NARUC IPPs and PPAs: Frontiers in International Experience
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SESSIONS 9 & 10

IPP Negotiation Role-Playing Exercise

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Case Study: Toe-to-Toe in Lagos

Outline of the Current Situation:

In the 1980s and early 1990s the various state-owned utility companies of the ECOWAS countries experimented with various management and ownership options for the power sector. Two concrete steps have emerged from this process: (i) the West Africa Power Pool; and (ii) the West Africa Gas Pipeline.

At the present time neither project has added any new electric power output to the regional supply column. Within a few years a substantial amount of new capacity must be added to meet growing demand along with the needs of existing power plants for rehabilitation or replacement.

- There are a number of important issues that national and regional regulators must consider in evaluating proposals for new power plants in the region. These are:
- Prices for electricity are highly variable, with full cost recovery in some countries and substantial subsidies in others;
- The only two regional sources for substantial new generation capacity are the Highlands of Guinea (OMVG, Niger river, etc.) and the gas reserves of Nigeria;
- Regulation of electricity projects and transmission on a regional basis is not yet fully worked out, whereas gas transmission can be priced on well-understood international benchmarks;
- On the other hand (and there always is another hand), financing for power plants may be more available by the Nigerian gas producers, who face penalties for continued gas flaring, than by local utilities or private consortia in the nations further west.

Three consortia have stepped forward with proposals to remedy the looming electricity supply shortage. A brief outline of their proposals is shown below. Each of these consortia has a proposal to build a new plant and to sell the output to WAPP, national utilities, direct customers, privatized distribution companies or some combination thereof. As this situation is novel for the region, the new West African Electricity Regulator (WEAR) will want to have a say in the contracting matters. Accordingly, they have engaged financial advisors to assist them in the evaluation of proposals:

Consortium 1: Using dedicated offshore gas resources, a consortium consisting of ChevronTexaco and Shell proposes to build a 500 MW CCGT plant in Nigeria. About 75% of the initial output is to be consumed in that country, with the remainder exported to Ghana, Benin and Togo, using an upgraded high voltage line. The plant would eventually be enlarged to 1,000 MW, and would use about 150 million cu ft/day of natural gas. The first phase of the project, 300 MW of turbine generation, could be ready by the end of 2005.

Consortium 2: A major international power company, Eskom Enterprises, proposes to use gas from the WAGP to build 300 MW of new capacity in Ghana, exporting electricity to Benin, Togo and Cote d'Ivoire. Eskom will contract for the approximately 50 million cu ft/day of natural gas with ChevronTexaco on a take-or-pay basis for 20 years. Eskom wants right of first refusal on the next 50 million cu ft/day of gas in the WAGP for expansion of its generation plant. Eskom must obtain project financing to construct its proposed plant. The first phase of the project, 180 MW of combustion turbine capacity, can be commissioned by mid 2007.

Consortium 3: Aqua Investments, a new company consisting of former Eskom and Enron executives and staff, proposes to construct several hydro plants in Guinea on the Niger and Gambia Rivers. The total generation capacity to be constructed in the first phase (through 2009) is 350 MW. To facilitate the transmission of electricity to the North, East and Southeast, the company is also proposing an ITP, a privately-owned transmission system that it would build to serve Senegal , Mali and Cote d'Ivoire. The ITP is proposed as a built-own-operate-transfer (BOOT) project, while the power stations are to be a BOO (Build-own-operate) investment. Both the generation and transmission projects will require some equity and loan funding from IFIs. The company claims that it can complete the ITP portion of the project by late 2009.

If none of these options can be completed by 2008, then the national markets will need to obtain at least 500 MW of alternative generation by mid-2007, with another 500 MW in 2009. The only significant options are smaller nationally-oriented CCGT or open cycle gas turbines, using natural gas in Ghana, Togo and Benin and either kerosene or naphtha, in Senegal, Gambia and Cote d'Ivoire, at least in the short term (before 2012, expected completion of the WAGP to Dakar). The expected fuel cost of liquid fuels is expected to be at least \$5.00-6.50/GJ, compared to ~\$4.00/GJ for WAGP gas. All parties acknowledge that keeping prices of electricity down is a key consideration for the project choice, and that most of the national markets cannot absorb a world-scale CCGT in the next 5-10 years.

International financial institutions (IBRD, AfDB, USAID) have indicated some willingness to entertain a regional power purchase concept backed by regional bonds. Sales to the national markets are a second-best, and financially riskier solution.

The Negotiations:

The participants will split into five groups, one representing the regulator, a second representing the regulator's financial advisors, with the other three representing Consortium 1, Consortium 2 and Consortium 3, respectively.

Each of the consortia is to come to the regulator with detailed confidential proposals by the first coffee break on Friday (10:00 hours). Each consortium is expected to reveal its detailed financing plans to the financial advisors at any time in the process. The regulator will prepare its initial confidential commentary and counter proposals during that time. Each consortium should feel free to impugn the experience, competence, honesty, financial strength or good looks of the other consortia at any time during the process.

After the break, each Consortium will have 60 minutes to revise its proposal for a "best and final" offer. This offer should be consistent with actual prices and terms that the company would be willing to see inserted directly into a PPA. They will present and outline of their offers in a public forum, where the general public may attend, as well as Eskom staff and reporters. The regulator will then submit counteroffers to the three groups.

After presentation the three consortia will then have 15 minutes to put together final proposals. NPL will select one or perhaps none of the three.