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**ENERGY AND TELECOMMUNICATIONS SECTOR ASSISTANCE
FOR MINISTRY OF ECONOMIC POLICY AND DEVELOPMENT
OF THE CZECH REPUBLIC
PHASE 2**

**REVIEW OF ENERGY SECTOR PLANNING
AND PRIVATIZATION DOCUMENTS**

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Table of Contents

| | |
|--|----|
| INTRODUCTION | 1 |
| I. REVIEW OF THE ENERGY PROGRAM | 3 |
| DISCUSSION OF SPECIFIC STATEMENTS MADE IN THE ENERGY PROGRAM | |
| Strategic Goals | 3 |
| High Investment Costs | 4 |
| Projected Energy Demand and Supply | 4 |
| Privatization | 5 |
| Energy prices and price regulation | 5 |
| Least Cost Planning/Demand-Side Management | 9 |
| Energy Supply Projections | 9 |
| Electricity Manufacture Forecast | 10 |
| Gas production | 10 |
| Oil Refining | 10 |
| Energy Conservation | 10 |
| Ownership of District Heating Facilities | 10 |
| GENERAL COMMENTS | |
| Estimated costs and sources or funds | 11 |
| Action steps | 11 |
| Milestones | 11 |
| Program monitoring | 11 |
| II. REVIEW OF THE PRIVATIZATION STRATEGIES | 12 |
| PROPOSED STRUCTURE FOR THE STRATEGY DOCUMENTS | |
| Introduction/Executive Summary: Strategy | |
| Overview/Rationale | 14 |
| Structure of Energy Enterprises | 14 |
| Phase I Guidelines | 14 |
| Phase II Guidelines | 15 |
| Proposed Legal and Regulatory Structure | 15 |
| Price Regulation | 16 |

INTRODUCTION

DRT International and ICF Resources have been engaged to assist in the energy sector privatization process in the Czech Republic. As part of this effort, we were given the assignment to review the following draft documents prepared by the Ministry for Economic Policy and Development of the Czech Republic:

- Energy Program of the Czech Republic (October 29, 1991 draft)
- Gas Industry Privatization Strategy (July 1991 draft)
- Electricity Industry Privatization Strategy (June 1991 draft)
- Coal Industry Privatization Strategy (July 1991 draft)

We examined the documents from two perspectives. First, is the content and structure of the documents appropriate for the purpose they are meant to serve? Second, are there any topics in the documents that appear to be potentially misdirected or insufficiently addressed from an economic or business standpoint?

The assessment of the overall content and structure of the documents could only be performed relative to a specific set of assumptions about the purpose of the Energy Program and Privatization Strategy documents. We made the following assumptions about the purpose of these documents.

- The Energy Program document is the Czech Republic's view of how the Czech energy sector should or will develop over the next 10 years. This outlook provides the context for the privatization effort and indicates to other Ministries and the public the Czech government's view about how the energy sector should develop and change over time independent of the privatization strategy. This document is principally informative, is not likely to be particularly controversial, and should remain relevant for about five years.
- The Privatization Strategy documents provide the Ministry for Economic Policy and Development of the Czech Republic's views on how privatization of the energy industry should be carried out. These documents relate to the other Ministries and the public the Ministry's views on the appropriate reorganization of the state companies, the appropriate form of the regulatory structure for each industry, the appropriate ownership structure of the private companies, and the appropriate schedule for privatization. These documents make a recommendation on exactly how privatization should be carried out and provide the rationale for the Ministry's

position. These documents are likely to be controversial and are principally designed to affect the political debate over privatization in the next 1-2 years.

Our comments on these documents are contained in the following two sections.

I. REVIEW OF THE ENERGY PROGRAM

The October 29, 1991 version of the Energy Program for the Czech Republic is a comprehensive document that effectively lays out a vision of the energy future for the Republic. In general, We found the document to be consistent with the approach and content commonly found in documents of this type in countries with a market economy. Some particularly good aspects of the document are the following:

- The document shows that the Ministry understands what needs to be done to move from a centrally planned economy to a free market economy and is committed to this transition.
- The document makes clear the Ministry's intent to eliminate subsidies and create a price structure for energy that is consistent with the full costs of energy use.
- The document clearly explains the Republic's plans and commitment to impose effective environmental and safety controls on energy production and use.
- The document clearly outlines the Republic's very sensible plans to interconnect the electricity system with the grid in the Common Market countries.
- The document realistically projects a significant decline in the Republic's use of coal over the next ten years.
- The document presents a very complete plan for improving the working conditions for mine workers.

DISCUSSION OF SPECIFIC STATEMENTS MADE IN THE ENERGY PROGRAM

In reviewing the Energy Program, we identified policy or factual statements in the document that in our opinion are incomplete or slightly misdirected. In the next section we discuss these statements and explain why we think the Ministry might wish to alter them.

[NOTE: THE PAGE NUMBERS CITED BELOW RELATE TO THE ENGLISH TRANSLATION OF THE ENERGY PROGRAM]

1. Strategic Goals: On pages 2-3 the Ministry outlines the goals of the Energy Program. We have two comments on this section. First, we believe that reliability of energy system operation is extremely important and should be added

as an important goal. Second, as drafted the Energy Program document does not appear to achieve the Ministry's goal of eliminating the direct intervention by the State into the decision making process of the firms. Under the program the State will continue to intervene by meeting some of the costs of downsizing, financing strategic reserves and guaranteeing foreign credits for certain environmental expenditures. This degree of intervention may be appropriate if the government wishes to manage the transition from the controlled economy to the free market, or wishes to pursue certain social policies which it considers important. We believe the goal of eliminating the State's role should be qualified to reflect this Ministry's intentions.

2. High Investment Costs: On page 3 the Ministry states that due to the low efficiency of energy-using equipment and the need for environmental protection, the country is faced with "unusually high investment costs." We observe that the Czech Republic should have a surplus of energy supply capacity over the next five years, which will reduce requirements for supply investments. While environmental control investments are required immediately, the surplus of energy supply capacity in the near-term may postpone the need for energy saving and supply investments. The net effect may be a redirection of investment from supply to environmental control but not an increase in investment.
3. Projected Energy Demand and Supply: On pages 7-9 the Ministry presents and comments on the energy demand projections prepared by VUPEK. We have several comments on this section.
 - First, in the discussion of the factors affecting energy demand, there is no mention of the most important factor, which is the level and the structure of economic activity. In economists' words, the demand for energy is a "derived demand." Energy is not required for itself, but only as an input to provide economic services. If the level of industrial output falls, the demand for energy will also fall. The energy program document should identify the main factors that will influence energy use.
 - Second, although the use of scenarios is appropriate in an uncertain environment, the two energy demand scenarios shown on page 8 (of the English translation) are not sufficiently different to be helpful (They also appear to be different from the numbers in the Annex prepared by VUPEK). In particular, the low and high scenarios for electricity demand in 1995 differ by less than 2 percent, even though electricity demand has fallen by about 15 percent in the last year. Either new, more widely differing, scenarios should be developed, or a single, average scenario should be presented that provides an illustrative projection of

what could happen over the next ten years, consistent with the direction of expected changes.

• Third, the separate forecast of energy supply, which is different from energy demand, is confusing. In a market economy with unregulated prices, producers respond to market demand and meet it given enough time. If the two similar demand scenarios are replaced with one scenario, then the separate supply scenario could be eliminated. The points could be made, however, that 1) surplus coal production capacity will be the result of the decline in the demand for coal and 2) an increase in gas supply infrastructure will be required to meet the projected increase in demand.

• Fourth, the forecast of energy demand and supply currently does not include oil, which in most countries is of key concern. Typically an outlook for the energy sector contains all energy types and an estimate of total energy use. We believe that an Energy Program is incomplete if it does not include a discussion of energy use in transportation. If oil is not to be addressed, then this section should be presented as the outlook for electricity, coal, and gas.

4. Privatization: On pages 9-10 the Ministry sets out its views about privatization. In keeping with the purpose of the Energy Program outlined above, we recommend that the Ministry only discuss privatization strategies to the extent that it will impact energy policy implementation. All of the Ministry's detailed (and probably controversial) views about the privatization of each energy industry (e.g., ownership shares, industry structure, regulatory practices etc.) should be addressed in the privatization strategy documents. A link to the privatization strategy could be accomplished by noting that while competition will be encouraged, it is important to be sure that the structure of the market is able to support effective competition. This depends on a number of factors such as the number of participants in the market.

5. Energy prices and price regulation: On page 11 the Ministry presents its policy on energy prices. Prices are the key determinant of energy market behavior in a market economy, so this section is extremely important to the document. The principles currently cited are essentially correct, but given the very complex process required to move from a totally regulated, centrally-planned economy to a market economy, we believe that an elaboration on Czech Republic price policy would be very appropriate.

• Prices are the critical mechanism in a market economy because they are the indicator or signal to consumers and producers that informs them whether consumption or

production should be increased or reduced. Low prices encourage consumption and discourage production. High prices discourage consumption and encourage production. Prices fluctuate in a market until consumption and production are in balance for all competing fuels. Historically, Czech prices have been centrally controlled, so consumption and production of all fuels are not currently optimal. The Ministry's policy is to ensure that prices approach appropriate market levels over time so that the efficiency of energy use will improve.

- Market prices find the right level only if all social costs are included in the cost of producing and consuming energy. These social costs include environmental costs and long-run occupational health costs for workers. The Ministry's policy clearly is to ensure that these costs are taken into account either through regulation on energy production and use or through taxes. However, the reasons for why non-market measures, such as regulation, are favored over market based mechanisms, such as taxes, should be clarified.

- Certain energy supply activities are natural monopolies because duplicating the supply infrastructure through competition would be wasteful. The most obvious monopolistic activities are the provision of electricity and gas, although pipeline provision of oil and brown coal supplied to minemouth power plants may also fall into this category. Absent competition, however, prices for these commodities must be regulated to levels appropriate to encourage optimal production and consumption of the regulated energy types. The Ministry intends that regulated prices for electricity and gas will be adjusted to appropriate levels as soon as possible and that the prices of other energy sources will be deregulated.

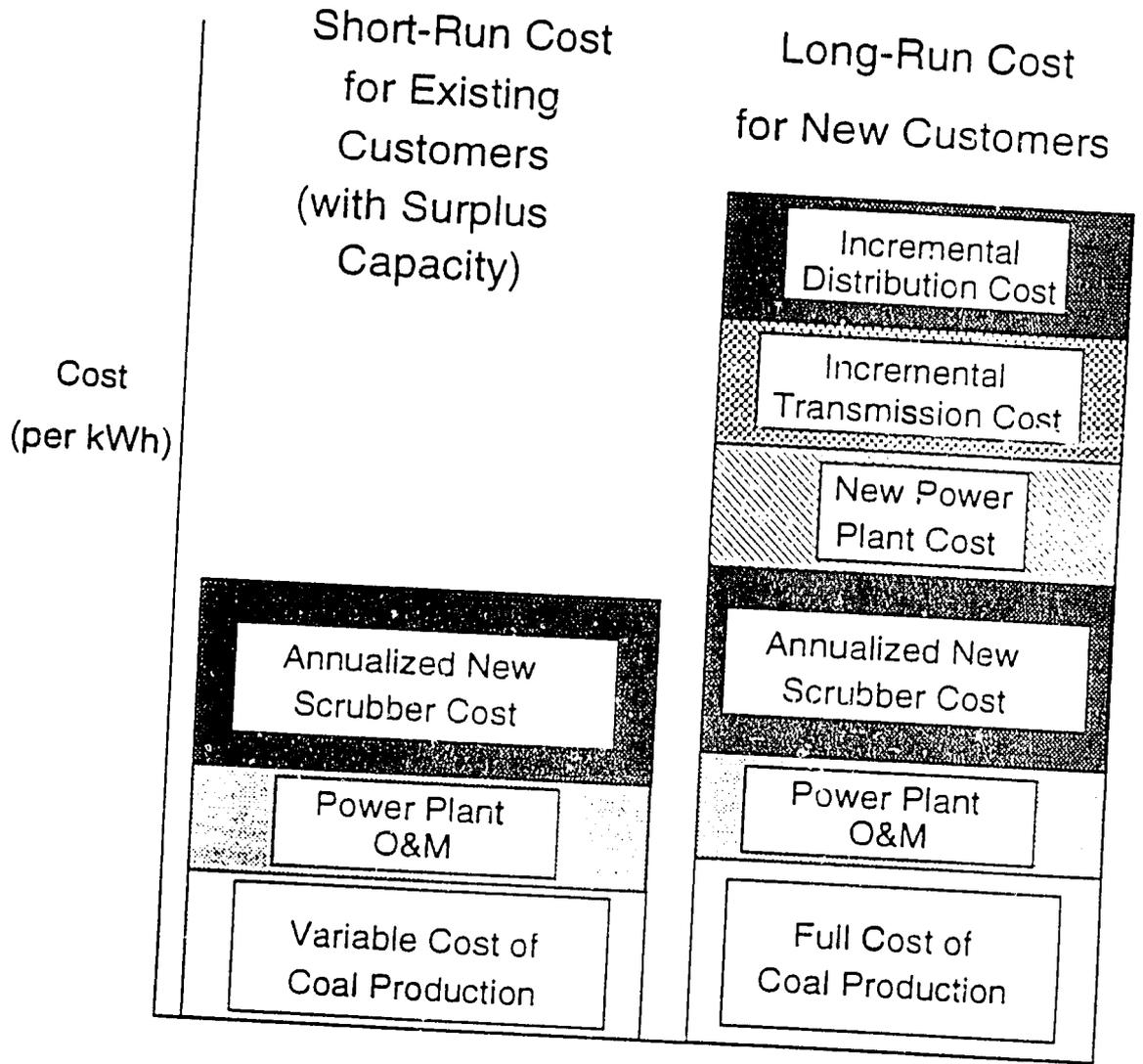
Given that prices of all energy sources in the Czech Republic must be deregulated or adjusted to appropriate levels, the Ministry should explain the principles that determine optimal pricing in more depth. The current document presents the concept of long run marginal cost, but perhaps not with sufficient explanation. The following points could be made.

- First, in general the average price of each energy source over time should equal the long-run marginal cost of supplying it to each consumer. In general, this means that consumers buying a small amount of energy will pay more per unit because energy supply usually has economies of scale. As a result, residential consumers generally should pay more than industrial consumers.

- Second, the long-run supply cost includes the cost of maintaining and expanding the supply infrastructure. As a result, this cost is higher when a system is expanding and lower when the system is complete. Pricing energy equal to this cost ensures that maximum use is made of systems that are already in-place, such as the electricity transmission and distribution system.
- Third, if there is a substantial energy surplus and existing industrial customers are not viable over the long-run, then the long-run marginal cost (that includes the capital cost of new plants) is not the right price to charge these customers. In this situation the correct price to charge these customers from an economic perspective is the short-run marginal cost, which does not include the cost of maintaining and expanding the supply infrastructure. This situation may apply to the Czech Republic over the next few years as it proceeds through the economic restructuring process. For example, if surplus (clean) electricity generation capacity is available, high electricity prices should not be charged to inefficient, virtually obsolete factories, if lower prices (above short-run marginal costs) would enable these factories to remain temporarily in business. Exhibit 1 illustrates the difference between short-run and long-run marginal costs.
- Fourth, the market or regulated price is a key determinant of the revenues received by the energy supplying company, which in turn is key to its financial viability and ability to make needed investments in new infrastructure. Particularly in the regulated utilities, the prices charged must also be consistent with the need to finance new investments.
- Fifth, the transition to market or regulated prices equal to long-run marginal costs may best be phased to permit the replacement or the retirement of existing energy-using equipment over a reasonable period of time. Even though the energy-using equipment currently in place is wasteful, its immediate replacement may not be financially feasible.
- Sixth, the energy program should propose a sequence of steps for transition to unsubsidized prices. These steps should relate to the schedule for establishing a new price regulation method and to the schedule for privatization.

On page 11 the Ministry discusses the appropriate method for regulating the price of brown coal. We believe that this discussion may be overly simplistic. The pricing of brown coal in many situations can be left to the market.

EXHIBIT 1
MARGINAL COST OF DISTRIBUTING AND GENERATING POWER FROM COAL



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Alternatively, it can be regulated in various ways. We recommend that the details of brown coal regulation be left for the coal industry privatization strategy document.

6. Least Cost Planning/Demand-Side Management: On page 14 the Ministry states that investments in energy savings are many times more effective than investments in additional energy sources. In our experience this is not always true, although it may be true in the Czech Republic. The situation is different if there is a surplus of energy supply capacity, particularly electricity. Then no additional supply investments are needed. Therefore, investments in energy saving are less attractive and may at times best be postponed until the surplus supply capacity is gone. This point is related to the issue of optimal energy pricing in an extreme surplus capacity situation cited above. The Ministry might consider combining this section on demand-side management with the later section on energy savings.

The Energy Program indicates that energy distributors might be encouraged to carry out energy-savings programs. The natural role of the energy producer/distributor is to try to sell more energy. It is possible, but not easy, to create regulatory mechanisms which encourage energy producers/distributors to promote conservation. One alternative approach, which is well described in the Energy Program, is government conservation programs. These programs, in addition to taxes, subsidies, loans, and information programs, can also include mandatory efficiency standards. A second alternative is to encourage the establishment of private, un-regulated "energy services companies" which carry out energy savings programs for consumers and are paid by the consumers.

Least cost planning may also make an important contribution to meeting environmental objectives. However, the emphasis of least cost planning is to reduce energy use rather than the use of heavily polluting fuels. Least cost initiatives that reduced the use of natural gas more than they did the use of coal might actually increase environmental risk.

7. Energy Supply Projections: On pages 15-24 (Sections 5.1-5.4) the Ministry provides information on specific actions to be taken in each energy supply industry. Although this information will be very useful to the managers of enterprises preparing privatization projects and business plans, many of the forecasts made in these sections may be too specific and detailed. We believe that some of these details are likely to change as the privatization strategies and enterprise plans are developed. Further, some of these specific investment and program decisions should be left up to the management of the private companies to be formed. We suggest that, at a minimum, these sections of the report be introduced by a statement that the purpose of the detailed discussion is to indicate

the probable developments in the energy sector and the main problems to be solved.

8. Electricity Manufacture Forecast: On page 15 the Ministry presents a forecast of electricity manufacture. If this investment plan is based on a least cost plan for the electric sector that complies with the latest air pollution control law, then it could be presented as such. If not, then perhaps it should be presented in a more tentative way, as one available plan to meet the projected electricity supply forecast provided earlier. If domestic electricity demand falls below the forecast due to the economic restructuring process, delaying the completion of the nuclear plants may be an option that would reduce the sector's investment requirements. On pages 16-17 the Ministry presents its plans to integrate the Czech grid with UCPTE. Given the potential for surplus Czech electricity generation capacity, generation for export to the UCPTE should be seriously considered as a near-term energy sector strategy. Earlier connection with the UCPTE could provide the power sector with needed revenues in the event that domestic demand does not meet expectations.
9. Gas production: On pages 18-20 the Ministry presents the plans for future Czech gas supplies, but possible domestic production from coalbeds is not included. We recommend that the discussion about coalbed methane on page 22 (in the coal section) be moved to the gas production section.
10. Oil Refining: On pages 23-24 the Ministry presents its plan for oil processing. We have seen refinery investment plans to upgrade Czech refineries (and reduce heavy fuel production) mentioned in the Oil and Gas Journal. These plans could be mentioned here.
11. Energy Conservation: On page 25 the Ministry discusses the "payback period" used for investments in industry, transportation, and agriculture in other countries. Although payback periods are sometimes referred to in investment analysis, the generally accepted approach is to use discounted present value of net income or return on investment to evaluate projects.
12. Ownership of District Heating Facilities: On page 30 the Ministry states that the cities and towns will influence social policies related to district heat through participation in the ownership of these facilities. We recommend that this discussion be moved to the privatization strategy document.

GENERAL COMMENTS

We also noted, several general deficiencies which we believe should be addressed.

Estimated costs and sources or funds - The document does not include cost estimates for recommended programs. Nor does it discuss the source of funds that will permit recommended programs to be implemented. For example, the program does not include the cost or source of funds needed to implement the conservation programs or to finance strategic reserves. We understand the difficulty of estimating costs under these uncertain times. However, whether or not a recommended program will really be implemented depends largely on or whether or not adequate funds will be available during the expected implementation period.

Action steps - The list of actions steps required to implement recommended energy programs appears incomplete. For example, if conservation goals are to be reached by using non-market measures such as government efficiency standards, then the energy program should probably discuss the need for a standard setting agency and enforcement laws. If specific actions cannot be recommended at this time, the document should mention that studies are being conducted, or are planned, that will assist the Ministry to determine what future actions are required (e.g. regulatory framework study, least cost planning study, etc).

Milestones - The document does not include a milestone schedule indicating what is expected, or hoped, will happen by when. For example, when will electricity load reduction due to conservation efforts begin to be felt. As the document is meant as a guide for the energy sector, it would be helpful if it included a schedule of when programs are to be implemented (i.e. when funds are to be spent or import quotas are to be eliminated, etc.)

Program monitoring - The document does not appear to address how the energy program is to be monitored and by whom. To be effective the energy program must be periodically reviewed with reports made available to all interested parties. Statistical data will need to be gathered. In most countries, this is a governmental responsibility.

II. REVIEW OF THE PRIVATIZATION STRATEGIES

Unlike the Ministry's Energy Program document, which is obviously far along in its development, the Ministry's privatization strategies for coal, gas, and electricity appear to be in a more preliminary state. In addition, the three draft strategy documents are very different in focus, perhaps signifying that they were prepared by different individuals. For this review we focused our comments on the structure and focus of the strategies rather than on the details in the existing drafts.

Through our discussions with individuals in the Ministry, we understand that the privatization strategies' purpose is to articulate the Ministry's position on the structural and legal framework for privatizing energy industries. The document should persuade members of the Czech Republic Economic Council of the Ministry's position by explaining how this strategy will help accomplish crucial national goals. The strategies should also inform those who will be submitting privatization projects: (1) about the likely structural and legal framework in which they will be privatizing, and (2) what should be included in their privatization projects.

The existing draft privatization strategies were prepared absent a full examination of the regulation of the energy monopolies. Since the form of regulation of the energy companies is inseparable from decisions about their structure (long term), it is very likely that some aspects of the guidance in the privatization strategies will have to be revised as the Ministry considers the regulatory issues.

At the request of the Ministry, we are preparing a separate report on energy industry structure and regulation. This report is the first comprehensive study performed for the Ministry on regulation of the natural energy monopolies. These natural monopolies include the principal components of the energy sector, such as electric power transmission and distribution, gas transmission and distribution, and heat distribution.

After reviewing our report, the Ministry may revise some of its views on the appropriate industry structure for privatization. Subsequently, the Ministry should revise the existing draft industry strategy documents.

PROPOSED STRUCTURE FOR THE STRATEGY DOCUMENTS

Many individuals have devoted thought, analysis, and discussion to the issue of privatization. Nevertheless, we believe that the Ministry's purpose and thoughts are not communicated effectively in the draft privatization strategies. Exhibit 2 on the following page, presents a structure that should communicate

EXHIBIT 2
Proposed Outline For Privatization Strategies

- I. Introduction/Executive Summary: Strategy Overview/Rationale
 - II. Structure of Energy Enterprises
 - A. Phase I Guidelines
 - 1. Structure
 - 2. Ownership Relations--Roles of: State, Foreign, and Private Czech Citizens
 - 3. Rationale
 - B. Phase II Guidelines
 - 1. Guidelines for Structure of Energy Enterprises
 - 2. Ownership Relations--Roles of: State, Foreign, and Private Czech Citizens
 - 3. Rationale
 - III. Proposed Legal & Regulatory Structure
 - A. Overview of Non-Price Legal & Regulatory Structure
 - 1. Description
 - a. Phase I
 - b. Phase II (if different from Phase I)
 - 2. Rationale for Ministry's Proposal
 - B. Price Regulation
 - 1. Description
 - a. Goals
 - b. Composition of Regulatory Authorities
 - c. Interaction between Energy Enterprises and Regulatory Commission
 - 2. Rationale for Ministry's Proposal, i.e., How does proposed structure achieve goals of price regulation?
 - IV. Milestone schedule for moving: (1) to Phase I structure, and (2) from Phase I structure to Phase II structure.
 - V. Items to be Included in Privatization Projects
-

the Ministry's position more effectively. This section of our report discusses the content of this proposed outline.

Introduction/Executive Summary: Strategy Overview/Rationale

As a brief introduction to each industry privatization strategy, the Ministry should describe its goals for the privatization of energy enterprises, provide an overview of its strategy, and explain how its strategy will enable the new private industries to carry out the Ministry's Energy Program.

For example, we understand that the Ministry wishes to achieve its privatization goals in two or more phases. In the first phase, energy enterprises would be divested of non-core businesses. We understand that the divestiture of non-core businesses and establishment of effective regulatory bodies is important to the accomplishment of the Ministry's goals for business and economic efficiency. We understand that the Ministry considers continuing state control of energy enterprises important for the accomplishment of such objectives as diversifying national energy enterprises and resolving international gas and electric exchange issues. In subsequent phases of privatization, once foreign exchange and diversification issues have been resolved, the Ministry apparently favors further subdivision of the state energy enterprises to further the goal of efficiency. The Ministry should present its broad strategy and the justification for this strategy right at the beginning of each document.

Structure of Energy Enterprises

The Ministry's privatization strategies should also describe its proposals for the organization and ownership of energy industries and provide rationales for its ideas. Assuming that the Ministry intends there to be a phased privatization of energy industries, the Ministry should present this structure separately for each phase. To simplify presentation, we recommend that the Ministry endeavor not to present more than two phases of privatization. To the extent that the fundamental relationship of regulatory bodies changes over phases of privatization, the Ministry should likewise address this issue.

Phase I Guidelines

The Ministry should describe separately the organizational structure, ownership relationships, and legal framework of its Phase I proposals. The Ministry should then defend its position.

Structure

The Ministry should describe its proposal for how the existing framework of energy enterprises in the Czech republic should be changed in the first phase of privatization. Figures showing the current structure of industries by each function (e.g.,

generation, transmission, and distribution) and the structure that the Ministry recommends be put in place in Phase I, would be useful. These figures show also show the structure of holding companies, if any. For both the existing structure and the proposed Phase I structure, the Ministry should describe the responsibilities of each entity shown on the figures.

Ownership Relations: Roles of State, Foreign, and Private Czech Citizens

For each of the entities that the Ministry envisions for Phase I, as presented in the above section, the Ministry should describe the proposed ownership relations, showing the percentage of ownership for: (1) the state, (2) foreign parties, (3) regular Czech nationals, and (4) other parties (e.g., employees). A summary table of these recommendations may be helpful.

Rationale

After presenting its Phase I proposals, the Ministry should present the rationale for its proposals, explaining how these proposals will accomplish the Ministry's goals for privatization and energy policy. The information presented in the accompanying report provides useful information in this regard.

For example, the Ministry might recommend that in Phase I, majority state ownership of a national electric utility may be useful to preserve the ability to influence structural changes in the future. Furthermore, the Ministry could present how its proposal will ensure the financial responsibility and accountability of management. Divestiture of non-core business would prevent conflict-of-interest problems that might arise if the organization making decisions about new generation capacity would also be the organization receiving construction revenues.

Phase II Guidelines

As in Phase I, the Ministry should describe separately the organizational structure, ownership relationships, and legal framework of its Phase I proposals. The Ministry should then defend its position. The Ministry should present the same kind of information about the Phase II structure as it did for Phase I.

Proposed Legal and Regulatory Structure

Given the multi-phased structural framework described in the section above, this section would describe the legal and regulatory framework in which energy enterprises would privatize. Enterprises' privatization projects would have to consider these laws and regulations. In many cases, laws are still being developed, and agencies have not yet been created. The strategy should identify these gaps, and provide information about the developmental status of these laws.

The Ministry should address the following kinds of laws and regulations:

- Environmental, e.g., air, water, solid waste,
- Licensing, i.e., siting, construction, and operation of: coal, gas, hydro, and nuclear power plants; electricity transmission and distribution lines; natural gas transportation and distribution lines; and other energy property.
- Worker occupational safety and health,
- Reimbursement to the Republic and/or Federal government for use of national assets, e.g. public royalties for coal.
- Other

In describing each area of law, the Ministry's privatization strategy should address the following: (1) laws and regulations, (2) regulatory agencies that would enforce these laws and regulations, and (3) procedures by which agencies would deal with these agencies in compliance with laws and regulations. If laws, agencies, and/or procedures have not been developed, the privatization should so indicate.

Importantly, in both this section and in any supporting tables, the Ministry should refer to the organization entities (described in the previous section) that would be affected by this regulation. For example, the Ministry may plan to establish separate electric distribution companies that would be separate from generation and transmission companies. Only some of the regulations would apply to these distribution entities; air quality and other regulations would not.

In addition to the type of information suggested by the illustrative table, the Ministry should also describe how legal and regulatory procedures and institutions would change between the various phases of privatization. In many areas, it is quite conceivable that there would be no legal or regulatory changes between phases.

The Ministry should then present a rationale for any new legal and/or regulatory structures that it proposes. Obviously, much of what the Ministry will present here will be laws and regulations that already exist, or those that will emanate from other parts of the government. For these issues, the Ministry may need not to offer any arguments.

Price Regulation

The Ministry's strategy should highlight price regulation, since

it is vital to the economic success of gas and electricity industries. In addition, unlike in other areas of regulation, changes in price regulation policies, procedures, and institutions are likely between various phases of privatization. For this reason apparently, the Ministry's current privatization strategy has devoted a separate section to this topic. The discussion of price regulation should become a sub-section underneath the general discussion of the legal and economic framework. Furthermore, the discussion of price regulation needs to be "tightened up". The discussion of the goals of price regulation needs to be shorter. Certain other topics relating to price regulation that the Ministry has not included need to be addressed.

In all, the Ministry should discuss the following:

The crucial goal of price regulation, i.e., establishment of fair prices that encourage efficient behavior on the part of energy producers and consumers. This discussion could be fairly brief, and may even refer back to sections of the energy policy.

The nature of the regulatory commissions that will ensure such fair and efficient prices, i.e., size of commission, background of commissioners, procedures by which the commission's impartiality will be ensured. For example, the commission could be a federal body comprised of a small number of popularly elected commissioners, who will be subject term limitations or possible recall by voters.

How energy enterprises will interact with regulatory commissions. For example, energy enterprises could be required to submit applications for expenses upon which commissioners will decide. The commission could also, for example, periodically audit the costs of energy companies. This section should refer to the entities described above (in the section on the Structure of Energy Enterprises) to identify which entity would be affected by each type of regulation.

How regulation will change between phases of privatization. For example, if the Ministry decides that, under Phase II of its strategy, there will be competing generation companies in the electricity sector, there may be no need for strict price regulation of each expense. Ongoing review to ensure that one generation company does not gain undue market influence may prove sufficient.

The Ministry should clearly describe the above issues based upon its priorities and objectives.

Milestone Schedule

The Ministry may then wish to present a "milestone schedule", i.e., a schedule of important dates or "milestones" for: (1) moving from the current structure to the Phase I structure, and (2) moving from Phase I to Phase II. Such a milestone schedule would be useful in reducing the number of Phases. We note that the gas privatization strategy includes many of the elements of such a strategy.

This milestone schedule can present a range of dates by which certain things should take place. For example, the Ministry may wish to state that breaking up of the gas industry into several distinct companies should occur around 1993 or 1994, depending upon the time when the Czech republic obtains sufficient security of supply by diversifying the source of gas supplies.

Following the presentation of its schedule, the Ministry should provide arguments in its favor, stating why this schedule is consistent with privatization and energy policy goals, and how its is achievable.

Items to be Included in Privatization Projects

The concluding section of the privatization strategies should be detailed, complete instructions for companies on completing their privatization projects. These instructions should include descriptions of what is to be covered and the required level of detail and format of presentation. Items to be covered in the privatization projects could include:

- Organization plan of the enterprise
- Plan for splitting-off of incidental activities such as manufacturing of equipment
- Privatization method, ownership and plan for allocation of employee-owned shares
- Financing plan, sources and uses of funds projections and pro forma financial statements.
- Market forecast and assessment of competition. Marketing plans
- Evaluation of price level assumed in financial plans and price level likely to be submitted to regulators.
- Schedule and method of preparation of initial tariff proposal to regulators
- Plan for environmental compliance