

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 44/TL/2012**

Sub: Application for grant of transmission licence under Section 14 read with Section 15 (1) of the Electricity Act, 2003 and Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission Licence and other related matters) Regulations, 2009.

Date of hearing : 3.5.2012

Coram : Dr. Pramod Deo, Chairperson  
Shri V.S.Verma, Member  
Shri M. Deena Dayalan, Member

Petitioner : Adani Power Limited, Ahmedabad

Respondents : National Load Despatch Centre and Others

Parties present : Shri Amit Kapur, Advocate for the petitioner  
Miss Poonam Verma, Advocate for the petitioner  
Shri Vishal Anand, Advocate for the petitioner  
Shri R.K.Mandan, APL  
Shri V.K.Prasar, APL  
Shri Jatin Jalundhwala, APL  
Shri S.Narasimhan, NLDC  
Shri K.K.Agarwal, NLDC  
Shri Rajiv Prowal, NRLDC  
Miss Joyti Prasad, NLRDC  
Shri Manoj Gupta, PGCIL  
Shri M.G.Ramachandran, Advocate for GETCO  
Shri B.K.Trivedi, GETCO  
Shri S.B.Moodgil, HVPN

**Record of Proceedings**

At the outset, the Commission observed that a technical report on the status of the transmission line and how it is connected with line diagrams would be required from the Central Electricity Authority and Central Transmission Utility to consider the issues in proper perspective.

2. Learned counsel for the petitioner submitted that the petitioner has been granted open access and inter-connection, and connection agreement and

BPTA have been signed. Whether the petitioner's transmission line would be considered as a dedicated transmission line or otherwise is only a function of determining the status as per the applicable rules and regulations. In so far as the investment is concerned, the learned counsel referred to the CEA's letter dated 16.3.2012 in which it is mentioned that Ministry of Power, while granting permission in July, 2009 under Section 68 of the Electricity Act, 2003 has put a condition on the petitioner to provide non-discriminatory open access to other licensees/generators on the Mundra-Mohindergarh HVDC line to the extent of available transmission margin. Learned counsel further submitted that this condition can be complied with only if the dedicated transmission lines are converted into licensed assets. Dehgam-Mundra-Mohindargarh-Bhiwani corridor developed as a dedicated transmission system by the petitioner would act as a parallel inter-regional link and would have an important role to play in the national grid if it is converted from dedicated transmission assets to licensed inter-State transmission assets.

4. The Commission clarified that the two paragraphs in the CEA's letter dated 16.3.2011 clearly provides that these lines unless they become licensed assets would have to be operated as dedicated transmission lines. The Commission desired to know whether the petitioner would give an assurance based on the system configuration that power of no other utility would flow through the transmission lines and their dedicated nature would be maintained. The learned counsel for the petitioner referred to a letter from OEM M/S SIEMENS dated 2.5.2012 in which the queries regarding islanded mode of operation of the transmission lines have been clarified as under:

- (a) The system is designed considering the bus coupler between stage 2 and stage 3 is closed. The short circuit ratio considered for design is 3.
- (b) In case a HVDC system which is directly connected to the generator bus, then the system must be specified and designed accordingly from the very beginning.
- (c) For start up of the generating units 7, 8 & 9, the bus coupler between stage 2 and stage 3 has to be closed.
- (d) The HVDC system is not designed to start in the Islanded mode. However, the transition from normal operation to islanded mode of operation of stage 3 units is possible but this is a contingent operation only for emergency cases and the power is limited to 800 MW with two units operating and 1200 MW with three units operating. Islanded operation with single unit is not possible.
- (e) The HVDC system controls permit exact power order setting and the same will not change during normal operation. However it may be difficult for the generators to meet the generation precisely with HVDC power order.

If the power order is set matching with the generation from units 7, 8 & 9, there will be no power exchange with the rest of the system through bus coupler for all practical purposes.

- (f) During line faults and commutation failure, the power transfer will drop to zero and units will trip on over speed. In case of transient faults the auto start feature on the HVDC system can lead to "hunting" of the generating units.

5. The Learned Counsel submitted that in the light of the fifth clarification {para 4 (e) above}, it is possible to operate the system with little power exchange with rest of the system. The Commission observed that it would not be practically possible to set the generating station at 800 MW as the deviations could be due to various factors. The representative of the petitioner clarified the query as under:

- (a) Scheduled flow of power over the HVDC corridor shall be for the quantum of open access granted and shall be ensured strictly as per Commission's Regulations;
- (b) Power order on HVDC corridor shall be set as per injection schedule approved by concerned RLDC/POSOCO;
- (c) In HVDC, control of power to be transmitted can be set and it will not change on its own, if it is set at say 600 MW;
- (d) Title of scheduled power through HVDC corridor will be in the name of Adani Power only.
- (e) Unscheduled power cannot and will not flow through HVDC under normal condition.

6. The representative of the petitioner further submitted that the condition of closure of bus coupler is a design requirement and supplier has given a written undertaking to the effect that they have designed the system with the bus coupler in closed condition. The CTU and CEA have examined and agreed to the same. If HVDC system would have been designed otherwise i. e. for Bus coupler in open position, it would have been very costly, by 2 to 3 times, and would not have been viable. He further submitted that even with sectionaliser breaker closed, dedicated nature of HVDC section could be maintained during the operation without violating the provisions of clause 5.2 of the Grid Code. He assured that APL would comply with the provisions of the Grid Code and undertaking in this regard would be filed.

7. The Commission sought a confirmation from POSOCO whether the transmission line can operate as dedicated transmission line till the grant of licence to the petitioner. The representative of POSOCO submitted that the moment breaker is kept in closed condition, the system operator cannot assure

that the transmission line would operate in purely dedicated mode and there are chances that some current may flow through Stage-I and Stage II. The representative of the POSOCO further clarified that if the power order is controlled, then it is possible to operate the transmission line in dedicated mode.

8. The Commission observed that if there is generation variation on the petitioner's side, the power of other utilities could also flow on the transmission lines. The representative of the POSOCO clarified that if the generator decides the power order and controls it, it would be possible to control the flow on the transmission line except some minor occasional variations in emergency situations. The representative of the petitioner submitted that as confirmed by the OEM, M/s Seimens and the POSOCO, for HVDC lines, there is definite corridor for fixed number. The Commission observed that though the power order of HVDC can be set, there is possibility of power flowing from other generators in case of small variations. The Commission enquired whether the petitioner could make all efforts to ensure that power order is maintained under all situations. The learned counsel for the petitioner submitted that it would file necessary undertaking on affidavit to that effect.

9. The Commission enquired from POSOCO as to how the small variation would be accounted for so that no other side is liable to pay for the use of the transmission line, the representative of POSOCO submitted that HVDC line is dedicated for stage-III only i.e. units 7, 8, & 9. Meters have been installed between Stage II and III and any extra power flow would be captured by meters and same would be treated as inadvertent unscheduled power flow to the extent of small quantum which can be metered and accounted for. With regard to the repercussion on cost and charges, the representative of the POSOCO clarified that it would be accounted for as UI charges.

10. The representative of POSOCO further submitted that as per Record of proceeding dated 3.5.2012, testing can be allowed for the transmission line. However, in case of operation, certain other issues are involved as this separate link is dedicated for stage-III, units 7, 8 & 9 only. The Commission clarified that if there is major variation in operation phase, it should be reported to the Commission by the System Operator. Moreover, at the operation stage, any plus or minus would be to the account of the petitioner.

11. The learned counsel for the petitioner submitted that as per Grid Code, the petitioner is also covered under the category of 'User' and the petitioner will comply with all the directions of RLDC and SLDC. Based on the experience in the testing phase, the petitioner would comply with instructions given by RLDC.

12. The representative of SLDC, Haryana submitted that it has no objection to testing of the transmission line by the petitioner; however, during testing whatever power will flow through HVDC should come to Haryana as infirm power as per the terms and conditions of the PPA between the petitioner and

the distribution companies of Haryana. He further submitted that stage-II and stage-III of the generating station are independent having separate PPA. There is a design deficiency as the bus coupler cannot be provided between the two stages. He further submitted that with closure of bus coupler between stage-II and III, dedicated nature of HVDC link would be lost. He however expressed concern about the liability for payment of UI charges. The Commission clarified that any plus or minus to the power order would be to the accounts of the petitioner only. The representative of Haryana SLDC further submitted that in Unit 8 and 9 of Stage-III, System Protection Schemes (SPS) have not been provided and it is the responsibility of NLDC to ensure that the SPSs are in place before undertaking the testing.

13. The Commission enquired from the representative of POSOCO whether the System Protection Schemes are not in place as averred by the representative of Haryana SLDC. The representative of POSOCO submitted that at the instance of Member(PS), Central Electricity Authority, a committee was formed which went into the aspects of metering arrangement and System Protection Schemes during testing. The representative of the petitioner confirmed that as decided in the committee, System Protection Schemes have been provided in Unit 8 and 9. In reply to the query of the Commission whether this could be checked during testing, the representative of POSOCO submitted that some mock trial could be carried out for that purpose. The representative of the petitioner assured that they would start operation only after the POSOCO is satisfied after the mock trial of the System Protection Schemes. With regard to the query of the representative of POSOCO as to how much power would be injected during mock trial, the representative of the petitioner confirmed that it would be of the order of 600 MW for which open access has been granted.

14. The learned counsel of GUVNL submitted that before permitting operation, certain other issues need to be resolved. Gujarat is purchasing 2000 MW from stage I and II and control area was given to SLDC, Gujarat. In unit 1 to 6, there is surplus power. It is not clear what type of protection system has been provided. The details of protection system must be filed by the petitioner before any permission is granted.

15. The learned counsel of Uttar Haryana Vidyut Vitran Nigam Limited and Dakshin Haryana Vidyut Vitran Nigam Limited submitted that copy of the petition has not been received so far and requested to grant time to file its reply.

16. The representative of the petitioner in response to the submission of the representative of Haryana SLDC regarding supply of infirm power submitted that power to Haryana distribution companies would be supplied after grant of licence by the Commission since its transmission line is linked to the transmission line of CTU and as per the PPAs, it is required to supply power only in August 2012. To this, the representative of Haryana SLDC objected and stated that as per the PPA, the petitioner is required to supply infirm power from Stage III to

Haryana only. The Commission clarified that as per the latest amendment to Connectivity Regulations, infirm power cannot be scheduled and the provisions in the existing PPAs would stand superceded to that extent. The Commission further clarified that the commercial issues are not being looked into at this stage since the issue at hand is the testing and operation of the transmission lines.

17. Learned counsel for GUVNL submitted that for the main petition, the petitioner needs to implead the beneficiaries since they would be required to pay the PoC charges as per Sharing Regulations when the transmission line is converted into a licensed line and forms part of the ISTS. Learned counsel further submitted that the Commission may also consider another issue as to whether a dedicated transmission line which has been established without competitive bidding can now be converted into a transmission line which requires competitive bidding. The Commission observed that these apart, there is also the issue of ownership of the transmission line which cannot be controlled by a trading licensee as per the scheme of the Electricity Act, 2003. These issues will be addressed during the hearing of the main petition.

18. The Commission directed the Central Electricity Authority and Central Transmission Utility to submit a report on the status of the transmission line and how it is connected with line diagrams by **28.5.2012**.

19. The Commission directed the POSOCO to carry out the mock trial of the System Operation Schemes during which AEL shall be permitted to inject upto a maximum of 600 MW and submit the report to the Commission by **28.5.2012** with copies to CEA, CTU, SLDC Haryana and SLDC Gujarat. During the testing, any variation from the power order would be to the account of the petitioner. The injection of infirm power during testing and mock trial would be regulated in accordance with Regulation 8(7) of the Central Electricity Regulatory Commission (Grant of Connectivity, Long term Access and Medium-term Access in inter-State Transmission and related matters) Regulations, 2009, as amended from time to time. The Commission directed the POSOCO to report to the Commission when there is any major variation from the power order and seek appropriate directions.

20. The petitioner was directed to submit on affidavit that the System Protection Schemes are in place; the petitioner shall maintain the power order throughout the mock trial and when the system is put into operation; any variation from the power order would be to the account of the petitioner; the petitioner shall abide by the provisions of the regulations and the directions of the concerned RLDC during mock trial and subsequently during operation.

21. The Commission directed the petitioner to comply with the directions given in para 5(c) and (d) of the ROP for the hearing dated 20.3.2012 and file an affidavit in this regard by **28.5.2012**.

22. The matter is listed for hearing on **31.5.2012**.

**By order of the Commission**

Sd/-  
**(T. Rout)**  
**Joint Chief (Legal)**