

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

**Petition No.70/2001**

**In the matter of**

Approval for Incentive for the year 2000-2001 for Feroze Gandhi  
Unchahar Thermal Power Station Stage-I (420 MW).

**And in the matter of**

National Thermal Power Corporation Ltd.

Petitioner

VS Uttar Pradesh

Power Corporation Ltd. & Others The following were

Respondents

present:

1. Shri K.K. Garg, GM (Comml), NTPC
2. Shri T.R. Sohal, NTPC
3. Shri R. Singhal, NTPC
4. Shri S.C. Gupta, Resident Engineer, BSEB
5. Shri S.C. Mehta, XEN (ISP), RRVPNL
6. Shri R.K. Arora, XEN, HVPNL

**ORDER (DATE OF HEARING  
21-12-2001)**

In the present petition, the petitioner, NTPC has prayed for approval of its proposal for incentive as contained in Annexure-III of the petition for the year

2000-01 in respect of Feroze Gandhi Unchahar Thermal Power Station Stage-I, located in Northern Region. The present respondents are the beneficiaries of the station.

2. The tariff and terms and conditions for power supply from the station was notified by Ministry of Power on 26-3-1994. Clause 4 of the notification makes a provision for payment of incentive/disincentive to/by the petitioner in case where the actual generation level in kWh/KW/year (AGN) as certified by Northern Regional Electricity Boards and the Central Electricity Authority in a financial year exceeds the normative upper limit of operating range in kWh/KW/year (NGU) as per the following formula.

Incentive (I) (Rs.)

$$=(\text{Energy (Kwh) corresponding to AGN} - \text{Energy (Kwh) corresponding to NGU}) \times (\% \text{PLF corresponding to AGN} - \% \text{PLF corresponding to NGU}) \times 0.01.$$

3. The tariff notification further stipulates that for the purpose of incentive/disincentive the actual generation level achieved in any financial year will include the quantum of backing down as certified by Northern Regional Electricity Board due to lack of system demand and other conditions not attributable to the petitioner, as certified by CEA as deemed generation. The tariff notification dated 26-3-1994 has been continued upto 31-3-2001 on ad-hoc basis by virtue of Clause 6 of that notification read with the Commission's order dated 21-12-2000 in petition No.4/2000, and other related petitions. Incentive

payable in respect of this station up to 1999-2000 has already been determined by the Commission, therefore, the proposal in the present petition relate to determination for incentive for the year 2000-01. Member Secretary, NREB in his inter departmental note addressed to CEA has certified gross generation as under:-

Gross Generation (in MU)	Loss of generation due to less demand (in MU)	Total gross deemed generation for 2000-01 (in MU)	Ex-Bus Generation under high frequency (in LU)	Gross excess generation under high frequency(in LU)
3279.184	13.831	3293.015	169.49	187.282

4. Replies has been filed on behalf of UPPCL, RRVPNL and Haryana Vidyut Parasaran Nigam Ltd. In reply to the petitions UPPCL and RRVPNL have stated that the tariff determined by Ministry of Power under its tariff notification dated 26-3-1994 was valid upto 31-3-1997, but was continued on adhoc basis upto 31-3-2001. Respondents have pointed out that determination of incentive without re-setting of tariff w.e.f. 1-4-1997 will not be reasonable and should be deferred. It has also been pointed out that 187.282 LU of excess power generated during high frequency should also be excluded for the purpose of incentive since a decision to that effect was taken at 121<sup>st</sup> meeting of NREB held in December, 1999. HVPNL in its reply had made an additional submission that the station has achieved PLF of 89.50% during 2000-01, which is unachievable when forced outages and outages on account of normal maintenance of the machines are taken into account. These outages account for 21 to 22% and, therefore, the PLF cannot be beyond 78% of the declared capacity of the station. HVPNL argued that for the purpose of incentive, PLF up to 79-78% be considered.

5. We have heard the representatives of RRVNL and HVPNL who were present at the hearing before us and also Shri K.K. Garg on behalf of the petitioner. We in the first instant deal with the preliminary objection raised on behalf of the respondents that determination of incentive be deferred till such time the tariff for the period from 1-4-1997 to 31-3-2001 is determined by the Commission. We do not find any force in this contention raised on behalf of the respondents. The Commission in its order dated 21-12-2000 has continued up to 31-3-2001 the terms of tariff notified by Ministry of Power. The incentive claimed by the petitioner is payable in terms of that notification. As we have already noted, incentive is payable based on the gross generation of power independent of other terms and conditions notified by Ministry of Power. Therefore, re-determination of tariff for the period from 1-4-1997 to 31-3-2001 will not have any effect on the incentive payable. Accordingly, we do not see any point in deferring payment of incentive till such time the tariff for the period from 1-4-1997 to 31-3-2001 is re-determined.

6. In our order dated 31-7-2001 in petition No.5/99 and other petitions pertaining to stations in Northern Region, we have already directed that excess generation at high frequency shall not reckon for the purpose of claiming incentive. For the reasons stated therein, we reiterate those directions. Accordingly, the excess generation at high frequency shall be excluded for the purpose of incentive in respect of the station covered under this petition. As


regards the point raised by HVPNL regarding achievement of PLF, we find that as per the tariff notification dated 26-3-1994, incentive is payable based on certification by NREB. The gross generation has already been certified by NREB. HVPNL could have raised this issue at NREB forum regarding certification of deemed generation. We, therefore, do not take any cognizance of the objection raised on behalf of HVPNL. We, therefore, propose to allow incentive based on the certification given by Member Secretary, NREB.

7. In the light of above discussions, the respondents are liable to pay incentive of Rs.15.466 crores for the year 2000-2001. Incentive has been recovered by the petitioner on monthly basis in view of the notification dated 19-6-1995. The final adjustment of incentive determined by us shall be carried out keeping in view the recoveries of incentive already made by the petitioner from the respondents from month-to-month. The above incentive shall be apportioned among the respondents in the ratio of the energy draws from the station.

8. With the above directions, the petition stands disposed of.

**(K.N.Sinfca)**  
Member

< c  
**(G.S. Rajamani)**  
Member

  
Member

New Delhi dated: 0^ January, 2002.

CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI

**Coram**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

**Petition No. 68/2001**

In the matter of

Approval of incentive for Singrauli STPS for the year 2000-01 in Northern  
Region

**Petition No. 69/2001**

In the matter of

Approval of incentive for Rihand STPS for the year 2000-01 in Northern Region

**Petition No. 71/2001**

In the matter of

Approval of incentive for NCTPP, Dadri for the year 2000-01 in Northern Region

**Petition No. 72/2001**

In the matter of

Approval of incentive for Anta GPS for the year 2000-01 in Northern Region

**Petition No. 73/2001**

In the matter of

Approval of incentive for Auraiya GPS for the year 2000-01 in Northern Region

Petition No. 74/2001

in the matter of

Approval of incentive for Dadr, GPS for the year 2000-01 in Northern Region

And in the matter of

National Thermal Power Corporation Ltd. .... **Petitioner**  
Vs Uttar Pradesh Power Corporation Ltd. & others ....  
**Respondents**

The following were present:

1. Shri K.K. Garg, GM (Comml), NTPC
2. Shri T.R. Sohal, NTPC
3. Shri R. Singhal, NTPC
4. Shri S.C. Mehta, XEN (ISP), RRVPNL
5. Shri R.K. Arora. XEN, HVPNL

**ORDER**  
**(DATE OF HEARING 8-1-2002)**  
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In these petitions, the petitioner, NTPC has prayed for approval of its proposal for incentive as contained in Annexure-III of the respective petition for the year 2000-01 in respect of the stations located in Northern Region. The present respondents are the beneficiaries of these stations. 2. The tariff and terms and conditions for power supply from these stations were notified by Ministry of Power as under:

Station	Notification	Period of validity
Singrauli STPS	2-1 T-1992	1JM992"to~31 ~A(M997~
Rihana STPS	"^J^iLIV"	1_~"J I^^to "31-10-1997"
Dadri NTPS	25-2M999	^L£/M5 "j "to 31~3~-19~98" 1-12-1995 )
Anta GPS	30-4-(994"	'~ H-4-1992 to 31-3-1997
Auriaya GPS	"30-4-1994	_ _ _ ~ _ ' 1-4-1992 to 31-3-1997
Dadri GPS	" '5-5-1999	...."" . ""T4d994 ')to 3K3-1999 1-8-1996 ) 1 t.luO"

Clause 4 of the reseen-.e notification makes

kWh/KW/year (AGN) as certified by Regional Electricity Boards and the Central Electricity Authority in a financial year exceeds the normative upper limit of operating range in kWh/KW/year (NGU) as per the following formula:

*Incentive (I) (Rs.)*

$$= ( \text{Energy (Kwh) corresponding to AGN} - \text{Energy (Kwh) corresponding to NGU} ) \times (\% \text{PLF corresponding to AGN} - \% \text{PLF corresponding to NGU}) \times 0.01.$$

4. The tariff notifications further stipulate that for the purpose of incentive the actual generation level achieved in any financial year will include the quantum of backing down as certified by Northern Regional Electricity Board due to lack of system demand and other conditions not attributable to the petitioner, as certified by CEA, as deemed generation. The above tariff notifications have been continued upto 31-3-2001 on ad-hoc basis by virtue of Clause 6 of the respective notification, read with the Commission's order dated 21-12-2000 in petition No.4/2000, and other related petitions. Incentive payable in respect of this station up to 1999-2000 has already been determined by the Commission, and, therefore, the proposal in these petitions relates to determination for incentive for the year 2000-01. Member Secretary, NREB in his inter departmental note addressed to CEA has certified gross generation as under:-

Name of the Station	Gross Generation for 2000-01 (in Mil)	Loss due to low demand (in MU)	of ' Gross generation high for 2000-01 (in MU)	frequency (in under	Ex-Bus excess Generation under high LU) frequency(i
Smurauli STPS	16402.652	52.3	16457.43370	552.710	602.409
Rajshahi JSIFS	7777	25	7752	503	14
Durgam NCTPS	>2	5z	6970	240	5v
Am.3 GPS	2c	12	2883	972	54
Aura vrf GPS	463-7	b4p-	4703	659	99



5. Replies were filed on behalf of UPPCL, RRVPNL and Haryana Vidyut Parasaran Nigam Ltd. In reply to the petitions UPPCL and RRVPNL stated that the tariff determined by Ministry of Power under its tariff notifications expired during 31-3-1997 to 31-3-1999, but was continued on ad hoc basis up to 31-3-2001. Respondents pointed out that determination of incentive without resetting of tariff from the date of expiry of the respective notification would not be reasonable and should be deferred. It was also pointed out that excess power generated during high frequency should also be excluded for the purpose of incentive since a decision to that effect was taken at 121<sup>st</sup> meeting of NREB held in December, 1999. HVPNL in its reply had made an additional submission that the stations had achieved very high PLF during 2000-01, which is unachievable when forced outages and outages on account of normal maintenance of the machines were taken into account. These outages accounted for 21% to 22% and, therefore, the PLF could not be beyond 78% of the declared capacity of the respective station. HVPNL argued that for the purpose of incentive, PLF up to 79-78% should be considered.

6. The similar issues as raised by the respondents in these petitions were earlier considered by us in our order dated 4-1-2002 in Petition No.70/2001. The findings recorded by us in the order dated 4-1-2002 *ibid* are as under:

- (a) For the purpose of determination of incentive for the year 2000-2001. It is recommended to re-determine tariff for the period from the date of expiry of the respective notification till 31-3-2001.

- (b) The excess generation at high frequency would not reckon for the purpose of claiming incentive and it had *per se* to be excluded from the gross generation.
- (c) The incentive was payable based on the certification done by Member-Secretary, NREB.

We reiterate these findings recorded by us in our order of 4-1-2002. 7. In the light of above discussions, the respondents are liable to pay incentive for the year 2000-2001 as under.

Name of the station	Amount of incentive (Rs.in Crores)
Singrauli STPS	110.252
Rihand STPS	34.542
Dadri NCTPS	48.624
Anta GPS	3.675
Auraiya GPS	8.756
Dadri GPS	5.994

8. Incentive has been recovered by the petitioner from the respondents on monthly basis in view of the notification dated 19-6-1995. The final adjustment of incentive determineu by us shall be carried out keeping in view the recoveries of incentive already made from month-to-month. The above incentive shall be apportioned among the respondents in the ratio of the energy draws from the respective station.

9. With the above directions, the petitions stand disposed of.

Sd/-  
(K.N. Sinha)  
Member

Sd/-  
(G.S. Rajamani)  
Member

Sd/-  
(D.P. Sinha)  
Member

\L-A Delhi d;;teti the 23" January. 2002.

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

**Petition No.70/2001**

**In the matter of**

Approval for Incentive for the year 2000-2001 for Feroze Gandhi  
Unchahar Thermal Power Station Stage-I (420 MW).

**And in the matter of**

National Thermal Power Corporation Ltd. .... Petitioner

VS

Uttar Pradesh Power Corporation Ltd. & Others .... Respondents

The following were present:

1. Shr
2. Shr | K.K. Garg, GM (Comml), NTPC
3. Shr | T.R. Sohal, NTPC
4. Shr | R. Singhal, NTPC
5. Shr | S.C. Gupta, Resident Engineer, BSEB
6. Shr | S.C. Mehta. XEN (ISP), RRVPNL  
R.K. Arora. XEN, HVPNL

ORDER (DATE OF HEARING  
21-12-2001)

In the present petition, the petitioner, NTPC has prayed for approval of its proposal for incentive for the year 2000-2001 for Feroze Gandhi Unchahar Thermal Power Station Stage-I (420 MW) as mentioned in Annexure-III of the petition for the year 2000-2001. ■■

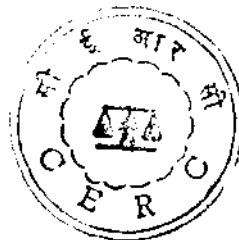
2000-01 in respect of Feroze Gandhi Unchahar Thermal Power Station Stage-I, located in Northern Region. The present respondents are the beneficiaries of the station.

2. The tariff and terms and conditions for power supply from the station was notified by Ministry of Power on 26-3-1994. Clause 4 of the notification makes a provision for payment of incentive/disincentive to/by the petitioner in case where the actual generation level in kWh/KW/year (AGN) as certified by Northern Regional Electricity Boards and the Central Electricity Authority in a financial year exceeds the normative upper limit of operating range in kWh/KW/year (NGU) as per the following formula.

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$$(\% \text{PLF corresponding to AGN} - \% \text{PLF corresponding to NGU}) \times 0.01.$$

3. The tariff notification further stipulates that for the purpose of incentive/disincentive the actual generation level achieved in any financial year will include the quantum of backing down as certified by Northern Regional Electricity Board due to lack of system demand and other conditions not attributable to the petitioner, as certified by CEA as deemed generation. The tariff notification dated 26-3-1994 has been continued upto 31-3-2001 on ad-hoc basis by virtue of Clause 6 of that notification read with the Commission's order dated 21-12-2000 in petition No.4/2000. and other related petition? incentive

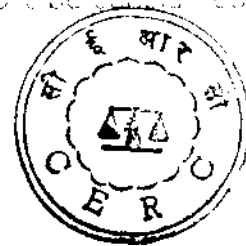


payable in respect of this station up to 1999-2000 has already been determined by the Commission, therefore, the proposal in the present petition relate to determination for incentive for the year 2000-01. Member Secretary, NREB in his inter departmental note addressed to CEA has certified gross generation as under:-

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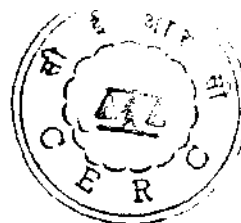
4. Replies has been filed on behalf of UPPCL, RRVPNL and Haryana Vidyut Parasaran Nigam Ltd. In reply to the petitions UPPCL and RRVPNL have stated that the tariff determined by Ministry of Power under its tariff notification dated 26-3-1994 was valid upto 31-3-1997, but was continued on adhoc basis upto 31-3-2001. Respondents have pointed out that determination of incentive without re-setting of tariff w.e.f. 1-4-1997 will not be reasonable and should be deferred. it has also been pointed out that 187.282 LU of excess power generated during high frequency should also be excluded for the purpose of incentive since a decision to that effect was taken at 121<sup>st</sup> meeting of NREB held in December, 1999. HVPNL in its reply had made an additional submission that the station has achieved PLF of 89.50% during 2000-01. which is unachievable when forced outages and outages on account of normal maintenance of the machines are taken into account. These outages account for 21 to 22% and. therefore, the PLF cannot be beyond 78% of the declared capacity of the station. HVPNL

argued that for the purpose of incentive, PLF up to 78% should be considered



5. We have heard the representatives of RRVPNL and HVPNL who were present at the hearing before us and also Shn K.K. Garg on behalf of the petitioner. We in the first instant deal with the preliminary objection raised on behalf of the respondents that determination of incentive be deferred till such time the tariff for the period from 1-4-1997 to 31-3-2001 is determined by the Commission. We do not find any force in this contention raised on behalf of the respondents. The Commission in its order dated 21-12-2000 has continued up to 31-3-2001 the terms of tariff notified by Ministry of Power. The incentive claimed by the petitioner is payable in terms of that notification. As we have already noted, incentive is payable based on the gross generation of power independent of other terms and conditions notified by Ministry of Power. Therefore, re-determination of tariff for the period from 1-4-1997 to 31-3-2001 will not have any effect on the incentive payable. Accordingly, we do not see any point in deferring payment of incentive till such time the tariff for the period from 1-4-1997 to 31-3-2001 is re-determined.

6. In our order dated 31-7-2001 in petition No.5/99 and other petitions pertaining to stations in Northern Region, we have already directed that excess generation at high frequency shall not reckon for the purpose of claiming incentive. For the reasons stated therein, we reiterate those directions. Accordingly, the excess generation at high frequency shall be excluded for the purpose of incentive in respect of the station covered under this petition. As



regards the point raised by HVPNL regarding achievement of PLF, we find that as per the tariff notification dated 26-3-1994, incentive is payable based on certification by NREB. The gross generation has already been certified by NREB. HVPNL could have raised this issue at NREB forum regarding certification of deemed generation. We, therefore, do not take any cognizance of the objection raised on behalf of HVPNL. We, therefore, propose to allow incentive based on the certification given by Member Secretary, NREB.

7. In the light of above discussions, the respondents are liable to pay incentive of Rs. 15.466 crores for the year 2000-2001. Incentive has been recovered by the petitioner on monthly basis in view of the notification dated 19-6-1995. The final adjustment of incentive determined by us shall be carried out keeping in view the recoveries of incentive already made by the petitioner from the respondents from month-to-month. The above incentive shall be apportioned among the respondents in the ratio of the energy draws from the station.

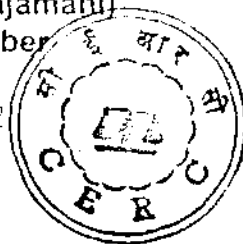
8. With the above directions, the petition stands disposed of.

Sd/-  
(K.N. Sinha)  
Member

Sd/-  
(G.S. Rajamani)  
Member

Sd/-  
(D.P. Sinha)  
Member

New Delhi dated: 4<sup>th</sup> January, 2002



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# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Coram:

1. Shri DP. Sinha, Member
2. Shri G.S. Rajamani, Member
3. Shri K.N. Sinha, Member

**Review Petition No. 82/2001  
in Petition No. 2/99**

In the matter of

Petition for removing difficulties faced during ABT implementation

And in the matter of

National Thermal Power Corporation Ltd.	...	Petitioner
Vs		
Union of India and Others	...	Respondents

The following were present:

1. Shri N.P. Singh, ED (OS), NTPC
2. Shri Shyam Wadhera, ED (Comm.), NTPC
3. Shri M.S. Chawla, DGM (Comm.), NTPC
4. Shri M.R.K. Rao, Sr.Mgr. (Law), NTPC
5. Shri S.K.Samul, Sr. Mrg., NTPC
6. Shri C.K. Mondal, Sr. Mgr., NTPC

## **ORDER (DATE OF HEARING 05.12.2001)**

The petitioner, NTPC filed an IA (No.106/2001) in Petition No.2/99 praying for deletion of certain portions of the Commission's order dated 4.1.2000 in Petition No.2/99. Since the prayer in fact amounted to modification of the relevant



parts of the order dated 4.1.2000, it was treated as a Review Petition. We have heard the petitioner on admission.

2. In its order dated 4.1.2000, the Commission had, inter alia, ordered as under in Paras 4 and 6 of the schedule-1 attached to the order:

4. Sent Out Capability:

*Sent out Capability of a generating station, hereinafter referred to as SOC, would mean the capability to deliver Ex-bus MWH based on which 'availability' will be worked out.*

*SOC for Thermal Stations shall be the DC, with all before-the-fact revisions/updating. The declared capacity shall not exceed the installed capacity.*

*NOTE 1: In case of gas turbine/combined cycle stations, the generator shall give DC for units/modules on gas fuel and DC for units/modules on liquid fuel separately, and the two shall be scheduled separately. Total DC and total SG for the station shall be the sum of the two.*

*NOTE 2: For the gas turbine/combined cycle stations for any time block, the average frequency is below 49.52 Hz but not below 49.02 Hz and SG is more than 98.5% of DC, SG shall be deemed to have been reduced to 98.5% of DC and if the average frequency of the time block is below 49.02 Hz and SG is more than 96.5% of DC, SG shall be deemed to have been reduced to 96.5% DC.*

6. Demonstration of Declared Capability:

*The Generator may be required to demonstrate the declared capability of its generating station as and when asked by the RLDC of the region in which the generating station is situated. In the event of generator failing to demonstrate the declared capability, the capacity charges due to the generator shall be reduced as a measure of penalty. The quantum of penalty for the first mis-declaration for any duration/block in a day shall be the charges corresponding to two days fixed charges. For the second mis-declaration the penalty shall be equivalent to fixed charges for four days and for subsequent mis-declarations, the penalty shall be multiplied in the same geometrical progression as per the order of the Commission.*

*NOTE: In case it is observed that the declaration of its capability by the generator is on lower side and the actual generation is more than DC, then UI charges due to the generator on account of such extra generation shall be reduced to zero and the amount shall be credited towards UI account of beneficiaries in the ratio of their capacity share in the station.*

3. It has been stated that the above provisions of the order dated 4.1.2000 result in denial of UI charges to the generators when they are helping the grid by way of more generation at low frequency and rather penalise the generators since it is denied energy charges in case of generation beyond installed capacity. The petitioner has stated that it is not always possible to maintain a constant value of sent out energy because of variations in input and output parameters beyond the control of the generators. The petitioner has sought deletion of the sentence "the declared capacity shall not exceed the installed capacity" in para 4 and the Note under para 6, reproduced above.

4. It is stated that the issue was discussed by the IEGC Review Panel which found merit in the contention of the petitioner and recommended suitable modification of the order dated 4.1.2000, as prayed for by the petitioner in the present petition.


5. The petitioner had earlier filed a Review Petition (No. 13/2000) against the Commission's order dated 4.1.2000 of which it seeks modification in the present petition. The Review Petition was disposed of by the Commission vide its order dated 15.12.2000. The issues raised in the present Review Petition were not raised by the petitioner in the earlier Review Petition No. 13/2000. Therefore, the present Review Petition is barred on this ground, apart from the fact that the

present Review Petition is barred by limitation as well for which the petitioner has not filed any application for condonation of delay. The present Review Petition is not maintainable on these grounds.

6. In para 4 of the schedule 1 attached to the Commission's order dated 4.1.2000, it has been provided that sent out capability i.e. the capability to deliver ex-bus MWH, shall be the "declared capacity" of the station with all before-the-fact revision/updating. It further provides that the "declared capacity" shall not exceed the "installed capacity". The petitioner, NTPC seeks deletion of the sentence "the declared capacity shall not exceed the installed capacity". The provision in the order has been made keeping in view the commonsense rule. During generation, a part of the electricity generated is consumed by the generating plant itself, which is called the auxiliary consumption. The installed capacity of the plant includes the auxiliary consumption as well. Therefore, by simple logic, the sent out capability of the "declared capacity" can, under no circumstances, exceed the "installed capacity" of a generating station and the former has to be less than the later. Accordingly it has been directed that the declared capacity of a generating station shall never exceed the installed capacity. It has been stated before us that on certain occasions, the actual generation can exceed the "installed capacity" of the station. In our view this is possible only if there is a mis-declaration of the "installed capacity" of the generating station. In such cases, the actual capacity of the generating station is higher but is shown to be on the lower side. We do not find any justification for deletion of the portion of para 4 sought by the

petition. For similar reasons, the deletion of note below para 6 of schedule 1 to the order dated 4.1.2000 cannot be allowed at this stage. A generator cannot be entitled to UI charges when its actual generation exceeds the declared capacity. The provision has been made to discourage mis-declaration of the capability of the generator to generate power and to ensure that generation of power conforms to the "declared capacity"\*otherwise scheduling will lose its significance.

7. In view of the foregoing, the Review Petition is dismissed at the admission stage. We, however, grant liberty to the petitioner to approach the Commission for appropriate relief in case it faces any practical difficulties in the implementation of the provisions of schedule 1 to the order dated 4.1.2000 which is stated to be under stay by the orders of different High Courts based on the appeals filed by some of the utilities, after ABT actually comes into force.



**SINHA)**

(£N. SIKJHX) ^ ~ ■  
**-MEMBER**

**(G.S. RAJAMANI)**  
**MEMBER**

**MEMBER**

New Delhi dated the 5<sup>th</sup> December 2001.



**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

***Coram :***

- 1. Shri G.S. Rajamani, Member**
- 2. Shri K.N. Sirtha, Member**

**Petition No. 83/2001**

**In the matter of**

Maintaining the Regional Grid Frequency at 49.0 Hz and above and compliance of direction of Regional Load Despatch Centre

**And in the matter of**

Southern Regional Load Despatch Centre

**... Petitioner**

***Versus***

1. Andhra Pradesh Transmission Corporation Ltd., (APTRANSCO), Hyderabad
2. Kamataka Power Transmission Corporation Ltd. (KPTCL), Bangalore
3. Kerala State Electricity Board (KSEB), Trivandrum
4. Tamil Nadu Electricity Board (TNEB), Chennai
5. Southern Regional Electricity Board, Bangalore

**... Respondents**

**The following were present:**

1. Shri R.G. Yadav, ED, SRLDC, PGCIL S. K.
2. Shri Soonee, SRLDC, PGCIL V. Mittal,
3. Shri AGM (SO), PGCIL A.K. Sinha, Mgr,
4. Shri (SO), PGCIL Sowmyanarayanan,
5. Shri Consultant, TNEB

**ORDER (DATE OF HEARING  
30.1.2003)**

Southern Regional Load Despatch Centre (SRLDC), the petitioner filed this petition on 15.11.2001 pointing out certain violations of IEGC by the constituents of Southern Region at low frequency of 48.5 Hz, during the months of August, September and October 2001 and prayed to the Commission to pass necessary order for maintaining the regional grid frequency at 49.0 Hz and above and compliance of directions of Regional Load Despatch Centre by the constituents of Southern Region.



2. The Commission heard Shri S.K. Soonee on behalf of the petitioner. He gave detailed presentation about the maintenance of regional grid frequency at 49.0 Hz and above and strict adherence to their respective schedules for drawal by all the constituents, since 1.1.2003, to the Commission. Shri S.K. Soonee, the representative of the petitioner stated that ABT has been successfully implemented in the Southern Region with effect from 1.1.2003 and it has also yielded the desired results. Since the implementation of ABT in Southern Region in the last 29 days, the regional grid frequency was automatically maintained throughout, within the permissible band of 49.0 Hz to 50.5 Hz. He stated that all the constituents of Southern Region fully cooperated with SRLDC and there had been no occasion for SRLDC to issue any instructions to the constituents.

3. Shri S.K. Soonee on behalf of the petitioner further stated that UI charges of about Rs.8 crores received for the first week of January 2003 were disbursed to the constituents. Thus, the constituents were prompt in making UI charges as provided in IEGC.

4. We take this opportunity to complement the constituents/beneficiaries of the Southern Region for the success achieved in their efforts to maintain the grid frequency within the normal band. We trust and hope that all constituents/beneficiaries through their concerted efforts shall continue to ensure that the optimum grid frequency level is maintained in future also in the over all interest of security of the regional grid.

5. In view of above, no further orders are needed in the present case. The petition accordingly stands disposed of.

**(K.N.SfNHA)**  
**MEMBER**

**(G.S.RAJAMANI)**  
**MEMBER**



**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Coram:**

1. **Shri Ashok Basu, Chairman**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N. Sinha, Member**

**Petition No. 84/2001**

**In the matter of**

Reduction of over-drawals from grid and compliance of directions of WRLDC.

**And in the matter of**

Western Regional Load Despatch Centre                      ....                      Petitioner

Vs

1. Gujarat Electricity Board, Vadodara
2. Madhya Pradesh State Electricity Board, Jabalpur
3. Chhattisgarh State Electricity Board, Raipur
4. Maharashtra State Electricity Board, Mumbai
5. Goa Electricity Department, Panaji, Goa
6. Union Territory of Dadar & Nagar Haveli, Silvassa
7. Daman & Diu Administration, Electricity Department, Daman
8. National Thermal Power Corporation, New Delhi
9. Nuclear Power Corporation Ltd., Mumbai                      ....                      Respondents

**ORDER**

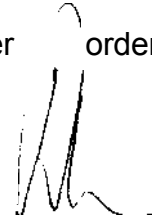
In this petition filed on 20.11.2001, the petitioner, Western Regional Load Despatch Centre (WRLDC) has brought to the notice of the Commission certain violations of IEGC and the Commission's order dated 24.8.2001 in Petition No. 107/2000, by the constituents of Western Region primarily during the months of August 2001 and September 2001. The petitioner had sought appropriate action against Respondent No.1 and Respondent No.2, namely, GEB and MPSEB, under Sections 44 and 45 of the Electricity Regulatory Commissions Act, 1998 (the Act). When this petition was pending, WRLDC filed two other petitions, that is, 107/2002

and 108/2002 whereby it brought to the Commission's notice further violations of IEGC and the Commission's order dated 24.8.2001 in Petition No. 107/2000 by MPSEB, GEB and MSEB during the months of July 2002 and October 2002. The Commission, by invoking powers under Section 45 of the Act vide order dated 28.1.2003, has levied a penalty of Rs.1.00 lakh on MPSEB (Respondent No.2 herein). The Commission has also issued show cause notice to GEB (Respondent No.1 herein) and MSEB (Respondent No.4 herein) as they were also prima facie found to be violating the Commission's said order dated 24.8.2001 as also the provisions of IEGC approved by the Commission. The issue is still pending before the Commission and the parties are to be heard on 27.3.2003 before taking a final view.

2. Under these circumstances we do not consider it necessary to take any action against any of the respondents, based on the allegations made in the present petition, that is, 84/2001, which pertained to the months of August 2001 and September 2001. Therefore, the petition stands disposed of without any further order.

**(K.N. SINHA)**  
**MEMBER**

C>--  
**7**  
**(G.S. RAJAMANI)**  
**MEMBER**



New Delhi dated 31<sup>st</sup> January 2003

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

**Review Petition No,8Q/2QQ1**

**In the matter of**

Maintaining the Regional Grid Frequency at 49.0 Hz and above and compliance of direction of Regional Load Despatch Centre.

**And in the matter of**

Kamataka Power Transmission Corp. Ltd.

.... Petitioner

**VS**

1. Southern Regional Load Despatch Centre
2. Andhra Pradesh Transmission Corporation Ltd.
3. Kerala State Electricity Board
4. Tamilnadu State Electricity Board
5. Department of Energy Secretariat, Govt, of Pondicherry
6. National Thermal Power Corporation Ltd.
7. Nuclear Power Corporation Ltd.
8. Neyveli Lignite Corporation Ltd.
9. Southern Regional Electricity Board

....Respondents

The following were present:

1. Shri B.S. Sheshadri, KPTCL
2. Shri M.H. Parviz, KPTCL

**ORDER (DATE OF HEARING  
29-10-2001)**

The present application for review arises out of our Order dated 03-08-2001 in Petition No.93/2000 and other related petitions (Southern Regional Load Despatch Centre versus Andhra Pradesh Transmission Corporation Ltd. & others).

2. We directed the beneficiaries/respondents, which included the present petitioner, to schedule their drawals from the Southern Regional Grid in such a manner that the frequency of the regional grid is not allowed to fall below 48.5 Hz during August-October, 2001 and thereafter the frequency should be maintained above the level of 49.0 Hz by adopting appropriate measures, to comply with the provisions of IEGC.

3. In the present Review Petition filed on 3-10-2001, the petitioner, Karnataka Power Transmission Corporation Ltd. has prayed for deferment of implementation of the order dated 3-8-2001 upto June, 2002 and for permission to overdraw within limitations the minimum energy as may be required to meet its demand. It has been stated that failure of monsoon in the State during June, 2001 and onwards has caused shortage of water as a result of which there is additional demand of energy to the extent of 13%, as compared to the demand for the corresponding period during 2000. It is stated that though it has been resorting to load-shedding, yet it has not been able to meet the requirements of additional power, particularly those of agriculturists for irrigation of fields. It is also stated that the petitioner has made efforts to maximise thermal generation

and to harness all the IPPs in the State to meet its additional requirement of power but these efforts have not yielded the desired result. Hence the application for review with the prayers noted above has been made.

4. The review petition is listed for admission. We have heard Shri B.S. Sheshadri for the petitioner. The Commission is conferred with powers of review as conferred on a Civil Court under the Code of Civil Procedure. The power of review of an order is limited to an error apparent on the face of record or recovery of new evidence by the aggrieved person, which was not available to it after exercise of due diligence or any other ground analogous to these grounds. We are not satisfied that on the grounds stated in the review petition, a case for review of order within the statutory prescription has been made out.

The

plea of failure of monsoon in the State was available to the petitioner at the time of hearing of Petition No.93/2000 and the related petitions during July, 2001 and this ground was raised on its behalf. Yet, an order giving directions for adopting suitable measure for improving the grid frequency and for adhering to the schedule, were passed. The relevant portion of order is extracted below:-

*"Accordingly, we direct that the beneficiary states shall schedule their drawals from the Regional Grid in such a manner that during the first three months i.e. from 1<sup>st</sup> August 2001 to 31<sup>st</sup> October 2001 the frequency of the Regional Grid shall not be allowed to fall below 48.5 Hz. Thereafter, during the next three months, that is up to 31<sup>st</sup> January, 2002, the frequency shall be maintained above the level of 49.0 Hz by taking suitable measures to comply with the provisions of IEGC. The measures adopted may be to increase the generation within the region or import of power from neighbouring regions or through proper load management and load shedding. We want to make it clear that these directions shall not be construed to absolve the respondents of their liability to pay Unscheduled Inter-change charges under the ABT regime."*

5. The petitioner seeks review of the order on the ground of hardship that is likely to be caused in case the order is implemented. We do not find this as sufficient ground for review of our earlier order dated 03-08-2001. The only alternative available to the petitioner is to have a resort to the measures listed in our order of 03-08-2001 and we reiterate those directions. The remedy of review is not available to it under these circumstances, in case the prayers made by the petitioner are allowed, it will contribute towards indiscipline in the regional grid. The Commission which has the onerous responsibility of regulating the inter state transmission of energy and in the process of ensuring proper grid discipline cannot be instrumental to such indiscipline by yielding to the machination of the players in the field.

6. In the light of above discussion, the review petition is dismissed at the state of admission.

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(K.N. Sihha)				(G.S. Rajamani)		(D.Ph\$wiha)	
Member				Member		^Member	

New Delhi dated: 6<sup>th</sup> November, 2001.

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. **Shri Ashok Basu, Chairman**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N. Sinha, Member**

**Petition No. 84/2001**

**In the matter of**

Reduction of over-drawals from grid and compliance of directions of WRLDC.

**And in the matter of**

Western Regional Load Despatch Centre                      ....                      Petitioner

Vs

1. Gujarat Electricity Board, Vadodara
2. Madhya Pradesh State Electricity Board, Jabalpur
3. Chhattisgarh State Electricity Board, Raipur
4. Maharashtra State Electricity Board, Mumbai
5. Goa Electricity Department, Panaji, Goa
6. Union Territory of Dadar & Nagar Haveli, Silvassa
7. Daman & Diu Administration, Electricity Department, Daman
8. National Thermal Power Corporation, New Delhi
9. Nuclear Power Corporation Ltd., Mumbai                      ....                      Respondents

**ORDER**

In this petition filed on 20.11.2001, the petitioner, Western Regional Load Despatch Centre (WRLDC) has brought to the notice of the Commission certain violations of IEGC and the Commission's order dated 24.8.2001 in Petition No. 107/2000, by the constituents of Western Region primarily during the months of August 2001 and September 2001. The petitioner had sought appropriate action against Respondent No.1 and Respondent No.2, namely, GEB and MPSEB. under Sections 44 and 45 of the Electricity Regulatory Commissions Act, 1998 (the Act). When this petition was pending. WRLDC filed two other petitions, that is, 107/2002

and 108/2002 whereby it brought to the Commission's notice further violations of IEGC and the Commission's order dated 24.8.2001 in Petition No. 107/2000 by MPSEB, GEB and MSEB during the months of July 2002 and October 2002. The Commission, by invoking powers under Section 45 of the Act vide order dated 28.1.2003, has levied a penalty of Rs.1.00 lakh on MPSEB (Respondent No.2 herein). The Commission has also issued show cause notice to GEB (Respondent No.1 herein) and MSEB (Respondent No.4 herein) as they were also prima facie found to be violating the Commission's said order dated 24.8.2001 as also the provisions of IEGC approved by the Commission. The issue is still pending before the Commission and the parties are to be heard on 27.3.2003 before taking a final view.

2. Under these circumstances we do not consider it necessary to take any action against any of the respondents, based on the allegations made in the present petition, that is, 84/2001, which pertained to the months of August 2001 and September 2001. Therefore, the petition stands disposed of without any further order. \

**(K.N. SINHA)**  
**MEMBER**

**(G.S. RAJAMANI)**  
**MEMBER**

**(ASHOK B^SU)**  
**CHAIRMAN**

New Delhi dated 31<sup>st</sup> January 2003



**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

Petition **No.12/2000**

**In the matter of**

Approval of Tariff for 220 KV D/C Kayamkulam-Pallom Transmission Line.

**Petition No.85/2001**

**And in the matter of**

Approval of Tariff for 220 KV D/C Kayamkulam-Edamon Transmission Line.

**And in the matter of**

Power Grid Corporation of India Ltd.

.... Petitioner

**VS**

Keraia State Electricity Board

... Respondent

The following were present:

- |     |      |                                     |
|-----|------|-------------------------------------|
| 1.  | Shr  | S.S. Sharma, AGM, PGCIL U.K. Tyagi, |
| 2.  | Shr  | PGCIL C. Kannan, PGCIL K.K.S.       |
| 3.  | Shr  | Babu, PGCIL Sanjay Mehra, PGCIL S.  |
| 4.  | Shr  | Gopal, PGCIL A.K. Nagpal, PGCIL     |
| 5.  | Shr  | S.S. Vindal. PGCIL D Sen, PGCIL     |
| 6.  | Shr  | Shri Shri B Ravindran. OSD. KSEB    |
| 7.  | Shr  |                                     |
| 8.  | Shr  |                                     |
| 9.  | Shri |                                     |
| 10. | Shr  |                                     |

**ORDER (DATE OF HEARING  
19-2-2002)**

In these petitions, the petitioner, PGCIL has sought approval of the Commission for the transmission charges in respect of following assets which form part of transmission system associated with Kayamkulam Combined Cycle Power Project and are being disposed of through this common order.

- (a) 220 kV D/C Kayamkulam-Pallom transmission line with associated bays
- (b) 220 kV D/C Kayamkulam-Edamon transmission line with associated bays

2. The petitioner company is entrusted with the function to undertake transmission of energy. In discharge of this function, the petitioner has set up transmission system in the entire country.

3. The petitioner and the respondent had agreed that the petitioner would execute the transmission system associated with Kayamkulam Combined Cycle Power Project with the following components:

- (a) 220 kV D/C Kayamkulam-Pallom transmission line
- (b) 220 kV D/C Kayamkulam-Edamon transmission line
- (c) 220 kV D/C switchyard at Kayamkulam
- (d) Extension of 220 kV sub-station of KSEB at Pallom and Edamon

4 MinitUy of Power accorded the iiv.estrnent approval for the transmission system associated with Kayamkulam Combined Cycle Power Project at an estimated cost of Rs.83.00 crores vide letter dated 6.2.1996. The transmission system was to be completed matching with the commissioning of the first unit of the generation project scheduled to be commissioned by March 1999. Subsequently, the estimated cost was revised to Rs.204.41 crores, including IDC of Rs.27.36 crores and approved by GOI vide letter dated 3.9.98. The petitioner built and commenced operation of the assets as given herein below:

- |   |           |
|---|-----------|
| (a) 220 kV D/C Kayamkulam-Edamon line<br>with associated bays | 1.11.1998 |
| (b) 220 kV D/C Kayamkulam-Pallom line<br>with associated bays | 1.12.1999 |

b. Petition No. 12/2000 was filed on 15.2.2000 and Petition No. 85/2C0T was filed on 3.12.2001. Subsequently, the petitioner filed amended petition No. 12/2000 to place on record certain additional facts in regard to actual expenditure.

6. It is stated that the estimated completion cost of 220 kV D/C Kayamkulam-Pallom line with associated bays is Rs.86.09 crores against the approved apportioned cost of Rs.85.31 crores. The estimated completion cost of Rs.86.09 crores includes an anticipated expenditure of Rs.980.88 lakhs. The Kayamkulam Edamon line with associated bays was completed at a total cost of Rs. 119.90

approved apportioned cost of Rs 119.10 crores. Thus the entire transmission system has been completed at a total cost of Rs.205.96 crores, against the sanctioned cost of Rs.204.41 crores. The petitioner has sought approval to the transmission charges, based on Ministry of Power's notification dated 16.12.1997 as under:

	(Rs. in lakhs)		
	1998-99	1999-2000	2000-2001
220 kV D/C Kayamkulam-Pallom transmission line with associated bays	-	427.62 (4 months)	1410.66
220 kV D/C Kayamkulam-Edomon transmission line with associated bays	878.95 (5 months)	2202.68	2207.62

7. In addition, the petitioner has sought approval for other charges like foreign exchange rate variation, income tax, incentive, other cess and taxes and surcharge as per the notification issued by Ministry of Power on 16.12.1997.

8. Replies to these petitions have been filed on behalf of the respondent, KSEB. It has been submitted that the O&M charges @ 1.5% of the total of project cost is high and should be @ 0.75%, charging 1% spares for the computation of working capital is unreasonable, depreciation should be charged @ 3-4% against depreciation of 6.07% proposed in the petitions, normative availability should be fixed at 98% instead of proposed normative availability of 95%. It also stated that anticipated expenditure of 980.88 lakhs should not be considered for computation

of tariff. The respondent has also pointed out that there has been delay in execution of Kayamkulam-Palloor transmission line by the petitioner, and as a consequence, the cost of construction has increased on account of higher IDC and IEDC and otherwise also, the cost of construction is higher as compared to that of similar lines constructed by the respondent itself. In petition No.85/2001, the respondent has submitted that interest @ 15.84% on working capital is very high, particularly when interest rates have subsequently been lowered. Interest @ 12.24% has been claimed in Petition No. 12/2000.

9. We have considered the submissions made on behalf of the parties. The petitioner has filed the petition for tariff based on norms notified by Ministry of Power in its notification dated 16.12.1997 in accordance with the directions of the Commission. O&M charges, spares for computation of working capital, depreciation and normative availability of 95% for recovery of full charges are based on the notification dated 16.12.1997 and are, therefore, in order. The anticipated expenditure of Rs.980.88 lakhs has been excluded for computation of tariff in Petition No. 12/2000 and Rs.76.29 crores have been considered for the purpose. In Petition No. 85/2001, the entire cost of Rs. 119.90 crores has been considered. On the question of delay raised on behalf of the respondent, we have noticed that in accordance with the investment approval accorded by Ministry of Power in its letter dated 6.2.1996, the project was to be completed matching with the commissioning of the first unit of the generation project scheduled to be commissioned by March 1999. 220 kV DC Kayamkulam-Edamam transmission

Commissioned on 1.11.1998 before the scheduled date. Hence there is no delay in commissioning of this line. So far as 220 kV DC Kayamkulam-Pallom line is concerned, we find that there is a delay of 8 months in the commissioning. The petitioner has explained that the delay was mainly on account of serious right of way problems and injunction granted by Kerala High Court for construction of a part of line measuring 1.5 km. It has been further explained on behalf of the petitioner that delay also occurred due to non-readiness of bays at the respondent's Pallom sub-station, which was being executed by the respondent itself on behalf of the petitioner. It may be noted that at the time of commissioning of Kayamkulam Combined Cycle Power Project, 220 kV Kayamkulam-Edamon transmission line was already available and, therefore, the marginal delay in execution of 220 kV Kayamkulam-Pallom line has not affected the evacuation of power generated from the project. We are satisfied with the explanation furnished by the petitioner that delay in execution of 220 kV DC Kayamkulam-Pallom line is for the reasons beyond the control of the petitioner. As regards the submission made by the respondent that the cost of construction of 220 kV DC Kayamkulam-Pallom line is higher as compared to similar lines constructed by the respondent, we find that, apart from the bald statement in the counter reply, no material evidence has been placed on record by the respondent to substantiate its plea. Therefore, we do not propose to take any cognizance of this submission made on behalf of the respondent. On the question of interest on working capital, we are of the view that the petitioner is entitled to claim an interest on working capital based on Prime Lending Rates of State Bank of India applicable when the assets were

put iir.c commercial operation Accordingly, we direct that interest @ 13%, 12% and 11.5% shall be allowed on working capital in respect of 220 kV DC Kayamkulam-Edamon line for the years 1998-99, 1999-2000 and 2000-01 respectively and interest of 12% and 11.5% shall be allowed in respect of 220 kV DC Kayamkulam-Pallom line for the years 1999-2000 and 2000-2001 respectively.

10. On consideration of entirety of the situation, we approve the transmission charges as under:

	(Rs. in lakhs)		
	1998-99	1999-2000	2000-2001
Kayamkulam-Pallom transmission Line with associated bays	-	431.38 (four months)	1421.15
Kayamkulam-Edamon transmission Line with associated bays	873.13 (five months)	2182.92	2184.89

11. In addition to the transmission charges, the petitioner shall be entitled to other charges like foreign exchange rate variation, income tax, incentive, surcharge and other cess and taxes in accordance with the notification issued by Ministry of Power and in force up to 31.3.2001.

12. While approving tariff, we have been guided by the following considerations:

- (t)■ The weighted average capitalization rate has been worked out on the basis of actual capital expenditure as per CA's certificates up to 31.3.2001 annexed to the petitions
- (b) The escalation in O&M expenses and maintenance spares for working capital has been worked out on the basis of WPI and CPI (industrial workers) for the month of April of the respective year.
- (c) It is observed that the interest rates considered in different petitions for the same loan are different. During the hearing it was explained by the petitioner that these loans are carrying floating rate of interest and the interest rate prevailing on the date of commercial operation has been considered in the tariff petition. Any resetting of the interest rates during the tariff period covered by this order shall be settled mutually between the parties.

13. In its order dated 17.4.2000 in Petition No. 12/2000 (Transmission charges for Kayamkulam-Pallom line) the Commission had allowed a provisional tariff of 85% of the transmission charges claimed by the petitioner in the unamended petition. Similarly, in respect of Kayamkulam-Edamon line also, the Commission in its orders dated 22.6.1999 and 1 10.1999 in Petition No. 3/1999 had allowed the petitioner to continue billing of charges. The provisional/interim tariff allowed by the Commission earlier shall be adjusted against the final transmission charges approved by us in this order.



given hereunder

**TAB LE**

Kayamkulam-Pallom Transmission Line with associated bays

(Rs. in Lakhs)

1998-99

Transmission Charges	1999-2000 (1 12.99 to 31.3.2000)	2000-2001
i) Interest on Loan	210.96	627.08
ii) Depreciation	149.97	484.85
iii) O&M expenses	34.56	113.80
iv) Return on Equity	24.15	158.37
v) Interest on working capital	11.74	37.05
<b>TOTAL</b>	<b>431.38</b>	<b>1421.15</b>

**T A B L E - II**

Kavamkulam Edamon Transmission Line with associated bays

(Rs. in Lakhs)

Transmission Charges	1998-99 (11.1.1998 to 31.3.1999)	1999-2000	2000-2001
i) Interest on Loan	395.88	932.17	908.76
ii) Depreciation	310.80	773.85	778.13
iii) O&M expenses	71.83	183.07	195.04
iv) Return on Equity	68.70	233.70	244.26
v) Interest on working capital	25.92	60.13	58.70
<b>TOTAL</b>	<b>873.13</b>	<b>2182.92</b>	<b>2184.89</b>

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15 The entire tariff approved by you shall be borne by the respondent as the transmission system associated with Kayamkulam Combined Cycle Power Project is dedicated to Kerala state.

16. We find that the auditors' certificate furnished along with the petition certifies the transmission tariff calculations but does not disclose whether the capital expenditure, equity, loan, rate of interest, repayment schedule, O&M charges, etc. are as per the audited accounts of the petitioner company. The petitioner is directed to file an affidavit within two weeks of the date of this order that all the tariff calculations and auditors' certificates are based on audited accounts of the petitioner company or in the alternative, the petitioner may file a revised auditors' certificate, in the format given below, failing which the transmission charges approved above shall not take effect and this order will automatically lapse without any further reference to the Commission.

### **A U D I T O R S     C E R T I F I C A T E**

We have verified the books of accounts, records and other documents of Power Grid Corporation of India Ltd and certify that the data used for transmission tariff calculations for \_\_\_\_\_ [name of the transmission system/line (s)] are in accordance with the audited books of accounts up to \_\_\_\_\_ (date) of the company. We have obtained all information and explanations which to the best of our knowledge and belief were necessary for the purpose of our examination and necessary approvals of the competent authority in respect of capital cost, foreign

exchange, time and cost over-run, etc. as prescribed under law, have been obtained.

Signature with Auditors seal and date

17 This order disposes of Petitions No. 12/2001 and 85/2001

**(K.N. Sinha)**  
**Member**

**(G.S. Rajamani)**  
**Member**

**(J.L. Prtmina)**  
**Member**

New Delhi dated: 3<sup>rd</sup> June, 2002

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. Shri DP. Sinha, Member
2. Shri G.S. Rajamani, Member
3. Shri K.N. Sinha, Member

**Petition No.75/2001**

**In the matter of**

Approval of Incentive for Transmission System of North Eastern Region for the years 1998-99 and 1999-2000.

**And in the matter of**

Power Grid Corporation of India Limited VS Assam State Electricity Board and Others	.... Petitioner  .... Respondents
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The following were present:

1. Shri P.R. Agarwal, Advocate for PGCIL
2. Shri S.S. Sharma, AGM, PGCIL
3. Shri T.S.P.Rao, AGM, PGCIL
4. Shri U.K. Tyagi, Chief Mgr., PGCIL
5. Shri M.K. Adhikary, CE (Com.), ASEB
6. Shri K. Goswami, AEE, ASEB
7. Shri H.M. Sharma, LO, ASEB
8. Shri H.L. Parthasarathy, SE, P&E Deptt. Mizoram
9. Shri N.G. Chanda, SE (SM), Meghalaya SEB
10. Shri CD. Saio, EE (SM), Meghalaya SEB

**ORDER (DATE OF HEARING:  
18.12.2001)**

In this petition, the petitioner seeks approval for incentive based on "availability" of transmission system in the North-Eastern Region (NER) for the

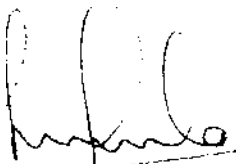
years 1998-99 and 1999-2000 in accordance with Ministry of Power's notification dated 16.12.1997.

2. The norms and factors in accordance with which tariff is chargeable for transmission of electricity by the petitioner to the State Electricity Boards and other persons, is to be determined under GOI notification date 16.12.97. Para 8 of the notification provides that in addition to the transmission charges, the petitioner shall be entitled to incentive for availability of the system beyond 95%. According to the petitioner, it has operated and maintained the transmission system in NER beyond 95% availability and is, therefore, entitled to incentive in accordance with the provisions of the said notification. The petitioner has also furnished the details of incentive chargeable for the years 1998-99 and 1999-2000.

3. The respondents have opposed the claim of the petitioner for incentive. It has been contended on behalf of the respondents that the tariff being presently paid by them is not based on the notification dated 16.12.97 and, therefore, the question of payment of incentive based on the provisions of this notification should not arise. It has been further submitted on behalf of the respondents that the transmission system constructed by the petitioner has been planned to cater to future generation of electricity and for transfer of power to other regions. For this reason also, the respondents have denied their liability to pay incentive claimed by the petitioner. On behalf of Meghalaya State Electricity Board, it was

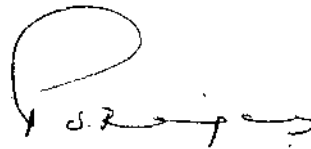
also submitted that their own share of power itself is not being delivered through the transmission system belonging to the petitioner because of the transmission bottlenecks.

4. In our separate order dated 1.1.2002 in petition No.40/2000 and Review Petition No.110/2000, we have allowed the petitioner to charge a lump sum tariff @ 35 paise/unit of the electricity transmitted through the transmission system owned by it in NER and not in accordance with the notification dated 16.12.97 based on a decision to that effect at NEREB forum. The question of payment of incentive in accordance with the norms and factors prescribed by the Central Government in notification dated 16.12.97 in the circumstances cannot arise. Accordingly, the petition is dismissed with no order as to costs.



**(K.N. Sinha)**

**Member**



**(G.S. Rajamani)**

**Member**



**(D.P. Sinha)**

**Member**

New Delhi dated the 2<sup>nd</sup> January, 2002.

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N. Sinha, Member**

**Review Petition No. 76/2001  
in Petition No.  
28/2001**

In the matter of  
Review of Commission's Order dated 4-6-2001 in Petition No. 28/2001

**And in the matter of**

National Thermal Power Corporation Ltd. .... **Petitioner**

**Vs**

Transmission Corporation of Andhra Pradesh and others .

**Respondents**

**And in the matter of**

Grid Corporation of Orissa Ltd. .... **Review Petitioner**

The following were present:

1. Shri R.K. Mehta, Advocate for GRIDCO

**ORDER (DATE OF HEARING  
4-12-2001)**

In terms of the notification dated 26.3.2001, the utilities were required to file petitions for determination of tariff with effect from 1.4.2001, based on the terms and conditions contained in the said notification. The notification, inter-alia, provides for payment of unscheduled inter-change charges under certain circumstances. Under the notification dated 26.3.2001, the payment of capacity charges is relatable to "availability", though prior to 1.4.2001, the capacity charges were payable on "drawal" basis. The final determination of tariff by the Commission based on the notification dated 26.3.2001 with effect from 1.4.2001 was likely to take some time in view of the interim



orders passed by certain High Courts based on the appeals filed by the utilities. The Commission, therefore, issued a notification dated 4.4.2001, that with effect from 1.4.2001, the billing of charges shall continue to be done on the same basis as on 31.3.2001 for a period of 6 months i.e. up to 30.9.2001 which presently stands extended to 31.12.2001, subject to adjustment in the light of final determination of tariff by the Commission. In other words, drawal of energy is to be the basis for billing of charges.

2. In view of the Commission's notification dated 4.2.2001, in our order dated 4.6.2001 in Petition No. 28/2001, we had directed the Member Secretaries of all the Regional Electricity Boards to prepare Regional Energy Accounts on "drawal" basis. A further direction was given to keep an accurate account of unscheduled inter-change charges to facilitate expeditious settlement and subsequent adjustment which may be necessary on account of difference in charges based on drawal and capacity basis, when the tariff is determined in accordance with the notification dated 26.3.2001.

3. The petitioner Grid Corporation of Orissa Limited filed an application to seek modification of the order dated 4.6.2001 for a direction that Availability Based Tariff (which stands incorporated in the terms and conditions contained in the notification dated 26.3.2001) shall be implemented prospectively and not with retrospective effect since its retrospective implementation would cause a serious prejudice to the petitioner on account of its inability to programme its drawals from the grid. The application has been treated as a review petition. We have heard Shri R.K. Mehta, Advocate on admission.

4. The actual implementation of ABT is presently stayed because of the interim orders of some of the High Courts based on the appeals filed by utilities, though the

Commission has given categorical directions for its implementation in the Eastern Region, of which the present petitioner is a constituent, w.e.f. 1.4.2001. Accordingly, we are not in a position to give any further directions on the issue raised in the present review petition. The date from which ABT is actually implemented will depend upon the orders of the superior courts that are in seisin of the matter in the pending appeals.

5. In view of this, in our opinion the present petition is not maintainable and is accordingly dismissed at admission stage.

(K.N. SINHA)  
MEMBER

(G.S. RAJAMANI) MEMBER



S'P—\*—t' \*~J~

  
(D.P. SINHA)  
MEMBER

New Delhi dated 4<sup>m</sup> December, 2001

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

- 1 S hri D.P. Sinha, Member**
- 2 Shri G.S. Rajamani, Member**
- 3 Shri K.N. Sinha, Member**

**Petition No. 60/2001**

**In the matter of**

Approval of Generation Tariff of Chamera HE Project Stage I

**And in the matter of**

National Hydroelectric Power Corporation Ltd. ... **Petitioner**

**Vs**

1. The Chairman, Punjab State Electricity Board, Patiala
2. The Chairman, Haryana Vidyut Prasaran Nigam Ltd., Panchkula
3. The Chairman, Delhi Vidyut Board, Delhi
4. The Chairman, Uttar Pradesh Power Corporation Ltd., Lucknow
5. The Chairman & Managing Director, Uttaranchal Power Corporation, Dehradun
6. The Chairman, Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
7. The Chairman, Himachal Pradesh State Electricity Board, Shimla
8. The Principal Secretary, Power Development Deptt., Jammu (J&K)
9. The Chief Engineer & Secretary, Engineering Deptt., Chandigarh ...

**Respondents**

The following were present:

1. Shri B. Dutta, Sr. Advocate for NHPC
2. Shri Sachin Datta, Advocate, NHPC
3. Shri S.K. Agarwal, CE (T), NHPC
4. Shri D.S. Ahluwalia, Sr. Manager (F&A), NHPC
5. Shri H.D. Khunteta, GM (F&A), NHPC
6. Shri N.K. Shekhawat, AO, NHPC
7. Shri Rupesh Sood, DM(F&A), NHPC

8. Shri Ansuman Ray, TE (Comml.), NHPC
9. Shri S.K. Gupta, Engineer, NHPC
10. Shri S.K. Meena, TE (Electrical), NHPC
11. Er. P. Kumar, NHPC
12. Shri R.K. Arora, XEN (T), HVPNL
13. Shri V.K. Gupta, SE, RRVPNL

**ORDER (DATE OF HEARING  
2.1.2002)**

This petition has been filed by National Hydroelectric Power Corporation Ltd. for approval of tariff for Chamera Stage I Hydro Electric Project (Chamera HEP Stage I) (3x180 MW =540 MW) for the period from 1.4.2001 to 31.3.2004 based on terms and conditions of tariff notified by the Commission on 26.3.2001.

2. The revised investment approval for Chamera HEP Stage I (3x180 MW) was accorded by Ministry of Power vide its letter dated 19.10.1995, according to which the generation portion of the project was completed at Rs.2114.02 crores, including IDC of Rs.605.49 crores.

3. All the three units of Chamera HEP Stage I were commissioned on 1.5.1994

4. Tariff for Chamera HEP Stage I, for the period from 1.4.1997 to 31.3.2002 was approved by Ministry of Power vide notification dated 8.2.1999. Consequent to notification of terms and conditions of tariff by the Commission on 26.3.2001, applicable with effect from 1.4.2001, the petitioner filed this petition for approval of tariff in respect of Chamera HEP Stage I for the period from 1.4.2001 to 31.3.2004 based on the terms and conditions of tariff contained in the notification issued by the Commission.

5. The replies to the petition have been filed by Haryana Vidyut Prasaran Nigam Ltd. (respondent No.2), Uttar Pradesh Power Corporation Ltd. (respondent No.4) and Rajasthan Rajya Vidyut Prasaran Nigam Ltd (respondent No.6). We propose to deal with the issues raised on behalf of the petitioner and respondents in the succeeding paragraphs while dealing with individual components of tariff.

### Capital Cost

6. In accordance with the terms and conditions of tariff notified by the Commission, the actual expenditure incurred on completion of the project is to form the basis for fixation of tariff. It is further provided that where the actual expenditure exceeds the approved project cost, the excess expenditure as allowed by CEA or an appropriate independent agency, is to be considered for the purpose of fixation of tariff. The terms and conditions notified by the Commission further provide that the capital expenditure of the project should be financed as per the approved financial package set out in the techno-economic clearance of CEA or as approved by an appropriate independent agency. A reasonable amount of capitalised initial spares are to be included in the project cost.

7. Ministry of Power had notified the tariff for the period 1.4.1997 to 31.3.2002 considering the gross block of Rs.2063.84 crores, excluding the initial spares of Rs.2.66 crores as on 31.3.1997. The commission recognizes the gross block of Rs.2063.84 crores considered by Ministry of Power to arrive at a gross block of 31.3.2001 for the purpose of fixing tariff for the period covered by this petition. In addition, an amount of Rs.48.71 crores was considered as additional capitalisation on account of FERV during 1994-95 to 1996-97 by Ministry of Power vide notification dated 14.5.1999. Considering this, the gross block as on 31.3.1997 works out as under:

)

Gross block as on 31.3.1997 = Rs.2063.84 crores  
Addl. Capitalisation on account  
of FERV during 1994-95 to  
1996-97 Total as on 31.3.1997 Rs. 48.71  
crores Rs.2112.55  
crores

### ADDITIONAL CAPITALISATIONS

8. In the tariff proposal submitted by the petitioner, it has taken into account the additional capitalisation since 1997-98. The details of amount claimed by the petitioner on account of additional capitalisation those allowed and disallowed by us on that account are given hereunder year-wise :

(Rs. in crores)

Financial Year	ACE Claimed	ACE Allowed	ACE Disallowed	FERV Disallowed
1997-98	(-) <b>104.59</b>	(-) <b>121.07</b>	<b>0.08</b>	<b>16.40</b>
1998-99		<b>0.28</b>	<b>0.25</b>	<b>16.58</b>
1999-00	<b>25.68</b>	<b>19.34</b>	<b>1.19</b>	<b>5.15</b>
2000-01		<b>3.59</b>	<b>0.37</b>	<b>9.03</b>
<b>TOTAL</b>		(-) <b>97.86</b>	<b>1.89</b>	<b>47.16</b>

While allowing additional capitalisation, we have been guided by the following factors :

- (a) Payments made in terms of arbitration award and settlement of final bill for such works, contracts for which were awarded before the date of commercial operation of the project have been allowed
- (b) Compensation paid of land has been permitted
- (c) Reduction in capitalisation on account of adjustment of depreciation during construction period on the advice of CAG and also reduction on account of disposal of old assets has been considered
- (d) Expenditure incurred on construction of staff quarters, roads which were in original scheme but completed later on, water supply plant at employees colony, etc. for the benefit of the employees at the remote location of hydro electric project for smooth and efficient operation of the project have also been allowed
- (e) Expenditure incurred for replacement of existing equipment, facility which has become obsolete or the equipment has outlived its utility, have been allowed



- (f) Amount under ERV for the years 1997-98 to 2000-01 has been separately approved by GOI/CERC and has been allowed on actual payment basis. As such, claim under ERV capitalisation in the present petition has not been allowed for tariff purposes.
- (g) Expenditure incurred on minor nature of works which could have been covered under O&M expenses has also not been allowed for capitalisation.

10. The year-wise details of expenditure disallowed for the purpose of additional capitalisation are given hereinbelow :

(Rs. in lakhs)

1997-1998	<b>(i)</b>	Acquisition of new machinery	3.00
	<b>(ii)</b>	Miscellaneous	5.00
1998-1999	<b>(i)</b>	Building GPM	1.00
	<b>(i)</b>	Other buildings	3.00
	<b>(iii)</b>	Workshop	3.00
	<b>(iv)</b>	Misc. plant & machinery (other expenditure)	11.00
	<b>(v)</b>	Transmission lines	5.00
	<b>(vi)</b>	Misc. Assets (Equipment)	1.00
	<b>(vii)</b>	Communication system	1.00
1999-2000	<b>(i)</b>	Building - others (soil conservation)	26.00
	<b>(ii)</b>	Misc. Plant & machinery (other equipments)	4.00
	<b>(iii)</b>	Generating plant and machinery (Misc. Power Plant)	13.00
	<b>(iv)</b>	Dam (Consultancy Charges)	40.00
	<b>(v)</b>	Tunnel/Channel (other charges)	8.00
	<b>(vi)</b>	Assets and equipments (other Misc. equipment)	2.00 26.00
	<b>(vii)</b>	Minor assets less than Rs.5,000/-	
2000-2001	<b>(i)</b>	Building (others)	3.00
	<b>(ii)</b>	Generating plant and machinery (others)	7.00
	<b>(iii)</b>	Sub-station equipment (stand by transformers)	2.00
	<b>(iv)</b>	Furniture, fixture and equipment (Replacement of old machine; water filter and air handling system for power house)	5.00
	<b>(v)</b>	Misc. assets/equipment (Night vision device, standby battery bank, wheel aligner for workshop and purchases)	12.00
	<b>(vi)</b>	Communication system	
	<b>(vii)</b>	Minor assets less than Rs.5,000/-	2.00
<b>TOTAL</b>			<b>189.00<sup>iii</sup></b>



11. Financing of additional capital expenditure has been considered from the EDC loans disbursed during respective years, and balance of amount has been considered from equity.

12. It has been stated on behalf of the respondents that the petitioner has applied equity more than 50% of the capital cost. It has, therefore, been prayed that ROE on excess equity may not be allowed. In accordance with the terms and conditions of the tariff notified by the Commission on 26.3.2001, the capital expenditure of the project should be financed as per the approved financial package set out in the techno-economic clearance of the CEA or as approved by an appropriate independent agency. Chamera HEP Stage I, as already discussed in this order, was commissioned on 1.5.1994. Ministry of Power already notified the tariff for the period from 1.4.1997 to 31.3.2002 and the present tariff petition before the Commission is for the period from 1.4.2001 to 31.3.2004. The respondents in this case are already paying tariff for the energy drawn from this project based on the Ministry of Power tariff notification. The Commission recognises the gross block as on 31.3.1997 as approved by Ministry of Power and added additional capitalization between the period 1.4.1997 to 31.3.2001 to arrive at gross block as on 31.3.2001. The gross block as on 31.3.2001 adds up to Rs.2014.69 crores (Rs.2112.55 crores-Rs.121.07 crores + Rs.0.28 crores + Rs. 19.34 crores + Rs.3.59 crores) after considering the additional capitalisation allowed during the period from 1997-98 to 2000-01. The debt and equity follows from the gross block as on 1.4.1997 and the additional capitalisation allowed by the Commission for which the debt and equity have been considered by the Commission in the same proportion of debt and equity as on 1.4.1997. Accordingly, the interest on loan and the return on equity shall be computed on the amount of debt and equity so arrived.

### **Foreign Exchange Rate Variation (FERV)**

13. FERV has been allowed by the Central Government/Commission from the date of commercial operation of the project in 1994-95 up to 2000-01. It is observed from FERV Notification No. 2/9/NHPC/Tariff dated 14.5.1999 issued by Ministry of Power in respect of Chamera HEP Stage I that two different methods for calculating FERV have been adopted. Up to the year 1996-97, FERV amount was capitalised. However, for the subsequent years, it was allowed on actual payment basis. Therefore, for the purpose of calculation of tariff for Chamera HEP Stage I, FERV amount capitalised by the Central Government has been included in the capital cost up to the year 1996-97. FERV considered above has been notionally divided into the ratio of 50:50 in to loan and equity and has been added under respective heads for tariff calculation purposes. Notional payment of normative loan has been assumed on the basis of pro-rata repayment of foreign (EDC) loan.

### **Repayment of Loan and Interest on Loan**

14. As provided in the Commission's Notification dated 26.3.2001, interest on loan capital is to be computed on the outstanding loan, duly taking into account the schedule of repayment as per the financial package approved by CEA or an appropriate independent agency, as the case may be. The interest on loan has been computed based on actual repayment schedule and actual interest rate indicated by the petitioner in the petition. The interest on additional capitalisation has also been worked out for the debt drawn from EDC loan. The year-wise interest on loan payable by the respondents for various years is as under:-

(Rs. in crores)

2001-2002	18.09
2002-2003	9 <sup>21</sup>
2003-2004	tZ

## Depreciation

15. As per the terms and conditions of tariff notified by the Commission, the rate base for the purpose of depreciation is to be historical cost of the assets. The depreciation has to be calculated as per the straight line method. Further, the total depreciation to be recovered in the tariff during the life of the project shall not exceed 90% of the approved original cost, which shall include additional capitalisation. As per the petition, an amount of Rs. 129.06 crores had been recovered till 1996-97 on account of depreciation. Ministry of Power in its tariff notification dated 8.2.1999 had considered gross block of Rs.2063.84 crores, excluding initial spares of Rs.2.66 crores for the purpose of recovery of depreciation. Depreciation recovered during the tariff period from 1.4.1997 to 31.3.2001 including depreciation as component of FERV allowed up to 31.3.1997 has also been taken into account. For the purpose of present tariff period, that is, 1.4.2001 to 31.3.2004, depreciation has been worked out on the gross block of Rs.2014.69 crores, approved by us in para 12 of this order. Ministry of Power while notifying the tariff on 8.2.1999 considered weighted average rate of depreciation. In view of this, weighted average depreciation rate has been calculated using the asset-wise break up of the gross block as on 31.3.2001 furnished in the petition. This rate works out to 2.44%. Based on the application of the above weighted average depreciation rate on the gross block of Rs.2014.69 crores, the depreciation payable for different years has been worked out and is indicated below:

(Rs. in crores)

2001-2002	49.16
2002-2003	49.16
2003-2004	49.16

## Advance Against Depreciation

16. The Commission in the norms of tariff notified on 26.3.2001 has made a provision for advance against depreciation, in addition to allowable depreciation. Advance against depreciation is permitted wherever original scheduled loan repayment exceeds the depreciation

allowable. The amount of advance against depreciation is to be worked out by applying the ceiling of  $1/12^h$  of the original loan amount less depreciation allowed. For working out advance against depreciation for the present tariff period,  $1/12^h$  of the loan amount of Rs. 1476.77 crores, which includes a sum of Rs. 1452.41 crores of original loan considered by Ministry of Power for the purpose of tariff and an amount of Rs.24.36 crores to finance FERV allowed by the Central Government from 1994-95 to 1996-97, has been considered. In addition,  $1/12^{th}$  of the loan disbursed upto 2000-01 has also been considered. Advance Against Depreciation for different years of the tariff period in this case has been worked out as under:

		(Rs. in crores)
Year		
2001-2002		47.06
2002-2003		23.19
2003-2004		00.00

### **Return on Equity (ROE)**

17. As per the notification issued by the Commission on terms and conditions of tariff, return on equity is to be computed on the paid up and subscribed capital at the rate of 16%. The petitioner has claimed return on equity on account of Rs.663.21 crores for each year during the present tariff period. However, in view of the fact that we have considered gross block of Rs.2014.69 crores as on 31.3.2001, equity of Rs.530.05 crores has been taken and return on equity at the rate of 16% has been allowed on that amount. On these considerations, year-wise ROE works out as under:

		(Rs. in crores)
2001-2002	84.81	
2002-2003	84.81	
2003-2004	84.81	

## **O&M Expenses**

18. The Commission has prescribed the procedure for arriving at base O&M expenses for the year 1999-2000 in the notification issued on 26.3.2001. The average of actual O&M expenses including insurance but excluding abnormal O&M expenses for years 1995-1996 to 1999-2000 gives the O&M expenses for the year 1997-98. This average of O&M expenses for the year 1997-98 is escalated twice at the rate of 10% per annum to arrive at the base expenses for the year 1999-2000. The base O&M expenses of 1999-2000 are further escalated at the rate of 6% per annum to arrive at permissible O&M expenses for the relevant year. Where increase in the O&M expenses in a year is more than 20% over the O&M expenses of previous years, such expenses are to be explained. The O&M expenses wherever was more than 20% over the previous year, was supported by explanation by the petitioner in the form of an affidavit filed on 13.3.2002. Year-wise O&M expenses as furnished by the petitioner and percentage increase are as under:

<b>Year</b>	<b>O&amp;M expenses (Rs. in crores)</b>	<b>% increase</b>
1995-96	36.7	-
1996-97	38.2	4.07
1997-98	65.9	72.45
1998-99	87.0	1
1999-00	52.0	-ive

19. O&M expenses during 1997-98 exceed the O&M expenses of the previous year by more than 20%. Similarly, there is an increase of 32.10% during 1998-99 over the previous year. The petitioner has submitted an affidavit to explain the expenses for 1997-98 and 1998-99. It is explained that some of the NHPC employees at Chamera HEP Stage I are governed by Central DA pattern. As a result of implementation of Fifth Pay Commission with effect from 1.1.1996 their pay and allowances have also increased. It is further explained that during 1997-98 there was pay revision of other NHPC employees at Chamera HEP Stage I governed by Industrial DA pattern, which has resulted in an increase on account of pay and allowances and "staff welfare

expenses", the total impact of which is Rs. 14.05 crores. It has also been seen that insurance expenditure has increased from Rs.0.1 crores during 1996-97 to Rs.10.2 crores during 1997-98 and thereafter the trend is steady. According to the petitioner, increase in insurance expenses during 1997-98 and onwards is on account of corporate policy of providing insurance coverage to all fixed assets of the project viz. generating plant machinery, Civil and hydro-mechanical works etc as also the employees located in remote areas. The total increase of O&M expenses during 1997-98 on account of insurance and employee cost is Rs.24.7 crores. If this expenditure is deducted, net O&M expenses during 1997-98 would be Rs.41.2 crores, which represents 7.8% increase over the expenses for the year 1996-97. So far as O&M expenses for 1998-99 are concerned, there is an increase of 32.1% over the previous year. An amount of Rs.23.70 crores included in O&M expenses is on account of Chamera HEP Stage II. Therefore, these expenses are not to be booked against Chamera HEP Stage I. After deduction of this amount, O&M expenses for 1998-99 are reduced to Rs.63.30 crores, which are less than those for 1997-98.

20. The petitioner has filed an affidavit to place on record the year-wise details of staff welfare expenses, which are extracted hereunder and has furnished explanation to justify the increases:

(Rs. in lakhs)

S. No	Particulars	1995-96	1996-97	1997-98	1998-99	1999-2000
1.	Contribution to fund	121.98	229.12	766.35	370.56	183.25
2.	Retirement benefits payment	100.85	20.41	106.74	40.84	38.90
3.	LTC	15.71	48.74	19.44	46.12	8.30
4.	Medical expenses	41.78	53.69	7058^	61.33	57.03
5.	Liveries and uniform	0.02	56.01	aos	41.50	3.47
6.	Grants and subsidies to sports, canteen, etc.	0.32	0.30	0.36	0.38	1.85
7.	Other Misc. expenses	16.57	0.08	6.83	3.78	0.02
8.	Post retirement medical scheme	0	0	0	278.46	21.30
9.	School expenses	23.89	25.34	.	48.63	40.34
10.	Transport expenses	212.41	204.73	183.33	234T55~1	187.81
11.	Training programme	0T22I	0~ZT1	0.16	5.96 1	3.35
12.	Productivity Linked Incentive (under section 31A of payment of Bonus Act)	34.16	31.35	65.87	88.88	55.87
TOTAL T			671.01	1267.77 ^	1220.99 j	601.50j

21. We have considered the explanation furnished by the petitioner to justify O&M expenses during 1997-98 and 1998-99. The increases in O&M expenses during these years is on account of mandatory and obligatory expenses over which the petitioner had no control. We, therefore, allow actual expenses for the years 1995-1996 to 1999-2000 to be considered for the purpose of calculation of O&M base for the base year of 1999-2000, except the expenses on account of Productivity Linked Incentive under Section 31A of Payment of Bonus Act, under the category Staff Welfare Expenses, the reasons for which are given in the succeeding paragraph:

22. The expenses incurred under the head Productivity Linked Bonus are on account of incentive paid to the employees for maintaining high plant availability to achieve higher generation availability for which incentive payment is made separately. The petitioner company should make Productivity Linked Bonus payment out of these incentive payments. Therefore, Productivity Linked Bonus cannot be permitted to be charged on O&M expenses and should be met by the petitioner out of its own profits. On these considerations, we have not allowed the Productivity Linked Incentive paid by the petitioner to its employee as a charge on O&M expenses.

23. Therefore, O&M expenses for the years 1995-96 to 1999-2000 considered for the purpose of computation of O&M expenses are as under:

Rs. in crores

1995-1996	27.40
1996-1997	28.01
1997-1998	52.14
1998-1999	58.46
1999-2000	50.06

24. Based on the above, O&M expenses for different years of the tariff period allowed by us are summarised hereinbelow:

(Rs. in crores)

2001-2002	58.74
2002-2003	62.27
2003-2004	66.00

### **Interest on Working Capital**

25. As per the Commission's notification 26.3.2001, interest on working capital covers the following :

- (a) Operation and Maintenance expenses for one month;
- (b) Maintenance spares at actuals but not exceeding one year's requirements less value of one fifth of initial spares already capitalized for the first five years;
- (c) Receivables equivalent to two months of average billing for sale of electricity.

26. The interest rate for this purpose shall be the cash-credit rates prevailing at the time of tariff filing. The annual average prime lending rate of State Bank of India of 11.5% as applicable at the beginning of the tariff period, that is, 1.4.2001, has been taken for the purpose of calculating interest on working capital. The interest on working capital to be recovered from the respondents is as per the following details:

(Rs. in crores)

2001-2002	62.1
2002-2003	5.93
2003-2004	5.53



27. The actual details of maintenance spares would be available on completion of the tariff period. In view of this, average of 5 years spares consumed, (including repairs and maintenance of machinery) as furnished by the petitioner has been considered for the purpose of calculating working capital. This is, however, subject to adjustment between the parties, once the actual spares consumed during different years of the tariff period is known. The Commission could be approached in the event of any disputes.

28. The revised fixed charges payable by the respondents to the petitioner year-wise are as under:

(Rs. in crores)

	Particulars	J2001-02	i2002-03	2003-04
J	Interest on Loan	18.09	9.21	3.82
"2	Interest on Working Capital	6.42	5^	5.53
I	Depreciation	19J6	497T6~	49.16
4	Advance Against Depreciation	4TW'	23.19	0.00
5	Return on Equity	J& L L	84.81	84.81
6	O&M Expenses	I	62.27	66.00
	<b>Total</b>	<b>264.28</b>	<b>234.57</b>	<b>209.32</b>

29. In accordance with the Commission's Notification dated 26.3.2001, the annual fixed charges are to be divided into capacity charge and primary energy charge. The annual fixed charges are indicated in para 28 of this order. The primary energy charge is to be computed in accordance with clause 3.5.3 of the Commission's notification. The capacity charge shall then be computed as indicated below:

$$\text{Capacity Charge} = (\text{Annual fixed charge} - \text{primary energy charge})$$

#### Primary Energy Charges

## Primary Energy Charges

30. As per the notification dated 26.3.2001, the primary Energy Charges are to be worked out on the basis of paise per kWh rate ex-bus energy scheduled to be sent out from the Generating Station after adjusting for the free power delivered to the home state.

31. Rate of Primary Energy, is to be taken as 90% of the lowest variable charges of the central sector thermal power station of the Northern region. The primary energy charge are computed based on the primary energy rate and saleable energy of the project. This rate is also the rate to be used in merit order despatch of the plants. Secondary Energy Rate are to be equal to Primary Energy Rate.

32. The lowest variable charge of Central Sector Thermal Stations of northern Region was found to be varying on a month to month basis. The petitioner has calculated the primary energy rate of the hydro stations for the first year of tariff period namely 2001-02 as 90% of average of preceding 12 months (i.e. the year 2000-01) lowest variable charge of Central Sector Thermal Power Stations of Northern Region. We agree with the methodology adopted by the petitioner for calculation of the rate of primary energy which is reproduced below. The lowest variable charge for the year 2000-01 has been worked out to 60.66 paise per kWh. The primary energy rate applicable during 2001-02 for the energy supplied from Chamera HEP Stage I shall be 54.59 paise per kWh (90% of 60.66 paise per kWh). The details in support of primary energy rate arrived at are given in the Table below :

TABLE

CHAMERA H.E.P STAGE 1 VARIABLE CHARGES OF THE C				ENTRAL SECTOR THERMAL POWER STATIONS OF NOR (Paise/Kwh)						TERN F	REGJON F	OR THE YEAR 2000-01	
STATION	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV	DEC	JAN	FEB	MAR.	Avg. Rate for the Year
SINGRAULI	63.44	<b>59.31</b>	61.14	<b>62.26</b>	61.01	<b>60.09</b>	61.06	61.76	60.92	63.60	69.74	68.79	62.76
RIHAND	65.49	60.15	<b>60.50</b>	62.27	<b>59.39</b>	63.87	<b>59.03</b>	<b>58.67</b>	<b>59.90</b>	<b>58.08</b>	<b>61.54</b>	<b>65.67</b>	61.21
FGUPTS	94.56	94.84	92.86	94.82	100.24	100.75	97.22	91.54	96.60	96.52	99.58	105.71	97.10
NCTPS	143.66	147.76	140.56	134.90	134.26	134.93	133.23	133.50	128.58	142.64	147.37	152.99	139.53
ANTA GPS	93.42	93.87	93.85	93.30	93.30	93.30	92.87	92.87	92.87	93.40	93.40	93.54	93.33
AURAIYA GPS	96.51	96.86	97.10	96.15	96.15	96.12	95.62	95.63	95.61	96.26	96.28	96.27	96.21
DADRI GAS	95.48	95.94	95.71	95.01	95.01	95.01	94.48	94.48	94.48	94.14	95.14	95.14	95.00
FGUPTS-II	217.94	216.36	213.99	215.96	219.73	221.67	218.6	212.92	218.08	219.98	220.63	222.77	218.22
Average Lowest Rate for the year (P/KwF 12 = 60.66 P/Kwh 90% of Average lowest rate for the year 2000-01 = 54.59 p/kwh				63.4 + 59.31 + 60.50 + 62.26 + 59.39 + 60.09 + 59.03 + 58.67 + 59.90 = 597.90				58.67 + 59.90 = 118.57		58.67 + 59.90 + 61.54 + 65.67 = 245.78		727.88 / 12 = 60.66	

33. The primary energy rate of 54.59 paise per kWh which pertains to the year 2001-02 shall remain constant throughout the tariff period for the purpose of payment of incentive/disincentive relating to the capacity index.

### Secondary Energy

34. Secondary energy relates to the quantum of energy generated in excess of the design energy on an annual basis in the station. For the computation of monthly secondary energy and secondary energy charge, month wise details of design energy are indicated in the table given below:

#### MONTHWISE DESIGN ENERGY

Month	Design Energy (Gwh)
April	99.02
May	184.54
June	183.46
July	279.62
August	340.25
September	168.17
October	96.93
November	65.91
December	59.93
January	64.45
February	58.12
March	64.15
Total	1664.55

35. The rate of secondary energy shall be the same as rate of primary energy in the respective years.

36. The primary energy rates for the years 2002-03 and 2003-04 shall be determined based on 90% of average of the 12 months' lowest variable charges of Central Sector Thermal Stations of Northern Region for the years 2001-02 and 2002-03 respectively by the petitioner in consultation with the respondents. No petition for this purpose is required to be filed. However, in case the parties are unable to agree to primary energy rates for these years, any one of them may approach the Commission for a decision by filing an appropriate petition.

### **Filing Fee**

37. The petitioner has remitted a sum of Rs.10 lakhs on account filing fee for the present tariff petition. The petitioner has prayed that the filing fee be made a "pass through" in the tariff. HVPNL has submitted that the filing fee should not be made a "pass through" in tariff but should be borne by the petitioner itself. On the contrary, UPPCL has submitted that filing fee should be charged on O&M expenses. We have considered the submissions made on behalf of the parties. We are satisfied that the filing fee is an obligatory statutory expense on the petitioner and is to be made "pass through" in the tariff, like other taxes, duties, cess and levies. We have also considered the implications of allowing filing fee in O&M expenses. We feel that filing fee should be allowed to be reimbursed as a separate item and not made a part of O&M expenses since by including the filing fee in O&M expenses will put additional burden on the consumers for a longer term. We, therefore, direct that filing fee of the main tariff petition only shall be recovered by the petitioner in 10 monthly installments in the tariff. We make it clear that all other charges like advocate's fee or filing fee for interlocutory applications shall not be allowed as "pass through" and these expenses shall be borne by the petitioner itself.

**A**

38. In addition to the above charges, the petitioner shall be entitled to incentive/disincentive, tax on income etc. as prescribed in the Commission's notification dated 26.3.2001.

39. The matters not specifically covered in this order, but for which provisions are made in the Commission's notification dated 26.3.2001, shall be governed by that notification. This is, however, subject to the directions of the superior courts on these matters.

40. The tariff approved by us shall be borne by the respondents in proportion of energy supplied from Chamera HEP Stage - I until Availability Based Tariff (ABT) is introduced in the region and as per the Commission's notification dated 26.3.2001 after the ABT is introduced in the Northern region.

41. This order disposes of petition No.60/2001.

**(K.N. SINHA)**  
**MEMBER**

*ja\_r*  
**(G.S. RAJAMANI)**  
**MEMBER**

  
**^^B^TSINHA)**  
**MEMBER**

New Delhi dated the 26<sup>th</sup> August, 2002



**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

1. **Shri D.P. Sinha, Member**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N.Sinha, Member**

**Review Petition No.55/2001 in  
Petitions No.111/2000 & 118/2000**

**In the matter of**

Review Petition against Commission's Order dated 14-6-2001 in Petition No.111/2000 and 118/2000 on "Grant of Transmission License -Procedure, Terms and Conditions of License etc."

**And in the matter of**

Power Grid Corporation of India Ltd.

Petitioner

VS National

Grid International Ltd. & Others The following

Respondents

were present:

1. Dr. Surat Singh, Advocate for Powergrid
2. Shri S. Garg, DGM (IPTC), Powergrid
3. Shri S.K. Jain, Powergrid
4. Shri Sanjay Rai, Powergrid

**ORDER (DATE OF HEARING  
12-9-2001)**

This application for review has been filed by Powergrid Corporation of India Ltd. seeking review of directions contained in the Commission's Order




dated 14-6-2001 in Petition No.111/2000 and 118/2000 since converted into a notification dated 24-8-2001.

2. After arguing the matter at some length and under instructions from the officers of the petitioner present at hearing, Dr. Surat Singh, learned counsel for the petitioner sought permission to withdraw the petition, with liberty to approach the Commission for appropriate relief in case the petitioner faces any difficulty.

3. The petitioner is permitted to withdraw the petition. Liberty is granted to the petitioner to file appropriate petition in accordance with law where a deviation in procedure is required with proper justification in respect of the cases where action was initiated before issue of the notification, for which ' power to relax' has been provided.

4. The petition stands dismissed as withdrawn.



**(K.N. Sinha)**  
**Member**

**(G.S. Rajamani)**  
**Member**



**4&^PCShha)**  
**Member**

New Delhi dated the 12<sup>th</sup> September, 2001.

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. Shri D.P. Sinha, Member
2. Shri G.S. Rajamani, Member
3. Shri K.N.Sinha, Member

**Petition NQ-56/2Q01**

**In the matter of**

Incentive for 2000-2001 for Kawas GPS (656.20 MW)

**Petition No.57/2001**

**And in the matter of**

Incentive for 2000-2001 for Korba STPS (2100 MW)

**Petition No.58/2001**

**And in the matter of**

Incentive for 2000-2001 for Vindhyachal STPS State -I (1260 MW)

**And in the matter of**

National Thermal Power Corporation Ltd.

.... Petitioner

VS Madhya Pradesh State Electricity Board &

Others        .... Respondents The following were present:

1. Shri K.K. Garg, GM (Comml), NTPC
2. Shri S.K. Sharma, Sr. Mgr. (Comml), NTPC
3. Shri Rohit K. Singh, Advocate, MPSEB

4. Shri D.K. Shrivastava, EE, MPSEB
5. Shri D. Khandelwal, SE, MPSEB
6. Shri S.N. Chauhan, CSEB
7. Shri M.H. Parviz, Controller, KPTCL

**ORDER (DATE OF HEARING  
21-12-2001)**

In these petitions the petitioner, NTPC has prayed for approval of incentive for the year 2000-01 as per Annexure-I attached to the respective petition in respect of Kawas GPS, Korba STPS and Vindhyachal STPS Stage-I located in Western Region. The present respondents are the beneficiaries of these stations.

2. The tariff and terms and conditions for supply of electricity from these stations were notified by Ministry of Power as noted below:-

- a) Kawas GPS - Notification dated 30-4-1994 read with Notification dated 19-6-1995.
- b) Korba STPS - Notification dated 2-11-1992 read with Notification dated 19-6-1995.
- c) Vindhyachal STPS Stage-I - Notification dated 2-11-1992 read with Notification dated 19-6-1995.

These notifications are<sup>1</sup> attached as Annexure-4A and 4B to the respective petition.

3. Clause 4 of the notification makes a provision for payment of incentive/ disincentive to/by the petitioner in case where the actual generation level in kWh/KW/year (AGN) as certified by Northern Regional Electricity Boards and the Central Electricity Authority in a financial year exceeds the normative upper limit of operating range in kWh/KW/year (NGU) as per the following formula.

Incentive (I) (Rs.)

$$=(\text{Energy (Kwh) corresponding to AGN} - \text{Energy (Kwh) corresponding to NGU}) \times (\% \text{PLF corresponding to AGN} - \% \text{PLF corresponding to NGU}) \times 0.01.$$

4. The tariff notifications further stipulate that for the purpose of incentive/disincentive the actual generation level achieved in any financial year will include the quantum of backing down as certified by Northern Regional Electricity Board due to lack of system demand and other conditions not attributable to the petitioner, as certified by CEA as deemed generation. The tariff notifications issued by Ministry of Power have been continued upto 31-3-2001 on ad-hoc basis by virtue of Clause 6 of those notifications read with the Commission's order dated 21-12-2000 in petition No.4/2000, and other related petitions. Incentive payable in respect of these stations up to 1999-2000 has already been determined by the Commission, therefore, the proposal in the present petitions relate to determination of incentive for the year 2000-01.