University, Irkutsk, 2000.

<sup>688</sup> This is a quote by S.Kuimov. In Russian: “Мы жестко интегрированы с нашим промышленным потребителями, зависимы от них. И поэтомы вынуждены вслед за ними корректировать свою тарифную политику.” *Ekspert*, No.14, April 1998, p.35.

<sup>689</sup> Prison labor was used for the construction of the railway link from Bratsk to Ust-Kut (source: <http://www.gulag.memorial.de>). Many of them “political prisoners” and the victims of Stalin’s purges. Prison camps existed at least until 1960. Construction on the Bratsk hydro-electric dam started in 1954 and ended in 1967.

<sup>690</sup> Seen as a monument to Soviet path to modernity; Yevtushenko’s poem “Bratsk Station” illustrate this; Yevgenij Yevtushenko, *The Bratsk Station and Other Poems* (London: Hart-Davis, 1967).

the “unity” of the TPKs should not be destroyed.<sup>691</sup> In political battles over Siberian hydro-electric plants, post-Soviet actors were strategically relying on this physical link to justify regional control. Proponents of granting ownership and subsidies to regional industrial powers frequently referred to the fact that they are part of *one* TPK, and that elements of the TPK depend on each other.<sup>692</sup> It was argued that the “tearing out” of power plants from the conglomerate of “industry+hydro-power plant+dam” would be harmful for the region’s economy, because industry depends on their connectedness.<sup>693</sup>

One academic summarizes these claims: “unification [of electricity and adjacent industrial plants] is necessary for the stabilization and healthy growth of the region's economy. The unification of the TPEK should take place not only on the level of production, but on the level of financial and organizational structures.”<sup>694</sup> Taken together, these arguments about the need to leave TPKs intact justified control of electricity assets by Rusal, the owner of adjacent aluminum factories. In other words, the company was able to secure ownership because of this discourse that favored the integrity of TPKs as a way to preserve Siberia’s industrial capacity.

Beyond the argument about TPKs, Rusal also benefitted from a discourse that aimed to keep Siberia’s resources under regional control. In the case of electricity, the argument was that the power generated by Siberia’s rivers should be used locally. This argument dates back to the property struggles of the 1990s, when the question about who gets to control the proceeds from Siberian hydro-electric dams became politicized. At that point, the question was whether Irkutskenergo’s assets should be handed over to the federal government and UES, or to be kept under regional control of Irkutsk oblast.<sup>695</sup> While Rusal is now an international aluminum company, when Deripaska first started acquiring electricity assets in Siberia, it was a regional company. In regional academic and public discourse, a series of arguments were put forth to justify the aluminum company’s claims to ownership and control. The most basic claim was that regional well-being requires regional control of electricity assets: “to preserve regional interests, we need regional control [of the Energo].”<sup>696</sup> Regional control of hydro-electric dams became part of a larger movement to keep Siberian resources for local use and to uphold the rights of

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<sup>691</sup> See for example reference to “единый территориально-технологический комплекс” in an article about the fight between Chubais and Lebed about Krasnoyarsk’s hydroelectric power plant and the adjacent aluminum factors in “Политическая энергетика,” *Izvestia*, September 2, 1999. Interview #60 with energy company executive, Irkutsk, 20071203.

<sup>692</sup> *Основные проблемы и направления обеспечения энергетической безопасности*, Siberian Section of the Russian Academy of Sciences, Irkutsk 2001, p.19. TPKs feature importantly in Krasnoyarsk’s development strategies, for example, but are important in elsewhere.

<sup>693</sup> A comment on the presidential directive that tried to transfer ownership of power plants away from regional owners to federally owned UES is telling. “The transfer of three hydro-electric power plants to UES would destroy the existing unity of the productive-technological and the economic complex.” In Russian: “Передача трех гидроэлектростанций в состав ПАО (...) разрушает сложившийся единый производственно технологический и хозяйственный комплекс.” In “Указ против Нас,” *Vostochno Sibirskaiia Pravda*, October 20, 1992. See also *Основные проблемы и направления обеспечения энергетической безопасности*, Siberian Section of the Russian Academy of Sciences, Irkutsk 2001, p.19.

<sup>694</sup> *Материалы к энергетической стратегии Сибири*, published by the Siberian Section of the Russian Academy of Science/РАН Сибирское отделение, Novosibirsk, July 1997, chapter 8, pp.89.

<sup>695</sup> See chapter 3.

<sup>696</sup> This is a quote by Sergey Kuimov, a senior Irkutskenergo executive; in “Высокие энерготарифы – крах для Приангарья,” *Vostochno Sibirskaiia Pravda* February 23, 1999.

residents to proceeds from local energy resources.<sup>697</sup> These rights were backed by a series of interrelated arguments: Siberians have a right to self-determination, because “Siberia is not a colony.”<sup>698</sup> Siberia does not share a responsibility for regions without local energy resources and high cost electricity.<sup>699</sup> The exclusive right of local residents is also often justified with reference to past suffering that resulted from dam building, such as population resettlement and environmental pollution.<sup>700</sup> Regional media coverage of UES and Moscow’s claims to Irkutsk’s electricity emphasize that the negative consequences of the industrialization and the dam building confer rights to Siberians: rights to the proceeds of the hydro-electric power plants, rights to own assets and to keep prices low.<sup>701</sup>

The discourse about the integrity of TPKs and about the rights to locally generated energy resources mobilized physical facts as rationales for affording local aluminum companies special privileges. The physical fact of Rusal’s connectedness to hydro-power plants and to the local resource of water was important in the government’s decisions, first regional and later federal, to afford the company a set of special privileges.<sup>702</sup> Yet, as in the case of Gazprom, there was nothing “natural” or predetermined about this outcome. The ownership and subsidy privileges were the result of a political bargain between powerful industrial interest and the government. The liberal reformers in the Putin government had wanted to create a uniform regulatory zone and to abolish all special privileges for companies and the population in the North.<sup>703</sup> But the liberal reformers had to make concessions; Siberian industrialists won a partial victory, and their privileges were retained.

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<sup>697</sup> “Энергия территории и сила ведомства,” *Vostochno Sibirskaiia Pravda*, October 28, 1992 makes the argument that local resources belong to Siberians. In “Политическая энергетика,” *Vostochno Sibirskaiia Pravda*, February 25, 1992, the journalist argues that Siberians have a right to the proceeds of Siberian resources. This is an ongoing theme, in “Чиѝ богатства прирастают сибирью?” *Vostochno Sibirskaiia Pravda*, January 6, 1996. This was also the broad agenda of the “Siberian Agreement” (see Hughes, “Regionalism in Russia: The Rise and Fall of the Siberian Agreement.”) It was also a claim that was mobilized not only with regard to hydro-electric resources. UES tried to gain control of Irkutsk’s coal reserves, for example, and the oblast opposed it; “Проглотит ли РАО ЕЭС сибирские экспортные углѝ?” *Vostochno Sibirskaiia Pravda*, February 25, 1999. Note that this implies that the sense of shared community does not extend to regions beyond Siberian and/or that it is a sense of community that does not include sharing benefits from Siberian energy resources.

<sup>698</sup> See for example, “Сибирь - не колоня,” *Vostochno Sibirskaiia Pravda*, September 22, 1992.

<sup>699</sup> An article in the *Vostochno Sibirskaiia Pravda* in ask the rhetorical question: “Is it fair that electricity in Irkutsk Oblast costs 60 rubles, and in Primorye, for example, it costs 400?” The answer the article gives is basically, yes, it is fair, because Irkutianki have been suffering the ecological cost of the dams (the resettlements and the catastrophic ecological consequences, the inundation agricultural and forestry land, the loss of villages, the decline of fishery reserves. The article notes that local residents were never compensated for these losses and these cost and that the state has a debt vis-à-vis local residents because of this past suffering, “Чиѝ богатства прирастают сибирью?” *Vostochno Sibirskaiia Pravda*, January 6, 1996. Interview #60 with energy company executive, Irkutsk, 20071203. See also “Не дележ, а грабеж,” *Vostochno Sibirskaiia Pravda*, February 2, 1993, another article in which the region’s strong opposition to the presidential decree is based on the region’s suffering.

<sup>700</sup> Ibid.

<sup>701</sup> See articles in *Vostochno Sibirskaiia Pravda* quoted in notes 48-51.

<sup>702</sup> Interview #59 with politician and former electricity company executive, Irkutsk, 20071130, and interview #60 with energy company executive, Irkutsk, 20071203.

<sup>703</sup> Gref program 2000 aimed to abolish all special privileges for the North; see chapter 2 and Rasell, “Neoliberalism in the North: The Transformation of Social Policy in Russia's Northern Periphery.”

*Russian Far East: electricity and coal in a weakly industrialized frontier region*

As in Siberia and in European Russia, there was nothing pre-determined about the particular combination of ownership and subsidy regimes in the Far East. Liberal reformers initially wanted to include the power plants of this region in a national market; “subsidies were supposed to be phased out and markets phased in.”<sup>704</sup> Yet, the liberal logic was ultimately subordinated to a logic in which electricity companies continue to be heavily subsidized and remain under state control. As in Siberia and European Russia, electricity companies benefitted from a discourse that linked their fate with a “neighboring” sector. The interests of the region’s electricity sector were linked to regional coal companies.<sup>705</sup> As elsewhere, an aspect of industrial geography thus shaped the interests of coal and electricity sectors, and was mobilized by both these actors in the politics surrounding electricity reforms. The link between the electricity and coal mining served regional electricity companies as an argument why they should not be required to compete with cheap Siberian electricity, and why regional coal mines should not be closed down.

Far Eastern power plants largely rely on regionally mined coal to fuel power plants. But during the economic crisis of the early 1990s, energy demand fell and Far Eastern coal production collapsed drastically.<sup>706</sup> Compared to Siberian coal, coal mining in Primorsky Krai is also relatively inefficient. Low-caloric coal, located deep underground and accompanied by methane gas, the regions’s coal is among the most expensive and least profitable. The liberal logic called for the closure of these mines. In the early to mid-1990s, many coal mines were closed, while others were privatized and restructured, reducing the workforce.<sup>707</sup> However, miners were the most politically active group in Primorsky Krai and fought hard to prevent mine closures. Despite, or maybe because of the precarious situation in many mining towns, “coal miners were prepared to fight (...).”<sup>708</sup> Miners’ strikes in the Far East started in 1993,<sup>709</sup> and the “coal war” dominated regional politics for most of the 1990s.<sup>710</sup> Key points of contention of these struggles were how much regional electricity companies should pay for coal, and how much of the federal subsidies to alleviate the Far Eastern energy crisis should go directly to the coal sector.

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<sup>704</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>705</sup> Note that coal companies, the upstream sector in the Russian Far East, are not nearly as powerful as Gazprom. And, in the case of the Far East, where direct federal transfers have been the dominant form of subsidies, their interests overlap with the interests of electricity companies. Basically a direct budget subsidy to electricity companies is also a subsidy to the coal sector and more importantly, without these, even more coal mines in the Far East would have to close.

<sup>706</sup> The 1995 level of coal production in all of the Russian Far East was 68% of the 1990 level (although coal production had already been declining between 1985 and 1990). Bradshaw and Kirkow, "The Energy Crisis in the Russian Far East : Origins and Possible Solutions," p. 1046.

<sup>707</sup> International Energy Agency, "Coal Mine Methane in Russia," (Paris: OECD, 2009), p.16.

<sup>708</sup> “Дальэнерго меняет партнеров?” *Utro Rossii*, January 14, 1997. Regional coal miners appealed to the federal government, for example, in an open letter to Chernomyrdin titled “Ситуация вышла из-под контроля,” *Utro Rossii*, April 30, 1997.

<sup>709</sup> An account of the difficult years 1993 and 1994 by a local miner, see “Просим Нас поддержать,” *Utro Rossii*, January 21, 1994.

<sup>710</sup> The coal war (in Russian: угольная война) was a recurring theme in the regional media, see for example “Дальэнерго меняет партнеров?” *Utro Rossii*, January 14, 1997, “Долой популиста Наздратенко,” *Utro Rossii*, May 17, 1997, “Стабилизация?” *Utro Rossii*, May 20, 1997.

Regardless of how federal subsidies were divided up between coal and electricity, they kept *both* electricity and coal companies alive for most of the nineties. The ownership changes also consolidated the links between electricity and coal: the perception emerged that the way to “save” Far Eastern electricity companies was to unite them with adjacent coal companies.<sup>711</sup> Coal and power plants were consolidated into energy companies with the rationale that they could more easily agree on prices, more effectively deal with the non-payment crisis and avoid unnecessary transport cost.<sup>712</sup> The unification of coal and electricity companies was planned for other regions reliant on coal-fired plants. Yet, not surprisingly, it started with power plants and coal mines in the Far East. In Primorsky Krai, the largest power plant and an adjacent coal mine were merged to form the company LuTEK, which then became one of the largest recipients of federal aid in the region.<sup>713</sup> After 2001, other Far Eastern coal companies were incorporated into larger, often national coal companies, such as SUEK. SUEK, in turn, purchased shares of the power plants that were the main customers of regional coal mines.<sup>714</sup> Much like Gazprom, SUEK argues for the necessity to keep coal companies and power plants linked: “The idea of achieving a synergetic effect from the integration of the coal mining and power supply business has been fundamental for SUEK from the very beginning of its activity. While building the vertically-integrated fuel and power supply company, we (...) have concentrated on the power grid systems that use coal as main fuel,” says the company's corporate strategy.<sup>715</sup> While the government has retained majority ownership of Far Eastern power plants, SUEK has become the largest minority owner.<sup>716</sup>

In addition to favoring coal interests in ownership and subsidy decisions of power plant, in 2004, the government made coal a national priority sector. As introduced in chapter 2, the federal government under Putin has been pushing for the expansion of domestic coal production, coal exports and has encouraged investment in new mining technologies.<sup>717</sup> Several federal and regional planning documents call for a switch from gas to coal.<sup>718</sup> In the Far East, in particular, this strategy has huge developmental implications: coal mines are an important source of

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<sup>711</sup> In Russian: “Одной из мер по спасению приморского ТЕКа станет объединение Лучеторского угольного разреза с Приморской ГРЭС, а в перспективе, возможно, и всех предприятия угольной индустрии и энергетики края,” in “Повышения цен не избежать,” *Utro Rossii*, May 27, 1997.

<sup>712</sup> “[...] in accordance with a decision of the head of RAO UES, Anatoly Chubais, the company is currently working on a program to form joint electricity and coal companies (энергоугольных компаний) on the basis of the assets of electricity companies and coal mines (...)” In Russian: “[...] согласно решению главы РАО ЕЭС России Анатолия Чубайса в настоящее время реасрабатывается программа формирования энергоугольных компаний на базе электростанций и угольных предприятий (...)” “Чубайс дает стране угля,” *Izvestia*, December 3, 1998.

<sup>713</sup> Announcement of merger of coal and electricity company to form the company Lutek, see “Пока просто товарищи,” *Utro Rossii*, June 3, 1997.

<sup>714</sup> СУЭК, Сибирской угольной энергетической компании/SUEK Siberian Coal Company, <http://www.suek.ru/>.

<sup>715</sup> According to Sergei Mironosetsky, Deputy Director General, Energy Supply, Mergers and Acquisitions of SUEK; interview available online, <http://www.suek.ru/en/page.php?id=207>

<sup>716</sup> See chapter 3.

<sup>717</sup> Capturing the methane of “gassy” coal mines for productive use, for example, International Energy Agency, “Coal Mine Methane in Russia.”

<sup>718</sup> This switch from coal to gas is reported in various government documents, see for example “General Scheme of Placing Electric Power Engineering Facilities for the Period Up to 2020.” Strategy approved by Decree of the Government of the Russian Federation No. 215-r of February 22, 2008. Also mentioned by Chubais at a conference “Electricity: Locomotive or Brake on Economic Development?/Энергетика: тормоз или локомотив развития экономики?” Moscow, February 13, 2007.

employment especially in the smaller towns outside the regional capitals. In the town of Partizansks, for example, coal mining constitutes over two-thirds of economic activities, as the coal mine pays both current salaries and pensions for most residents, as few other employers have survived the post-Soviet collapse.<sup>719</sup>

At the same time, the protection of inefficient coal mines and of coal-fired electricity companies was not somehow “given” or a necessary result of the physical link between the electricity and the coal sector. Coal is not the only energy resource in the Far East. Sakhalin’s oil and gas fields are among the country’s most abundant. The Far Eastern Electricity sector could thus be “weaned” from the region’s low-caloric coal and instead linked to gas deposits, or electricity could be imported from Siberia. The switch to gas has always been tempting. Regional governors in the 1990s sometimes pursued both strategies – “gasification” and the protection of local coal production.<sup>720</sup> At the same time, the two strategies have conflicting regional constituencies – “there has been a conflict [over the issue of] coal versus gas”<sup>721</sup> – and most regional governors ended up supporting local coal miners. The federal government under Putin was ostensibly pursuing a dual strategy: it was protecting Far Eastern coal industries, while also planning to build a gas pipeline between Sakhalin, Khabarovsk and Vladivostok that would “gasify” the big regions in the Southern Far East, Khabarovsk and Primorsky Krai. However, while the gas pipeline has remained an elusive project for years, coal mines have consistently received federal support and subsidies. One observer explains that “nobody here really wants coal fired plants to switch to gas. (...) The coal miners are opposed. The [regional] administration is opposed. (...) Really, there won’t be a switch to gas.”<sup>722</sup>

While the Far Eastern electricity sector has emerged as the “winner” in the reforms, as it remains protected from cheap Siberian power and continues to be subsidized, the region’s coal sector came in a close second. In a weakly industrialized frontier region, the government opted to protect both coal mines and coal-fired power plants, rather than allowing Far Eastern power plants to go under or allowing the switch from coal to gas. Both the electricity sector and coal mines benefited from the physical link that tied their fate, which was used to argue against a liberal logic that would eventually lead to the closure of both mines and coal-fired power plants.

#### **4. Theoretical implications**

In sum, while electricity sector outcomes were the result of political bargains, they were at the same time tied to the industrial and natural geography of a region. Why is this interesting? Why should we care to theorize how physical things and facts enter politics? I will make three arguments about the implications of these findings: one, concerning the transformation of the electricity sector, the second, regarding the role of legacies; and the third, about the need to theorize the political role of “things.”

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<sup>719</sup> Most defense related plants and light industry, such as textiles, shut down in the nineties, see chapter 2.

<sup>720</sup> Khabarovsk governor Ishaev is personally credited for effecting the “gasification” of a power plant in Nikolaevsk-na-Amure, or more precisely, for convincing domestic and foreign companies to invest in the technology to switch the power plant from coal to gas. The deal was brokered by a UN Agency. Interview #45 with employee of electricity company and interview #46, academic and journalist, both in Khabarovsk, 20071011

<sup>721</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004.

<sup>722</sup> In Russian: “Переидеть на газ не будем.” Interview #41 with journalist covering electricity sector, Vladivostok, 20071005.



First, a focus on industrial geography adds to the explanation of the political bargains that gave rise to the varied institutional outcomes in Russia's electricity sector. Industrial geography played a key role in determining the boundaries along which electricity markets fragmented, and thus the boundaries of the newly emerging zones of regulation. A theme that ran through earlier chapters is that the boundaries of regulatory zones are themselves subject to political conflict and that the political dynamics of regulation may shift in the process. New zones of governance have emerged from the process of re-regulation: regional (*oblast*) level regulation was effectively supplanted by regulation at the level of newly constituted supra-regions. The evidence presented in this chapter explains why regulatory regimes are geographically patterned in this particular way. The political conflicts about new regulatory zones pitted liberal reformers against conglomerates. The former wanted to abolish physical boundaries and create one market, regulated by one set of rules. The latter actively mobilized physical boundaries to justify the creation of zones that matched their interests. As conglomerates have been successful in negotiating concessions, the scope of regulation in the electricity sector thus mapped onto the existing boundaries of industrial structures.

A broader point that emerges from this observation is that the scope of regulation cannot be taken for granted: it may or may not overlap with existing political boundaries. After three decades of liberalization and re-regulation, territories of economic governance have become destabilized everywhere, and the political conflicts surrounding the scope of regulation are being debated elsewhere, a point that chapter 7 addresses further.

Secondly, findings in this chapter might be an interesting starting point to re-think the role of legacies. Specifically, they highlight the ways in which economic interests matter both as structural determinants *and* as discursively constructed physical facts. Observers of Russian capitalism often describe it as a post-ideological space: ideas don't matter, while interests determine outcomes.<sup>723</sup> An emerging set of studies question this dichotomy of ideas versus interests that pervades much of the research on political economy.<sup>724</sup> Arguably, an examination of how interests are based on ideas, and how they are constructed must be part of the analysis of how market institutions emerge and evolve. While international relations theory, and theories of national and ethnic identities have long embraced the idea that interests are constructed, the political economy subfield still relegates these kinds of explanations to the margins. Since I am looking at markets as politically constructed institutions, the discursive strategies that legitimize the particular rules that underlie market construction are important. More specifically, my findings provide new perspectives on how corporate and private interests influence institutional outcomes.

We saw that physical facts, industrial geography in particular, have influenced Russia's electricity sector transformation: these physical facts shaped conglomerates' interests and have entered political discourses underpinning the bargains between the government and private actors. This argument may be attacked from three angles: either as too obvious (*of course*, the

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<sup>723</sup> Trenin argues that in today's Russia "ideas hardly matter, whereas interests reign supreme. It is not surprising then that the worldview of Russian elites is focused on financial interests. (...) Values are secondary or tertiary issues (...)." Trenin, "Russia Redefines Itself and Its Relations with the West."

<sup>724</sup> Herrera, *Imagined Economies: The Sources of Russian Regionalism*, Abrami, "Toward a Manifesto: Interpretive Materialist Political Economy".

physical infrastructure and technology of fuel generation matter), as implausible (it's Gazprom's prominent *political* position, not the physical link that matters), or finally, as too imprecise to rely on as a causal mechanism. All these points are justified. Yet, during the research on this project, I have repeatedly been led back to the impression that physical facts matter in political bargains, and therefore to the puzzle *how* they matter. I found that the example of a railway line is illustrative. Railways lines are physical facts, immovable objects and a technology. Once built, a railway line organizes how goods and people move; it is responsible for the thriving of some sites and the stagnation of others. It thus has "agency," but it does not determine the way humans act. Who travels, when and with what destination is up to the traveler. It merely creates the conditions for the way we move and transport goods; it enables certain human actions, and prohibits others.<sup>725</sup> Industrial geography is a set of physical facts that enable human action: in the Russian electricity sector, they created the possibility for the oligarchs to control whole production chains and electricity tariffs. Just as the Trans-Siberian railway conditions the way cargo is transported across the Eurasian landmass, so did the hydro-power plants and the gas-pipelines condition the way post-Soviet industrial conglomerates have been able to shape new electricity markets.

This image may also clarify how the chapter adds to debates on the role of Soviet legacies in post-Soviet politics. We saw that norms of Soviet-era planning gave rise to the close ties between industries and the electricity sector, which in turn shaped economic interests and political bargains in post-Soviet Russia. Yet, the way these legacies matter is not only as static, determining factors, but as conditions that shaped political battles during the post-Soviet transformation. Thinking of legacies as memories might be a useful conceptual move; the term "memory" sheds the deterministic connotation that inheres in "legacies." Even as Soviet-era industrial maps were shaken up and recombined, the physical infrastructure contained a memory of political, economic and social imperatives that had shaped their location. This memory shaped economic interests and was mobilized in ongoing political struggles; it created the conditions for certain reform trajectories and prohibited others.

Finally, the chapter might serve to underscore the value of theorizing the relationship between politics and the material environment. The transformation of the electricity sector reflects the influence of various interests in shaping development discourse, but it also illustrates how political actors relate to their natural environment and physical geography. By environment, I mean "things" or physical facts that are often thought of as fixed, such as geography, nature and technology.<sup>726</sup> In recent years, a number of social theories have re-emphasized the role "things" in politics, and have called attention to political discourses that construct physical facts as givens, rather than as part of social and political life. Constructed as unalterable objects or indisputable

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<sup>725</sup> Contrast this with Marx's emphasis on the railways for the development of India, which is phrased as a deterministic mechanism. Marx, argues, for example, "Modern industry, resulting from the railway system, will dissolve the hereditary divisions of labor, upon which rest the Indian castes, those decisive impediments to Indian progress and Indian power." The Future Results of British Rule in India, in *Marx-Engels Reader*, Robert Tucker, London, 1978 (2nd edition); pp.659.

<sup>726</sup> Bruno Latour, *Von Der "Realpolitik" Zur "Dingpolitik" Oder Wie Man Dinge Oeffentlich Macht*, Internationaler Merve-Diskurs, 280 (Berlin: Merve Verlag, 2005). Bruno Latour and Peter Weibel, *Making Things Public : Atmospheres of Democracy* (Cambridge, Mass.; [Karlsruhe, Germany]: MIT Press ; ZKM/Center for Art and Media in Karlsruhe, 2005).

facts, scientific evidence, for example, are marshaled as justifications for political agendas.<sup>727</sup> On the whole, political science tends to think of politics as the interaction between humans and ideas. At least since Marxist and structuralist accounts have fallen out of fashion, the ways in which political outcomes are not only about humans, but also about how humans interact with their environment have barely been theorized outside of geography.<sup>728</sup> Yet, this may be an important omission, as an ever-larger part of politics concerns technical and technological features of social life. In debates about environmental politics, biotechnology, security and complex infrastructure, arguments about physical reality and facts are key.<sup>729</sup>

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<sup>727</sup> Bruno Latour 2005 has referred to “things” as the “res” in the “res publica” and has called on political science to refocus attention on non-human matters, *ibid*.

<sup>728</sup> The interaction between the environment and society has remained a theme in some studies, for example in Jared M. Diamond, *Guns, Germs, and Steel : The Fates of Human Societies* (New York: W.W. Norton & Co., 1998). See also Mitchell, *Rule of Experts : Egypt, Techno-Politics, Modernity*, Callon, *The Laws of the Markets*. Theorizing the environment is axiomatic in much of sociology and anthropology. The following two cites are specifically on the post-Soviet context; special issue of *Slavic Review* and introduction by Zsuzsa Gille, "Nature, Culture and Power - from Nature as Proxy to Nature as Actor," *Slavic Review* 68, no. 1 (2009). And Oleg Kharkhordin, *Main Concepts of Russian Politics* (Lanham, Md.: University Press of America, 2005), chapter 8.

<sup>729</sup> For example, Hughes, *Networks of Power : Electrification in Western Society, 1880-1930*.

## **Chapter 6: The Role of Experts – Managers and *Energetiki***

1. *Introduction: the role of experts in technocratic polities*
2. *Competing expertise – the “managery” versus the “energetiki”*
3. *Political positions of experts*
4. *Managery replace energetiki*
5. *Legitimacy of liberal reforms – “there is no other way”*
6. *Conclusion*

“[The problem with privatization was, that] it brought all these managers to decision-making position within the electricity system; whereas what is really needed, (...) are highly qualified and experienced leaders – namely engineers.”<sup>730</sup>

*Electricity sector professional, 2006*

## **1. Introduction: the role of experts in technocratic polities**

There is little doubt that everyone in a country with cold winters and energy-intensive industries is affected by the transformation of the electricity sector. At the same time, in the political context of post-Soviet Russia, the actors who actually shaped electricity reforms are fewer. Previous chapters have focused on the government and Russia’s emerging conglomerates. This chapter examines the political role of experts in the post-Soviet transformation of the electricity system.

I document the role of two groups of experts and the conflict that unfolded between them during the marketization of the sector: the “engineers/technical experts” and the “managers.” The former – the *energetiki* – are electricity sector specialists with long-standing work experience, specialized technical expertise and loyalties to a work collective, bound by shared values and a common history. The latter, the *managery* are younger electricity sector professionals, often with a background in business or economics, who were promoted by the liberal reform team at UES to modernize the sector and improve corporate governance. The manager’s shared experience includes training in well-known Russian or foreign economics programs and a shared vision of the effectiveness of market forces in allocating scarce resources.

During the transformation of the electricity sector, *energetiki* and *managery* became political actors and their expertise played a role in the political bargains about ownership changes and subsidy regime introduced in earlier chapters. On one level, the outcome of the conflict between the two groups – namely the success of the *managery* and the failure of the *energetiki* to control the commanding heights of the sector, was a result of the partial victory of the liberal reformers in the transformation of the sector. At the same time, however, *managery* won and *energetiki* lost because this made the electricity sector legible and potentially attractive to domestic and foreign private investors, which in turn served the government’s agenda of integrating Russia into international markets. In other words, the victory of the managers and of their expertise, owed as much to the strategy of the government to integrate Russia into international markets at a time when international capital flows are unprecedentedly mobile, as it did to a domestic power balance.

Previous chapters introduced instances in which the government’s development agenda overlapped with the liberal reformers’ plans: chapters 2 and 3 showed how the unbundling of

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<sup>730</sup> In Russian: “К руководсбо компаниями приходят менеджерз, хотя для обеспечения надежного и эффективного функционирования и развития ЕЭС нужны, в пербую очередь, высококвалифицированные и опытные руководители – инженери широкого профиля.” Belyaev, L.S. *Недостатки реализуемой концепции реформирования электроэнергетики России и необходимость ее корректировки* (Energy Systems Institute, Siberian Branch of Russian Academy of Sciences, Irkutsk, 2006) p.20.

regional Energos served Putin's efforts to undercut the autonomy of regional governors. Another aspect of liberal reforms where we see the liberal agenda overlap with post-Soviet developmentalism is the replacement of Soviet-era cadres in the electricity sector. The government's agenda to integrate Russia into international markets, financial markets in particular, was served by the victory of the *managery* over the *energetiki*. The electricity sector's new management first rendered the electricity sector legible for foreign portfolio investors, by introducing international accounting and valuation standards. *Managery* also promised to make electricity companies attractive to strategic investors, by vowing to collect bills, earn profits, protect shareholders rights and introduce a market-based culture of professionalism. This was a prerequisite for the inflows of domestic and foreign capital detailed in chapter 3.

The success of the *managery* thus supports the core argument of the dissertation: it suggests that the government has a developmental agenda that trumps predatory motivations. As either regional or federal governments held majority stakes in most electricity companies, the wholesale replacement of management required at least tacit approval, if not active support by the government. It allowed liberal reformers to promote *managery* because this served the aim of modernizing the sector in congruence with market principles, a goal in itself as well as a prerequisite to the Russian economy's integration into global markets. Presumably, if the government's motives had been primarily predation, it would not have been likely to support the installment of managers committed to improving corporate governance standards.<sup>731</sup>

What are the broader theoretical implications of this shifting position of technical and managerial experts? The chapter uses evidence of the expert turnover in the electricity sector to highlight possibly more general implications of the political role of experts in technocratic polities. The legitimization of political authority via claims to technocratic governance is an interesting aspect of the post-Soviet period that has received relatively little attention. Partly a result of the traumatic crises of the 1990s, partly due to the lingering memories of Soviet-era political legitimacy, the legitimacy and popularity of many post-Soviet leaders is based on their ability to raise living standards. Huntington called this "performance legitimacy."<sup>732</sup> This kind of legitimization is a hallmark of technocratic governance, as is the rejection of legitimization through political representation. As an ideal-type, technocracy means policy-making by scientific experts, who determine the "right" solution to political conflicts and challenges.<sup>733</sup> Technocratic

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<sup>731</sup> Markus has argued that private firms adopt corporate government mechanisms as an insurance mechanism against the infringement on property rights by a predatory state. The causal mechanism of this argument relies on foreign investors acting as allies of private companies, defending them and lobbying on their behalf with the Russian government; Markus, "Corporate Governance as Political Insurance: Firm-Level Institutional Creation in Emerging Markets and Beyond." While these kinds of alliances were important in the electricity sector at times, we saw in chapter 3 that the role of foreign investors was ultimately limited and they were only successful in obtaining a controlling stake, if the government permitted this (specifically, German E-On and Italian Enel, did secure controlling stakes, while Finnish Fortum failed).

<sup>732</sup> Samuel P. Huntington, *The Third Wave: Democratization in the Late Twentieth Century* (University of Oklahoma Press, 1991), pp.46. Noted in Aron, "The merger of power and property," *Journal of Democracy*, Volume 20, Number 2, April 2009.

<sup>733</sup> The idea became popular in the early twentieth century both in the US and the Soviet Union, as a corollary of industrialization and a few decades later, as the solution to the pain of the Great Depression, see William E. Akin, *Technocracy and the American Dream: The Technocrat Movement, 1900-1941* (Berkeley: University of California Press, 1977). As a real-world phenomenon in the post-Soviet world, technocratic governance tends to be as much a legitimization device, than a factual description how decisions are actually made.

governments claim to rely on the advice of experts to “govern well,” rather than by seeking consensus and compromise. Putin promised to restore prosperity, stability and sovereignty, but not through consensus and consultation, but by decisively “doing the right thing” – and providing for economic prosperity in the future.<sup>734</sup> Against this background, what can we say about the political role of experts in technocratic polities?

An underlying premise of technocratic governance is that science will replace politics; the political version of Taylor’s maxim that “scientific management will mean the elimination of almost all causes for dispute and disagreement.”<sup>735</sup> Yet, instead of replacing politics, experts have themselves become political actors. Because post-Soviet developmentalism relies on technocratic governance and “performance legitimacy,” experts have taken on a particular political role: they contribute to the realization of the liberal agenda, by making the sector’s legible for an important audience outside the electricity sector and outside of Russia, namely private investors, both domestic and foreign. Moreover, as the realization of the technocrat’s promise is based on the application of scientific principles, experts also played an important role in the legitimization of the liberal political positions.<sup>736</sup> Once *managery* had replaced *energetiki*, the managerial logic and the liberal agenda gained legitimacy as “the only way” to govern the sector. In general terms, this suggests that a technocratic governments’ reliance on one set of experts produces legitimacy for the values, ideas and methods espoused by these experts. The implication of this finding for Russia is that despite claims to technocratic rule, and despite the appearance of the demise of political contestation in Putin’s “managed democracy,” contestation persisted in many realms, including among experts who have played a key role in “power politics.”<sup>737</sup>

That experts play a role in politics is not an outlandish claim. Sociologists have long been interested in experts, but their work on experts has often focused on medical expertise, examining, for example, how politically organized laymen can challenge the legitimacy of medical professionals.<sup>738</sup> Research on the political role of experts plays a relatively minor role in contemporary political science. Timothy Mitchell has been interested in the nature of politics based on shifting bodies of expertise<sup>739</sup> My research draws on Mitchell’s work in the sense that I

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<sup>734</sup> Aron notes “instead of seeking to ground its legitimacy on broad-based, transpersonal institutions with character and integrity of their own, the regime has chosen to bank overwhelmingly on Vladimir Putin’s popularity. This, in turn, seems to derive from the economic growth that he presided over between 2000 and the first half of 2008.” Aron, “The merger of power and property.” See also Kramer, 2007, “Dmitri A. Medvedev: Young Technocrat of the Post-Communist Era,” *New York Times*, December 11, 2007

<sup>735</sup> Frederick Winslow Taylor, *The Principles of Scientific Management* (London: Routledge, 1993). F. W. Taylor, *The Principles of Scientific Management* (Noorwood, Mass.: 1923).

<sup>736</sup> Mitchell, *Rule of Experts : Egypt, Techno-Politics, Modernity*.

<sup>737</sup> A study Elana Wilson offers interesting parallels to these findings. Although Wilson is not primarily concerned with the political role of experts, but with different ways Russian experts frame the problem raised by global climate change – she nevertheless concludes with important findings about the political role of experts. She finds that experts are “on tap, not on top,” thus that the government plays a role in which types of expertise mobilized for political arguments about climate change. Elana Wilson Rowe, “Who Is to Blame? Agency, Causality, Responsibility and the Role of Experts in Russian Framings of Global Climate Change,” *Europe Asia Studies* 61, no. 4 (2009).

<sup>738</sup> Gil Eyal, keynote address on the sociology of expertise, at the Conference of the Berkeley Journal of Sociology, March 12, 2010. See the work of Nikolas S. Rose, *The Politics of Life Itself : Biomedicine, Power, and Subjectivity in the Twenty-First Century*, In-Formation Series (Princeton, NJ; Oxford: Princeton University Press, 2007).

<sup>739</sup> Ibid. See for example, pp.41.

see expertise as important ideological framework mobilized as a political justification for economic policy. At the same time, Mitchell's work explicitly opens opportunities for place- and time-specific research, rather than wanting to serve as a theoretical model. Most of the research on experts in political science has come out of the field of organizational theory. Concerned with reliability of service provision of a particular organization, this literature addresses the consequences of shifts in expertise for the organization's ability to fulfill its objectives.<sup>740</sup> In infrastructure provision, they are concerned, for example with the consequences of a technological logic being replaced by a financial logic. Roe and Schulman ask – given that complex infrastructure networks were designed as technical systems with a centralized decision making body, in what ways does service provision change and how is reliable service guaranteed, when infrastructure is privatized and vertically integrated monopolies are broken up, and financial considerations come to dominate other concerns? My research is similarly interested in the consequences of a shifting expertise, specifically with the replacement of technical with managerial expertise. Rather than focusing on the quality of infrastructure services, however, I examine the interplay between politics and experts.

The remainder of the chapter proceeds as follows. First, I will introduce the two groups of experts and show how the fault-lines of their conflict turn on key issues of sector liberalization, such as the degree of unbundling of vertically integrated monopolies, public versus private ownership of networks, and pricing mechanisms. Second, I examine how the *managery* gained influence in key decision-making positions, at the expense of the *energetiki*. Finally, we will see how various actors in the political conflicts about the future of the electricity sector capitalized on the experts' arguments and justified their preferences for sector reform by using the arguments of either group. I conclude the chapters with suggestions how these findings are relevant for technocratic governance beyond Russia.

## **2. Competing expertise – the “managery” versus the “energetiki”**

The characterizations of the *energetiki* and managers are based on my interviews with electricity sector insiders, as well as on interviews they gave for Russian newspapers, and on publicly available biographical information. During my interviews I found that experts often explicitly or implicitly identified themselves as belonging to one of two groups – the *managery* or the *energetiki*.

The *managery* are new executives in the electricity sector, promoted by Anatoly Chubais to key positions in the sector and loyal to his vision of markets as the most efficient allocation mechanism of scarce resources. As the head of Committee on the State Properties, Chubais was one of the main architects of Russia's privatization program in the early nineties. He became director of UES in 1998 with the aim of liberalizing the electricity sector, a task he chose for himself, because he saw in UES the “most vital piece of unreformed socialism.”<sup>741</sup> Like Chubais, *managery* saw themselves as “agents of change;” their mission was to turn the remnants of a Soviet-era ministry into profitable enterprises, increasing efficiency and attracting investment to the sector.<sup>742</sup> Chubais and the *managery* have described their mission as a “crusade” to introduce

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<sup>740</sup> Roe and Schulman, *High Reliability Management: Operating on the Edge*.

<sup>741</sup> Chubais, interview with Mellow, "Is This a Way to Create Capitalism? Maybe So."

<sup>742</sup> Interview #63 with electricity company executive (*manager*), Moscow, 20071212.



markets, private property and free prices.<sup>743</sup> *Managers* were self-described businessmen and leaders in the world of markets, contrasting themselves with “old cadres,” who, “it turned out, could not adjust to the new conditions of a market economy.”<sup>744</sup> One observer said *managery* “come straight from Moscow’s business schools (...), or even from the US.”<sup>745</sup> Often they have worked as “businessmen,” before transitioning to the electricity sector, and stressed the skills and knowledge gained in this previous vocation.<sup>746</sup>

*Energetiki* is a term that dates back to the Soviet-era, and refers to the work collective of electricity sector professionals. *Energetiki* have long-standing experience in the sector, often dating back to the expansion of the electricity sector in the late Soviet period. As electricity was a priority sector in the Soviet Union, *energetiki* were often closely connected to party nomenklatura. Perspectives of the *energetiki* were shaped by the work-collective’s ethic that strongly emphasized the technological expertise and the commitment to reliability of service provision.<sup>747</sup> The collective identity of Siberian *energetiki* was particularly strong; the construction of Siberian hydro-electric dams had brought together young engineers and volunteers to “build socialism” in remote and uninhabited areas of Siberia.<sup>748</sup> The *energetiki*’s life stories emphasized their connection to the electricity system. One *energetik*, the director of Bratsk hydro-electric station, included his own personal story in the history of Bratsk station: he dreamt of building the dam already as a school boy, he ended up marrying the daughter of the station’s general director, and finally ascended to that post himself.<sup>749</sup>

The conflict between the *energetiki* and *managery* first arose in the early-1990s.<sup>750</sup> The contours of the two groups’ self-identification were shaped by their views of electricity sector’s problems,

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<sup>743</sup> Chubais, interview with Mellow, "Is This a Way to Create Capitalism? Maybe So."

<sup>744</sup> Viktor Minakov describes himself in the following terms: “He [Chubais] needed managers and businessmen in the electricity sector, because the old cadres, it turned out, could not adjust to the new conditions of a market economy/Ему нужны были энергетика “управленцы и коммерсанты, потому что старые кадры, выросшие в закрытой технической системе, оказались не приспособлены к новым рыночным условиям.” Interview in *Dal'nevostochnyi Kapital*, October 2003, No.10/38, p. 48-49.

<sup>745</sup> The remark was made about the new management at Irkutskenergo. Interview #48 with academic, Irkutsk, 20071113.

<sup>746</sup> Minakov says about himself that he is *not* an *energetik* (in Russian: “Я по образованию не энергетик”). It is said about him, that he had been a businessman for 10 years (in Russian: “10 лет занимались бизнесом”). He himself stresses that the experience as a businessman was useful for his current job (in Russian: “Для моей сегодняшней должности эти знания и опыт оказались очень полезны.”) Interview in *Dal'nevostochnyi Kapital*, October 2003, No.10/38, p. 48-49. In an analysis of the board of directors of major oil companies, David Lane finds that a significant number of the successful oil executives had acquired “executive capital” – managerial elites having gained experience as industrial executives. David Stuart Lane, *The Political Economy of Russian Oil* (Rowman & Littlefield, 1999), p.79.

<sup>747</sup> Reliability as the main concern of the “technical point of view” of the *energetiki*, was mentioned in interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122

<sup>748</sup> Alekseev, V.V. *Электрификация Сибири*, published by Nauka/Наука, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, 1973, pp.186. *Energetiki* later often lived and worked in the mono-industrial towns that were built around these dams, where their vocational ethnic – that the electricity sector is the backbone of a socialist economy and society – was part of their everyday lives.

<sup>749</sup> Interview with Viktor Rudykh, *Svet Negasimyi* (Vostochno-Sibirskaiia Izdatel'skaya Kompania), Irkutsk, 2004) p. 50.

<sup>750</sup> Conflict was mentioned in several interviews, for example interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004 and interview #52 with electricity sector economist (*energetik*), Irkutsk, 20071117.

the proposed solution and the sector's future. Conflict between the two groups arose, as they held radically different views on how to respond to the crisis of the electricity sector, marked by electricity outages and non-payment. For the *managery*, the electricity system was a transitioning sector, in need of restructuring, "hard budget constraints" and competition. Their priority was the creation of competitive markets in the electricity system, deemed necessary to attract private capital. Competition required corporate restructuring, including the breaking up of the vertically integrated monopoly structures.<sup>751</sup> This process, known as "unbundling" as it separated the different segments of the production chain, turned out to be one of the core points of contention between the *energetiki* and *managery*. Another aspect of the manager's agenda was the reduction of the workforce to increase the "net power output per employee," an indicator of efficiency.<sup>752</sup> *Managers* generally thought that *energetiki* were not up to the task of restructuring the sector. Boris Brevnov, Chubais' first, though failed appointment of a manager, noted about *energetiki* at UES: "While most individuals proved to be quite knowledgeable about the industry as technical specialists, they had little desire or interest in improving the firm's position or performance. They lacked imagination and initiative [...]."<sup>753</sup>

For the *energetiki*, the electricity sector was a highly sophisticated technological system that is the "material-technological" basis for the economy.<sup>754</sup> *Energetiki* stressed both the intrinsic value of electricity as a service that turns night into day, as well as the supporting role of electricity for other industries. As engineers, their concerns centered on technological challenges, technological achievements and technological requirements of secure provision.<sup>755</sup> In interviews, *energetiki* stressed that the electricity system was "not built for competition" and that its power is a "state sector."<sup>756</sup> They stressed the importance of system reliability over strictly economic rationales, in particular, what they saw as the tyranny of cheap prices.<sup>757</sup> They feared that energy security and the reliability of provision – key objectives for *energetiki* – were endangered by proposed reforms. They expressed consternation at the managers' lack of understanding for the technical requirements of the system. "They don't understand the technological side," said one *energetik*.<sup>758</sup> For them, the idea of separating the management and operations of the different sub-sectors, the core idea behind unbundling, was highly problematic. One *energetik* thought of it as "separating limbs from a body." With no single entity responsible for planning and management

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<sup>751</sup> Vertical monopolies are broken up as a way to separate the competitive from the non-competitive elements in the sector. Potentially competitive are generation and retail; the network sectors, transmission and distribution have inherent natural monopoly character.

<sup>752</sup> Interview #37 with electricity sector executive (*manager*), Vladivostok, 20071002. See also UES 2001 Annual Report, section 5.4.5, available online <http://www.rao-ees.ru/en/archive/>

<sup>753</sup> For Brevnov's role, see also chapter 2. Brevnov, "From Monopoly to Market Maker? Reforming Russia's Power Sector," p.19.

<sup>754</sup> Belayev uses this term, *Недостатки реализуемой концепции реформирования электроэнергетики России*.

<sup>755</sup> Security of provision is a high priority for *energetiki*, see for example *Основные проблемы и направления обеспечения энергетической безопасности*, Siberian Section of the Russian Academy of Sciences, Irkutsk, 2001.

<sup>756</sup> Interview #60 with energy company executive (former *energetik*), Irkutsk, 20071203.

<sup>757</sup> Viktor Kudryavy notes: "elsewhere in the work, there is nobody who demands from the electricity sector professionals only cheap prices. What is needed is reliability." In Russian: "Нет в мире никого, кто требует от энергетиков только дешевого тарифа. Нужна надежность." Interview in *Ekspert*, No.14, April 13, 1998.

<sup>758</sup> Interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122. *Energetiki* also think that reforms were rushed, without due consultation of technical experts, for example, interview #60 with energy company executive (former *energetik*), Irkutsk, 20071203.

of output and investment decisions, there would be no “brain” and system failures were bound to happen, they thought.<sup>759</sup>

*Energetiki* tended to be opposed to making energy companies profit-maximizing economic entities. “Looking for profits in the Far Eastern electricity sector, is like looking for wool on a pig’s back,” is how a Far Eastern *energetiki* put it.<sup>760</sup> Like *managers*, they were interested in efficiency, but define it technically, i.e. preventing losses, rather than economically, i.e. as maximizing profits. The difference between the two is apparent in their position on unbundling of vertical monopolies. Unbundling created a host of new companies and required the setting up of institutions to regulate new markets. *Energetiki* described this process as a waste of resources, as each of these companies and institutions will have administrative overhead costs. They disputed the *managers’* logic that prices will fall as power generation becomes more efficient and therefore cheaper. In their eyes, the restructuring of the sector into separate, private companies would inevitably lead to more costs and therefore tariff hikes, because it created separate, uncoordinated administrative agencies. They were also afraid that the valuable assets would be squandered to politically connected insiders, in a redux of the “*prikhvatizatsiya*” of the nineties.<sup>761</sup>

*Managery* and *Energetiki’s* views on the value of the system also differed sharply. For *managery* the essence and the value of the electricity infrastructure can be expressed as a commercial, or economic variable. Myasnik, for example, elevates the market capitalization of electricity companies as the ultimate indicator of its value: “the market capitalization of [our] company is the most important indicator or its general condition (...). It’s precisely the market capitalization that is the only objective and adequate indicator of the value of a company.”<sup>762</sup> Contrast this with the view of *Energetiki*, for whom the people who built the system constitute value. One *Energetik* recounts the history of Bratsk hydro-electric plant by equating it with its employees – “most of all, Bratsk hydro-electric power plant is its remarkable people, its devoted workers and its highly qualified specialists.”<sup>763</sup> Not surprisingly, *energetiki* and *managery* differ in their position towards redundancies and staff reductions at electricity companies. One *manager* considers the problem of employment: “of course, as many people as today work [in the electricity sector] are not needed, all this amounts to is an unnecessary expense.”<sup>764</sup> The

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<sup>759</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004. Another *energetik* expressed concerns about who was to have the ultimate responsibility for the functioning of the system. The same person also stressed that because “electricity has many difficult and interconnected technological aspect, [it is] very questionable what will happen to the system after unbundling.” Interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122.

<sup>760</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004.

<sup>761</sup> A word play of the privatization – *khvatat* means to grab in Russian, see “Энергетика России: реформа или 'прихвятизация'?” *Vostochno Sibirskaya Pravda*, November 14, 2000.

<sup>762</sup> In Russian “Капитализация компании – это важнейший показатель ее самочувствия, естественно (...). Именно капитализация является единственно объективной и адекватной оценкой стоимости компании.” Interview with Myasnik, in *Dal'nevostochnyi Kapital*, February 2006, No.2/66, p.23.

<sup>763</sup> In Russian “Прежде всего Братская ГЭС это замечательные люди, преданные труженики, специалисты высочайшей квалификации,” quote by Viktor Rudykh, p.46 in *Svet Negasimyi* (*Vostochno-Sibirskaya izdatel'skaya kompaniya*, Irkutsk, 2004).

<sup>764</sup> In Russian “Понятно, что столько людей, сколько сегодня в ней занято, не нужно, это все лишние затраты.” Viktor Minakov, a manager of a Far Eastern electricity company. Interview in *Dal'nevostochnyi Kapital*, October 2003, No. 10/38, p.49.

*Energetiki*, on the other hand, bemoaned the loss of the many “highly qualified and experienced leaders.”<sup>765</sup>

Finally, the two sides afforded the electricity system varying degrees of agency. *Managery* thought that electricity provision could be subordinated to the logic of the market. In other words, market forces, demand and supply, have agency. Technology is a means to an end, namely producing electricity, a commodity. “It’s just a business,” was the assessment of one *manager*.<sup>766</sup> *Energetiki* by contrast, afford agency to the technological system. They thought of the system as having “needs.” *Energetiki* thus warned that investments would not go where “the system” needs it most, but where new owners see profits (which is why they are also wary of the claim that liberalization and privatization can attract investments for the urgently needed capital upgrades).<sup>767</sup> In two separate conversations, in two cities, *energetiki* told me about their vision that one day, the electricity systems of several countries, even all countries, would be united, with the technological system serving as an agent for agreement and peace across political boundaries.<sup>768</sup> Finally, pride in technological achievements, in particular with reference to the hydro-electric power plants that have “conquered nature,” similarly revealed that *energetiki* imbued the electricity system with agency in its own right.<sup>769</sup>

The two sides referred to each other’s views, values and priorities as mutually incompatible. “All they are interested in is profits” regretted one of the *energetiki*.<sup>770</sup> “The new management, just doesn’t understand the importance of the history of the electricity system (...). As a result, their priorities are all wrong,” said a Siberian *energetik*, refereeing to the new management of Irkutskenergo.<sup>771</sup> She continued, the *energetiki*, on the other hand, “respect history, because out of history the present and the future are built.”<sup>772</sup> For both sides, there is more at stake than the logistics of electricity provision; they each claim moral high ground for their solution to the country’s electricity crisis. A UES manager claimed that the successful implementation of reform was a “moral victory.”<sup>773</sup> One of the Siberian *energetiki*, by contrast, sees recent changes as a profound loss: “[privatization] brought all these managers to decision-making position within the electricity system; whereas what is really needed (...) are highly qualified and experienced leaders – namely engineers.”<sup>774</sup> This perceived lack of common grounds and their different world views constitutes them as separate groups.

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<sup>765</sup> See quote at the beginning of chapter. Belyaev, L.S. *Недостатки реализуемой концепции реформирования электроэнергетики России*, p.20.

<sup>766</sup> Interview #37 with electricity sector executive (*manager*), Vladivostok, 20071002.

<sup>767</sup> Some *energetiki* are opposed to the idea of foreign investors owning and controlling electricity assets.

<sup>768</sup> Interview #59 with politician/former electricity executive (former *energetik*), Irkutsk, 20071130; and interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004.

<sup>769</sup> Interview #55 with employee of electricity company, Irkutsk, 20071120. She was particularly proud of the hydro-electric power plants located in permafrost regions.

<sup>770</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004.

<sup>771</sup> Ibid.

<sup>772</sup> “Они [энергетики] уважают прошлое, потому что из него произрастают наше настоящее и будущее.” *Svet Negasimyi*, author’s conversation with Galina Mayakova (*energetik*).

<sup>773</sup> Interview #63 with electricity company executive (*manager*), Moscow, 20071212.

<sup>774</sup> See quote at the beginning of chapter, Belayev, *Недостатки реализуемой концепции реформирования электроэнергетики России*.

Examples of high-profile *managery* are Victor Myasnik and Valentin San'ko. Myasnik was appointed head of the Far Eastern power company (*DVUEK*). Primorsky Krai was one of the region most affected by the electricity sector crisis in the 1990s, with frequent blackouts and unfortunate provincial towns left in the dark, without heat for hours and days. Myasnik led the crisis management team tasked with solving the Far Eastern Energy crisis and making power generation in the Far East profitable.<sup>775</sup> While he has a background in the energy sector, he was an outsider in Vladivostok. Myasnik was one of a group of managers, who were placed at different Energos to restore order. He had proven his credentials as a reformer at Chitaenergo, where he collected bills, reduced the company's debt and earned profits. San'ko was the head of the Northern Energy Management Company.<sup>776</sup> His background is in economics and he proved his allegiance to Chubais' agenda at Vologdaenergo before being chosen to head one of Russia's largest newly created generation companies, OGK-6.<sup>777</sup>

Examples of high-profile *energetiki* are Victor Kudryavy and Sergei Kuimov. Kudryavy is a Soviet trained engineer, who held a number of high appointments in the Ministry of Energy since the Soviet period, including Deputy Minister of Energy under Yeltsin and Putin. He was an outspoken and high-profile critic of Chubais's reforms and was dismissed as Deputy Minister of Energy in 2003, after refusing to authorize a number of key elements of the proposed reform plans.<sup>778</sup> Sergei Kuimov, also an engineer by training, was head of engineering for Irkutskenergo since 1985 and on the board of directors since 1997.<sup>779</sup> Kuimov had close ties to the regional administration of Irkutsk oblast and for years joined the oblast administration's opposition to Chubais reform plans.<sup>780</sup> He was replaced on the board of directors in 2001.

Opposing *managery's* and *energetiki's* views, values and career trajectories in this stylized way does not mean that the boundaries between the groups are impermeable. For example, some *energetiki* became successful *managery*, and many *managery* were also trained as electric engineers. Moreover, as different as the *energetiki* and the *managery* were, there were also parallels between the two groups. Both groups used references to national economic development as a justification for their position, arguing that their solution is better for the well-being of the country, whereas the others' is detrimental for the electricity sector and for the economy as a whole. Secondly, they also both used Soviet-era symbolism to legitimize their agendas. Lenin had conceived of electricity as the basis for the spread of modern industry and technology.<sup>781</sup> The symbolic capital imbued in turbines, grids and wires since Lenin's era still

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<sup>775</sup> Myasnik was appointed head of DEUK in 2001. Biography and interview in *Dal'nevostochnyi Kapital*, October 2006, No. 10/74, pp.54. See also his personal webpage - <http://www.miasnik.ru/person/biography/>

<sup>776</sup> "Новые менеджеры АО-Энерго исполнительны до и после предела?" *Pravda*, June 28, 2001.

<sup>777</sup> San'ko was general director of Vologdaenergo since 1998 and then became director of NEMC. He is a graduate of the Leningrad Institute for Finance and Economics (Ленинградский финансово-экономический институт, им. Вознесенского), according to the Vologda Information Center/Вологодский информационный центр, <http://www.vic35.ru/news/2778.html>

<sup>778</sup> Rybalchenko, "Power Industry 1991-2000." See also *Zhurnal Vlast*, 23, June 14, 2004.

<sup>779</sup> Biographical information on Kuimov, available at <http://whoiswho.irkutsk.ru/>

<sup>780</sup> Interview with Svetlana Batutene, "Высокие энерготарифы - крах для Приангарья," *Vostochno Sibirskaiia Pravda*, February 23, 1999.

<sup>781</sup> Captured in the slogan "Communism = Soviet Power + Electrification of the whole country" quoted in Lenin, *O Razvitiu Tiasholoi Promyshlennosti I Elektrifikatsii Strany/on the Development of Heavy Industry and Electrification*, p.49.

resonates widely in Russia. *Energetiki* often used Soviet era language in stressing that electricity is “the backbone” of the economy. It is perhaps more surprising that the liberal reformers and the *managery* also sought to capitalize on Soviet era symbolism. Like *energetiki* they used Soviet era language and symbols to refer to the sector’s vital function for the economy. For example, Chubais’ investment plan to upgrade ailing Soviet-era infrastructure is called “GOELRO-2,” after the original *Plan GOELRO*, Lenin’s 1920 initiative to bring electricity to the newly created Soviet Union.<sup>782</sup> Ironically, but perhaps typical of post-Soviet politics, liberal reformers and *managery* repeatedly alluded to Lenin’s vision to gain support for their plan to *privatize* the country’s power plants.<sup>783</sup>

The conflict between technical experts and managers or economists has many historical precedents. In the early twentieth century, Thorsten Veblen was concerned about how the interests of engineers and of the “captains of industry” – the latter motivated by increasing pecuniary gain, the former by technological efficiency – could be reconciled in a technocratic society.<sup>784</sup> In recent years, the conflict between these two types of experts has become particularly salient in the electricity sector. As many countries liberalized their power sector, technological and financial imperatives were being re-examined under pressure to compete.<sup>785</sup> In Russia, the conflict between competing groups of experts in political battles over the future of an industry was also not unprecedented. Yakubovich and Shekshnia document a conflict between two sets of elites in the telecom sector. The incumbents were the traditional telecom workforce, Soviet-trained engineers with close personal connections (having mostly graduated from two elites institutes), constituting a “relatively closed social milieu.”<sup>786</sup> They were challenged by a group of professionals from the military industrial complex. Having lost their status and employment, they were looking for business opportunities and a way to put “their brains to work” in the market context.<sup>787</sup> In this case, both groups had an engineering background, but the latter group brought in foreign partners for marketing, branding and customer service. They were also more adept at the “skill of building relationships in the corridors of power,” which they put to good use. Both steps helped them succeed.<sup>788</sup> The challengers were able to convince the government that their goal of creating the infrastructure for mobile telephone services overlapped with the government’s goal of converting military facilities for civilian use.<sup>789</sup> In an interesting parallel to the electricity sector, new elites succeeded, because their goals overlapped with the governments in multiple ways.

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<sup>782</sup> GOELRO stands for Государственная комиссия по электрификации России, State Commission for the Electrification of Russia. See also chapter 1.

<sup>783</sup> San’ko was one of the *managery* who used a references to GOELRO, interview in *Krasny Sever*, May 17, 2007.

<sup>784</sup> Veblen, *The Engineers and the Price System*, 1921, noted in R. Stabile Don, “Veblen and the Political Economy of Technocracy: The Herald of Technological Revolution Developed an Ideology of ‘Scientific’ Collectivism,” *American Journal of Economics and Sociology* 46, no. 1 (1987).

<sup>785</sup> Distinct occupational cultures of technological and managerial elites is examined in various contexts, see for example, A. von Meier, “Occupational Cultures as a Challenge to Technological Innovation,” *Engineering Management, IEEE Transactions on* 46, no. 1 (1999).

<sup>786</sup> Valery Yakubovich and Shekshnia, “The Emergence of the Russian Cellular Industry: Entrepreneurial Success in a Failing Economy,” in J. Padgett and W. Powell (editors), *Market Emergence and Transformation*. MIT Press, *forthcoming*, p. 10 (page references refer to paper, not to the edited volume).

<sup>787</sup> *Ibid.* p.12.

<sup>788</sup> *Ibid.* p.18.

<sup>789</sup> *Ibid.* p.8.

### 3. Political positions of experts

Previous chapters have detailed the political battles that characterized the post-Soviet transformation of the electricity sector, pitting shifting alliances against the liberal reformers. What was the role of experts in these political struggles over the transformation of the electricity sector?<sup>790</sup> A first, immediately obvious observation is that the expert positions neatly mapped on to political proponents and opponents of electricity sector reforms since the early 1990s.

The position of the *managery* overlapped with the goals of the liberal reformers in the Yeltsin government and the liberal faction of the Putin government. This is not surprising, as Chubais himself was a key member of Yeltsin's young reformers and is closely connected to the liberal faction of the Putin government. As introduced in previous chapters, their goal was to unbundle the vertically integrated monopolies, privatize and use private capital to upgrade infrastructure. Unbundling and privatizing meant that regional Energos were broken up and ownership re-distributed; this pitted liberal reformers against regional governors, who wanted to keep Energos intact and maintain their hold over the regional electricity monopolies. The position of the *energetiki* mapped on to the position of regional governors in the 1990s. Governors had long opposed the unbundling of Energos, because they used the sector to selectively subsidize regional industrialists and keep household tariffs low. *Energetiki* were also opposed to the breaking up the regional vertical monopolies. They saw it as a recipe for system failure and held that maintaining the "integrity" of the unified electricity system is the only way out of the crisis of the 1990s.<sup>791</sup>

The *energetiki-managery* conflict entered politics most obviously when the two sets of experts were drawn into important policy bodies and consulting committees involved in electricity reforms. On the national level, two committees were particularly influential around 2001 and 2002: the "Kress committee" and the "Gref team."<sup>792</sup> The Kress committee was a working group of the State Council/*Gossoviet*. It was staffed with *energetiki* and backed by various regional governors, including for example, Leonid Roketsky, the governor of Tyumen, one of Russia's richest regions.<sup>793</sup> Kress himself was the independent and strong governor of Tomsk, another Siberian region. The Kress commission proposed a plan to modernize the electricity system that would leave the vertically integrated structure of the Energos intact, and *not* divide generation from transmission.<sup>794</sup> It also suggested that the state retains substantial ownership of electricity companies and was against the privatization of generation companies, fearing that such unbundling would decrease reliability.<sup>795</sup> The plan also suggested that only a small amount of

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<sup>790</sup> The post-Soviet Literature has examined the nomenklatura background of Russia's political and business elites – see for example Kryshantovskaya and White, "Putin's Militocracy." These studies are not concerned with experts.

<sup>791</sup> The relationship between the *energetiki* and the regional governors was complicated. There were always tensions between regional governors and Energo managers, as the governor's policies of keeping tariffs low starved the electricity sector of much needed cash. At the same time, many of the *energetiki* directors had personal connections to governors, as detailed below

<sup>792</sup> See for example, "Кресс добавит энергетики," *Rossiiskaia Gazeta*, April 20, 2001.

<sup>793</sup> Interview #39 with electrical engineer/electricity sector expert, Vladivostok, 20071004, interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122 and interview #52 with electricity sector economist (*energetik*), Irkutsk, 20071117.

<sup>794</sup> Interview #52 with electricity sector economist (*energetik*), Irkutsk, 20071117.

<sup>795</sup> The Kress committee's concern with reliability was stressed in interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122.

electricity should be freely traded between contracting parties, and that the state should continue to regulate the bulk of wholesale and all retail prices.<sup>796</sup> The Kress plan drew on a modernization proposal by the Institute for Electric Energy Systems at the Siberian Branch of the Russian Academy of Sciences, one of the most prominent institutional homes of the “academics” among the *energetiki*.<sup>797</sup>

The “Gref team” was the reform committee of the Ministry of Economic Development and Trade.<sup>798</sup> Made up of *managers*, the Gref team by and large recommended the liberalization plan favored by Chubais.<sup>799</sup> The unbundling of the vertically integrated regional monopolies, the Energos, into the supra-regional OGKs and the territorial TGKs was initiated by the Gref team. It also favored full price liberalization and the creation of competitive markets for the exchange of all electricity, both long-term contracts, as well as the day-ahead and balancing markets.<sup>800</sup> The *managers* also supported the policy of Chubais to cut off non-paying customers.<sup>801</sup>

While experts play an important role in the federal reform commissions, their influence on the day-to-day activities of the administrative bodies at the oblast level, in particular in the Regional Energy Commissions (REKs), was probably even more significant.<sup>802</sup> REKs are composed of representatives of regional administrations, electricity companies and major industrial consumers. For most of the 1990s, REKs tended to be staffed by *energetiki*, as the Energos as well as the regional administrations sent them as their representatives. REKs were formally charged with implementing the federal government’s energy policy and price directives. As we have seen in chapter 4, in practice, however, REKs were often beholden to regional political dynamics.

Note that the Russian government itself tried to de-emphasize the political nature of the expert’s conflict. The claim to implement policies that are the “right” solutions, rather than the outcome of political processes, buttressed the legitimacy of Putin’s government. Putin’s *PR-shiki* (presidential public relations) and some participants in sector reform tended to “de-politicize” the nature of the disputes surrounding the electricity sector. The presidential administration downplayed the political nature of the conflict between the Kress and Gref commissions: the deputy minister for economic development commented on one of the meetings between the two

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<sup>796</sup> In Khlebnikov, *Rynok Elektroenergii V Rossii*, p. 56. Also, interview with high-level administrator of the Melentiev institute, who confirmed the involvement of his team, interview #52 with electricity sector economist (*energetik*), Irkutsk, 20071117.

<sup>797</sup> Energy Systems Institute, named after L.A. Melentiev at the Siberian Branch of Russian Academy of Sciences (Институт систем энергетики им. Л.А. Мелентьева, Сибирского отделения РАН). Much of their work published on their website <http://www.sei.irk.ru/>. Their involvement is also mentioned in Khlebnikov, *ibid.*. The opposition of the institute to Chubais plan was mentioned in an interview with two prominent members of the Melentiev Institute, interview #52 with electricity sector economist (*energetik*), Irkutsk, 20071117, and interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122.

<sup>798</sup> The working group was active in 2001/2002. For an overview of the position of the two committees, see “Последняя схватка за РАО ЕЭС,” *Vedomosti*, May 15, 2001. See also Rutland, “Power Struggle: Reforming the Electricity Industry,” p.22.

<sup>799</sup> Further details on the different proposals, see Khlebnikov, *Rynok Elektroenergii V Rossii*, pp.55.

<sup>800</sup> *Ibid.*

<sup>801</sup> Myasnik is said to have been very strict about non-payments, “Новые менеджеры АО-Энерго исполнительны до и после предела?” *Pravda*, June 28, 2001.

<sup>802</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004.



commissions for example: “this meeting will not be political, but purely technical.”<sup>803</sup> Other commentators dismissed the conflict between *energetiki* and *managery* as personal squabbles between loyalists and enemies of Chubais.<sup>804</sup>

#### **4. The “managery’s victory”**

The position of the two groups of experts vis-à-vis power and influence, and their position within the political and administrative structures changed over the last two decades. The *energetiki* gradually lost control of the commanding heights of the electricity sector. The outcome of the experts’ conflict mirrored the battles of political elites: the *energetiki*’s defeat and the *managery*’s ascendancy owed much to declining power of regional power and the political agreement reached between the liberal reformers and the Putin government. Scales tipped in the experts’ conflict as a result of the recentralization of political power under President Putin and the implementation of Chubais’ liberalization agenda. “When Anatoly Chubais’ ascended to the leadership of RAO EES, the formation of a new leadership team began.”<sup>805</sup> This process was variously described as a “purge”<sup>806</sup> or a “wave”<sup>807</sup> that ended up with “an almost wholesale replacement of management”<sup>808</sup> and signified the “*manager*’s victory.”<sup>809</sup>

A number of events are indicative of this trend. At the center, the Kress team’s advice was largely ignored in favor of the plan that unbundled Energos and privatized power plants. Kudryavy, one of the most high-profile *energetiki* and outspoken critics of electricity reforms was removed from office.<sup>810</sup> As the *energetiki/managery* conflict played out at the federal level, we see a similar pattern at the regional level, in the staffing of the regional energy commissions (the REKs). Around 2001, the *energetiki* serving as REK delegates in the regions tended to be replaced by *managery*. One observer noted – “the new *managery* constantly conflicted with [the governor], a conflict that was carried out in the REK.”<sup>811</sup> Where the old REK delegates remained in their seats, they were now more closely overseen by the newly created presidential envoys to the region, the *polpredy*. As the *polpred* offices were endowed with substantial authority, the remaining *energetiki* had no choice but to go along with Moscow’s liberalization agenda.

The replacement of *energetiki* with new managers at the commanding heights of the electricity sector was not coincidental. Chubais actively pursued this as a policy. The replacement of old Soviet era cadres with new, younger minds had already been one of his priorities when he was head of the State privatization commission under Yeltsin. He once said that along with the old

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<sup>803</sup> A comment by Andrei Sharonov, deputy minister for economic development. “Великое Стояние,” *Vedomosti*, May 18, 2001.

<sup>804</sup> Interview #8 with electricity sector analyst at financial institution, Moscow, 20061006.

<sup>805</sup> In Russian: “Когда к руководствo единоy российской энергосисемы РАО ЭЕС России пришел Анатолий Чубайс, началo формирование новой команды управленцев энергетическими предприятиями.” *Dal'nevostochnyi Kapital*, October 2003, No.10/38, p.48.

<sup>806</sup> Leadership change at Krasnoyarskenergo is referred to as a purge, in Russian *чистка*, in “Красноярск пошел по приморскому пути,” *Segonya*, September 12, 1997.

<sup>807</sup> In Russian *волне*, Nadeshda Voronzova, *Dal'nevostochnyi Kapital*, October 2003, No.10/38, p.48.

<sup>808</sup> In Russian: “почти полностью смеил менеджмент” – this is said to be Chubais' work; *ibid*.

<sup>809</sup> Interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122.

<sup>810</sup> Interview with Kudryavyi in *Ekspert*, No.14, April 13, 1998. About his removal see “Энергетика,” *Zhurnal Vlast*, No.23, June 14, 2004.

<sup>811</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004.

cadres “there remain the same instincts, habits, connections and the same bend in the spine.”<sup>812</sup> Once chairman of UES, he moved decisively to replace older personal in the electricity sector, in particular the Energo directors. This campaign ended up removing high profile *energetiki* from their posts. The leadership turnover happened across Russia’s regions: according to one source, four out of five Energo directors were replaced in the few years between 1998 and 2002/3.<sup>813</sup> Media sources give an account of the most high-profile leadership changes during these years, although many probably went unreported. An early leadership change happened at Tyumenenergo, the country’s second largest Energo, where the director lost his seat both at the head of the Energo and on UES’ board of directors.<sup>814</sup> Once a director changed, so did most of the other executives within an Energo. Myasnik is said to have fired much of the executives at Chitaenergo during his “clean sweep” of the company – “after a year, not one of the old bosses who had worked there before Myasnik was left at the company.”<sup>815</sup> This policy clearly had its intended effects. UES’ 2001 annual report notes that “the policy of decreasing the average age of personnel is (...) a consistent priority”<sup>816</sup> and shows statistic that the average age of the Energo’s general directors has *decreased* by three years, during the three year period of 1999 and 2001.<sup>817</sup>

The leadership turnover was important not only because of the different worldviews of the two groups of experts, but because of their political networks. The *energetiki* tended to be linked to regional governors and regional administrations. These ties date back to Soviet times: as a vital infrastructure, the electricity sector had been the responsibility of the deputy secretary of the regional assembly (the “second *krai-kom* secretary.”)<sup>818</sup> This meant that during the first post-Soviet decade, the *energetiki* at the head of the Energos were part of the old Soviet regional party nomenklatura. They remained in charge for most of the nineties, which facilitated the tight connection between regional administrations and the Energos. Examples of this close relationship can be found in many regions. In Khabarovsk, for example, the Energo director Vladimir Popov was said to be a close friend of governor Ishaev.<sup>819</sup> In Novosibirsk, the head of Novosibirskenergo, Vitali Tomilov, was a loyalist of the regional governor Tolokonsky, who supported him fiercely, though ultimately in vain, against the attempts by Chubais to replace

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<sup>812</sup> Quoted in Gustafson, *Capitalism Russian-Style*.

<sup>813</sup> Franz Hubert, Astrid Matthey and Alexander Andrianov, "Reform of Russian Power Industry," in *Modernization of the Russian Economy*, ed. Yasin (Moscow: 2003).

<sup>814</sup> “Энергетики выбирают первым,” *Segonya*, October 2, 1999. Chapter 3 documents how directors at Mosenergo, Irkutskenergo and Dal’energo were fired a few years later.

<sup>815</sup> In Russia: “За год (...) не осталось не одного из начальника, которые работали там до прихода Мясника.” In “Новые менеджеры АО-Энерго исполнительны до и после предела?” *Pravda*, June 28, 2001.

<sup>816</sup> UES 2001 Annual Report, section 5.4.5. “Personnel management” available online at <http://www.rao-ees.ru/en/business/report2001/>

<sup>817</sup> From 53 years to 50 years between 1999 and 2001, according to the UES 2001 Annual Report. As the average age of existing directors should have increased over 3 years, had they not been replaced, the decrease can only mean that a few younger directors have been appointed each year.

<sup>818</sup> Interview #39 with electrical engineer and electricity sector expert (*energetik*), Vladivostok, 20071004.

<sup>819</sup> In fact, Popov became vice-governor. Popov is an *energetik*, having worked for Khabarovskenergo since 1984. He was removed from Khabarovskenergo in 2001, during the Chubais led reforms, but then became first deputy chairman of the Khabarovsk Krai administration and given the portfolio of overseeing the fuel and energy complex. Popov’s biography on the Khabarovsk Krai government site, <http://www.adm.khv.ru>. Also interview #45 with employee of electricity company, and #46 with academic and journalist, both in Khabarovsk, 20071011.

him.<sup>820</sup> The *managery*, on the other hand, were typically not rooted in regional politics. They were intentionally “transplanted” from other regions, where they had proven to be loyal to a reformist agenda. An interesting observation about the political connection of the *managery*, concerns their links to the Yeltsin-era liberal reform team: in particular high-level UES executives seem to have served in various functions under Yeltsin. At UES, “Chubais’ empire,” they found refuge during the political elite turnover that followed the ascendancy of Putin and his loyalist.<sup>821</sup>

There was also a connection between the shifting power position of experts with the centralization of political and bureaucratic authority under Putin. Energo directors who had been installed by regional governors were ousted, when regional governors lost their independence during Putin’s first term in office. As Putin’s replaced the most rebellious regional governors in his efforts to recentralize political power, *energetiki* lost their protectors and were replaced with *managery*, promoted by Chubais. In Primorsky Krai, for example, the old Energo management was thrown out as soon as the rebellious governor Nazdratenko was removed from his post in 2001.<sup>822</sup> The new governor of Primorsky Krai, Darkin, who relies on the approval of the Kremlin, is said to have no involvement with the electricity sector.<sup>823</sup> In Moscow, Remezov, the Mosenergo director loyal to mayor Luzhkov was ousted in a stand-off with Chubais.<sup>824</sup> In other regions, the newly appointed *managery* had to fight regional governors: “from the outset we had to fight with regional powers,” said San’ko, then manager of Volgodaenergo.<sup>825</sup> And the new director of Krasnoyarskenergo talked of a “war without rules” that was fought against him by incumbent regional elites.<sup>826</sup>

The manager’s victory also overlapped with President Putin’s developmental agenda, because it allowed for an integration of the sector into domestic and international markets. This integration is premised on making the sector legible for private investors, a goal that the promotion of *managery* served in multiple ways. The manager’s victory brought in a culture of “professionalism” that is congruent with a market economy. One of the sector’s new *managery* noted “today the leadership of electricity companies understand that a director is a hired manager, somebody who has to plan and execute a budget, they understand that everything has to be paid for, etc. and that one needs to live according to market principles. And as a result, we stand today on rails towards markets.”<sup>827</sup> Implicitly this statement contrasted the new

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<sup>820</sup> The struggle between the regional government and UES over the director of Novosibirskenergo stretched over a few months; “Запрет не подействовал,” *Vedomosti*, April 26, 2001; “РАО ЕЭС готовит силовые акции в Новосибирске,” *Kommersant*’, May 11, 2001 and “Новосибирскэнерго без боя не сдастся,” *Kommersant*’, May 16, 2001. Finally, “РАО ЕЭС России решило конфликт в Новосибирскэнерго,” *Izvestia*, July 13, 2001.

<sup>821</sup> Aleksander Voloshin, UES board member, was Yeltsin’s Chief of Staff in the late 1990s. Yakov Urinson, another high-ranking UES executive was Economics Minister under Yeltsin in the late 1990s. See a reference to this connection between the Yeltsin era government and UES executives in *Dal’nevostochnyi Kapital*, June 2005 No. 6/58, p. 10.

<sup>822</sup> As discussed in chapter 3, see also “Энергетика,” *Zhurnal Vlast*, No.23, June 14, 2004.

<sup>823</sup> Interview #39 with electrical engineer and electricity sector expert (*energetik*), Vladivostok, 20071004.

<sup>824</sup> Rybalchenko, “Power Industry 1991-2000.”

<sup>825</sup> Valentin San’ko, Manager of the Northern Energy Company, quoted in Rutland, “Power Struggle: Reforming the Electricity Industry,” p.284.

<sup>826</sup> Kolmogorov, in “Раскалять амбиции не продуктивно,” *Krasnoyarsky Rabochii*, March 5, 1998.

<sup>827</sup> In Russian: “стоим на рыночных рельсах.” Full quote: “Сейчас руководство энергокомпаний понимает, что (...) директор - это нанятый менеджер, который должен планировать и исполнять бюджет, что со всеми надо

professionalism of managers, with an imputed lack of professionalism of the *energetiki*, who did not understand that electricity bills need to be collected in cash, did not cut-off non-paying customers, did not know how to run a profitable company, who would not have fired personnel and, therefore would not have set the system on rails towards the market.

I am also stressing that the financial “modernization” of the sector was particularly important consideration for liberal reformers and for the Putin government, and that the victory of the managers owes much to these considerations. Myasnik, one of the managers introduced above, saw his primary challenge at the head of the electricity system to “increase the attractiveness of the company for investors.”<sup>828</sup> The government wanted and needed to rely on private capital, both domestic and foreign, as part of the developmental agenda that combines state control with private investment. Agreeing to let the *managery’s* take over the commanding heights of the sector was in many ways a prerequisite for this strategy to work: without the *managery* in place, the old electricity companies were unable to turn themselves into attractive targets for investors (at least that was the winning argument of the liberal reformers).

The *managery’s* victory was not complete. Neither Chubais nor Putin had the ability to replace all *energetiki*, nor would they have wanted to lose their knowledge and expertise. Nevertheless, *energetiki* have portrayed it as a wholesale change: “all *energetiki* have left UES, there is nobody left. There are only the managers left at UES” said one veteran *energetik*.<sup>829</sup> This perception was created by the whole-sale turnover of high-profile decision makers. Also, when it came to a stand-off in the battle about a high-profile position, the incumbent *energetik* tended to lose their standing as decision makers in important positions.<sup>830</sup> On the flip side, the *managery* were able to keep their positions, despite political maneuvering to oust them from power. The most high-profile UES manager was of course Chubais. The Duma repeatedly passed motions to replace him as the director of UES.<sup>831</sup> Victor Kress, the political leader of the Siberian *energetiki*, was at a time rumored to replace Chubais; something that never happened.<sup>832</sup>

## **5. Legitimacy of liberal reforms – “there is no other way”**

Beyond turning electricity companies into enterprises legible and attractive to foreign and domestic private investors, the views and frames of reference of the two groups entered the politics of reform in two other ways: one, both sets of experts furnished narratives for different parties involved in the transformation of the electricity sector. Secondly, the victory of the *managery* legitimized the equation “modernization=liberalization” among electricity sector insiders and beyond. Continuing a theme introduced in chapter 5, the analysis how expert

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расплачиваться деньгами, т.е. надо жить рыночной экономикой. ... И сегодня стоим на рыночных рельсах.” Viktor Minakov, interview in *Dal'nevostochnyi Kapital*, October 2003, No.10/38, p. 48.

<sup>828</sup> In Russian “повышение инвестиционной привлекательности,” interview with Myasnik in *Dal'nevostochnyi Kapital*, February 2006, No.2/66, p.23.

<sup>829</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004.

<sup>830</sup> Kudryavy was dismissed in August 2003 for blocking the directives on the formation of the Federal Network Company and the System Operator. “Энергетика,” *Zhurnal Vlast*, No.23, June 14, 2004.

<sup>831</sup> The Duma was repeatedly trying to replace him as the head of UES. Petrosyan, “What Is the Current Status of Russian Electricity Sector in the Light of Restructuring Laws and Rao Ues Breakup Strategy?.”

<sup>832</sup> “Как Виктор Кресс предложил уволить Анатолия Чубайса,” *Kommersant*, May 18, 2001, and “Кресс Вместо Чубайс?” *Vek*, July 27, 2001.

discourse legitimizes interests and political agendas highlights how ideas and interests are intertwined.

Various interested parties in the political struggle endorsed arguments by either the *energetiki* or the *managery* at different points in the reforms. Gazprom is not usually thought of as a proponent of liberalization and marketization in Russia, having prevented the privatization of the gas sector for two decades. As we've seen in earlier chapters, Gazprom did endorse the liberalization of the electricity market, as they were interested in acquiring gas-fired power plants and in price liberalization. In its electricity sector strategy, Gazprom adopts the language of efficiency that is the hallmark of the *managery* "The major focus is [...] improving the efficiency of natural gas fired power generation, which will provide for the effective use of natural gas in the context of growing energy demand of the Russian economy."<sup>833</sup> Mobilizing the arguments of the liberal reformers may have contributed to the company's success in acquiring valuable assets during the "privatization" of generation assets.

Powerful private interests also resorted to the *energetiki's* expertise to justify the privileges they secured during liberalization. One aspects of the *energetiki's* narrative is the importance of maintaining the "integrity" of the system, i.e. not breaking apart different parts of a physical infrastructure that was originally built as a coherent system. As we've seen in chapter 5, this argument benefitted large energy-intensive industries in Siberia. These industries emphasized the importance of the unity of the system that included electricity and industrial production, tied together in the TPKs (Territorial Industrial Complexes), thereby including their production facilities into "the system" that should not be broken up. The reasoning of the *energetiki* – that the "system" should remain intact,<sup>834</sup> thus played a role in Rusal's gaining control of Siberia's largest power plants, eventhough as a group they have lost much of the influence over the commanding heights of sector they once had. Note thus that expert discourse played a key role in the way industrial geography was politicized, as discussed in chapter 5.

The two sets of expert discourses served to legitimize various political positions, including Gazprom and Rusal's, as they were appropriated into corporate strategies and, arguably, into the conglomerate's negotiations with the government. At the same time, the argument here is not that expert discourse is in some way causally prior to corporate interest. I am also not making the case that experts were captured or bought by oligarchs. While I have no way of knowing whether some experts were financed by conglomerates, or whether the expert opinions published in regional newspapers were paid for (it is rumored that some of them might have been), the two expert positions to a large extent existed outside and independent from private interests and conglomerates. In some sense, expert discourse can be thought of as tools appropriated by political actors, but not created by them or for them.

Finally an important consequence of the shifting balance between *managery* and *energetiki* concerns the legitimacy of liberal reforms. The victory of the *managery* legitimized liberal reforms, and more broadly, the vision of the future of the electricity system pushed by Chubais. Today "modernization" of the sector is generally equated with privatization and liberalization.

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<sup>833</sup> Gazprom business strategy and Gazprom electricity sector strategy, available on Gazprom website, <http://old.gazprom.ru/eng/articles/article8523.shtml>

<sup>834</sup> Interview #60 with energy company executive (former *energetik*), Irkutsk, 20071203.

According to one observer “many people believe that *there is no other way*.”<sup>835</sup> Ironically, the blackouts and the threat of blackouts helped the liberal reformers, serving as proof for their argument, that there is no other way. I am not entirely certain how widespread the approval of this equation “modernization=liberalization” is; it does seem to include at least Kremlin insiders, but may also be a broader sentiment. Among Kremlin elites, approval for reforms started with Vladimir Putin, who switched from opposition to support soon after becoming President. It also seems to have taken hold among electricity sector professionals. Even the *energetiki* among my interviewees have resigned to the idea that liberalization was inevitable. It is not so much that they changed their minds about the viability of “economistic ideas,” but they often believed that these ideas are unstoppable and concurrent with post-Soviet trends more generally, even though they would have preferred other ownership structures and other ways of organizing production.<sup>836</sup> Finally, almost everybody involved in the electricity sector believed that “there is no way back,”<sup>837</sup> a notion shared by observers of electricity sector privatizations in other countries.<sup>838</sup> The victory of the *managery* thus legitimized their world-views and the recent reforms, not necessarily as the right way, but as the dominant views of the current epoch.

Whether the liberal reforms gained approval among the general public is not clear at this point. Chubais himself has been exceedingly unpopular in Russia, blamed with the botched outcomes of the voucher privatization of the 1990s, for enriching the few and impoverishing the masses.<sup>839</sup> The privatization of electricity was hardly a popular idea and many people are negatively affected by rising utility prices. At the same time, the government linked infrastructure privatization with the promise of economic growth and better future. The most widely used argument for privatization has been that private investment is a prerequisite for technological updates, an argument that sought to legitimize the divestiture of the state’s stake in power plants. Whether this rationale is today widely accepted, however, is not clear.

## **6. Conclusion**

To conclude, I want to come back to the theme of technocratic governance. At least since Max Weber, political theory has drawn a distinction between elected politicians and a second group, variously called bureaucrats, technocrats or experts. One intellectual tradition has extolled the virtues of technocratic governance by bureaucrats, while lamenting the inconsistency of elected officials beholden to public opinion. Another values democratic accountability and the representative functions of politicians over the undemocratic, arbitrary claims to expertise by bureaucrats. Though their normative valiance differs, they both raise questions about the uneasy relationship between politicians and experts, and about the ostensible political neutrality of scientific expertise. This relationship has been explored in the context of Western democracies.<sup>840</sup>

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<sup>835</sup> Emphasis added, interview #8 with electricity sector expert at financial institution, Moscow, 20061006.

<sup>836</sup> Interview #39 with electrical engineer/electricity sector expert (*energetik*), Vladivostok, 20071004. He also noted that he prefers municipal ownership of power plants, for example, but that this seems to not be a politically viable option.

<sup>837</sup> Interview #57 with electricity sector economist (*energetik*), Irkutsk, 20071122.

<sup>838</sup> Sally Hunt, *Making Competition Work in Electricity* (New York: Wiley and Sons, 2002).

<sup>839</sup> For example, Valentin Sirokin, *Чуба́йс, Великий Инженер*, Izdatel'stvo Algoritm, Moscow 2006, p.57.

<sup>840</sup> Joel Aberbach, Robert Putnam, and Bert Rockman, *Bureaucrats and Politicians in Western Democracies* (Harvard University Press, 1982).

What can we say about this relationship in a post-socialist context, and what can my findings contribute to broader debates about the political role of experts?

Even though the conflict between the *energetiki* and the *managery* was not framed as a political issue, the stakes of the conflict and the legitimizing effect of expert discourse warrant seeing competing experts as political arenas in post-Soviet Russia. The political neutrality of technocratic governance and of scientific expertise in technocratic polities thus break down. The chapter presented two arguments about how this happened, and about the political role of experts in Russia's electricity sector, which open avenues to understand the relationship between experts and elected politicians in technocratic polities more generally. First, the victory of *managers'* was a consequence of shared goals of the liberal reformers and the Putin government. Promoting the *managery* served Chubais' goal of depoliticizing and liberalizing the electricity sector. At the same time, *managery* were instrumental for the government's development agenda; their victory was a prerequisite for raising private capital in the sector, as it made electricity companies legible for foreign and domestic private investors. Second, I suggested that expert discourse served as a legitimizing discourse for various factions engaged in power politics. The victory of the *managery* ultimately legitimized a liberal agenda that equated modernization with the breaking up of vertical monopolies and with privatization.

Phrased more generally, these two findings have the following implications: technocratic governments' reliance on one set of experts produces legitimacy for the values, ideas and methods espoused by these experts, especially if the government's reliance on them leads to the displacement of competing experts in leading positions. As increasingly globalized and regulatory intensive economies tend to rely on elements of technocratic governance, this finding may prove relevant beyond Putin's Russia.

## **Chapter 7: Beyond Electricity, Beyond Russia, Beyond Today**

1. *The argument in light of the evidence*
2. *Beyond the electricity sector*
3. *Implications beyond Russia*
4. *Beyond 2008 and future research*
5. *Conclusion*



## **1. The argument in light of the evidence**

Russia's regional and federal governments have embraced the electricity sector as a valuable tool to shape the country's future. The electricity sector's transformation from ministry to market was forged by officials at different tiers of the state administration, who were trying to achieve multiple goals: regulate regional economies at a time when authority structures were being challenged, promote economic development when de-industrialization loomed large, and, finally, legitimize governance when the government was unable to provide many essential public goods. My narrative of the electricity sector's transformation – from a ministry to a market – stresses the government's developmental motives in meeting these challenges. I argued that it was these motives that crucially shaped political battles over power plants and subsidies, rather than the rent-seeking and power-maximizing motives of corrupt bureaucrats.

Initially, regional governors sought control of electricity sector assets and prices to prevent de-industrialization and cushion the impact of hyperinflation on household incomes. Governors kept prices low for regional industrialists, and determined which oligarchs benefitted from early privatization and ownership changes. With the centralization of political power under Putin, the site of property battles and of utility tariff regulation shifted to the federal government. By then, Russia's oligarchs had consolidated into a relatively small number of powerful conglomerates. These conglomerates were by no means independent from the state. Neither could the state realize its goals without them. The federal government under Putin entered into agreements with these conglomerates, which characterized by mutual dependence and resulted in a blurring of the boundaries between the public and private realm. Just as regional governors had attempted earlier, it was now the federal government that tried to enlist conglomerates for its developmental agenda, by selectively accommodating their demands during the transformation of the electricity sector. As energy-led and industry-led conglomerates had different interests vis-à-vis the electricity sector, this strategy resulted in the different ownership and subsidy regimes evident across Russia today.

What are the merits of this interpretation in light of the evidence presented in the previous chapters? Post-Soviet histories of the largest electricity producing regions in European Russia, Siberia and the Far East, which were at the center of the dissertation's narrative, most strongly support this interpretation of state-market relations. The political dynamics of reform in smaller regions, which have received less attention in the preceding discussion, sometimes differed from those of their larger neighbors, in particular during the nineties. Unlike Irkutsk, Moscow and Primorsky Krai, smaller regions that had to import electricity generally followed federal government directives and were less likely to chart their own paths. Unlike Mosenergo and Irkutskenergo, the Energos in remote regions were not subject ownership struggles by large conglomerates. In Siberia and the Far East, they typically relied on coal, were expensive to run, and served primarily local consumers and enterprises. However, under Chubais' aegis, smaller regions' electricity companies were at first *de facto* and later *de jure* merged with the *Energos* of their larger neighbors. These consolidations meant that smaller, more remote regions followed a trajectory similar to their neighbors during this later period. In some cases, Putin mandated that conglomerates controlling large profitable enterprises in remote regions "look after" the territorial electricity companies there.

Apart from the small and remote regions, there are a number of larger anomalous cases, with trajectories and outcomes that do not fit neatly into the triptych that structures the narrative of the dissertation. I introduced Tatarstan and Bashkortostan in passing; they are two sub-national regions with the status of Ethnic Republics. Enjoying far more autonomy from the federal government than other regions, their electricity companies were excluded from the UES-led reform plans from the start. For different reasons, the war-torn regions in Southern Russia (Chechnya, Ingushetia and North Ossetia) have also not been included in the liberalization plan and remain government owned.<sup>841</sup> These regions do not follow the larger European Russian trajectory.

Aside from these divergent regional cases, a number of objections could be raised to the emphasis on developmentalism. Skeptics might want to redirect the focus to the state's grabbing hand, which undermined any efforts of minority factions pushing for a developmental agenda. Even though they might concede that the Russian state has a developmental agenda, they would argue that it failed to create a viable basis for sustainable economic growth. A typical enumeration of failures includes reference to an overreliance on oil and the inability to diversify economic production, to levels of foreign investment that remain puny compared to China's, and to a bureaucracy of Soviet dimensions. They tend to conclude that Putin's term in office has been a "lost decade."<sup>842</sup> These failures are often blamed on ever-tightening relations between the government and Russia's remaining loyal oligarchs.

Arguably, post-Soviet developmentalism has had an important influence on regional economies, even if its stated aims remain partially or largely unfulfilled, by shaping reform trajectories and outcomes and by imparting legitimacy to economic policies. Regional development strategies draw on regional economic histories and developmental discourses that are often imbued with established legitimacy. In Siberia, for example, regional development discourse drew upon the vocabulary developed by the environmental movement, which formed as a reaction to various ecological disasters that accompanied Soviet-era industrialization. In the Far Eastern city of Vladivostok, the current development strategy calls for construction of a bridge that has been planned since the late Tsarist period.<sup>843</sup> The legitimacy of development strategies also results from the fact that no single actor dictates them; instead they are the result of a convergence of powerful interests and authoritative voices – public and private actors, professionals and academics.

Most accounts that stress the failure of the state to further economic development, also either implicitly or explicitly rely on a predatory or captured state model. A second objection to the emphasis on developmentalism would emphasize that the privileges secured by large conglomerates during electricity sector reforms support the argument that the state was captured

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<sup>841</sup> Neighboring Dagestan, however, has been remarkably peaceful. It is also home to a number of valuable, though smaller hydro-electric plants, which were integrated into the federal government owned Hydro-OGK.

<sup>842</sup> This is also a core argument of the political opposition to Putin grouped under the umbrella of "Other Russia," see for example, In 10 Years of Putin, Russia Lost a Decade, *Other Russia Analysis*, August 6th, 2009, <http://www.theotherussia.org/2009/08/06/in-10-years-of-putin-russia-lost-a-decade-analyst/> (last accessed May 2010).

<sup>843</sup> The development program for Primorsky Krai: Администрация Приморского Края, "Стратегия социально-экономического развития Приморского Края на 2004-2010 гг.," под общей редакцией С.М.Дарькина, Владивосток, Издательство ТЦСП, 2004.

by powerful private interests. Even if the government was able to extract contributions for its developmental agenda, these should be considered negligible, and fail to undermine the core of the capture hypothesis. Such focus on capture and corruption fails to explicate other important characteristics of the post-Soviet economic transformation. Observers who stress failure often utilize analytical lenses that scan for precisely those state-market relations that most resemble a stylized view of Western capitalist economies. They also tend to seek out evidence of competitiveness in a firm belief that the most efficient and innovative producers will conquer a given market. Finding little evidence for these drivers of prosperity, they instead find ample opportunity to explore the curiously close relations between the government and conglomerates. The dissertation tries to provide an alternative lens, which without denying evidence of corruption and capture, nonetheless throws light on different types of state-market relations and different conceptions of competitiveness.

## **2. Beyond the electricity sector**

The Russian state's developmental ambitions shaped the transformation of the electricity sector. What evidence is there for the relevance of this model beyond the electricity sector? A third salient objection to my narratives is that the state's developmental ambitions may be unique to the electricity sector, as a particularly close connection exists between this sector and economic development.

There is little doubt that electricity is in some sense an "easy case" and that the developmental logic is particularly relevant for electricity. Linking the electricity sector to economic planning has a long tradition in Russia: since the early days of the Soviet Union's existence, planning went hand-in-hand with electrification. The first electrification-plan, *Plan-GOELRO*, was also the first of the Soviet Union's legendary Five-Year Plans, the pulse of planning for rest of the Soviet era. Soviet industrialization, and even more broadly, the project of Soviet economic development was intricately linked to electrification.<sup>844</sup> Today electricity sector modernization features prominently in territorial development strategies. Electricity is also unique, in that it is both a basic infrastructure and an energy sector. Finally, it is a network sector. Grids remain natural monopolies, which means that the government always retains an exceptionally prominent role.

To what extent is the political dynamic I describe relevant for other sectors of the Russian economy? What of other networked infrastructure sectors, such as the Russian railways. In the railway sector, Pittman found that the state introduced some competition among private actors, while being reluctant to give up control over key aspects of the sector and continuing to subsidize cargo and passengers. As in the electricity sector, complex subsidy regimes continue to exist in the Russian rail system, including both freight-to-passenger and within-freight subsidies.<sup>845</sup> While the logic of subsidies is multi-layered, developmental considerations are

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<sup>844</sup> Coopersmith, *The Electrification of Russia*.

<sup>845</sup> Pitman, Russell, "Railway and Electricity Restructuring in Russia: On the Road to where?" Unpublished working paper obtained by author, p.5. Pitman has published extensively on the Russian railways reform, for example, Russian Railways Reform and the Problem of Non-discriminatory Access to Infrastructure, *Annals of Public and Cooperative Economics*, 2004, 75/2.

obvious when considering rail transport of various key commodities -- coal, first and foremost.<sup>846</sup> Siberian coal is transported at very low cost to European and Far Eastern consumers, as well as to the booming Asian economies; a subsidy that helps Russian companies produce at low cost and Siberian coals mines to sell more. Rail subsidies also benefit other export-oriented sectors located in remote territories. As in the electricity sector, attempts to liberalize the railway system have a “territorial” aspect: the pattern of the rail sector’s transformation has been profoundly shaped by economic geography.

Is an emphasis on developmentalism misplaced for sectors that are not “networked” and do not provide infrastructure services? There are a priori reason to believe that the government had less reason to stay involved and actively manage ownership changes and subsidy regimes in sectors that do not provide such essential public services as electricity. Yet there is evidence that regional governors and the federal government under Putin have been involved in the post-Soviet transformation of many different sectors, from metals to machine building, from food processing to financial services. Each of these sectors is in its own way the “backbone” of a particular regional economy or even the national economy. The government’s quest to either retain or regain control and influence of the oil and gas sectors is well known. Although some would claim this was primarily due to rent-seeking opportunities in the sector, Putin’s own explanation has emphasized developmental motives.<sup>847</sup> Whether the latter are as important as in the electricity sector, and whether agreements with Russia’s conglomerates are akin to the “developmental bargains” I describe in the electricity sector, warrants closer scrutiny and further research.<sup>848</sup> So does the state’s involvement in the post-Soviet transformation of sectors not related to energy. The analytical tools developed in the dissertation, for example the emphasis on distinguishing among *types* of influence (such as that wielded by industrial versus energy interests), will be important even when considering sectors where the state’s developmental motives are less salient.

At its broadest, the dissertation examined the creation of markets as historically contingent, politically embattled institutions, and tried to show how political, social and cultural trends shaped this process. In many ways the process I describe is historically unique and thus time and place specific. At the same time, elements of the story are reflected in other country’s electricity sector reforms.

### **3. Beyond Russia**

The dissertation argues that domestic political dynamics explain the emergence of a particular set of institutions that underpin new electricity markets in Russia. Which elements of this story are relevant elsewhere? What is the applicability of the core theses of the dissertation beyond the post-Soviet context?

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<sup>846</sup> See European Conference of Ministers of Transport, "Regulatory Reform of Railways in Russia," (Paris: Organisation for Economic Co-operation and Development, 2004).

<sup>847</sup> Putin’s doctoral dissertation (entitled “Strategic Planning of the Reproduction of the Resource Base” elaborated on the merits of national champions in the energy sector. See Balzer, "Vladimir Putin’s Academic Writings and Russian Natural Resource Policy.", Goldman, *Petrostate : Putin, Power, and the New Russia*, p.97.

<sup>848</sup> Paulein Jones and Erika Weinthal document the cooperation between the Russian state and Russian oil companies in the aftermath of the 1998 default (see chapter 1). Jones Luong and Weinthal, "Contra Coercion: Russian Tax Reform, Exogenous Shocks, and Negotiated Institutional Change."

While many of the processes I describe are unique to post-Soviet Russia, key political dynamics are reflected in the political economy of infrastructure liberalization elsewhere. The starting points are similar in other countries: roads, electricity grids, ports – the physical infrastructure that fuelled post-War growth – are aging in most, if not all, industrialized countries. While the renewal of physical infrastructure is particularly urgent in post-Soviet countries, governments across the world are faced with a similar challenge to update crucial infrastructure. Today there is less agreement about the role of the state in infrastructure provision, and more diversity in public-private arrangements. For most of the 20<sup>th</sup> century, a solid consensus held that governments should provide infrastructure as the basis for economic growth. Since the eighties a new paradigm emerged in policy circles, equating modernization of infrastructure with more private ownership and less state regulation of tariffs. Yet, after a series of crises and a very mixed track-record in terms of efficiency, the merits of privatizing infrastructure are once again debated.<sup>849</sup> At the same time, from California to Bolivia, political resistance against infrastructure liberalization has been mounting. Against the background of this political opening, and renewed debates about state involvement in infrastructure, governments and polities have to make decisions about how to meet the infrastructural needs of society.

Two political dynamics are noteworthy: one concerns the politics surrounding the scope of regulation, a second, the influence of political actors located downstream and upstream of the electricity sector. Over-time comparisons in each chapter draws attention to a shift in the geography of regulation. During the two post-Soviet decades, new zones of governance have emerged from the process of re-regulation: regional (*oblast*) level regulation was effectively supplanted by regulation at the level of newly constituted supra-regions. I found that Russia's liberal reformers successfully "scaled up" the zone of regulation, but had to make concessions to conglomerates and the government's developmental agenda. These kinds of political battles – over the boundaries of zones of regulation – may be relevant elsewhere. After three decades of liberalization and re-regulation, territories of economic governance have become destabilized everywhere, bringing into focus political conflicts surrounding the scope of regulation. While a systematic comparison of these conflicts warrant further research, it seems that the difficulties of liberal reformers to institute a unifying regulatory regime across larger geographical regions is mirrored in power politics elsewhere. Liberal reformers in the European Union and the US have struggled for almost two decades to "scale" up regulation from a national to a supra-national, and from a state to a national level.

As part of a larger attempt to coordinate Europe's energy policy, since the mid-nineties the EU has been pushing member countries to agree to a common liberalization trajectory and an EU-wide market. There are two types of initiatives afoot, one to create a common liberalization agenda, and a second, to unify adjacent electricity zones to create larger markets. Liberal reformers have been trying to connect Spain and France, for example, arguing that the two countries have complimentary generation capacity. Political opposition to preserve them as separate zones has so far prevented the strengthening of high-voltage connections between the two countries. Attempts to coordinate liberalization and market design across Europe have also

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<sup>849</sup> See for example, Bank, "Power for Development: A Review of the World Bank Group's Experience with Private Participation in the Electricity Sector World Bank Operations Evaluation Department."

met with resistance, and resulted in what is sometimes seen as a meaningless compromise.<sup>850</sup> While the dynamics of the political agreements between national governments are diverse and very different concerns dominate the political agenda in Russia and Europe, one aspect of power politics is similar: as in Russia, European countries see their utilities as “important vehicles for the realization of national energy planning.”<sup>851</sup> The difficulties that European liberals encounter in “scaling up” the zone of regulation may be rooted in the role electricity plays for national and sub-national economic development, rather than being the result of rent seeking by utility companies.

In the United States, the federal government’s attempts to align states behind a liberal reform agenda have also encountered difficulties. The regulatory regime that governs utilities in the US has historically left most of the jurisdiction over sector regulation up to states. Since the mid-1990s, the Federal Energy Regulatory Commission (FERC) has been trying to create a set of unified institutions to regulate utility markets.<sup>852</sup> Many states and a majority of congress have rejected FERC’s plans to create a “standard market design” (SMD).<sup>853</sup> States in the Southeast (Arkansas, Georgia, Louisiana, Mississippi, and North Carolina) have traditionally been a stronghold of opposition to the SMD proposal. With low-density rural areas, they have opposed marketization, because of concerns about reduced service provision and higher prices.<sup>854</sup> States in the Pacific Northwest have also opposed FERC’s attempts to impose a SMD, fearing higher prices and more price volatility. FERC’s SMD also might end utilities’ ability to enter into long-term agreements with large consumers. One representative of a Northwestern utility argues that SMD proposals would “eviscerat[e] our long-term firm transmission contract rights by exposing these transactions to market prices in real-time.”<sup>855</sup>

Agreements between states, utilities, and consumers may well be responsible for Congress’ unwillingness to allow FERC to implement reforms based on SMD. In Oregon, for example, large electricity consumers that rely on cheap power from hydroelectric power plants have secured industrial subsidies guaranteed by the state’s government. Traditionally, large consumers have been aluminum smelters located near the hydro-electric power plants of the Columbia River. They are now joined by Microsoft and Google’s server farms, also looking for tax breaks and other incentives to locate data centers close to cheap power and hydro-electric dams.<sup>856</sup> These political dynamics for resisting a unified market, and for keeping regional markets

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<sup>850</sup> "Energy Liberalisation in Europe," *The Economist*, December 6 2007.

<sup>851</sup> Jacint Jordana, David Levi-Faur, and Imma Puig, "The Limits of Europeanization: Regulatory Reforms in the Spanish and Portuguese Telecommunications and Electricity Sectors," *Governance* 19, no. 3 (2006), Leigh Hancher, "Slow and Not So Sure: Europe's Long March to Electricity Market Liberalization " *The Electricity Journal* 10, no. 9 (1997).

<sup>852</sup> See Paul Joskow, "Markets for Power in the United States: An Interim Assessment," *Energy Journal* 27 no. 1 (2006). And Hunt, *Making Competition Work in Electricity*.

<sup>853</sup> Attempts to introduce SMD started in 2001. Hunt, *Making Competition Work in Electricity*. p.286.

<sup>854</sup> Morey and Forbes, *The Electricity Journal*, Volume 16, Issue 7, August-September 2003.

<sup>855</sup> Alka Scott, FERC Needs to Listen to the Regions before Racing to its Standard Market Design, *The Electricity Journal* Volume 15, Issue 9, November 2002, p. 91. Low-cost region reluctant to sign on to FERC SMD, see Hunt, *Making Competition Work in Electricity*, p.39.

<sup>856</sup> According to the Economist, “the largest data centers now rival aluminum smelters in the energy they consume. (...) As a result, finding a site for a large data center is now, above all, about securing a cheap and reliable source of power.” "Down on the Server Farm: The Real-World Implications of the Rise of Internet Computing."

separate are remarkably reminiscent of the Russian Far East and Siberia. California and Texas, on the other hand, have been among the leaders in US electricity sector liberalization.<sup>857</sup> In both states, the energy company Enron pushed for reforms and price liberalization, while it was finding new ways to profit from electricity sector liberalization and from selling gas to utilities. The political clout of Enron in DC is well known, although it might not quite match Gazprom's stature in Moscow. The point here is not that we can predict the liberalization trajectory of a state, but that different types of political actors, including conglomerates located either upstream or downstream of the electricity sector, have inherently different interests vis-à-vis the electricity sector. As in Russia, it matters whether energy or industrial lobbies influenced the electricity sector in the US.

Both EU member states and states in the US have so far largely resisted attempts to give up regulatory authority and create enlarged and unified markets. US and EU-wide markets, with one set of market regulations, remain the wishful thinking of North American and European liberal reformers. My findings in Russia seem to mirror the difficulties of EU and US regulators to create a zone of regulation that encompasses a large and diverse economic region. Notably, though, Russian reformers were relatively successful in undercutting the influence of *oblast* level governors. This is not surprising, given the weakness of the channels of democratic accountability in Russia and Putin's successful efforts to obliterate the political authority of governors.

On a more general level, re-regulation might be closely tied to economic geography in countries outside of Russia as well, in particular in large and diverse countries, because of the type of developmentalism that I emphasize.<sup>858</sup> Because this type of developmentalism relies on preserving existing economic structures, and on protecting or promoting certain industries, diversity in the economic geography across territories shapes reform trajectories. In the Russian case, this necessitates considering the human and economic geography system left behind the Soviet Union, including the concentration of industry in remote areas, the prevalence of "company towns" and the concentration of industrial activity in the so-called Territorial Industrial Complexes. While such diversity will be manifested differently elsewhere, the history of industrialization has left behind an uneven map of vulnerabilities everywhere. Economic geography might better inform us of a state's liberalization trajectory than a utility firms' ability to capture regulators.

#### **4. Beyond 2008**

Returning to Russia, a final point concerns the stability of the developmental bargains discussed in the dissertation. What can we say about the state-market relations in Russia's electricity sector looking forward, how will the sector be regulated in the future?

On the one hand, the economic crisis of 2008/2009 has already shifted the terrain of electricity politics, even as I was writing up the evidence gathered in the field in 2006 and 2007. Political negotiations and bargains were in large measure premised on growing demand and the need for

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<sup>857</sup> In 1994, California was the first state to liberalize retail access. — — —, *Making Competition Work in Electricity*.

<sup>858</sup> The protection of existing industrial structures is a common phenomenon, even if it is not politicized as the protection of national champions, and even if it is incompatible with a dominant liberal rhetoric.

technological updates to keep pace with rapid growth. However, in January 2009, electricity demand fell more than 7%, and in the last quarter of 2008 the price of electricity on the liberalized segment of the wholesale market fell by some 40%.<sup>859</sup>

Various parties to the agreements that accompanied privatization and liberalization sought to revise their commitments. Most importantly, new owners began to renege on promises made to invest in technology upgrades, arguing that the magnitude of investments was untenable given the changed economic environment. President Putin has repeatedly criticized new owners of electricity companies for failing to invest as much as they had promised.<sup>860</sup> Allegations abound that Chubais used exaggerated projected growth rates to calculate investment contributions: “Chubais tricked not just the energy companies, but the government itself. He based the sector's official report on winter 2006 consumption when there were freak frosts, and record GDP growth. Needing another 750 billion kilowatt hours by 2020 is twice the best-case and 3.5 times the likely scenario,” opined one observer.<sup>861</sup> The upshot of this argument is that Chubais calculations of the investment need was based on political rather than economic calculations. This echoes a common sentiment among Russians, who like to see him as a charlatan, responsible for the betrayal of every citizen who was promised much and received little during privatization. Chubais’ motives are of course impossible to discern, although he likely wanted to find ways to build alliances for his agenda to liberalize and create markets. Either way, what counts is the outcome: the vertical monopoly erected during the Soviet Union has been dismantled and power plants now have new owners. Both processes are not likely to be reversed.

Despite these challenges, there are also reasons to believe that the bargains and cross-regional variation that underlie Russia’s electricity sector regulation might prove durable. On the one hand, liberal reformers are still pushing for one national market for electricity and want to end various price-distorting subsidies. Further liberalization will only happen, however, if liberal reformers can convince power brokers within the Kremlin, and Russians more generally, that their plans will deliver future benefits. The liberal promise sets the bar high, however. To fulfill it, new owners will need to update technology, increase efficiency and lower prices, while reducing waste of valuable natural resources. On the other hand, it is likely that liberals do not have enough support and are unable to convince other political factions and the Russian population. Development strategies that rely on the current subsidy and ownership regimes enjoy both political support and legitimacy. The benefits from current bargains for both the government and for Russia’s might outweigh the promises of full liberalization for some time to come. “Power politics” traced in the dissertation are thus likely to have consequences beyond the current period.

## **5. Conclusion**

The current ownership patterns, subsidy and price regulation are likely to shape market interactions in years to come. Prices will remain the most noticeable effects of the reform bargains, as they affect the cost of living and producing across Russia. Many Russians still have

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<sup>859</sup> Mikhail Slobodin “The Russia Forum” available online at <http://therussiaforum.com/2009/02/05/06022009/>

<sup>860</sup> “Putin Threatens to Fine Four Tycoons,” *Moscow Times*, 25 February 2010.

<sup>861</sup> Russia Today/Ria Novosti, “E.On warns on electricity investment.” RT, 25 March, 2009.



to make ends meet on small household incomes, and price increases will not go unnoticed.<sup>862</sup> Russians also care about reliable electricity provision; power is more than a mere commodity. People are likely to hold Chubais accountable for “his” reforms. At the same time, it is not clear what the political channels for redress, should there be need for it, will look like in the future. It is likely that the architecture of markets has been set up in a way that reflects the needs of the Russian state and conglomerates, which will be difficult to challenge or alter in the future.

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<sup>862</sup> Increasing electricity bills following liberalization are said to be the immediate trigger for the popular rebellion in Kyrgyzstan in April 2010. Madeleine Reeves, "In Bishkek," *The London Review of Books* 32, no. 9.

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