# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram:

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri Bhanu Bhushan, Member
- 3. Shri R.Krishnamoorthy, Member
- 4. Shri S.Jayaraman, Member

Petition No. 64/2008

#### In the matter of

Fixation of and adjudication on the transmission charges for use of the Gujarat transmission system for conveyance of central sector power to Union Territory of Daman & Diu (DD) under sections 62 and 79 of the Electricity Act, 2003

Petition No. 67/2008

#### In the matter of

Fixation of and adjudication on the transmission charges for use of the Gujarat transmission system for conveyance of central sector power to Union Territory of Dadra and Nagar Haveli (DNH) under sections 62 and 79 of the Electricity Act, 2003

#### And in the matter of

Gujarat Energy Transmission Corporation Ltd., Vadodra ..... Petitioner

Vs.

- 1. Union Territory of Daman and Diu, Daman
- 2. Union Territory of Dadra and Nagar Haveli, Silvassa
- 3. Maharashtra State Electricity Distribution Company Limited, Mumbai
- 4. Gujarat Urja Vikas Nigam Ltd., Vadodra
- 5. Madhya Pradesh Power Trading Company Ltd., Jabalpur
- 6. Chhattisgarh State Electricity Board, Raipur
- 7. Electricity Department, Govt. of Goa, Panaji

- 8. Power Grid Corporation of India Ltd., Nagpur
- 9. Western Regional Power Committee, Mumbai

#### ... Respondents

#### The following were present

- 1. Shri M.G.Ramchandran, Advocate, GETCO
- 2. Shri P.J.Jani, GETCO
- 3. Shri S.K.Trivedi, GETCO
- 4. Shri Sakesh Kumar, Advocate, DNH and DD
- 5. Shri. Amit Kapoor, Advocate, Govt. of Goa
- 6. Shri Mansoor Ali, Advocate, Govt. of Goa
- 7. Ms. Poonam Verma, Government of Goa
- 8. Ms. Yogmaya Agnihotri, Advocate, CSEB
- 9. Shri A K Garg, CSEB
- 10. Shri Sailesh T. Chauhan
- 11. Shri D D Khandelwal, MPPTCL
- 12. Shri Pramod Chowdhary, MPPTCL

# ORDER (Date of Hearing: 23.12.2008)

These two petitions have been filed by Gujarat Energy Transmission Corporation Ltd (GETCO) for fixation of transmission charges for use of Gujarat Transmission system for conveyance of central sector power to Union Territories of Daman & Diu (DD) and Dadra and Nagar Haveli (DNH) and also adjudication of any dispute and differences between the parties including consequential relief for payment of transmission charges for the period from 28.2.2006. The prayer in petition No. 64/2007 is extracted below:

<sup>&</sup>quot;(i) entertain the present petition and determine the applicable network charges and loss level to be allowed by adjustments in time for the use by DD of the transmission network of GETCO for the period from 28.2.2006

- (ii) Pass such further orders as be deemed fit and appropriate under the circumstances of the case"
- 2. Similar prayer has been made in Petition No. 67/2007 except that conveyance of power has been facilitated to DNH using Gujarat transmission system. Apart from the fact that the parties involved in the proceedings are common, to a large extent, the techno-legal issues involved in the two petitions are also similar in nature. Therefore, we are dealing with these petitions through this common order.
- 3. The petitioner is a Government of Gujarat undertaking and has been declared State Transmission Utility of Gujarat State. Respondents No. 1 and 2 have allocation from Central sector station in Western Region like other States of Western Region. A Power Purchase Agreement has been signed between NTPC and other entities in Western Region including Respondents No 1 and 2 to whom power has been allocated from NTPC's generating stations. As on 1.12.2006, the allocation to Respondent No 1 was stated to be 376.38 MW during peak hours and 381.83 MW during off-peak hours. Corresponding figures for Respondent No. 2 were 184.89 MW and 170.44 MW respectively. It is stated that the transmission net work of the first two respondents was not connected to the transmission network of PGCIL. It is further mentioned that the power allocated to them is delivered by PGCIL at different inter-connection points of the petitioner's transmission system and thereafter it is carried by the petitioner on its transmission system to these two respondents. The petitioner has stated that the following lines are used for delivery of power to the first two respondents.

#### Common transmission route between GETCO and DD and DNH system

- i) 400 kV Asoj Ukai S/C (Asoj is CTU point)
- ii) 220 kV Ukai Vav D/C
- iii) 220 kV Vav Navasari D/C
- iv) 220 kV Navasari Vapi D/C

#### Interconnection between DNH and GETCO (Gujarat system)

- i) 220 kV Bhilad Magarwada D/C
- ii) 66 kV Vapi Dabhel
- iii) 66 kV Vapi Kachigam

#### Interconnection between Diu and GETCO (Gujarat system)

- i) 400 kV Asoj Jetpur S/C
- ii) 220 kV Jetpur Keshod D/C
- iii) 220 kV Keshod Timdi
- iv) 220 kV Timdi Dhokadwa S/C
- v) 66 kV Dhokadwa Uma S/C
- vi) 66 kV Una Diu
- vii) 66 kV Kanasari Diu

#### Background

4. Till recently, wheeling charges for use of the petitioner's system for supply to the two respondents were being determined based on decision taken in the 110<sup>th</sup> meeting of Western Regional Electricity Board (WREB) held on 22.5.1999. We have noted that the methodology for calculation was suggested by CEA and was based on usage of the facilities of the petitioner involved in the transmission. The transmission charges for the facilities were shared by the beneficiaries, pro rata to the extent of utilization.

- 5. By order dated 28.2.2006, Gujarat Electricity Regulatory Commission (GERC) determined the applicable transmission charges and applicable transmission loss adjustment for the petitioner's network effective from the date of the order. Thereafter, by order dated 6.5.2006, the charges were revised effective from 1.4.2006.
- 6. The petitioner has submitted that the transmission charges and transmission loss adjustments determined by GERC are applicable for conveyance of power to Respondents Nos. 1 and 2. Accordingly, it demanded payment of the transmission charges and adjustment for losses from them but they did not make payment of charges.
- 7. Thereupon, the petitioner and Gujarat Urja Vikas Nigam Ltd (GUVNL) filed Petition No.94 /2006 before this Commission seeking the following reliefs:
  - "1. The Hon'ble Commission may kindly clarify that the "Appropriate Commission" having jurisdiction to determine the Transmission charges of the GETCO system being used incidental to transmission system of CTU for transmission of Central Sector and Bilateral power to the Union Territories of Daman & Diu and Dadra Nagar Haveli is GERC or CERC.
  - 2. The Hon'ble Commission may direct Respondents 1 to 7 to make the payment of transmission charges as determined by Hon'ble Gujarat Electricity Regulatory Commission for the year 2005-06 and 2006-07 to GUVNL for utilization of Gujarat Energy Transmission Corporation Network for transmission of Central Sector and Bilateral power to DD and DNH as agreed in the 110th WRE Board Meeting held at Aurangabad on 22.5.99 and since the transmission charges as worked out by erstwhile WREB secretariat for the year 2004-05 were provisionally applicable.

- 3. The Hon'ble Commission may direct the Respondents 1 to 7 to pay interest @ 18% per annum to GUVNL on differential amount for the period from the date on which amount actually due till the date on which the amount is actually paid by the respondents to GUVNL.
- 4. The Hon'ble Commission may also dispose off this petition at the cost of Respondent no.1 who has forced the petitioner to file this petition and deprived the petitioner from its legitimate right to recover transmission charges as determined by Hon'ble Gujarat Electricity Regulatory Commission.
- 5. In case according to Hon'ble Commission, the "Appropriate Commission" in the instant case is CERC, the transmission charges may be determined for the GETCO transmission system being used incidental to transmission system of CTU for transmission of Central Sector and Bilateral power to the Union Territories of Daman & Diu and Dadra Nagar Haveli.
- 6. The Hon'ble Commission may pass any other order as may be deemed fit."
- 8. The Commission vide order dated 4.10.2006 disposed of this petition with the following observations:
  - "13. The petitioners during the hearing argued that in their view, GERC is the "Appropriate Commission" for determination of the transmission charges for the transmission system owned by GETCO and, according to the petitioners, the transmission charges were correctly determined by that Commission. It was, however, submitted that they would abide by the decision of this Commission in the present petition. It appears that the petitioners have been vacillating on the question of jurisdiction to determine the wheeling charges. One the one hand, they submit to the jurisdiction of CERC, but on the other, they have prayed this Commission to determine the transmission charges for GETCO network.
  - 14. Without expressing any opinion on the issue at this stage, we dispose of the present petition, without admitting, with the directions to the petitioners to examine the question of jurisdiction afresh, based on the interpretation of the provisions of the Electricity Act, 2003. The petitioners need to consider the different provisions of the Act and on being satisfied about the question of jurisdiction, make an appropriate application in

accordance with the terms and conditions for determination of transmission charges notified by the Commission."

- 9. Thereafter, Respondent No 1 filed a petition before GERC for determination of transmission charges for use of the petitioner's network. In the meantime, Electricity Department of Goa (Respondent No. 7 in the present proceedings) filed Appeal No. 150 of 2007 before the Appellate Tribunal for Electricity (the Appellate Tribunal) challenging the order dated 28.6.2006 of the Maharashtra State Electricity Regulatory Commission (MSERC) wherein MSERC had, *inter alia* treated the intervening transmission system of MSETCL as part of the inter-State transmission system for wheeling of power from the central generating stations and /or WREB pool of power to the State of Goa. Taking note of the pendency of the above Appeal, GERC, vide its order dated 22.1.2008 disposed of the above petition, with the following directions:
  - "[9] We have carefully considered the submissions made by the representatives of the parties. It is admitted fact that same issue regarding jurisdiction is pending before the Appellate Tribunal for Electricity. The judgment of the Appellate Tribunal would be binding and therefore, we dispose of the present petition by saying that order of Appellate Tribunal will be binding to the parties. If the judgment is in favour of GETCO, the petitioner would have to pay the transmission charges as determined by the Commission in the relevant Tariff Order for GETCO. Nevertheless the petitioner would be free to approach the Commission in case any further clarification is required.
  - [10] We order accordingly."
- 10. The Appellate Tribunal vide its order dated 17.12.2007, decided that the State Commission has no jurisdiction to determine tariff for inter-State lines

including the intervening lines of the transmission company in Maharashtra in relation to conveyance of electricity from the State of Maharashtra to Goa.

11. The petitioner has, therefore, approached this Commission for exercising the jurisdiction to determine the tariff for conveyance of electricity through its transmission system from the State of Gujarat to Respondents Nos 1 and 2 for the period 28.2.2006 and onwards.

# **Rival contentions**

- 12. The petitioner has submitted that the transmission charges and transmission loss adjustment for use of its network for delivery of power to Respondents Nos 1 and 2 could be determined based on network transmission cost and losses prevalent in its system as decided by GERC. Therefore, the petitioner has submitted that the Commission may adopt revenue requirements and applicable transmission losses, as decided by GERC, for the purpose of deciding tariff payable by Respondents Nos. 1 and 2 for use of its system.
- 13. Respondents have relied on the provisions of the Bulk Power Supply Agreement (BPSA) entered between NTPC and beneficiaries of Western Region on 12.1.1994, which provides that transmission system of PGCIL and other beneficiaries may be used for transmission of power from NTPC bus bars, and charges and energy losses for use of transmission system shall be mutually settled between beneficiary drawing the power and owner of the transmission system. It has been further pointed out that since no settlement could be reached

for use of transmission system of the petitioner, the matter was referred to CEA, in accordance with provisions of BPSA and the method suggested by CEA was used so far for determination of transmission charges for use of transmission system for transferring power to DD and DNH and that of Maharashtra system for transferring power to Goa. The method finalized by CEA for calculation of transmission charges is stated to be as under:

- (a) Contract Path Method has been used for working out the wheeling charges. The contract path is the EHV system of the wheeling system from the delivery point of the central sector system to the point of supply to the recipient system.
- (b) The capital cost of the transmission system commissioned prior to 1991-92 has been taken as per the CEA data and for the system commissioned during 1991-92 and thereafter as per actual cost furnished by Gujarat Electricity Board.
- (c) The annual fixed charges have been apportioned to the wheeling of the central sector power in the ratio of average MW drawal during the year and SIL of the 440/220 kV lines.
- (d) It has been mentioned in the calculation sheet that 66 kV lines are dedicated to DD and DNH and hence total fixed charges have been taken as chargeable fixed charges.

- 14. Respondents have also pointed out that the Commission, in its order dated 14.11.2004, in the matter of "Open Access in inter-State transmission' has held that assets owned by STU to the extent they facilitate an inter-State transmission transaction fall within the jurisdiction of the Central Commission. It has also been pointed out that Maharashtra State Regulatory Commission, vide order dated 28.6.2006, had ordered for application of the State transmission system charges for conveying power to Goa. Aggrieved by this order, Goa filed Appeal No. 150 of 2007 before the Appellate Tribunal. The latter vide order dated 17.12.2007 set aside order of MERC so far as it relates to recovery of transmission charges for the intervening transmission system of MSETCL when it is used as inter-State transmission line.
- 15. Respondents have stated that GERC Regulations and orders pertain to intra-State transmission system and are not applicable to the present case. They have stated that the petitioner's contention in this regard is not sustainable under the law. During the hearing, Shri D. Khandelwal who appeared for MPPTCL pointed out that the open access Regulations specified by GERC that these regulations are applicable for intra-State transmission or distribution except intervening transmission facilities. MPPTCL and CSEB urged that transmission infrastructure of the petitioner in the Gujarat State was laid primarily for evacuation of power and its efficient transmission from different generating stations to the load centers for distribution of power and thereby supply to the consumers of Gujarat State. It has been further argued that DD and DNH and their consumers are no way concerned with the entire transmission system of

Gujarat State, nor with the future developments and annual revenue requirement of the petitioner. MPPTCL has given details of line lengths in total Gujarat network in 2004-05 and as on 31.3.2008 and also network length used for transferring power to transfer power to DD and DNH to show that while substantial addition has taken place in total network of Gujarat, the length of network used for transferring power to DD and DNH has reduced due to commissioning of PGCIL's assets. Respondents have also contended that the transmission system utilized for conveyance of the central sector power to DD and DNH is in the nature of intervening transmission facility as defined in the explanation appended to Section 36 of the Electricity Act, 2003 (the Act). Electricity Department, Goa (Goa) has pointed out that charges payable to the petitioner based on ARR approved by GERC works out to 13.59 paise/kWh as against 4.89 paise/kWh calculated as per Contract Path method.

- 16. DD has contended that in the planning process it was conscious decision not to build exclusive CTU system for DD and DNH possibly due to the following reasons:
  - (a) small quantum of allocation from Central Generating Stations,
  - (b) availability of existing transmission network in WR being adequate to supply power, and
  - (c) techno-economic planning of transmission system.

17. In this context, DD has relied on the following remarks of Member (Power System), Central Electricity Authority (CEA) made during the 2<sup>nd</sup> meeting of WRPC held on 12.10.2008:

"........ Member (Power System), CEA said that regional transmission system is planned keeping in view the overall regional requirement. Since the consumption of DD & DNH was not significant, previously no direct CTU link was envisaged for them. However, DD and DNH have been sharing the regional transmission tariff along with other beneficiaries. As such, the wheeling charges payable by them to GETCO should also be shared by all beneficiaries of Western Region. Member (Power System), CEA further added that as this problem was foreseen by CEA and had accordingly now planned construction of 220 kV Vapi-Marganwada D/C and 220 kV Vapi-Kharadpada D/C lines for DD & DNH by POWERGRID. PGCIL was requested to expedite construction of these lines on priority."

18. The respondents have also highlighted that the transmission facilities used for conveying power to DD and DNH have changed over the period under consideration. It has been argued that while the facilities used for transferring power to these two respondents up to August 2005 were the same as stated in the petition, after commissioning of Vapi (Ambheti) sub-station of PGCIL, the network length used was substantially reduced. After commissioning of 220 kV Vapi (POWERGRID) – Magarwada transmission line in April 2008, DD is directly connected to CTU network as Magardwada is sub-station of DD. Further, DD has stated that out of its total drawal of about 210 MW, about 130 MW load has been drawn from direct 200 kV link to CTU network and balance 60 MW is being drawn through 66 kV line from the petitioner's sub-station. Member Secretary, WRPC in his letter dated 11.7.2008 CERC has also confirmed that subsequent to filing of these petitions, DD and DNH networks are connected to the CTU

network through 220 kV Vapi (POWERGRID) – Magarwada (DD) D/C line and 220 kV Vapi (POWERGRID) – Kharadpada (DNH) D/C transmission lines. These lines are in commercial operation with effect from 1.5.2008 and 1.7.2008 respectively. It has been further stated that electrical network in Diu and parts of Daman and DNH continue to be fed through 66 kV network of the petitioner. Referring to letter dated 18.5.2007 of DNH, MPPTCL has stated that cost of dedicated transmission lines supplying to DNH was borne by DNH and these lines are also maintained by them.

- 19. It has been pointed out that Commission had notified Tariff Regulations for the period 2001-04 on 26.3.2001. These regulations provided for wheeling charges and transmission losses to be applied based on agreement between the parties. In case of disagreement, Member Secretary of the respective Regional Electricity Board (which has been reconstituted as Regional Power Committee) was required to calculate wheeling charges based on Contract Path, which was defined as shortest path between point of injection and point of drawal, capable of carrying the contracted power. Respondents have pointed out that method suggested by CEA and adopted by WREB is in line with the provisions in the notification dated 26.3.2001.
- 20. The respondents have also drawn our attention to the provisions in the National Electricity Policy which, *inter-alia* provide tariff mechanism for transmission to be sensitive to distance, direction and quantum of flow. Besides, the tariff policy provides that transmission charges can be determined on MW per

circuit kilometer basis, zonal stamp basis or some other pragmatic variant with the ultimate objective that transmission system users share the total transmission cost in proportion to their respective utilization of the transmission system.

- 21. On the issue of pooling of applicable transmission charges for sharing by all the beneficiaries of the region, MPPTCL in its affidavit submitted on 22.12.2008 has stated that DD has been connected to CTU network since April 2008 after commissioning of 220 kV Vapi-Magarwada D/C transmission line and has contended that question of pooling of transmission charges payable by DD should not arise. We presume that MPPTCL is aware that some power is still flowing through the petitioner's network who is contending that DD should pay charges for such use directly to it. Similar argument has been made in respect of conveyance of power to DNH after commissioning of 220 kV Vapi-Kharadpada D/C transmission line. To a pointed question during the hearing on 7.8.2008, as to whether these charges be pooled and shared by all the beneficiaries as had been done in the past, the counsel for the petitioner, DD, DNH and Goa, GUVNL and representative of MPPTCL agreed that the existing practice of pooling of transmission charges should be continued.
- 22. We have noted that the last occasion on which WRPC had calculated charges payable for use of the petitioner's system was in April 2004 for the period 2004-05, which was conveyed vide letter dated 30.4.2004. Thereafter, no calculations have been made by WRPC and constituents are paying same rate provisionally. MPPTCL has contended that transmission charges for use of

Gujarat system for transmitting power to DD and DNH are required to be determined from 1.4.2004 and not from 1.4.2006 as was requested by the petitioner during the hearing on 7.8.2008.

# **Findings**

- 23. Having heard the parties and gone through the pleadings, we proceed to dispose of the matter.
- 24. We have no doubt that this is clearly a case of determination of transmission charges for inter-State transmission system. This aspect has been settled vide the Appellate Tribunal's judgment dated 17.12.2007 in Appeal No. 150 of 2006 referred to above. Apparently, in view of this, none of the parties has disputed the jurisdiction of the Commission. Therefore, we do not find any need to go into the issue of jurisdiction and straight away proceed to the issues pertaining to determination of transmission charges for the system in question.
- 25. The first issue to be addressed is the date from which transmission charges determined pursuant to these petitions shall be applicable. The petitioner has prayed that transmission charges be determined from 28.2.2006, the date on which GERC had issued orders prescribing transmission charges and loss adjustments. However, during the hearing held on 7.8.2008, in response to query of the Commission, learned counsel for the petitioner submitted that transmission charges would need to be determined from 1.4.2006 onwards and they would not make any claim for the period prior thereto .As has been pointed

out by the respondents, Regulation 4.9.2 of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2001 (the 2001 regulations) notified on 26.3.2001 specifically dealt with wheeling system of SEB/State utility. It may be pointed out that prior to the Act the term 'wheeling' was used to denote third party use of the transmission system. However, these regulations were applicable only up to 31.3.2004, after which the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (the 2004 regulations) notified on 26.3.2004 become applicable from 1.4.2004 to 31,3.2009. The 2004 regulations do not have any specific provision for use of SEB/STU network for third party transmission. Thus, with effect from 1.4.2004, there is a vacuum with regard to determination of transmission charges for use of transmission system of a utility, which is neither buyer nor seller of the power flowing through this system. Therefore, we are in agreement with MPPTCL that we have to determine transmission charges with effect from 1.4.2004.

- 26. The next issue for determination is the method of computation of the transmission charges payable for the use of the system of the petitioner. The following two options are available to us in this regard:
  - (a) <u>Postage Stamp method</u>: In this method, the transmission system as a whole is considered and transmission charges are apportioned based on relative usage of the network by applying some criteria. In this method it is not required to identify specific elements which are used for a

particular transaction. As the name suggests, transmission charges are not sensitive to distance and direction, like postage charges. GERC has adopted this method while specifying rate in Rs per MW for the intra-State system of GETCO. If this method is to be applied in the present case, postage stamp rate based on applicable heads of expenditure included in the ARR approved by GERC can serve as starting point.

- (b) <u>Contract Path method:</u> In this method, specific facilities used in transaction are identified. The 2001 regulations of the Commission which was in vogue during the period 2001-04, this method was prescribed for use of SEB/State utility system for wheeling, whereas general principle for sharing of transmission charges of PGCIL/transmission licensee's system was based on postage stamp method.
- 27. The respondents have relied on the provisions of the National Electricity Policy and the Tariff Policy notified by Central Government on 12.2.2005 and 6.1.2006 respectively. The relevant provisions of above mentioned policies are extracted hereunder:

#### National Electricity Policy

 present network deficiencies do not result in unreasonable transmission loss compensation requirements.

### Tariff Policy

#### "7.1 Transmission pricing

- (1) A suitable transmission tariff framework for all inter-State transmission, including transmission of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-state transmission, needs to be implemented with the objective of promoting effective utilization of all assets across the country and accelerated development of new transmission capacities that are required.
- (2) The National Electricity Policy mandates that the national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This would be developed by CERC taking into consideration the advice of the CEA. Such tariff mechanism should be implemented by 1 April 2006.
- (3)Transmission charges, under this framework, can be determined on MW per circuit kilometer basis, zonal postage stamp basis, or some other pragmatic variant, the ultimate objective being to get the transmission system users to share the total transmission cost in proportion to their respective utilization of the transmission The system. overall framework should such as not to inhibit planned development/augmentation of the transmission system, but should discourage non-optimal transmission investment."
- 28. It is clear that the National Electricity Policy mandates adoption of a mechanism sensitive to distance, direction and related to quantum of flow. The Tariff Policy reiterates the same and goes a step further to suggest some illustrative mechanism. As pointed out earlier, the conventional Postage Stamp method does not fulfill the requirements specified in the aforesaid policies and therefore, should not be the first choice at least when it comes to inter-State

transmission. It is for this reason that the Commission, vide its order dated 28.3.2008 in Petition No, 85/2007, decided to restrict automatic pooling of new transmission elements (which would have resulted in inclusion of these elements in the existing regional postage stamp). The pooling of new elements is now optional. The Commission is also carrying out studies through a consulting agency to suggest a mechanism for transmission pricing (sharing of transmission charges). The transmission charges for conveyance of power to respondents No. 1 and 2 were not paid so far based on Postage Stamp rate for the petitioner's system. Therefore it may not be justified to do so now in disregard of the provisions of the National Electricity Policy and the Tariff Policy.

29. Our attention has also been drawn to Sections 35 and 36 of the Act reproduced below:

# " 35. Intervening transmission facilities.

The Appropriate Commission may, on an application by any licensee, by order require any other licensee owning or operating intervening transmission facilities to provide the use of such facilities to the extent of surplus capacity available with such licensee.

Provided that any dispute regarding the extent of surplus capacity available with the licensee, shall be adjudicated upon by the Appropriate Commission.

#### 36. Charges for intervening transmission facilities.

(1) Every licensee shall, on an order made under section 35, provided his intervening transmission facilities at rates, charges and terms and conditions as may be mutually agreed upon: Provided that the Appropriate

Commission may specify rates, charges and terms and conditions if these cannot be mutually agreed upon by the licensees.

(2) The rates, charges and terms and conditions referred to in subsection (1) shall be fair and reasonable, and may be allocated in proportion to the use of such facilities.

Explanation. - For the purposes of section 35 and 36, the expression "intervening transmission facilities" means the electric lines owned or operated by a licensee where such electric lines can be utilised for transmitting electricity for and on behalf of another licensee at his request and on payment of a tariff or charge."

30. Plain reading of these sections reveals that the case in hand falls in the category of intervening transmission facility as defined in the explanation to Section 36. In the present case, intervening transmission facility owned by the petitioner is used for conveyance of power to Respondents Nos 1 and 2 which are deemed to be licensees in terms of third proviso to Section 14 of the Act. We have noted that in general, the term used in the Act is 'transmission system' and only in these two sections the term 'transmission facility' has been used. In our opinion, this clearly implies that for the purpose of Sections 35 and 36, the transmission assets specifically used for the transaction have to be identified. During hearing, Shri D. Khandelwal appearing for MPPTCL had argued that since Section 36 talks about intervening transmission facility, the Commission is required to identify the intervening transmission facility and not to apply postage stamp rate determined by GERC. In this context, he submitted copy of the judgment dated 31.10.2007 of the Appellate Tribunal in the matter of Hindalco Industries Ltd (appellant) Vs West Bengal State Electricity Regulatory Commission & others. In the said judgment, the Appellate Tribunal had directed WBERC to calculate wheeling charges taking into account applicable distribution

network cost. Expanding on the term 'applicable network', the Appellate Tribunal had held that CESC had network at various voltage levels, but since the appellant was drawing power at 33 kV, there was no reason as to why it should pay for LT lines which are not being used. Though facts of the present case are not exactly same as the case decided by the Appellate Tribunal, the basic principle adopted by the Appellate Tribunal in the above case is capable of application in the present case before us. Thus there is a need to identify applicable transmission elements which are used for conveyance of power to Respondents Nos 1 and 2.

- 31. There was also an indirect suggestion on behalf of the respondents that since pre-existing arrangement whereby transmission charges were determined based on method suggested by CEA emanates from the provisions of PPA, it is binding. We are unable to agree. Provisions of the Act, and the regulations and orders of the Appropriate Commission have the force of law and consequently override provisions of the agreements. While holding so, we are not unmindful of the fact that transmission charges were being determined so far based on contract path method and there is a strong reason for continuing the same particularly when there are reasons to believe that this method is just and fair.
- 32. We are conscious of the fact that in the interim order dated 21.7.2004 in Petition No 6/2004 in the matter related to determination of wheeling charges for the use of Orissa transmission system for transmission of power to MPSEB under the 2001 tariff Regulation for the period 2001-04, the Commission had

stated that after implementation of open access regulations, charges shall be payable under those regulations. However, we are of the opinion that the matter relating to use of State transmission system for conveyance of power to other licensees is more appropriately covered under Sections 35 and 36 of the Act. These explicit statutory provisions cannot be ignored. We are therefore proceeding by specifying method of calculation of the transmission charges in the present case. In due course, the Commission will come out with draft regulations under Section 36 of the Act so as to deal with the issue of determination of transmission charges for intervening inter-State transmission facilities.

- 33. Above discussion leads one to the conclusion that it is appropriate to apply Contract Path method in preference to Postage Stamp method, The following distinct consideration in favour of this method cannot be overlooked:
  - (a) This method fits in well with the philosophy contained in the National Electricity Policy and Tariff Policy.
  - (b) It is in line with Sections 35 sand 35 of the Act, which require determination of transmission charges for intervening transmission facility. Therefore, these sections read with conclusion drawn by the Appellate Tribunal imply that in cases such as the present one, to the extent possible, specific transmission elements used in conveyance of power have to be identified.

- (c) The Contract Path method was the agreed arrangement for the period beginning 1992-93 till GETCO raised the issue in the form of Petition 94/2006 filed in August 2006.
- (d) Probably because the method is just and fair. In fact, the same was specified by the Commission in the 2001 regulations during the tariff period 2001-04 for determination of charges in case the parties were not able to reach to an agreement.
- 34. The next issue calling for our attention is the methodology to be adopted to identify the facilities or contract path used for transmission of power to DD and DNH. There is no doubt that the transmission lines across the two territories are used for the transaction. For example, following transmission lines are definitely used for transmitting power to DD.:
  - (a) 220 kV Bhilad Magarwada D/C
  - (b) 66 kV Vapi Dabhel
  - (c) 66 kV Vapi Kachigam
- 35. The above stated position remains unchanged even after commissioning of PGCIL's transmission line between Ambheti (Vapi) to Magarwada, which would have resulted in reduction in (but not stoppage of) power flowing though the transmission lines at (a), (b) and (c) listed in the preceding paragraph. However, it has been pointed out that some of these transmission lines are owned by DD and DNH and not by the petitioner as was contended by it. If so, obviously no transmission charges are payable to the petitioner for such

transmission lines. Inside the territory of Gujarat, it will be fair to assume that power to the terminal sub-stations in Gujarat will flow on the shortest lines connecting these sub-stations to PGCIL sub-stations. This is a reasonable assumption because even if a small fraction of power flows through alternate paths, it can be neglected for the sake of simplicity without significantly affecting accuracy. Thus, in case of power transmission to DD, power to terminal substation in Gujarat namely Vapi and Bhilad can be assumed to be flowing from Ambheti (Vapi) sub-station of PGCIL after commissioning of Ambeti -Bhilad and Ambeti-Vapi lines of PGCIL. As a corollary, it will be fair to assume that after commissioning of Ambheti sub-station of PGCIL, power meant to flow to DD will not follow the Asoj-Ukai-Vav-Navsari-Vapi-Bhilad path.

36. Another issue, which needs our consideration, is sharing of charges payable to the petitioner for use of its system for transmission of power to Respondents Nos. 1 and 2. In the pre-existing arrangement, the charges were shared by all the beneficiaries of WR by pooling it with the charges payable for PGCIL lines. We are of the opinion that the transmission lines used for conveyance of power to these two respondents are inter-state lines similar to the lines owned by POWERGRID and, therefore, there is no reason for their sharing mechanism to be different. We accordingly direct that applicable transmission charges for the identified intervening transmission facilities shall be shared in the same manner as inter-State intra-regional transmission system based on the 2004 regulations.

- 37. The petitioner has also prayed for determination of appropriate loss levels. However, we understand that transmission losses are already taken care of by WRLDC while finalizing drawal schedules for Respondents Nos 1 and 2. The same practice may continue. This obviates the need for determination of applicable transmission losses.
- 38. Based on the above, we direct Member Secretary, WRPC to submit to the Commission detailed calculation of the transmission charges for transmission of power to DD and DNH within one month of issuance of this order. The calculations shall be made based on following guidelines:
  - (a) The transmission assets used for transmitting power to DD and DNH shall be identified as under:
    - (i) Transmission lines across the territories of Gujarat on one side and DD and DNH on other side will be considered to be used for this transaction. The ownership of these lines shall be ascertained and only transmission lines owned by GETCO need to be considered for calculation of applicable transmission charges.
    - (ii) Transmission lines within Gujarat transmitting power from nearest PGCIL sub-station for further conveyance on lines identified in step (i) above shall also be considered to be used for the transaction.

- (b) The exercise at (a) above shall be carried out whenever a transmission element was commissioned by PGCIL, which had impact on flow pattern to DD and DNH.
- (c) The capital cost of the elements shall be continued to be taken as was done for pre-existing calculations since there appears to be no dispute in this regard.
- (d) For calculation of total transmission changes for these elements, 30% of the capital cost shall be considered as equity and 70% shall be considered as debt.
- (e) Return on equity shall be calculated at the prescribed rate i.e. 14% for the period from 1.4.2004 to 31.3.2009.
- (f) Interest on loan shall be calculated by applying SBI PLR as on 1.4.2004. For the period 1.4.2009 onwards, SBI PLR as on that date shall be used.
- (g) O&M expenses, depreciation and interest on working capital shall be calculated as prescribed in the relevant tariff notification of the Commission. However, component on account of Advance against depreciation shall not be included.

- (h) Repayment shall be considered as equal to depreciation recovered in the relevant year.
- (i) Cumulative depreciation for the period from 1.4.1992 to 31.3.2001 shall be obtained by adding depreciation for each of the years during this period as calculated based on pre-existing method. Cumulative depreciation for prior period (from date of commercial operation of the asset to 31.3.1992) shall be obtained by applying depreciation rates applicable to transmission lines owned by POWERGRID or other PSUs during that period.
- (j) Salvage value shall be considered as 10% of the capital cost.
- (k) Rebate and late payment surcharge on the bills raised based on calculations are carried out by Member Secretary, WRPC consequent to this order shall also be based on provision in the relevant tariff notification of the Commission.
- (I) The proportion in which the identified transmission assets are used for conveyance of power to DD and DNH shall be estimated based on relevant historical data of power flows
- (m) The transmission charges applicable for conveyance of power to DD and DNH shall be calculated separately for each asset by applying the

proportion estimated in step (I) to the total transmission charges for that asset.

- (n) The applicable transmission charges for conveyance of power to DD and DNH shall be shared by all long-term customers of WR in the same manner as regional assets of PGCIL.
- 39. The petitions shall be processed for hearing after receipt of the calculations from the Member-Secretary.

Sd/- Sd/- Sd/- Sd/- Sd/- (S. Jayaraman) (R. Krishnamoorthy) (Bhanu Bhushan) (Dr. Pramod Deo) Member Member Chairperson

New Delhi, dated 3<sup>rd</sup> February 2009