

**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION**  
**SCO 220-221 SECTOR-34-A CHANDIGARH**

**Petition No.27 of 2014**  
**Date of Order: 28.11.2014**

In the matter of : Petition – Incorporating provisions of charges for Over-Injection / Under-Injection by Independent Power Producers (IPPs) selling power to distribution licensee in Punjab under Long Term Power Purchase Agreement, by making consequent amendments in PSERC (Terms & Conditions for Intra-state Open Access) Regulations, 2011 and State Grid Code, 2013.

AND

In the matter of: Punjab State Transmission Corporation Limited, State Load Dispatch Centre, (PSTCL/SLDC), Patiala, Punjab.

Present: Smt.Romila Dubey, Chairperson  
Shri Virinder Singh, Member  
Shri Gurinder Jit Singh, Member

**ORDER**

The present petition has been filed by Punjab State Transmission Corporation Limited (PSTCL), which is a State Transmission Utility (STU) carrying out the functions of the State Load Dispatch Centre (SLDC), for incorporating provisions of charges for over-injection/under-injection by IPPs in Punjab by amending PSERC (Terms & Conditions for Intra-State Open

Access) Regulations, 2011 and State Grid Code, 2013. The submissions made by the petitioner are as under:

- 1.1 Punjab SLDC has been notified as Nodal agency for short term open access matters dealing with grant of consent, clearance and Energy accounting. As per Section 14.1.1 & 14.1.2 of State Grid Code, 2013, SLDC is responsible for the preparation of Energy Account for the quantity of electricity transmitted through the State Grid
- 1.2 Power Purchase Agreements (PPAs) were executed between three number IPPs and distribution licensee i.e. Punjab State Power Corporation Limited (PSPCL) for supplying entire power generated by the IPPs to PSPCL on long term basis.
- 1.3 As per Clause 1.2.6 of Schedule 7 of the PPAs executed between IPPs and PSPCL, any deviation from the Schedule is to be settled as under:-

*"Variation between Scheduled Energy and actual energy at the Delivery Point shall be accounted for through Unscheduled Interchange (UI) Charges as detailed in the Grid Code and ABT."*

- 1.4 As per the Section-14.1.5 of State Grid Code, 2013

*"For the purpose of preparation of energy accounts, ----- every month. The UI energy account shall be prepared by SLDC as per ABT regime based on CERC (Unscheduled Interchange charges & related matters) Regulations, 2009 as amended from time to time. "*

- 1.5 The said CERC (Unscheduled Interchange charges & related matters) Regulations, 2009, have been repealed by CERC (Deviation Settlement Mechanism & related matters), Regulations, 2014 w.e.f. 17.02.2014
- 1.6 SLDC/ PSTCL after obtaining proposal for Intra-State UI Regulation from PSPCL submitted the same to Commission for working out the charges for over-injection/ under-injection by IPPs.
- 1.7 Hon'ble Commission vide memo no. 3154-55 dated 12.03.14 clarified that the provisions for Imbalance Charges already exists in PSERC (Terms & Conditions for intra state open access) Regulations, 2011. However, PSTCL was advised to file the petition for carrying out amendments to the regulations as suggested by the CE/ PP&R, PSPCL vide its letter dated 2.12.2013, for consideration of the Commission.
- 1.8 The petitioner proposed to amend Regulation 31 (3) under Chapter-7 of PSERC (Terms & Conditions for Intra-State open access) Regulations, 2011 as under:-

Open Access by a Generator/Trader/ Sale by IPPs to distribution licensee

- a) Over injection

*In the event of over injection for any 15 minute time block, IPP will be paid by the distribution licenses as under:*



**UI / Deviation Settlement charges, (after capping, if any),** as notified by CERC from time to time.

or

Applicable lowest tariff for any permanent category/sub-category determined by the Commission in its Tariff Order for that year.

or

Sale Price of Open Access Generator/ Trader (Variable Charges only in case of IPPs, if Sale Price consists of both Fixed & Variable Charges) **whichever is lower.**

b) Under Injection

In the event for under injection for any 15 minute time block the distribution licensees will be paid by generator/ trader/ IPP, as under:

**UI / Deviation Settlement charges (including Surcharge, if any) + Congestion charges, if any,** as notified by CERC from time to time.

or

Large supply (LS) Tariff + Highest PLEC (Peak Load Exemption charges) Rate during evening peak load hour period and highest tariff for any permanent consumer category during balance non-peak load hour period

(Tariff at that point of time as approved by the Commission in the Tariff Order for that year).

**Whichever is higher.**

*However, the under injection (in case of open access customers) will be loaded with the intra-State T&D losses determined by the Commission in its Tariff Order for that year, before calculating the payable amount.*

- 1.9 Section- 14.1.5 of State Grid Code, 2013 was also proposed to be amended as under:-

*"For the purpose of preparation of energy accounts, the joint meter reading(s) taken on 1st of every month at inter connection points between STU / transmission licensee and SGS or any IPP or CPP or Open Access Customers and between STU/ transmission licensee and Distribution Licensees or between two distribution licensees shall be conveyed to SLDC by 5th of every month. The UI/ Deviation Settlement energy account shall be prepared by SLDC as per ABT regime based on CERC (Unscheduled Interchange charges & related matters) Regulations, 2009, since replaced (upto 16.02.14)/ CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014 (w.e.f. 17.02.14 onwards), as amended from time to time.*

*However, the UI/ Deviation Settlement/ Imbalance Charges energy account for open access customers/ generators and IPPs selling power to distribution licensee shall be prepared in line with the provisions of PSERC (terms & conditions for intra state open access) Regulations, 2011, as amended from time to time."*

1.10 It was further proposed to incorporate the term "*Deviation Settlement*" (*w.e.f 17.02.14 onwards*) along with "*Unscheduled Interchange*" (*upto 16.02.14*) in PSERC (Terms & Conditions for Intra State Open Access) Regulations, 2011& Open Access Procedures approved by Hon'ble PSERC.

The Commission vide Order dated 07.05.2014 while admitting the petition, decided that PSPCL, Nabha Power Ltd. (NPL), Talwandi Sabo Power Ltd.(TSPL) & GVK be made respondents. The Respondents were asked to file comments by 20.05.2014 & the petitioner was directed to file proposed amendments in Open Access Regulations and State Grid Code with justification in annotated form with copy to the respondents by 20.05.2014. The petition was fixed for hearing on 27.05.2014.

The petitioner filed the revised petition along with proposed amendments in annotated form vide CE/SLDC, PSTCL Memo. No. 3325 dated 19.5.2014. The amended proposal submitted by PSTCL is as under:

Open Access by a Generator/Trader/ Sale by IPPs to distribution licensee

a) Over injection

*In the event of over injection for any 15 minute time block, IPP will be paid by the distribution licenses as under:*

***UI / Deviation Settlement charges, as notified by CERC from time to time.***



or

*Applicable lowest tariff for any permanent category/sub-category determined by the Commission in its Tariff Order for that year.*

or

*Sale Price of Open Access Generator/Trader/PPs*

***Whichever is lower.***

b) Under Injection

*In the event for under injection for any 15 minute time block the distribution licensees will be paid by generator/ trader/ IPP, as under:*

***UI / Deviation Settlement charges + Congestion charges, if any, as notified by CERC from time to time.***

or

*Highest Tariff Rate for any permanent consumer category during peak load & non-peak load hour period*

*(Tariff at that point of time as approved by the Commission in the Tariff Order for that year).*

***Whichever is higher.***

*However, the under injection will be loaded with the applicable intra-State T&D losses determined by the Commission in its Tariff Order for that year, before calculating the payable amount.*

Section- 14.1.5 of State Grid Code, 2013 is proposed to be amended as under:-

*"For the purpose of preparation of energy accounts, the joint meter reading(s) taken on 1st of every month at inter connection points between STU / transmission licensee and SGS or any IPP or CPP or Open Access Customers and between STU/ transmission licensee and Distribution Licensees or between two distribution licensees shall be conveyed to SLDC by 5th of every month. The UI/ Deviation Settlement energy account shall be prepared by SLDC as per ABT regime based on CERC (Unscheduled Interchange charges & related matters) Regulations, 2009, since replaced (upto 16.02.14)/ CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014 (w.e.f. 17.02.14 onwards), as amended from time to time.*

*However, the UI/ Deviation Settlement/ Imbalance Charges energy account for open access customers/ generators and IPPs selling power to distribution licensee shall be prepared in line with the provisions of PSERC (terms & conditions for intra state open access) Regulations, 2011, as amended from time to time."*

It is also proposed to incorporate the term "*Deviation Settlement*" (w.e.f 17.02.14 onwards) along with "*Unscheduled Interchange*" (upto 16.02.14) in PSERC (Terms & Conditions for Intra State Open Access) Regulations, 2011& Open Access Procedures approved by Hon'ble PSERC.



Talwandi Sabo Power Ltd vide letter dated 24.05.2014, Nabha Power Ltd. vide its letter dated 26.05.2014 requested for grant of more time to file reply. Meanwhile PSPCL vide CE/ARR&TR Memo No. 5648 dated 26.05.2014 filed its reply wherein following amendments in the proposal of PSTCL were recommended:

2.1 Open Access by a Generator/Trader/ Sale by IPPs to distribution licensee

a) Over injection

*In the event of over injection for any 15 minute time block, IPP will be paid by the distribution licenses as under:*

*UI / Deviation Settlement charges, as notified by CERC from time to time.*

*or*

*Applicable lowest tariff for any permanent category/sub-category determined by the Commission in its Tariff Order for that year.*

*or*

*Sale Price of Open Access Generator/ Trader (not applicable in case of IPPs)*

***Whichever is lower.***

b) Under Injection

*In the event for under injection for any 15 minute time block the distribution licensees will be paid by generator/ trader/ IPP, as under:*

*UI / Deviation Settlement charges (including additional charges, if any) + Congestion charges, if any, as notified by CERC from time to time.*

*or*

*Highest Tariff Rate for any permanent consumer category during peak load & non-peak load hour period*

*(Tariff at that point of time as approved by the Commission in the Tariff Order for that year).*

***Whichever is higher.***

*However, the under injection will be loaded with the applicable intra-State T&D losses determined by the Commission in its Tariff Order for that year, before calculating the payable amount.*

During hearing on 27.05.2014, all the three IPPs sought time to file reply. The Commission in its Order dated 29.05.2014 directed the IPPs to file their comments by 10.06.2014 and petitioner was to file rejoinder by 17.06.2014. The petition was fixed for hearing on 24.06.2014.

Talwandi Sabo Power Ltd. sought extension of time by one week vide e-mail dated 09.06.2014. Nabha Power Ltd. also requested to grant 10 days more to file comments vide letter dated 10.06.2014. However, GVK filed its reply vide letter dated 10.06.2014 and submitted as under:

3.1 As per Power Purchase Agreement (PPA) entered between erstwhile Punjab State Electricity Board & GVK Power dated 26.05.2009 (PPA), the deviation from schedule shall be

accounted through Unscheduled interchange (UI) charges as detailed in Grid Code and ABT.

3.2 The objective of UI regulations as notified by CERC (Deviation Settlement Mechanism and Related Matters) Regulations 2014, is to maintain grid discipline and grid security as envisaged under the Grid Code through commercial mechanism for Deviation Settlement through drawal and injection of electricity by the users of the grid.

3.3 The commercial arrangements by CERC for grid discipline is frequency linked and not based on actual cost of power or tariff. The charges for the deviation from schedule are linked with grid frequency prevailing in the time block in which deviation has taken place and the UI vector has a continuous sliding scale providing higher compensation for over-injection (or withdrawal less than schedule) at lower frequencies and lower compensation for under-injection (or withdrawal more than schedule) at higher frequencies. This helps in supporting the grid frequency at desired level.

3.4 Linking the Unscheduled Interchange (UI) /Deviation Settlement charges with the proposed mechanism at para 12 & 14 of petition will not be consistent with CERC regulations and will not facilitate over injection at lower frequencies as the payment for over injection is restricted to UI/Deviation settlement charges as notified by CERC (or) applicable lowest tariff for any permanent category/sub-category determined by the Commission in its Tariff Order for that year (or) Sale price of Open Access Generator/ Trader, whichever is lower and is further reduced on account of Intra-state T&D losses.



Similarly, in case of higher frequency, about 50 Hz in particular, the generator would not be able to cut generation and under-inject the power to bring down the grid frequency as the UI charges which a generator shall be required to pay is based on the UI/Deviation Settlement Charges & Congestion charges, if any, as notified by CERC (or) highest tariff for any permanent category approved by the Commission in its Tariff Order for that year, whichever is higher and is further loaded with the Intra-state T&D losses. This may lead to a situation in which the generator may be required to pay the amount of under-injection more than the fuel cost saved by the generator and will be a deterrent to cut generation at higher frequencies.

3.5 Further, sub-clause 12.4.3 of Punjab State Grid Code Regulations, 2013, states that

*“When the frequency is above 50.2Hz, the SGS may (at their discretion) back down up to 5% or higher value (if pre-advised by SLDC) without waiting for an advice from SDLC to restrict the frequency rise. When the frequency falls below 49.8 Hz, the generation at all SGS (except those on peaking duty) shall be maximized, at least up to the level to which can be sustained, without waiting for an advice from SDLC subject to the condition that such increase does not lead to unacceptable line loading or system parameters to deteriorate beyond permissible limit”.*

Under, the proposed arrangements for UI/Deviation settlement, it shall not be possible for generating station to adhere to the above provisions of the Grid Code.

3.6 The Electricity Act 2003, Section 86 sub-section (1) clause (h) provides that State Commission shall specify State, Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of Section 79, i.e. Indian Electricity Grid Code (IEGC) as notified by Central Electricity Regulatory Commission(CERC). Accordingly consistent with the provisions of IEGC, PSERC specified Punjab Grid Code. IEGC further lays down that UI charges and modalities of UI settlement shall be in accordance with UI Regulations of CERC. Thus the IEGC and the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulation 2014, for settlement of deviations are intra-related regulations. Therefore, the terms and conditions of the UI/ Deviation settlement mechanism as proposed would amount to inconsistency with Indian Electricity Grid Code.

3.7 As per PPA, ABT means all the regulations contained in Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations as applicable and that UI charges shall have the meaning ascribed thereto in Rule 24 of the CERC (Terms and Conditions of Tariff) Regulations as applicable and that Unscheduled Interchange (UI), charges shall be governed by the relevant regulations specified by the Commission from time to time. Accordingly, in case of GVK Power (Goindwal Sahib) Limited, the deviation from schedule is to be accounted for and settled as per CERC (Deviation Settlement Mechanism and Related Matters) Regulations 2014 w.e.f. 17.02.2014, as applicable.

Talwandi Sabo Power Ltd. filed its reply vide letter dated 17.06.2014 and made following submissions:

- 4.1 The petition has been filed by SLDC/PSTCL whereas the SLDC and the STU perform two very different functions and the SLDC is not a commercial organisation and cannot act at the behest of or for the benefit of the State Discom.
- 4.2 The Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009 (hereinafter referred to as the "CERC UI Regulations"), came into force w.e.f. 1.4.2009. Various conditions were specified in the CERC UI Regulations in order to ensure that the generating stations, as far as possible, generate electricity as per the day-ahead generation schedule finalised by the Regional Load Despatch Centre in accordance with Grid Code.

The aforesaid Regulations were subsequently repealed and a new mechanism has been put into place by the Central Commission through the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014, (hereinafter referred to as the "CERC Deviation Settlement Mechanism Regulations). These Regulations came into force on 17-02-2014 and are applicable only to sellers and buyers involved in the transactions facilitated through short-term open access or medium-term open access or long-term access in inter-State transmission of electricity. Thus, the new regulations are applicable to inter-State transmission open access transactions. Therefore, deviation from the schedule



generation/drawal, in the case of open access transactions is governed by the new regulations.

4.3 PSERC Open Access regulations are applicable only to open access transactions in the State. The amendments proposed by the Petitioner incorrectly and arbitrary attempt to categorize the IPPs supplying their entire power to the State Discom on the same footing as an open access customer or a generating company supplying power directly to a consumer in the State through open access.

4.4 The proposed amendment is illegal and arbitrary for the following reasons:

- a) An IPP supplying its entire generation to the distribution licensee in the State cannot be categorised as a generator supplying electricity to a consumer through open access;
- b) While the Petitioner has proposed amendments to deal with issues arising out of imbalance due to IPPs, no such amendments has been proposed by the Petitioner for State owned generating companies which is discriminatory and contrary to the provisions of the Electricity Act, 2003;
- c) The power purchase agreement dated 01.09.2008 executed between TSPL and PSPCL clearly provides that the variation between Schedule Energy and actual energy at the Delivery Point shall be accounted for through Unscheduled Interchange (UI) Charges as detailed in the Grid Code and ABT. Under clause 14.1.5 of the (Punjab State Grid Code) Regulations, 2013, UI energy account has to be prepared by SLDC

as per ABT regime on the basis of the CERC (Unscheduled Interchange charges & related matters) Regulations, 2009. Thus, with the repeal of the CERC UI Regulations by the CERC Deviation Settlement Mechanism Regulations, the Grid Code stands modified/amended to that extent. Any further amendments/changes sought to be proposed by the Petitioner amount to an amendment of the PPA dated 01.09.2008

4.5 The licensee is attempting to obviate the provisions of the CERC (Unscheduled Interchange and Related Matters) Regulations/Deviation Settlement Mechanism Regulations. The PPA was executed on 01.09.2008 and PSERC OA Regulations were notified on 01.07.2011 whereas the State Grid Code was notified on 14.02.2013. By the proposed amendments, the Petitioner is attempting to levy additional penalty/charges than those specified under the CERC Regulations. The proposed amendments, if permitted, will amount to a change in law and will entitle the Respondent to due compensation, in terms of the PPA.

4.6 The CERC Deviation Settlement Mechanism Regulations clearly specifies the charges payable for over drawal/under-injection/under-drawal/over-injection. Thus, imposition of any charges or penalty over and above the UI rates specified under the CERC Deviation Settlement Mechanism Regulations is arbitrary and unjust. It amounts to an amendment to the PPA executed between PSPCL and TSPL which is based on the Standard Bid Documents and the proposed amendment is an attempt to modify the legal

regime forming the basis for the terms of the PPA. The Petitioner or PSPCL cannot be permitted to alter that position now.

- 4.7 The Petitioner (for and on behalf of PSPCL) will be paid UI charges from the Regional Deviation Pool Account Fund in accordance with the CERC Deviation Settlement Mechanism Regulations, while the IPPs will be paid lower compensation and levied higher penalty, as per the proposed amendments. Thus, the proposed amendments will only facilitate unjust enrichment of the Petitioner at the cost of the IPPs in the State.

In addition, the respondent raised the same issues as have been stated in para 3.2 to 3.4 above.

Nabha Power Ltd. vide letter dated 18.06.2014 requested for adjournment of the hearing scheduled for 24.06.2014 and three weeks' time to file its reply. During hearing on 24.06.2014, the Commission observed that PSPCL, GVK & TSPL have filed replies but NPL has sought time. The Commission vide Order dated 24.06.2014 directed NPL to file reply by 15.07.2014 and PSTCL/PSPCL to file their rejoinder by 30.07.2014 and supply advance copy to each other and other respondents. The matter was listed for hearing on 05.08.2014.

Nabha Power Ltd. vide letter dated 15.07.2014 submitted the following reply:

- 5.1 The present Petition ought to be dismissed on the following grounds:



- (a) The PPA between the Petitioner and Respondent No.2 provides that the UI energy accounts will be prepared as per the UI Regulations.
- (b) The UI Regulations have been replaced by the Deviation Settlement Regulations.
- (c) The Regulation 14 of the Deviation Settlement Regulations specifies that after repeal of the UI Regulations, all references to the UI Regulations will mean the Deviation Settlement Regulations.
- (d) There is a regulatory framework in place for preparation and settlement of UI energy account in the form of Deviation Settlement Regulations.

In light of the foregoing, there is no requirement for amendment to the existing PSERC Regulations to make them applicable to IPPs.

5.2 Regulation 14 (2) of the Deviation Settlement Regulations states as under:

*“On commencement of these Regulations, any reference to the CERC (Unscheduled Interchange charges and related matters) Regulation, 2009 in any of the Regulations, Standards, Codes or Procedures of the CERC shall be deemed to be replaced by CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014”*

5.3 In terms of Section 8(1) of the General Clauses Act, 1897, any reference to the UI Regulations after the date of repeal

thereof will mean the Deviation Settlement Regulations. Section 8(1) of the General Clauses Act is reproduced below:

*“Where this Act, or any Central Act or Regulation made after the commencement of this Act, repeals and re-enacts, with or without modification, any provision of a former enactment, then references in any other enactment or in any instrument to the provision so repealed shall, unless a different intention appears, be construed as references to the provision so re-enacted.”*

- 5.4 The prime objective of the UI Regulations which have been replaced by the Deviation Settlement Regulations, is to maintain grid discipline and grid security as envisaged under the Grid Code through the commercial mechanism of Unscheduled Interchange Charges/Deviation Settlement through drawl and injection of electricity by the users of the grid.
- 5.5 As per the PSERC Grid Code, the settlement of the UI energy account will be as per UI Regulations which have been replaced by the Deviation Settlement Mechanism. In light of the same, there is no requirement for amendment to the PSERC Regulations.
- 5.6 The CERC Deviation Settlement Regulations will apply for the determination of UI Charges as per the terms of the PPA & State Grid Code and the Open Access Regulations will not apply. CERC has the power to specify the Grid Code, since the Grid is not confined to intra-state transmission lines but

also extends to inter-state transmission lines. The Supreme Court in the 2007 judgement held as follows:

“...The various sections under the Electricity Act would clearly show beyond any doubt the powers of the Central Commission and jurisdiction in regard to the Grid, the scheduling and dispatch.

*Under Section 79(1)(h) the Central Commission has the power to specify the Grid Code. It also provides that the function of the State Commission to specify the State Grid Code under Section 86(1)(h) should be consistent with the Grid Code specified by the Central Commission and therefore the power of the State Commission is subservient to the power of the Central Commission.”*

5.7 As per the terms of the PPA and the State Grid Code, the UI Regulations were to be followed in order to determine any variation between the Scheduled Energy and Actual Energy at the Delivery Point in the Grid, through UI Charges. The UI Regulations have subsequently been replaced by the Deviation Settlement Regulations by CERC. It is submitted that the Open Access Regulations will not be applicable and there is no need for UI Charges to be determined in terms of the Open Access Regulations. By operation of Regulation 14 of the Deviation Settlement Regulations, the said Regulations will be applicable for settlement of UI energy accounts of the Respondent.

In addition, the arguments appearing in para 3.2 to 3.4 were also mentioned in the reply of NPL.



PSTCL vide CE/SLDC Memo No. 4953 dated 30.07.2014 filed the rejoinders to the replies of IPPs. The preliminary objections filed by PSTCL for all the IPPs are common and are as under;

6.1 Under section 181 of the Act, the State Commission has the power to make regulations and further as per Clause No. 42 of the Statement of Reasons dated 06.03.2012 to the CERC (Unscheduled Interchange and Related Matters) (Second Amendment) Regulations, 2012 *"UI is computed at the inter-State boundaries and as such, any State is free to have its own ABT Regulation for the Intra-state entities."*

Therefore there is need for the State of Punjab to have its own UI/ Deviation Settlement Mechanism for intra-state entities considering the specific aspects of the State with respect to the consumers and discom.

6,2 As per Regulations 30 (4) & 30 (5) of CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009, as amended from time to time

*"(4) Any mismatch between the scheduled and the actual drawal at drawal points and scheduled and the actual injection at injection points for the intra-State entities shall be determined by the concerned State Load Despatch Centre and covered in the intra-State Unscheduled Interchanges accounting scheme.*

*(5) Unless specified otherwise by the State Commission concerned, the Unscheduled Interchanges rate for intra-State entity shall be 105% (for overdrawals or under generation) and 95% (for under-drawals or over generation) of the Unscheduled Interchanges rate at the periphery of regional entity."*

Regulations 20 (4) & 20 (5) of CERC (Open Access in Inter-State Transmission), Regulations, 2008, as amended from time to time, clearly indicates that State Commission can specify Unscheduled Interchange charges/ deviation charges for intra-state entities.

6.3 As per Regulation 2 of the CERC (Unscheduled Interchange and related matters) Regulations 2009, the UI settlement mechanism is to apply to generating stations whose tariff has been determined under Section 62(1)(a) by the CERC (as defined in Regulation 2(f)) or to a person, other than a generating station, supplying electricity, through a transaction scheduled in accordance with the regulations applicable for short term open access, medium term open access and long term access (as per Regulation 2(d), 2(e) and Regulation 4). In the present case, the CERC has not determined the tariff for the IPPs. In fact, the tariff for supply of power from the IPP to the distribution licensee has been discovered through competitive bidding under Section 63 of the Electricity Act and adopted by this Hon'ble Commission. Therefore, the CERC (Unscheduled Interchange and related matters) Regulations 2009, have no applicability to the IPPs in the present case.

6.4 Regulation 2(p) of the CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014 define seller as a person, including a generating station, supplying electricity through a transaction scheduled in accordance with the regulations applicable for short-term open access, medium term open access and long term open access. Moreover, as per Regulation 4 of aforementioned regulations, these regulations shall be applicable to sellers and buyers involved in the transactions facilitated through short-term open access or medium-term open access or long-term access in inter-State transmission of electricity. So argument of IPPs that the provisions of Open Access Regulations, 2011 will not apply to them as they have not availed open access is misplaced. The IPPs cannot approbate and reprobate at the same time. It cannot argue that it is bound by the CERC Deviation Settlement Mechanism, 2014 and also that it is not availing open access. If the IPPs are bound by the CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014, it will be understood that the IPP is availing open access and for intra-state imbalances will be bound to pay imbalance charge under the PSERC (terms & conditions for intra state Open Access) Regulations, 2011.

6.5 The amendments proposed by the petitioner (SLDC) are in line with the provisions of PSERC (terms & conditions for intra state open access) Regulations, 2011 and same are justified. The Sale Price of the IPP (especially Variable/Energy charge) should be included (especially while working



out the UI/ deviation charges for over-injection) in order to discourage/ avoid gaming by the IPPs

6.6 The Minimum Tariff Rate of any permanent category/ sub-category should be included (especially if blended fuel not supplied under APM is being used by the IPP), while working out the UI/ deviation charges for over-injection. Because, it is possible that the IPP, by over-injecting (upto 12% of the schedule or 150 MW, whichever less) at frequency below 49.70 Hz is earning UI/ Deviation Charges @ 824.04 Paise/ KWh, whereas by using the over-injected power for supplying to/ relaxing power cuts on any category, PSPCL may earn benefit as low as @ Minimum Tariff (presently 425 Paise/ KWh for AP- High technology, Compost Plants/Solid Waste Management Plants for Municipalities/ Urban Local Bodies as per Tariff Order for F.Y. 2013-14).

6.7 The Highest Tariff Rate of any permanent category/ sub-category should be included, while working out the UI/ deviation charges for under-injection because in case of under-injection by IPP, power cuts/ restrictions are likely to be imposed on various categories of consumers, thus causing revenue loss to PSPCL. Similarly, in case of under-injection by IPPs during peak load hours, restrictions on the industrial consumers are likely to increase, thus causing revenue loss on account of LS Tariff charges recoverable from industrial consumers + Peak Load Exemption Charge (PLEC). In such cases, the loss incurred/ burden on PSPCL is likely to pass on to all categories of consumers, thus resulting into hike in tariff

6.8 in case of under-injection by the IPP using SECL fuel supplied under APM, the UI/ deviation rate to be charged being restricted to the Cap Rate of 303.04 Paise/kWh (if under-injection is upto 12% of the schedule or 150 MW, whichever less), resulting into financial loss to the distribution licensee (PSPCL), because in such case of under-injection by IPP, PSPCL has to over-draw from grid, for which there is no cap rate (Rates as high as 824.04 Paise/kWh at frequency below 49.70 Hz).

PSTCL filed the following rejoinder to reply of GVK:

7.1 CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014 are applicable only to sellers and buyers involved in the inter-State transmission of electricity. The matter in the petition is related to intra state transmission of electricity and Regulation 2 of PSERC (terms & conditions for intra state open access) Regulations, 2011, clearly mentions that these regulations shall apply to open access for use of intra-state transmission system.

7.2 The price table of said CERC regulations is only applicable for buyers/ beneficiaries and sellers/ generators, wherein the fuel used by the generator is not supplied under Administered Price Mechanism (APM). Though in case of M/s GVK and other 2 no. IPPs, as mentioned in the petition, most of the fuel is being supplied under Administered Price Mechanism (APM) and the UI/ deviation charges in such cases shall be restricted to the Cap Rate as provided in Regulation 5 (1) (i) of the said CERC regulations.

7.3 CERC (Deviation Settlement Mechanism & related matters) Regulations 2014, itself permits deviation (over-injection/ under-injection) upto 12% of the schedule or 150 MW, whichever is less, and payment for over-injection upto 12% of the schedule/ 150 MW (whichever is less) shall be restricted to the Cap Rate of 303.04 Paise/kWh (in case of fuel supplied under APM), which is already lesser than the applicable lowest tariff for any permanent category. There will be no payment for over-injection more than 12% of the schedule/ 150 MW (whichever is less), as per said CERC regulations. It is also clarified that as per the proposal made in the petition, the amount payable for over-injection is not reduced on account of Intra-State T&D losses, as projected by M/s GVK in its reply.

7.4 As per Section- 181 of Electricity Act, 2003, PSERC has power to make regulations, which includes determination of charges for UI/ deviation/ imbalance, applicable within the State of Punjab. The proposal submitted by SLDC is in line with the provisions of PSERC (terms & conditions for intra state open access) Regulations, 2011, already issued by PSERC for intra-state entities. Moreover, specifying rates for UI/ deviation in line with Electricity Act 2003, as already done by PSERC in case of open access customers, shall not result in any inconsistency with IEGC.

7.5 The IPPs, being intra state entities, are subjected to scheduling, dispatch and other coordination activities being performed by SLDC under the regulations framed by the Hon'ble PSERC. Further, as submitted in preliminary



submissions, the Hon'ble Commission has jurisdiction under Electricity Act to determine and decide on the aspects of imbalance charges within the State of Punjab for the intra-state entities.

PSTCL filed the following rejoinder to reply of Talwandi Power Ltd.

- 8.1 SLDC, being the nodal agency for energy accounting as per clause 14.1 of State Grid Code, 2013, has filed this petition in line with appropriate act/ regulations to overcome the losses to the State Discom resultantly to the Consumers on account of under-injection/ gaming by IPPs. The petitioner (SLDC/ PSTCL) has filed this petition in compliance to Commission memo no. 3154-55 dated 12.03.14 and decision of Commercial & Metering Committee taken during 12th meeting held on dated 28.03.2014.
- 8.2 Regulation 2 "Extent of Application", as reproduced by M/s TSPL in its reply, mentions that these regulations shall apply to open access for use of intra-state transmission system and M/s TSPL is using the 400 kV intra-state transmission system to supply power to State discom (PSPCL).
- 8.3 Till date, the Supply and Wire business in the State of Punjab has not been segregated in line with the provisions of Electricity Act, 2003 and PSPCL owns both generation & distribution business. This is the reason that why the PSPCL owned generators are not being covered under ABT (Availability Based Tariff) mechanism, as any deviation/ UI by

PSPCL owned generators are to be charged/ paid by PSPCL (being the State Discom) itself.

8.4 Denied that the amendments/ changes proposed by the petitioner shall amount to an amendment of PPA is not true, because as per the Clause 1.2.6 of Schedule 7 of PPA “the UI charges shall be as per Grid Code and ABT.” Further, the amendments in State Grid Code has been proposed without changing/ altering the provisions of PPA in line with appropriate act/ regulations.

8.5 The statement that ABT and UI are to be governed by CERC Regulations and amendments sought by PSTCL in PSERC OA Regulations & State Grid Code are unjust and arbitrary have been denied because for the generators embedded within the State of Punjab, regulations issued by the Commission are applicable. As per Section-62 & Section- 86 of Electricity Act, 2003, the Commission is responsible for determining tariff in respect of Consumers and generators within the state and as per Section- 181 of Electricity Act, 2003, it has power to make regulations, which includes determination of charges for UI/ deviation/ imbalance, applicable within the state of Punjab.

8.6 Admitted that the commercial arrangement for grid discipline is not related to cost of power prevailing in the market or the tariff for any consumer category and the charges for variation are linked to the grid frequency prevailing in the time block of deviation only as per CERC Regulations. However, the same is completely not true in case of generators using fuel

supplied under Administered Price Mechanism (APM), where Cap Rate of 303.04 paise/ unit is applicable on both under-injection and over-injection of power as per CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014 applicable w.e.f. 17.02.2014).

As in case of M/s TSPL and other 2 no. IPPs, as mentioned in the petition, most of the fuel is being supplied under Administered Price Mechanism (APM) and the UI/ deviation charges in such cases shall be restricted to the Cap Rate as provided in Regulation 5 (1) (i) of the said CERC regulations

PSTCL filed the following rejoinder to reply of Nabha Power:

9.1 NPL's interpretation of the Hon'ble Supreme Court's judgment cited in its reply cannot be subscribed upon, since the same was based upon its peculiar facts and circumstances. The interpretation aims to question the very essence of the concept of UI as a commercial mechanism to ensure grid discipline which has been authoritatively settled by the Hon'ble Supreme Court and therefore, the submissions are devoid of any merit.

9.2 Further, the objective of the UI mechanism needs to be clearly understood and appreciated. CERC in its Statement of Reasons explaining the various provisions of UI regulations 2009 has stated as follows:

“UI pricing is expected to serve the twin objectives of specifying settlement rate for deviations from schedules in normal operating range and ensuring ‘grid



discipline' on the one hand while ensuring maximization of generation at optimal cost for grid participants on the other. Further, UI pricing mechanism should discourage grid participants from using UI mechanism as trading instrument."

9.3 Moreover, the IPPs are under no compulsion to under-inject/over-inject into the grid. If they adhere to their respective schedules, then there shall be no UI liability accruing to them whatever may be the grid condition.

PSPCL vide CE/ARR&TR Memo No. 5912 dated 04.08.2014 filed its rejoinder and while re-iterating the submissions made by the petitioner, submitted the following additional averments:

10.1 PSPCL is supporting the submissions made by the Petitioner for amendment of the State Grid Code and the Open Access Regulations, 2011 in view of the Section 32 of the Electricity Act. The Commission is entitled under the Electricity Act to determine and decide on aspects of imbalance charges within the State of Punjab for the intra-state entities as all issues within the State are within the sole jurisdiction of the Commission.

10.2 The submissions made by IPPs that the current amendments are not applicable to them in view of Clause 1.2.6, Schedule 7 of their respective PPAs with the distribution licensee is untenable in law. The IPPs have submitted that as per the aforementioned clause, they are to be governed by the UI Regulations, 2009 as amended from time to time. The IPPs

have further submitted that the provisions of Open Access Regulations, 2011 will not apply as the IPPs are not seeking open access. As per Regulation 2 of the UI Regulations, 2009, the UI settlement mechanism is to apply to generating stations whose tariff has been determined under Section 62(1)(a) by the CERC and in the present case, the CERC has not determined the tariff for the IPPs. In fact, the tariff for supply of power from the IPP to the distribution licensee has been discovered through competitive bidding under Section 63 of the Electricity Act and adopted by this Hon'ble Commission. Therefore, the UI Regulations, 2009 have no applicability to the IPPs.

10.3 The Commission is fully entitled to frame its own deviation settlement mechanism applicable to the IPPs and such other intra-state entities as decided by the Commission. The powers of the Commission under the Electricity Act that too for aspects for deviation settlement and protection of the State Grid cannot be restricted by virtue of PPA. The Commission being vested with regulatory powers which includes legislative powers in respect of framing Regulations and Codes, the IPPs are bound by such authority and powers of the Commission.

10.4 The role of the CERC is only with regard to the inter-state grid and upto the State periphery. All aspects within the State are within the sole jurisdiction of the Commission. Even under the CERC UI Regulations, the generators were paid a capped UI tariff for over-generation, even though the amounts payable by the defaulting entity was frequency

linked and higher than the capped tariff. In the case of CERC, since the consumer tariff is not determined the amounts were kept for the purposes of transmission development. However, for intra-state purposes, the difference in amounts will be directly passed on to the consumers in the retail supply tariff. The generators cannot claim that they should be paid the same amount for over-generation as being levied for under-generation in case of deviation of schedule. In case of continuous under-injections by IPPs, PSPCL may also resort to costly power purchases via. Intra Day/ contingency power purchase, in order to balance the energy lost on account of under-injection by IPPs, which may result into further financial loss to PSPCL.

10.5 in case of under-injection by the IPP using SECL fuel supplied under APM, the UI/ deviation rate to be charged being restricted to the Cap Rate of 303.04 Paise/kWh (if under-injection is upto 12% of the schedule or 150 MW, whichever less), resulting into financial loss to the distribution licensee (PSPCL), because in such case of under-injection by IPP, PSPCL has to over-draw from grid, for which there is no cap rate (Rates as high as 824.04 Paise/kWh at frequency below 49.70 Hz). Thus the major loss to PSPCL will be on account of difference in UI/deviation charges on account of cap rate allowed to IPPs being supplied fuel under APM.

After hearing the petitioner and the respondents on 05.08.2014, the Commission directed the parties to file their written arguments by 14.08.2014. Further PSTCL was directed to



ascertain whether any State Commission has notified its Intra-State UI regulations and to submit report by 02.09.2014. TSPL filed its written note during hearing. The petition was fixed for further hearing on 09.09.2014.

Talwandi Sabo Power Ltd. while re-producing most of the arguments put forth in its reply/rejoinder, made following additional submissions in the written note.

11.1 A bare perusal of the provisions of the PPA clearly establishes the intent of the parties to be governed by the CERC Regulations on the issue of ABT and UI. Further, the PPA provides that variation between Scheduled Energy and actual energy at the Delivery Point shall be accounted for through Unscheduled Interchange (UI) Charges as detailed in the Grid Code and ABT.

The Petitioner is erroneously treating the UI/ Deviation mechanism as a purely commercial transaction devoid of any purpose. The explanation given by the Petitioner that as PSPCL owns both generation and distribution business and any deviation/UI by PSPCL will be charged and paid by PSPCL, is without considering the fact that UI/Deviation Settlement is a mechanism to ensure grid discipline and safety and is not a mere commercial transaction. Exemption of State generating companies from the ABT regime is a blatant aberration, which ought to be severely reprimanded.

11.2 Admitted that any amendments/modification of the CERC Regulations will not be a change in law, as per the terms of the PPA. However, the entire mechanism of UI/Deviation

Settlement cannot be permitted to be altered indirectly misinterpreting the provisions of the PPA.

11.3 The charges for variation are linked to the grid frequency prevailing in the time block in which the deviation has take place. However, the mechanism proposed by the Petitioner is not related to frequency. It fails to incentivize the generator to under-inject in case of higher frequencies or to over-inject in case of lower frequencies. Linking the deviation penalty/incentive with consumer tariff is incorrect in as much as consumer tariff has various inbuilt inefficiencies which cannot be linked with unscheduled interchange charges/deviation settlement charges.

11.4 The Petitioner has incorrectly alleged applicability of the Capped Rate of 303.04 Paise/kWh to the Respondent's power plant. The capped rate of Rs.303.04 Paise/kWh, as provided in the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014, is applicable to only those plants which are regulated by CERC. Thus the capped rate of Rs.303.04 Paise/kWh is not applicable to the Respondent's power plant.

11.5 The Petitioner's examples of how a generator may gain by under- injecting in case the frequency is above 50.05 Hz and by over-injecting in case the frequency is below 49.70Hz. has completely lost sight of the purpose of the UI/Deviation Settlement Mechanism Regulations where a generator is supposed to under-inject in case of a frequency

as high as 50.05Hz and over-inject in case of frequency as low as 49.70Hz in order to save the grid.

11.6 The interpretation of the Petitioner, that since the term “person” includes “PSPCL” and TSPL, so TSPL while supplying power to PSPCL, is an open access consumer covered by the PSERC OA Regulations is wrong. Open access by its very meaning is taking supply of electricity from a generating company or any licensee other than the distribution licensee of that area of supply. In the present case, TSPL is supplying its entire generation to the distribution licensee. TSPL’s case is that an IPP supplying its entire generation to the distribution licensee in the State cannot be categorized as a generator supplying electricity to a consumer through open access.

Further, the Petitioner’s contention that TSPL is an open access consumer as it is using the 400kV intra-State transmission system to supply power to PSPCL is wholly misconceived. In terms of the PPA, TSPL is obliged to supply power to PSPCL at the delivery point, which is the power station switchyard. Beyond the switchyard, PSPCL uses the 400 kV intra-State transmission line to evacuate power from the power plant. Therefore, TSPL can in no manner be categorized as an open access consumer.

Nabha Power Ltd. filed its written note vide letter dated 19.08.2014 and while repeating some of the submissions already made in its reply/ rejoinder, submitted the following additional submissions:



12.1 The PPA provides that UI energy accounts will be prepared as per the UI Regulations in terms of schedule 7, Clause 1.2.6 of the PPA read with the definition of Grid Code or IEGC of the PPA and Section 14.1.5 of the Grid Code. The proposal to introduce a new UI Regime will amount to re-opening/unilaterally changing the term of the PPA.

12.2 Section 14.1.5 of the Grid Code states that UI charges shall be determined based on UI Regulations which has been repealed and replaced by the Deviation Settlement Regulations. The proposed amendments by the petitioner are not in consonance with the Deviation Settlement Regulations.

12.3 The proposed UI regulations cannot be made applicable only to Independent Power Producers (“IPPs”) and should be made applicable to all Generating Companies including those owned by PSPCL.

12.4 The process to be followed for amending the Open Access Regulations in terms of section 181(3) of the Act has not been complied with.

12.5 In terms of section 79(1)(h), the CERC has been entrusted the function of specifying the Grid Code having regard to Grid standards. In terms of sections 86(1)(h), the State Commission has been entrusted the function of specifying the State Grid Code which has to mandatorily be in consonance with the Grid Code specified by the CERC. The extant UI mechanism is a frequency-linked regime. The proposed amendments are not linked to grid frequency and

delinking the UI mechanism from grid frequency is contrary to the basic premise of the UI regime.

12.6 The Punjab State Grid is not an independent or isolated grid. The national grid is one integrated grid. The premise of a frequency-linked UI regime is that the grid as a whole operates to ensure that the frequency of grid remains within the stipulated limits. To treat the Punjab State Grid as an independent grid and have a UI regime which is not linked to grid frequency is contrary to the Act and regulations there under. The charges for the deviation from the schedule are linked with grid frequency prevailing in the time block (15 min.) in which the deviation has taken place as may be seen in clause 5(1) of Deviation Settlement Regulations.

12.7 The UI mechanism in the form of proposed amendment to the Open Access Regulations cannot be made applicable to only IPPs. The proposed UI mechanism will have to be made applicable to all power stations in the state of Punjab including state owned power stations. Any UI regime which excludes government owned generating stations will be contrary to Article 14 of the Constitution since such classification is impermissible.

GVK Power Ltd. submitted its written note vide letter dated 22.08.2014 (received on 25.08.2014) and reiterated its submissions filed in its reply and rejoinders.

PSTCL vide CE/SLDC Memo No. 5670 dated 25.08.2014 filed the written note of arguments and only the submissions in

addition to averments already made by the petitioners are reproduced below:

13.1 That the Hon'ble Central Electricity Regulatory Commission (CERC) is framing rules and regulations for generating/transmission companies owned or controlled by the Central Govt. and for those other than owned or controlled by the Central Govt., only if such a company has composite scheme for generation/ transmission and sale of electricity in more than one State. The respondent IPPs are embedded in Punjab grid and are selling 100% power to the PSPCL and therefore same will fall under the jurisdiction of Commission. Thus the rules and regulations framed by this Commission will be applicable to IPPs.

13.2 As per Regulation 2 of CERC (Terms & Conditions of Tariff) Regulations, 2004, as amended from time to time, the provisions of these regulations shall not be applicable where tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government and shall apply only in cases where tariff is to be determined by the Commission based on capital cost.

13.3 The provisions of CERC (Unscheduled Interchange Charges & related matters) Regulations, 2009, as amended from time to time, and CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014, as amended from time to time, shall not apply to these IPPs, as the tariff for supply of power from the IPPs to the distribution licensee has been



discovered through competitive bidding under Section 63 of the Electricity Act.

13.4 Any amendment in regulations by appropriate Commission are applicable to all concerned entities irrespective of any amendment in already executed PPAs. For example if according to the PPA "the UI charges are to be calculated as per Grid Code", the "Grid Code" will be as per Regulations effective as on date and not as per the regulations effective during the time of signing PPA.

13.5 Petitioner admitted that it has inadvertently considered applicability of the capped Rate of 303.04 Paise/kwh to the IPPs. The cap rate of Rs. 303.04 Paise/kwh, as provided in the CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014, is applicable to only those plants which are regulated by CERC and thus shall not apply to these IPPs.

13.6 As per the present dispensation being followed since April, 2010, there is no scheduling and dispatch for the generating stations of the PSPCL as the entire electricity generated within the State, including NRSE projects selling power directly to PSPCL under State NRSE policy, is used by the PSPCL itself for retail supply activities. Even for the electricity procured by PSPCL from interstate/external sources, the activities like scheduling & dispatch, payment of UI charges, Payment of PoC Transmission charges toward usage of interstate lines, etc. are directly coordinated by PSPCL with the NRLDC/NRPC without the involvement of

the SLDC. Only, the scheduling and despatch activities for IPPs are being performed by SLDC in collaboration with PSPCL in order to comply with the provisions of PPA entered by erstwhile PSEB with IPPs. However, if directed by the Commission, scheduling and dispatch activities of state owned thermal plants can be performed by SLDC.

13.7 Section 11.3.13 of State Grid Code deals with mis-declaration of Declared Capability (DC)/ demonstration of DC on directions of SLDC and not with the gaming by the IPPs within the Declared Capability and evading SLDC observation.

CE/SLDC, PSTCL filed the information regarding framing of Intra-State UI Regulations by other states which indicate that only Maharashtra has framed Balancing and Settlement Mechanism based on weighted average system marginal price but the same has been modified with frequency linked regime.

During hearing on 09.09.2014, the Commission heard the views/arguments of the petitioner and the respondents at length and directed all parties to file their reply to the following queries & comprehensive written submissions by 01.10.2014:-

- (i) Is UI rate cap as per CERC (Deviation Settlement and related matters) Regulations, 2014 is applicable in case of IPP's operating in the State of Punjab? If not, the reasons for the same.**

- (ii) If there is no UI rate cap applicable in case of IPP's operating in the State of Punjab, will it resolve the issues raised by the parties during hearing?**

The petition was fixed for further hearing on 14.10.2014.

CE/SLDC, PSTCL filed its reply vide Memo. No. 6614 dated 29.09.2014 and submitted as under:

14.1 As per CERC (Deviation Settlement and related matters) Regulations, 2014 UI rate cap is not applicable in case of IPP's operating in the State of Punjab since the Cap Rate is only applicable to Generating Stations regulated by Hon'ble CERC and using fuel supplied under Administered Price Mechanism (APM). The tariff of these IPPs has been determined through competitive bidding in accordance with the guidelines issued by the Central Government vide gazette notification dated 19<sup>th</sup> January, 2005, as per Section 63 of the Electricity Act,

14.2 The non-applicability of Cap Rate will resolve most of the issues, except that in case of under-injections by IPPs in any time-block, discom will have no control and power will be over-drawn from the grid instantaneously, resulting in grid indiscipline and endangering grid security & stability. Due to which, SLDC as well as discom may also be heavily penalized for over-drawal in excess of permissible limits. Besides, power cuts/ restrictions are likely to be imposed on various categories of consumers.



Talwandi Sabo Power Ltd. filed the following reply vide letter dated 01.10.2014:

15.1 The capped rate of 303.04 Paise/kWh, as approved in CERC (deviation settlement and related matters) regulations, 2014, is not applicable to the Respondent's power plant since it is applicable to only those plants which are regulated by CERC. The respondent's power plant is not subject to the jurisdiction of CERC under section 79 of the Electricity Act, 2003 and therefore the cap will not apply to it.

15.2 No issues will remain between the parties with regard to calculations of UI, as the cap rate is not applicable to the respondent's power plant.

GVK Power Ltd. Submitted the following response vide letter dated 14.10.2014:

16.1 Power Purchase Agreement entered between erstwhile Punjab State Electricity Board & GVK Power (Goindwal Sahib) Limited provides that all variations between actual net injection and schedule injection shall be treated as their respective UI charges which shall be governed by the relevant regulations specified by the CERC from time to time. For the purposes of settlement of deviations w.r.t schedules, all the provisions of CERC shall apply in all respects including the cap on UI charges wherever applicable and the words mentioned in para 5(1)(i) of CERC regulation viz. "the generating station regulated by Commission" would deemed to have been understood as "the generating stations regulated by PSERC".

16.2 The objective of UI regulations as notified by CERC is to maintain grid discipline and grid security as envisaged under the Grid Code through commercial mechanism for Deviation Settlement through drawal and injection of electricity by the user of the grid. However, the cap-rate of 303.04 paisa/kWh specified in the CERC regulation for deviation settlement mechanism will not encourage over-injection at lower frequencies and support the grid by the Punjab IPPs due to the higher variable cost owing to the coal sources being at far off locations and the changed scenario of inadequate coal availability. Therefore, if the cap on the UI charges is removed, it would better meet the objective of UI regulations and also address some of the concerns raised by PSTCL/PSPCL.

Nabha Power Ltd. vide letter dated 01.10.2014 (received on 07.10.2014) made the following submissions:

17.1 The prime objective of the UI Regulations which have been replaced by the Deviation Settlement Regulations is to maintain grid discipline and grid security as envisaged under the Grid Code and the financial gain or loss either of IPP or Respondent is not of much significance.

17.2 Respondent will have to pay very high UI charges to respondent No.1 when a unit trips (UI charges for 100% deviation if one unit was running and UI charges for 50% Deviation if both the units were running). The same is the case of runback, when generation reduces to 40% due to tripping of any auxiliary. It is for this reason that the UI charges have been capped.

17.3 All the provisions of the Deviation Settlement Regulations 2014 which includes the UI rate cap, shall apply in all respects to the IPP's in the State of Punjab. Therefore, the UI cap rate will be applicable in the case Respondent.

17.4 The removal of the Cap is clearly contrary to the terms of the PPA as well as the applicable Regulations including the Grid Code in terms of which respondent No.1 and respondent No.2 have agreed that the CERC Regulation on UI will be applicable.

During hearing on 14.10.2014, the Commission observed that all parties except PSPCL have filed written submission and replies to queries. PSPCL was directed to file the same by 28.10.2014 with copy to other parties. The petition was partly heard and it was decided by the Commission to take up further hearing on 11.11.2014.

Meanwhile PSPCL vide CE/ARR&TR memo. No. 5240 dated 16.10.2014 submitted its written submissions which were mostly repetition of the arguments already made in various rejoinders. PSPCL agreed with the arguments put forth by Petitioner regarding applicability of Capped rate as per CERC regulations.

The petition was taken for hearing on 11.11.2014 and after hearing all the parties, the Commission vide Order dated 13.11.2014 closed the further hearing. The parties were directed to file written submissions by 18.11.2014. The order was reserved.

Nabha Power Ltd. vide letter dated 19.11.2014 filed the additional written submissions wherein various arguments already filed by NPL were reproduced. However following additional averments have been made:



18.1 The applicability of the UI price cap is not germane to the issue of amendment to the Open Access Regulations and for the purpose of the present petition, the Commission is only required to examine whether a UI mechanism is in place.

18.2 During operation of the plant since Feb. 2014, the frequency does not fall to a level where IPPs are encouraged to over-inject. On the contrary if the Unit trips or in case of runback, IPPs have to bear heavy loss if calculated without cap rate. Thereafter, it is essential to retain the UI price cap.

18.3 The Commission may consider a cap rate of 500 paise/kWh since it will incentivize IPPs of injection at low frequency and ensure that IPPs are not penalized heavily in case of unit tripping or run back.

### **Findings and Decision of the Commission**

After hearing the arguments of all the parties and taking note of various submissions made in their replies/rejoinders, the Commission short list the following issues for adjudication

1. Is PSTCL competent to file the present petition?
2. Whether Commission is competent to frame Intra-State Deviation Settlement Mechanism for state entities including IPPs of Punjab ?
3. Whether CERC (Unscheduled Interchange charges & related matters) Regulations, 2009, which have been replaced by CERC (Deviation Settlement

Mechanism & related matters), Regulations, 2014 w.e.f. 17.02.2014 or PSERC(Terms & Conditions for Intra-State Open Access) Regulations, 2011 are applicable to IPPs of Punjab for preparing UI energy account/deviation settlement?

4. Are amendments proposed by PSTCL in PSERC(Terms & Conditions for Intra-State Open Access) Regulations, 2011 for deviation charges for over/under injection by IPPs in line with CERC regulations/IEGC/State Grid Code ?
5. Will any amendment in State Grid Code or any other regulations to determine deviation charges for intra-state entities alter the PPAs signed by the distribution licensee with IPPs and tantamount to change of law ?
6. Is UI cap rate specified in CERC regulations applicable to Punjab IPPs?

**Issue no.1. Is PSTCL competent to file the present petition?**

The present petition has been filed by Punjab State Transmission Corporation Limited (PSTCL), which is a State Transmission utility (STU) carrying out the functions of the State Load Despatch Centre (SLDC) under Section 31(1) of the Act for incorporating provisions of charges for over-injection/under-injection by IPPs in Punjab by amending regulation 31(3) of PSERC (Terms & Conditions for Intra-State Open Access) Regulations, 2011 and Section 14.1.5 of the State Grid Code, 2013. The proposal of PSTCL for Intra State UI Regulation is broadly based on the provisions of Imbalance Charges in PSERC

(terms & conditions of Intra State Open Access) Regulations, 2011.

The first argument of IPPs is that PSTCL is not competent to file this petition because of the functions assigned to it as per Section 32 and 39 of the Act.

As explained by the petitioner in its submission, SLDC/PSTCL requested the Commission to formulate Intra State UI regulations, specifically for the Punjab IPPs, so that the same may be followed by SLDC to undertake UI energy accounting etc.. Since SLDC, is the nodal agency for energy accounting according to clause 14.1 of State Grid Code, 2013, so as per the directions of the Commission, a comprehensive proposal was submitted for Intra State UI Regulation to work out the charges for over-injection/under-injection by IPPs for consideration of the Commission. Thus no illegality has been committed by PSTCL in approaching the Commission for removal of any difficulty in the discharge of its functions.

**Issue No. 2: Whether Commission is competent to frame Intra- State Deviation Settlement Mechanism for state entities including IPPs of Punjab?**

Regarding powers of the Commission to formulate intra-State UI Regulations/Deviation Mechanism, the petitioner argued that Section 181 of the Act provides powers to the State Commission to make Regulations consistent with Act which include determination of Charges for imbalance/deviation applicable for the intra-State transactions. CERC frames Regulations for generating/transmission companies for inter-State transactions and UI/Deviation Charges is computed at the inter-



State boundaries. It has been clearly mentioned in Clause 42 of the Statement of Reasons (SoR) dated 06.03.2012 that any State is free to have its own ABT Regulations for the intra-State entities. The respondents did not contest the submissions of the petitioner.

The Commission observed that there is no dispute regarding the powers of the Commission to make Intra-State UI/Deviation Settlement Mechanism for state entities including IPPs embedded in the Punjab Grid and selling 100% power to the distribution licensee. The Commission agrees with the arguments of IPPs that the Intra-state UI/Deviation Settlement Mechanism through any amendment in the existing Regulations/Code shall have to be consistent with the CERC Regulations on Deviation Mechanism and Indian Electricity Grid Code (IEGC)/State Grid Code.

**Issue No.3**

**Whether CERC (Unscheduled Interchange charges & related matters) Regulations, 2009, which have been replaced by CERC (Deviation Settlement Mechanism & related matters), Regulations, 2014 w.e.f. 17.02.2014 or PSERC(Terms & Conditions for Intra-State Open Access) Regulations, 2011 are applicable to IPPs of Punjab for preparing UI energy account/deviation settlement?**

According to PSTCL and PSPCL, the provisions of PSERC (terms & conditions for intra state open access) Regulations, 2011 will apply to these IPPs for determining UI/Deviation Charges, as the IPPs selling power to distribution licensee, are using the 400

kV intra-state transmission system to supply power to State discom (PSPCL) and will be covered under open access as per regulation 2 of PSERC(Terms & Conditions for Intra-State Open Access) Regulations, 2011.

The IPPs contested the interpretation of the Petitioner that they are covered under Open Access Regulations since they are supplying their entire generation to the distribution licensee and such generators cannot be termed as 'Open Access Generators'. The IPPs submitted that as per PPAs signed by PSPCL, deviation from the Schedule is to be settled by CERC (Unscheduled Interchange charges & related matters) Regulations, 2009 as amended from time to time. Regarding using of 400 kV intra-state transmission line to evacuate power from these plants, it was argued that as per PPA, PSPCL is required to get supply at the delivery point which is the power station switchyard of the IPPs. Beyond this switchyard, PSPCL uses the 400 kV intra-state transmission line to evacuate power from the power plant.

★ The Commission agrees with the arguments of the IPPs since as per regulation 2 of PSERC (Terms & Conditions for Intra-State Open Access) Regulation 2011, these Regulations shall apply to open access for use of intra-State transmission system and/or distribution systems of the licensees in the State, including when such system is used in conjunction with inter-State transmission system. As per Note below Regulation 2, a generating company seeking to supply to a consumer/person in the State whose premises is situated within the area of supply of a distribution licensee and intent to use intra-state transmission/distribution system of the licensees in the state shall

have to apply for open access and which shall be governed by Open Access regulations. The interpretation of the petitioner that 'person' referred in the regulation include distribution licensee i.e PSPCL is not correct. The IPPs embedded in the state grid falling in the area of supply of PSPCL and supplying its entire power to the distribution licensee of that area i.e PSPCL cannot be termed as generators availing open access as per PSERC Open Access regulations. Thus as per the existing provisions of the Open Access Regulations, the three IPPs are not covered under the PSERC (Terms & Conditions for Intra state open access) Regulations, 2011. However, it does not debar extending the scope of PSERC Intra-State Open Access Regulations to include IPPs with suitable provisions in line with CERC regulations and State Grid Code for regulating their intra-state UI/Deviation Settlement Mechanism.

Regarding applicability of CERC UI/deviation Settlement Regulations for preparing UI energy account of these IPPs, provisions of PPA and State Grid Code needs to be examined. Punjab State Electricity Board, the predecessor of distribution licensee Punjab State Power Corporation Ltd. (PSPCL) entered into Power Purchase Agreements (PPAs) with the 3 no. IPPs (named M/s Nabha Power Limited (NPL), M/s Talwandi Sabo Power Ltd. (TSPL) and M/s GVK) for supplying entire power generated by these IPPs to PSPCL on long term basis. Whereas the projects NPL & TSPL have been selected through competitive bidding route under Section 63 of the Act but GVK is selected through MoU route under section 62 of the Act. The PPA with NPL



was signed on 18.01.2010 whereas PPA with TSPL & GVK was signed on 01.09.2008 and 26.05.2009 respectively.

According to the IPPs, as per the Clause 1.2.6 of Schedule 7 of PPA, any deviation from the Schedule is to be settled through Unscheduled Interchange (UI) Charges as detailed in the Grid Code and ABT. Further, Section-14.1.5 of State Grid Code, 2013 provides that *The UI energy account shall be prepared by SLDC as per ABT regime based on CERC (Unscheduled Interchange charges & related matters) Regulations, 2009 as amended from time to time. "*

However, both PSTCL & PSPCL argued that CERC UI regulations are not applicable to the IPPs because as per Regulation 2 of the CERC (Unscheduled Interchange charges and related matters) Regulations 2009, the UI settlement mechanism is to apply to generating stations whose tariff has been determined under Section 62(1)(a) by the CERC. Since the tariff for supply of power from these IPPs to the distribution licensee has been discovered through competitive bidding under Section 63 of the Electricity Act and adopted by PSEERC & has not been determined by CERC so the CERC (Unscheduled Interchange and related matters) Regulations 2009, have no applicability to the IPPs in the present case.

According to petitioner, Regulation 4 of CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014 provides that *these regulations shall be applicable to sellers and buyers involved in the transactions facilitated through short-term open access or medium-term open access or long-term access in inter-State transmission of electricity.* The CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014, is

being applied to work out the UI/ Deviation charges in respect of all generating companies engaged in inter-state transmission of electricity (including ISGS/ IPPs) either through short-term open access or medium-term open access or long-term access. However, the matter in the petition relates to Intra-state transmission of electricity which does not fall in the purview of CERC UI Regulations.

The Commission does not agree with the arguments of PSTCL/PSPCL since as per clause 14.1.5 of State Grid Code, 2013, the UI energy account shall be prepared by SLDC as per ABT regime based on CERC (Unscheduled Interchange charges & related matters) Regulations, 2009 as amended from time to time. Thus for the purpose of preparing UI account for Intra-State entities, the Commission has adopted the CERC regulations which shall remain in force till it is amended or the Commission notify Intra-State Deviation Settlement Mechanism.

Secondly, the CERC (Unscheduled Interchange Charges and Related Matters Regulations 2009) have been repealed and replaced with effect from 17.02.2014 with a new mechanism through CERC (Deviation Settlement Mechanism and Related Matters Regulations 2014). As per Regulation 14 (2) of the Deviation Settlement Regulations, after the commencement of these Regulations any reference to CERC UI Regulations 2009 in any Regulation, Standards, Codes or procedures of the CERC shall be deemed to be replaced by CERC (Deviation Settlement Mechanism and Related Matters) Regulations 2014. Thus till 16.02.2014 the CERC UI Regulations 2009 shall be applicable for preparing UI Energy account and thereafter the Deviation

Settlement shall be carried out as per CERC (Deviation Settlement Mechanism and Related Matters) Regulations 2014.

**Issue No.4:**

**Are amendments proposed by PSTCL in PSERC(Terms & Conditions for Intra-State Open Access) Regulations, 2011 for deviation charges for over/under injection by IPPs in line with CERC regulations/IEGC/State Grid Code ?**

The IPPs brought out that the amendments proposed by PSTCL are not in line with the CERC regulations and Indian Electricity Grid Code (IEGC)/State Grid Code.

The objective of CERC UI or Deviation Settlement Mechanism Regulations is to maintain grid discipline as envisaged under Grid Code through commercial mechanism of Unscheduled Interchange/ Deviation charges, according to which over injection at lower frequencies is encouraged by offering higher compensation and lower compensation is payable for under-injection at higher frequencies. Although, the mechanism proposed by the petitioner is also based on UI charges/deviation charges specified in CERC regulations but different cap rates for over-injection & under-injection in terms of tariff rate of some categories of consumers has been prescribed without taking the cost of generation particularly variable cost of generation into account. Such mechanism will not incentivize the generator to under-inject at higher frequencies and over-inject at lower frequencies. The Commission agrees with IPPS that as per the proposed amendments, it shall not be possible for the IPPs to adhere to the provisions of Section 12.4.3 of State Grid Code with regard to the



conditions of backing down of generation at rising frequency and maximizing generation at falling frequency.

Thus the amendments proposed by the petitioner are not consistent with the provisions of CERC regulations and IEGC/State Grid Code and cannot be accepted. Therefore, the Commission directs PSPCL to re-examine the whole issue and if need be, file a fresh comprehensive proposal for Intra-State Deviation Mechanism for IPPs supplying 100% powers to Punjab. However, till Intra-State UI/Deviation Settlement Mechanism is notified by the Commission, the CERC (Deviation Mechanism and Related Matters Regulations 2014 as amended from time to time shall be applicable for preparing UI energy account/Deviation Charges for the IPPs in the State of Punjab.

**Issue No. 5: Will any amendment in State Grid Code or any other regulations to determine deviation charges for intra-state entities alter the PPAs signed by the distribution licensee with IPPs and tantamount to change of law ?**

The IPPs submitted that the petition is an indirect method of altering the terms of PPAs executed between IPPs and PSPCL since as per the provisions of PPAs and State Grid Code, 2013, CERC (Unscheduled Interchange charges & related matters) Regulations, 2009 / CERC (Deviation Settlement Mechanism & related matters) Regulations, 2014, as amended from time to time,

should apply for calculating the charges for over-injection/ under-injection by the IPPs. The proposed amendments, if permitted, will also amount to a change in law.

According to the petitioner, as per the Clause 1.2.6 of Schedule 7 of PPA “the UI charges shall be as per Grid Code and ABT” which shall mean as per Regulations effective as on date and not as per the regulations effective during the time of signing of PPA.

The Commission agrees with the argument of the petitioner since at the time of signing of PPAs, which was done before 2013, the relevant clause for preparation of energy account in the State Grid Code 2006 was as under:

Clause 15.1.5

*“For the purpose of preparation of energy accounts, the joint meter readings(s) taken on 1<sup>st</sup> of every month at inter connection points between STU and State Genco or any IPP or CPP or Open Access Customers and between STU and Discoms or between two distribution licensees shall be conveyed to SLDC by 5<sup>th</sup> of every month”.*

The clause 15.1.5 of the State Grid Code 2006 was amended in the State Grid Code 2013 and the sentence *“The UI energy account shall be prepared by SLDC as per ABT regime based on CERC (Unscheduled Interchange charges & related matters) Regulations, 2009 as amended from time to time”* was added at the end of clause 14.15 of the State grid Code 2013 dealing with preparation of UI energy account by SLDC. This regulation is applicable as on date and on which the IPPs have

relied upon in its submissions. Thus there is no dispute that reference to any regulations or the Code means the regulations or Code applicable on that date and not at the time of signing PPA. Any amendment in any regulation or code under Section 181 of the Act shall be applicable to all concerned entities from the date such amendment come into force. Also as per Article 13.1.1 of the PPA, the Change in Law shall not include change in respect of UI charges or frequency intervals by an Appropriate Commission. Thus the Commission does not find merit in the argument of IPPs that any amendment in State Grid Code and/or any other regulation shall mean change of law or amendment in PPA provided the amendments are consistent with the Act/CERC regulations &/or IEGC/SGC for preparing deviation charges.

**Issue No. 6: Is UI cap rate specified in CERC regulations applicable to Punjab IPPs?**

The Commission asked all the parties to explain whether UI Rate Cap as per CERC Deviation Settlement Mechanism Regulations is applicable in case of IPPs operating in the State of Punjab and the reasons for the same. In reply, both PSPCL and TSPL, admitted that UI Rate Cap is not applicable since the tariff in the case of TSPL and NPL has been determined through competitive bidding and is covered under section 63 of the Act whereas UI Cap Rate as per Regulations 5(1)(i) of CERC Deviation Settlement Mechanism Regulations is applicable to generating stations whose tariff is regulated by CERC under



section 62 of the Act and who are using coal or lignite or gas supplied under Administrated Price Mechanism (APM) as fuel.

In the initial submissions, NPL argued (without quoting the reasons) that the cap rate is applicable but in its additional written submissions argued that the issue of UI price Cap is not a subject matter of the dispute between parties so the Commission is not required to examine this issue. However, at the same time, NPL recommended a Cap Rate of 500 Paise/kWH for consideration of the Commission, which is an admission that cap rate of 303.04 paise/kWh as specified in CERC regulation is not applicable and the Commission may take appropriate decision on this issue.

GVK submitted that although UI Cap rate is applicable in his case but argued that the Cap on UI charges is not required in order to meet the objectives of UI Regulations and also to address the concerns of PSPCL/PSTCL.

During arguments on various aspects of the issue of Deviation charges, the Petitioner and the distribution licensee justified their proposal with the argument that PSPCL is to pay Deviation Charges to the Regional Deviation Pool Account Fund in accordance with CERC Regulations for any over-drawl which has no cap rate. In many scenarios, the state may have to pay full UI charges and if the Cap Rate of 303.04 Paise/kWH is made applicable to IPPs as per Regulation 5 (1)(i) of the CERC regulations then the distribution licensee may suffer losses which will ultimately shifted to consumers of the State through tariff. On the query of the Commission whether removal of cap rate will resolve all the issues raised by the parties, an affirmative reply was submitted by all the parties except NPL.

While appreciating the concerns of the petitioner, distribution licensee and other respondents, the Commission observed that under low frequency scenario the intra-state generating stations having variable cost up to the prevailing deviation charges should be encouraged to maximize its generation. The state should avoid over-drawl at low frequency and encourage State generating Stations to maximize generation for which sufficient incentive be given to the generators & cap rate shall not help in achieving these objectives.

The Commission examined the whole issue and would like to refer to the para 7.3 ,7.4 & 7.7 of the Statement of Objects and Reasons in the matter of CERC (UI Charges and Related Matters) Regulations 2009 wherein the objective of putting a UI Cap on the generating stations regulated by CERC and the logic/grounds for not suggesting any UI Price Cap for other generating stations have been explained. The relevant paras of SoR are reproduced below:

7.3 *“As regards differential treatment to generation station, we wish to clarify that as stated above, the UI pricing mechanism is expected to serve the twin objectives of specifying settlement rate for deviation from schedule in normal operating range and ensuring ‘grid discipline’ on the one hand while ensuring maximization of generation at optimal cost for grid participants on the other. Under the regulated regime of tariff determination, it needs to be ensured that **while generating stations are entitled to recover their cost of generation, any additional income through UI mechanism over and above actual variable cost of generation by such generation stations shall not***

**result in higher cost for the end-consumers”.[Emphasis added]**

7.4 *“The UI price cap of Rs.4.08 per kWh has been imposed only on the generating stations based on coal, lignite and APM gas as a fuel. Such cap has been specified after taking into account the factor that such generating stations must have some incentive in addition to the recovery of their energy charges. As per recent estimates, the variable cost of generation for such generating stations ranges between 64 paise/kWh (Korba TPS) to 248 paise/kWh (Badarpur TPS). Thus, even at a cap of Rs.4.08/kWh for over-injection by such generating stations, adequate incentive has been provided.*

7.7 *“As regards the suggestion of imposing UI price cap on all types of generating stations, we are of the view that the Commission has imposed the UI price cap only on the generating station which are regulated by it under the provisions of the Act and use coal, lignite or APM gas only as fuel whose variable cost of generation is fairly lower than the proposed UI price cap. Therefore, there will be inherent incentive for these generating stations for over-injection of electricity. However, for other generating stations using coal/lignite or APM gas or sellers contracting power based on such generating stations, whose tariff is not regulated by the Commission, introduction of such price cap at this stage without detailed analysis of their cost of generation including variable cost may not be appropriate.-----“*

From the above, it is evident that CERC has recommended UI cap rate only for the generating stations whose



tariff is determined by CERC and has been fixed keeping in view the variable cost of such generating stations.

Since the tariff of TSPL and NPL has not been determined by CERC as per Section 62 of the Act but has been determined through competitive bidding covered under Section 63 of the Act so the Cap Rate for Deviation Charges for these IPPs as per Clause 5(1)(i) of the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2014 shall not be applicable. Although the tariff of the GVK will be determined by the Commission but still it will not be covered under Clause 5(1)(i) of the Deviation Settlement Mechanism since the tariff is not determined by CERC who has prescribed the Cap Rate keeping in view range of the variable cost of the generating plants whose tariff is determined by CERC under Section 62 of the Act. The variable cost of GVK may not be in the range which justify the Cap Rate of 303.04 paise/kWH and without detailed analysis of the cost of generation including variable cost, prescribing any Cap Rate shall be contrary to the principle laid down in CERC Deviation Settlement Regulations as referred above. Thus Commission conclude that till Intra-State Deviation Settlement Mechanism for state entities is notified, the UI energy account of all the three IPPs shall be prepared on the basis of CERC (Unscheduled Interchange Charges and Related Matters Regulations 2009) applicable till 16.02.2014 and thereafter as per CERC (Deviation Settlement Mechanism and Related Matters) Regulations 2014 as amended from time to time, without any cap rate for deviation charges both for over-injection as well as under-injection.

The petition is disposed of accordingly

Sd/-  
**(Gurinder Jit Singh)**  
Member

Sd/-  
**(Virinder Singh)**  
Member

Sd/-  
**(Romila Dubey)**  
Chairperson

Chandigarh  
Dated : 28.11.2014

