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One-Sided Agreements for ‘Fast Track’ Power Projects
Case of Spectrum’s PPA
Kannan Srinivasan

The Andhra Pradesh Electricity Board’s (APSEB) Power Purchase Agreement (PPA) with Spectrum Power Generation (SPGL) on July 13, 1994 illustrates once again how the agreements for the so-called ‘fast-track’ power projects are weighted in favour of the foreign investors. In this instance, on an investment of Rs 956 million, the promoters should make in excess of Rs 300 million annually after their plant begins operations.

THE Andhra Pradesh State Electricity Board’s (APSEB) Power Purchase Agreement (PPA) with Spectrum Power Generation (SPGL) on July 13, 1994 illustrates the returns available to investors in the seven ‘fast-track’ power projects. Like the others, the contract has been negotiated – not awarded through any competitive process. And like them, the return on equity is assured: the investors include manufacturers of power plant equipment; there is no special incentive to minimise the cost.

Though SPGS is hydrocarbon-fuelled, it is not a peaking plant as would have been more appropriate for one based on a relatively scarce (compared to coal) imported fuel – but a base-load one. This reduces the flexibility available to the grid, and compels it to buy power from a relatively expensive producer – pushing up tariffs for all consumers.

Like Enron’s Dabhol project (DPC) in Maharashtra, SPGL will set up a combined cycle gas turbine plant which can run on diesel or distillate. But its installed capacity will only be 208 MW – against DPC’s 695 MW. SPGL’s Project Information Memorandum of April 1994 puts the capital cost at Rs 7.78 billion. That would amount to Rs 37.4 million a megawatt. Compare this to DPC’s Rs 43.5 million per MW – surely the latter should enjoy some economy of scale? Why is DPC so expensive?

PROJECT COST AND FINANCING

The SPGL promoters will provide Rs 956.9 million of equity – toward a total project cost of Rs 7,780 million:

<table>
<thead>
<tr>
<th>Rs in million</th>
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<tbody>
<tr>
<td>Financing</td>
</tr>
<tr>
<td>Project participants 41 cent</td>
</tr>
<tr>
<td>Power Financial Institutions (ADB/AFIC/CDC)(25 cent)</td>
</tr>
<tr>
<td>Public issue (34 per cent)</td>
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Total equity: 2,334.0

Debt: 5,446.0

- Rupee Loan: 4,272.0
- FC Loan: 4,272.0

Expenditure:

<table>
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<th>Rs in million</th>
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<tbody>
<tr>
<td>Land and site development</td>
</tr>
<tr>
<td>Plant and machinery (EPC)</td>
</tr>
<tr>
<td>Other miscellaneous fixed assets</td>
</tr>
<tr>
<td>Technical consultancy</td>
</tr>
</tbody>
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Preliminary expenses: 72.0
Pre-operative expenses: 885.1
Contingency: 248.3
Capital cost: 7663.3
Margin money for working capital: 116.7
Total: 7780.0

Payments by the State Electricity Board will be guaranteed by the Andhra Pradesh government and counter-guaranteed by the government of India. The Power Purchase Agreement with APSEB also provides for an irrevocable letter of credit, as well as an escrow account to be opened by APSEB with its bankers.

The plant will consist of three Westinghouse 251B11 gas turbine generators with three waste heat recovery boilers and one steam turbine generator. Rolls-Royce Power Generation Systems, the turnkey engineering, procurement and construction contractor, will guarantee the cost, performance and scheduled completion of the project against liquidated damages. The plant is meant to be commissioned in 26 months from closing of financing and commencement of the EPC contract in mid-94. The stipulated unit heat rate is 2,900 kilocalories a kilowatt hour for combined cycle operation.

The Indian government has allocated 0.75 million cubic metres per day of natural gas from the Krishna-Godavari basin and a Fuel Supply Agreement with GAIL. The supply of gas is to begin on July 16, 1995 or earlier and will continue till December 31, 2007. SPGL has obtained an assurance of liquid naphtha from HPCL’s Visag Refinery as interim/standby fuel.

On an investment by the promoters of Rs 956 million, they should make in excess of Rs 300 million every year after their plant begins operation.

The two-part tariff is composed of a fixed charge and a variable charge. It comprises the interest on debt and principal; the return on equity; interest on working capital; depreciation; operation and maintenance expenses; taxes, and insurance. A 16 per cent return on equity is assured at a plant load factor of 68.5 per cent – and generous bonuses ensure that around 30 per cent ROE will be available.

The Power Purchase Agreement tells us that “the variable charge component of the tariff (comprising costs of gas) will be determined as follows:

1. Heat Rate = h kilo cal/kwh; (2) GCV of gas (base) = g kilo cal/cubic metre; (3) Base cost of gas at gas metering point of the Purchase = C (Rs) per 1,000 cubic metres; (4) Auxiliary Consumption. A per cent of gross generation; (5) Base Variable Charge component of 'Tariff of Energy Unit delivered = U0 = (10h/C)(g(100-A))Paise/kwh...

The government of India guidelines for ‘fast-track’ power projects have been adopted. Bonuses begin at a plant load factor of 68.5 per cent; up to 80.5 per cent, there is a 0.4 per cent increase in the return assured for every 1 per cent increase in the PLF. At levels of production above that, there is a 0.5 per cent increase in ROE for every 1 per cent. And above 85.5 per cent the return rises to 0.6 per cent for every 1 per cent rise (for the entire portion above 68.5 per cent).

Spectrum will be paid on the basis of the power it offers to generate – whether or not the board has requirement of that power. This will include what is termed deemed generation: “Deemed Generation shall mean...the quantum of energy which the company was in a position to generate... but did not generate, as a direct result of:

(a) any direction in writing issued by the board
(b) any failure on the part of the board to purchase energy...
(c) any emergencies in the grid of the board...
(d) any non-supply or short-supply of gas and alternate fuel by the supplier...
(e) beyond the reasonable control of the company...
(f) any political force majeure event...
(g) instability associated with low voltage or frequency on the board’s system.”

Should the board seek to terminate the contract, the company has six months to:

“(a) the occurrence of any event of force majeure; (b) any change in law restricting the company’s ability to convert rupees into foreign currency or remit funds in foreign currency outside India; (c) Any failure by the board, the scheduled bank...and the G&P or GOI...to pay any amounts owing to the company under this agreement... (d) The winding up of the company.”

Should the company require the board to buy out the plant: “The buyout price will be the greater of:

(i) The fair market value of the project... on the date of the buyout event, and (ii) An amount equal to the sum of all outstanding debt and other obligations of the company to the lenders under the Financing Documents (including any pre-payment penalties or rebates as required in the Financing Documents) and the equity invested.”

And should the board demand that the company sell the plant: “the buyout price shall be an amount equal to the sum of all

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What Happens to Consumers?

The National Working Group on Power (composed of two former members of the Planning Commission, a former finance secretary to the government of India, three former chairmen of the Central Electricity Authority and two former chairmen of state electricity boards) has studied the impact of all these six new projects – promoted by Enron (Phase 1 only), Cogentrix, AES, ST Power, Spectrum, GVK, and the Hinduja – on the boards of the states in they will be commissioned. Their conclusion is that the annual outflow from the SEBs to these companies will be of the order of Rs 56 billion. If tariffs are not increased beyond current levels, then the additional losses will be of the order of Rs 37 billion. About 50 per cent of the revenue of boards such as Andhra (where Spectrum is located) will go to pay for this very small number of new projects, leaving them with limited resources to maintain their own generation. In order to avoid losses, the SEBs will have to raise tariffs; and subsidise these new power projects with that increased revenue. According to the working group on power, the SEBs’ subsidy would be more than a rupee for every unit of power supplied to the consumer – a total subsidy for these six projects of the order of Rs 28 billion.

In the case of Andhra, the group on power projects found that the addition of 1,443 MW by Spectrum, GVK and the Hindujas will result in a loss to the board of Rs 14.61 billion at current tariff levels – or Rs 13.36 billion if a more realistic tariff building in a 3 per cent rate of return (ROR) were stipulated. If APSEB is to avoid a loss, its average tariff will have to rise by at least 29.23 per cent – over the 3 per cent ROR.

Development or Destruction?

New Mining Projects in Orissa

Vidhya Das

The two large export-oriented bauxite mining and aluminium projects coming up in the tribal areas of Orissa, have sparked off widespread protest from the local population.

KASHIPUR block of Orissa is one of the poorest regions in the country where deaths due to malnutrition and disease frequently occur. This underdevelopment has prompted funds to flow into the region through various departments, programmes and projects. Unfortunately, only a small percentage of this has actually gone into development. The government of Orissa, has now opened the region to private sector investment in bauxite mining and processing. The hills of Kashipur have very rich deposits of bauxite; land and labour value in the region is cheap. Water is available in plenty from numerous perennial streams, and the transport and communication infrastructure is well-developed. A railway link between the mining area and Visakhapatnam, the closest sea port, has been constructed, and all weather roads providing communication to all the areas being prospected are coming up.

How does such industrial activity benefit the people of the area, who are primarily a peasant community; what would be the impact on the natural resource base which is the prime source of sustenance for most tribal groups in this state? What has been the experience of people around bauxite projects in other parts of the state? Two private sector companies, have started prospecting and testing in Kashipur block in Rayagada district and in the bordering areas of Thumulrampur block in Kalahandi district. On one side of this region, the Utkal Alumina International Company, a consortium of Indian Aluminium Company (INDAL), TATA and Hydro-Aluminium of Norway, plans to build an alumina refinery in Kucheipadar panchayat of Kashipur block. The initial estimated investment is Rs 2,400 crore. The bauxite ore will be transported via conveyor belt from the Baphia Mali plateau, about 14 km away. This plant, initially of one million metric tonnes capacity, is to be subsequently expanded to three million metric tonnes capacity. Larsen and Toubro, in collaboration with ALCOA of America, planning an initial investment of Rs 1,500 crore, proposes to have its refinery in Kalyansinghpur in Rayagada district processing bauxite from Kutrugmalai plateau in the bordering Kalahandi district. Various other areas like Sijimali are also being prospected. Both the L and T and INDAL units are 100 per cent export-oriented. Over the last three years these tribal hinterlands have seen strangers speaking various alien tongues pursuing endless questionnaires, gathering all kinds of information, setting up drilling rigs and other machinery, and taking soil and water samples. People are told that the area is going to be mined for bauxite, factories are going to be set up and that they will have to leave. Little else has been made clear to them.

This has upset the normally easy-going tribal people of the region who have taken to these various forms. Their first attempt in Kucheipadar village was to dig a ditch across the road to stop the traffic. Spontaneous protests from people of the same village has resulted in machinery being damaged. But the entire block is under siege. And in other areas too the people have become suspicious and weary of the constant intrusion into their lives by strangers, and alien technology. In Sijimali, Rayagada, through which pass the roads to areas being prospected by L and T, the people of Sijimali and Kulpai, the people of Sijimali and Kulpai, have now blocked all routes to the mining sites till their demands are met. Despite repeated entreaties by various officials and elected representatives, including the district collector and the local MLA, they refused to budge unless their demands are met.

Perhaps it was this that inspired them or perhaps they were driven by fear of an uncertain future that such intrusions threatened, but the people in and around Kucheipadar once again took to protest action. They stopped the survey work going on in the village of Ramibeda. When some of them were arrested and taken to the police station at Tikiri, more than a 1,000 women and men gathered outside the police station and refused to leave till the arrested people were released. The companies are losing time and money and the government is hardput to honour its commitment to them. The investment is heavy, to the tune of Rs 5,000 crore at a very conservative estimate, and precious days slip by, bringing the typical heavy monsoons of the region ever closer and increasing the prospect of the companies losing a whole season.

In an attempt to consolidate their efforts to protect their land and their resources, people in and around the villages of Sijimali and Kulpai have organised the Ananchalika Suraksha Parishad. The demand of the people is primarily for information as they have detailed in a letter to the ‘tahsildar’ of Kashipur:

“We have heard that an investment of Rs 5,000 crore for two alumina plants in and around the Kashipur block of Rayagad district is being planned. The people of Kashipur block should be told all the details of these projects, and clearly and in no uncertain terms what is to be the effect of these projects, and the mining, on our lives and on the natural resource base of the area:

– What are the terms and conditions agreed upon between the companies and the government for the setting up of these projects;
– Our rights as the native inhabitants of this region to our land, forests and homes are being snatched away from us, as we are threatened with eviction with no options offered. What is the government’s response to this;
– What are the benefits to the people of Kashipur block of Rayagad district, and Thumulrampur block of Kalahandi district, from this mining and industrial activity?”

The proposed projects for mining and processing of bauxite are 100 per cent export-oriented units along the border areas of Rayagada and Kalahandi districts, which have a large tribal population. The region’s