Update

SECTOR: UTILITIES - POWER

CERC: Regulatory views

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Meeting with Central Electricity Regulatory Commission (CERC): Key takeaways

Subtle action on regulatory front: Over the past 3-4 months, CERC has come out with regulations, Draft Orders, Discussion Papers, etc on i) medium term and long term open access in inter-state transmission, ii) mechanism to improve grid discipline by regulating UI market, iii) tariff regulations for promotion of renewable energy (RE) and iv) plans to evolve framework for renewable energy certificate. In the interim, CERC also introduced a cap on ST power trading prices to regulate the market, while retaining developer's interest (cap of Rs8/unit). CERC has also proposed to revise power trading margin from an absolute cap of Rs0.04/unit to slab based system, linked to power realizations.

Expect regulatory focus on rationalizing transmission pricing, promotion of Renewables, etc: CERC is in the process of formulating notifications / regulations towards i) Feed-in tariff structure for different renewable energy sources ii) operationalization of Renewable Energy Certificates (including nomination of trading platform, Registry agents, etc) iii) rationalizing transmission pricing which intends to move the system towards marginal pricing method; sensitive to direction, distance and quantum of power flow. *Lack of clarity and predictability on transmission charges across the country is one of the key risks in estimating the profitability for a merchant power project.*

Issues that need Central Government attention

- CERC is aware of the Memorandum of Understanding (MoUs) signed by various state governments with power project developers, where which provides either free power (for hydro power project) or specified quantum of capacity (25-37.5%) on CERC norms/ CBT tariffs and Variable cost. Given that fact that most states cannot consume the entire power, home states will emerge as a large trading group, going forward. These are currently outside the purview of CERC
- Private developers are trying to participate in Competitive Bidding process under Case-I Bidding; this process has been slow and in many cases State utilities have not been able to formulate clear Bid papers which has resulted in delayed decisions. This has also impacted financial closure for such projects.

Focus to create vibrant trading market: The commission re-iterated its view to create free and open power trading market based on demand and supply dynamics. To develop a vibrant power trading market, CERC has come out with various mechanisms and regulations pertaining to Unscheduled Interchange mechanism, Day ahead market, Power Exchanges, Open access in Inter state and Intra state, National Transmission Tariff Framework, etc. All State Regulators have also taken an unanimous view to promote open access to consumers (annual consumption 1MW+) and is a key priority area.

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Key regulatory developments and important issues

1. Promotion of Renewable energy

Central Electricity Regulatory Commission (CERC) has notified tariff regulations for determination of tariffs for projects being setup on renewable energy sources. The regulations are formulated to promote development of renewable energy projects, to remove ambiguity on project returns, debt repayment assurance, etc. The regulations will complement the National Action Plan on climate change, which specifies that minimum renewable purchase standards be set at 5% for total power purchases for FY10 and should be increased by 1% each year for ten years.

Key points of the notification:

- Capital cost norms have been specified for determination of tariffs for the project upfront for the whole tariff period. Normative capital cost to be different for different renewable technologies. For wind power project, normative capital cost is specified at Rs51.5m/MW.
- Norms would be reviewed in the next control period starting from FY13 onwards (gap of three years). Regulation would however have enabling provisions to review capital cost norms for solar power projects every year, given the dynamics of solar power project development.
- For Wind power, tariff period would be 13 years, solar power at 25 years and hydro power below 5MW at 35 years.
- Normative DER is kept at 70:30, while loan tenure has been kept at 10 years. Normative interest cost on debt would be linked to Long Term Prime Lending Rate (LTPLR) of SBI, plus 150 bps. Debt repayment to commence from the first year of commercial operations and would be equal to depreciation charge.
- Depreciation to be calculated on 90% of the project cost and at 7% for first 10 years and balance over the useful life based on Straight line method (SLM).
- Accelerated depreciation benefit availed by project developer on project development would be apportioned in tariff determination, based on levelised basis using specified weighted average cost of capital.
- Return on Equity for the project is pre-tax 19% for first 10 years and pre-tax 24% from 11th year onwards.
- Clean Development Mechanism (CDM) benefit for the project would be allowed to be retained by project developer for the first year of commercial operations. Thereafter, the beneficiaries will have 10% sharing in CDM benefit, increasing by 10% each year till it reaches 50%. Post which, the benefits will be shared in equal proportion.
- Tariff philosophy in these regulations is to give a preferential tariff to the projects based on renewable technologies during the period of debt repayment. Preference has been given mainly in respect of return on equity, shorter loan repayment period, and higher normative interest on loan. Thereafter, these projects are expected to sale power through competitive route.
- Tariff model adopted is levellized tariff, in order to avoid front loading of tariff while at the same time ensuring adequate project IRR. Levelization will be carried out for the useful life of the Renewable Energy project, while Tariff shall be specified for the Tariff period.

- Dispatch principle for electricity generated from this project would ensure that these projects would be operated on "Must Run" basis and would not be routed through merit order dispatch. This provision is not applicable only to Bio-mass project with 10MW+ capacity.
- Regulations provide that in case of solar power which is comparatively an evolving technology and also for other new technologies such as municipal waste based generation, the project developer can also approach Commission for a project specific tariff.
- Forum of Regulators has also agreed to implement Renewable Energy Certificate (REC) mechanism which will be an alternative route for fulfilling renewable purchase obligations. REC mechanism is mainly aimed at addressing the mismatch between renewable resources availability in the local region and the renewable purchase obligations. CERC would play a supportive role for designing and regulating national level REC registry and REC market.
- Further, in order to address the technical problems relating to absorption of large volumes of non-firm power such as wind in the grid, CERC has constituted an expert task force which has representation from Central Electricity Authority, States, System Operator and C-WET.
- The Task Force has been mandated to give recommendations in respect of forecasting of generation from these technologies, ensuring grid reliability and equitable sharing of costs involved in ensuring reliable operations. The Task Force would also recommend appropriate grid connectivity standards for renewable sources based generating stations.

Our View: We believe that these regulations should improve viability of renewable energy projects in India. Pre-tax ROE of 19% for first 10 years and 24% from 11th year onwards makes the sector attractive for investments by utilities. Also, formulation of Renewable Energy Certificate is a key step to drive utility / long term investor interest in the sector; vs the current practice of accelerated depreciation which primarily entails 'tax planning'.

2. Open access in inter-state transmission

CERC has notified regulations for Medium term open access (3 months to 3 years) and Long term open access (12 - 25 years), to ensure fair play and availability of inter-state transmission open access to various categories of players / project developers. The nodal agency for seeking connectivity for medium term open access or long term access would be the Central Transmission Utility, i.e. Powergrid Corporation of India. The key features are:

- Any generating plant having installed capacity of atleast 250MW and any bulk consumer having atleast a load of 100 MW can seek connectivity to interstate transmission system.
- Grid connected entities can seek either medium term open access or long term access to interstate transmission system.
- The regulation also provides for direct connectivity to Grid (no dedicated transmission line to be constructed) for thermal power project of at least 500MW and hydro power project of at least 250MW.

Applications to be processed on first-come-first-served basis; priority based on duration

Application for long-term access or medium-term open access shall be processed on firstcome-first-served basis. Also, applications received during a month shall be construed to have arrived concurrently. Also, while processing applications for medium term open access received during a month, the application seeking access for a longer term shall have priority. On the expiry of the period of the medium term open access, the medium term customer shall not be entitled to any overriding preference for renewal of the term.

Our View: Expect merchant capacity to gradually shift towards medium term contracts

- We believe that the regulations are positive, largely for upcoming power generation projects being set up by the private sector. Most of these projects entail part of the capacity on merchant basis. CPSU's like NTPC, NHPC, etc are already connected to the interstate grid, as these projects supply power to more than one states.
- In the near term, constraints in terms of intra-state grid availability have restricted flow of power. Medium term open access norms stipulate that application seeking access for longer time period shall have priority. This will entail that large part of the current merchant capacity could move towards medium term contracts, over the next 12 months.

3. ST trading margin to be based on realization

CERC has proposed draft norms for increasing cap on power trading to Rs0.07/unit, vs Rs0.04/unit currently. According to the proposed draft norms, the ST trading margin will be 1.5% of realization or Rs0.07/unit, whichever is lower for units traded at Rs3/unit or above. For units traded below Rs3/unit, the current ST trading margin cap of Rs0.04/unit will apply.

Our View: Given that the average ST trading rates are at Rs4.5-5.0/unit, PTC would benefit from higher trading margins. In FY09, of the 13BUs traded by PTC, 5.8BUs were traded sub Rs3/unit (largely Bhutan hydro power), 2.1BUs at between Rs3-4.67/unit and 5.2BUs at Rs4.67+/unit. Thus, the revised norms would have led to higher operating profits by Rs150m in FY09 for PTC, and higher net profit by Rs100m (upside of ~10%, given Adj FY09 net profit for PTC stood at Rs972m).

4. Grid discipline through UI mechanism

The Forum of Regulators comprising of Chairpersons of Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions, have agreed that the additional unscheduled-interchange (UI) charges imposed as penalty on distribution utilities for overdrawal from the grid would not be allowed to be recovered from consumers through tariff orders from August 1, 2009.

This decision is based on the recommendation of the Parliamentary Standing Committee on Energy that the regulators should evolve such practice that when the Annual Return Rates are being filed, the damages which have been imposed as UI charges should be stated separately and very clearly and those payments which are in the nature of damages, should not go to show purchase of power because that really is the inefficiency or incompetence of that particular distribution company.

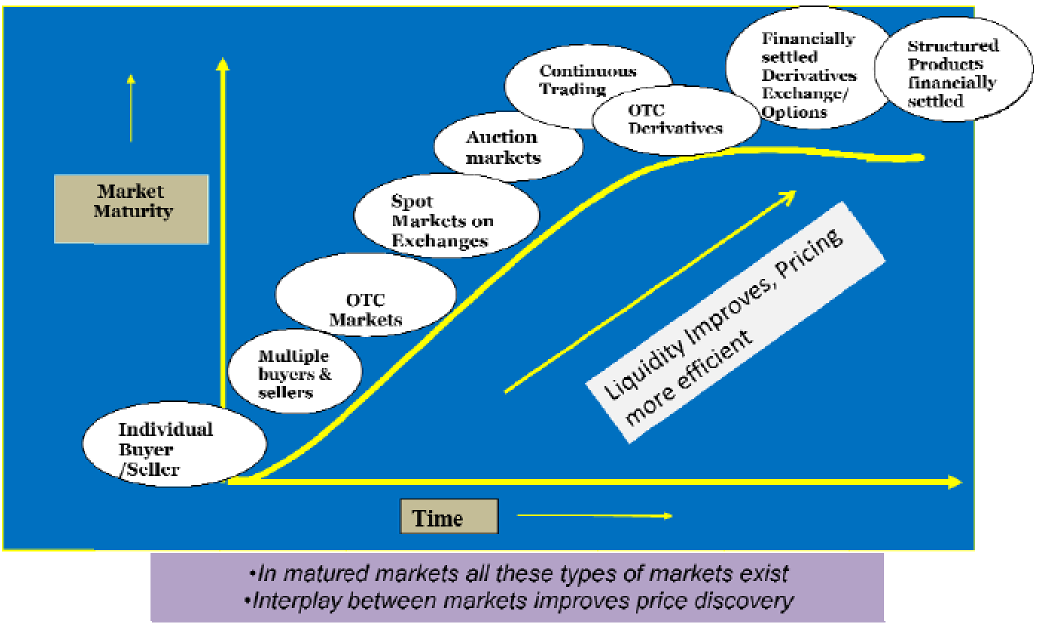
Our View: CERC has increased the additional UI charges at 100%, vs previously 40% for overdrawing below 49.2 Hz frequency. We understand that the key intention behind these norms is to arrest inefficiency of various state distribution utilities in terms of estimating demand; and also to promote UI mechanism as a grid discipline and not for trading of electricity. Thus, now the distribution utilities will be responsible for any payments on account of UI through their own finances. This we believe will act as a key deterrent and lead to increased power trading through medium term contracts.

5. Draft 'Power Market Regulations'

For the development and efficient working of power markets, CERC has formulated the Draft Power Market) Regulations, 2009. These regulations apply to Bilateral / OTC markets and also Exchange traded markets.

It is expected that the role of power exchanges would transform with time. From the present main purpose of acting as price signal for investments it will then have twin role of providing price signal and act as risk transfer platform. Once supply demand deficit reduces, liquidity gathers in spot markets, markets mature and deepen, derivatives may be introduced.

DEVELOPMENTAL PHASE OF POWER MARKET MATURITY



Source: CERC

Demutalization and ring fencing of power exchange

- Restrictions on shareholding pattern and composition of Board of Directors of power exchanges to provide transparency (for instance, A member to the exchange can have maximum of 5% shareholding in the exchange)
- Imposition of prudential norms, including Net worth requirement, Settlement Guarantee Fund, etc

- Guidelines for management of power exchange, with directives to form a Risk Management Committee, a Market Surveillance Committee and a Settlement Guarantee Fund Committee.
- Capital adequacy norms for various participants in power trading market, including for power exchange and traders
- Ceiling on member service charge for trading members has been introduced at 0.75% of transaction value.
- Introduction of a three tiered default mechanism.
- After two years of operations, any exchange with a market share less than 20% for a continuous period of 2 years shall need to close or merge with other exchange.
- Exchanges are being required to provide demand supply, weather, fuel, generators information for informed pricing decisions for participants mandatorily .This is to emphasis the exchanges role in price and information dissemination to reduce information asymmetry in markets.

Concept of Clearing corporation, and separating the same from price discovery

- Currently, both functions are performed by power exchange.
- Exchanges are being required to hive off clearing business to clearing corporation within one year.

Market Oversight & Surveillance

Market oversight is required to maintain the market integrity and credibility in the minds of participants, that the market is fair and efficient.

- Commission shall have an oversight on the overall functioning of the market through monitoring of prices, volatility, volumes of trades etc.
- Commission shall have an oversight on market participants behaviour through checks on manipulative or attempted manipulative trading activity, trading that is misleading or deceptive, or is likely to mislead or deceive; market abuse or gaming etc
- Commission can intervene in markets when prices or volatility rises unreasonably, or very high sudden trading reported
- The interventions methods can be appropriate price caps for necessary duration, halting trading for a cooling period in case of increased volatility , increasing margins on contracts ,imposing client / market position limit, suspend contracts from trading etc.
- Insider trading policy has been introduced so that price sensitive information is not used for profiteering.
- Whistle blowing policy has been introduced.

Our View: We believe that these regulations are very important steps in the direction to promote and encourage trading of power outside Long Term PPAs. Given the nascent nature of the industry, the role of power trading will evolve from present main purpose of acting as price signal for investments into twin role of providing price signal and act as risk transfer platform. The regulations will also act as a check on malpractices by participants, and empowers to introduce price caps, halting of trading for a cooling period to check volatility, imposing client / market position limits, etc.

NOTES

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