



Dear Readers,

The vision of providing India with a competitive power market has always been the force behind the motivated team at PXIL. A fair and transparent market place, where price of electricity would be a function of demand and supply only. In a competitive market, availability of right information with all the market participants is a must. With this in view, we are pleased to publish the first issue of our monthly newsletter.

The sections of newsletter have been designed to provide information from all facets of power sector viz. Power Exchanges, the latest rules and regulations and Power industry news in addition to trends and practices around the world.

We look forward to receiving your feedback on improving the coverage and accessibility of the newsletter. On behalf of PXIL team I would like to thank you all for sharing our vision of creating a competitive power market in India.

Warm Regards,

(Rupa Devi Singh)

MD & CEO

Power Exchange India Limited

PXIL Develops Long Term Products

PXIL is in the process of getting approvals from CERC for term-ahead products which have been developed for trading of **Day-ahead contingency, week-ahead, 1st, 2nd and 3rd month ahead** electricity.

The electricity trading system would utilize the bilateral open access with trades being matched through PXIL's newly developed proprietary trading engine.

The matching system has been developed in-house after continued deliberations with power market entities as well as the Regulators and is expected to help entities purchase electricity with ease and flexibility.
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PXIL takes Membership of WEC



PXIL has joined hands with World Energy Council by taking the membership of WEC-IMC. PXIL is the only Power Exchange having WMC-IMC membership in India

EARTH DAY



Earth day designed to increase awareness and appreciation for the Earth's environment. It is celebrated by United Nation every year on the March equinox, which is often March 20. However the same was celebrated first in US on 22nd April 1970 to mark the beginning of the modern environmental movement.

Trading data for the month of APRIL - 2009

Total Buy Bids (MUs)	55.08
Total Sell Bids (MUs)	60.45
Total Market Cleared Volume (MUs)	29.35
Max MCP (Rs/KWh)	14.7
Min MCP (Rs/KWh)	4.38
Avg. MCP (Rs/KWh)	8.21
Max Volume in a day (MUs)	3.35
Total Market Clearing Volume in MUs (till 30th April 09)	179.90

Within the pages...

- Latest news: India and International
- PXIL's article in Powerline
- Power Exchanges: Latest Developments in International Market
- Knowledge Center: did you know?

Top News: India

- ❖ [Power exchanges set to get nod for long-term contracts from May,](#) April 21, 2009
 With the onset of the summer, states facing shortage of power will get a much-needed relief from May as Power Exchange India Limited (PXIL) proposes to start week ahead, month ahead, quarter ahead and other long term products. The move is important as it will now enable power deficient states to strategize the bridging of the demand-supply gap well in advance and on a regular basis, as well as help the power exchanges to help entities sell power for a longer term. [\(more...\)](#)
- ❖ [CERC to ensure deficit states too get feel of green power,](#) April 7, 2009
 Moving in to make states comply with an existing rule to have a certain portion of their power grid reserved for green energy, the government is planning to set up a renewable power exchange that would issue certificates to surplus states which can be sold to deficit states looking to fill their mandatory quota. [\(more...\)](#)
- ❖ [CERC to pen pricing mechanisms,](#) April 7, 2009
 The Central Electricity Regulatory Commission (CERC) is expected to announce a comprehensive roadmap to develop power markets in India soon. The country's apex power sector regulator plans to develop pricing mechanisms for the bilateral contract market, the spot market, the real time market, and ancillary service market based on international practices. [\(more...\)](#)
- ❖ [CERC Clarifies Jurisdiction to Develop Power Market in India,](#) April 29, 2009
 CERC, in its order dated 28th April 2009 has stated that "regulatory oversight to promote development of market in power is vested in this Commission as mandated under Section 66 of the 2003 Act and, therefore, the orders, guidelines issued by this Commission and the regulations framed shall be binding on all concerned". The order also mentions "we hold that MCX and any other commodity exchange using their platform for trading of forward contracts in electricity, whether transferable or non-transferable, shall be subject to the orders, guidelines and regulations of this Commission. It, therefore follows that such contracts cannot be undertaken without complying with the prescriptions and regulations of this Commission". Earlier, PXIL had filed a petition with CERC against the launch of electricity derivative product by MCX. [\(more...\)](#)

Top News: International

- ❖ [Spain steps up retail energy market deregulation,](#) April 3, 2009
 Spain's cabinet has approved steps towards the elimination of regulated tariffs for small consumers of electricity and gas, the government said on Friday. From July 1 Spaniards can choose from a range of electricity tariffs offered by different suppliers, with the government only fixing a "tariff of last resort," in the form of maximum prices for consumers who contract less than 10 kilowatts of power. [\(more...\)](#)
- ❖ [NASDAQ/Nordpool to launch UK power market in Sept,](#) April 24, 2009
 U.S.-based Nasdaq OMX and Nordic electricity market operator Nordpool will on Sept. 28 launch a physical power market in Britain, along with associated clearing services, Nordpool said in a statement on Friday. The two companies were picked last year to create a single market place -- to be called N2EX -- to boost liquidity and improve price transparency in the UK market. [\(more...\)](#)
- ❖ [Single market bringing down electricity prices in Ireland,](#) April 16, 2009 [\(more...\)](#)
- ❖ [Experts demand comprehensive power market reforms: Vietnam,](#) April 12, 2009 [\(more...\)](#)
- ❖ [SAARC group to discuss regional power grid,](#) April 24, 2009 [\(more...\)](#)
- ❖ [China Ripe To Launch Electricity Trading Market: Regulator,](#) April 23, 2009 [\(more...\)](#)

Brief of write-up published by Mr. Satyajit Ganguly, Head – Operations, PXIL “PROMISING PLATFORM: Power Exchanges Aim to Promote Competition”

India’s installed capacity, as of January 2009, is 147,457 MW. The country is facing an actual shortfall in peak deficit and energy deficit of about 14 per cent and 11 per cent respectively, of the total power generated in the country, short-term transactions account for only 6.83 per cent.

The Indian power system operates on a two-market concept: a day-ahead spot market, where the market clearing price (MCP) represents the electricity energy price; and a real-time market, where the price represents the system capability to balance generation and consumption in real time.

Rationale for power exchanges

- To set up adequate infrastructure for trading, clearing and settlement of electricity contracts for Indian power sector participants
- To develop a transparent and fair price discovery mechanism to given signals for investments
- To provide single-window clearance for traded electricity contracts

Exchange operations so far

The power exchanges in India provide a platform for next-day physical delivery. The spot concept is based on bids for purchase and sale of proper contracts of one-hour duration that cover all 24 hours of the next day. All buy and sell orders are compiled into demand and supply curves for each power-delivery hour – and the MCP for each hour is determined by their intersection. This method of matching is called the auction method. All the major spot market exchanges in the world are based on the auction concept.

Products in the pipeline

Understanding the requirement of market participant, PXIL has proposed to the Commission for introducing the longer term products and contingency markets. Worldwide, the conventional wisdom has been to initially introduce only those products that already exist in the bilateral market.

The way ahead

Power exchange is a relatively new concept in India. It would need support from the regulators, policy-makers and market participants in the following areas:

- Helping captive generation capacities to bring their surplus on board
- Providing a platform to IPPs for merchant sales
- To increase the liquidity of transactions
- Wide basing the scope by introducing energy efficiency products, RECs, etc.
- Assist and support regulators and policy-makers to develop the power market in India.

(for complete write-up, please visit: <http://www.powerexindia.com/download/Satyajit-Feb-09.pdf>)

Towards a Pan-European Power Market

Since 1998, around eighteen power exchanges have been established in Europe. By establishing reliable reference prices and creating a ‘level playing field’ for trading, they have become a key requirement for functioning markets. While it is advantageous for final consumers to have many power suppliers to choose from, a cooperation of the trading platforms on the wholesale level helps in increasing liquidity and efficiency of the power markets. The cooperation between the energy exchanges **EEX**, based in Germany, and **Powernext SA**, based in France, is a decisive step towards an integrated European electricity market.

Key aspects of the cooperation

- Common Power Spot Exchange based in Paris
- Common Power Derivatives Exchange based in Leipzig
- Clearing of all spot and derivatives energy products through European Commodity Clearing AG(ECC) based in Leipzig (Detailed report: <http://www.eexpwxcooperation.com/lang-en>)

Long Term products developed by PXIL

PXIL is in the process of getting approvals from CERC for term-ahead products which have been developed for trading of electricity on **Day-ahead contingency, week-ahead, 1st, 2nd and 3rd month ahead basis**. All these products are delivery-based products. These term-ahead products would enable market participants to procure and sell electricity through power exchange on firm basis for longer periods. In this way participants would be in a better position to forecast and plan for their power portfolio.

The electricity trading system would operate under the bilateral open access regulations, which are currently under revision. The trades would be matched through PXIL's newly developed proprietary trading engine. PXIL believes that order matching systems for power trades are best evolved in keeping with the peculiarities of the local market conditions. Therefore, rather than choosing to operate term ahead trade on the basis of a ready product from overseas markets, PXIL has developed a special methodology for order matching in consultation with power market entities as well as the regulators. This matching methodology is more in-line with the decision making processes of participating entities and will help create transparency in the market. The system would be demonstrated as soon as approval of product is received from The Hon'ble Commission.

In addition to offering ease of trade through high degree of interactiveness, the indigenous nature of the system also provides the product with flexibility and scalability to take care of the needs of continuously evolving power market in India.

PXIL is of the opinion that in addition to providing ease and certainty to market participants, these products would certainly change the way power is traded in India, by making information of trade available to all the participants and regulators at the same time, these products would prove to be a stepping stone towards the development of a competitive power market in India.



Did you know?

1. The first demonstration of electric lights in India was given by P.W. Fleury and Company in Calcutta on July 24, 1879
2. On September 30, 1882, the world's first hydroelectric power plant began operation on the Fox River in Appleton, Wisconsin
3. Derivative Products in Polish Power Exchange (TGE) were first launched in 2001 but withdrawn in 2006 due to lack of liquidity; it has been re-launched in 2008

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