No. IEX/CRO/041/18-19

Dated: 15th January, 2018

To,
Mr. Sanoj Kumar Jha,
Secretary
Central Electricity Regulatory Commission
3rd Floor, Chanderlok Building, Janpath
New Delhi – 110 001

Subject: Comments on Draft CERC (Grant of Connectivity and General Network Access to the inter-State transmission system and other related matters) Regulations, 2017

This has a reference to Public Notice issued by the commisson dated 14th December, 2017 (No. L-1/229/2017-CERC) on Draft CERC (Grant of Connectivity and General Network Access to the inter-State transmission system and other related matters) Regulations, 2017, wherein the Hon’ble Commission invited comments/ suggestions/ objections on the Draft Regulations.

In this regard, the comments of Indian Energy Exchange (IEX) are attached as Annexure for kind consideration of the Hon’ble Commission.

Yours Faithfully

[Signature]

Chief Risk Officer

Enclosed: A/a
IEX Comments on Draft CERC (Grant of Connectivity and General Network Access to the inter-State transmission system and other related matters) Regulations, 2017

Electricity Act, 2003 laid down measures conducive for development of electricity industry, promoting competition therein, protecting interest of consumers and supply of electricity to all areas. The Electricity Act, 2003 ushered an era of de-licensed generation and Open Access. The Electricity Act, 2003 also provided the necessary legislative support for growth in the generation capacity by de-licensing the generation. As a consequence there has been rapid generation capacity addition witnessed in the last 10 years. The act also provided for an enabling mechanism towards development of a vibrant power market in India. Section 66 of the Electricity Act, 2003 specifically mandates the Commission to promote the development of a power market (including trading) which shall be guided by the National Electricity Policy. With the implementation of this act the short term power market is consistently gaining volume. The prices discovered in the short term market have been significantly lower vis-à-vis the long term agreements, which has ultimately benefitted the end consumers. However, we understand that the proposed draft regulations may act as a road block towards development of an efficient power market. Our concerns in this regard are provided hereinafter:

Detailed Assessment of Commercial Impact of the proposed draft regulations:

The proposed draft regulations would have potential impact on large number of stake holders and the entire implications of any such change needs to be understood with full clarity. Therefore, a proper Commercial Impact Study of the proposed mechanism should be done and made available to the various stakeholders. Commercial impact is an important evaluation criterion for adopting any new regulations; hence we would suggest that draft regulations along with proper explanation of the commercial impacts would help us in appreciating the concept in entirety. Any comments made before understanding completely the commercial impact, on the new methodology would be pre-mature and without a proper base. For that reason we suggest that the commercial impact study using data of the preceding years may be done and made available to stakeholders.

Clarity on Mechanism of Sharing of Transmission Charges and Losses:

The National Electricity Policy and National tariff Policy, stipulates that to facilitate cost effective transmission of power across the region, the tariff mechanism should be sensitive to distance, direction and related to quantum of flow. This provision is essential for development of a competitive and dynamic power market which has been envisaged in the Electricity Act, 2003. Development of a robust transmission network in a timely manner is needed for a competitive power market but any such development can be done along with a fair and equitable transmission cost allocation procedure to its users.

From the Draft Regulations it is not clear that under GNA concept whether billing of PoC charge shall be done on a fixed quantum of GNA or it will be based on actual usage or both. However, we feel that the sharing mechanism for payment of transmission charges is proposed to be based on GNA (based on contracted GNA quantum). The transmission pricing based on contract or allocation is an old concept which is contradictory to the guidelines specified in the National Electricity Policy and Tariff Policy.
Here we would like to highlight the fact that the tariff mechanism should be sensitive to quantum of flow and not linked to the contracted quantum. The prevailing regulations of sharing of transmission charges (PoC Regulations) provide an equitable mechanism for sharing of transmission charges based on usage. This Sharing regulation has proved to be a major catalyst in developing a fair and efficient power market in India. Similar transmission charges sharing mechanism based on usage is adopted in other developed power markets as well. The basic principle of usage based cost allocation under the prevailing Sharing Regulations should not be changed.

Therefore we suggest that the Transmission charges sharing mechanism under GNA regime may be explained and the draft version of sharing regulations should be brought out in parallel before any decision in this regard could be made.

Development of Power Market:

Section 66 of the Electricity Act of 2003 envisaged the development of power market. The provisions of Open access and power exchange have been major enablers in this process. The power market has led to efficient and transparent price discovery which has instilled the faith of market participants and also benefitted the end consumers.

Today Short Term market is not incidental, considering the thrust of public policy on evolution of competitive and efficient energy markets. It is the backbone of trading and market operations, which have been rapidly gaining volumes as well as acceptability among users. After 9 years, we are now at a junction where we have reaped the benefits of competitive power market and seen the rise in participation and volumes. It is incontrovertible that the power exchange has infused efficiency and transparency in discovery of price of power in the Indian power sector and it is well accepted fact that the prices discovered at the exchange acts as benchmark price for all other term of contracts. The end consumers have availed extensive benefits of low prices at the exchange and same time generators with no firm PPAs have found an opportunity to transact their power efficiently. Moreover, exchange has helped the development of power market by providing a window for small generator and small consumers to trade power with a certain level of reliability.

The introduction of GNA and financial implications associated with it in its present structure is not very conducive for the development of power market. The spirit of GNA is against the fundamentals of short-term market and exchange based power transaction. The DISCOMs would not be willing to buy or sell power beyond the GNA quantum contracted even though they have more demand or surplus capacity respectively. The embedded customers would be unwilling to procure power from power market through open-access. Thus, in a nutshell the introduction of GNA seems adverse for the development of Power Market.

Impact of Introduction of GNA on Generating Stations:

- We believe that the introduction of GNA will have limited impact on the generating stations which have long term PPAs for the entire capacity as their LTA will be converted into GNA. At the same time the generating stations which do not have any long term/medium term PPAs and
are selling only part of power in short term (merchant plants) will have the liability to pay transmission charges as reliability charges corresponding to the contracted GNA (installed capacity minus auxiliary power) even if entire capacity is not scheduled.

- Currently merchant generators connected to ISTS or embedded in intra-State transmission system, transact power through inter-State transmission system in short term market, as per the demand in the power market and pay transmission charges as and when they transact power. We understand that as per the proposed draft regulations, such embedded generators will have to seek GNA and take liability of transmission charges for inter-State transmission system round the year. Such generators will be obliged to pay transmission charges round the clock notwithstanding the fact whether they actually transact any power. The draft regulations stand in conflict with the EA, 2003 and NEP and NTP as there would be payment liability on generators even if they do not evacuate power and on consumers even if they do not demand the contracted load.

- The sunk cost component for MPPs would be an addition financial burden for them. This would have an adverse impact on those generators who evacuate their power through short-term market. The financial liability of stranded power stations which are unable to evacuate their power, either due to lack of working capital or due to unavailability of fuel or for any other reason, will increase as they will now have to pay transmission charges corresponding to the GNA contracted. This may prove to be a detrimental step for the power sector, where 30-40K MW of stranded generating capacity will be at risk of ultimately turning into NPAs.

- The proposed Draft Regulations allow limited flexibility in terms of implementation and require upfront GNA quantum for generators. The flexibility of revision of GNA is almost null and limited to force-majeure. We would like to point out that any such methodology adopted which has fixed cost associated with contracted power and penalty for deviations would adversely impact the generators.

- We also understand that these regulations provide for access to all generators but in case of congestion or while scheduling, priority is to be given to generators with long-term agreements. This would be a big dis-incentive for those Power Plants which intend to evacuate power through short-term market. More often than not such generators evacuating through short-term demand would be left bottled-up. This situation will also be against the fundamental definition of GNA (General Network Access), which means non-discriminatory access to the ISTS granted by CTU to an applicant. Here, we believe that discrimination based on term of contract is unjust and needs to be based on the principles of economic despatch.

**Impact of Introduction of GNA on Open Access Consumers:**

- In case of industrial consumers it is almost impossible to predict demand, as the load has direct linkage to economic growth, financial health of the organizations, demand of their product, etc. By making it compulsory for all consumers to declare withdrawal GNA 5 years ahead, amidst all these uncertainties, would act as a major deterrent for them to seek open-access. The consumers would be bound to pay transmission cost associated with maximum drawal demand irrespective of their actual usage and deviation from the previously declared drawal GNA
quantum would attract penalty. Presently, all such consumers pay transmission charges to CTU associated with only the quantum of power transacted through ISTS.

- Also consumers who wish to opt for open-access will have no visibility of the Cross Subsidy Surcharge and Additional Surcharge which they would be liable to pay, 5 years hence. Such industrial consumers would, on a safer side, may choose to be a customer of the DISCOM.

- The draft regulations also propose to give least priority to short-term contracts, as a result the consumers who would choose to procure power from short-term market, and in order to optimize their power procurement cost could be left exposed to the risk of non-availability of transmission corridor.

- The design of implementation of the proposed GNA regulation is such that the obligation of payment of charges even without transacting power will ultimately force such generators and consumers to apply for LTA. By linking transmission charges with GNA Quantum thereby aligning charges with contracted quantum of power will erode the competitive roots of power market, discourage the open access consumers and also the merchant power plants which are the key enablers of the competitive power market and limit potential transactions and thus affecting efficient price discovery. This is likely to have a detrimental impact on the participants of short term market.

- The procurement cost of electricity is already high for open access consumers (who are mainly industrial consumers) considering the high wheeling, cross subsidy, addition subsidy charges, stand-by and deviation settlement charges. At a time when Govt. of India is aggressively promoting Make in India initiative, introduction of GNA will be unfavorable for such an ambitious initiative of GoI. With GNA provisions there will be no open access in distribution. Such industrial consumers will continue to remain captive consumers of the distribution companies and they would lose their independence to procure cheaper power from the power market through open-access. This would be against the concept of Competitive Power Market which is the spirit of the Electricity Act, 2003.

**Impact of Introduction of GNA on DISCOMs:**

- GNA is based on maximum demand. However, it is important to identify the fact that demand for many states viz. Punjab, Delhi, U.P. to name a few, has drastic variations. Such variations are observed across the year based on seasonality and also in a day during peaking hours. However, GNA does not cater to the any such variations.

- Moreover, draft Regulations grant priority to long term and medium term over short term. This is in contrast to the principle of economic dispatch. During transmission corridor allocation the priority is to be given to long-term contracts by CTU which would affect the reliability of scheduling of short-term power thereby incentivizing long term contracts.

- We are also aware that there is a need to encourage Renewable Energy Generating plants. More often than not setting up a Renewable Power plant is a state policy matter. If a state, after having declared its GNA quantum 5 years ahead in time, wishes to revise its Renewable Capacity addition targets would face penalty for deviation. This would discourage the states to further amend their renewable capacity targets after having declared it once 5 years ahead in time.
Upcoming Concepts in Power Sector:

- **Carriage & Content**: Separation of Carriage and content is a concept which is being considered as a revolutionary change in Indian power distribution sector. The separation will allow consumers in India to buy electricity from a supplier of their choice. The result, apart from choice for consumers, would bring lower tariffs because of the competition for the consumers. This is already a part of the proposed amendments in EA 2003 and, the government plans to move the legislative changes in the next session of the Parliament.

  It is suggested that keeping in view such major changes expected in the power sector the effect of GNA introduction be analyzed and assessed in this framework before its actual implementation. The competition among the suppliers and flexibility of the consumers to choose their suppliers would bring variation in load for each supplier and therefore declaring the GNA quantum five years ahead in time would not seem practically feasible. Even the aggregate GNA of a state may vary because a supplier may choose to procure power from generator within the state or outside depending upon the economics and its commitment to supply low cost power to the end consumers, which will not facilitate the carriage & content scenario.

**Impact of GNA on proposed Renewable Capacity Addition Targets of GoI:**

- As we are aware that the Govt. of India has an ambitious plan for 175 GW of RE generations by the year 2022, including 100 GW from solar power, 60 GW from wind power, 10 GW from bio power and 5 GW from small hydro power. This has propelled massive investment in RE sector both from public and private participants.

- The limited flexibility of GNA is also not very encouraging towards the development of Renewable Generation, which is mainly Public Policy Investment. Provisions of non-revision of GNA of STUs 4 years ahead would deter state-governments to incentivize and promote the development of Renewable energy because RESs have a lower gestation and would be ready between 2-2.5 years. The states would be reluctant to add renewable capacity after having declared their GNA 5 years ahead in time because the deviation in the demand GNA from ISTS would have severe financial implications. This may act as a major setback to the ambitious target set by the government of installing 125 GW of Renewable Power by 2022.

**Transmission Planning under GNA:**

Transmission infrastructure is backbone for operation of a competitive electricity market. It is the link which synergies de-licensed generation and Open Access and Competitive Power Market.

National Electricity Policy mandated that network expansion should be planned and implemented keeping in view the anticipated transmission needs that would be incident on the system in the open access regime. Prior agreement with the beneficiaries would not be a pre-condition for network expansion.
CTU/STU should undertake network expansion after identifying the requirements in consultation with stakeholders and taking up the execution after due regulatory approvals. Now after deregulation of Generation and provision of open access, transmission is playing the role of market enabler and we suggest that the transmission planning approach should be reworked and be made more dynamic considering the short-term power market.

We understand that the transmission networks in the country have now evolved significantly. In this scenario the planning of transmission system should be guided by load forecast and generation capacity addition. Here we would like to present an analogy between transmission planning and highway infrastructure planning. Construction of Highways are done by keeping in mind the anticipated traffic and users of the highway and not on the contract signed for using the highway infrastructure. Moreover, the payment of charges through Toll Tax is applicable only for the user of the infrastructure. Similarly, we would suggest that the Commission may take steps for efficient planning of transmission infrastructure keeping in mind the anticipated load scenarios and generation capacity addition in future. Also, the sharing of charges should as per the usage and not the contracted GNA quantum.