IEX Bulletin
News and Information
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REGULATORY NEWS

CERC extends pilot on SCED

CERC vide its order dated 11.09.2019, extended the pilot on Security Constrained Economic Dispatch (SCED) of Inter-State Generating Stations (ISGS) Pan India. The key highlights of the Order are as below:

The Commission vide Suo-Motu Order dated 31st January 2019 directed POSOCO to implement a Pilot on SCED w.e.f. 01.04.2019, for ISGS pan India to explore the scope of optimization and therefore the possibility of minimizing the system cost without major structural changes.

- **Operational Experience**
  - Primarily pit head generation with lower variable cost is being increased in western region and eastern region whereas generation with higher variable cost is being decreased in southern region and northern region. This has led to optimization of the generation across the country thereby reducing the production cost.
  - 49 coal and lignite based thermal ISGS generators constituting 132 generating units and having total installed capacity of 55,940 MW are participating in the SCED pilot with daily average perturbation of 1276 MW.
  - The average System Marginal Price (SMP) during this period was found to be 298.27 paisa/unit.
  - The charges to be paid to SCED UP generators during this period amount to Rs 759 crore against the charges to be refunded by SCED DOWN generators amounting to Rs 1149 crore.
  - The heat rate compensation Rs. 58.28 crore payable as of now, only for southern region generators.
  - Rs. 330 crore reduction in the system cost has been observed subject to the heat rate compensations.
  - SCED pilot has resulted in consolidation of the available spinning reserve in the higher variable cost generators.
  - Availability of reserve is getting constrained by the ramping capability of generation units carrying reserve resulting in reduction in cumulative reserve quantum after the SCED optimization process.
- The Commission finds that the implementation of SCED pilot for the 4 months mentioned in the report has shown positive results and helped in understanding the operational challenges and possibility of optimization of generation dispatch at inter-regional level.
- Net benefits accrued will be shared in the ratio of 50:50 between the generators participating in SCED and the concerned beneficiaries / discoms, on a monthly basis.
- The generators benefit (i.e. 50% of the net savings / benefit accrued in the pool) will be shared between SCED UP and SCED DOWN generators in the ratio of 60:40 respectively for each time block.

- Commission recognizes need for appropriate regulatory framework for SCED.
- SCED pilot has been running during summer/monsoon seasons of April to September 2019 and there is a need for gaining the experience during the winter season as well.
- The Commission recognizes the time required for framing the relevant regulatory amendments / enactments and the need for gaining experience across all the seasons in a year.
- Accordingly, the Commission has decided to extend the SCED pilot for the period up to 31st March 2020.
- However, this shall apply in respect of the generating stations that are willing to participate in the SCED pilot, for the extended period from 1st October 2019 to 31st March, 2020.

More information: www.cercind.gov.in

GERC determines Additional Surcharge (AS) for H2 FY20 at 10 Paisa per kWh

GERC vide its order dated 25/09/2019 has determined AS at 10 paisa per unit for the period of October 2019 to March 2020. The AS for the specified period has been determined basis the data for October'18 to March'19.

Methodology for Calculation of Additional Surcharge

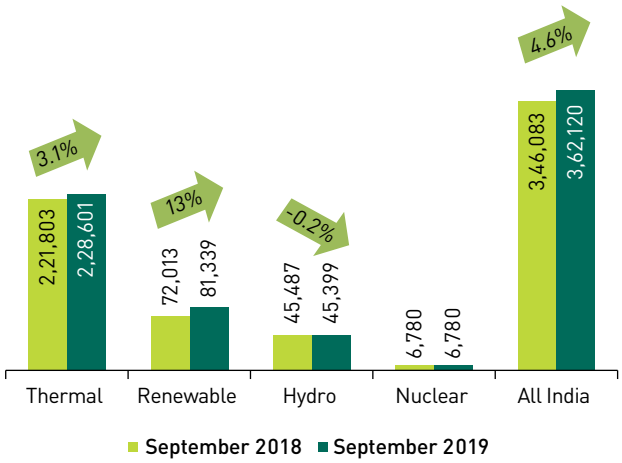
Sr. No	Description	Nomenclature	Value	Unit
1	Contracted Capacity	A	17577	MW
2	Maximum Availability	B	17508	MW
3	Minimum Availability	C	12675	MW
4	Average Availability	D	15033	MW
5	Maximum Scheduled	E	14665	MW
6	Minimum Scheduled	F	7205	MW
7	Average Scheduled	G	11335	MW
8	Capacity not availed (Max)	H	7827	MW
9	Capacity not availed (Min)	I	422	MW
10	Capacity not availed (Avg.)	J	3698	MW
11	OA Allowed (Max)	K	235	MW
12	OA Allowed (Min)	L	30	MW
13	OA Allowed (Avg.)	M	100	MW
14	Capacity stranded due to OA	N	100	MW
15	Total Fixed Charge (PPA)	O	5362	Crore
16	Fixed charges per MW available	P=O/D	0.3567	Crore
17	Fixed charges of stranded capacity	Q=P*N	35.66	Crore
18	Transmission Charges paid	R	2970.19	Crore
19	Energy Scheduled	S	49511	MU
20	Transmission Charges per kWh	T=R/S*10	0.5999	Rs./kWh
21	Distribution Charges (As approved in Tariff Order)	U	0.15	Rs./kWh
22	Total T & D Charges per kWh	V=T+U	0.746	Rs./kWh
23	Energy Consumed by OA Consumer from Discoms	W	1599.95	MU
24	T & D charges payable to Discoms by OA consumers	X=W*V/10	119.36	Crore
25	Demand Charges Recovered by Discoms from OA	Y	150.81	Crore
26	Demand Charges to be adjusted	Z=Y-X	31.46	Crore
27	Net stranded charges recoverable	AA=Q-Z	4.21	Crore
28	OA scheduled energy	AB	436.77	MU
29	Additional surcharge	AC=AA/AB*10	0.10	Rs./kWh

POWER SECTOR AT A GLANCE

- All India installed capacity grew by 4.6% Y-o-Y from 3,46,083 MW to 3,62,120 MW as on 30th Sep'19 with thermal capacity at 2,28,601 MW; renewable capacity at 81,339 MW ; hydro capacity at 45,399 MW and nuclear capacity at 6,780 MW.
- Installed capacity increased by 3.1% for thermal, 13% for renewables, declined 0.2% for hydro and remained same for nuclear over the same period.
- All India peak demand in September'19 declined by 1.4% from 1,77,022 MW to 1,74,584 MW over Sep'19.
- All India energy met declined by 1.3% from 1,08,819 MU in Sep'18 to 1,07,262 MU in Sep'19.

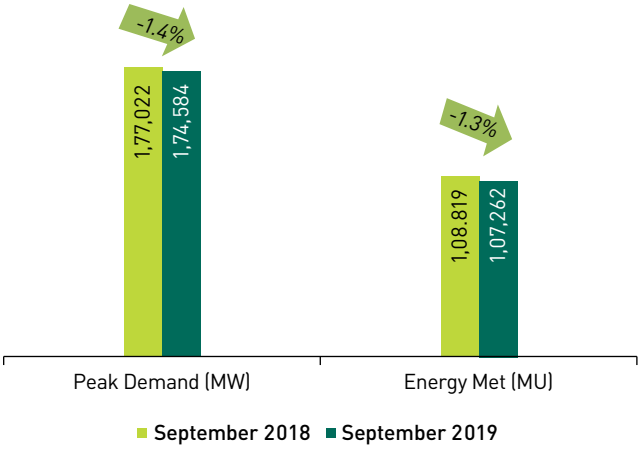
All India Installed Capacity (in MW)

(Source: www.cea.nic.in)



Demand and Supply Position

(Source: www.cea.nic.in)



Peak Demand Comparison of Key States (MW)

The comparison of the peak demand in the key states during Septemeber'18 and September'19 is as hereunder:

State	Apr-Sep 2019	April-Sep 2018	%Change
Karnataka	12,700	10,690	19%
Bihar	5,966	5,050	18%
Madhya Pradesh	10,187	8,811	16%
Kerala	4,487	4,050	11%
Uttar Pradesh	22,599	20,498	10%
Telangana	11,703	10,815	8%
Gujarat	18,437	17,053	8%
Andhra Pradesh	10,183	9,435	8%
Rajasthan	12,620	11,698	8%
Chhattisgarh	4,746	4,404	8%

Energy Met Comparison of Key States (MU)

The comparison of the energy met in the key states during September'18 and September'19 is as hereunder:

States	Apr-Sep 2019	April-Sep 2018	% Change
Chhattisgarh	16,378	13,638	20%
Uttar Pradesh	71,433	64,836	10%
Bihar	17,836	16,213	10%
Madhya Pradesh	35,751	32,551	10%
Kerala	13,151	12,063	9%
Rajasthan	41,537	38,434	8%
West Bengal	30,688	28,681	7%
Karnataka	35,498	33,225	7%
Haryana	32,708	30,651	7%
Punjab	36,688	34,401	7%

MARKET NEWS

ELECTRICITY MARKET

The electricity market at IEX recorded a total trade of 3,924 MU in September 2019.

The day-ahead market traded 3,488 MU with avg market clearing price at only Rs.2.77 per unit.

The market continued to be favorably inclined to the buyers both the distribution utilities as well as the open access consumers in terms of price competitiveness as well as flexibility in power procurement.

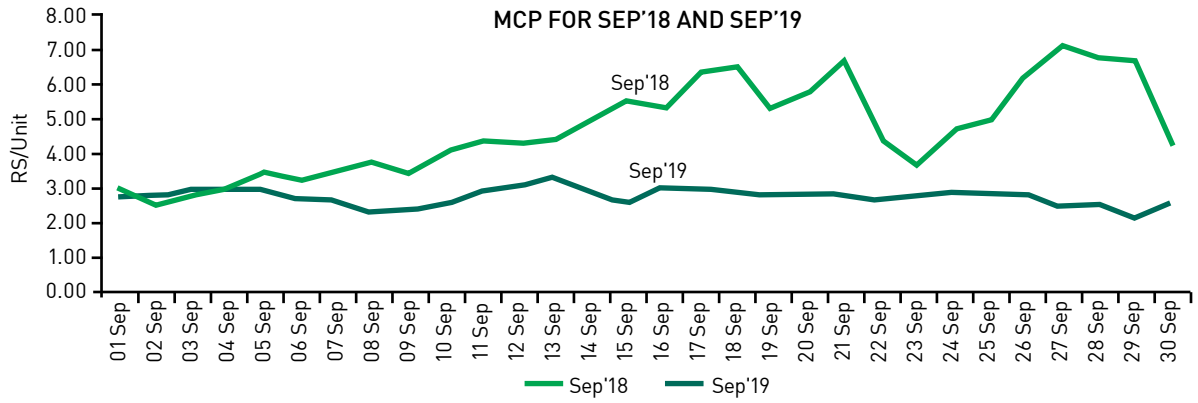
The average market clearing price was down by 41% vis-à-vis price of Rs.4.69 per unit in September'18 and 16% on MoM basis. The reduction in prices was mainly on account of improved coal supply, extended monsoon and improved hydro power generation.

Further, subdued demand for power due to economic slowdown was another reason for low prices in the market. All India peak demand at 173 GW in September'19 declined 1% over demand of 175.6 GW in Sep'18. In the similar vein, the energy met at 105 BU also declined 5% YoY according to the NLDC data.

In the Exchange DAM market, total monthly sell bids at 8,570 MU were almost twice of total buy bids at 4,066 MU.

The inter-state transmission corridor congestion prevailed during the month specially towards the import of power to northern states due to shutdown of 765 KV Agra – Jhatikara & HVDC Champa – Kurukshetra line. Consequently, 'One Nation, One price' prevailed for only 18 days during the month.

The term-ahead market traded 436 MU in September'19 from 103 MU in September'18, on strength of increased participation by the distribution utilities who leverage the market segment to manage the demand-supply variability close to the real-time. The acceptance for TAM contracts especially the intraday, daily, weekly contracts has been growing amongst the distribution companies.



RENEWABLE ENERGY CERTIFICATE MARKET

On 25th September, the REC market at IEX saw a total trade of 5,33,756 (5.33 lac) Renewable Energy Certificates comprising of 4,74,837 Non-Solar RECs and 58,919 Solar RECs.

The price for Non-Solar RECs (Issued after 1.4.17) at Rs. 1,625 increased 8.33% over Aug' 19 and price for Solar RECs at Rs. 2,250 increased 7.14% over price in August'19.

The increase in prices in REC market was mainly on account of shortfall on the inventory / supply side which has been persisting since March 2019.

KEY HIGHLIGHTS OF THE TRADING SESSION			
	Non-Solar RECs (Issued before 1.4.17	Non-Solar RECs (Issued after 1.4.17)	Solar RECs
Buy Bids	1,58,480	4,49,658	6,30,421
Sell Bids	1,50,500	5,16,811	72,780
Cleared Volume	1,28,971	3,45,866	58,919
Price (Rs/REC)	1,625	1,500	2,250

MARKET INSIGHTS

DEVELOPING THE SHORT-TERM POWER MARKET: A PERSPECTIVE

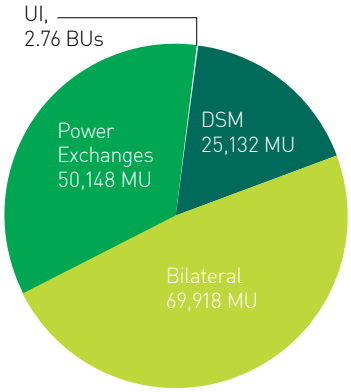
The promotion of competition in electricity sector is one of the core objectives of the Electricity Act, 2003 wherein under Section 66 the Hon'ble Commission has been entrusted with the mandate to develop market including 'trading'.

As per CERC, India's short-term power market in FY19 traded 145 billion units which is about 12% of the total power generation at 124 billion units (excluding renewables). In Absolute numbers, the volume of electricity traded through bilateral transactions (traders & direct) was 69.9 billion units, volume transacted through power exchanges was 44 billion units and 21.4 billion units were traded by DSM in FY19.

There two power exchanges in India and nearly 40 trading licensees in the market with trading business being concentrated amongst the top 5 market constituents.

SHORT TERM MARKER PLAYERS

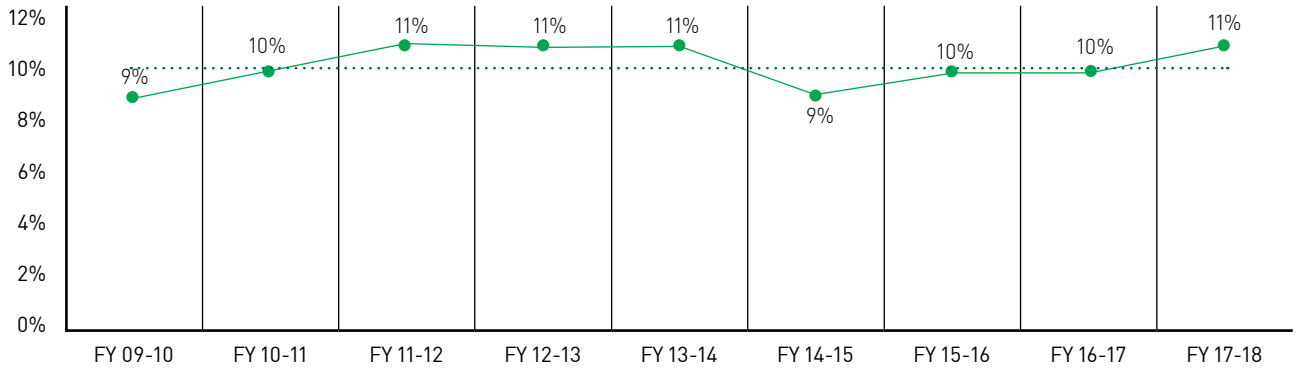
1,45,198 MU Traded in Short-term Market in FY19



CERC Market Monitoring Report

Over the years, the short-term market has remained at approx. 10% of the total power market in the country. The market constituents play an important role in market development by offering solutions to both buyer/sellers to fulfill their power supply requirements.

SHARE OF SHORT TERM VOLUME



The CERC Power Market Regulations allows the market constituents especially traders to take open positions in market which means that these players can also buy in long term and sell in short term or vice versa. As recognized in the Power Market Regulations, the market constituents in open positions are exposed to higher risks including that of price risk and therefore these constituents should be given the flexibility to charge trading margin as per their business & market assessment. Any change in the definition of short-term contracts and/or applicability of margin to transactions having any one leg on short term basis would discourage the licensees to take open positions in terms of duration of the contract which will also impede development of short-term market.

TRADE DATA : DAY AHEAD MARKET, SEPTEMBER'19

PRICE SNAPSHOT

Minimum MCP	Maximum MCP	Average MCP
₹ 1.00/kWh	₹ 5.99/kWh	₹ 2.77/kWh

VOLUME SNAPSHOT

1 MU = 1 Million kWh = 1 GWh

VOLUME	Sell Bids	Purchase Bids	Unconstrained Volume	Cleared Volume
Total Volume (MU)	8,570	4,066	3,535	3,488
Average Daily (MU)	286	136	118	116

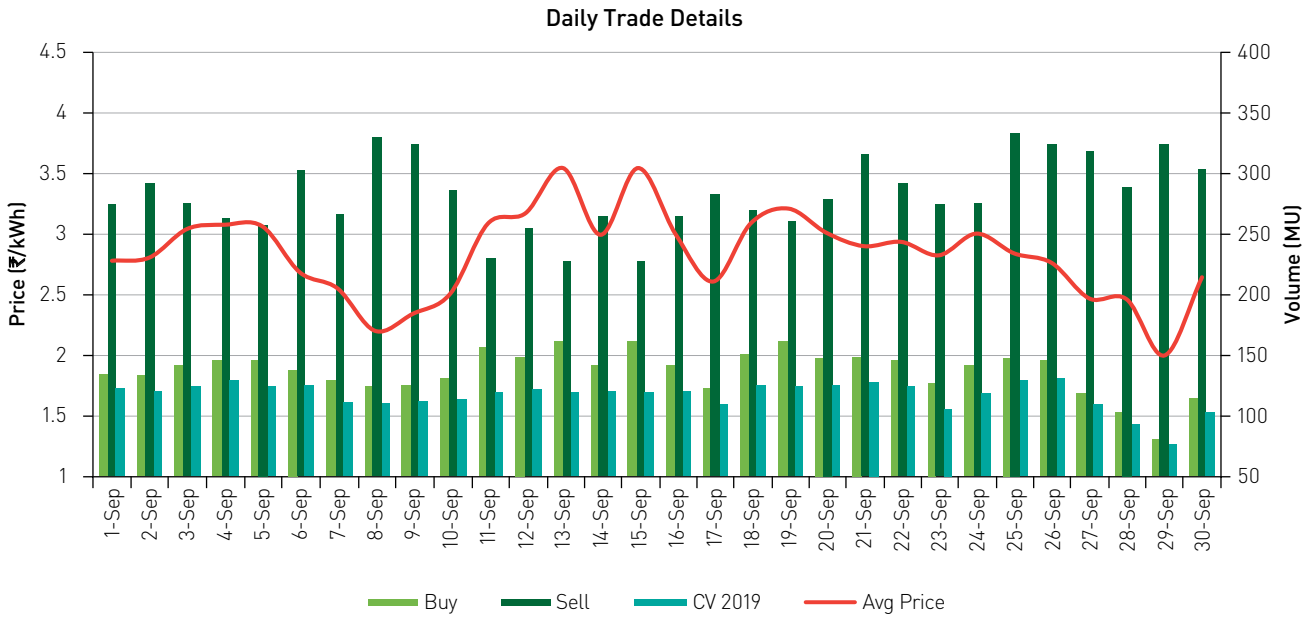
PARTICIPATION SNAPSHOT

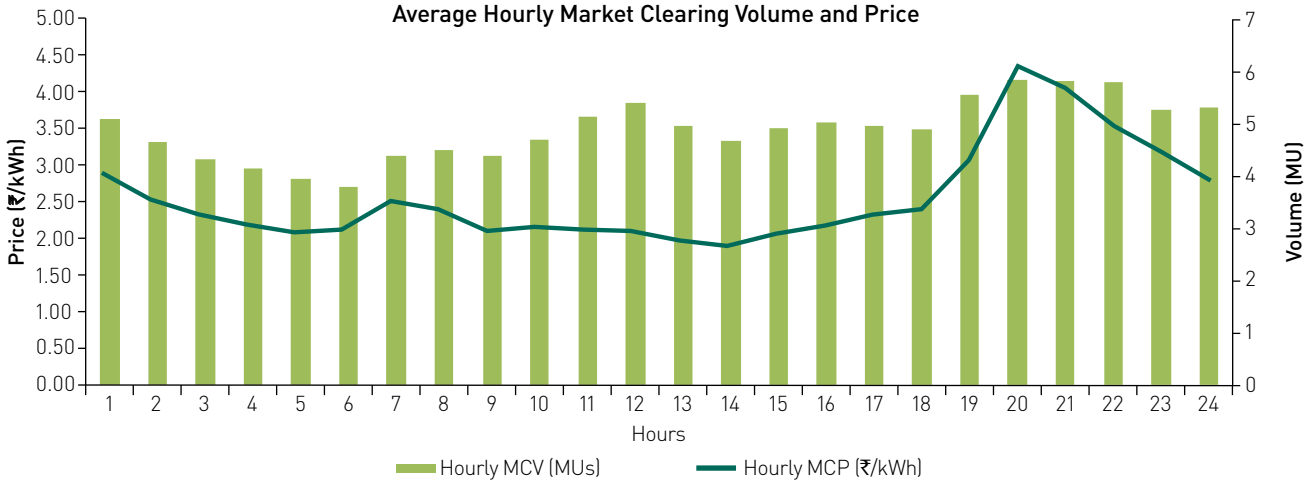
Total Registered Participants	Open Access Consumers	Private Generators
6,500+	4,100+	500+

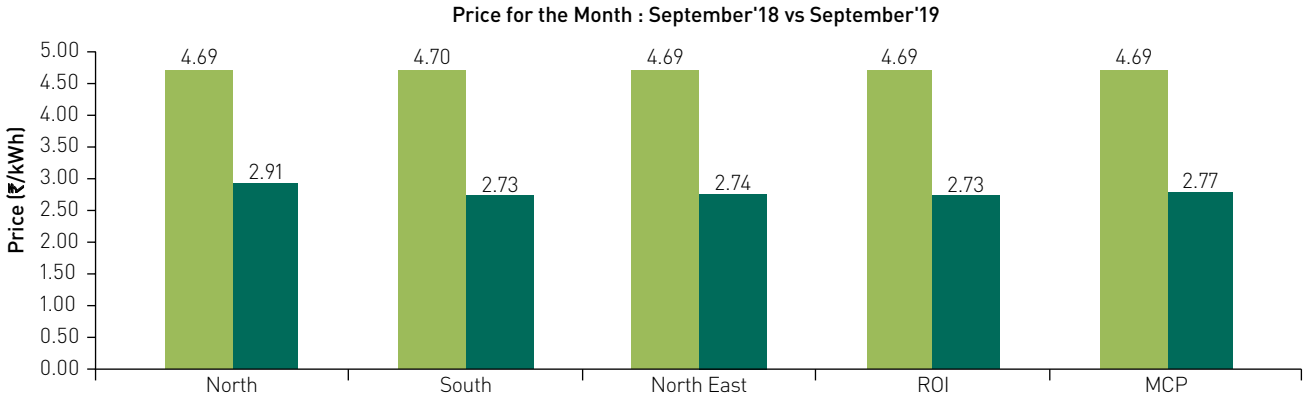
TERM AHEAD MARKET

Contracts	Total Volume (MU)	Max Price (₹/kWh)	Min Price (₹/kWh)
Weekly	106.37	3.80	3.30
Intraday	62.04	6.00	2.00
Day-Ahead Contingency	81.44	6.99	1.39
Daily	186.24	3.85	3.85

TRADE DATA: DAY-AHEAD MARKET, SEPTEMBER'19







IEX introduces 'Zero Client Subscription Fees' for the period 20th September 2019 – 31st December 2019 for Open Access Commercial & Industrial Consumers

Indian Energy Exchange (IEX) is pleased to announce 'Zero Client Subscription Fees' for the period 20th September 2019 – 31st December 2019 for Open Access Commercial & Industrial Consumers. Under the scheme, any new client registration or reactivation of existing client will not be required to pay any amount toward annual client registration fee from 20 September'19 till 31st Dec 2019. For example, an open access consumer may register on 10th of October 2019 and another may register on 10th of December 2019. Both these consumers can trade at IEX till 31st December 2019 without paying any client registration fee. From 1st January 2020 onwards annual client registration fee will be levied and will be applicable upto 31st December 2020, if the client continues trading after 31st December 2019. The scheme is applicable only for Open Access Commercial and Industrial Consumers. We truly believe this scheme will help open access consumers to take the advantage of lower prices at the exchange and enhance their overall competitiveness.

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