EXPLANATORY MEMORANDUM

1. PXIL has filed a petition before the Commission for changing the methodology of levying the NLDC operating charges to the exchange participants in the Day Ahead Market (DAM). The petitioner has given the following grounds for asking for changes:-

I. The existing practice of socialization of the NLDC Operating Charges in the absence of any methodology for such allocation (i.e. the practice of Operating Charges being levied on each regional entity by the NLDC and the total Operating Charge payable by Exchanges being allocated amongst their respective successful participants), promotes monopoly and is inclined towards the Exchange with more number of clients in comparison to the Exchange with smaller number of clients. Such a situation leads the clients to gravitate towards the Exchange which has large number of successful clients, as the NLDC Operating charges on that Exchange are comparably less.

II. Continuance of the current practice of socialization of the NLDC Operating Charges, albeit with lower rates of such Operating Charges, has not eliminated the disparity existing between the operating Power Exchanges, participants trading on the smaller PX are still at disadvantage when compared to a larger exchange under the current practice. Such reduction in flat rate of Operating Charges fails to address the ills of current mechanism.
III. Continuance of the current practice of socialization of the NLDC Operating Charges is contrary to the observations and directions of the Hon’ble Commission given vide Order dated 01.01.2014 in petition no. 124/MP/2013, wherein the Hon’ble Commission noted as under –

a) to maintain parity between electricity traders and Power Exchange, holistic view on operating charges for scheduling short term transactions, for both Power Exchange and traders should be taken.

b) there is a case to relook at the level of operating charges as well as the nature in which these charges are presently being imposed.

By reducing the NLDC Operating Charges from earlier Rs. 5000 to Rs. 2000 per regional entity, the direction regarding level of Operating Charges have been catered to; however, by simply continuing the current practice of socialization of the NLDC Operating Charges, the direction of the Hon’ble Commission regarding the nature in which Operating Charges are presently being imposed have not been catered to.

IV. The present practice of levying Operating Charges by the NLDC is based on the principle of ‘cost to serve’ a regional entity. However, the participant mix on the Exchanges has changed since their inception and, today, small embedded open access consumers form a large proportion of power exchange customers. Levying a flat regulatory charge at regional level does not take into consideration the new participant mix and has led to an unintended competitive advantage of one exchange over the other.

V. The quantum of efforts on the part of the NLDC in handling any transaction is dependent on the number of transactions irrespective of
the quantum of energy being transacted, the existing practice of levying NLDC Operating Charges based on ‘cost to serve’ principle is not appropriate anymore. This is particularly true in view of the fact that –

a) The participant mix on the Exchanges has changed since their inception.
b) The economies of scale in business have been achieved by the NLDC.
c) With the IT systems and technology implementation, scheduling and operating cost have not gone up linearly with increased transaction volume.
d) The NLDC recovers all its operational cost through other revenue streams.
e) Since the fee charged by the NLDC does not vary depending upon how such fee is recovered from the actual participant, it is incorrect to say that the amount being received from the participant reflects or is linked to the actual service being rendered by the NLDC.
f) On an electronic platform, it is not possible to put a marginal value on the scheduling efforts of the NLDC for scheduling of each transaction.

VI. Rationalization of the NLDC Operating Charges for the smaller participants like open access consumers is desirable for encouraging competition in the electricity sector. Such objective cannot be achieved by continuing the present practice of socialization of the NLDC Operating Charges and by merely reducing the rates from Rs. 5000 to Rs. 2000 per regional entity. However, the said objective can be achieved by either of the proposed methodologies even without burdening the larger consumers by imposing maximum Operating Charges cap.
VII. Regulation 17 of the Open Access Regulations requires review so as to make it more conducive to seamless trade and supportive of competition. It is submitted that a level playing field among all market infrastructure institutions needs to be created and the same rate of Operating Charges for all end consumers' needs to be levied for the purpose, inducing competition in power markets and is in interest of the consumers.

VIII. PXIL has proposed the following two methodologies for collecting and allocating the NLDC Operating Charges:

a) **Option 1:** Levy the NLDC Operating Charges on per participant basis irrespective of the size and quantum of the volume transacted by such a participant and irrespective of the Power Exchange the participant is trading on; OR

b) **Option 2:** Levy the NLDC Operating Charges on per MWh basis i.e. in proportion to the scheduled energy irrespective of Power Exchange the participant is trading on.

IX. The Petitioner has enumerated following advantages of the proposed methodology:

a) Both the proposed methodologies of levying the NLDC Operating Charges address the ills of the current mechanism. Under the proposed methodologies, the participant pays the same amount of Operating Charge irrespective of the Power Exchange it is trading on. Such practice truly promotes competition as it eliminates biases and hurdles for the participants who bid on the smaller Exchange.

b) Both the proposed methodologies would translate into uniform Operating Charges. Under Option 1 of the proposed
methodology, this would mean that the Operating Charge payable by all the participants would be same irrespective of the Power Exchange on which they are trading. Under Option 2 of the proposed methodology, this would mean that the Operating Charge payable for a small quantum transaction would be lower in comparison to the charge payable for a large quantum transaction in absolute terms though the charge payable as a percentage of transaction volume would be same for all customers. Therefore, both the proposed methodologies would encourage level playing field among participants irrespective of Power Exchanges on which they are trading on.

c) The proposed methodologies would bring in certainty and predictability in applicable Operating Charge which today is varying on a daily basis for a participant on Exchange platform.

d) Option 2 of the proposed methodology of levying the NLDC Operating Charges on scheduled energy basis is in line with most of the other charges in short term power markets that are based on scheduled energy. For instance, power exchange transaction charge, traders’ transaction charge, trading margin and transmission charge are based on quantum of scheduled energy. Therefore, it is submitted that Option 2 is in alignment with the present practice in the industry. It is submitted that in order to ensure that the NLDC Operating Charges do not become very low or very high in case of small or large transaction size, respectively, a minimum or maximum Operating Charge cap may also be imposed.

e) Even assuming that conversion of the NLDC Operating Charges from flat rate to Rs./MWh may lead to extra computational efforts regarding such charge, these should not become a pretext for not implementing a fair and equitable methodology for allocation of the NLDC Operating Charges. The spirit of the Open Access Regulations could not have been to deny an
equitable treatment of participants trading on different Exchange platforms for recovery of the NLDC Operating Charges.

2. Analysis:-

I. All the issues raised by PXIL were discussed at great length when it had filed its petition 124/MP/2013 in June 2013 and in the draft third amendment to Open Access Regulations on 03.07.2014.

II. In the finalized third amendment, the flat rate of operating charges was continued, albeit with a lower rate of operating charges (Rs 2000 from Rs 5000).

III. The pros and cons of the methodologies proposed (in the petition 246/MP/2015) by PXIL and following other methodologies are discussed in the following sections:-

   a) **Option 1:** Continuing with the practice of charging regional entity wise a flat fee where NLDC operating charges were reduced from Rs 5000 to Rs 2000 per regional entity in view of economies of scale achieved in exchange based collective transactions.

   b) **Option 2:** Levy operating charges on per participant basis irrespective of power exchange the participant is trading on.

   c) **Option 3:** Do not levy any operating charge on short term open access customers.

   d) **Option 4:** Levy operating charges in proportion to the scheduled energy irrespective of power exchange the participant is trading on.

IV. **Option 1:** Continuing with the practice of charging regional entity wise a flat fee where NLDC operating charges were reduced from Rs 5000 to Rs 2000 per
regional entity in view of economies of scale achieved in exchange based collective transactions.

- The graph below and the table below show the impact of reduction of the NLDC operating Charges for Collective transactions from Rs 5000 to Rs 2000:-

<table>
<thead>
<tr>
<th></th>
<th>Minimum (Rs)</th>
<th>Maximum (Rs)</th>
<th>Average (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PXIL</td>
<td>Before May, 2015</td>
<td>1253</td>
<td>4531</td>
</tr>
<tr>
<td></td>
<td>After May, 2015</td>
<td>809</td>
<td>1573</td>
</tr>
<tr>
<td>IEX</td>
<td>Before May, 2015</td>
<td>213</td>
<td>909</td>
</tr>
<tr>
<td></td>
<td>After May, 2015</td>
<td>178</td>
<td>356</td>
</tr>
<tr>
<td>PXIL &amp; IEX combined</td>
<td>Before May, 2015</td>
<td>213</td>
<td>949</td>
</tr>
<tr>
<td></td>
<td>After May, 2015</td>
<td>187</td>
<td>370</td>
</tr>
</tbody>
</table>
• It shows that the charges have reduced substantially in both the Power Exchanges since May 2015; however, there still exists a difference between the charges paid by participants on PXIL and IEX.

V. **Option 2:**
Levy operating charges on per participant basis irrespective of power exchange the participant is trading on

• This option was also discussed in the explanatory memorandum of the draft Third Amendment to Open Access regulations where it was mentioned:

"...SeemstobapreferableoptionsinceNLDCoperatingchargeleviedonparticipants ofboththepowerexchangesissameandisleviedattheendcustomerlevel.Thefalloutof thisalternative isthatitplacesallcustomersonanequalfootingirrespectiveoftheirtransactionquantity, i.e. a small open access consumer (say trading about 10 MWh) and a distribution company (say trading about 4000 MWh) both pay the same amount of operating charge to the exchange."

VI. **Option 3:**
Do not levy any operating charge on short term open access customers

• This option was also discussed in the explanatory memorandum of the draft Third Amendment to OA regulations where it was mentioned:

"NLDC&RLDCcollectalltheiropertatingexpenses(systemoperationandmarketoperationcharges)throughCentralElectricityRegulatoryCommission(feesandchargesofRegionalLoadDespatchCentreandotherrelatedmatters) Regulations,2009. The shorttermoperatingchargescollectedfromthepowerexchangelicensedtradersaredepositedinthelDCdevelopmentfundofPOSOCOasperregulation9oftheelectricityandcharge regulations."
Removing levy of operating charge on short-term customers would be justifiable for entities like distribution companies (discoms) which are medium or long-term customers along with them being short-term customers. The discom pays system operation and market operation charge as required under the aforementioned fee and charges regulation. The downside of removing levy of charges is that majority of the participants on the exchanges like access consumers and captive power producers would become freeriders on the system. Hence, operating charges in some form should continue to be levied on the short-term customers."

VII. **Option 4:**

Levy operating charges in proportion to the scheduled energy irrespective of power exchange the participant is trading on

- In the Statement of Reasons released along with the Open Access (Third) Amendment regulation, CERC had given the following reason for choosing the reduction in NLDC Operating Charges only and not changing the methodology to per unit basis charge collection:

  “It is noted that IEX, PXIL and PTC have endorsed the proposed amendment regarding levy of NLDC/RLDC/SLDC operating charges on the basis of energy scheduled in kWh. POSOCO has raised certain concern regarding proposed amendment and has highlighted the complexities involved in computing the charges in Rs/MWh. POSOCO has suggested alternatives including reduction of the present flat rate charge and levying flat rate charge based on slabs.

The basic intent of proposing conversion of operating charge from flat rate to Rs/MWh was to rationalize such charges for different participating entities in proportion to the quantum of energy transacted by them. For instance, in a flat rate system, an entity irrespective of the quantum of power traded per day is liable to pay the same operating charge. This was explained in the Explanatory Memorandum for the previous draft regulation. However, analysis of the issues at stake in this context reveals the following:-
a) Conversion of operating charge from flat rate to Rs/MWh would lead to complexities in computation of such charge as has been highlighted by POSOCO (- the entity for which such operating charges is applicable).

b) POSOCO has also highlighted that the quantum of efforts on the part of the system operators in handling any transaction is not dependent on the quantum of energy being transacted.

c) While rationalization of the charges for the smaller participants like open access consumers is desirable for encouraging competition in the electricity sector, the question needs to be considered whether the same objective can be achieved without burdening the larger consumers.

In view of the above, we have decided to convert the operating charge to Rs/MWh. However, in order to rationalize the existing operating charges, we reduce operating charges for collective transactions from the present level of Rs 5000/regional entity to Rs 2000/regional entity...

VIII. The analysis above shows that the reduction of charges for collective transactions from Rs 5000/regional entity level to Rs 2000/regional entity level has definitely led to rationalization of operating charges. The per participant charge has reduced substantially in both the exchanges. However, there still remains an inter-se difference in charges between the two exchanges. The Commission therefore, proposes to amend the regulations on Open Access to levy the operating charges on the basis of energy scheduled (MWh). The table below presents the NLDC operating charges on the per MWh basis. Six month average suggests that these charges come out to Rs 1.87/MWh.
<table>
<thead>
<tr>
<th></th>
<th>NLDC Operating Charges (Rs )</th>
<th>Approved Energy (MUs)</th>
<th>NLDC Operating Charges (Rs/MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-15</td>
<td>62,56,000</td>
<td>2471.73</td>
<td>2.53</td>
</tr>
<tr>
<td>Jul-15</td>
<td>50,72,000</td>
<td>2535.31</td>
<td>2.00</td>
</tr>
<tr>
<td>Aug-15</td>
<td>51,96,000</td>
<td>2776.47</td>
<td>1.87</td>
</tr>
<tr>
<td>Sep-15</td>
<td>51,62,000</td>
<td>3195.17</td>
<td>1.62</td>
</tr>
<tr>
<td>Oct-15</td>
<td>51,58,000</td>
<td>3252.79</td>
<td>1.59</td>
</tr>
<tr>
<td>Nov-15</td>
<td>48,08,000</td>
<td>2736.74</td>
<td>1.76</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>1.87</td>
</tr>
</tbody>
</table>

IX. The Fourth Amendment to CERC (Open Access in Inter-state Transmission) Regulations, have been proposed accordingly.