

## *UES 5+5 Plan*

The Unified Energy System of Russia (RAO UESR) has now proposed a detailed plan for moving ahead with restructuring. It has been enabled by legislation passed by the Russian legislature and signed by the President of the Russian Federation.

**In Summary**, the plan is ambitious, far reaching and comprehensive. It envisions a radical change in the structures of power generation, transmission, distribution, pricing and sale throughout all of Russia. The implications of this plan would seem to include **substantial opportunities for foreign companies** with expertise in the sector. The plan seems to recognize that the appetite of foreign investors for privatization investment opportunities at the moment is very small to non-existent. The opportunities for non-Russian companies seem mainly to be:

- Possibilities for *qualified companies* to enter into *management contracts* to take over operations of four or more generation companies, being paid on a fee basis with performance incentives;
- Service opportunities for consultants and consulting engineers;
- Sales of equipment.

RAO UESR estimates that it will need to spend at least **\$50 billion** over the next five years on maintenance and system improvements. This estimate does not appear to include expenditures on management contracts.

### **RAO UESR Now**

As reported in earlier Pan EurAsian reports on UES, the basic facts about the company are as shown in the table to the right.

RAO UESR is a holding company that provides its services through a complex structure of wholly and partly owned subsidiary company. At the core are its holdings in:

- 73 vertically integrated energy companies (AO Energos) that generate, transmit, distribute and sell both heat and electricity in their respective regions;
- the national grid system;
- 31 “federal level” power plants (plus 9 under construction) that sell over the national grid;
- the System Operator for the entire electricity transmission system in almost all of Russia.

<b>RAO UES Basic Facts</b>			
Physical	units	amount	share of Russian market
Total Installed capacity	MWe	156,100	73%
fossil-fueled	MWe	122,000	82%
hydro-electric	MWe	34,100	76%
Total length of transmission lines	'000 km	2,530	
Electricity production 2001	TWh	626.8	71%
-of which, thermal	TWh	501.0	87%
Heat production in 2001	Gcal	479.6	33%
Coal consumed	'000 tonnes	109.6	
Gas consumed	billion cubic meters	131.2	
Average number of employees		664,796	

The 5 + 5 Plan is designed to change all this. Specifically, it will:

- change the system from a vertical (regional monopoly) structure to a competitive structure by lines of business (horizontal) for power generation and;
- recognize “natural monopolies” in the transmission and distribution of electricity.

## **Power Generation**

There will be two sets of generating companies. First will be the wholesale generating companies (WGC) that will be created by combining the federal level power plants into 10 regionally diversified companies of which 6 will be fossil-fueled plants and 4 will be hydroelectric plants. It is the intent of the Plan to privatize the 6 fossil-fueled plants with no residual government ownership. As part of the plan to make some of these ready for privatization, UES is planning to issue tenders for management contracts for 2 of the 6.

It is presently estimated that the fossil-fueled WGCs will be about 8,000 to 10,000 megaWatts in generating capacity.

The second set of generating companies will be regional (RGC). These companies will be created from the heat and power generating assets of the present Energos. They will likely include large power plants and some district heating plants. Likewise, UES is preparing to issue tenders for management contracts for two of these RGCs.

The timing for these management contracts is not clear. The impression we get from the Plan is that the WGC tenders are likely to occur fairly soon (within 18 months) while the RGC tenders are not likely before 2006.

**Management Contracts** would be awarded based on the concept that the only payment would be a management fee. According to the Plan, the fee structure would have two components: improvements in the operational efficiency of the plants and an increase in the capitalization of the companies. This structure seems, sensibly, to recognize that for the foreseeable future electricity and fuel prices will continue to be set by the government based as much on social considerations as economic. Any fee structure based on “profits” would not be realistic, and UES appears to accept that.

Our impression is that a lot of improvement may be possible with minimal capital expenditure at the outset. Therefore, substantial efficiency improvements may be quickly obtainable through better management practices. This is not unreasonable; we have seen similar circumstances in other post-Communist countries. The overall fuel conversion efficiency in the UES power plants is presently in the range of 25%.

## **Distributed Generation**

It is worth noting that UES has identified a market in Russia it believes is worth pursuing, but it presently does not control this market. There are presently over 50,000 small power plants in Russia with a total generating capacity of 17 gigaWatts. They also note that 26% of the heat generated in Russia derives from 200,000 heating plants. This sector is in especially bad condition. UES estimates that maintenance and upgrading expenditures in this sector will amount to about **\$500 million per year**.

## **What Next**

Pan EurAsian urges those with any interest in this market to examine it in some detail, to be prepared to react when UES issues tenders. We stand ready to work with clients in looking at these opportunities and [welcome your inquiry](#). For more information on power and energy opportunities in Central and Eastern Europe, please contact us.