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Policy Perspective and Analysis of the Regulatory Regime in the Restructured Russian Power Sector

A Policy Note

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ACRONYMS

ATS	Administrator of the Trading System, which is responsible for implementation and enforcement of the market rules and resolving disputes between market participants
DSR	Demand-Side Response
FAS	Federal Anti-Monopoly Service, which is responsible for market monitoring and mitigation of market power in the wholesale generating market
FEC	former Federal Energy Commission. FTS now undertakes its functions
FOREM	Federal Wholesale Market of Electric Energy and Capacity (transliteration of the Russian acronym)
FTAS	Federal Technological Audit Service, which is responsible for establishing technical and safety standards, including service quality
FTS	Federal Tariff Service, which is responsible for setting tariffs for monopoly services at the national level and has a supervisory role in regard to the setting of distribution tariffs
MAP	former Anti-Monopoly Ministry. FAS now undertakes its functions
MEDT	Ministry of Economic Development and Trade, which is responsible for establishing rules and methodologies for formulating tariffs, including caps for distribution tariffs
PLR	Provider of Last Resort
RECs	Regional Electricity Commissions, which are responsible for setting distribution tariffs
SESA	former State Electricity Supervision Agency (SESA). Its functions in regard to service quality are now undertaken by FTAS.

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1 BACKGROUND

The Russian Government is contemplating a fundamental restructuring of the country's electricity sector. The proposal will vertically disaggregate the industry, dividing the generating sector into multiple companies that will participate in a new, competitive wholesale market. Each of the generating companies, other than hydro generators in which the state will retain control, will be privately owned or controlled.

The transmission sector will be unified in a single, state-controlled (75% + 1 of the voting shares) company.

The distribution sector will, at least the wires portion of the business, remain divided into regional monopolies. It is unclear whether the distributors will also be the providers of "assured supply" (i.e. the provider of last resort). The new law allows, but does not require, the distributors to be the default supplier(s).

The transition to the new model will last for at least two years, during which time there will be a "trial" market for up to 15% of the supply to large consumers. The precise day for the start of operations of the new model will be determined by the Russian Government.

The full details of the market design and operation will be set forth in a companion Policy Note on "Structural and Design Issues in the Russian Electricity Reforms". Thus, this description of the market is written solely for the purpose of setting the context for the discussion of the contemplated regulatory regime. Those seeking a more complete explanation and analysis of the market should read the companion report.

The task assigned for this report was to analyze the regulatory regime being proposed from both a practical and policy perspective in light of relevant international experience and practice.

One point of clarification is needed at the outset. The policy notes in this report are intended to point to critical matters requiring more attention prior to the implementation of the new model. Where matters seemed to be well handled at present, they were not made the subject of policy notes. While there are a number of shortcomings to be noted, readers should be aware that the intended focus of the report was on shortcomings in the

regulatory arrangements. Thus, the overall tone may appear to be more critical than some may feel is merited. Nonetheless, the appropriate focus in the report is not one of evaluating the overall regulatory regime, but rather one of focusing on the specific issues referenced.

2 OVERVIEW OF THE PROPOSED REGULATORY REGIME

The regulatory structure being proposed is complicated. Institutionally, it consists of a web of "independent" state regulatory agencies, and even Ministries, at both national and regional levels:

- Federal Anti-Monopoly Service (FAS)[1], which is responsible for market monitoring and mitigation of market power in the wholesale generating market

- Administrator of the Trading System (ATS), which is responsible for implementation and enforcement of the market rules and resolving disputes between market participants

- Federal Technological Audit Service (FTAS)[2], which has responsibility for establishing technical and safety standards, including service quality

- Federal Tariff Service (FTS)[3], which has responsibility for setting tariffs for monopoly services at the national level, such as the transmission network and, perhaps, generators with market power. It also plays a supervisory role in regard to the setting of distribution tariffs

- Regional Electricity Commissions (RECs), which have the responsibility of setting distribution tariffs, but only after a prescribed, extensive process of interactions with FTS and the Ministry of Economic Development and Trade (MEDT), and regional political authorities

- Ministry of Economic Development and Trade (MEDT), which has, in addition to its many other obligations, the responsibility in regard to the power sector of establishing rules and methodologies for formulating tariffs, including caps for distribution tariffs.

The division of responsibility is further complicated by the fact that the agencies report to different parts of the government. FTS, FTAS, and FAS report to the Prime Minister. Each REC reports to the Governor in its locality, but is, in many ways, also accountable

[1] The Federal Anti-Monopoly Service is the new name given to the agency that had previously been called the Anti-Monopoly Ministry (MAP).
[2] The Federal Technological Audit Service is a new entity combining responsibilities formerly exercised by a number of agencies, including the old State Electricity Supervision Agency (SESA), which had responsibility for, among other things, quality of service in the provision of electricity service.
[3] Formerly known as the Federal Electricity Commission (FEC).

to FTS. MEDT, of course, is part of the Cabinet and reports to the Prime Minister and to the President. ATS, with its governance by representatives of various parts of the government, is accountable, in one form or another, to a variety of agencies. In fairness, however, it should be noted that the current reporting path is a major consolidation in accountability, but not necessarily in consolidation of responsibility. The previous reporting structure was far more dispersed in accountability, but perhaps less so in regard to actual regulatory operations.

The recent restructuring of the Russian Government[4] lays out a conceptual framework for the division of responsibilities within the government. The Ministries will have the obligation to develop rules, norms, and guidelines, while the Federal Services will have responsibility to perform their functions based on those rules. Thus, in regard to electricity, MEDT will establish the methodologies and principles to be followed, but actual implementation and application of them will be left to FTS, FAS, RECs and perhaps to FTAS, depending of the specific matter at hand.

This array of regulatory institutions covers only those with economic and service quality functions. Siting, environmental, hydro, nuclear, and safety issues are still another layer of regulation that exists, but are well beyond the scope of this report. Stated mildly, the array of regulatory institutions and jurisdictions is complex and fraught with a high probability of difficult and contentious bureaucratic, legal, and institutional problems and perhaps even conflicting and confusing policy signals and decisions.

Not surprisingly, given the complex web of regulatory institutional arrangements, it is not entirely clear where some critical responsibilities will fall. Among those are the determination of which energy costs distributors or other guaranteed suppliers will be able to pass through (e.g. spot market prices, long term contract costs, transmission rights, ancillary services, hedges), how disputes between market participants and ATS itself will be resolved, how deadlocks at the stakeholder-controlled ATS will be sorted out in timely fashion, how market power remedies will be fashioned and implemented, how cross-subsidies will be reduced or even eliminated, and a host of other matters.

Regulatory uncertainty and perceptions that the regime may be unstable can adversely affect all stakeholders. Outcomes are equally uncertain for all stakeholders but the uncertainty for investors will also be factored into lower receipts for the government from asset sales, a higher return required for the investor and/or higher prices for consumers.

While the complex array of institutions is not necessarily incapable of resolution, international experience inspires little confidence that these hurdles will be easily overcome. Although the recent reshuffling or regulatory responsibilities may have added a level of clarity, it still leaves a great deal of uncertainty as to how the regulatory regime will function. Competitive electricity markets are inherently complicated and require a carefully calibrated mix of regulatory restraint and intervention. Moreover, given the dynamic nature of competitive electricity markets, disputes or market failures are best dealt with as expeditiously as possible. Thus the regulatory regime needs to be, to the

[4] The Government's restructuring was initiated in March 2004.

extent possible, simple, responsive, coherent, consistent, and transparent. This blend of characteristics is difficult enough to achieve within a single institution, but to do it with such a wide array of bureaucratic institutions, some autonomous and some non-autonomous, seems well nigh impossible.

Policy Observation 2. 1

It is of great importance to review all of these arrangements and institutions to make certain that they interact harmoniously, coherently, and comprehensively, or that the regulatory design be reduced in its complexity (e.g. merging functions and/or institutions, clear decisional hierarchy established) in order to facilitate consistent, coherent, and carefully calibrated decision-making. It is not at all certain, even in the context of the recent restructuring, that the current alignment of agencies and responsibilities will be fully functional as currently configured. If, as foreshadowed, substantial changes in the regulatory regime may be required, it would be better to implement the changes earlier rather than later. If, however, practical considerations mean that this is not achievable a clear transition timetable should be established. It must be noted in that regard, however, that post-reform changes can prove quite problematic. Vested interests can become quite invested in the* status quo *and resist changes that others may believe to be in the public interest. The ability to make second generation reforms cannot be taken for granted.

3 REGULATORY INDEPENDENCE

It is a basic principle of sound public policy in electricity that regulatory decisions:

- are taken against clear transparent criteria, and
- are made by entities which are fully independent of political considerations and of the economic interests of any private parties in the market.

While politics and private economic interests can never, and perhaps should never, be fully excluded from consideration, they cannot be allowed to control outcomes in a non-transparent manner without sacrificing integrity, coherence, and the confidence of consumers and investors alike.[5] There is considerable debate about the breadth of regulatory discretion that should accompany independence. Certainly regulators should abide by the terms of the law and of binding concession contracts or licenses. Some contend that during periods of substantial reform there may be a need to restrict the

[5] It is perhaps utopian to suggest that the power sector and its regulation can ever be fully removed from politics. Thus, the issue of de-politicization of electricity regulatory issues should be seen in two contexts. The first is that whatever influences that are brought to bear in regulatory decision making, political or otherwise, should be as transparent as possible. The second is that there should be institutional safeguards put in place to protect regulators from harsh, short-term political retaliations against them for honest decisions.

degree of regulatory discretion to preserve the independence of the regulator in acting within its allowed discretion.[6] Others, however, see regulatory discretion as an essential level of flexibility required to make the regulatory regime more sustainable over the long term.

Restructuring and increasing private participation in the energy sector entails risks for the Government, the investor, and for the consumer. In particular the Government may want some assurance that the impacts on residential customers or inflationary pressures will not be excessive. The Government may also want some assurance that the value of its current equity in the businesses will be maintained. Consumers, of course, will be interested in obtaining satisfactory service at reasonable prices. Potential investors will want some assurance on the future value of their investment through certainty on the market rules, basic regulatory parameters and the approach to regulation.

Ideally the practical political and economic constraints should be reflected at the outset in the legislative enactments and/or privatization agreements under which the regulator makes its decisions.[7] This may constrain the discretion available to the regulator, especially during the period of reform but should ensure the outcomes are predictable and transparent. By reducing the risks for investors logic suggests a better trade-off between risk and prices for the consumer and a more stable, sustainable basis for the development of the energy sector. That logic, however, can easily be frustrated by asymmetrical or otherwise unsustainable arrangements.[8] The fact that a requirement is specified in a contract or instruments guiding the regulatory is no guarantee – the contract or provision also has to be feasible.

The current framework in Russia provides quite broad discretion, which may or may not be problematic. It must be noted, however, that that discretion is accompanied by a tradition of political intervention, much of it occurring in non-transparent ways. This combination of broad discretion and continued non-transparent political interference

[6] See, for example, The World Bank's recently issued operational guidance note, "*Public and Private Sector Roles in the Supply of Electricity Services*", February, 2004, p8. A more detailed discussion of how this approach could be implemented in the context of regulating electricity distribution entities can be found in Tonci Bakovic, Fiona Woolf and Bernard Tenenbaum, "Regulation by Contract: A New Way to Privatize Distribution" *World Bank Energy and Mining Sector Board, Discussion Paper No 7*, May 2003. Both documents are available at www.worldbank.org/energy.

[7] For example, primary or subsidiary legislative instruments could specify, among other things, the initial regulatory asset base, the mechanism for rolling forward the asset base, the role of efficiency benchmarks, the criteria for assessing efficiency, a timetable for removal of cross-subsidies and price/service guarantees for specific customer groups. Alternatively these could be placed directly into a contract with the utilities, with the regulator's role being to administer the contract and resolve disputes.

[8] An excellent example of such a confounding of logic was the unsustainability of the initial tariffs for the newly privatized electric distribution companies in England and Wales in the 1990's. The contractual constraints on regulatory discretion turned out to have little meaning in the context of the public disclosure of "excessive profits". The regulator was compelled to take steps to reduce tariffs even though he technically may have lacked the powers to do so. The constraints on his powers did nothing to protect consumers against insufficiently constrained monopoly profits, and, ironically, did nothing to prevent the investor against the the possibility of the regulator freeing itself from those constraints.

creates excessive risks and may result in worse outcomes for both investors and consumers.

Regulatory decisions, to be credible and respected, must be made by people with no financial or political stake in the outcome. Agencies should, within the limits of discretion provided, be free from both market and political conflicts of interest. It is also vital that the processes that the agencies use to make decisions be open, clear, and accessible to all who wish to participate. Moreover, those processes, must be the real processes by which decisions are made. They cannot simply be a public charade that hides behind-the-scenes decisions. Private pressure or influence exerted by politically or financially powerful individuals or interests to "quietly" influence regulatory outcomes not only compromise regulatory independence, they compromise the transparency and integrity of the entire process.

It is imperative to examine the degree of independence found in the proposed regulatory structure. That examination should be conducted from both an analysis of the overall system and also on the basis of the individual institutions involved. To be thorough and fair, one needs to examine the theoretical and legal structures as well as behavior and performance. Given the fact that there has been little experience with the proposed Russian electricity market model, it is impossible to draw any definitive conclusions about the latter, other than those based on lessons learned under the existing model and from international experience.

The problem of fractured regulatory jurisdiction is compounded by the fact that authority is divided among agencies with uncertain levels of discretion and varying degrees of independence and autonomy. FTS and the RECs at present, have, at best, limited independence. Their autonomy in setting tariffs is limited by the extensive role played by MEDT, and, in the case of the RECs, by the governors as well. These limits on the autonomy mean that while there may be broad statutory discretion, in practice this discretion is politically constrained in a non-transparent, non-predictable manner. MEDT is a line Ministry directly accountable to the political authorities. FTAS and FTS are, under the recent restructuring, now both accountable to the Prime Minister. It is not yet apparent what the significance of that relationship will be.[9]

ATS is a non-governmental entity but fully controlled by stakeholders and agents of the government or regulatory agencies, who are presumably driven by considerations of self-interest, both economic and political. While such arrangements have worked reasonably in Australia and New Zealand, they have proven to be disastrous in Brazil and California. On balance the experience with stakeholder boards has been negative.[10] One option is a two-tier approach where an independent body or board is established to resolve issues

[9] For both agencies, reporting to the Prime Minister is an improvement, in terms of both visibility and prestige, over being accountable to a line ministry, such as Industry and Energy. Whether that translates into more independence in making decisions is, of course, impossible to determine as of the time of writing this report. The situation certainly merits watching.

[10] The strengths and weaknesses of alternative governance structures for market and system operators can be found in James Barker Jr, Bernard Tenenbaum and Fiona Woolf, "Governance and Regulation of Power Pools and System Operators: An International Comparison," *The Energy Law Journal*, October 1997.

which the stakeholder board is unable to resolve within a reasonable period. Alternatively, the stakeholder body can be an advisory group for an independent board.

Policy Observation 3. 1

ATS is neither completely independent of the Government, nor lacking in ties to the private economic and financial interests of market participants. While those interests may well diverge or even conflict from time to time, that is a weak foundation for assuring that ATS will possess the level of independence required for a market administrator to effectively and credibly carry out its responsibilities.

Coordinating interaction between such divergent agencies and interests is likely to be extraordinarily difficult, given the array of interests that must be consulted and satisfied. Moreover, given the nature of the agencies and interests involved, the likelihood that sound independent judgment will prevail seems, given international experience, more fantasy than real. Thus, as a general overall proposition, without delving into the details of the governance of each institution, the overall independence of the regulatory regime from both government and vested private interests seems, in principle, seriously compromised.

Policy Observation 3.2

Best international practice suggests that final authority over regulatory matters be vested in agencies that possess adequate independence from government and from private interests with significant stakes in regulatory outcomes. It does not appear that the Russian regulatory agencies possess that requisite level of independence.

In regard to the independence of the specific agencies involved, FAS, FTS, the RECs, and ATS merit some scrutiny.

FAS

FAS is a service directly accountable to the Government, not an independent agency. Just how independent in its actions the FAS staff, charged with overseeing competitiveness in the electric market, will or can be, of course, remains to be seen. What is clear is that the customary institutional protections allowing for independent decision-making by the protectors of competition will not be in place. This is contrary to the prevailing trend internationally where the "guardians" of competition are insulated from politics. While it is impossible to state categorically that the absence of independence will inevitably lead to politicization or lobbying at high levels, the fact is that the door is being left wide open to such an unhappy result. Given the stakes involved, the absolute centrality of the FAS role in assuring the success of the competitive market, the embryonic nature of the market itself, and the fragility of its competitiveness, at least at its beginning, and the potential risks associated with failure to enforce competition, the risk seems worth avoiding.

Policy Observation 3.3

Competition regulators should possess full independence in assessing and monitoring the market, in taking actions to enforce and enhance competition, and to remedy problems associated with market power, market failure, market design flaws, and abusive behavior. The key point is to make certain that the competition regulators are able to carry out their obligations free from politics and free from undue interference or lobbying by private economic interests. That does not appear to be the current circumstance in Russia.

In this context, the discussion to follow in regard to independence for FTS and for the RECs is equally relevant to the competition regulators at FAS.

FTS

FTS has many of the features typically associated with independent regulatory agencies, such as commissioners with fixed terms and the nominal ability to make decisions without obtaining approval from another arm of the state. Nonetheless, its independence was questioned by a number of those who were interviewed in the course of the preparation of the report[11]. While it is not of value here to go into all of the details about why the observations were made, a few institutional characteristics of the agency do, in fact, raise serious questions about the degree of independence of the agency. Some of these merit attention. One noted by FTS personnel themselves is that the agency is under the aegis of the Government rather than the President.[12] Several of the interviewees suggested that, being under the President's authority was advantageous in terms of both status and independence. It is worth noting in that context, that while the Chairman is a Presidential appointee, the rest of the Commissioners are appointed by the Government. This is symbolically significant because the President is the Head of State, and regulatory agencies are generally viewed as agents of the state rather than of the government. In a very real sense, only the FTS Chairman is a representative of the state, while the others are agents of the government.[13]

Another symbolic, but substantive statement as well regarding FTS' status as an agent of the government rather than the state is that its tariff-setting authority is constrained by directives from the MEDT that establish the methodologies and guidelines it must follow, and that cap tariffs at levels that it views as acceptable from a macroeconomic, or perhaps even a political point of view, without regard to the sector or company-specific

[11] The interviews took place in January 2004.

[12] The interviews were conducted prior to the recent restructuring of the government which changed FEC to FTS and required it to report to the Prime Minster. Nonetheless, the substance of the interviews is still relevant.

[13] It might be useful in Russia to require that appointees to regulatory bodies be confirmed by the Duma. Parliamentary approval of such Presidential or government appointees is required in many countries. It has symbolic and practical value in that by having two sources of approval for the appointment, the fact that the regulator is a creature of the state and not the government is affirmed, and that the regulators is not obliged to any single person for his/her appointment.

considerations FTS must contemplate.[14] In general international practice, the methodology for tariff setting is written into law or in the concession agreements under which regulated companies do business. Similarly, it is not common practice for a Ministry to possess the power to cap tariffs by overruling regulatory decisions. It is highly unusual in situations involving "independent" regulatory agencies for a Ministry to possess those types of powers, and it certainly compromises the independence of the regulatory agency.

Perhaps even more important, the government, with some very limited exceptions, retains the authority to rescind regulator agency decisions. In effect, the door is left ajar to politicize tariff setting, and to render the tariff-setting process at FTS a hollow exercise. It is difficult to describe that power as anything other than a blunt instrument hanging over FTS' ability to function independently. It is a power that is inconsistent with international standards on regulatory independence.

Policy Observation 3.4

The fact that all but one of the FTS Commissioners are appointed by the Government rather than by the President, that MEDT has the power to direct the use of its preferred methodologies, to impose price caps and to rescind FTS decisions is inconsistent with best international practice regarding the independence of regulatory agencies. To the extent that price caps for particular customer classes or limitations on pricing methodologies are necessary they should, as far as possible, be specified at the outset, in the framework within which the regulator operates rather than subsequently imposed by the Government.

Such observations of course certainly do not mean that the Government or the Ministry cannot advise FTS of its macroeconomic or any other concerns. It simply means that the regulator has the legal authority to make final tariff determinations, and that the government's concerns be communicated to the regulator in open and transparent ways. It also means that the market will be able to function without artificial price constraints and without undue political interference, and that distribution companies (or guaranteed suppliers) will be less likely to be left with trapped costs for energy they purchase for resale to end users, but are unable to pass through because of administrative price caps. Additionally, having the tariffs set forth in either law or concession documents provides them with an added level of permanence and/or predictability than leaving them to the discretion of a government ministry.

RECs

The RECs, in addition to being constrained by MEDT's powers, also suffer from severe constraints imposed by regional governments. They have two Boards, one formally

[14] As noted previously, the interviews occurred prior to the restructuring, which, among other things, gave MEDT even more authority over tariffs than it had previously possessed. In addition to setting caps, the Ministry, as noted earlier, now has the power to direct regulators on what methodologies to use and provide mandatory guidelines on tariff matters.

representative of various constituents (e.g., labor unions, local governments) and one composed of "experts." Terms for Directors do not always appear to be fixed or staggered and the agencies' policies and decisions seem heavily influenced by regional governments. Governors, for example, appear to be very influential in establishing retail tariffs for district heating and for electricity. Cross-subsidies tend to run from electricity to district heating. Although the tariffs for the combined heat/electric generating stations (CHP's), as well as the electric tariffs themselves are subject to review by FTS, and must be within MEDT established caps, the ultimate end-use tariffs for heat are generally established by the RECs themselves. Those rates appear to be based more on cross-subsidy considerations than on actual costs, performance benchmarks, or some other internally driven set of factors.

Given the general lack of independence by the RECs, and the political importance of the cross-subsidy issues within the regions, it seems apparent that the RECs will either have to be more independent or rendered less important in overall regulation if the market is to be allowed to function independent of political considerations. Judgments will have to be made regarding the prudence of energy purchases in the wholesale market and which costs will be passed through to the end user by the guaranteed supplier (likely to be the local distributor). The dilemma here is simple. Pass through and prudence decisions could be centralized at FTS or the independence and capacity of the RECs could be enhanced to allow them to make professional judgments free of political or cross-subsidy considerations. Centralization of such decisions seems likely to lead to more uniform approaches to wholesale transactions, something that could make the market less robust than it might be in a more decentralized regulatory context. Moreover, there may well be perfectly legitimate reasons for regions to follow diverse strategies in purchasing energy. It would seem preferable, both in terms of a richer, more diverse marketplace, and in the context of making regulation more accessible and sensitive to local interests and sensitivities, to decentralize regulation on the purchaser side. For that to be effective, the RECs should be made more independent.

Regulating the pass-through of the costs of energy purchased in a competitive wholesale energy market is a very difficult and complex task. Providing wide discretion to relatively weak local regulators with limited experience may raise substantial risks. In these circumstances it may be desirable for the FTS to provide strong binding principles to the RECs on the approach to be followed. This would limit the RECs discretion while still enabling the RECs to reflect local preferences, conditions and circumstances in their decisions.[15]

Policy Observation 3.5

The context within which REC Boards are appointed and do business – often without fixed, staggered, terms, with communications between RECs and regional governments

[15] The issues associated with the regulation of power purchases has been the subject of a World Bank discussion Paper. See B Arizu, L Maurer and B Tenenbaum, "Pass Through of Power Purchase Costs: Regulatory Challenges and International Practices", *World Bank Energy and Mining Sector Board Discussion Paper No 10*, February 2004.

be made generally on a non-transparent basis, and without a single board, entirely composed of persons fully independent of any particular special interests – is out of step with best international practice.

ATS

One final note on independence relates to the governance of ATS. It is governed by a board dominated by stakeholders, government officials, and regulators. Experience in many places has shown that stakeholder domination has made effective governance of critical bottleneck functions in electric markets a virtual impossibility. As noted above, the Independent System Operator in California (CAISO) and the Wholesale Market Administrator (MAE) in Brazil bear profound testimony to the potential problems of stakeholder control. Although the experience with stakeholder dominated institutions in Australia and New Zealand have performed with fewer difficulties, the risks are substantial. This potential problem is compounded by the fact that FAS and FTS each occupy seats on the board of ATS, essentially reducing the regulators to the status of just another interest to be represented in a body of peers, rather than as agencies with regulatory oversight authority that is the more common international practice. That status provides the regulators with the ability to exercise supervision and to adjudicate disputes involving the market administrator. Such powers are essential to avoid gridlock among competing interests and to make "capture" of regulators by particular interests less likely. Obviously, if FTS and/or FAS personnel occupy seats on the ATS Board, they have seriously compromised their independence and burdened themselves with a significant conflict of interest.

Policy Observation 3.6

FTS and FAS should not be represented on the ATS board as it may compromise the effective regulatory oversight of the market administrator. The fact that ATS has a governing board composed of directors linked to market participants and/or the government is a potential source of problems and should be monitored carefully.

4 LEGAL POWERS OF THE REGULATORY AGENCIES

The regulatory agencies appear to derive their authority from a variety of laws, rather than from a single source. That is not particularly problematic as long as the laws are not inconsistent or contradictory. There is, however, an element of the delegation of authority to the agencies that is problematic. The statutes adopted by law generally delegate power to the Government, not directly to the regulator. Thus, unlike most jurisdictions where the regulatory agencies are empowered by law, in Russia, the regulators derive their power from a sub-delegation of authority from the Government. That poses a problem because powers that the Government grants it can also take away. Direct vesting of regulatory powers by law gives more permanence and independence to the regulatory authority. The ability of the Government to both delegate and remove authority opens the door to political manipulation of the regulatory process. It also

explains, at least in part, why the Government has, as is discussed below, the power to dictate methodology and to rescind regulatory decisions.

Policy Observation 4.1

The fact that regulatory agencies derive their authority from a delegation of powers by the government, rather than directly by law is inconsistent with best international practice and seriously compromises regulatory independence. The authority of MEDT to rescind regulatory decisions and to mandate specific methodologies and guidelines, rather than doing so in more permanent instruments such as law or concession documents is similarly out of step with best international practice.

In regard to specific necessary powers, the regulators seem to have sufficient authority in some areas and insufficient in others. For example, FTS seems to have sufficient powers for the vital task of obtaining information or compelling its production from market participants. FTS' ability to use this information effectively and transparently, however, is seriously compromised by the fact that Russian law seems to require confidential treatment of all information a business entity declares to be confidential. This runs counter to the general presumption prevailing in best international regulatory practice that documents/information in possession of regulators are, with few exceptions, public. The exceptions to that principle are few (e.g., personnel matters, verified trade secrets, documents whose premature, although not necessarily ultimate, disclosure would incorrectly compromise the value of stock, national or personal security, and matters relating to pending litigation). Moreover, exceptions are the result of prior declaration of such by the law or by the regulator, not by a mere assertion by a private party.

Policy Observation 4.2

The ability of private companies to require regulatory agencies to treat as confidential any information they provide to the agencies is contrary to best international regulatory practice on transparency.

On another topic, FTS, and perhaps FAS and the RECs may not possess sufficient powers to provide adequate remedies for, or deterrents to, unacceptable actions or inactions by regulated companies. FTS, for example, is concerned that it lacks authority to impose anything beyond minimal and ineffective economic penalties when it finds violations of rule or law by regulated entities.

Policy Observation 4.3

The FTS lacks sufficient remedial powers to address violations in ways that are proportionate to the offenses. Examples of such remedial powers include, but are not limited to assessing penalties, refunds to consumers, specific orders to perform, escrowing of funds to be used for specified purposes only, and suspension of revocation of licenses.

FAS has clear authority to remedy market power on both an *ex ante* and *ex post* basis. Thus it has the power to deny mergers or acquisitions prior to their taking effect, and has the ability to require divestiture of assets to mitigate market power. That is as it should be.

5 REGULATORY DECISION-MAKING PROCESSES

A highly transparent regulatory decision-making process is a vital part of a credible regulatory regime. The decision-making process under the new model is, at present, highly uncertain. Only FTS and the RECs have defined decision-making processes. The processes to be employed at FAS and MEDT are yet to be defined. The ATS decision-making process, by a stakeholder board, has already been discussed above and need not be repeated. The lack of clarity in decision-making should be rectified before the model is put in place. The need to do so is particularly important as complaints by market participants and consumers are a key component of market monitoring and promotion/maintenance of competition.

Policy Observation 5.1

Credible regulatory decision-making requires a formal, highly transparent, decision-making process with ample opportunity for public participation. MEDT and FAS should adopt and publish clear decision-making processes so that all parties will know how the process will work and how they may access and participate in it. The failure to do so can be quite harmful to the regulatory regime in terms of credibility, consumer and investor confidence, and substantive outcomes.

In regard to FTS, the decision-making process is in place, but opinions vary with regard to its transparency, and there appear to be deficiencies in the opportunities for meaningful public participation. FTS sees its process as transparent. When a matter is submitted to FTS for decision, it is referred to the appropriate staff department. The staff follows up by collecting and reviewing documents and information, including interviews with people it believes to be relevant, and perhaps seeking expert advice. The identities of the persons interviewed or consulted, but not necessarily the substance of what is said, is made public.

The staff then submits a report to FTS' lawyers, who finalize the report and submit it to the board for decision. The board deliberates in private, but makes its formal decisions by voting in weekly public meetings. Historically, the votes have not always been unanimous, and the vote(s) of the dissenter(s) have been publicly noted.

The FTS publishes a formal notice prior to each board meeting setting out the time and place of the meeting and the agenda to be considered. The decisions themselves are written and published in an official bulletin, although they do not contain written explanations of the basis and rationale for the decisions. Similarly, there are no written dissenting or concurring decisions by individual commissioners.

FTS contends that anyone who wishes to ascertain the rationale for decisions and/or separate opinions of board members may find all they wish to know by reading through the formal case records which are publicly accessible at the FTS offices. Outsiders, while not specifically taking issue with FTS' description of its processes, claim the process is less transparent than it appears. They contend that the agency is dominated by the chairman rather than being a fully transparent collegial body. They also claim that the Government plays a critical, but not fully transparent, role in shaping the agency's decisions. They also complain that decisions are often inadequately explained. Finally, critics maintain that while there are some windows for public participation, they are fewer and less meaningful than they ought to be. Interveners, for example, have little or no opportunity to analyze data submitted by regulated companies. Their only real opportunity to participate in tariff matters is to appear at FTS Board meetings and speak out.

It is not the intention of this report to judge the conflicting views of the transparency and openness of FTS' processes, but rather to report that the accounts provided point to a need for processes designed to provide a level of transparency, openness, and credibility that participants find acceptable. The mere fact that opinions were so diverse suggests that some transparency must be lacking, otherwise, interviewees would have been better informed of the processes employed.

Interviewees suggested that the RECs' decision-making processes may be even less transparent than the FTS'. In fact, a widespread opinion was that REC decisions were mainly taken in non-transparent negotiations with the governors, and/or with FTS.

Experience in both long established regulatory systems, such as the US, and relatively new regulatory systems, such as those recently established in developing countries, has highlighted the importance of the transparency of the process for regulatory credibility. However, while there is a common objective of transparency, different approaches can be used to achieve transparency. More formal systems involving legalistic hearings and constraints on meetings with stakeholders have developed in the US. These procedures are well accepted by stakeholders and perceived to provide an important protection against capture of the regulator by any one stakeholder group. However, such processes can require substantial resources (for stakeholders and the regulatory commissions) and rely on the experience of the commissions and their staff. Regulators in other common law countries have not always adopted these procedures in seeking to achieve transparency. In the UK and Australia regulators have adopted more informal procedures (e.g., workshops and roundtables rather than hearings with sworn testimony) but are now also achieving a high degrees of transparency in decision making[16]. Inevitably, the mechanisms chosen will need to reflect the circumstances the regulator faces and their resources and capabilities. The key minimum elements are opportunities for interested

[16] Initially there was substantial criticism of the lack of transparency in the UK . The primary focus of these criticisms was on the opaqueness of the final reports which often did not disclose key financial assumptions underpinning the reports. The extent of openness, particularly in regard to the transparency of the information upon which decisions are made, has improved quite substantially – see, for example the disclosure of OfWat's financial modeling.

parties to participate effectively in the process and a traceable public record of the basis for the decision which enables the participants:

- to see that the regulator is properly considering and evaluating relevant submissions and information, and

- understand the factual basis for the regulators decision and how the regulator weighed up the submissions and information available.

As noted above there are different means of achieving transparency, but these key elements should help reduce the information asymmetry and enable more effective participation by non-utility stake-holders.

Policy Observation 5.2

The decision-making processes of all of the regulatory agencies should be conducted with a view toward making them more transparent, more user friendly, and more informative. While recognizing the need to ensure that regulatory processes reflect the specific circumstances in a country, the following measures are key elements in assuring transparency:

1. ***All decisions should be written. They should be in a format that includes a description of the matter at hand, a history of the proceedings/review, a description of the positions taken by the various parties and of the information offered in support of those positions, an analysis of the arguments and information offered, an analysis of the policy, factual, and legal issues, and finally, a clear statement of the board's conclusions and decision. All dissenting and/or concurring opinions should also be in writing.***

2. ***Submissions and other material such as consultant reports or research commissioned by the stakeholders or the regulator should be on the public record[17] and properly tested and evaluated during the course of the proceedings/review. As part of the consideration and evaluation of this information stakeholders should have access to the information in order to have the opportunity to provide effective and meaningful input.***

3. ***All communications between regulators (including individual board members) and the Government and/or commercial entities on pending or prospectively pending regulatory matters should be transparent and made part of the public record.***

[17] Subject to strict tests of commercial confidentiality.

6 RELATIONSHIPS AMONG REGULATORY AGENCIES

It has already been noted that regulatory authority has been divided and diffused to a greater extent than is commonly found in electricity markets around the world. For that reason, it has already been suggested that a thorough review be conducted to ascertain whether it is appropriate to consolidate some functions and/or to merge institutions to assure consistency and coherence. It has also been noted that the relationship between ATS and both FAS and FTS, as currently envisioned, is inconsistent with best practice internationally. It is, however, necessary to go beyond these observations and explore in somewhat greater depth other issues regarding the relationships between the various regulators. To the extent that multiple entities with regulatory authority do exist, it is important to consider how those agencies interact with one another.

In regard to FTS and FAS, the respective roles of the agencies are conceptually defined with some, but not complete, clarity. FAS is charged with overseeing the competitive wholesale market to make certain that it remains viably competitive and to take appropriate action where improper behavior or failure of the market or its design diminishes competition to unacceptable or dysfunctional levels. FTS' job is to regulate those monopoly parts of the industry, such as the wires business or generators with market power. While the conceptual division of responsibility between FTS and FAS seems straightforward, there are many areas where the two agencies, acting within their respective bailiwicks, can run afoul of one another. A few illustrations of where this may occur are in order.

FAS may well conclude that some generators are either "must-run" units or possess monopoly power in a specified load pocket. Under such circumstances, it may impose an appropriate remedy, one of which is to ask that FTS establish a tariff rate or rate cap, rather than allowing such units to take advantage of monopoly power through market-based rates. How is it to be determined if what FTS does is a sufficient solution to the problem? What if FTS and FAS disagree as to the efficacy of FTS' action? The same questions could be raised in regard to ancillary services that FAS finds to be insufficiently competitive and for which FTS, therefore, has to impose some form of rate regulation. It could also turn out that transmission pricing arrangements, a function of FTS, distort competition in generation in ways that FAS finds unacceptable. What is to be done and who will do it?

The point of the examples is not to provide an exhaustive list of potential pitfalls, but to point out that there are multiple activities within the respective domains of the two agencies that require a common, or, at least, a non-contradictory approach. While all potential disputes or jurisdictional border issues cannot be readily anticipated, the fact that some, if not many, will exist seems inevitable.

It should also be noted that the recent restructuring only makes matters even more complicated. MEDT now has the power to mandate FTS to follow prescribed procedures and methodologies of its own making. Thus, one now has to contend with at least three,

and perhaps more, agencies trying to address the same problem. The diffusion of regulatory authority, with its inherent potential for sending confused, incoherent, and quite possibly contradictory signals to the market and its participants is simply enormous.

Policy Observation 6.1

The level of diffusion in regulatory authority has within it enormous potential for sending confused, incoherent, and even contradictory signals to market participants. Some means of preventing that outcome needs to be put in place. That might come from establishing the preeminence of one of the agencies, by some joint action by the agencies, or by some other means. For an embryonic market, however, the potential for conflicting regulatory signals should cause very significant concerns, and this problem should not be allowed to fester.

The relationship between the RECs and FAS and FTS is also troubling. FTS provides guidelines to the RECs for setting tariffs for electricity and for the CHP component of heating.[18] FTS provides the guidance after the RECs obtain rate information from the distribution companies they regulate and propose price caps to the FTS. The federal regulator, under the active direction of MEDT on both methodology and tariff caps, considers the presentations and then provides gives direction to the RECs. Thus, FTS plays a critical role at the front end of the tariff setting process. At the back end of the process, FTS also serves as a forum to which appeals from REC decisions, particularly on tariffs, can be taken. In effect, the FTS provides *ex ante* guidance to the REC and possesses an *ex post* veto over REC decisions.

An additional level of complication relates to the internalization of the service quality and safety standards set by FTAS. Presumably, these standards are taken into account in the setting of tariffs, but no one in the interview process could identify precisely how that was done, or for that matter, how those standards were enforced and incorporated into an overall regulatory framework. While there is an ongoing policy debate in many countries about whether externalities should be regulated by economic regulators, or be subject to the authority of another type of agency, there is no reason not to have an overall framework in mind. It is not at all clear that such an overall conception is being carried out in Russia.

In addition to its role on tariff approvals, FTS has the final say on which customers can become FOREM members, a status that allows customers to bypass the local distribution company and buy energy directly off the grid. Customers may wish to do so because bypass enables the customer to avoid, at least in part, the obligation to contribute to the cross-subsidization of small customers. Given the interest that the RECs and regional governments have in maintaining cross-subsidies, there is considerable negotiation between FTS and the RECs on FOREM membership and the terms and conditions on

[18] Under the law the FTS, under guidance from MEDT, sets caps and floors for electricity and heat distribution network tariffs set by the REC's. for heat tariffs for CHP set by REC's, and for electricity and heat supply tariffs set by REC's for regional supply companies.

which it is granted. In fact, although there are some specific criteria for determining eligibility for FOREM membership, the clear impression left from a number of discussions on the topic, is that decisions on the issue are, in the end, quite *ad hoc* and subjective.[19]

Given that the new market envisions expanded open transmission access for large users and reduced, if not altogether eliminated, cross-subsidies, and envisions market pricing for generation, the relationship between FTS and the RECs will necessarily change. If energy prices are to be set by a competitive market, how will the price cap guidelines apply? Will the elimination, or severe reduction of cross-subsidies be politically and socially sustainable? Will FTS' *ex post* veto power over REC decisions apply to the pass through of energy prices, and if so, does that effectively centralize the regulatory review of the energy purchases of guaranteed suppliers? If FTS does have veto power over the pass through of wholesale energy prices, does it have a "backdoor" means of regulating the wholesale market that could effectively stifle competition and preempt FAS authority in the wholesale market? These and other regulatory institutional questions are hovering over the implementation of the new market model. The relationships between the regulatory institutions need to be reassessed and evaluated.

Policy Observation 6.2

The relationship between the RECs, FTS, and FAS is still another example of the diffusion of regulatory authority and lack of clarity in regulations that needs careful attention in order to avoid confusing, incoherent, and even contradictory signals and policies.

7 ROLE OF REGULATORS IN MARKET DEVELOPMENT

The restructuring process in Russia is a bit unusual in that much of it appears to be driven by the incumbent, state-owned company (RAO UES). The role of the regulatory agencies appears mixed. It appeared to some that FAS is playing a significant role in the process[20], while FTS and the RECs are playing lesser roles. Given that regulatory agencies will inevitably have major responsibilities in the restructured market, it would be good practice to have all of them actively involved in market development and evolution and, therefore, fully invested in its success. No one is in a better position to understand what must be done to exercise regulatory oversight than the agencies that will be assigned responsibility. Typically, in many countries, the regulators are looked to as the only party with relevant expertise and knowledge that is unburdened with a financial or economic interest to serve.

[19] The decision-making process regarding FOREM membership was identified by several interviewees as one of the least transparent processes in sector regulation.

[20] There was some disagreement among those interviewed about the significance of FAS' role. Some of those interviewed thought it more significant than others did.

Policy Observation 7.1

Any failure to have FAS, FTS and the RECs fully engaged in the restructuring process could enhance the probability that future regulatory decisions will be inconsistent with the intentions and goals of the designers of the markets and could cause confusion and incoherence in the evolution of the market.

Another important issue is the role of the regulatory agencies in controlling investment. By law, FTS has control over funds collected to build plants left unfinished at the time of the collapse of the Soviet Union. Its use of the funds can be of value to the evolution of the market. Similarly, FTS, in coordination with the Construction Ministry and the RECs, plays a role in spending funds to be used for energy conservation. Those funds can range up to 1.5% of end-user tariffs and up to 3% of capped regional tariffs.[21] The value of conservation and effective demand-side response (DSR) to market signals is being increasingly recognized as a critical factor in the success of competition in electricity markets. Using funds collected for that purpose plays an important role in the new model.

The role of directing, or even simply approving the amount of investment on both the supply and demand sides is a conflict of interest for regulators. Investment decisions of any kind by regulators makes them market participants, a role that is utterly inconsistent with their obligation to be completely neutral on market outcomes.

Policy Observation 7.2

The regulatory agencies' responsibilities for investment in the market, on both the supply and demand side, are a conflict of interest for a regulatory agency and should be assigned to another entity for which market participation poses no conflict of interest.

8 PROMOTING AND MAINTAINING COMPETITION

Promoting and maintaining meaningful competition in the new market is critical function. Both that and the need for effective and timely market monitoring appears to be well understood. The scheme proposed for doing so is a complicated one requiring considerable coordination between agencies and institutions.

The generating sector will from the very outset of the market, be broken up into competing generating companies whose size and shape will be configured in a way that is believed to be most conducive to robust competition. Must-run or other specific units which for several reasons cannot have their operating characteristics driven by the market, will have regulated prices, presumably established by FTS. Any consolidation of market participants through merger or acquisition will be prohibited without the express prior approval of FAS. FTS, which appears to possess the same authority, but has never

[21] FTS approves the yearly amount of the funds, although it never collects or manages them itself. Nonetheless, its approve the amount expended effectively gives it a roles as a market participant.

exercised it, will nonetheless be given the power to veto mergers or acquisitions of monopoly companies as well as the authority to block the acquisition of non-monopoly businesses by monopoly companies. ATS, now charged with enforcing the market rules, will also have some as yet unspecified market monitoring responsibilities, especially in regard to spot markets. Indeed, it appears that the full scope of ATS's monitoring responsibilities is not yet decided. FAS will monitor market share, participant behavior, and market defects or failures.

Self-enforcement of competition is also a key part of the market monitoring regime, because it is anticipated that consumer groups and market participants themselves will look out for their own interests and bring complaints to the regulators where they see abusive practices or defects in market design and/or operations. This scheme, while perhaps ultimately thorough on substance (it is impossible to be categorical at this point), seems unduly complicated. Success is highly dependent on competent, consistent, independent, and professional implementation. The importance of a very high level of cooperation and coordination among the disparate agencies cannot be understated.

The deficiencies in metering and flow of market information in general add still another dimension to the difficulties of keeping tabs on the market. FTS, for example, indicated that it has only just begun to acquire the information technology and put in place the administrative structure it will need to fulfill its obligations in the new market. In fact, interviewees were concerned that the needed IT capacity would not be available until 2007, and even then its full functionality could not be assured.

Policy Observation 8.1

The regulatory responsibilities for promoting, maintaining, and monitoring competition in generating markets are highly diffused among regulatory agencies. The coordination of market monitoring and the promotion and maintenance of competition among the agencies may prove to be difficult. It is essential that policies and procedures be carefully coordinated and calibrated, that responsibilities of relevant agencies be clearly defined, and that the relevant IT technology be deployed before implementation of the new market, and that requisite information be shared among agencies once the technology is deployed.

The substance of the regulatory oversight of the new market is also not entirely clear. Some progress has already been made. FAS, for example, has a registry of companies that have more than 30% market share in defined markets. It also claims to have found numerous anti-competitive violations in electricity markets in the past, although certainly not in the context of the new market being proposed. Most of that experience involved energos in regional markets and were resolved through regional offices. Those cases evolved from frequent studies conducted by FAS, often using the Herfindahl-Hirshmann Index (HHI), an instrument widely used by economists to measure the degree of market power or dominance by a particular market participant. That experience might prove to be helpful, but the agency appears to need significant capacity building in order to fulfill its role effectively. It has been working to fill the current void in clear market power

standards. It proposes to have the standards in place by mid-2004. The primary focus of FAS appears to be on horizontal generation markets themselves. There seems to be little concern about vertical integration because transmission and generation will be disaggregated, and because fuel prices are either regulated in the case of natural gas, or are competitive in the case of coal. The standards proposed are based on both a static and dynamic analysis, and will take the grid's configuration into consideration.

Policy Observation 8.2

It is not at all clear that FAS, as currently constituted, has the experience, technical capability, and resources to carry out its heavy responsibility to promote, maintain, and monitor the competitiveness of generating markets. It should seek the assistance of international experts, experienced in competitive electricity markets to assist in the task of capacity building, putting appropriate systems in place, and promulgating clear, enforceable standards on market power and proper functioning of competitive generation markets. It is also recommended that thought be given to retaining an independent consultant on an ongoing basis to provide publicly available, periodic (e.g., quarterly) reports to the regulators on the state of the market, with particular focus on behavioral, institutional, and systemic problems in the market's overall competitiveness and efficiency.

9 TARIFF SETTING

Setting the tariffs in the new model is the major task for FTS and the RECs. While most generation will have market-based rates, "must-run" units (including CHP's), generators with local market power, and perhaps some other categories of plants will have regulated tariffs. Transmission, systems operations, distribution services, and perhaps some ancillary services will retain monopoly status and will have fully regulated tariffs. In addition to deciding what methodology to use, what incentives to deploy, and how to allocate costs appropriately, the regulators will face the extraordinarily difficult twin tasks of deciding what energy and supply contract costs to pass through for guaranteed suppliers, and of reducing, and eventually eliminating the cross-subsidies embedded in existing tariffs.

The area where the thinking regarding tariffs seemed most evolved was in transmission pricing. It is anticipated that the new multi-year tariffs will be in place by 2005. It is anticipated that there will be regional tariffs with nodal prices administered by the system operator. Beyond that, however, it is not clear what incentives will be put in place to encourage the construction of new interconnections and system enhancements. One proposal was to establish a fund for differences in nodal prices from which capital could be drawn for new construction. The problem with that, of course, is that it has the same "cost socialization" effect nodal pricing was designed to move away from. While the actual design of the pricing and incentives is part of the overall design of the market, the difficulties that regulators will encounter in overseeing the implementation and operation of the system cannot be understated. The previously mentioned shortcomings in metering and information flow, the capacity to monitor the market on a real-time basis,

and the resolution of the very difficult interconnection and interregional issues are all obstacles that must be overcome. Given where matters stand in regard to existing regulatory resources and capabilities, 2005 seems a very short time horizon for having the capacity in place for dealing with these issues.

Policy Observation 9.1

FAS, FTS, and other relevant institutions need to launch an immediate effort to build the capacity, human, technological, and otherwise, to be able to effectively monitor the grid for regulatory purposes, to develop appropriate allocation of costs for new interconnections, for overseeing transmission planning, for determining how best to optimize system enhancements (e.g., new transmission wires, FACS technology, better controls, strategically located generation, and demand-side/load-control measures), and to perform other necessary regulatory tasks associated with the grid. Second, a clear understanding regarding the allocation of regulatory responsibilities needs to be in place to avoid future bureaucratic quarreling and market confusion.

In generation, as noted, most plants will be selling their output at market-based rates. Should a unit be "must-run," or be found by FAS to have inordinate local market power, or should there be some other circumstance where a plant cannot be permitted to sell its energy at market rates, FTS is to set the tariffs. The methodology to be used for doing so is not yet known, nor is it clear how the tariff level will fit with the market being overseen by FAS. At present, FTS' tariffs for generators are determined on a cost plus basis and adjusted annually (they were previously adjusted quarterly). Whether that regime will be applied to generators with tariffs in the new model remains to be seen. It is also not apparent how often FAS will review the circumstances that place a plant involuntarily onto a tariff-based regime, or for that matter, what would trigger such an action in the first place.

Policy Observation 9.2

Generators will need to know when they will be subject to tariffed rates, as opposed to selling output at market based rates. At present, there is no way for them to acquire that information. Accordingly, FAS should, at its earliest opportunity, publish what criteria might cause a plant to be subjected to tariffs, how often that status will be reviewed, and under what circumstances. FTS should also publish the methodology for setting tariffs. These actions should be taken before the market is implemented.

At present distribution tariffs are set through a complicated process involving the RECs, FTS, and MEDT. The distribution companies submit price cap proposals to their REC. The regional regulators then make a determination of what the cap ought to be in their region and submit it to the FTS for approval. The FTS, under guidelines from the MEDT for overall caps (presumably based on macroeconomic considerations), then tells the REC what the specific cap ought to be. The REC, after "consultation" with regional political authorities regarding cross-subsidies and cost allocations between heat and electricity, determines the precise tariffs. The complicated, three-step process is designed

to keep inflationary pressure under control while at the same time affording local officials considerable say over the tariff levels in their region.[22]

By all accounts, however, the current tariff-setting system makes more political than economic sense. The tariffs rarely, if ever, include incentives for reduced costs, improved productivity, or reduced losses. It is generally recognized that the new market cannot tolerate such a regime. FTS says that it is now considering the type of tariff regime to put in place.[23] Four methods are currently under consideration:

- cost plus
- rate of return
- price caps with indexation and perhaps with an X factor
- some form of benchmarking.

It is also possible that some combination of these methodologies will be attempted. Benchmarking is attracting some degree of support because it will allow tariffs to be set on a regional, rather than company-specific basis.

The plan is also to apply the same tariff regime used for distribution services to other monopoly activities such as the system operator and ATS, although it is not evident that there has been a careful study of whether incentives appropriate for a distribution company are applicable to such non-facility-based service providers as ATS and the system operator.

Policy Observation 9.3

There needs to be an open and public debate on what methodology should be used to establish tariffs for distributors, for ATS, and for the system operator. MEDT and FTS should publish a preferred proposal for tariff methodology for distribution companies, for ATS, and for the system operator. International consultants with experience with distribution, market administrator, and system operator tariffs might be employed to assist the formulation. Comments and analysis on the proposal should be sought and fully considered. The methodology should be fully and publicly articulated before the new model is implemented.

Although it is theoretically possible that the entire retail market could be opened to full competition quickly, many believe that full retail competition should be delayed for some time. Even when it happens, many consumers may decide not to change their "traditional" supplier. Consequently, a great deal of thought should be given to

[22] Some observers also suggested that the complicated process is an example of the complexities involved in Russian federalism.

[23] The discussions with FTS took place when the agency was still known as FEC and before the assignment for selecting methodologies was given to MEDT. Thus, it cannot be stated for certain that the thinking at the old FEC at the time of the interviews is reflective of current thinking at MEDT. Nonetheless, while these considerations are relevant to understanding the context, they have little bearing on the substance of the policy notes themselves.

designating the provider of last resort (PLR).[24] In most cases it is presumed this obligation will be assigned to the local distribution company, but that has not been officially determined.[25]

Perhaps more importantly, it is not apparent what costs the PLR will be allowed to pass through to the customers. There are two philosophical approaches to the question. The first approach would attach little significance to the components of PLR tariffs, other than to make certain that they were not so low as to discourage new entrants into the market. This approach is applicable, of course, only if and when there is full retail competition. The second approach, where the PLR actually provides the energy to *most* customers (e.g., in cases where open retail access is allowed only to certain categories of consumers), requires consideration of incentives for prudent and efficient energy purchases and appropriate consumer protection measures. The questions that typically arise are:

- What energy costs will regulators permit to be passed through to consumers?
- Will they include the costs of hedges?
- To what extent should PLR's rely on the energy market?
- To what extent should PLR's enter into long-term contracts?
- Who is at risk for shortfalls in energy supply?
- Who is responsible for reliability of supply?
- What are the incentives for efficient purchasers of energy?

These and other questions will both impact the nature of the new wholesale market and the protection afforded to consumers.

Policy Observation 9.4

As is the case with tariffs for monopoly services, a public debate about PLR obligations is needed. It is recommended that a proposal for the specific responsibilities, risks, and incentives for PLR's be published and put out for public comment and analysis. Once again, the engagement of an international consultant with specific experience with PLR issues might be useful. PLR's are entitled to know* ex ante *what risks they are being asked to bear, so it is recommended that the regulators fully articulate the criteria to be applied in passing through costs before the market is implemented.

Finally, there is the intense political question of cross-subsidies. Cross-subsidies are embedded in most existing distribution tariffs. They typically go from large to small customers, from more affluent to less affluent consumers, and from electric to heat

[24] There are essentially three types of customers for PLR service. The first are those customers who are not yet contestable, and require a provider. The second are those customers who are contestable but have chosen to exercise no choice. The third are those customers who are contestable, but whose supplier may have, for whatever reason, failed. Most of the discussion in this report is focused on the first two types.
[25] Assigning PLR responsibility to the distributors has some intuitive appeal, but there are alternative that should be considered. They include putting the PLR obligation out for bid at periodic intervals, assigning them to a supply company affiliated with an energo, or perhaps some other options.

customers. The new model proposes to substantially reduce, if not entirely eliminate these cross-subsidies, which would represent a major social and political challenge. Competition in the wholesale market, direct transmission access for many, but particularly for large consumers, and full commercialization of the sector will make it difficult, if not impossible, to maintain existing cross-subsidies, even if it were desirable to do so. No one interviewed professed any desire to maintain them. They were widely viewed as inefficient and economically undesirable. Despite the consensus on theory, however, in reality the elimination, or even substantial reduction, of cross-subsidies will be a difficult and contentious process. Doing so runs counter to the traditional ways tariffs were negotiated and will doubtless lead to rate shocks and worse for many customers.

Some cross-subsidies are supposed to be replaced by general budget (taxpayer) subsidies. This can be part of the overall scheme of social assistance to the vulnerable social groups. This mechanism is preferred from the point of view of economic efficiency, although it may have its own difficulties, especially in cases of large budget deficits. In any case, the political and social complexity of eliminating cross-subsidies in general cannot be underestimated. Some cross-subsidies, like those for low income households, are particularly vexing and difficult. It would be folly to expect the regulators alone would be able to deal with this problem.

Policy Observation 9.5

Once again, the initiation of a public debate is important. It would be very helpful to publish a plan for the gradual phasing out of subsidies in order to solicit public comment and analysis and to stimulate a national, public education campaign to acquaint all consumers with the plans and assist them to cope with the consequences that will inevitably affect many of them.[26] The necessity to fund some of the needs financed by cross-subsidies (e.g. subsides to low income households) should be made an explicit part of the public debate.

10 ACCOUNTING AND INFORMATION ISSUES

The regulators appear to lack authority to impose specific accounting requirements for purposes of regulation. The accounting rules regulated entities are required to follow are simply those that are generally applicable in Russia for financial reporting purposes. Internationally, it is common and useful, for regulatory purposes, although not necessarily for financial reporting, for regulators to have the power to impose specific accounting measures on entities. Such requirements do not replace regular rules on financial accounting. Those rules stay in effect for financial reporting purposes.

[26] The companion paper on electricity sector restructuring discusses the possible use of vesting contracts to ease the transition process. That would certainly be a useful concept to put out in the course of stimulating a public debate on the need to phase out cross subsidies.

Regulatory accounting is an additional requirement for regulated entities, and is used solely for purposes of economic regulation.[27]

The deficiency in legal accounting powers is compounded by a deficiency in personnel. FTS, and perhaps the RECs as well, lack their own auditing staff to monitor the books and records of the entities they regulate. In fact, FTS lacks the resources to independently verify the data it receives in connection with tariff reviews. It simply relies on outside auditors or on tax auditors who are likely to lack regulatory expertise or perspective, for financial and cost allocation information on regulated companies. This is also contrary to best international practice, and is potentially very problematic in a competitive market where companies may be engaged in both monopoly and competitive arenas. In fact, the ability of a business engaged in monopoly activities, or in both heat and electricity, to extract revenues from monopoly activities to cross-subsidize its endeavors in competitive markets, is a classic abuse for which effective regulatory accounting is a *sine qua non.* That is even more so in Russia, where there has been a tradition of cost allocations and cross-subsidies determined by politically and socially driven considerations rather than based upon sound business or commercial analysis. Indeed, it appears that political authorities and FOREM have historically played a larger role in determining cost allocations than the regulators. That is clearly an arrangement that the new market model will be unable to tolerate.

Policy Observation 10.1

The lack of power for Russian regulators to mandate specific accounting for regulatory purposes is inconsistent with very basic powers typically provided to regulatory agencies in other countries. Those powers are essential for market transparency and to guard against improper cost allocations that can distort and do harm to competitive markets. It is also very problematic that regulators lack adequate resources to hire and retain a regular auditing staff to examine the books and records of regulated entities.

Apart from mandating accounting that permits regulators to effectively analyze information, by almost all accounts the information flowing into the market and to regulators is inadequate. The metering currently deployed is simply inadequate to provide the information required to monitor and regulate within the new model.

Policy Observation 10.2

The lack of information flow needed for both regulation and effective market operations caused by inadequate metering is a critical shortcoming.

[27] There are two basic accounting needs of regulators. The first is to enable them to be knowledgeable about company costs in general. That is of particular value in setting tariffs. Obviously, the more cost based the methodology, the more important the accounting information. The other basic need is in regard to allocation of costs, such as which costs are allocated to competitive activities and which are allocated to non-competitive activities.

11 APPELLATE PROCESSES

An essential element of holding regulatory agencies accountable is the appellate process. Internationally, there are many variations in the nature of appeals. The scope of appellate review can range from *de novo* review where essentially the entire decision-making process by the regulator is repeated before another decision-making forum, to a more limited review of the regulator's decision that does not focus on the substance of the decision under review, but makes certain that the regulator acted within its authority, correctly followed the legal and process requirements, and that the decision was neither arbitrary or unreasonable based on the facts and circumstances presented. The options for the routes that appeals can take from the regulatory agency is to the courts (sometimes a specifically designated one, or sometimes to any court), to specialized tribunals, or to the government. Other related appellate issues are the remedies available to an appellate body should it find error by the regulators, the effect of taking an appeal on the decision of the regulators, and who can take an appeal.

The current Russian appellate situation seems something of a hybrid. The process regarding appeals from FTS is the most established, so the focus will be on appeals from that agency. The discussion, however, is equally applicable to all regulatory agencies, except to note that, at present, appeals from the RECs can be taken either to FTS or to the courts. However, when FTS is bypassed, the courts often forego exercising jurisdiction until they hear from the FTS. Appeals from FTS decisions go to the Arbitration Courts, the usual forum for adjudicating commercial disputes. Because the Government has the power to rescind FTS decisions, however, appeals can effectively go there as well.

The technical standards for reviewing an agency decision in the courts are narrowly legal in scope, and agency decisions are given the benefit of the doubt where matters are unclear. The courts however, have the power to appoint an expert to advise them on cases, thus suggesting that they could make substantive inquiry into decisions well beyond a more circumspect review. When experts have been appointed, however, they were often FTS staff members. In any event, the FTS has not reportedly lost an appeal in the last three years. Because there is little precedent, and because the law is vague on the point, it is largely unknown what remedies a court can order when it finds that the regulator is in error. Finally, whenever an appeal is taken, the effect of the regulator's decision is automatically suspended pending the outcome of the appeal.

There do not appear to be any particular standards for appeals to the government. Indeed, the recent restructuring has made that subject even more opaque. Since MEDT sets the methodologies and guidelines which FTS must follow, it would appear that the government is in a position to exercise *ex ante* control over FTS. Since the regulator is now accountable to the government, and since appeals could always be lodged with the government, it would appear that the government can exercise *ex post* control over FTS as well. The criteria or process the government would use in evaluating appeals is not commonly known, and may not exist. Similarly, other than rescission, it is unclear to

anyone interviewed or in the law, what remedies the government can apply should it overturn a decision of the regulators.

From the perspective of best international practice, there are several principles that should be applied. Four such principles are described next.

Role of the Government

The first principle relates to appeals to the government. If regulatory agencies need to be independent to avoid the politicization of the process, then it makes no sense to politicize the appellate process either. In the context of the new market model with lobbyists for various competing interests jockeying for competitive advantage, it is even more important to build in protections against politicization that could have severe or adverse impacts on the efficiency and reliability of the market.

In terms of holding regulatory agencies accountable, the best practice is for policy-makers (either legislative or executive) to establish policies that regulators must follow on a prospective basis. Once these policies are in place and the regulators implement them in actual cases, the job of holding regulators accountable for those decisions falls to those who hear appeals from agency decisions, usually the courts or special appellate tribunals. In a few countries, an appellant can make his/her case to the government as well. Appeals can be taken for a variety of reasons, but they are fundamentally of two types: (i) whether the regulator failed to follow a course he/she was required to follow, or (ii) whether the course itself was, for some reason, legally flawed, even if the regulator did follow the prescribed course. In the latter type, the government has a very basic conflict because under the recent restructuring, it is the government, acting through MEDT, which sets the course alleged to be flawed. In essence, the government would be asked to judge or re-examine itself.

Policy Observation 11.1

The Government's power to exercise* ex ante *and* ex post *control over regulatory decisions is inconsistent with best international practice in regard to both regulatory independence and regulatory accountability. Indeed, the government's ability to exercise* ex post, appellate *review of regulatory appeals is out of step with more commonly accepted international norms.

Appellate Body

The second principle to be considered is to make sure that the appellate process does not render regulatory policy and administration incoherent by having multiple, potentially conflicting appellate decisions. Although the Russian legal system does not rely on judicial precedent, thereby mitigating the long-term consequences of a "bad" decision, the fact that Russian courts are not bound by prior decisions can actually make the appellate process riskier and less certain by allowing appellants the ability to "forum shop" for sympathetic judges and by reducing the predictability and coherence of regulatory decisions. Judges throughout the world have found reviewing the decision of independent infrastructure regulators to be an arcane task for which they are not well suited. It is, therefore, useful to have appeals processed by tribunals with specific competence in the subject.

Policy Observation 11.2

While international practice varies, the Russian situation where precedent need not be followed, and where the courts in general possess no specific expertise in infrastructure regulation, it might be more appropriate to establish a single, specialized appellate tribunal to hear regulatory appeals.

Status of decision under appeal

The third principle is about the effect of taking an appeal on the regulatory decision, pending the outcome of the appeal. As noted, currently in Russia, the effect of simply taking an appeal is to delay implementation of the decision. This constitutes a powerful incentive for parties to take appeals and violates what should be a presumption of validity that attaches to an agency's decision, until such time as it is officially judged to have been in error. It also has the effect of making the regulatory process less predictable and more easily subject to manipulation. In fact, it is a powerful incentive for parties to take appeals regardless of the merits of their claim and thereby create unnecessary uncertainty and delay in regulation.

Policy Observation 11.3

Good regulatory practice suggests that the decision of the agency should be presumed to be valid until adjudged otherwise by the appellate forum. The only circumstance where the implementation of a decision should be delayed is upon successful application by an appealing party to either the regulatory agency itself or the appellate forum for an order to delay implementation. Such an order should be granted only under the very limited circumstances where the order will do irreparable harm to the applicant during the appellate process and where the applicant can demonstrate a high probability of success in the appeal.

Basis for appeal and remedies available

The fourth principle is that the expertise of the regulatory agency should be respected and utilized. The substantive knowledge and competence of the agency should be relied on to the extent that the law and fairness permit. This principle appears to reflect the general practice in Russia today, but the notion of limited appellate review is not necessarily written into law. It is also not specified in law what remedy a court should pursue when it overturns a decision of a regulatory agency. Although it is not uniformly so, best practice suggests that the case be returned to the agency to reconsider the matter in light of the court's decision. The reason for that is that it provides for greater continuity and evolution in regulatory practice.

Policy Observation 11.4

Best practice suggests that appellate bodies should only reverse a decision of a regulatory agency if it finds that the agency has exceeded its legal authority, violated the law in some fashion, failed to follow the correct procedures, or has acted arbitrarily, unreasonably, or against the manifest weight of the evidence presented to it. Should an appellate body find it necessary to reverse an agency decision, rather than fashioning its own remedy, it should remand the case to the agency to remedy the deficiency in a way that is consistent with the appellate decision. While at least some of these principles appear to be followed in practice, it does not appear to be codified, and thereby assured.

12 ETHICS

The only ethical standards applicable to the personnel of the regulatory agencies at present are the general provisions of law that are applicable to the Russian civil service as a whole. The provisions include prohibitions on bribery and other common abuses. While regulatory personnel should certainly be subject to such provisions, the general rules are inadequate, given the nature and circumstances of electricity regulation.

Regulatory personnel work very closely with private companies and interest groups. At the same time they are charged with serving and protecting the public with whom they have less constant contact. Moreover, regulators are generally compensated less for their efforts than their counterparts at regulated companies. Potential ethical conflicts are posed by those circumstances. They include not only such traditional perils as bribery and acceptance of gratuities, but also more subtle and complicated matters such as financial conflicts of interest and revolving-door employment from regulatory agencies to regulated companies, often without pause.

FTS reports that it is losing 20% of its senior staff annually to regulated companies. That should be unacceptable for many reasons, but from the standpoint of ethics, it is a scandal

waiting to happen.[28] A staff person working on a matter involving a specific company, while at the same time negotiating and/or accepting a job with that enterprise is an unacceptable conflict of interest, that could undermine the credibility of the regulatory regime. There are many examples throughout the world of such incidents.

Another problem, of course, relates to the fact that regulators have an enormous power to influence the value of the securities of regulated companies. For that reason, strong rules need to be in place to preclude regulatory personnel from having any financial interest in a regulated entity, or from disclosing any information, other than formal decisions or reports, which might affect the market value of securities or give some parties privileged information that allows them to take unfair advantage of "inside" information for their own profit. Without enumerating all of the possible ethical issues that may arise, this report only points out that electricity regulation requires special ethical treatment and standards.

Policy Observation 12.1

There is, at present, no appropriate Code of Ethics for all regulatory officials. Best international practice suggests that one should be written and adopted. Subjects to be regulated by such a code include prohibitions on conflicts of interest, acceptance of gratuities, and leaving regulation to accept employment serving a private interest on the same matter. Other possible subjects include financial disclosure of holdings by regulatory officials, rules regarding communications with companies having business before the agency or traders in the securities of such firms, and any other matters that are deemed relevant and important in the context of international experience, and Russian circumstances.

13 REGULATORY RESOURCES: HUMAN AND FINANCIAL

One of the most obvious weaknesses in the regulatory structure is in the area of human resources. The number of personnel assigned to the task of regulating electricity is very small. At the time the interviews were conducted, FAS (then MAP) had only assigned five staffers to the job of monitoring the electricity market.[29] That number will likely be too small once the model is implemented. The task will be a complex one requiring sophisticated, rapid, data collection, analysis, and reporting. It will also require rapid and

[28] There are also examples of personnel moving from regulated companies to the regulatory agency. International experience has shown, however, that subsequent to commercialization or privatization of the companies, the personnel flow tends to be overwhelmingly one way. People leave low paying jobs at regulatory agencies for higher paying positions at regulated companies.

[29] To put this number in perspective, the PJM market monitor in the U.S. currently employs 11 staffers and is ramping up to 17. The New York ISO employs almost 30 on its market monitoring staff. Those numbers, of course, do not reflect the number of regulators assigned the same tasks at the FERC, state commissions, Justice department, State Attorneys General, Federal Trade Commission, and at the Department of Justice.

thorough responses to complaints and inquiries from market participants and consumers. Additional human resources will inevitably be required.

Similarly, FTS' human resources are limited. In January 2004 FEC (now renamed FTS) had 219 staff members overall, but only twenty were assigned full time to regulate electricity. An excellent example of the paucity of human resources is in FEC's public relations and consumer education. The entire effort was carried out by a single staff member, who, because he has other duties, could only devote part of his time to the public relations and education.[30] Given the importance of public education to the success and credibility of the new model, and based on international experience, the low level of staffing is wholly inadequate. The RECs that are also likely to be recipients of complaints and inquiries about the new model. appear to be understaffed for the task they are likely to confront as well.

Policy Observation 13.1

The human resources which will be required for the multiple regulatory functions in the preparation for and implementation of the new model are simply inadequate at present. FTS, FAS, and the RECs should assess their human resources requirements and make these known to the government. In addition to all other tasks, particular attention should be directed to the need for comprehensive public relations, outreach, and education.

The level of compensation for regulatory personnel poses a very serious problem. As noted, FEC lost a significant portion of its staff every year. A disproportionate number of the departing staff are experienced and competent personnel. Departing staff were primarily going to work for regulated companies. FEC also reported great difficulty in recruiting university-trained personnel. The biggest obstacle to recruiting and retaining good staff was the low level of compensation FEC was able to pay. The salaries paid at FEC were to conform to the rules and guidelines applicable to the civil service in general. Compensation packages for civil servants were, as in many countries, significantly lower than those offered in the commercial sector, even lower than in state-owned commercial entities. Efforts by FEC to compensate for the lack of economic opportunity proved to be either counterproductive or ineffectual. Special training programs for example had provided incentives for some staff to come to work at FEC, but it was reported that many staff receiving the training left soon after for more lucrative jobs, thereby turning the program into something of a subsidy to regulated companies that were able to recruit personnel trained by the FEC. An example of the salary discrepancy is that the chief accountant at FEC was reported to earn a salary that was about 1/12 of what his counterpart at a regulated company earned. While there were opportunities for staff to earn bonuses, the amount of the bonuses were too insignificant to obviate the salary

[30] Experience in other countries undergoing the transition from monopoly to competition strongly suggest that regulators must devote considerable resources to public education efforts in order to assist consumers reorient themselves in regard to electricity, and thereby enrich the new market. Public education and public relations by the regulator is a key ingredient in the success of the transition from monopoly to competition.

differential. The problem has been compounded by the fact that salary levels have been frozen for the past seven years.

Over time, it likely that FAS will encounter similar problems, if it has not already done so. The same may be true of the RECs, although there is some evidence that at least some of the RECs are able to bypass civil service requirements, and pay higher salaries than those provided for in the general civil service. As noted above, the issue is not simply economic; it is also an ethical and credibility issue relating to the conflicts, both real and apparent, in personnel leaving regulatory agencies to work for the companies they are supposed to regulate.

Policy Observation 13.2

The compensation packages for regulatory personnel are inadequate for the recruitment and retention of fully trained, technically competent, professional staff. It is specifically recommended that the remediation of this problem be examined in tandem with the ethics issues flowing from them, so that some of the rationale for higher salaries is linked to restrictions on the job mobility and investment opportunities of regulatory personnel.

FTS and the other regulatory bodies draw their funds from the public treasury. This practice is contrary to the prevailing international practice of regulatory agencies drawing their funds from a levy on regulated tariffs paid by consumers but collected by the companies providing the service. Such revenues are maintained in special accounts separate from the general treasury and can only be used for regulatory activities. There are three reasons for the practice:

- to prevent efforts by political authorities to penalize regulators for their decisions by taking away funds, or to balance the government's books, at least in some measure, by reducing the resources available for regulation;

- to recover the costs of regulation more transparently. Regulatory costs are inherent cost of operating the power sector. From an economic perspective, these costs ought to be reflected in electric rates, rather than be subsidized by revenues from the public treasury;

- To assure a stable and predictable level of regulatory activity. While regulators in Russia report that, apart from freezes, they have not encountered difficulties in obtaining approval for requested budgetary levels, they also expressed a strong desire to move toward the prevailing international practice and away from reliance on the public treasury for the reasons noted.

The Government has expressed opposition to FEC' proposals for fear that other agencies would then request similar arrangements and that it might ultimately reduce the government's ability to maintain fiscal control. That argument, however, is not supported by experience elsewhere, in part because the anticipated cascade of agency

requests for special funding never materialized, and more importantly, because the overall budget of regulatory agencies is still capped at levels either set by the governments through their budget approval processes, or by the laws which set the amount of the regulatory levy. In fact, regulatory agency budgets are typically such a tiny fraction of overall government expenditure that differential treatment of them rarely attracts much attention from larger agencies of the state. The threat of governmental interference with the effectiveness of regulation by budget manipulation simply eclipses any possibility that favorable treatment of regulatory budgets will somehow cause fiscal discipline to be lost.

Policy Observation 13.3

The current practice of funding regulatory activities out of general treasury funds is inconsistent with best international practice of funding regulation through a dedicated fee imposed on electricity tariffs. The current practice leaves the door wide open to political retaliation against regulators through budgetary actions, to cross-subsidies to rate payers from taxpayers and* vice versa, *and to destabilization of regulatory activities.

14 CONCLUSION

The work that must be accomplished in a short time to prepare Russia's regulatory system for its responsibilities in the new market model is extraordinary. It requires very substantial efforts by the regulators and by high-level officials at all levels of government. It requires changes in traditional methods of doing things, substantive research, and much negotiating, consulting, learning, writing, and ultimately, implementation. It may also require changes in law. It would be a costly error to go forward half-prepared in the hope that mistakes or uncertainties can be remedied as difficulties are encountered. There are too many examples of electricity market reforms failing or faltering because of inadequate, poorly designed, or dysfunctional regulatory systems. This report points out some of the key regulatory issues that should be carefully addressed before full implementation of the new market model.

Attachment 1

LIST OF POLICY OBSERVATIONS

Policy Observation 2. 1

It is of great importance to review the arrangements and institutions to make certain that they interact harmoniously, coherently, and comprehensively, or that the regulatory design be reduced in its complexity (e.g. merging functions and/or institutions, clear decisional hierarchy established) in order to facilitate consistent, coherent, and carefully calibrated decision-making. It is not at all certain, even in the context of the recent restructuring, that the current alignment of agencies and responsibilities will be fully functional as currently configured. If, as foreshadowed, substantial changes in the regulatory regime may be required, it would be better to implement the changes earlier rather than later. If, however, practical considerations mean that this is not achievable a clear transition timetable should be established. It must be noted in that regard, however, that post-reform changes can prove quite problematic. Vested interests can become quite invested in the status quo and resist changes that others may believe to be in the public interest The ability to make second generation reforms cannot be taken for granted.

Policy Observation 3. 1

ATS is neither completely independent of the Government, nor lacking in ties to the private economic and financial interests of market participants. While those interests may well diverge or even conflict from time to time, that is a weak foundation for assuring that ATS will possess the level of independence required for a market administrator to effectively and credibly carry out its responsibilities.

Policy Observation 3.2

Best international practice suggests that final authority over regulatory matters be vested in agencies that possess adequate independence from government and from private interests with significant stakes in regulatory outcomes. It does not appear that the Russian regulatory agencies possess that requisite level of independence.

Policy Observation 3.3

Competition regulators should possess full independence in assessing and monitoring the market, in taking actions to enforce and enhance competition, and to remedy problems associated with market power, market failure, market design flaws, and abusive behavior. The key point is to make certain that the competition regulators are able to carry out their obligations free from politics and free from undue interference or lobbying by private economic interests. That does not appear to be the current circumstance in Russia.

Policy Observation 3.4

The fact that all but one of the FTS Commissioners are appointed by the Government rather than by the President, that MEDT has the power to direct the use of its preferred methodologies, to impose price caps and to rescind FTS decisions is inconsistent with best international practice regarding the independence of regulatory agencies. To the extent that price caps for particular customer classes or limitations on pricing methodologies are necessary they should, as far as possible, be specified at the outset, in the framework within which the regulator operates rather than subsequently imposed by the Government.

Policy Observation 3.5

The context within which REC Boards are appointed and do business – often without fixed, staggered, terms, with communications between RECs and regional governments be made generally on a non-transparent basis, and without a single board, entirely composed of persons fully independent of any particular special interests – is out of step with best international practice.

Policy Observation 3.6

FTS and FAS should not be represented on the ATS board as it may compromise the effective regulatory oversight of the market administrator. The fact that ATS has a governing board composed of directors linked to market participants and/or the government is a potential source of problems and should be monitored carefully.

Policy Observation 4.1

The fact that regulatory agencies derive their authority from a delegation of powers by the government, rather than directly by law is inconsistent with best international practice and seriously compromises regulatory independence. The authority of MEDT to rescind regulatory decisions and to mandate specific methodologies and guidelines, rather than doing so in more permanent instruments such as law or concession documents is similarly out of step with best international practice.

Policy Observation 4.2

The ability of private companies to require regulatory agencies to treat as confidential any information they provide to the agencies is contrary to best international regulatory practice on transparency.

Policy Observation 4.3

The FTS lacks sufficient remedial powers to address violations in ways that are proportionate to the offenses. Examples of such remedial powers include, but are not limited to assessing penalties, refunds to consumers, specific orders to perform, escrowing of funds to be used for specified purposes only, and suspension of revocation of licenses.

Policy Observation 5.1

Credible regulatory decision-making requires a formal, highly transparent, decision-making process with ample opportunity for public participation. MEDT and FAS should adopt and publish clear decision-making processes so that all parties will know how the process will work and how they may access and participate in it. The failure to do so can be quite harmful to the regulatory regime in terms of credibility, consumer and investor confidence, and substantive outcomes.

Policy Observation 5.2

The decision-making processes of all of the regulatory agencies should be conducted with a view toward making them more transparent, more user friendly, and more informative. While recognizing the need to ensure that regulatory processes reflect the specific circumstances in a country, the following measures are key elements in assuring transparency:

1. All decisions should be written. They should be in a format that includes a description of the matter at hand, a history of the proceedings/review, a description of the positions taken by the various parties and of the information offered in support of those positions, an analysis of the arguments and information offered, an analysis of the policy, factual, and legal issues, and finally, a clear statement of the board's conclusions and decision. All dissenting and/or concurring opinions should also be in writing.

2. Submissions and other material such as consultant reports or research commissioned by the stakeholders or the regulator should be on the public record[31] and properly tested and evaluated during the course of the proceedings/review. As part of the consideration and evaluation of this information stakeholders should have access to the information in order to have the opportunity to provide effective and meaningful input.

3. All communications between regulators (including individual board members) and the Government and/or commercial entities on pending or prospectively pending regulatory matters should be transparent and made part of the public record.

Policy Observation 6.1

The level of diffusion in regulatory authority has within it enormous potential for sending confused, incoherent, and even contradictory signals to market participants. Some means of preventing that outcome needs to be put in place. That might come from establishing the preeminence of one of the agencies, by some joint action by the agencies, or by some other means. For an embryonic market, however, the potential for conflicting regulatory

[31] Subject to strict tests of commercial confidentiality.

signals should cause very significant concerns, and this problem should not be allowed to fester.

Policy Observation 6.2

The relationship between the RECs, FTS, and FAS is still another example of the diffusion of regulatory authority and lack of clarity in regulations that needs careful attention in order to avoid confusing, incoherent, and even contradictory signals and policies.

Policy Observation 7.1

Any failure to have FAS, FTS and the RECs fully engaged in the restructuring process could enhance the probability that future regulatory decisions will be inconsistent with the intentions and goals of the designers of the markets and could cause confusion and incoherence in the evolution of the market.

Policy Observation 7.2

The regulatory agencies' responsibilities for investment in the market, on both the supply and demand side, are a conflict of interest for a regulatory agency and should be assigned to another entity for which market participation poses no conflict of interest.

Policy Observation 8.1

The regulatory responsibilities for promoting, maintaining, and monitoring competition in generating markets are highly diffused among regulatory agencies. The coordination of market monitoring and the promotion and maintenance of competition among the agencies may prove to be difficult. It is essential that policies and procedures be carefully coordinated and calibrated, that responsibilities of relevant agencies be clearly defined, and that the relevant IT technology be deployed before implementation of the new market, and that requisite information be shared among agencies once the technology is deployed.

Policy Observation 8.2

It is not at all clear that FAS, as currently constituted, has the experience, technical capability, and resources to carry out its heavy responsibility to promote, maintain, and monitor the competitiveness of generating markets. It should seek the assistance of international experts, experienced in competitive electricity markets to assist in the task of capacity building, putting appropriate systems in place, and promulgating clear, enforceable standards on market power and proper functioning of competitive generation markets. It is also recommended that thought be given to retaining an independent consultant on an ongoing basis to provide publicly available, periodic (e.g., quarterly) reports to the regulators on the state of the market, with particular focus on behavioral,

institutional, and systemic problems in the market's overall competitiveness and efficiency.

Policy Observation 9.1

FAS, FTS, and other relevant institutions need to launch an immediate effort to build the capacity, human, technological, and otherwise, to be able to effectively monitor the grid for regulatory purposes, to develop appropriate allocation of costs for new interconnections, for overseeing transmission planning, for determining how best to optimize system enhancements (e.g., new transmission wires, FACS technology, better controls, strategically located generation, and demand-side/load-control measures), and to perform other necessary regulatory tasks associated with the grid. Second, a clear understanding regarding the allocation of regulatory responsibilities needs to be in place to avoid future bureaucratic quarreling and market confusion.

Policy Observation 9.2

Generators will need to know when they will be subject to tariffed rates, as opposed to selling output at market based rates. At present, there is no way for them to acquire that information. Accordingly, FAS should, at its earliest opportunity, publish what criteria might cause a plant to be subjected to tariffs, how often that status will be reviewed, and under what circumstances. FTS should also publish the methodology for setting tariffs. These actions should be taken before the market is implemented.

Policy Observation 9.3

There needs to be an open and public debate on what methodology should be used to establish tariffs for distributors, for ATS, and for the system operator. MEDT and FTS should publish a preferred proposal for tariff methodology for distribution companies, for ATS, and for the system operator. International consultants with experience with distribution, market administrator, and system operator tariffs might be employed to assist the formulation. Comments and analysis on the proposal should be sought and fully considered. The methodology should be fully and publicly articulated before the new model is implemented.

Policy Observation 9.4

As is the case with tariffs for monopoly services, a public debate about PLR obligations is needed. It is recommended that a proposal for the specific responsibilities, risks, and incentives for PLR's be published and put out for public comment and analysis. Once again, the engagement of an international consultant with specific experience with PLR issues might be useful. PLR's are entitled to know ex ante what risks they are being asked to bear, so it is recommended that the regulators fully articulate the criteria to be applied in passing through costs before the market is implemented.

Policy Observation 9.5

Once again, the initiation of a public debate is important. It would be very helpful to publish a plan for the gradual phasing out of subsidies in order to solicit public comment and analysis and to stimulate a national, public education campaign to acquaint all consumers with the plans and assist them to cope with the consequences that will inevitably affect many of them.[32] The necessity to fund some of the needs financed by cross-subsidies (e.g. subsides to low income households) should be made an explicit part of the public debate.

Policy Observation 10.1

The lack of power for Russian regulators to mandate specific accounting for regulatory purposes is inconsistent with very basic powers typically provided to regulatory agencies in other countries. Those powers are essential for market transparency and to guard against improper cost allocations that can distort and do harm to competitive markets. It is also very problematic that regulators lack adequate resources to hire and retain a regular auditing staff to examine the books and records of regulated entities.

Policy Observation 10.2

The lack of information flow needed for both regulation and effective market operations caused by inadequate metering is a critical shortcoming.

Policy Observation 11.1

The Government's power to exercise ex ante and ex post control over regulatory decisions is inconsistent with best international practice in regard to both regulatory independence and regulatory accountability. Indeed, the government's ability to exercise ex post, appellate review of regulatory appeals is out of step with more commonly accepted international norms.

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While international practice varies, the Russian situation where precedent need not be followed, and where the courts in general possess no specific expertise in infrastructure regulation, it might be more appropriate to establish a single, specialized appellate tribunal to hear regulatory appeals.

Policy Observation 11.3

Good regulatory practice suggests that the decision of the agency should be presumed to be valid until adjudged otherwise by the appellate forum. The only circumstance where

[32] The companion paper on electricity sector restructuring discusses the possible use of vesting contracts to ease the transition process. That would certainly be a useful concept to put out in the course of stimulating a public debate on the need to phase out cross subsidies.

the implementation of a decision should be delayed is upon successful application by an appealing party to either the regulatory agency itself or the appellate forum for an order to delay implementation. Such an order should be granted only under the very limited circumstances where the order will do irreparable harm to the applicant during the appellate process and where the applicant can demonstrate a high probability of success in the appeal.

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The compensation packages for regulatory personnel are inadequate for the recruitment and retention of fully trained, technically competent, professional staff. It is specifically recommended that the remediation of this problem be examined in tandem with the ethics issues flowing from them, so that some of the rationale for higher salaries is linked to restrictions on the job mobility and investment opportunities of regulatory personnel.