# CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

**Petition No. 121/MP/2015** 

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member

Date of Order: 13.6.2016

#### In the Matter of:

Petition for grant of Inter-State Open Access for the energy generated by ITC Ltd. at the wind power project in Anantapur district, Andhra Pradesh for captive consumption at its factory at Bhadranchalam, Telangana

# And In the Matter of:

ITC Limited, Virginia House, 37 J.L. Nehru Road, Kolkata-700 001

..... Petitioner

Vs

- 1. State Load Despatch Centre for Andhra Pradesh Transmission Corporation of Andhra Pradesh, Vidyut Soudha, Khairatabad, Hyderabad-500 082
- 2. State Load Despatch Centre for Telangana, Transmission Corporation of Telangana Ltd., Vidyut Soudha, Khairatabad, Hyderabad-500 082
- Southern Regional Load Despatch Centre,
   Power System Operation Corporation Ltd.,
   Race course cross road, Bangalur-650 009
- 4. Southern Power Distribution Company of Andhra Pradesh 19-13-65/A, Srinivasapuram, Tiruchanoor Road, Tirupathi-517 503
- 5. Eastern Power Distribution Company of Andhra Pradesh P & T colony, Seethammadhara, Visakhanatnam-530 013

6. Northern Power Distribution Company of Telangana Ltd., 2-5-31/2, Corporate Office, Vidyut Bhawan, Nakkalagutta,

Hanamkonds, Warangal-506 001

7. Andhra Pradesh Power Co-ordination Committee c/o Transmission Corporation of Andhra Pradesh.

Vidyut Soudha, Khairatabad, Hyderabad-500 082

..... Respondents

**Parties Present:** 

For the Petitioner: Shri Sanjay Sen, Senior Advocate

Shri Ashis Pal

For the Respondents: Shri V. Suresh, SRLDC

Shri S. Vallinayagam, Advocate, TSTRANSCO and

**APTRANSCO** 

ORDER

The petitioner, ITC Limited, has filed the present petition challenging denial of

short term inter-State open access for the months of September 2014 and April to July

2015 and raising several issues arising out of denial of open access and relating to

grant of open access.

2. The petitioner is a company under the Companies Act, 2013 and is having

manufacturing units and branch offices all over India. The present case relates to the

generation of wind power by the petitioner in Anantpur District of Andhra Pradesh for

captive consumption at its industrial units at Chirala and Anarpati in Andhra Pradesh

and Bhadrachalam in Telangana. The wind power project of the petitioner and the

industrial unit at Chirala are in the area of operation of Fourth Respondent, namely,

Southern Power Distribution Company of Andhra Pradesh Limited with service

connections at 33 kV through a dedicated feeder and CMD of 4250 kVA. The industrial

unit at Anarpati is located in the area of operation of Fifth Respondent, namely, Eastern

Power Distribution Company of Andhra Pradesh Limited with service connection at 33 kV through a dedicated feeder and CMD of 1600 kVA. The industrial unit at Bhadrachalam is located within the jurisdiction of Sixth Respondent, namely, Northern Power Distribution Company of Telangana Limited with service connections at 132 kV and CMD of 5000 kVA.

- 3. Brief facts of the case leading to the filing of the present petition are as under:
  - (a) The petitioner has set up a 46 MW wind power project as captive generating plant. The project comprises 23 Nos Wind Turbine Generators (WTG) of 2 MW capacity each spanning across three villages of Tagguparthi, Budigumma and Ankapalli in Anantpur District of Andhra Pradesh. The WTGs are grouped into three groups of 8,8 and 7 WTGs at 33 kV level to form three separate 33 kV feeders, each having its own ABT compliant metering arrangement comprising of main meters, check meters and stand-by meters of 0.2 class of accuracy and with 0.25 class CTs and 0.2 class PTs. All 33 kV feeders are combined at 33 kV bus in 100 MW 33kV/132kV pooling sub-station at Tagguparthi village where voltage is stepped up to 132 kV and connected to APTRANSCO's 220/132/33 kV sub-station at Kalyandurg. The petitioner is stated to have fully compliant ABT metering arrangements in both 132 kV bays at the Kayandurg sub-station for energy accounting.
  - (b) The wind power project was synchronized on 25.6.2014 and achieved COD on 25.7.2014. The power generated from the project is being consumed at the petitioner's own industrial units at Chirala (33 kV), Anaparthi (33 kV) in Andhra

Pradesh for the processing of tobacco leaf and at Bhadrachalam (132 kV) in Telanagana for the manufacture of paperboards and specialty papers.

(c) Based on the applications made by the petitioner from time to time, AP-SLDC granted intra-State open access to the petitioner as under:

S. No.	Period/month	Open access (MW)		Date of grant of Open Access
		Chirla	Anaparthi	
1.	8 <sup>th</sup> to 31 <sup>st</sup> October 2014	3.8	1.4	16.10.2014
2.	1 <sup>st</sup> to 30 <sup>th</sup> November 2014	-	1.4	31.10.2014
3.	1 <sup>st</sup> to 31 <sup>st</sup> December 2014	1	1.4	28.11.2014
4.	1 <sup>st</sup> to 31 <sup>st</sup> January 2015	3.8	-	31.12.2014
5.	1 <sup>st</sup> to 28 <sup>th</sup> February 2015	3.8	-	31.1.2015
6.	1 <sup>st</sup> to 31 <sup>st</sup> March 2015	2.04	-	26.2.2015
7.	1 <sup>st</sup> to 30 <sup>th</sup> April 2015	2.05	-	1.4.2015
For April 2015, the application, was for 2.9. MW, at Chirale but the same was curtailed				

For April 2015, the application was for 3.8 MW at Chirala but the same was curtailed and revised at the instance of the AP-SLDC to 2 MW

### Application for inter-State Open Access for September 2014

(d) According to the petitioner, no specified formats or procedures for making applications for short term inter-State open access for energy transfer from a captive generating plant for captive consumption in an industrial unit of the very same owner are available and on the oral advice of AP-SLDC, the petitioner used the formats and followed the same procedure for bilateral transactions. On 21.8.2014, the petitioner made an application dated 20.8.2014 to AP-SLDC for issue of concurrence to make an application to SRLDC for grant of inter-State open access for 15 MW for the month of September 2014 for transmission/wheeling to the Bhadrachalam unit in Telangana. On 2.9.2014, South Power Distribution Company of Andhra Pradesh Limited (APSPDCL) endorsed Formats A and B and sent it directly to AP-SLDC. Simultaneously, on

20.8.20014, the petitioner made an application to TS-SLDC for issue of concurrence for the month of September 2014.

- (e) In response to the petitioner's application dated 20.8.2014, AP-SLDC vide its letter dated 26.8.2014 requested the petitioner to submit forecast for wind generation upto 30.9.2014 and the tools utilized for the forecast. The petitioner vide its letter dated 3.9.2014 replied that the forecast schedule on weekly basis would be furnished as per the enclosed format as was being done in other States such as Karnataka, Gujarat and Rajasthan. Subsequently, AP-SLDC vide its letter dated 15.9.2014 further requested the petitioner to submit forecast of generation up to 30.9.2014. In response, the petitioner vide its letter dated 17.9.2014 clarified that on the basis of the document of the Indian Meteorological Department, 30 days forecast was not possible as the wind speed prediction is available only for 1 to 7 days and therefore, the forecast would be furnished only on a weekly basis.
- (f) Meanwhile, TS-SLDC vide its letter dated 28.8.2014 requested the petitioner to submit Formats A and B from TS-NPDCL and an undertaking for UI charges as per the format available on its website. The formats were endorsed on 28.8.2014 by North Power Distribution Company of Telangana Limited (TS-NPDCL) and the petitioner submitted the same to TS-SLDC vide its letter dated 1.9.2014. According to the petitioner, no response was received from the TS-SLDC on the application which lapsed after expiry of the period of open access upto 30.9.2014 requested vide the said application.

- (g) On 15.10.2014, AP-SLDC sought details of SCADA facilities available, LVRT details and details of forecast sought vide letter dated 19.9.2014. In response, the petitioner vide its letter dated 27.10.2014 submitted the documents of SCADA architecture, functional design specifications, details of PLCC drawing and LVRT, and pointed out that the issue of forecast has already addressed in its earlier letters.
- (h) AP-SLDC vide its letter dated 13.11.2014 requested the petitioner to submit for the purpose of seeking issuance of concurrence on day ahead basis only to (i) furnish the forecast of wind generation including inter-State open access one day before and the tools utilised for the forecast; (ii) to separate the WTGs meant for intra-State open access from the rest of the available WTGs; (iii) to adhere to the day ahead schedule given without any deviation failing which deviation settlement mechanism would be applied; (iv) to submit an undertaking in the format which provides for not claiming any charges for any energy injected over the scheduled energy. In response, the petitioner vide its letter dated 11.12.2014 agreed to the conditions at (i) to (iv) with certain suggestions and in respect of condition (v), the petitioner sought relaxation to the extent of allowing upto 30% deviation from the schedule in accordance with the CERC Renewable Regulatory Fund Mechanism and to provide compensation for over-generation cases in accordance with CERC Deviation Settlement Mechanism. AP-SLDC vide letter dated 12.12.2014 replied the petitioner that (i) every day ahead application should be accompanied with a non-refundable fee of Rs. 5000/- and no exemption can be given, (ii) a generation mix of WTGs meant for intra-State

and inter-State cannot be allowed as the intra-State and inter-State Open Access Regulations and settlement mechanisms are quite different; (iii) no amount would be paid for over injection by the generator as per policy decision of APTRANSCO and to that extent an undertaking is to be given; (iv) RRF mechanism is not available at present to allow 30% deviation; and (v) intra-State open access can be opted for the entire wind generation due to infirm nature of wind power and keeping in view grid security, promoting green energy, etc. In response, the petitioner vide its letter dated 25.2.2014 inter-alia informed AP-SLDC as under:

- (i) AP-SLDC's expectation for separate application for each day accompanied by fee of Rs.5000 is contrary to CERC Regulations;
- (ii) AP-SLDC is not entitled to make any terms and conditions inconsistent with CERC Regulations;
- (iii) The petitioner is entitled under CERC Regulations to make application for concurrence for a month at a time for four months following and SLDC is required to consider the same in accordance with CERC Regulations;
- (iv) There is no such requirement in CERC Regulations to segregate the WTGs for inter-State and intra-State transactions;
- (v) The undertaking sought for not claiming the amounts due for overinjection in terms of the applicable CERC Regulations is impermissible;

- (vi) The suggestions to opt for intra-State open access for the entire generation is impermissible and unlawful and tantamount to obliquely defeat and deny inter-State open access;
- (vii) The petitioner's application dated 20.8.2014 has been rendered infructuous by various unlawful and unwarranted conditions imposed and by non-disposal of the application in accordance with law.

#### Applications for inter-State Open Access from April 2015 to July 2015

- (i) The petitioner made separate applications to AP-SLDC and TS-SLDC for grant of concurrence for inter-State open access for the months of April, May, June and July, 2015 for 2 MW, 5 MW, 12 MW and 18 MW respectively.
- (j) In response to the application dated 16.3.2015 for concurrence for April 2015, TS-SLDC vide letter dated 18.3.2015 responded to the application for April 2015 by asking for the Format A and B issued by TS-NPDCL and undertaking for UI charges. The petitioner is stated to have submitted the Formats A and B endorsed by TS-NPDCL on 30.3.2015 to TS-SLDC under its letter dated 2.4.2015. According to the petitioner, though TS-SLDC issued concurrence on 20.4.2015, the same was infructuous since SRLDC had posted the rejection of petitioner's application for April 2015 by that time. AP-SLDC vide its letter dated 19.3.2015 rejected the application dated 16.3.2015 stating that "in view of Grid Security and to adhere to 5.2(j) of IEGC, no inter-State open access is allowed for wind generators."

- (k) AP-SLDC by letter dated 23.3.2015 rejected the application dated 20.3.2015 for the month of May 2015 for the reasons of Grid Security and adherence to Regulation 5.2(j) of Grid Code. AP-SLDC vide its letter dated 18.4.2015 in respect of applications for the months of June and July 2015 asked the petitioner to furnish 15 minute block-wise round the clock forecast of wind generation upto 31.7.2015. The petitioner has submitted that in its earlier letter dated 25.2.2015, the petitioner had apprised the difficulty in getting the forecast of wind generation. With regard to application dated 20.3.2015 for concurrence for the months of May, June and July 2015, TS-SLDC vide its letter dated 27.3.2015 sought Formats A and B issued by TS-NPDCL and the undertaking for UI charges. The petitioner submitted the Formats A and B endorsed by TSNPDCL to TS-SLDC on 4.4.2015. According to the petitioner, the letter dated 27.3.2015 issued by TS-SLDC is non-est in law as the Regulations/Detailed Procedure do not require the petitioner to furnish the documents or undertaking.
- (I) According to the petitioner, the concurrences are deemed to have been accorded by AP-SLDC and TS-SLDC as the rejection of applications for concurrence for the months of April and May 2015 by AP-SLDC and the communication dated 18.3.2015 and 27.3.2015 by TS-SLDC are non-est in law. Further, there was no communication of defect/deficiency within 2 days of the date of receipt of application for June and July 2015 or rejection of the said applications within 3 working days by AP-SLDC. Assuming deemed concurrence by SLDCs, the petitioner made an application dated 11.4.2015 for April and May

2015 and application dated 10.5.2015 for June and July 2015 to SRLDC for scheduling of power together with relevant documents and appropriate affidavits.

- (k) On 13.4.2015, SRLDC informed the petitioner that affidavits accompanied with the applications are not as per the 2008 Open Access Regulations and requested the petitioner to submit the format as prescribed by the Commission. Accordingly, on 14.4.2015, the petitioner sent a letter to SRLDC alongwith affidavit in Format IIA to the extent possible in the circumstances of the petitioner's case. The petitioner has submitted that SRLDC has not communicated the rejection of the petitioner's applications but on perusal of website of SRLDC, the petitioner's applications for the months of April 2015 and May 2015 had been rejected with remarks "columns left blank".
- (I) Subsequently, the petitioner, vide its affidavit dated 4.5.2015 has submitted that on 27.4.2015, TS-SLDC issued its concurrence for the period from 1.5.2015 to 31.5.2015 for injection of 5 MW in Andhra Pradesh and for drawal in Telangana for captive consumption by the petitioner. The petitioner has submitted that SRLDC vide its letter dated 27.4.2015 informed AP-SLDC and TS-SLDC that the petitioner has made an advance application on 10.4.2015 for grant of STOA to schedule 12 MW power from its wind farm in AP to its PSPD, Bhadrachalam in Telangana for the period from 1.6.2015 to 30.6.2015, and if no reply is received from SLDCs by 28.4.2015, it would be construed that AP-SLDC and TS-SLDC have no objection and SRLDC would process the application accordingly. In response, AP-SLDC vide its letter dated 27.4.2015 informed

SRLDC that the petitioner vide letter dated 18.4.2015 was requested to furnish 15 minute block-wise forecast of wind generation upto 31.7.2015 which was not submitted. AP-SLDC further informed that since wind power generation is infirm in nature, concurrence was not issued keeping in view the grid security. On 29.4.2015, SRLDC informed the petitioner about the rejection of the STOA application for the month of June 2015. The petitioner has submitted that AP-SLDC neither conveyed deficiency in the application nor communicated rejection of its application within the time limit prescribed in the 2008 Open Access Regulations and consequently, its concurrence must be deemed to have been given in terms of proviso to Regulation 8 (4) of the 2008 Open Access Regulations.

- (m) The petitioner has submitted that its right to inter-State open access for captive consumption has been arbitrarily, unreasonably and irrationally thwarted time and again for which the petitioner has filed the present petition for relief including interim relief.
- 4. The petitioner has submitted that from the date of commissioning of the WTGs upto 31.8.2015, the entire power generated aggregating to 20538809 kWh was fed into AP grid free of cost. The petitioner has further submitted that the petitioner applied for inter-State and intra-State open access for the month of September 2014 to the petitioner's own industrial units for captive consumption. The petitioner has submitted that since neither intra-State nor inter-State open access was granted till 17.10.2014, the entire energy was fed into AP grid. The petitioner has submitted that between

1.9.2014 to 17.10.2014, a total of 10377423 kWh was injected out of which 7264026 kWh was meant for inter-State open access. The petitioner has submitted that computing the energy meant for inter-State open access on the basis of TSNPDCL tariff of Rs.4.85 per kWh and allowing 4% transmission loss, the petitioner has suffered a loss of Rs.3,38,28,278/- (i.e. 7264026 x 0.96 x 4.85). The petitioner has further submitted that it was allowed intra-State open access from 18.10.2014. However, between the period 16.10.2015 to 5.12.2015, the petitioner injected surplus power to the extent of 4559550 kWh on account of denial of inter-State open access. Calculating the said energy at the rate of Rs.4.85/kWh with transmission loss of 4%, the estimated loss suffered by the petitioner comes to Rs. 2,12,33,642 (i.e. 4559550 x 0.96 x 4.85). The petitioner has also submitted that it was forced to sell the stranded surplus energy to AP Discoms through Andhra Pradesh Power Purchase Centre @ Rs.2.44/kWh as against the APERC approved rate of Rs.4.70/kWh. As a result, the petitioner has sold 13044727 kWh from 6.12.2014 to 31.3.2014 and 1950685 kWh from 1.4.2015 to 19.4.2015 by incurring loss of Rs.2,89,19,638/- and Rs.47,88,073/- respectively.

- 5. The petitioner has sought to make out its case on the following grounds:
  - (a) As per Section 9 (2) of the Act, the petitioner has a statutory and indefeasible right to open access for carrying the electricity generated in its captive generating plant for its own consumption at its manufacturing units. The right to open access is only subject to the availability of adequate transmission facility and there is no other ground on which open access can be denied to the petitioner. The petitioner's requirement for open access does not fall within the definitions of

either bilateral transaction or collective transaction in terms of Regulation 1 (b) or (c) of the Central Electricity Regulatory Commission (Open Access in inter-State transmission) Regulations, 2008 (2008 Open Access Regulations) since there is no buyer or seller involved. Regulations 7 and 8 of the 2008 Open Access Regulations and Detailed Procedure thereof do not apply to the petitioner as there is no detailed procedure or particular regulations applicable in case where inter-State open access is required for carrying electricity from captive generating plant for own consumption. Even if the existing procedure is adopted for the purpose of carrying electricity from captive generating station for own use, the provisions of the existing regulations and the detailed procedure has to be reasonably construed and adapted. SLDC is not at all entitled to apply any terms and conditions inconsistent with the 2008 Open Access Regulations and in a manner apparently calculated and designed to defeat the right to open access under Section 9(2) of the Act.

- (b) The manner in which AP-SLDC frustrated the petitioner's application for inter-State open access for the month of September 2014 is unreasonable, arbitrary and contrary to the regulations. AP-SLDC was not entitled to make any terms and conditions inconsistent with CERC Regulations and in a manner calculated and designed to defeat inter-State open access.
- (c) The rejection of concurrence by AP-SLDC for inter-State open access for the months of April and May 2015 on the ground of grid security and adherence to Regulation 5.2(j) of Grid Code is arbitrary and unreasonable. Regulation 5.2(j) is

not at all applicable. As per Regulation 5.2 (j) of the Grid Code, user is required to take prior consent of RLDC before reducing the generating unit output by more than 100MW. Therefore, Regulation 5.2(j) of the Grid Code only applies to generating units with a capacity of more than 100 MW. However, in the present case, the maximum capacity of the wind farm is only 46 MW. The transmission network of Andhra Pradesh is actually evacuating all the power from the wind farm for intra-State open access and for the purchase of stranded surplus by the distribution companies of Andhra Pradesh under distress sale shows that there is no issue of grid security at all in evacuating and transmitting the entire output from the wind farm. Further, AP-SLDC has not rejected the application for concurrence on any of the specified grounds in Open Access Regulations, particularly, Regulation 8(3)(b)(i) & (ii) and 8(3)(c). Therefore, concurrence must be deemed to have been given in terms of proviso to Regulation 8(4) of Open Access Regulations.

- (d) AP-SLDC's evasive response to the applications for concurrence for June and July 2015, TS-SLDC's inaction in respect of application for concurrence for September 2014 and for April, May, June and July 2015 should be treated as deemed concurrence by AP-SLDC and TS-SLDC in terms of Regulation 8(4) of Open Access Regulations.
- (e) The rejection of open access scheduling by SRLDC for April and May 2015 was arbitrary, illegal and against the Open Access Regulations.
- 6. Against the above background, the petitioner has made the following prayers:

- "(a) Hold and declare that the denial of concurrence by SLDCs for the month of September, 2014 and the consequent denial and/or frustration of inter-state open access for carrying the electricity generated at the Petitioner's captive wind generating plant in Andhra Pradesh to the Petitioner's manufacturing unit in Telangana for captive consumption is illegal and contrary to law;
- (b) Hold and Declare that the conduct of the AP-SLDC in raising and continuing to raise objections and demands even after September, 2014 for only day ahead applications, forecasts of wind generation, separation of WTGs for inter-State and intra-State open access and undertaking for not claiming UI charges for over-injection are illegal, irrelevant, unreasonable, irrational and contrary to law; and further that the disablement of the Petitioner from applying for inter-State open access for the months of October, 2014 to March, 2015 and forcing the Petitioner to distress sale of the stranded power meant for inter-state conveyance for captive consumption at an abysmally low price is illegal, capricious and contrary to law;
- (c) Hold and declare that the rejection of concurrence by AP-SLDC for the months of April and May, 2015 on grounds of compliance with 5.2(j) IEGC is arbitrary, unreasonable, irrational, illegal and contrary to law;
- (d) Hold and declare that the non-disposal of the applications for April, 2015 to July, 2015 by the TS-SLDC within the time specified is illegal and contrary to law; and further that the concurrence for the months of April, 2015 to July, 2015 is deemed to have been given;
- (e) Hold and declare that the concurrence of the AP-SPDCL for the months of June and July, 2015 is deemed to have been given;
- (f) Hold and declare that the communication of the AP-SPDCL dated 18.4.2015 is unwarranted, unjustified, illegal and contrary to law;
- (g) Hold and declare that the Petitioner cannot be compelled to give any declaration to the SLDCs for not claiming UI charges for over-injection and/or under-drawal to which they may be entitled under the applicable Regulations, and the demands of the SLDCs for such undertaking was illegal and contrary to law;
- (h) Hold and declare that the Petitioner is not required to separate the WTGs for intra-State and inter-State open access, and that the Petitioner is entitled to apportion the entire generation of all the WTGs taken together for captive consumption at the Petitioner's different manufacturing units in any manner that the Petitioner requires and determines;
- (i) Hold and declare that the rejections by the SRLDC of the applications for scheduling for the months of April and May were arbitrary, without reasons, illegal and contrary to law;
- (j) Direct the SRLDC to schedule the Petitioner's energy under inter-State open access for transmission of the energy generated by the Petitioner at its captive wind energy generating plant in Anantapur District, Andhra Pradesh, to the Petitioner's manufacturing unit at Bhadrachalam in Telangana, for the remainder of April and for the months of May,

June and July, 2015 and also for subsequent months as may be applied for by the Petitioner:

- (k) Direct the SLDCs to issue timely concurrence for the inter-state open access upon consideration only of the availability of transmission capacity and the already existence of metering infrastructure for the months of August, 2015 and thereafter according to law:
- (I) To direct the AP-Discoms and/or the SLDCs to jointly and/or severally pay to the Petitioner the sum of Rs 3,38,28,278/-,or such other sum as may be decided by the Hon'ble Commission, together with interest at 15% p.a. with monthly rests, by way of compensation for the stranded energy injected into the grid between 1.9.2014 to 17.10.2014 used by the AP-Discoms;
- (m) To direct the AP-Discoms and/or the SLDCs to jointly and/or severally pay to the Petitioner the sum of Rs 2,12,33,642/-, or such other sum as may be decided by the Hon'ble Commission, together with interest at 15% p.a. with monthly rests, by way of compensation for the stranded energy injected into the grid between 18.10.2014 to 5.12.2014 used by the AP-Discoms without payment;
- (n) To direct the AP-Discoms, the TS-SPDCL and/or the SLDCs to jointly and/or severally pay to the Petitioner the sum of Rs 2,89,19,638/-, or such other sum as may be decided by the Hon'ble Commission, together with interest at 15% p.a. with monthly rests, by way of compensation for the loss sustained by the Petitioner on account of the stranded energy under distress sale to the AP-Discoms between 6.12.2014 to 31.3.2015:
- (o) To direct the AP-Discoms, the TS-SPDCL, the SLDCs and/or the SRLDC to jointly and/or severally pay to the Petitioner the sum of Rs 47,88,073/-, or such other sum as may be decided by the Hon'ble Commission, together with interest at 15% p.a. with monthly rests, by way of compensation for the loss sustained by the Petitioner on account of the stranded energy under distress sale to the AP-Discoms between 1.4.2015 to 19.4.2015, and such further amounts on the same basis for the periods thereafter till open access is made available to the Petitioner to convey the stranded energy generated for captive consumption under inter-state open access;
- (p) Hold and Direct that the AP and Telangana Discoms and/or the other Respondents, jointly and severally, shall indemnify, compensate and hold the Petitioner harmless and without any costs, charges or expenses for any and all consequences that may follow the Petitioner losing captive status for its captive wind generating plant including, but not limited to, any levy of cross subsidy surcharge for 2014-15 and 2015-16 and subsequent periods;
- (q) Decide upon the issue as to whether the concurrence of the SLDCs is required in the cases of open access applications for captive generation and captive consumption and to give necessary clarifications / directions in respect of such open access applications as suggested by the Petitioner hereinabove or otherwise as the Commission considers fit, necessary and expedient."

- 7. The petition was admitted on 12.5.2015 and notices were issued to the respondents to file their replies to the petition. Replies to the petition have been filed by AP-SLDC, TS-SLDC and SRLDC.
- 8. AP-SLDC vide its affidavit dated 16.5.2015 has submitted as under:
  - (a) AP-SLDC always cooperated with the petitioner by advising it about the furnishing of details regarding applications for intra-State open access. AP-SLDC granted intra-State OA from 18.10.2014 onwards as the generation forecast was not required to be furnished by wind generators under the APERC Regulations and also settlement mechanism exists for averaging month wise generation on time block basis in terms of APERC Regulations.
  - (b) In order to facilitate inter-State open access to the petitioner, AP-SLDC vide its letter dated 15.10.2014 sought the details of SCADA facility available, LVRT details and forecast. The petitioner vide its letter dated 27.10.2014 stated it would be able to furnish the forecast schedule on weekly basis only. AP-SLDC vide its letter dated 13.11.2014 sought certain details to issue concurrence on day ahead basis which included forecast of wind generation including tools utilized, generation from WTGs meant for intra-State OA not to be mixed with WTGs meant for inter-State OA, deviation mechanism would be applied for any deviation for which undertaking to pay deviation charges has to be given by the petitioner. The petitioner in its letter dated 11.12.2014 conveyed the following: (i) schedule and forecast would be communicated on daily basis to take care of the infirm nature of wind generation; (ii) the application fee would be paid on monthly

basis instead of Rs.5000 daily due to financial difficulty; (iii) the generation schedule would be fixed as the average of the next day's forecast; (iv) the WTGs for intra-State and inter-State transactions could not be segregated; (v) the petitioner agreed to bear all inter-State open access charges and losses as applicable to day ahead bi-lateral transactions but sought exemption for the loss incurred by it from pooling station to the sub-station of the State utility; (vi) The petitioner sought relaxation of deviation upto 30% from schedule as per CERC Renewable Regulatory Funds Mechanism.

- (c) The exemption and relaxation sought by the petitioner are contrary to CERC Regulations and therefore, could not have been granted by AP-SLDC being beyond the statutory powers of SLDC. The non-processing of applications of the petitioner in the above circumstances cannot be construed to be deemed approval by AP-SLDC.
- (d) The petitioner is an integral part of the grid and cannot absolve itself of the responsibilities of a generator by stating that it is an open access generator generating less than 100 MW. If all such wind generators having pooling stations under 100 MW are exempted from applicability of section 5.2(j) of the Grid Code, the entire 869 MW of wind generation will be of a serious threat to Grid Secuity, considering the potentially variable nature of wind generation.
- (e) The generation of wind energy may go down or shoot up even within a block of 15 minutes causing serious grid disturbances. There is no mechanism for managing such sudden disturbances within a block. The entire loss is passed on

to the general consumer to the benefit of wind generator. Further, due to high variability of wind generation, the consequential deviation from schedule is likely to happen more frequently as against the regulatory approved schedule of 12% of the schedule or 150 MW, whichever is less and the limit on sudden variation of more than 100 MW makes the SLDCs with RE generators vulnerable for regulatory violations. Therefore, it is essential to have in place an approved settlement mechanism for granting open access to RE generators.

- In terms of Section 32 of the Act, SLDC is responsible for secure operation of the State power system and for proper accounting of the energy flowing through the State grid for which it has to comply with the provisions of the Grid Code. Though Section 9 of the Act enables the petitioner to have open access to its captive consumers, it is subject to the regulations and Grid Code. SLDC is granting the open access to the consumers who are complying with the provisions of the Open Access Regulations, 2008 and Regulation 6.5.16 of the Grid Code without any discrimination.
- (g) As per Regulation 6.5.23 of the Grid Code, wind generators are required to furnish forecast for scheduling of power. In the absence of forecast and availability from wind generators and by allowing inter-State open access during the lean wind seasons, load generation balance will be affected as equivalent power from CGS share will be deducted from the State quota where the generator is located. As the wind power is highly variable in nature, when there is

no wind generation, SLDC may be forced to overdraw from the grid thereby deviating from schedule beyond the prescribed limits.

9. TS-SLDC, vide its affidavit dated 16.5.2015, has submitted that presently, it is issuing NOCs to 209 open access consumers to facilitate trading through Power Exchange. In terms of the Regulation 5.2 of the Telangana State Electricity Regulatory Commission (Regulation 2 of 2005), SLDC devised procedures such as Format A and B, and UI undertaking, etc. in consultation with the distribution companies and uploaded on website of TS TRANSCO. TS-SLDC has further submitted that Regulation 4 of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (First Amendment) Regulations, 2014 provides that the overdrawal/underdrawal of electricity by any buyer during the time block shall not exceed 12% of its scheduled drawal or 150 MW, whichever is lower, when grid frequency is 49.70 Hz and above and below 50.10 Hz. Regulation 9.4 of the Andhra Pradesh Electricity Regulatory Commission (Interim Balancing and Settlement Code for Open Access Transactions) Regulations, 2006 provides that the scheduled demand at exit point or the actual demand made available to a consumer from each open access generator at that exist point in a time-block whichever is less, shall be deducted from the recorded demand and balance demand for each time-block shall be deemed to have been consumed from the Discom and shall be paid at twice the demand charges applicable for the same consumer to which the open access consumer would normally belong. TS-SLDC has further submitted that all open access users have been fulfilling the procedures by submitting format A, B, and UI undertaking for less or equal to contracted maximum. TS-SLDC has submitted that on 20.8.2014, the petitioner made

an application for grant of concurrence from its wind power project located at Anantapur district, Andhra Pradesh. TS-SLDC vide its letter dated 28.8.2014 requested the petitioner to furnish the Format A. B and an undertaking for UI charges. However, the petitioner only submitted Format A and B without mentioning UI undertaking. Since the petitioner did not furnish UI undertaking for the whole month, its application could not be processed. Subsequently, on 16.3.2015 and 26.3.2015, the petitioner made applications for grant of concurrence for the months of April, May, June and July 2015 without fulfilling the requisite requirements. SLDC vide its letter dated 18.3.2015 pointed out deficiencies in the application. However, regarding the UI undertaking, the petitioner vide its letter dated 2.4.2015 stated that 'no such undertaking is required to be submitted by it as per CERC Regulations'. The UI, if any, has to be settled in accordance with the Central Electricity Regulatory Commission (Unscheduled Interchange charge and related matters) Regulations, 2009 (CERC UI Regulations) which will apply'. TS-SLDC has submitted that the petitioner is the first consumer who did not comply with the procedure framed by SLDC. However, the petitioner was granted concurrence for the said periods. Therefore, the contention of the petitioner that SLDC eventually and belatedly issued concurrence is not correct. TS-SLDC has requested to direct the petitioner to furnish complete information required by it to process its open access applications well in advance and to comply with the mandatory procedures of SLDC devised on par with the regulation for the purpose of safety and security of the grid and to avoid gaming by the consumers and generators.

10. Southern Regional Load Despatch Centre vide its affidavit dated 18.5.2015 has submitted that the petitioner's wind generating units were synchronized on 25.6.2014

and declared commercial operation on 25.7.2014. The petitioner has confirmed that the wind generation is for captive consumption and the forecasting and scheduling could be done for a short time. Accordingly, the petitioner has continuous requirement of power for its captive consumption as well as require flexibility of revision of schedule. This requirement could have been met without any difficulty through MTOA, but the petitioner opted for STOA only. As per Section 9 (2) of the Electricity Act, 2003, if the petitioner was convinced that the reason for denial of open access by AP-SLDC is not due to the 'non-availability of transmission facility', the petitioner could have approached the APSERC, which is the appropriate Commission. SRLDC has submitted that the petitioner presented the matter as denial of open access by SRLDC without complying with the provisions of 2008 Open Access Regulations. SRLDC has submitted that the scheduling, transmission availability, load generation balance maintaining etc. are interrelated matters which facilitate or determine security of grid. Therefore, when the apex body in the State Control Area denied consent on the ground of grid security, it is not appropriate for the nodal agency (SRLDC) to insist SLDC to compromise the grid security by approving such applications. SRLDC has submitted that the petitioner was informed regarding rejection of the application through the web portal to which the petitioner is having access. SRLDC has submitted that the petitioner's applications for grant of concurrence for the months of April and May 2015 were not considered as AP-SLDC has already communicated to the petitioner its non-concurrence. Therefore, the application could not be considered under the provision of deemed consent of SLDC through affidavits. SRLDC has submitted that any inter-State transaction even for a captive generation to a captive consumption has to be consented by the concerned

SLDC as the same would affect the drawl schedules and DSM charges accounts of the concerned States. SRLDC has further submitted that it has not violated Regulation 9(5) as no separate communication is sent to any of the applicants and the status of applications including the reasons for rejection or curtailed approval are communicated to all applicants through web-based STOA utility only.

- 11. AP-SLDC was directed vide ROP dated 19.5.2015 to submit the information, namely (i) Details of grid security likely to be affected due to grant of inter-State open access and whether any load flow study was conducted to ascertain the same? (ii) How is intra-State Open Access being permitted without affecting "grid security" but inter-State Open Access is not possible in view of "grid security"? (iii) How can WTGs be separated for intra-State and inter-State Open Access?",and (iv) How is scheduling of power for intra-State Open Access being done?
- 12. AP-SLDC vide its affidavit dated 8.6.2015, has submitted as under:
  - (a) With regard to details of grid security likely to be affected due to grant of inter-State open access and whether any load flow study was conducted to ascertain the same, AP-SLDC has submitted that APTRANSCO carried out load flow studies for evacuation of 588.6 MW of wind power in Kadapa, Ananthapur, Chitoor and Kurnool districts. Subsequently, approval for evacuation of additional 431 MW wind power was accorded after conducting the load flow studies in the same area with inclusion of the petitioners among others, proposing augmentation of network by erection of second 220 kV D/C Moose line from Muddanur to Chinakampalli. However, the petitioner's generation was realized

and the associated augmentation 220 kV could not be commissioned due to ROW problem. During the load flow studies, it was observed that 4 number of circuits are loaded to full load capacity in normal loading conditions and the ICTs at 400 kV Chinkamapply (Kadapa) sub-station (PGCIL) are stepping up power instead of drawing of power from CTU. Injection to CTU network is sometimes causing overloading of 400 kV Gooty-Nelamangla and Gooty-Somhnahalli (Bengaluru) inter-State lines.

With regard to the query as to how intra-State Open Access is being permitted without affecting "grid security" and not inter-State Open Access, AP-SLDC has submitted that the petitioner's open access application could not be processed due to transmission constraints i.e. overloading of 220 kV STU system, injection of power to CTU network and grid security. As per Regulation 6.5.23 of the Grid Code, wind generators are required to submit the forecast for scheduling the power. Even if forecast is given, the power is not reliable power, especially in lean wind season which affects load-generation balance, as underinjection by wind generator leads to overdrawal of equivalent quantum of power from the central grid. In addition, Central Generating Station quota also gets reduced from the State quota of the State where the wind generator is located leading to financial loss to the distribution company. Wind power is highly variable in nature. In the absence of wind generation, SLDC will be forced to overdraw from grid thereby deviating from schedule beyond the prescribed limit specified in the Grid Code and the distribution companies/SLDC have to resort to Demand

Side Management in terms of Regulation 5.4 of the Grid Code, which reduces the credibility of the distribution company among its consumer.

- (c) ITC wind generators are an integral part of the grid and cannot absolve itself of the responsibilities of the generator by stating that it is an open access generator generating less than 100 MW. Regulation 6.5.23 of the Grid Code provides that with effect from 15.7.2013, scheduling of wind power generation plants would have to be done where the sum of generation capacity of such plants connected to connection points to the transmission or distribution system is 10 MW and above and connection point is 33 kV and above, for pooling stations commissioned after 3.5.2010. Accordingly, the provisions of the Grid Code are applicable to the petitioner and the petitioner cannot absolve itself because it has wind generation of 1 to 2 MW at any one of its wind turbine. As per the Regulation 6.5.23 of the Grid Code, wind generators having pooling stations of more than 10 MW are required to adhere the provisions of the Grid Code. If all such wind generators having pooling stations are exempted from the applicability of Regulation 5.2(j) of the Grid Code, the total 869 MW of wind generation in the State would be a serious threat to the grid security, particularly due to potentially and variable nature of wind power.
- (d) The generation of wind energy from 869 MW may go down or shoot up even with a 15 minute block causing serious grid disturbances. There is no mechanism for managing such sudden variations of generation within a time block. As per Regulation 6.4.6 of the Grid Code, every regional entity is required

to ensure reversal of sign deviation from schedule at least once after every 12 time blocks. The entire impact of the variability of wind generation will be passed on to the general consumer to the benefit of the wind generator. Therefore, the intra-State open access is granted to the petitioner as the schedule consumer is entitled to draw power from the distribution company even if intra-State wind generator fails to supply power in terms of APERC Regulations on Interim Balancing and Settlement Code for Open Access Transactions. Regulation 10.5 of the said Regulations provides that 'in case of wind and mini-hydel OA generators, the actual generation during the month shall be deemed as scheduled energy. For the purpose of settlement in respect of scheduled/OA consumer availing supply from these OA generators, the actual generation during the month will be apportioned for each time block of the month and deviations reckoned accordingly. However, the petitioner is not willing to comply with the deviation settlement mechanism approved by the Commission vide order dated 6.1.2014. The petitioner seeks RRF commercial mechanism to be made applicable to it which has specifically been suspended by the Commission vide order dated 7.1.2014 in Petition No. 356/SM/203. The petitioner is seeking inter-State open access with a hybrid of settlement mechanism for deviation by mixing RRF mechanism and deviation settlement mechanism approved vide said order dated 6.1.2014.

(e) With regard to the query as to how can WTGs be separated for intra-State and inter-State Open Access, AP-SLDC has submitted that the petitioner's 46 MW generating system comprises of 23 WRTGs with 2 MW each connected to

three different feeders with approved metering facilities. Now, 23 generators are segregated in three feeders and with this arrangement, the petitioner's system can segregate the intra and inter-State generators. Moreover, the petitioner vide its letter dated 11.12.2014 agreed to identify WTG meant for intra-State and inter-State separately.

With regard to scheduling of power for intra-State Open Access, the (f) petitioner has submitted that as per Open Access Regulations, 2008, scheduling is mandatory for inter-State open access. However, as per Regulation 4 of the APERC Regulations, wind based open access generators are not required to provide a day ahead wheeling schedule and the actual electricity injected by them shall be deemed to be the scheduled energy. In response to the petitioner's application dated 27.10.2014 for grant of inter-State open access, AP-SLDC vide its letter dated 13.11.2014 informed the petitioner that concurrence to SRLDC for inter-State open access would be issued on day ahead basis and requested the petitioner to give an undertaking for acceptance of deviation charges. However, the petitioner did not agree for the same. The petitioner vide its letter dated 11.12.2014 submitted that it could not apply on day ahead basis and requested to grant relaxation upto 30% deviation from schedule as per RRF mechanism and provide compensation for deviation mechanism. AP-SLDC had not rejected the petitioner's application for grant of inter-State open access for the month of September, 2014 and the petitioner did not make any application for grant of inter-State open access for the months of October 2014 to March 2015.

#### **Analysis and Decision:**

- 13. After consideration of the rival contention of the parties, the following issues emerge for consideration:
  - (a) Whether a specific format or procedure is required for applications for short term inter-State open access for energy transfer from a captive generating plant for captive consumption in an industrial unit of the very same owner of the captive generating plant?
  - (b) Whether concurrence of SLDC is required for grant of open access for captive generation and captive consumption?
  - (c) Whether the petitioner, a Wind Generator, seeking inter-State Open Access is required to submit UI undertaking as required by AP-SLDC and TS-SLDC?
  - (d) Whether2 the respondents have dealt with the applications of the petitioner in accordance with the provisions of the Act and applicable Regulations?
  - (e) Whether the rejection of concurrence for inter-State Open Access by AP-SLDC for the months of April and May, 2015 on grounds of compliance with 5.2(j) of Grid Code is in accordance with law?
  - (f) Whether the petitioner is required to separate Wind Turbine Generators
    (WTGs) for intra-State and inter-State Open Access?

- (g) Whether the petitioner is required to do scheduling and forecasting of power from wind power projects?
- (h) Relief to be granted to the petitioner by way of compensation for the loss sustained on account of the stranded energy under distress sale to AP-DISCOMs of the period from 1.9.2014 to 19.4.2015 and further for the period thereafter till such open access is made available?

The above issues have been dealt with as under:

Issue No. 1: Whether a specific format or procedure is required for applications for short term inter-State open access for energy transfer from a captive generating plant for captive consumption in an industrial unit of the very same owner of the captive generating plant?

14. The petitioner has set up a 46 MW (2x23 MW) captive wind power plant comprising of 23 nos Wind Turbine Generators (WTGs) of 2 MW each spanning across the three villages of Tagguparthi, Budigumma and Ankampalli at district Anantapur in the State of Andhra Pradesh. The WTGs are grouped into three groups of 8,8 and 7 WTGs at the 33 kV level to from three separate 33 kV feeders having its own ABT compliant metering arrangement comprising of main meters, check meters and stand-by meters of 0.2 class of accuracy and with 0.2S class CTs and 0.2 class PTs. The petitioner's above three industrial units avail power from the project. The project was synchronised on 25.6.2014 and was declared under commercial operation on 25.7.2014. The petitioner has submitted that there is no specified format or procedure for making applications for grant of Short Term inter-State Open Access for transfer of energy from the captive generating station for captive consumption in an industrial unit of the very same owner.

The petitioner has submitted that based on the oral advice of the AP-SLDC, it applied for grant of open access in accordance with procedure specified for bilateral transactions. The petitioner has submitted that the requirement of concurrence is not applicable in petitioner's case as the petitioner's requirement for open access does not fall within the definition of either bilateral transaction or collective transaction in Regulation 1(b) or (c) of the Open Access Regulations as there is no buyer or seller involved and consequently, Regulation 7 and 8 and the Detailed Procedure do not apply. The petitioner has submitted that even if the existing procedure is adopted for the purpose of carrying electricity from a captive generating plant for captive consumption, the provisions of the existing regulations and the detailed procedure has to be reasonably construed and adapted so as not to defeat the petitioner's right to open access under Section 9(2) of the Act.

15. We have examined the submission of the petitioner. There are no separate formats prescribed for application for open access to be made by a captive generating plant to take its power for its captive consumption. On oral advice of AP-SLDC, the petitioner applied for grant of STOA as per the procedure specified in Regulation 2 (1) (b) of the 2008 Open Access Regulations for transfer of power from its captive plant in AP for consumption in its industrial unit in Telangana. Regulation 2(1)(b) of the 2008 Open Access Regulations which defines bilateral transaction, is extracted as under:

"2(1)(b) "bilateral transaction" means a transaction for exchange of energy (MWh) between a specified buyer and a specified seller, directly or through a trading licensee or discovered at power exchange through anonymous bidding, from a specified point of injection to a specified point of drawl for a fixed or varying quantum of power (MW) for any time period during a month."

As per the above definition, the transaction carried out from a specified point of injection to a specified point of drawl for a fixed or varying quantum of power for any time is covered under bilateral transaction. The petitioner has set up the wind power project in the State of Andhra Pradesh for consumption of the power generated from the project in the industrial facilities of the petitioner located in Andhra Pradesh and Telangana. There are specified points of injection and specified points of drawal in so far as carrying the power from the wind power project to the industrial facilities of the petitioner are concerned. Therefore, even though there is no buy or sale of power between the captive generating plant and its captive users, the exchange of power is similar to bilateral transaction. Therefore, the formats applicable for bilateral transactions shall be used for grant of short term inter-State open access for transfer of power from captive generating plant for captive consumption by the captive users. The petitioner had applied on these formats and the petitioner's applications had been processed by AP-SLDC and TS-SLDC on the basis of these formats.

# Issue No. 2: Whether concurrence of SLDC is required for grant of open access for captive generation and captive consumption?

16. The petitioner has submitted that since 2008 Open Access Regulations do not specifically provide for concurrence from SLDCs for carrying power from captive generating plant to the destination of its use for captive consumption, the Commission should clarify the procedure for grant of open access in such cases. The petitioner has submitted that only requirements regarding availability of metering arrangements and the availability of adequate transmission capacity need to be verified. The petitioner has requested to consider and direct that, where the open access is sought for captive

generation and captive consumption, the application for scheduling be made directly to SRLDC with a declaration of the captive nature, whereupon SRLDC may refer the application to concerned SLDCs on the very same day for objections on grounds only of non-availability of metering arrangements and/or adequate transmission capacity within 3 days, and providing for deemed confirmation to that effect if no response is received within such specified time limit; and SRLDC may communicate acceptance for scheduling within the time limits applicable to SRLDC similar to the cases under the existing regulations.

- 17. Sub-section (2) of Section 9 of the Electricity Act which deals with the open access to captive generating plant reads as under:
  - "(2) Every person, who has constructed a captive generating plant and maintains and operates such plant, shall have the right to open access for the purposes of carrying electricity from his captive generating plant to the destination of his use:

Provided that such open access shall be subject to availability of adequate transmission facility and such availability of transmission facility shall be determined by the Central Transmission Utility or the State Transmission Utility, as the case may be:

Provided further that any dispute regarding the availability of transmission facility shall be adjudicated upon by the Appropriate Commission."

As per the above provision, a captive generating plant has a right to open access for the purpose of carrying electricity from his captive generating plant to the destination of his use, subject to availability of transmission capacity. Adequacy of the available transmission capacity shall be confirmed by CTU or STU as the case may be. Except on the ground of non-availability of transmission capacity, captive generating plant cannot be denied open access to carry power to the destination of its use. The petitioner has a captive 46 MW wind power project which comprises of 23 wind turbine generators of 2

MW at village Tagguparthi, Budigumma and Ankampalli in Anantapur District, Andhra Pradesh. The petitioner has three industrial units at Chirala (at 33 kV) and Anaparthi (at 33 kV) in Andhra Pradesh for the processing of tobacco leaf, manufacture of paperboards and specialty papers at Bhadrachalam (at 132 kV) in Telangana. The petitioner intended to wheel power from the captive generating plant to its manufacturing facility in Andhra Pradesh and Telangana. There is no difficulty in supplying power to the industrial facilities in Andhra Pradesh. For supply to the industrial facility in Telangana which involves inter-State open access, the petitioner is facing difficulties. While AP-SLDC and TS-SLDC are of the view that they are acting strictly in accordance with Open Access Regulations, the petitioner has pleaded that both SLDCs are introducing terms and conditions which defeats the petitioner's right to open access under Section 9(2) of the Act.

18. Regulation 8 of the 2008 Open Access Regulations provides for concurrence of SLDC as under:

#### "Concurrence of State Load Despatch Centre for bilateral and collective transactions

8. (1) Wherever the proposed bilateral transaction has a State utility or an intra-State entity as a buyer or a seller, concurrence of the State Load Despatch Centre shall be obtained in advance and submitted along with the application to the nodal agency. The concurrence of the State Load Despatch Centre shall be in such form as may be provided in the detailed procedure. (2) ......

As per the above provisions, advance concurrence from SLDC is required to be obtained if proposed bilateral transaction has a State utility or an intra-State entity as a buyer or a seller.

19. We have considered the submission of the petitioner. The petitioner is seeking clarification of the Commission regarding concurrence from SLDCs for a transaction of the nature of captive generation and transmission for captive consumption as 2008 Open Access Regulations do not specifically provide for the same. In this regard it is clarified that as per Section 32 of the Act, SLDC is the apex body to ensure integrated operation of power system in the State. Sub-section 2 of Section 32 of the Act, interalia, provides that the SLDC shall be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid Standards and the State Grid Code. Further, under Section 9 of the Act, the petitioner has a right to open access for the purpose of carrying electricity from the generating station to the destination of his use, subject to availability of transmission capacity which shall be determined by the CTU and STU as the case may be. Since the availability of transmission capacity is involved, the petitioner is required to approach SLDC for concurrence before injection of infirm power. We have already clarified that in the present case, the petitioner is carrying the electricity generated in its captive generating plant for its own use at its manufacturing unit which is similar to bilateral transaction. Regulation 8 of the 2008 Open Access Regulations provides that wherever the proposed bilateral transaction has a State utility or an intra-State entity as a buyer or a seller, concurrence of the State Load Despatch Centre shall be obtained in advance and submitted along with the application to the nodal agency. The concurrence of the State Load Despatch Centre shall be in such form as may be provided in the detailed procedure. In view of the above, we are of the view that concurrence from SLDCs for a transaction of the nature

of captive generation and transmission for captive consumption is required and the concurrence of the State Load Despatch Centre shall be in such form as provided in the detailed procedure approved by the Commission.

- 20. The petitioner has raised an issue that in case where the open access is sought for captive generation and captive consumption, the application for scheduling should be made directly to SRLDC with a declaration of the captive nature whereupon the SRLDC should refer the application to concerned SLDC on the very same day for objections on grounds only of non-availability of metering arrangements and/or adequate transmission capacity within 3 days, and providing for deemed confirmation to that effect if no response is received within such specified time limit; and SRLDC should communicate acceptance for scheduling within the time limits applicable to SRLDC similar to the cases under the existing regulations.
- 21. Sub-regulations 2 and 5 of Regulation 6.4 of the "Schedule and Despatch Code" of the Grid Code provides for scheduling as under:

## **"6.4 Demarcation of Responsibility**

1.....

- 2. The following generating stations shall come under the respective Regional ISTS control area and hence the respective RLDC shall coordinate the scheduling of the following generating stations:
- a) Central Generating Stations (excluding stations where full Share is allocated to host state),
- b) Ultra-Mega power projects,
- c) In other cases, the control area shall be decided on the following criteria:
  - (i) .....
  - (ii) If a generating station is connected only to the State transmission network, the SLDC shall coordinate scheduling, except for the case as at (a) above;

5. The Regional grids shall be operated as power pools with decentralized scheduling

and despatch, in which the States shall have operational autonomy, and SLDCs shall have the total responsibility for –

- (i) scheduling/despatching their own generation (including generation of their embedded licensees),

22. Since, the petitioner's captive wind generation plant is an intra-State entity, it falls under the jurisdiction of SLDC. Therefore, the petitioner is required to obtain concurrence from SLDC for grant of inter-State Open Access. The petitioner has requested to consider and direct for filing application to SRLDC for scheduling where the open access is sought for captive generation and captive consumption. It is clarified that captive generator would also be required to seek open access in terms of the provisions of 2008 Open Access Regulations as applicable to other generating companies.

Issue No. 3: Whether the petitioner, a Wind Generator, seeking inter-State Open Access is required to submit UI undertaking as required by AP-SLDC and SLDC, Tamil Nadu?

23. The petitioner applied to AP-SLDC to issue concurrence for making application to SRLDC for grant of inter-State Open Access for 15 MW power for the month of September 2014 for transmission/wheeling of power to its Bhadrachalam unit in Telangana. In response, AP-SLDC vide its letters dated 28.8.2014 and 13.11.2014 requested the petitioner *inter alia* to submit UI undertaking wherein the petitioner was required to pay the prevailing UI rates as payable from time to time depending on the grid frequency in addition to charges liable to pay for the energy generated below the scheduled energy provided and for not claiming any charge for any energy injection

over and above the scheduled energy as the same is inadvertent power to the AP Grid. Similarly, on 20.8.2014 and 16.3.2015 the petitioner also made an application to TS-SLDC for grant of concurrence for the month of September, 2014 and April, 2015 respectively.

24. The petitioner vide letter dated 11.12.2014 informed AP-SLDC that the condition for adherence to day ahead schedule without any deviation put the petitioner in difficult financial positions as in addition to being penalized for under injection, the petitioner would also lose the excess generation over the schedule without any compensation. The petitioner requested AP-SLDC to allow a relaxation up to 30% deviation from the schedule in accordance with the CERC RRF Mechanism and provide compensation for over injection cases as per the Commission's Deviation Settlement Mechanism. In response, AP-SLDC vide its letter dated 12.12.2014 informed the petitioner that as per APTRANSCO's policy decision, no amount would be paid for over injection by generators and to that extent, undertaking should be given by the generator for not claiming over injection. AP-SLDC further informed that since RRF Mechanism is not available at present, therefore, 30% deviation cannot be allowed. The petitioner vide its letter dated 25.2.2015 informed AP-SLDC that it is required to give day ahead schedule and deviation in the schedule would be subject to deviation settlement mechanism as specified by the Commission in Deviation Settlement Regulations. The petitioner further informed AP-SLDC that APTRANSCO cannot itself make any policy decision in respect of UI and the entire power and authority is with Appropriate Regulatory Commission.

- 25. TS-SLDC vide its affidavit dated 16.5.2015, has submitted that it is the nodal agency to issue NOCs/ concurrences for the generators/ consumers for trading through Power Exchanges/bilateral applications. Since last seven years, SLDC is issuing NOCs/ concurrences within stipulated time and is presently issuing NOCs to 200 open access consumers to facilitate to trade through Power Exchanges. TS-SLDC has submitted that as per Regulation 5.2 of the TSERC Regulation 2 of 2005, the SLDC and Licensees are required to devise procedures for coordination among themselves for allowing such short term transactions.
- 26. TS-SLDC vide its letters dated 28.8.2014 and 18.3.2015 requested the petitioner to submit UI undertaking devised in accordance with Regulation 5.2 of the TSERC Regulation 2 of 2005. The petitioner has submitted that no such undertaking is required under 2008 Open Access Regulations and UI, if any, has to be settled in accordance with the UI Regulations which would apply.
- 27. We have examined the submissions of the petitioner and the respondents in respect of UI undertaking. The Regulation 20(5) of the 2008 Open Access Regulations as amended from time to time provides as under:
  - "(5) Unless specified otherwise by the concerned State Commission, UI rate for intra-State entity shall be 105% (for over-drawals or under generation) and 95% (for underdrawals or over generation) of UI rate at the periphery of regional entity:

Provided that all payments on account of Unscheduled Interchange Charge (Deviation Charges) including Additional Unscheduled Interchange Charges (Deviation Charges) and interest and implications for all other aspects of Unscheduled Interchange (Deviation Charges), shall be regulated in accordance with the provisions of Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009, as amended from time to time or any subsequent re-enactment thereof."

As per above provisions, unless specified otherwise by the concerned State Commission, UI rate for intra-State entity shall be 105% (for over-drawals or under generation) and 95% (for under-drawals or over generation) of UI rate at the periphery of regional entity.

- 28. Regulation No. 2 of Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions of Open Access to Intra-State Transmission and Distribution Network)
  Regulations, 2005 (APERC Open Access Regulations) provides as under:
  - "2(i)(b) "applicant" means a person who makes an application to the Nodal Agency for open access and includes any person engaged in generation, a licensee or any consumer eligible for open access under this Regulation.
  - 4(b) Short-Term Open Access User: Any user other than a long term user of the transmission and/or distribution system(s) entering into an open access agreement with the concerned licensee(s) shall be treated as Short-term open access user, but open access shall not be allowed at a time for a period of more than one year.

# 5. Nodal Agency

5.1.....

5.2 For short-term open access transactions, the Nodal Agency for receiving and processing applications shall be the State Load Dispatch Centre (SLDC). The SLDC shall, however, allow short-term open access transactions only after consulting the concerned transmission and/or distribution licensee(s) whose network(s) would be used for such transactions:

Provided that for short-term transactions with duration of less than one week, the SLDC may not consult the concerned licensees for permitting such transactions. The SLDC and Licensees shall devise procedures for coordination among themselves for allowing such short-term transactions.

## 17. Open Access charges

- 17.1 The charges for the use of the transmission and / or distribution system by an open access user shall be regulated as under:
  - (i) Open Access users connected to the transmission/distribution system shall pay the transmission charges and / or wheeling charges, and any other applicable charges as determined by the Commission from time to time, and notified in the relevant Tariff Order or otherwise, and as per the conditions stipulated therein:

Provided that the wheeling charges so payable shall be subject to a minimum level, as fixed by the Commission in the relevant Tariff Order or otherwise,

- (ii) In case of utilization of inter-state transmission system in addition to the intrastate transmission system and/or distribution system by an open access user, the transmission charges and /or wheeling charges, shall be payable for the use of intrastate system in addition to the charges for utilization of the inter-state transmission system
- (iii) The Open access users of the Transmission and / or Distribution System where such open access is for delivery of electricity to the consumer's premises in the area of supply of a distribution licensee, shall pay to the distribution licensee the (cross-subsidy) surcharge as determined by the Commission from time to time under Section 42 (2) of the Act:

Provided that no (cross-subsidy) surcharge shall be payable if the open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use.

. . . . .

- (vii) Scheduling and system operation charges shall be payable by all open access users under scheduling by SLDC. Such charges shall be governed by the relevant Regulations issued by the Commission.
- 19.4 **Energy and Demand Balancing:** All open access users, and the users covered under clause 7.2, shall make reasonable endeavor to ensure that their actual demand or actual sent-out capacity, as the case may be, at an inter-connection does not exceed the Contracted Maximum Demand or allocated sent-out capacity for that inter-connection:

Provided that for carrying out balancing and settlement of energy and demand at all entry and exit points relating to open access agreements, the licensee shall strictly adhere to the Balancing and Settlement Code to be approved by the Commission from time to time."

Andhra Pradesh Electricity Regulatory Commission (Interim Balancing and Settlement Code for Open Access Transactions) Regulations, 2006 provides as under:

### "Introduction

...... The Commission has also been expressing its keenness to introduce the ABT regime at the State level. Pending finalization of a comprehensive settlement system for the State pool under ABT, the Commission considered it appropriate to specify an Interim Balancing and Settlement Code, envisaging a day-ahead wheeling schedule of energy on the basis of 15-minute time blocks, and monthly settlement of deviations.......

#### 4 SCHEDULING

4.1 Each Open Access Generator, Scheduled Consumer and QA Consumer shall provide a Wheeling Schedule in the format as at Appendix- 1(a), to the SLDC/ DISCOM for each fifteen (15) minute time block for a day, on a day-ahead basis by 10:00 a.m. Son the day

preceding the commencement of the first time block for which the wheeling of energy is scheduled, with a copy each to the State Transmission Utility (APTRANSCO) and the concerned DISCOM:

Provided that an Open Access Generator, Scheduled Consumer and OA Consumer requiring to wheel electricity from more than one generating station with the interface points located at different locations (with separate metering at each entry point) shall provide separate wheeling schedule for the entry point(s) of each generating station:

Provided also that the Wind based, Solar based or Mini-Hydel Open Access Generators shall not be required to provide a day-ahead wheeling schedule and the actual electricity injected by them shall be deemed to be the scheduled energy.

### 10 SETTLEMENT FOR OA GENERATORS AT ENTRY POINT

10.1 .....

10.5 In case of Wind, Mini-Hydel and Solar OA Generators the actual generation during the month shall be deemed as scheduled energy. For the purpose of settlement in respect of scheduled/OA consumer availing supply from these OA generators, the actual generation during the month will be apportioned for each time block of the month and deviations reckoned accordingly."

On perusal of above regulations framed by APERC, it emerges that the Regulation 2 of 2005 of APERC Open Access Regulations does not make any provision for any type of UI undertaking to be submitted by the open access applicants. Therefore, there is nothing on record to prove the contention of the AP-SLDC that the UI undertaking has been devised in line with the policy decision of APTRANSCO. In case, the State Commission has not notified any rate for deviation for intra-State entities who are selling power inter-State, the rate prescribed by the Commission in Regulation 20 (5) of the 2008 Open Access Regulations shall be applied for deviation.

29. TS-SLDC has submitted that the petitioner was requested to submit UI undertaking in accordance with Regulations 2 of 2005 which provides that SLDC and licensees shall devise procedures for coordination among themselves for allowing short term transactions. On perusal of the Regulations of TSERC, it emerges that TSERC has

adopted the regulations framed by APERC. We are of the view that in line with the discussions at para 27 above, the rate as prescribed in the 2008 Open Access Regulations shall be applicable if no rate has been specified by the State Commission.

30. Since, the State Commissions have not specified charges for deviation from schedule in respect of short term transactions, therefore, the provisions of 2008 Open Access Regulations shall be applicable in the present case. We direct AP-SLDC and SLDC, Telangana to correctly implement the Open Access Regulations of this Commission as well as the respective State Commissions for facilitating non-discriminatory open access as enshrined in the Electricity Act, 2003.

Issue No. 4: Whether AP-SLDC and TS-SLDC and SRLDC have dealt with the petitioner's application in accordance with the provisions of the Act and applicable regulations?

31. The petitioner has alleged that AP-SLDC and TS-SLDC as well as SRLDC have not dealt with its applications in accordance with the provisions of the Act and the applicable regulations. We proceed to deal with the contentions of the petitioner against AP-SLDC, TS-SLDC and SRLDC separately as under:

# Petitioner's contention against AP-SLDC:

32. The petitioner has submitted it had filed an application dated 20.8.2014 on 21.8.2014 to AP-SLDC, for grant of concurrence to enable it to make application to SRLDC for inter-State open access for 15 MW for the month of September 2014 for transmission / wheeling of power to its Bhadrachalam unit in Telangana. Subsequently, on 2.9.2014, Andhra Pradesh State Power Distribution Company Limited (APSPDCL)

endorsed the Formats A and B and sent directly to AP-SLDC. The petitioner has submitted that it has followed the procedure and formats specified for bilateral transaction. AP-SLDC vide letter dated 26.8.2014 requested the petitioner to furnish forecast for wind generation up to 30.9.2014 and the tools utilized for the forecast. In response, the petitioner vide its letter dated 3.9.2014 informed that the forecast schedule on weekly basis would be furnished as per the enclosed format as was being done in other States such as Karnataka, Gujarat and Rajasthan. AP-SLDC vide its letter dated 19.9.2014 further requested the petitioner to furnish forecast for wind generation for the whole month of September, 2014 and tools utilized for forecasting. The petitioner vide letter dated 17.9.2014 clarified that on the basis of the document of Indian Metrological Department, forecast can be provided only on weekly basis as the wind speed prediction is available only for 1 to 7 days.

33. The petitioner has submitted that AP-SLDC vide its letter dated 15.10.2014 requested the petitioner to provide details of SCADA facilities available, LVRT details and tools utilized for the forecast. In response, the petitioner, vide its letter dated 27.10.2015 submitted to AP-SLDC the particulars of the SCADA architecture, functional design specifications and PLCC drawing and LVRT details and pointed out that the issue of forecast was already replied to in the petitioner's earlier letters. AP-SLDC vide letter dated 13.11.2014 again requested the petitioner to furnish forecast of the wind generation including inter-State open access one day before, the tools utilized for the forecast, separation of the WTGs meant for intra-State and inter-State open access, UI undertaking for payment for energy generated below scheduled energy and reason for not claiming any charges for energy injected over and above the schedule. AP-SLDC

vide letter dated 12.12.2014 further requested the petitioner to make separate applications for grant of concurrence for every day-ahead application with nonrefundable fee of Rs. 5000 with an undertaking for not claiming the amounts due for injection as per APTRANSCO's policy and opt for intra-State open access for entire wind generation due to infirm nature of wind power keeping in view grid security. The petitioner vide letter dated 11.12.2014 informed AP-SLDC that to start off the process. the petitioner agreed not to mix WTGs meant for intra-State Open Access with the rest of the WTGs. The petitioner further informed that it should be allowed to allocate capacities (not WTGs) for intra and inter-State transactions. In the said letter dated 11.12.2014, the petitioner further informed AP-SLDC that it has agreed to abide by all inter-state Open Access charges and losses applicable to day-ahead bi-lateral transactions and requested to exempt it from intra-State transmission charges in accordance with APERC guidelines. The petitioner vide letter dated 25.2.2015 informed Chief Engineer, AP-SLDC that conditions imposed by it is contrary to the 2008 Open Access Regulations and the Detailed Procedure thereof which are binding to AP-SLDC. The petitioner has submitted that it again applied to AP-SLDC for grant of inter-State open access for the months of April, May, June and July, 2015 for 2 MW, 5 MW, 12 MW and 18 MW respectively. AP-SLDC vide letters dated 19.3.2015 and 23.3.2015 rejected the petitioner's applications for the months of April and May, 2015 on the ground that no inter-State Open Access is allowed for wind generators in view of grid security and to comply with the provisions of Regulation 5.2.(j) of the Grid Code. The petitioner has submitted that no response was received from AP-SLDC on the applications for grant of inter-State open Access for the months of June and July, 2015.

34. AP-SLDC has submitted that during August, 2014, the petitioner sought inter-State open access for the month of September, 2014 to supply its captive wind power from its generating station at Andhra Pradesh to its own industry at Bhadrachalam in Telangana. AP-SLDC has further submitted that the petitioner's application was scrutinized and vide letter dated 26.8.2014, the petitioner was requested to furnish the forecast of expected generation and applicability of deviation mechanism for any deviation in schedules, although the RRF mechanism was kept in abeyance. In response, the petitioner replied that a weekly forecast can only be furnished prior to commencement of open access operations. Meanwhile, the application of intra-State open access of the petitioner was approved by AP-SLDC from 18.10.2014 onwards as the generation forecast is not required to be furnished by wind generators under the intra-State Regulations and also settlement mechanism exists for average month generation on time block basis in terms of intra-State Regulations. AP-SLDC has submitted that to facilitate in getting inter-State open access, the petitioner, vide letter dated 15.10.2014, was requested to furnish details of SCADA facility available, LVRT details and forecast. However, the petitioner vide its letter dated 27.10.2014 informed that it would be able to furnish the forecast schedule on weekly basis only during STOA period as there is no mechanism available to furnish the forecast schedule for the entire month. AP-SLDC has submitted that in reply to the letter dated 27.10.2014, the petitioner, vide letter dated 13.11.2014, was requested to provide forecast of wind generation including tools utilized, not to mix WTGs meant for intra-State open access with WTGs meant for inter-State open access and to comply with day ahead schedule without any deviation, and if there is any deviation from the schedule, deviation mechanism would be applied. AP-SLDC has submitted that the petitioner was required to liquidate payment of deviation charges. AP-SLDC has submitted that the above information was sought from the petitioner as per the provisions of Regulation 8 (3A) of the 2008 Open Access Regulations. AP-SLDC has further submitted that as per 2008 Open Access Regulations, SLDC only can grant concurrence in open access transactions for State power system. If the petitioner is aggrieved of the 2008 Open Access Regulations, it can challenge it before the High Court and the right of an entity to seek open access is always subject to procedures approved by the Commission and APERC. SLDC is required to make requisite checks in processing various applications/transactions and execute them in compliance with the relevant Regulations. In this process, SLDC required data from the generators, the distribution companies to account for the energy flowing in the grid, etc. AP-SLDC has submitted that it has good track record in allowing generators/consumers on open access to sell/purchase power from power markets, even when the State was under power deficit/surplus situation from outside and also within the State where the procedures and settlement mechanism are in place.

35. We have examined the submissions of the petitioner and the respondents. The petitioner had applied to AP-SLDC for grant of concurrence for short term inter-State open access for the months of September, 2014 and April, May, June and July, 2015 for transfer of power from its wind power generating station in AP to its industrial unit in Telangana for its own use. Regulation 8(3) (b) and (c) of the 2008 Open Access Regulations which deals with concurrence of State Load Despatch Centre for bilateral and collective transactions provides as under:

- "8.(3) (b) While processing the application for concurrence or 'no objection' or prior standing clearance, as the case may be, the State Load Despatch Centre shall verify the following, namely-
- (i) existence of infrastructure necessary for time-block-wise energy metering and accounting in accordance with the provisions of the Grid Code in force;
- (ii) availability of surplus transmission capacity in the State network;
- (iii) submission of affidavit regarding existence of valid contract according to the second proviso to sub-clause (a) of clause (3) of this regulation with respect to bilateral transactions and according to the last proviso with respect to collective transactions.
- (c) Where the existence of necessary infrastructure, availability of surplus transmission capacity in the State network and submission of affidavit as required under provisos to sub-clause (a) of clause (3) of this regulation have been established, the State Load Despatch Centre shall convey its concurrence or no objection or prior standing clearance, as the case may be, to the applicant by e-mail or fax, in addition to any other usually recognized mode of communication, within three (3) working days of receipt of the application.

Provided that when short-term open access has been applied for the first time by any person, the buyer or the seller, the State Load Despatch Centre shall convey to the applicant such concurrence or 'no objection' or prior standing clearance, as the case may be, within seven (7) working days of receipt of the application by e-mail or fax, in addition to any other usually recognised mode of communication."

As per the above provisions, SLDC is required to verify existence of infrastructure necessary for time-block-wise energy metering and accounting in accordance with the provisions of the Grid Code, availability of surplus transmission capacity in the State network and availability of valid contract. SLDC is required to convey its concurrence or no objection or prior standing clearance, as the case may be, to the applicant by e-mail or fax, in addition to any other usually recognized mode of communication, within three (3) working days of receipt of the application, if the existence of necessary infrastructure, availability of surplus transmission capacity in the State network and submission of affidavit as required have been established. However, AP-SLDC after receipt of application from the petitioner for grant of concurrence for short term open access directed the petitioner to submit details of SCADA, LVRT, PLCC and functional

design specification. It is also noted that AP-SLDC advised the petitioner to separate WTGs meant for inter-State and intra-State open access, submit non-refundable application fee of Rs. 5000 for every day ahead application, undertaking for not claiming any charges for energy injected over above schedule energy and opt for intra-State open access for entire energy. AP-SLDC also informed the petitioner that in the absence of non fulfillment of above conditions, the applications of the petitioner were either rejected by in view of grid security or were not responded to.

36. AP-SLDC vide RoP of the hearing dated 19.5.2015 was directed to clarify how intra-State Open Access being permitted without affecting "grid security" but inter-State Open Access is not possible in view of "grid security". AP-SLDC vide its affidavit dated 8.6.2015 has submitted that APTRANSCO had conducted load flow studies for evacuation of 588.6 MW of wind power in Kadapa, Ananthapur, Chitoor and Kurnool districts and wind power evacuation approvals for an installed capacity of 431 MW were given progressively with inclusion of the petitioner among others, proposing augmentation of network, by erection of second 220 kV D/C line from Muddanur (RTPP) to Chinakampalli. AP-SLDC has further submitted that the petitioner's generation was realized but the associated augmentation 220 kV is not commissioned due to ROW problem. AP-SLDC has submitted that since the petitioner is covered in the above scheme, intra-State Open Access is given by curtailing injection of a few of the wind generating stations in the area as and when transmission constraints are encountered. In view of the constraints like overloading of 220 kV STU system, injection of power to CTU network, etc., the grid security issues arise, and therefore, the inter-State open access application could not be processed. AP-SLDC has further submitted that as per

Regulation 6.5.23 of the Grid Code, wind generators are required to furnish forecast for scheduling the power. Even if forecast is given, the power is not reliable power, especially in lean wind season. According to AP-SLDC, allowing inter-State Open Access during lean wind season seriously affects load-generation balance, as under injection by wind generator leads to over drawl of equivalent quantum of power from the central grid which induces reduction in frequency leading to violation of the provisions of the Grid Code. Further, CGS quota of the State also gets reduced from the State quota where the wind generator is located leading to financial loss to the DISCOM. It has been further stated by AP-SLDC that wind power being highly variable in nature, when there is no wind generation, SLDC will be forced to overdraw from the grid thereby deviating from schedule beyond the prescribed limits prerscribed in the Grid Code and DISCOMs/SLDC has to resort to Demand Side Management as per Regulation 5.4 of the Grid Code, which reduces the credibility of the State DISCOM among its consumers and, therefore, the inter-state Open Access application could not be processed.

37. In our view, SLDC is required to verify existence of infrastructure necessary for time-block-wise energy metering and accounting in accordance with the provisions of the Grid Code, availability of surplus transmission capacity in the State network and availability of valid contract. It is noted that AP-SLDC is scheduling power from the generating station of the petitioner to the distribution companies of Andhra Pradesh through the State transmission network while denying open access to the petitioner to evacuate a part of the power from the generating station to Telangana through inter-State open access. In other words, there is no constraint in the State transmission network to wheel power from the generating station to Telangana. In our view, AP-

SLDC cannot take the plea of non-availability of adequate transmission capacity in the State network for facilitating inter-State open access. Therefore, AP-SLDC should have granted concurrence or denial for short term inter-State open access to the petitioner as per the provisions of Regulation 8(3) (b) and (c) of the 2008 Open Access Regulations. In our view, though AP-SLDC can seek details such as SCADA facilities, tools utilized for forecasting and LVRT details in view of grid security concerns but AP-SLDC should not deny open access applications in absence of such information. AP-SLDC should comply with the provisions of 2008 Open Access Regulations and process the applications of the petitioner for issue of concurrence in the manner specified in the regulations.

# Petitioner's contention against TS-SLDC:

38. The petitioner has submitted that it had made an application dated 20.8.2014 to TS-SLDC which was delivered on 21.8.2014, for grant of concurrence for the month of September, 2014. Subsequently, on 28.8.2014, Northern Power Distribution Company of Telangana Ltd. (NPDCTL) submitted the copies of Formats A and B to TS-SLDC. The petitioner further made an application to TS-SLDC for grant of inter-State Open Access for the months of April, May, June and July, 2015 and to AP-SLDC and TS-SLDC for 2 MW, 5 MW, 12 MW and 18 MW power respectively. The petitioner has submitted that with regard to its application for the month of September 2014, TS-SLDC vide letter dated 28.8.2014 requested the petitioner to submit Formats A and B from NPDCTL and an undertaking for UI charges as per the formats available on the website of TS-SLDC. Accordingly, the petitioner vide letter dated 1.9.2014 submitted the

formats. However, no further action was taken by TS-SLDC. The petitioner has submitted that for the month of April 2014, TS-SLDC belatedly issued concurrence on 24.4.2015 and for the months of May, June and July, 2015, TS-SLDC requested the petitioner to submit the Formats A, B and an undertaking. However, the petitioner submitted the formats except for undertaking.

39. TS-SLDC has submitted that as per Regulation 5.2 of TSERC Regulation 2 of 2005, SLDC and licensees are required to devise procedures for coordination among themselves for allowing such short term transactions. Accordingly, the procedures such as Format A, B and UI Undertaking, etc. were devised in consultation with DISCOMs and are displayed in TSTRANSCO website. TS-SLDC has submitted that the petitioner, vide its letter dated 20.8.2014 applied to TS-SLDC for grant of concurrence for wheeling of wind power from its generating station in Andhra Pradesh to its Bhadrachalam unit, Telangana for own use. TS-SLDC requested the petitioner vide letter dated 28.8.2014 to furnish Formats A, B and an undertaking for UI charges in the prescribed format given in TSTRANSCO website. However, the petitioner submitted only Format A&B without mentioning about UI undertaking. The petitioner did not furnish UI undertaking for the whole month. Therefore, the application of the petitioner could not be processed. TS-SLDC has further submitted that on 16.3.2015 the petitioner made an application for grant of concurrence for the month of April, 2015 for 2 MW power without fulfilling the requisite requirements. TS-SLDC vide its letter dated 18.3.2015 requested the petitioner to furnish Formats A, B and UI undertaking to process its application. Subsequently, TS-SLDC vide its letter dated 20.3.2015 requested NPDCTL to issue Formats A and B. Accordingly, on 31.3.2015 and 1.4.2015, NPDCTL issued Format A and Format-B

respectively for the month of April, 2015. With regard to UI undertaking, the petitioner, vide its letter dated 2.4.2015 informed SLDC, Telangana that no such undertaking is required as per 2008 Open Access Regulations and UI, if any, has to be settled in accordance with the CERC UI Regulations which would apply. TS-SLDC has submitted that the petitioner is the 1<sup>st</sup> consumer who denied such procedure. However, TSTRANSCO issued clearance to issue concurrence on 18.4.2015 and accordingly, on 20.4.2015 the petitioner was granted concurrence for the month of April, 2015. TS-SLDC has submitted on 26.3.2015, the petitioner made applications for grant of concurrences for the months of May, June and July, 2015. TS-SLDC vide its letter dated 27.3.2015 requested NPDCTL and the petitioner to furnish Format-A, B and UI undertaking for the months of May, June and July, 2015. The petitioner vide its letter dated 2.4.2015 enclosed the details of Format-A and B for April, 2015, mentioning that the same are relevant formats for the months of May, June and July, 2015. Subsequently, NPDCTL furnished the feasibility report on 27.4.2015. Thereafter, immediately TS-SLDC granted concurrence to the petitioner for the month May, 2015 on the same day. TS-SLDC has submitted that the petitioner had applied open access for 12 MW and 18 MW power for the months of June, 2015 and July, 2015 respectively which are more than their Contracted Maximum Demand (CMD) as a scheduled consumer to the concerned DISCOM. TS-SLDC has submitted that vide letter dated 29.4.2015 NPDCTL was requested to communicate the confirmation of technical feasibility for grant of concurrence above CMD (as a scheduled consumer of DISCOM) for quantum of 12 MW and 18MW as the DISCOMs have not allowed Open Access for above CMD so far to any consumer. Since, NPDCTL vide letter dated 12.5.2015 issued

feasibility report for the months of June, 2015 and July, 2015, the concurrence for the months of June, 2015 and July, 2015 were issued on 13.5.2015 i.e. within 3 days of confirmation. Therefore, there is no delay from TS-SLDC in issuing concurrence to the petitioner.

40. We have considered the submissions of the petitioner and TS-SLDC. It is noted that the petitioner applied to TS-SLDC for grant of concurrence for short term inter-State open access for the months of September, 2014 for transfer of power from its wind power generating station in AP to its industrial unit in Telangana for captive purpose. TS-SLDC directed the petitioner to submit Formats A, B and undertaking for UI charges for grant of concurrence for STOA for month of September, 2014 which was submitted by the petitioner except for UI undertaking. Further, the petitioner made an application to TS-SLDC on 16.3.2015 for grant of concurrence for the month of April, 2015 for 2 MW without UI undertaking. On the request of TS-SLDC, NPDCTL issued Format-A and Format-B on 31.3.2015 and 1.4.2015 respectively for the month of April, 2015. However, regarding UI undertaking, the petitioner vide its letter dated 2.4.2015 informed TS-SLDC that no such undertaking is required as per 2008 Open Access Regulations and UI, if any, has to be settled in accordance with the UI Regulations which would apply. On 18.4.2015, TSTRANSCO granted clearance and accordingly, TS-SLDC granted concurrence for 5 MW to the petitioner on 20.4.2015 for the month of April, 2015. On 20.3.2015, the petitioner applied for grant of STOA concurrence for 5 MW for the month of May, 2015 which was granted to the petitioner by TS-SLDC on after getting feasibility report from SPDCTL. The petitioner made an 27.4.2015 application to TS-SLDC for grant of open access for 12MW and 18 MW for the month of June and July, 2015 respectively on 16.3.2015 which was more than the petitioner's Contracted Maximum Demand (CMD) as a scheduled consumer to the concerned DISCOM of Telangana. TS-SLDC vide its letter dated 29.4.2015 requested NPDCTL to forward technical feasibility for grant of concurrence for above CMD (as a scheduled consumer of DISCOM) for 12 MW and 18 MW as the DISCOMs have not allowed Open Access for above CMD to any consumer. NPDCTL vide its letter dated 12.5.2015 issued feasibility for the months of June, 2015 and July, 2015 and accordingly, TS-SLDC granted concurrence to the petitioner for June, 2015 and July, 2015 on 13.5.2015 i.e. within 3 days from the confirmation.

41. Since, we have already observed that the UI undertaking required by TS-SLDC is not as per the provisions of the 2008 Open Access Regulations, the contention of TS-SLDC to the effect that it did not process the application in absence of undertaking, is not appeared to be correct. It is noted that TS-SLDC granted concurrence for the month of April, 2015 on 20.4.2015. Therefore, TS-SLDC failed to comply with the provisions of 2008 Open Access Regulations. It is also noted that for the months of May, June and July, 2015, TS-SLDC granted concurrence with in time as specified in the 2008 Open Access Regulations. We direct TS-SLDC to correctly implement the regulation of this Commission as well as the respective State Commission for facilitating non-discriminatory open access as enshrined in the Electricity Act, 2003.

## Petitioner's contention against SRLDC:

42. The petitioner has submitted that it had made an application to AP-SLDC for grant of concurrence for short term inter-State open access for the months of June and

July, 2015. However, no response was received till 18.4.2015 from AP-SLDC. According to the petitioner, as per 2008 Open Access Regulations, AP-SLDC was required to give concurrence or denial within 3 working days. However, no response was received from AP-SLDC within the stipulated time. Therefore, the concurrence should be considered as deemed to have been given as per first proviso of Regulation 8 (4) of 2008 Open Access Regulations. The petitioner has submitted that since no response was received from AP-SLDC in respect of applications for the months of June and July, 2015, the petitioner made applications to SRLDC for scheduling of power for the months of June and July 2015 on 10.4.2015 and April and May 2015 on 11.4.2015 along with the relevant documents and the appropriate affidavits in respect of each application with the letter explaining the circumstances. In response SRLDC vide its letter dated 13.4.2015 informed the petitioner that the affidavits were not in the Commission's approved format and requested to submit the affidavit in the prescribed format. Accordingly, the petitioner under its letter dated 14.4.2015 sent affidavits in Format IIA to SRLDC. However, no communication was received from SRLDC in this regard. The petitioner has submitted that on perusal of SRLDC's website that its applications for the months of April, 2015 (Ref No 15299) and May, 2015 (Ref No. 15298) were rejected with the Remarks column left blank. The petitioner has submitted that SRLDC is bound to convey the reasons for the rejection of application in writing as per extent regulations.

43. We have examined the submission of the petitioner. The petitioner has contended that it had submitted application to SRLDC for grant of inter-State open Access for the months of April, May, June and July, 2015 in the formats prescribed in

2008 Open Access Regulations along with the relevant documents and the appropriate affidavits in respect of each application with the letter explaining the circumstances. The first proviso of Regulation 8 (4) of the 2008 Open Access Regulations, which is extracted herein below, provides that when SLDC has not communicated any deficiency or defect in the application within two days from the date of receipt of application or refusal or concurrence or 'no objection' within the specified period of 3 working days or 7 working days, as applicable, from the date of receipt of the application, concurrence or 'no objection' or prior standing clearance, as the case may be, shall be deemed to have been granted:

"Provided that where the State Load Despatch Centre has not communicated any deficiency or defect in the application within two (2) days from the date of receipt of application or refusal or concurrence or 'no objection' or prior standing clearance, as the case may be, within the specified period of three (3) working days or seven (7) working days, as applicable, from the date of receipt of the application, concurrence or 'no objection' or prior standing clearance, as the case may be, shall be deemed to have been granted:

Provided further that where concurrence or 'no objection' or prior standing clearance, as the case may be, is deemed to have been granted by the State Load Despatch Centre, the applicant such as the State utility or the intra-State entity or short term customer as the case may be, shall submit to the nodal agency (concerned Regional Load Despatch Centre) in case of bilateral transactions and the power exchange in case of collective transactions for day ahead or for bilateral intra-day transaction/contingency transaction through power exchange, the following on affidavit in the format as provided in the detailed procedure at least three days in advance:

- (a) Declaring that the State Load Despatch Centre has failed to convey any deficiency or defect in the application or its refusal or concurrence or 'no objection' or 'prior standing clearance', as the case may be, within the specified time;
- (b) Declaring that necessary infrastructure for time-block-wise energy metering and accounting in accordance with the provisions of the Grid Code in force, is in place; and
- (c) enclosing the following documents:-
  - (i) a copy of the complete application made to the State Load Despatch Centre for seeking 'concurrence' or 'no objection' or 'prior standing clearance', as the case may be;

- (ii) Deficiency or defect in the application, if any, communicated by the State Load Despatch Centre and the action taken to remove or rectify the defect or deficiency;
- (iii) a copy of the acknowledgement, if any, given by the State Load Despatch Centre, or any other evidence in support of delivery of the application to the State Load Despatch Centre;
- (iv) Necessary affidavit in accordance with provisos to the clause (3a) of Regulation 8 of this Regulation."
- 44. On 16.3.2015 and 20.3.2015, the petitioner made applications to AP-SLDC and TS-SLDC for the grant of concurrence for the month of April and May, 2015. However, AP-SLDC vide its letters dated 19.3.2015 and 23.3.2015 rejected the petitioner's applications for the months of April and May, 2015. Subsequently, on 11.4.2015, the petitioner approached SRLDC to schedule its power for the months of April and May, 2015 on 11.4.2015. Since, AP-SLDC rejected the petitioner's applications for the months of April and May, 2015 within 3 working days of receipt of applications, we are of the view that SRLDC has not gone into the merits of rejection of the open access application by AP-SLDC. On 20.3.2015, the petitioner made an application to AP-SLDC for grant of concurrence for the months of June and July, 2015. Since no response was received from AP-SLDC within three working days, the petitioner approached SRLDC on 10.4.2015 to schedule its power on the basis of deemed concurrence. However, SRLDC did not consider the petitioner's request. In our view, SRLDC should have acted in accordance with the 2008 Open Access Regulations considering the concurrence to be deemed to have been granted. In our opinion, SRLDC have failed to comply with the provisions of the 2008 Open Access Regulations. It is further noted that on 16.3.2015, the petitioner made an application to TS-SLDC for grant of concurrence for the month of April, 2015. However, TS-SLDC granted concurrence to the petitioner's 20.4.2015 after

getting clarification regarding requirement of UI undertaking which is contrary to the Deviation Settlement Mechanism. We are of the view that SRLDC should have acted in accordance with the provisions of the 2008 Open Access Regulations considering the lack of response by AP-SLDC as deemed concurrence. In our opinion, SRLDC has failed to comply with the provisions of provisions of 2008 Open Access Regulations in letter and spirit.

Issue No. 5: Whether the rejection of concurrence for inter-State Open Access for the months of April and May, 2015 by AP-SLDC on the grounds of compliance with 5.2(j) of Grid Code is contrary to law?

- 45. The petitioner has submitted that Regulation 5.2(j) of the Grid Code is not applicable in the present case. The petitioner has submitted that user is required to take prior consent of the RLDC before reducing the generating unit output by more than 100 MW and provisions of Regulation 5.2 (j) are only applicable to more than 100 MW generating station. Therefore, the said provisions are not applicable to the petitioner's wind farm which maximum capacity is only 46 MW.
- 46. AP-SLDC has contended that the petitioner is an integral part of the grid and cannot absolve itself of the responsibilities of a generator by stating that it is less than 100 MW open access customer. AP-SLDC has further contended if all such wind generators having pooling stations under 100MW are exempted from the applicability of Regulation 5.2 (j) of the Grid Code, the entire 869 MW of wind generation will be of a serious threat to the Grid security, considering the potentially variable nature of wind power. AP-SLDC has submitted that generation of wind energy may go down or shoot up even within a block (15 minutes) causing serious grid disturbance and there is no mechanism for

managing such sudden disturbances within a block. The entire loss is passed on the general consumer to the benefit of the wind generator. AP-SLDC has further submitted that inter-State open access was never opposed by it. However, open access was denied to the petitioner due to concessions sought by it, which is not permissible under the provisions of the 2008 Open Access Regulations and Grid Code. Moreover, AP-SLDC has no statutory power to grant the exemption sought by the petitioner. In such circumstances, the contention of the petitioner that it had to go in for distress sale of power to the distribution commands of Andhra Pradesh is wrong. AP-SLDC has submitted that sale was pursuant to negotiations and the distribution companies of Andhra Pradesh never compelled the petitioner to sell the power to the distribution companies. AP-SLDC has submitted that the petitioner could sell power to third parties with the State of AP. Moreover, the petitioner was allowed to sell its power as and when available and not on RTC basis. Though AP-SLDC is proactive in processing inter-State open access of renewable energy generators despite abeyance of RRF mechanism and applying only deviation charges, the petitioner did not evince interest to pay for under injection, and simultaneously sought for compensation for over injection vide its letter dated 11.12.2014.

- 47. We have considered the submissions of the petitioner and AP-SLDC. Regulation 5.2(j) of Grid Code provides as under:
  - "5.2 (j) Except under an emergency, or to prevent an imminent damage to a costly equipment, no User shall suddenly reduce his generating unit output by more than one hundred (100) MW (20 MW in case of NER) without prior intimation to and consent of the RLDC. Similarly, no User / SEB shall cause a sudden variation in its load by more than one hundred (100 MW) without prior intimation to and consent of the RLDC. All users and SEBs shall ensure that temporary over voltage due to sudden load rejection and the maximum permissible values of voltage unbalance shall remain within limits specified under Central Electricity Authority (Grid Standards) Regulations, 2010."

As per the above provisions, no user shall suddenly reduce his generating unit output by more than one hundred (100) MW (20 MW in case of NER) without prior intimation to and consent of the RLDC. Since, the installed capacity of the petitioner's plant is 46 MW, provisions of Regulation 5.2(j) of the Grid Code is not applicable to it. Therefore, the rejection of concurrence for inter-State Open Access for the months of April and May, 2015 by AP-SLDC on grounds of non-compliance with the provisions of Regulation 5.2(j) of the Grid Code is contrary to the Grid Code.

# Issue No. 6: Whether the petitioner is required to separate its Wind Turbine Generators (WTGs) for intra-State and inter-State Open Access?

- 48. The petitioner has submitted that AP-SLDC vide letter dated 13.11.2014 inter alia requested the petitioner to separate its WTGs meant for intra-State open access which should not be mixed with the rest of the available WTGs. The petitioner has further submitted that AP-SLDC vide its another letter dated 12.12.2014 informed the petitioner that generation mix of WTGs meant for intra-State and inter-State cannot be allowed as the intra and inter State short-term open access regulations and settlement mechanisms are quite different. The petitioner has submitted that there is no such requirement in the Commission's Regulations to segregate the WTGs for inter-State and intra-State transactions.
- 49. AP-SLDC has submitted that segregation of WTGs was sought from the petitioner on the ground that no forecasting and scheduling is required in intra-State open access, whereas forecasting and scheduling is mandatory under the 2<sup>nd</sup> Amendment of the Grid Code and RRF mechanism of the Commission. AP-SLDC has further submitted that there

is interim balancing and settlement code for open access transactions under Regulation 10.5 of the APERC's Regulation 2 of 2006 Regulations, for intra-State open access. However, there is no such provision in 2008 Open Access Regulations and the same is governed by Deviation Settlement Mechanism Regulations, 2014.

50. We have examined the submissions of the petitioner and AP-SLDC. AP-SLDC was directed vide RoP of the hearing dated on 19.5.2015 to clarify "how can WTGs be separated for inter-State and intra-State Open Access?". In response, AP-SLDC vide affidavit dated 8.6.2015 has submitted that the petitioner's 46 MW generating station comprises of 23 WTGs with 2 MW capacity each connected to three different feeders with approved metering facilities. Now, it is gathered that the 23 generators are segregated in three feeders (7+8+8). With this arrangement, the petitioner's system can segregate the intra-State and inter-State generators. In fact, the petitioner has vide letter dated 11.12.2014 agreed to identify WTG meant for intra-State and inter-State separately. Relevant portion of said letter dated 11.12.2014 is extracted as under:

"To start off the process, we agree not mix WTGs meant for intra-State Open Access with the rest of the WTGs. However, on a long term we would like to work with you to arrive at a methodology by which this can be avoided. Ideally, we should be allowed to allocate capacities (and not WTGs) for intra and inter-State transactions. For example: if the total average generation forecast from all the 23 WTGs is 16 MW for a particular day, we should be allowed to schedule 8 MW for inter-State OA and balance 8 MW for intra-State OA. We would like to discuss with you on this matter and proposes a possible settlement procedure through which this can be operationalized. We are attaching a sample working with this letter for your reference."

Perusal of the above letter reveals that the petitioner had agreed for separation to start the process of inter-State open access and had requested to allocate capacities not WTGs. Since, the petitioner's project comprises of 23 nos. Wind Turbine Generators

(WTGs) of 2 MW capacity each and the WTGs are grouped into three groups of 8, 8 and 7 WTGs at the 33 kV level to form three separate 33 kV feeders. The 33 kV feeders combine at the 33 kV bus in the 100 MW 33 kV/132 kV pooling sub-station at Tagguparthi village where the voltage is stepped up to 132 kV and connected to the APTRANSCO 220/132/33 kV substation at Kalyandurg. Therefore, the petitioner's power is to be allocated from 33/132/220 kV sub-station of APTRANSCO for the purpose of intra-State and inter-State open access. We are of the view that AP-SLDC should allocate capacities but not WTGs for inter-State and intra-State open access and necessary accounting scheme should be finalized in consultation with SLDC in this regard.

# Issue No. 7: Whether the petitioner is required to carry out scheduling and forecasting of power from wind power projects?

51. The petitioner has submitted that AP-SLDC vide its letters dated 26.8.2014 and 15.9.2014 requested the petitioner to furnish forecast for wind generation up to 30.9.2014 and tools utilized for forecasting. The petitioner vide letter dated 17.9.2014 clarified that on the basis of the document of IMD, forecast can be provided only on weekly basis as the wind speed prediction is available only for 1 to 7 days. According to the petitioner, The petitioner has submitted that further AP-SLDC vide its letter dated 15.10.2014 directed the petitioner to provide details of SCADA facilities available, LVRT details and tools utilized for the forecast as sought in its letter dated 15.9.2014. In response, the petitioner vide its letter dated 27.10.2014 provide to AP-SLDC the particulars of the SCADA architecture, functional design specifications and PLCC drawing and LVRT details, and clarified that the issue regarding forecast has already

dealt with in its earlier letters. The petitioner has submitted that AP-SLDC vide letter dated 13.11.2014 requested the petitioner to furnish forecast of the wind generation including inter-State open access one day before, the tools utilised for the forecast, separation of the WTGs meant for intra-State open access which should not be mixed with the rest of the available WTGs, to adhere to the day ahead schedule without any deviation failing which deviation settlement mechanism would be applied and submit an undertaking in the format to the letter not claiming any charges for any energy injected over and above the scheduled energy as the same was inadvertent power to the grid.

52. AP-SLDC has submitted that the petitioner in its letter dated 11.12.2014 had agreed to abide by all inter-State open access charges and losses as applicable to day ahead bi-lateral transactions. However, the petitioner requested AP-SLDC to exempt the loss incurred by it from pooling station to the sub-station of the State utility and such exemption cannot be granted by SLDC. AP-SLDC has further submitted that the petitioner stated that adhering to the strict day ahead schedule puts it in financial difficulty and requested SLDC to relax the deviation up to 30% from the schedule as per the Renewable Regulatory Fund Mechanism. AP-SLDC has contended that the petitioner was seeking compensation for over generation in accordance with the Deviation and Settlement Mechanism and relaxation under RRF mechanism. According to AP-SLDC, in one hand, the petitioner is not ready to comply with any of the conditions mandated under the Commission's relevant Regulations and in other hand, the petitioner is seeking exemption from mandatory provisions of the 2008 Open Access Regulations and Grid Code which is beyond the statutory powers of AP-SLDC, detrimental to grid security and contrary to the relevant Regulations. Therefore, the petitioner's application for grant of concurrence could

not be processed. AP-SLDC has submitted that under the above circumstances, non-processing of the petitioner's application cannot be construed to be deemed approval by SLDC.

53. We have considered the submissions of the petitioner and the respondents. Part 6 dealing with scheduling and dispatch of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015 provides as under:

"Part 6: Scheduling and Despatch Code: This section deals with the procedure to be adopted for scheduling and despatch of generation of the Inter-State Generating Stations (ISGS) and scheduling for other transactions through long-term access, medium-term and short-term open access including complementary commercial mechanisms, on a day-ahead and intra-day basis with the process of the flow of information between the ISGS, National Load Despatch Centre (NLDC), Regional Load Despatch Centre (RLDC), Power Exchanges and the State Load Despatch Centres (SLDCs), and other concerned persons.

Most of the wind and solar energy generators are presently connected to intra-State network and in future are likely to be connected to the inter-state transmission system (ISTS) as well. Keeping in view the variable nature of generation from such sources and the effect such variability has on the interstate grid, and in view of the large-scale integration of such sources into the grid envisaged in view of the Government of India's thrust on renewable sources of energy, scheduling of wind and solar generators which are regional entities, has been incorporated in this code.

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6.5 (23) (i) Wind and Solar generators shall mandatorily provide to the concerned RLDC, in a format as prescribed by RLDC, the technical specifications at the beginning and whenever there is any change. The data relating to power system parameters and weather related data as applicable shall also be mandatorily provided by such generators to concerned RLDC in real time. The frequency and other details in this regard shall be provided in the Detailed Procedure to be prepared by NLDC and approved by the Commission.

(ii) Forecasting shall be done by wind and solar generators which are regional entities as well as the concerned RLDC. The concerned RLDC may engage forecasting agency(ies) and prepare a schedule for such generating stations. The forecast by the concerned RLDC shall be with the objective of ensuring secure grid operation. The forecast by the wind and solar generator shall be generator centric. The wind and solar generators which are regional entities will have the option of accepting the concerned RLDC's forecast for preparing its schedule or provide the concerned RLDC with a schedule based on its own forecast. Any commercial impact on account of deviation

from schedule based on the forecast chosen by the wind and solar generator shall be borne by it."

As per the above provisions, wind and solar generators are required to provide to the concerned RLDC the details of technical specifications in the format as specified by RLDC at the beginning and whenever there is any change. Wind and solar generators, which are regional entities, as well as the concerned RLDC are required to do forecasting to ensure secure grid operation. However, the wind and solar generators which are regional entities will have the option of accepting the RLDC forecast to prepare their schedule or to provide the concerned RLDC with a schedule based on their own forecast.

- 54. The Commission in the Statement of Reasons to the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015 had observed as under:
  - "2.3.2 The Commission appreciates inputs on expanding the scope of IEGC regulations. Indeed, the Commission is committed to helping states implement a framework for forecasting, scheduling and deviation settlement for intra-state RE generating stations as well. However, the framework proposed by the Commission fits well for an ABT compliant payment, scheduling and balancing system. Currently all States do not have ABT mechanism in place. As such, it would not be advisable to prescribe a one-size-fits-all framework. After instituting an inter-state framework, the Commission will also create an enabling framework and frame model regulations for the state level, which will be shared with the Forum of Regulators (FOR) for implementation/adaptation at the state level. ........"
- 55. The Commission has issued Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Third Amendment) Regulations, 2015 on 23.10.2015 to amend the DSM Regulations. The Explanatory Memorandum to the above amendments addresses the issue regarding forecasting, scheduling and

deviation settlement of solar and wind generators. The relevant portion of the Explanatory Memorandum is extracted as under:

"For large-scale integration of solar and wind generators into State grids, the Forum of Regulators (FoR) has evolved a State Model Regulation, which outlines a model for operational and commercial management of variable RE sources. The proposed framework for forecasting, scheduling, and deviation settlement of solar & wind generators is similar to that notified by CERC for regional entities in August 2015. However, it is pertinent to explicate the commercial arrangement suggested for the States. In the Model Regulation, it has been recommended that if the State DSM pool goes negative due to implementation of the regulation, the States may approach national funds such as NCEF or PSDF for covering the deficit. It has been underlined that this would be only to the extent of deficit caused by RE generators. Hence, to qualify for such compensation, the States must undertake separate scheduling and energy accounting of all entities, as explained in the document. The Commission feels that this will address a major part of the problem, as currently stated by the RE-rich states."

56. Forum of Regulators (FoR) has evolved a 'Model Regulations on Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Stations at the State level' (Model Regulations), which outlines a model for operational and commercial management of variable RE sources. The object of Model Regulations is to facilitate large-scale grid integration of solar and wind generating stations while maintaining grid stability and security as envisaged under the Grid Code, through forecasting, scheduling and commercial mechanism for deviation settlement of these generators. Model Regulations have been proposed to be applicable to all wind and solar generators which are connected to the State grid, including those connected via pooling stations, and selling power within or outside the State. Model Regulations provide 'Forecasting and Scheduling Code' (Part-2) and 'Commercial and Deviation Settlement' (Part-3). The 'Forecasting and Scheduling Code' provides that forecasting shall be done by wind and solar generators connected to the State grid or by QCAs (Qualified Coordinating Agency) on their behalf. It also provides that the concerned SLDC shall also undertake

forecasting of wind and solar power which is expected to be injected into the State grid, by engaging forecasting agency (ies) if required. The relevant portion of the Model Regulations is extracted as under:

- "2.3. Forecasting shall be done by wind and solar generators connected to the State grid, or by QCAs on their behalf. The concerned SLDC is also mandated to undertake forecasting of wind and solar power that is expected to be injected into the State grid, by engaging forecasting agency(ies) if required. The forecast by the concerned SLDC shall be with the objective of ensuring secure grid operation by planning for the requisite balancing resources. The forecast by the QCA or wind and solar generator, as the case may be, shall be generator centric. The QCA or wind and solar generators will have the option of accepting the SLDC's forecast for preparing its schedule or provide the SLDC with a schedule based on their own forecast. The QCA shall coordinate the aggregation of schedules of all generators connected to a pooling station and communicate it to the SLDC.
- 2.4. The QCA or the wind and solar generator shall submit a day-ahead and week ahead schedule for each pooling station or each generating station, as the case may be. Day-ahead schedule shall contain wind or solar energy generation schedule at intervals of 15 minutes (time-block) for the next day, starting from 00:00 hours of the day, and prepared for all 96 time-blocks. Week-ahead schedule shall contain the same information for the next seven days.
- 2.5. The schedule of wind and solar generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4th time block, the first being the time-block in which notice was given. There may be one revision for each time slot of one and half hours starting from 00:00 hours of a particular day subject to maximum of 16 revisions during the day."
- 57. Regulation 3 of the Model Regulations dealing with 'Commercial and Deviation Settlement' provide mechanism for settlement of over/under drawl of power arising out of over /under injection of power from renewable sources (wind/solar) selling power within the State or outside the State. The relevant portion of the Regulation 3 of the Model Regulations is extracted as under:
  - "3.1. (a) The wind or solar generators connected to the State grid and selling power within the State shall be paid by the buyer as per actual generation.
  - (b) The wind or solar generators connected to the State grid and selling power outside the State shall be paid by the buyer as per scheduled generation.

- 3.2. The wind and solar generator or the QCA, as the case may be, shall have the option of accepting the concerned SLDC's forecast for preparing its schedule or provide the concerned SLDC with a schedule based on its own forecast, and such schedule shall be used as reference for deviation settlement.
- 3.3. The QCA shall undertake all commercial settlement on behalf of the generator(s) connected to the respective pooling station(s).

58. The Model Regulations on Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Stations at the State level have been evolved to address the issues of forecasting, scheduling and settlement of over/under drawl of power arising out of over/ under injection of power from renewable sources which are connected to the State grid and selling power within or outside the State. In view of the above, the State Electricity Regulatory Commissions are requested to implement these regulations to ensure grid integration of huge renewable resources to be connected to grid in next 5 to 7 years. Keeping in view the above, we direct all wind generators to carry out forecasting/scheduling as per applicable Regulations. We further direct SLDC/RLDC to seek forecast/schedule for wind generation as per applicable Regulations.

Issue No. 8: Relief to be granted to the petitioner by way of compensation for the loss sustained on account of the stranded energy under distress sale to the distribution companies of Andhra Pradesh for the period from 1.9.2014 to 19.4.2015 and thereafter till such open access is made available?

59. The petitioner has submitted that due to arbitrary denial of STOA by AP-SLDC for transfer of power from captive generating stations to its industrial units in Telangana, all the energy generated by the petitioner is fed into the AP system but the distribution companies of Andhra Pradesh are not paying any charges for it. The petitioner has contended that for the period during 1.9.2014 to 19.4.2015, it has sustained loss of Rs.

8.87 crore for the stranded energy injected into the grid and used by the distribution companies of Andhra Pradesh without payment. The petitioner has submitted that its wind power project has generated 205,38,809 units from the date of synchronization to till 31.8.2015. However, the petitioner has not received any payment in this regard. The petitioner has submitted that in view of the delay and obstruction in securing inter-State open access in the circumstances explained in the petition, the petitioner in order to mitigate losses was forced to sell the surplus stranded power to the distribution companies of Andhra Pradesh through the Andhra Pradesh Power Co-ordination Committee at a paltry price of Rs. 2.44/unit as against the APERC approved tariff rate for wind energy of Rs. 4.70 per unit and when even the Average Pooled Power Cost (APPC) as determined by the APERC was Rs. 3.38/unit. The petitioner has prayed for recovery of such amount along with interest at 15% p.a. with monthly rests, by way of compensation for the stranded energy injected into the grid/distress sale and used by the distribution companies of Andhra Pradesh.

60. We have considered the submission of the petitioner. It is noted that the energy generated by the wind generating station of the petitioner was fed into the grid of Andhra Pradesh. According to the petitioner, the power generated was consumed by the distribution companies of Andhra Pradesh through Andhra Pradesh Power Coordination Committee at the rate of Rs. 2.44/unit as against the APERC approved tariff rate for wind energy of Rs. 4.70 per unit and when even the Average Pooled Power Cost (APPC) as determined by the APERC was Rs. 3.38/unit. We are of the view that the petitioner should approach the State Commission for appropriate direction in this regard.

## 61. Summary of our decision:

- (a) The petitioner is required to follow the procedure and the formats as applicable for grant of short term inter-State open access for transfer of power from its captive generating plant for use by its captive users.
- (b) Since the petitioner's captive wind generation plant is an intra-State entity, the petitioner is required to obtain concurrence from SLDC for grant of inter-State open access in terms of the provisions of 2008 Open Access Regulations.
- (c) Since the State Commissions have not specified charges for deviation from schedule in respect of short term transactions, the provisions of the 2008 Open Access Regulations shall be applicable. AP-SLDC and TS-SLDC are directed to implement the Commission's regulations as well as the regulations of the respective State Commissions for facilitating non-discriminatory open access as enshrined in the Act.
- (d) AP-SLDC was required to either grant concurrence or deny short term inter-State Open access to the petitioner as per the provisions of Section 9 of the Act read with Regulation 8 (3) (b) and (c) of 2008 Open Access Regulations. Though AP-SLDC can seek details such as SCADA facilities, tools utilized for forecasting and LVRT details keeping in view the grid security, non-furnishing of the said information cannot be a ground to deny open access. Accordingly, AP-SLDC is directed to process the applications of the petitioner for issue of concurrence in the manner specified in the 2008 Open Access Regulations.

- (f) SRLDC was required to act in accordance with the provisions of 2008 Open Access Regulations by considering the lack of response by AP-SLDC as deemed concurrence.
- (g) As per Regulation 5.2 (j) of the Grid Code, no user is required to suddenly reduce his generating unit output by more than 100 MW without prior intimation to and consent of the RLDC. As the installed capacity of the petitioner's plant is 46 MW, the rejection of concurrence of inter-State Open Access for the months of April and May 2015 by AP-SLDC on the ground of non-compliance with the provisions of Regulation 5.2 (j) is contrary to the Grid Code.
- (h) Since the petitioner's power is to be scheduled from 33/132/220 kV substation of APTRANSCO for the purpose of intra-State and inter-State Open Access, AP-SLDC is required to schedule capacities(not WTGs) for inter-State and intra-State Open Access in consultation with the petitioner and finalize necessary accounting scheme accordingly.
- (i) State Electricity Regulatory Commissions are requested to implement Model Regulations on Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Station evolved by Forum of Regulators to ensure grid integration of huge renewable resources to be connected to grid in next 5 to 7 years. All wind generators are directed to carry out forecasting/scheduling as per applicable regulations. SLDCs/RLDCs are directed to seek forecast/schedule for wind generation as per applicable regulations.

- (j) The petitioner is required to approach the State Commission for compensation for the loss sustained on account of stranded energy under distress sale to the distribution companies of Andhra Pradesh.
- 62. The petition is disposed of in terms of the above.

sd/-(A.S. Bakshi) Member sd/-(A.K. Singhal) Member sd/-(Gireesh B Pradhan) Chairperson