



**ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION**

4<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

MONDAY, THE FIRST DAY OF AUGUST  
TWO THOUSAND AND TWENTY TWO  
(01.08.2022)

**Present**

**Justice C.V.Nagarjuna Reddy, Chairman**

**P.Rajagopal Reddy, Member**

**T.Rama Singh, Member**

**1. O.P.No.19 of 2016**

In the matter of granting approval to the Power Purchase Agreement (PPA) entered into by APDISCOMs for purchase of Power from 1040 MW (2x 520 MW) coal based thermal power station of Hinduja National Power Corporation Limited(HNPCL) at Visakhapatnam

Between

Andhra Pradesh Eastern Power Distribution Company Limited (APEPDCL) &  
Others. ....Petitioners

AND

Hinduja National Power Corporation Limited ..... Respondent

**2. O.P.No.21 of 2015**

In the matter of determination of Capital Cost and Multi-Year Tariff (MYT) for 1040 MW (2x 520 MW) coal-fired thermal power station of Hinduja National Power Corporation Limited (HNPCL) at Visakhapatnam

Between

Hinduja National Power Corporation Limited .....Petitioner  
AND

Andhra Pradesh Eastern Power Distribution Company Limited(APEPDCL) &  
Others. .... Respondents

These Original Petitions were finally heard on 02.07.2022 in the presence of Sri. M.G. Ramachandran, learned Senior Counsel representing HNPCL, Sri C. V. Mohan Reddy, learned Senior Counsel for the DISCOMs and Sri. M.Venugopal Rao, the learned objector. After carefully considering the material available on record the Commission passed the following:

### **COMMON ORDER**

1. O.P. No.19 of 2016 was filed by APDISCOMs and O.P.No.21 of 2015 was filed by HNPCL. In order to have a complete and proper perspective of the entire matter related to these OPs, it is felt necessary to narrate the relevant sequence of events since the proposal to set up a 1000 MW power plant in Visakhapatnam was taken up in the early 1990s.
2. The erstwhile Andhra Pradesh State Electricity Board (APSEB) proposed to set up a 1000 MW (2x500 MW) coal based power project at Visakhapatnam to meet the power requirements of undivided Andhra Pradesh State and accordingly obtained all statutory clearances from various departments, fuel linkage and water sanctions required for the project.
3. However, in pursuance of the policy decision of the Government of India to privatize the generation activity in power sector in the year 1992, Gol/GoAP have identified the above proposed project as one of the Fast Track Projects and accordingly entrusted the implementation of the project to Hinduja National Projects Limited (HNPCL), A Joint Venture of Mission Energy Company, a California based, USA Corporation in collaboration with Ashok Leyland Limited, India).
4. Thereafter, the erstwhile APSEB signed a Memorandum of Understanding (MOU) with HNPCL on 17th July 1992. As agreed to in the MOU, the erstwhile APSEB transferred the land to the extent of 2,600 acres, coal & water linkages, and all statutory clearances it obtained from various departments, in favour of the HNPCL for the purpose of establishing, operating, and maintaining a power plant of 1040 MW (2x 520 MW) capacity at Visakhapatnam (hereinafter referred to as the project) by the latter and supplying the entire plant capacity to APSEB or its successor entities or Distribution Companies (APDISCOMs) of the then undivided Andhra Pradesh State, i.e., Eastern Power Distribution Company of Andhra Pradesh (APEPDCL), Central Power Distribution Company of Andhra Pradesh (APCPDCL), Southern Power Distribution Company of Andhra Pradesh (APSPDCL) and Northern Power Distribution Company of Andhra Pradesh (APNPDCL).
5. Based on the above MOU, the APSEB entered into a Power Purchase Agreement (PPA) with HNPCL on 09.12.1994. The Central Electricity Authority

(CEA) issued Techno-Economic clearance for the project on 25.07.1996 at an estimated project cost of about Rs.4,628 Crores (Rs. 4.45 Crore per MW).

6. In order to adopt the guidelines on guarantee and counter guarantee to be given by GoAP and GoI respectively and sharing of Fuel Risk, the erstwhile APDISCOMs entered into an amended and restated PPA with HNPCL on 15.04.1998. Thereafter, HNPCL signed a Coal Supply Agreement (CSA) with Mahanadi Coalfields Limited (MCL), a subsidiary of Coal India Limited, on 18.12.1998.
7. On 30.07.2001, GoAP requested HNPCL to give concurrence to bring its capital cost of HNPCL on par with that of the Simhadri project. The validity of the PPA, which was up to 30.09.2001, was not extended though requested by HNPCL.
8. However, due to several reasons, HNPCL could not proceed further with the execution of the project. Further, MCL terminated the FSA on 04.12.2001 due to the non-fulfillment of certain conditions in the CSA.
9. In 2007, HNPCL took a decision to revive the project and accordingly approached the Ministry of Coal, Government of India (GoI) for restoration of the coal allocated to the project earlier. Further, HNPCL expressed its interest to the GoAP to proceed as a Merchant Plant, indicating that GoAP have the first right of refusal to purchase 25% capacity. However, GoAP/APTRANSCO did not agree to the same.
10. On 12.11.2009, the then GoAP requested the HNPCL to supply 100% power at the tariff of the Simhadri Stage-II project. But, HNPCL did not agree to the said request.
11. The Ministry of Coal, GOI issued a fresh Letter of Assurance to HNPCL in the year 2009 allocating 100% of coal to the plant based on normative availability. Based on the Letter of Assurance, a fresh CSA was signed between HNPCL and Mahanadi Coalfields Limited (MCL) on August 4, 2011, for the supply of coal to the project which was revised on August 26, 2013, to be in line with the new model FSA that was applicable for power plants to be commissioned between December 2009 to March 2015. The Ministry of Power(MOP)/GOI vide letter dated 10.10.2011 issued a provisional Mega Power Project (MPP) Status to the project which enables HNPCL to avail of

Excise and Customs Duty exemption benefits subject to the fulfillment of certain conditions.

12. In 2010, HNPCL participated in the Case-1 bidding conducted by the erstwhile APDISCOMs, offering 580 MW capacity at a levelised tariff of Rs. 3.48 per unit and emerged as the second lowest bidder (L2). Subsequently, the HNPCL approached the Government of the undivided Andhra Pradesh (GoAP) vide letter dated 06.08.2012 seeking support for the implementation of the project. On 29.06.2010, the project achieved financial closure.
13. In the meeting conducted on 28.09.2012 for evaluation of Case-1 bidding, the State Level Expert Committee decided not to consider the HNPCL's bid since GoAP took a decision that the entire generation capacity of the HNPCL's project was already encumbered to the State of AP under the Amended and Restated PPA of 1998.
14. The GoAP vide letter dated 26.12.2012 to HNPCL expressed its interest in purchasing 100% power from the project (through APDISCOMs) as contemplated in the amended and restated PPA entered into between APSEB and the HNPCL in the year 1998 and agreed to facilitate the implementation of the project and directed the erstwhile APDISCOMS to enter into an Agreement with the HNPCL for the continuation of the PPA entered into on 15.04.1998.
15. In response to the GoAP's letter dated 26.12.2012, HNPCL, vide letter dated 14.01.2013, agreed to supply 100 % power from the project at the tariff to be determined by the erstwhile APERC.
16. On being insisted upon by the erstwhile APDISCOMs, HNPCL vide letter dated 16.05.2013 has furnished the details of the tentatively estimated Project cost of Rs.6,098 Crores. The erstwhile APDISCOMs, vide letter dated 17.05.2013, have informed HNPCL that they do not accept the capital cost furnished by HNPCL and that they will contest every component of the project cost before the APERC at an appropriate stage. On 17.5.2013, a Memorandum of Agreement (MOA) was signed between HNPCL and the erstwhile APDISCOMs for the purchase of 100% power from the project at a tariff to be determined by APERC under section 62 of the Electricity Act, 2013. The erstwhile APDISCOMs, vide letter dated 17.05.2013, have informed HNPCL that in the event of any delay in providing the evacuation facility, there will not be any

liability on the part of DISCOMs for the delay which was accepted and acknowledged by HNPCL.

17. Thereafter, the erstwhile APDISCOMs entered into a Memorandum of Agreement (MoA) with HNPCL on 17.5.2013 for the continuation of the amended and restated PPA dated 15.04.1998 for the purchase of the entire power generated from the project at a tariff to be determined by the erstwhile APERC of the undivided Andhra Pradesh State. In the MoA, both parties agreed to take all the necessary measures including but not limited to discharging their respective rights and obligations as envisaged and agreed to in the amended and restated PPA dated 15.04.1998. That all conditions of the amended and restated PPA dated 15.04.1998 shall be subsisting and binding on all stakeholders of the agreement (Parties), except to the extent that they may require to be modified or substituted in the manner as may be agreed between the Parties to give the effect of the prevailing laws/regulations guiding the power sector.
18. Subsequent to the above events, Hinduja National Power Corporation (HNPCL) filed an application on 12.03.2014 before the erstwhile APERC for the determination of Capital Cost for the project under Clause 10.8 of Regulation 1 of 2008 of Andhra Pradesh Electricity Regulatory Commission (Terms and conditions for determination of tariff for supply of electricity by a generating company to a distribution licensee and purchase of electricity by distribution licensees) Regulations, 2008 read with Sections 61, 62 & 64 of the Electricity Act, 2003. HNPCL projected a Capital Cost of Rs.6,998/- Crores including Interest During construction (IDC) & Financing Charges (FC) in the application. Subsequently, HNPCL filed the first addendum dated 15.04.2014 to the above application praying for the determination of tariff for the project for the period commencing from June 30, 2014, to the end of FY 2018-19. In the addendum, HNPCL anticipated the COD units I and II as 30.06.2014 and 30.09.2014 respectively, and claimed the following tariffs for the project.

Year	FY2014-15	FY2015-16	FY2016-17	FY2017-18	FY2018-19
Fixed Charges (Rs. Crores)	1074	1577	1522	1459	1397
Energy (Variable) Charges (Rs. Crores)	927	1190	1187	1187	1187
Rate for Energy charges(Rs./kWh)	2.19	1.75	1.75	1.75	1.75



19. The application dated 12.03.2014 filed by HNPCL for determination of the Capital Cost of the project was taken on the record of the Commission on 30.06.2015 and was numbered as O.P.No. 21 of 2015. The Commission issued notice to the parties on 02.07.2015.
20. HNPCL through the second addendum dated 28.07.2015 to the application dated 12.03.2014 (Determination of Capital cost) revised the estimated Capital Cost of the project to Rs.8,087/- Crores and projected the COD of Units-I & II of the project as 30.09.2015 and 31.12.2015 respectively under the assumption that the pending CRZ approvals for the revised outfall diffuser scheme and the interim outfall schemes are issued by MoEF in the Expert Appraisal Meeting in the month of July 2015 (as the original CRZ Clearance for sea water intake outfall scheme issued by Ministry of Environment & Forests on 03.01.2014 was not suitable for construction anymore due to depletion of the structural integrity of outfall jetty piles beyond 444 meters) and also depending on calm sea weather conditions during the south-west monsoon sea rough for taking up construction work.
21. The reasons forwarded by HNPCL for the increase in the Capital Cost by Rs.1,428 Crores from the earlier projection of Rs.6,998 Crores are  
a) increased IDC due to delay in the COD of the project because of the delays in the handing over of the lands for sea water intake and railway siding by the district administration, Hud-Hud cyclone and non-grant of permission from Rashtriya Ispat Nigam Limited (RINL) for the usage of their road for coal transportation  
b) The additional costs for balance of plant items, Cost of restoration activities including change in the design of the plant based on the recommendations of MoEF/EAC, additional construction power and start-up power costs, etc., due to Hud-Hud cyclone  
c) Inclusion of the cost of coal and oil required for the Commissioning of the project in the revised Capital Cost and  
d) Revision of land cost, levies, taxes and duties based on the actuals.
22. Further, HNPCL stated in the addendum that under the revised Provisional Mega Power policy the generator must tie up at least 65 percent of the capacity on a long-term basis through a competitive bidding route in order to be eligible to avail of the benefits under MPP status. That since HNPCL signed MoA with APDISCOMS and is required to sell 100% power on a regulated tariff basis and not on competitive bidding route, Excise Duty and Customs Duty liability (along with interest thereon) may be imposed on the Project if the Ministry of Power does not transcend the Provisional MPP status of the Project

to the Final PP status. That the GoAP has taken up the matter with the Ministry of Power to convert the Provisional MPP status to final MPP status as the benefit of according the MPP status would result in the reduction of tariff burden on the end consumers in the state of A.P. That HNPCL expects it to be considered favorably. HNPCL has also applied and requested the Ministry of Power to grant final Mega Power Project status to its Project as the benefits would be directly passed on to the end consumers. That, therefore, HNPCL has only included the mandatory Excise Duty on civil supplies (payable regardless of MPP status) and the Excise Duty on other equipment supplies (already paid before the grant of the Provisional MPP status) in the Revised Estimated Capital Cost. That the balance duty amounts for which fixed deposits /bank guarantees are being submitted were not included in the Revised Estimated Capital Cost of the Project and the same may have to be included as and when the Ministry of Power (MoP) decides on the matter. That HNPCL would approach the Commission at an appropriate stage upon finalization of the matter.

23. The first hearing in O.P.No.21 of 2015 was conducted on 31.07.2015. The DISCOMs filed a counter affidavit to the petition and replied to the first addendum on 26.09.2015. The Commission directed both parties to expedite placing all the relevant information before it. In response to the direction, HNPCL filed additional information on 21.08.2015 regarding Capital cost in which HNPCL stated that it intends to appraise the Commission as soon as it gets the estimated cost of the two items, i.e., Insurance and Phase-II Railway Siding which are in addition to the revised Capital Cost filed in their addendum dated 28.07.2015. Further, vide the third addendum dated 18.09.2015, HNPCL projected the CODs of Unit I & II as 30.09.2015 and 31.12.2015 respectively and filed the following revised fixed and energy charges for the period from FY 2015-16 to FY 2018-19.

Year	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Fixed Charges (Rs. Crores)	761	1799	1732	1659
Energy (Variable) Charges (Rs. Crores)	501	1281	1228	1228
Rate for Energy charges (Rs./kWh)	1.97	1.89	1.81	1.81

24. APDISCOMs filed a counter affidavit on 24.09.2015 against HNPCL's Capital Cost filings. HNPCL filed a rejoinder to the above counter on 06.10.2015. APDISCOMs filed a counter affidavit to the MYT tariff claims made by HNPCL in the third addendum dated 18.09.2015. HNPCL filed a rejoinder to the above counter on 16.10.2015. APDISCOMs filed an IA in O.P.No.15 of 2015 praying the Commission a) to incorporate a condition in the approval to the effect that HNPCL is not entitled to any charges in the event of back down due to transmission constraints until APTRANSCO arranges regular evacuation system which was accepted by HNPCL on 17.05.2013 b) to pass appropriate orders on the Adhoc Tariff payable to HNPCL pending determination of regular tariff
25. The COD of Unit-1 of the project was declared at 16:00 hours on 11.01.2016 which was accepted by APDISCOMs subject to certain conditions, among others, that HNPCL is not entitled to any fixed charges in the event of any disturbance in the temporary transmission system, that APDISCOMs shall pay the charges as per the actual energy recorded at the interconnection point at HNPCL's substation and that if there is any transmission congestion at Vemagiri complex as reported by SRLDC, HNPCL shall regulate their generation and supply as per APSLDC's instructions.
26. Vide Record of Proceedings (ROP) dated 01.03.2016, the Commission fixed an interim tariff of Rs. 3.61 per unit for the power supplied by HNPCL to the DISCOMs for the period from 11.01.2016 (COD of Unit-I) to 30.04.2016. The DISCOMs filed replies on 18.01.2016 to the first addendum to the O.P.No. 21 of 2015 filed by HNPCL.
27. HNPCL filed IA No.5 of 2016 in O.P.No. 21 of 2015 praying the Commission to direct the DISCOMs to pay Rs.1.80 per unit as the Variable Cost and Rs.2.16 per unit as the fixed cost aggregating to Rs.3.96 per unit at 80% availability w.e.f. 01.04.2016 by curtailing the end of the control period to 31.03.2016 instead of 30.04.2016 fixed in the ROP dated 01.03.2016. APDISCOMs filed a counter to the above IA praying the Commission to pass orders to continue the interim tariff at Rs.3.61 per unit as fixed in the ROP dated 01.03.2016 till the determination of the regular tariff.
28. The GoAP, vide letter dated 26.03.2016, informed APPCC that the Government agreed to the proposal for purchasing 100% power from the project. APSPDCL & APEPDCL signed the Continuation Agreement to the PPA



dated 15.04.1998 with HNPCL on 28.04.2016 for the purchase of 100% power from the project.

29. Vide ROP dated 30.04.2016, the Commission continued the interim tariff payable by the DISCOMs to HNPCL at Rs.3.61 per unit until 30.06.2016. Further, the Commission directed to place the petition on the website of the Commission and on the websites of both the respondents also intimating that there will be a public hearing on the petition at the court hall of the Commission at 11:00 AM on 28.05.2016 and that any stakeholder is at liberty to submit his/their views/suggestions/objections on the subject matter in writing to the Commission Secretary on or before 5.00 PM on 25.05.2016 and also in person on the date of the public hearing and that the DISCOMs shall expedite the filing of the agreement entered into with HNPCL on 28.04.2016 so as to take up the same along with O.P.No.21 of 2015.
30. The DISCOMs filed a petition before the Commission on 12.05.2016 for grant approval/consent for the Initial Continuation Agreement to the Amended & Restated PPA dated 15.04.1998 with HNPCL. In the petition, APDISCOMs stated that though the Continuation Agreement to the PPA dated 15.04.1998 was entered into by both the parties, the concurrence of both parties on some issues could not be arrived at still and that they are waiting for appropriate instructions from the GoAP and that after receipt of the same and due concurrence of HNPCL, a supplementary agreement will be entered into and submitted for approval by the Commission.
31. The Commission took the petition on record on 21.05.2016 and numbered it as O.P.No.19 of 2016. APDISCOMs filed IA No.9 of 2016 in O.P.No. 21 of 2015 on 10.06.2016 praying the Commission to direct HNPCL to furnish the detailed breakup of the Estimated Project Cost made at the time of Investment Approval/Financial Closure and reasons for the increase in the cost of each item in the scope of works indicated in the estimated project cost from the time of Investment Approval in June 2010 to the date of filing of O.P.No. 21 of 2015.
32. On 14.10.2016, HNPCL filed a counter affidavit to the O.P.No. 19 of 2016 filed by the DISCOMs. In the first hearing on the above petition on 18.06.2016, the Commission posted it for hearing on 23.07.2016 along with O.P.No.21 of 2015. Further, in the hearing held in O.P.No. 21 of 2015 on 18.06.2016, the

Commission directed the DISCOMs to continue to pay the interim tariff of Rs.3.61 per unit to HNPCL from 01.07.2016 to 31.07.2016.

33. HNPCL filed a Memo in IA No.5 of 2016 on 18.06.2016. APDISCOMs filed a counter in IA No.5 of 2016 on 22.06.2016 praying the Commission to continue the interim tariff of Rs.3.61/unit. The second unit of the project achieved COD on 03.07.2016.
34. APDISCOMs, through IA No.10 of 2016 dated 22.07.2016, filed replies to the objections of Sri M. Venugopala Rao and Sri M. Thimma Reddy in O.P.No.21 of 2015. HNPCL replied through a Memo dated 23.07.2016 to the IA No. 9 of 2016 filed by the DISCOMs.
35. HNPCL filed a rejoinder on 29.07.2016 to the IA.No.5 of 2016 filed by the DISCOMs. APDISCOMs filed a Memo in IA.No.5 of 2016 on 23.07.2016. HNPCL filed a rejoinder on 29.07.2016 to IA.No.5 of 2016. APDISCOMs filed a Memo on 30.07.2016 in IA No.5 of 2016. HNPCL filed a rejoinder on 03.08.2016 to the Memo dated 30.07.2016 filed by the DISCOMs in IA.No. 5 of 2016. Vide ROP dated 06.08.2016 in O.P.No. 21 of 2015, the Commission directed the DISCOMs to pay an interim tariff of Rs.3.82 per unit till further orders.
36. APDISCOMs filed a rejoinder dated 03.09.2016 to the replies furnished by HNPCL in IA.No. 09 of 2016 filed by the former. APDISCOMs filed a Memo on 27.10.2016 in O.P.No.21 of 2015 praying the Commission to consider the capital costs of contemporary and comparable power plants approved by CERC in the years 2015 & 2016 for determination of the tariff of the project. HNPCL replied on 18.11.2016 to the above Memo filed by the DISCOMs.
37. In the ROP dated 03.12.2016 in O.P.No.19 of 2016, the Commission directed HNPCL and the DISCOMs to file a joint Memo regarding the incorporation of a clause on third party sales in the draft PPA. In compliance with the above directions, both parties filed a joint Memo on 13.12.2016.
38. HNPCL filed submissions on 31.03.2017 in IA No. 05 of 2016 in O.P. No. 21 of 2015 seeking fixation of interim tariff at Rs.4.51 per unit since the same tariff of Rs.4.51 per unit was fixed by the Commission in the Retail Supply Tariff Order (RSTO) for FY 2016-2017 for other similarly situated projects of APGENCO, namely, Sri Damodaram Sanjeevaiah Thermal Power Station. The Commission passed RSTO for FY 2016-17 on 31.03.2017. Aggrieved by the

above order, HNPCL filed a Review Petition before the Commission. The Receiving Officer of the Commission returned the papers of Review to explain within 15 days the maintainability of the Review Petition.

39. APDISCOMs filed written submissions in O.P.No. 21 of 2015 on 15.05.2017. HNPCL filed replies to the above submissions on 01.06.2017. HNPCL filed Appeal No.153 of 2017 before APTEL on 13.05.2017 challenging RSTO for FY2016-17 passed by the Commission. On 15.05.2017, the Commission reserved the orders in O.P. No. 19 of 2016 and O. P. No. 21 of 2015. APTEL passed an order on 01.06.2017 in Appeal No. 153 of 2017 directing the Commission to dispose of the above O.Ps within a period of three months, i.e. on or before 14.08.2017. It also directed the HNPCL to withdraw the Review Petition filed by it before the Commission on the RSTO for FY 2016-17.
40. The Commission filed IA No. 619 of 2017 before the APTEL on 05.08.2017 in Appeal No. 153 of 2017 seeking an extension of time for disposal of the above two O.Ps till the end of December 2017. However, APTEL in the order dated 16.08.2017 granted time till the end of October 2017 only. HNPCL filed a Memo on 30.10.2017 before APTEL seeking an extension of time till 16.12.2017 for disposal of the O.Ps by the Commission in the light of the proposal from the DISCOMs for a discussion between the parties with the State Government on terms and conditions of generation and supply of power. APTEL in the order dated 31.10.2017 extended the time till 16.12.2017. HNPCL and the DISCOMs filed IA No.1100 of 2017 before APTEL for extension of time for disposal of the O.Ps till 16.04.2018 and APTEL in the order dated 11.12.2017 granted extension up to 15.01.2018 only.
41. APDISCOMs filed IA No.1 of 2018 on 04.01.2018 in O.P.No. 19 of 2016 before the Commission to reopen the case and permit it to withdraw the O.P. No. 19 of 2016 together with the PPA in the public interest and resubmit the same if necessary. They also filed IA No. 02 of 2018 before the Commission seeking permission to reopen the case and return O.P. No. 21 of 2015 after permitting the distribution companies to withdraw O.P. No. 19 of 2016. HNPCL filed objections on 09.01.2018. Further, HNPCL filed IA.No. 3 of 2018 on 24.01.2018 in O.P.No.19 of 2016 praying the Commission to transpose it as a petitioner in O.P. No. 19 of 2016. APDISCOMs filed a counter affidavit on 27.01.2018 to the above IA. HNPCL filed a rejoinder in IA.No.3 of 2018.

42. APDISCOMs filed IA Nos. 34 and 38 of 2018 in Appeal No. 153 of 2017 before the APTEL to direct the Commission to pass orders on IA No. 01 of 2018 in O.P. No. 19 of 2016 and IA No. 02 of 2018 in O.P. No. 21 of 2015 at first instance and if necessary to pass appropriate orders on the said O.Ps.
43. The Commission also filed a Memo on 05.01.2018 before the APTEL to allow it to dispose of IA Nos. 01 and 02 of 2018 filed by the DISCOMs in O.P. Nos. 19 of 2016 and 21 of 2015 respectively. APTEL disposed of the IA on 10.01.2018 granting an extension of time to the Commission to decide O.P. Nos. 19 of 2016 and 21 of 2015 by 31.01.2018.
44. APERC passed an order on 31.01.2018, allowing the DISCOMs to withdraw O.P. No. 19 of 2016 rejecting the prayer of HNPCL(IA No.3 of 2018) to transpose itself as a petitioner in O.P. No. 19 of 2016 and consequently closing O.P.No.21 of 2015 with liberty to HNPCL to pursue all remedies available to it under the law for fixation and payment of a reasonable price for electricity supplied by it to the DISCOMs and subject to the same, the DISCOMs are bound to continue to pay the interim tariff already fixed by the Commission for the electricity received by them from HNPCL.
45. Aggrieved by the above order, HNPCL filed Appeal No.41 of 2018 and IA No.211 of 2018 (praying for interim relief for a stay of the Commission's order dated 31.01.2018, among others) before the APTEL. On 16.03.2018, APTEL passed an interim order in IA No.211 of 2018 directing APDISCOMs to maintain the status quo as prevalent before 31.01.2018 and to decide on the Merit Order despatch on the quantum of power from HNPCL at a provisional tariff of Rs. 3.82 per unit. APDISCOMS challenged the order in IA No. 211 of 2018 before the High Court of Andhra Pradesh through WP.No.10814 of 2018. APDISCOMs also challenged the order of the APTEL dated 26.02.2018 before the High Court of Andhra Pradesh through WP No.13689 of 2018 opposing the admission of Appeal No. 41 of 2018 filed by HNPCL. The WPs were dismissed by the High Court of Andhra Pradesh vide order dated 02.05.2018. APDISCOMS also challenged the APTEL order dated 16.03.2018 by way of CA No.5772 of 2018 before the Supreme Court. The Supreme Court vide order dated 04.06.2018, refused to interfere with the said order since it was an interim order. However, the Supreme Court directed the appeal to be decided expeditiously without taking into consideration the observations, in the order impugned before it, as conclusive.

46. HNPCL filed Execution Petition No.3 of 2018 before the APTEL for execution and implementation of the Order dated 16.3.2018 passed by the APTEL in IA No. 211 of 2018 in Appeal No. 41 of 2018. APTEL in its order dated 31.05.2018 directed the DISCOMs to schedule the power declared available from the project so long the variable cost determined/accepted by the Commission is within the merit order despatch followed by the DISCOMs for procurement of power from different sources on a provisional basis pending the final decision in Appeal No. 41 of 2018. Further, APTEL directed the Commission to determine the fixed charges and variable charges of the project based on the provisional tariff order of the Project passed by the Commission immediately, in any case not later than 15 days from the date of receipt of a copy of the Order.
47. APTEL in the Order in Appeal No.41 of 2018 on 07.01.2020 allowed the appeal and directed the commission to dispose of O.P. No. 21 of 2015 filed for determination of Capital Cost and O.P. No. 19 of 2016 for approval of amended and restated PPA (Continuation Agreement) on merits as expeditiously as possible but not later than three months.
48. APDISCOMs filed Civil Appeal No.1844 of 2020 before the Supreme Court challenging the order passed by APTEL on 07.01.2020 in Appeal No.41 of 2018. On 14.07.2020, the Supreme court stayed the order passed by the APTEL in the above Appeal until further orders. HNPCL through I.A. No.67061 of 2020 sought modification of the Supreme Court order dated 14.07.2020. The Supreme Court passed an order dated 21.08.2020 in the above IA clarifying that there shall be no stay of the order dated 16.03.2018 passed by the APTEL providing for an interim measure. APDISCOMs sought vacation whereas HNPCL sought implementation of the above interim order dated 21.08.2020.
49. The Supreme Court, in its Judgement dated 02.02.2022, dismissed CA No.1844 of 2020 filed by the DISCOMs and directed the Commission to decide O.P. No.21 of 2015 and O.P. No.19 of 2016, as expeditiously as possible, and in any case, within a period of six months from the date of the judgment.
50. HNPCL filed an affidavit on 18.04.2022 in O.P.No.21 of 2015 in which it submitted revised Capital Cost and tariff filings for the period from FY2015-16 to FY 2023-24. Abstract of the Capital Cost and Tariff filings is as follows:



### Depreciation

Particulars	FY 2015-16			FY 2016-17			FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Depreciation Expenses (Rs. Cr)	Unit-I	Unit-2	Total	Unit-I	Unit-2	Total							
	40.6	-	40.6	185.75	78.5	264.25	292.73	292.73	292.73	292.73	292.73	292.73	292.73

### O&M Expenses

Particulars	FY 2015-16			FY 2016-17			FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
O&M Expenses (Rs. Cr)	Unit-I	Unit-2	Total	Unit-I	Unit-2	Total							
	16.37	-	16.37	77.9	57.84	135.73	162.02	168.51	175.25	182.26	189.55	197.13	205.01

### Working Capital Requirement

Particulars	FY 2015-16			FY 2016-17			FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Working Capital Requirement (Rs. Cr)	Unit-I	Unit-2	Total	Unit-I	Unit-2	Total							
	340.35	-	340.35	313.47	153.36	466.84	552.22	398.81	536.72	394.27	313.81	605.05	665.08

### Regulated Rate Base

Particulars	FY 2015-16 (from COD 11.01.2016 to 31.03.2016) Unit-I			FY 2016-17 (Unit-1 full year, Unit-2 from 03.07.2016)			FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Unit-I	Unit-2	Total	Unit-I	Unit-2	Total							
Original Capital Cost (Rs Cr)	4970	2755.38	7725.38	4986.44	2771.81	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25
<b>Less:</b> Accumulated Depreciation (Rs Cr)	40.6	0	40.6	226.36	78.5	304.86	597.59	890.32	1183.05	1475.78	1768.51	2061.25	2353.98
Working Capital (Rs Cr)	340.35	0	340.35	313.47	153.36	466.84	552.22	398.81	536.72	394.27	313.81	605.05	665.08
Regulated Rate base (Rs Cr)	5269.75	2755.38	8025.13	5073.55	2846.67	7920.23	7712.88	7266.74	7111.92	6676.74	6303.55	6302.05	6069.35

### Return On Capital Employed

Particulars	FY 2015-16 (from COD 11.01.2016 to 31.03.2016 Unit-I)			FY 2016-17(Unit-1 full year, Unit-2 from 03.07.2016)			FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Unit-I	Unit-2	Total	Unit-I	Unit-2	Total							
Original Capital Cost (Rs.Cr)	4970	2755.38	7725.38	4986.44	2771.81	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25
Accumulated Depreciation (Rs. Cr)	40.6	0	40.6	226.36	78.5	304.86	597.59	890.32	1183.05	1475.78	1768.51	2061.25	2353.98
Working Capital (Rs.Cr)	340.35	0	340.35	313.47	153.36	466.84	552.22	398.81	536.72	394.27	313.81	605.05	665.08
Regulated Rate base (Rs .Cr)	5269.75	2755.38	8025.13	5073.55	2846.67	7920.23	7712.88	7266.74	7111.92	6676.74	6303.55	6302.05	6069.35
Debt Equity Ratio	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
Cost of Debt(%)	11.99	11.99	11.99	11.27	11.27	11.27	10.56	10.15	10.11	9.4	9.41	9.37	9.36
Return on Equity(%)	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
WACC(%)	13.04	13.04	13.04	12.54	12.54	12.54	12.04	11.76	11.72	11.23	11.23	11.21	11.2
Total RoCE (Rs.Cr)	150.24		150.24	636.33	265.08	901.41	928.58	854.32	833.82	749.6	708.17	706.39	680

### Annual Fixed Charges

Particulars	FY 2015-16			FY 2016-17			FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Unit-I	Unit-2	Total	Unit-I	Unit-2	Total							
O&M Expenses (Rs.Cr)	16.37	-	16.37	77.9	57.84	135.73	162.02	168.51	175.25	182.26	189.55	197.13	205.01
Return on Capital Employed (RoCE) (Rs.Cr)	150.24		150.24	636.33	265.08	901.41	928.58	854.32	833.82	749.6	708.17	706.39	680
Depreciation (Rs.Cr)	40.6	-	40.6	185.75	78.5	264.25	292.73	292.73	292.73	292.73	292.73	292.73	292.73
Annual Costs (B) Fixed (Rs.Cr)	207.21		207.21	899.98	401.42	1301.39	1383.33	1315.56	1301.8	1224.59	1190.45	1196.25	1177.74

### Fixed Cost

Particulars	FY 2015-16 (From Unit 1 CoD-11.01.201 6 to 31.03.2016	FY 2016-17 (Unit 1 full year, Unit 2 from 03.07.2016 till 31.03.2017	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Actual Capital Cost(Rs. Cr)	4970	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25	7758.25
MW Capacity(MW)	520	1040	1040	1040	1040	1040	1040	1040	1040
Per MW Cost (Rs.Cr)	9.56	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46
O&M Expenses(Rs. Cr)	16.37	135.73	162.02	168.51	175.25	182.26	189.55	197.13	205.01
Return on Capital Employed (RoCE)( Rs.Cr)	150.24	901.41	928.58	854.32	833.82	749.6	708.17	706.39	680
Depreciation (Rs. Cr)	40.6	264.25	292.73	292.73	292.73	292.73	292.73	292.73	292.73
Annual Costs (B) Fixed (Rs. Cr)	207.21	1301.39	1383.33	1315.56	1301.8	1224.59	1190.45	1196.25	1177.74
No of Days Unit Operation (Days)	80	365	365	365	366	365	365	365	366
Availability (Normative 80%) MU	743	5905	6778	6778	6797	6778	6778	6778	6797
Fixed Costs (Rs./Unit)	2.79	2.2	2.04	1.94	1.92	1.81	1.76	1.76	1.73

### Variable Cost

Particulars	FY 2015-16			FY 2016-17			FY	FY	FY	FY	FY	FY	FY
	Unit-1	Unit-2	Total	Unit-1	Unit-2	Total	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Station Heat Rate(Kcal/kWh)	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
Auxiliary Consumption(%)	7	7	7	7	7	7	7	7	7	7	7	7	7
Landed Cost of Coal(Rs/Ton)	2730	2730	2730	3711	3711	3711	3898	5013	4470	4365	3850	3850	3850
GCV of Coal(KCAL/Kg)	3850	3850	3850	3850	3850	3850	3850	3850	3850	3850	3850	3850	3850
GCV of oil (Kcal/L)	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Price of oil (Rs/kL)	35975	35975	35975	35975	35975	35975	35975	35975	35975	35975	35975	35975	35975
Specific Oil Consumption( ml/kWh)	2	2	2	2	2	2	2	2	2	2	2	2	2
Variable Cost(Rs./kWh)	1.95	0	0	2.62	2.62	2.62	2.74	3.51	3.14	3.06	2.71	2.71	2.71

51. On 04.05.2022, APDISCOMs filed an IA to the Affidavit dated 18.04.2022 filed by HNPCL in O.P.No.21 of 2015 praying the Commission to direct HNPCL to provide quarterly project expenditure, audited financial statements, auditor certified loan drawal details for each quarter with bank scrolls, rate of interest and quarterly interest cost, audited certified statements of quarterly equity infusion into the project commensurate with the present claim of the completed capital cost of Rs. 7758 Crs.
52. As directed by the Commission in the ROP dated 29.04.2022, HNPCL through an affidavit dated 09.05.2022 submitted details of the project cost as on 31.03.2013 duly certified by its auditors.
53. On 12.05.2022, HNPCL replied to the IA filed by the DISCOMs on 04.05.2022 to the affidavit dated 18.04.2022 of the former. On 12.05.2022, APDISCOMs filed a counter affidavit to the affidavit dated 18.04.2022 filed by HNPCL in O.P.No.21 of 2015. APDISCOMs filed Interrogatories on 09.06.2022. HNPCL filed an affidavit on 20.06.2022 in response to the counter affidavit filed by the DISCOMs on 12.05.2022.

54. On 20.06.2022, HNPCL filed an affidavit in response to the Interrogatories filed by the DISCOMs. APDISCOMs filed a Memo on 23.06.2022 to the above affidavit filed by HNPCL on 20.06.2022. APDISCOMs filed an affidavit on 23.06.2022 in response to the counter affidavit filed by HNPCL on 20.06.2022. HNPCL filed an additional affidavit on 28.06.2022.
55. On 05.07.2022, APDISCOMs filed the final submissions and on 07.07.2022, HNPCL filed its written submissions.

**Objections/Suggestions/Views on O.P.No.19 of 2016 (List of objectors is shown vide Annexure-I) and the Replies thereto**

56. **A. Fixed charges and payment of Incentive**

The PPA provides for payment of fixed charges for deemed generation and an incentive for the generation above the threshold level of PLF. Therefore, a provision for payment of disincentive/penalty to the DISCOMs by HNPCL when the generation falls below the threshold level of PLF should be incorporated in the PPA.

**Reply of APDISCOMs:** Deemed availability will not be considered for payment of incentive. If the target availability falls below 80% in any month, the fixed charges payable by APDISCOMs will be reduced proportionately for that particular month. The methodology for tariff calculations has been illustrated in Schedule-F of the Continuation Agreement to 15.04.1998. Further, that there is no disincentive clause in the PPAs of thermal power projects. Therefore, the same is not incorporated in the PPA.

**Reply of HNPCL:** The Continuation Agreement to the 1998 PPA has been signed in line with the provisions of Regulations 1 of 2008 of APERC. As per the Regulation, Incentive is on the basis of Actual Generation which is over and above the Target Availability and not on mere availability. There is no additional fixed charge payment for Generation beyond target availability. Only an incentive of Rs.0.25/Kwh and approved Energy Rate Charges are payable. If the target availability falls below 80% in any month, the fixed charges payable by APDISCOM will be proportionate for that particular month. That linking Penalty to PLF would tend to penalise the generating company for lack of offtake by the Licensee. Therefore, the penalty is linked to availability. The reduction of availability below the approved threshold value affects the Fixed Cost recovery of the generating company - thereby penalising the generating company substantially. It is a settled regulatory principle that a generator



cannot be penalised for the inability of the procurer to offtake the energy. The generator can only be held responsible for the availability.

### **B. Revision of PLF**

The clause relating to the payment of incentive should be amended to the effect that incentive shall be paid for the generation above 85% PLF in view of technological development and availability and use of the latest machinery and in line with similar projects using the similar technology during the same period.

**Reply of APDISCOMs:** The Government of Andhra Pradesh (GoAP) vide letter dated 26.12.2012 directed APDISCOMs to enter into a continuation agreement to the PPA dated 15.04.1998 with M/s. HNPCL, except to the extent it may stand modified due to the impact of changes in laws/rules and regulatory standards guiding such power projects post 1998. Further to the above, GoAP vide letter dated 21.02.2013 advised APDISCOMs to take all necessary action for tariff consideration and approval by APERC under section 62 of Electricity Act, 2003. As such, the 'Target Availability' for payment of full fixed charges is determined as 80% PLF in line with Regulations 1 of 2008 of APERC.

**Reply of HNPCL:** The Continuation Agreement to 1998 PPA is governed by the prevailing APERC (Terms and Conditions of determination of Tariff for the supply of electricity by a generating company to a distribution licensee and purchase of electricity by distribution licensees) Regulations, 2008-Regulation No. 1 of 2008. It is wholly unjustified to say that APERC regulations are unjustified. As long as any regulations remain in the statute book, the same are to be construed as legal, valid, and justified.

### **C. Third Party Sales**

A provision may be made in the PPA to enable HNPCL to sell power to third parties to the extent the DISCOMs do not require such power for such period as conveyed by them at a tariff not less than the tariff being charged to the DISCOMs as per the terms and conditions of the PPA subject to the conditions that the DISCOMs shall not pay fixed charges for such third party sales by HNPCL and that fixed costs recovered by HNPCL through such third party sales shall be adjusted for reduction of debt and equity proportionately. The Commission may direct both the parties to work out the proposed procedure for third party sales within a reasonable time and to keep its consent to the PPA pending until then. Since HNPCL is getting a revised interim tariff,

keeping the consent to the PPA pending does not make any difference till capital cost and tariff are determined. The Commission may consider giving its orders on the PPA and capital cost and tariff of the project simultaneously.

**Reply of APDISCOMs:** CEA in its letter dated 13.04.2016 has replied that most new PPAs have a provision for the sale of power to a Third Party in case of non-requisitioning of the same by the contracted procurers, including for projects awarded through competitive bidding. The latest provision of Tariff Policy is applicable even if there is no provision in the PPA w.r.t. the third party sale for un-requisitioned capacity. Since the PPA between APDISCOMs and HNPCL is yet to be finalised, this provision can definitely be incorporated in the PPA, along with sharing of gains. However, it may have to be legally ascertained whether this would be treated as a new PPA, and if so, the new guidelines that all power procured by State Distribution Companies from private parties would have to be through competitive bidding except in the case of expansion of existing projects to the extent of 100% of the existing capacity, or if the State government has the policy to encourage investment in the state.

**Reply of HNPCL:** The latest applicable Tariff Policy of the Union of India, Ministry of Power, dated 28th Jan 2016, provides for the mechanism for Third Party Sale for better utilisation of un-requisitioned generating capacity of generating stations. Since the PPA between APDISCOMs and HNPCL is yet to be finalised, this provision can definitely be incorporated in the PPA, along with sharing of gains. HNPCL has proposed for Third party sale in line with Clause 6.2 of the Tariff Policy currently in force. This is currently under discussion with APDISCOMs and once finalised, the PPA amendments will be presented before APERC. There will be no consequent financial burden either on the DISCOMs or its consumers emanating from this clause. The important aspect is that a generating station should have the freedom to generate and supply power up to its available capacity, as power is a key resource and should not be wasted by underutilization of generating plants. Third Parties should have the freedom to buy power in a competitive manner in such events.

As directed by the Commission, the parties submitted a Joint Memo to the Commission on 13.12.2016 for the inclusion of a provision for Third Party Sale of power in the PPA/Continuation Agreement. The operating procedure for third party sale shall be in line with the extant rules and regulations for despatch, scheduling, and settlement. That it will be finalised after mutual

discussions between the parties and in line with the terms of the PPA. The entire provisions of Third Party Sale have been incorporated under clause 2.1(b)(iv), (v); and the procedure suggested in clause (vi) is also being settled.

The Objector's contention that the Commission should pass concurrent orders for PPA, Capital Cost, and Tariff approvals is denied and challenged. O.P.No. 19/ 2016 (PPA) is a standalone proceeding and correlating this with O.P.No.21/2015 (Capital Cost and Tariff Approval) is irrelevant and lacks merit. This would delay the process of approval of the PPA which will be prejudicial to the interests of the respondents. The Commission may pass the Orders in O.P.No. 19/ 2016 as soon as the settlement of the Third Party Sale, provisions to the satisfaction of the Commission are achieved. In fact, the petitioner has already proposed the procedure for third party sales and the Commission may approve the same as per the regulations.

#### **D. Procurement of Coal from alternative Sources**

Article 2.9 which provides for the procurement of coal from alternate sources in case of shortages from Mahanadi Coalfields Limited (MCL) should be amended to the effect that for purchasing coal from alternate sources to bridge the shortages from MCL, the Company shall adopt international competitive bidding for procurement of coal and for its transportation, whether the procurement is done indigenously or from abroad. If necessary, APERC should conduct prudence checks on such transactions by holding public hearings.

**Reply of APDISCOMs:** As per the provision envisaged in article 2.9 of the Continuation Agreement to the PPA dated 15.04.1998, the approval for usage of coal from alternate sources and payment of tariff will be as per the procedure followed by State/Central generating stations with the approval of APERC. Conducting a prudence check by holding a public hearing for procurement of coal from alternate sources is under the purview of the APERC. APDISCOMs will abide by the orders of APERC as stated in Article 2.9 of the Continuation Agreement to the PPA dated 15.04.1998.

**Reply of HNPCL:** HNPCL has 100% coal Linkage from MCL. As per Article 2.9 of the PPA, procurement of coal from the approved alternate source shall be limited to the shortfall of Coal from MCL and/or to maximise its Declared Capacity and generation up to the Normative Availability and shall be met with equivalent quality of indigenous/imported coal on strict requirement basis in terms of GCV. The approval for usage of alternate coal and payment of

Tariff will be followed as per the procedure followed by State/Central generating stations with the approval of APERC. Article 2.9 envisages two-stage prior approval from APDISCOMs and APERC. The short supply from MCL could be for a short span and the approval is to be obtained within that period in order to maintain the generation. Article 2.9 is in line with the prevailing practices.

#### **E. Maintenance of Coal Stocks**

Article 2.7 C (ii) of the PPA as amended, says, interalia, “the Company at the time of Incurring such Compensation, maintain a coal stockpile equivalent to thirty (30) days operation at a Target Availability...” Regulation No.1 of 2008 of APERC states that in the case of coal-based generating stations, working capital shall cover the “cost of coal or lignite for one-and-a-half months for pit-head generating stations and two months for non-pit-head generating stations corresponding to target availability”. Since HNPCL is a non-pit-head station, it has to maintain a coal stock equivalent to two months of operation at a target availability,

**Reply of APDISCOMs:** As per APERC Regulation 1 of 2008, the estimation of working capital shall be computed by including the following components.

- i) Cost of coal or lignite for one-and-a-half months for pit-head generating stations and two months for non-pit-head generating stations, corresponding to target availability;
- ii) Cost of oil for two months corresponding to target availability;
- iii) Cost of secondary fuel oil for two months corresponding to target availability;
- iv) Operation and Maintenance expenses for one month;
- v) Maintenance spares @ 1 percent of the historical cost as per indexation of O&M norms and,
- vi) Receivables for sale of electricity equivalent to two months of the sum of annual fixed charges and energy charges calculated on target availability;

Minus

Payables for fuel (including oil and secondary fuel oil) to the extent of one month of the cost of fuel calculated at target availability

As seen from the above, the cost of coal for only one month (30 days) will be considered in the estimation of working capital since payable for fuel to the extent of one month is deductible from the sum of the cost of all items

indicated at (i) to (vi). Accordingly, the minimum coal stock to be maintained at the Project has been considered for 30 days.

**Reply of HNPCL:**

The working capital computation is carried out as per the APERC (Terms and Conditions of determination of Tariff for the supply of electricity by a generating company to a distribution licensee and purchase of electricity by distribution licensees) Regulations, 2008 as amended from time to time. As per the Regulation, Working Capital calculation includes the cost of coal for 2 months for non-pit generating stations among others from which payables for fuel to the extent of the cost of fuel for one month calculated on target availability are to be deducted. Therefore, the cost of coal for only one month will be passed on through the Working Capital.

**F. Buy-Out of the Plant**

Article 7.3 and 7.4 and schedule M of the PPA provide for the buy-out of the project by the DISCOMs. Calculation of buy-out price as provided for in the PPA will impose an unjustifiably higher burden on the DISCOMs and their consumers and much to the undue advantage and unfair gain to HNPCL. The generator would have recovered about 90 percent of the capital cost within the first 12 years of the PPA and much more than the entire capital cost of the project thereafter during the period of PPA. Therefore, in the place of the Articles and Schedule M relating to buy-out, a clause should be incorporated in the PPA that the project shall be handed over to the DISCOMs by HNPCL after the expiry of 30 years of the PPA, without any liabilities and with all rights, subject to the payment of the cost of the land by the DISCOMs to HNPCL at the original price paid for it by the latter and bearing of taxes and other expenses pertaining to such transfer of the project by the DISCOMs. Though no depreciation charges are applicable to the land of the project, the cost of the land is included in the Capital Cost of the project and the generating company gets interest on debt and return on equity, in the form of fixed charges, depending on how the cost of the land is met, and as such payment of the original cost of the land alone is justified under the Buy-Out.

**Reply of APDISCOMs:** As of now, there are no guidelines/regulations issued by Central/State agencies that guide the buy-out price of the Project. However, as per the methodology described in the Table shown in Schedule-M of the PPA dated 15.04.1998 for arriving at the buy-out price as per the industries



practice, APDISCOMs shall only pay Terminal Valuation which is equal to 50% of the depreciated replacement cost, plus Transfer taxes and Transfer costs, in case APDISCOMs exercise option to purchase the Project following the expiry of the Agreement. The first right of refusal lies with APDISCOMs only as per article 7.3 of the PPA dated 15.04.1998.

**Reply of HNPCL:** As regards the contention concerning the value in the case of Buy-Out of the project, the intent of the provision in the PPA is to encourage the parties in the agreement to conform to the terms of the Agreement. As per the provisions of the PPA, DISCOMs have the option to approve the Renovation and Modernization works proposed by HNPCL for increasing the life of the project. Only when the DISCOMs refuse such a proposal, the Buy-Out price would be computed and the transaction carried out. The first right of refusal always vests with the DISCOMs. The provision incorporated in the PPA provides for identification of the fair Buy-Out price under all scenarios of termination of Agreement. The project will continue to have a significant useful life, and productive capacity along with an economic value and transcends beyond the period up to which the asset is fully depreciated and the suggestion of the objector belies accepted commercial principles. The parties to the Continuation Agreement have found it reasonable to provide for 50% of depreciated value/cost of the plant plus transfer costs and taxes which is the correct method of ascertaining the Buy-Out price.

**G. Adjustment of excess revenue earned from third party sales**

Article 2.1(b) (v) should be amended to make a provision for adjusting the excess revenue realised on the sale of power to third parties over and above the threshold level of PLF, towards depreciation charges after deducting variable cost and incentive or it should be made clear that the project should supply generation above the threshold level of PLF to the DISCOMs only at variable cost plus incentive even when it is permitted to make third party sales under the proposed amendments.

**Reply of HNPCL:**

The commercial propositions suggested by the objector are denied as lack any commercial merit and totally discriminatory against the generator. The proposed clause has been developed by the parties in line with various bilateral documents signed between parties while putting into effect the 100% sale of power to the State. However, as the stakeholder is objecting to the

terms of the joint memo dated 13.12.2016, HNPCL submits that in such an event, the Commission may direct the parties to adopt the Third Party Sale Clause as prevailing in National Tariff Policy (NTP). This Policy has evolved after considerable discussion with all

stakeholders and prevailing practices. As the NTP has already been notified in the Gazette, abiding by the terms outlined therein is equitable/acceptable to all stakeholders. Further, it may be noted that these standard terms have been accepted in the other PPA of the DISCOMs / Procurers.

#### **H. PLF (Plant Load Factor)**

According to the Continuation Agreement, the target availability/normative availability for recovery of fixed charges is 80%. This shall be increased to 85% in line with the revised Regulations of CERC.

**Reply of APDISCOMs:** As per the GoAP direction vide letter dated 21.02.2013, directing APDISCOMs to take necessary action for tariff consideration and approval by APERC under section 62 of Electricity Act, 2003, the 'Target Availability' for payment of full fixed charges is proposed as 80% PLF inline with APERC Regulation 1 of 2008.

#### **HNPCL Reply**

The PPA is governed by APERC Regulation 1 of 2008.

#### **I. Incentive**

According to Article 3.9 incentive shall be paid for generation in excess of PLF of 80%. This shall also be increased to 85% PLF.

**Reply of APDISCOMs:** Incentive will be paid @ 25 paise/unit for the actual energy in excess of 'Target Availability' (80%) recorded at ex-bus in line with Regulation 1 of 2008 of APERC.

**Reply of HNPCL:** The PPA is governed by the prevailing APERC Regulation 1 of 2008.

#### **J. InterConnection Facility**

According to Article 8.2 (a) of the PPA "The Procurers shall complete the Interconnection Facilities for evacuation of power from the Company's Project within 12 months from the date of signing of the Continuation Agreement to the PPA dated 15-04-1998." which is reiterated at paragraph 9 of Schedule I

(Interconnection Facility). But the Company in its petition on the determination of capital cost and tariff (O.P. No. 21 of 2015) stated that it has already set up the interconnection facility at its own cost. This shows that the ground situation is at variance with the provisions of the Continuation Agreement. The Interconnection Facility was set up even before the signing of this new Agreement.

**Reply of APDISCOMs:** The said evacuation facility is being carried out by APTRANSCO. However, HNPCL was given confirmation to evacuate the entire power of the project through the Vemagiri Complex until the regular evacuation system is completed. In the meantime, HNPCL has constructed a 400 KV D/C line from the project to the 400 KV Kalpaka SS for the purpose of startup power. Till the permanent evacuation system is completed, APDISCOMs will be using the 400 KV DC line to the 400 KV Kalpaka SS for temporary evacuation.

**Reply of HNPCL:** The interconnection facility for evacuation of power from HNPCL's Project to the proposed 400 kV Sub-station at Kamavarapukota in W.G. District is being constructed by APTRANSCO. APDISCOMs have confirmed that the above interconnection facility will be completed in 12 months from the date of signing of the Continuation Agreement to the PPA dated 15.04.1998 and the same is incorporated in the Schedule-I of the aforesaid agreement. However, HNPCL has received confirmation from the DISCOMs to evacuate the entire power of the project through the Vemagiri Complex till the completion of the regular evacuation system. In the meantime, HNPCL has constructed a 400 KV D/C line from the project to the 400 KV SS at Kalpaka for the purpose of startup power on behalf of APTRANSCO. Until the completion of the permanent evacuation system, APDISCOMs will be using the 400 KV DC line to the 400 KV Kalpaka SS for temporary evacuation. However, during the interim period, APDISCOMs, vide letter D.No.71/2016 Dt.22.06.2016, committed to evacuating 978 MW of power.

#### **K. Private Siding Agreement**

The Continuation Agreement provides for a Private Siding Agreement with Indian Railways and/or NTPC for coal transportation. But, according to HNPCL's petition for Capital Cost determination filed by the petitioner, it proposes to lay a 23 KM length dedicated railway line from the nearest railway station to the plant, even though a 19 KM length railway line belonging to

NTPC is available for sharing. HNPCL's proposal leads to an increase in the capital cost of the project. The laying of the new railway line also involves the needless acquisition of land and creates discomfort for the local community.

**Reply of ASPDISCOMs:**

HNPCL shall follow the provision envisaged in Article 1.1 of the Continuation Agreement to the PPA dated 15.04.1998 for the Private Siding Agreement.

**Reply of HNPCL:** Same reply as above.

**L. Selection through competitive bidding**

Following the National Electricity Policy and the National Tariff Policy announced by the GoI under the Electricity Act, 2003, developers should have been selected through competitive bidding. As the erstwhile APSEB had obtained all permissions, the developer should have been selected through Case II bidding. According to APDISCOMs, HNPCL participated in the Case I bidding in 2012 and stood L2. But the same was set aside by the GoAP on the ground that the plant is already encumbered to the state of AP. The tariff quoted by HNPCL in that bid was much lower than the tariff claimed at present.

**Reply of APDISCOMs:** Based on the provisions of the agreements, the delay on the part of HNPCL in completing the project has already been contested by APDISCOMs vide counter affidavit dated 26.09.2015 in O.P.No.21 of 2015 and subsequent I.A dated 22.07.2016.

**M. Misdeclaration event and penalty**

Articles 2.6 (f) of the 1998 PPA reads as follows;

“Beginning with the first billing month after the end of the Stabilisation Period of the Second Generating Unit, if the actual net generating capacity in any settlement period deviates by +/- 2% from the dispatch instructions, it will be treated as misdeclaration event and penalty for the same would be at the rate of twice the amount of shortfall in net metered energy generated by the project than what it would have been if the Project has generated during such settlement period at its declared capacity...”.

However, the same is not included in the Amended PPA. Hence, the same shall be retained in the Amended PPA or the same shall be reframed in line with Clause 18.2 of Regulation 1 of 2008.

**Reply of APDISCOMs:** As per the Memorandum of Agreement (MoA) dated 17.05.2013 entered between the then APDISCOMs and HNPCL, the PPA dated 15.04.1998 has to be realigned due to the impact of change in laws/rules and regulatory standards in force. Accordingly, the Scheduling, Dispatch, and Deviation Settlement Mechanism were amended as per the Indian Electricity Grid Code (IEGC), 2010, and the amendments thereto or the grid code of the Commission as and when the same get enacted and made applicable to the state of Andhra Pradesh. The relevant clause in Part-6 of IEGC, 2010 is as follows;

6.4 Demarcation of Responsibilities: 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 progression over a period of a month in the geometrical. Clause 18.2 of Regulation 1 of 2008 is the same as IEGC, 2010 as seen above. Considering the above Regulation of APERC, the relevant clause was amended and incorporated in the Continuation Agreement dated 28.04.2016.

**Reply of HNPCL:** A new definition has been included in the Continuation Agreement as follows;

Grid Code: means the applicable grid code, i.e. either the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (and the amendments thereto), or the grid code of the Commission as and when the same gets enacted and is made applicable to the state of Andhra Pradesh. The provisions under AP Grid Code Regulation, 2010 are applicable for HNPCL including for scheduling and dispatch of energy

#### **N. Relevant Tariff Formulae to be made part of the PPA**

While Energy Charges may change due to changes in fuel prices, the Fixed Charges will continue to be more or less the same. To avoid any confusion and provide clarity, applicable Fixed Charges and Energy Charges, along with the relevant Formulae, as of now shall be made part of the PPA

#### **Reply of APDISCOMs:**

As per Clause 10.10 of Regulation 1 of 2008 of APERC, the "Foreign exchange variation shall not be allowed as a pass-through". Therefore, Articles 3.1 to



3.11 in the PPA dated 15.04.1998 have been omitted. Further, as per the Memorandum of Agreement (MoA) dated 17.05.2013 entered into between the then APDISCOMs and HNPCL, the monthly Tariff payment will be computed as per the Tariff Regulations of APERC (Regulation 1 of 2008) illustrated at 'Schedule F' of the Continuation Agreement dated 28.04.2016 which contains relevant formulae.

**Reply of HNPCL:** Schedule F covers the formulae of Tariff determination in line with the APERC Regulation 1 of 2008.

#### **O. Actual Cost Report**

Article 8.1 (t) dealing with the submission of Actual Cost Report shall be retained as it is except replacing 'Board and Authority' with 'Procurers and the Commission.

**Reply of APDISCOMs:** The matter relating to the Actual Cost Report was omitted duly retaining the balance content of the earlier clause with regard to accessibility of papers, documents, and records about Capital Cost by the procurers.

**Reply of HNPCL:** This has been amended in line with the current regulation. All the details of project cost have been submitted to APERC in our petition for approval of project cost and determination of tariff.

#### **P. Enhancement of Capital Cost after a delay of 22 years is not justified and this enormous burden will be passed on to the poor consumers.**

**Reply of APDISCOMs:** GoAP in its letter dated 26.12.2012, as already contemplated in the PPA entered into between the erstwhile APSEB and HNPCL in the year 1998 directed APDISCOMs (the successor entities of erstwhile APSEB on its restructuring) to enter into a continuation agreement to the PPA of 1998 with HNPCL, except to the extent they may stand modified due to impact of change in laws/rules and regulatory standards guiding such power projects post 1998. Further to the above, GoAP in its letter dated 21.02.2013 has advised Chairman/APPCC to take necessary action for tariff consideration and approval by APERC under Section 62 of the Electricity Act, 2003 duly considering all earlier decisions taken by the GoAP during the meetings held on 16.05.2007 and 22.07.2009 and also the APPCC decision communicated vide letters dated 12.11.2009 and 01.05.2010 about APDISCOM's interest to Purchase 100% Power from HNPCL project at NTPC

Simhadri tariff. As per the provisions of the Power Purchase Agreement, the issues have already been contested by APDISCOMs in the counter affidavit dated 26.09.2015 in O.P.No.21 of 2015 and subsequent IA.No.10 filed on 22.07.2016.

**Reply of HNPCL:** HNPCL denies and is unaware of the costs estimated in 1994 as claimed by the objector, which is irrelevant as the project was revived and commenced in June 2010. Further, HNPCL in its various submissions before the Commission has demonstrated that the project cost by the accepted benchmark norms is better and competitive with the contemporary projects which are commissioned or in the process of being commissioned. HNPCL, vide its submissions dated 28.7.2016, has provided a detailed explanation of the cost components and has further justified the cost with the Benchmark Capital Cost in its submissions dated 18.10.2015. The increase in project cost is attributable significantly to the severe damage caused by Super Cyclone Hud Hud in Oct 2014 when 90% of the Project works were completed, which resulted in the postponement of the scheduled COD.

**Q. G.O. Rt. No. 561 dated 13.04.2012 may be studied in depth before taking a decision on this.**

**Reply of APDISCOMs:** After taking into consideration G.O.Rt.No. 561, dated 13.04.2012, GoAP vide letter dated 26.12.2012 have directed APDISCOMs (the successor entities of erstwhile APSEB) to enter into a Continuation Agreement to the PPA of 1998 with HNPCL, except to the extent they may stand modified due to impact of change in laws/rules and regulatory standards guiding such power projects post 1998.

**Reply of HNPCL:** The project land was allotted by the GoAP and also directed the wakf board to alienate the land to the petitioner. GoAP issued several GOs which, if necessary, will be produced before the Commission. Curiously, the objector has not placed facts in his objections to have a fair and correct reporting of facts.

**R. The AP power sector is in a power surplus situation now**

**Reply of APDISCOMs:** After taking into consideration G.O.Rt.No. 561, dated 13.04.2012, and all the earlier correspondences held between GoAP and APDISCOMs regarding the purchase of 100% power from the HNPCL's Project at NTPC Simhadri tariff, GoAP vide letters dated 26.12.2012 & 21.02.2013 have directed APDISCOMs (the successor entities of erstwhile APSEB) to enter

into a Continuation Agreement to the PPA of 1998 with HNPCL, except to the extent they may stand modified due to impact of change in laws/rules and regulatory standards guiding such power projects post 1998, at the tariff to be approved by APERC under Section 62 of Electricity Act, 2003.

**Reply of HNPCL:** The submissions of the objector are denied. The capacity has already been contracted vide PPA dated 15.4.1998 and the current petition is for approval of the Continuation Agreement to the PPA dated 15.04.1998.

**S. The Surprise methodology invented by the consultants in proving that Rs.3.75 (cost of public sector power) is more than Rs 4.50 (Cost of private sector power) by dividing the unit cost into two components (Fixed cost +Variable Cost) is nothing but hoodwinking**

**Reply of APDISCOMs:** APDISCOMs have been purchasing power from APGENCO/IPPs as per the power procurement projections approved by the Commission in its Retail Supply Tariff Order every year. Accordingly, the tariffs (two parts, i.e. fixed + variable) of the respective Power Stations of APGENCO/IPPs are being paid by APDISCOMs. APSLDC is the competent authority to issue dispatch instructions to the generators based on merit order, duly considering the grid constraints that arise from time to time.

**Reply of HNPCL:** HNPCL is not aware of the facts stated here and this being an internal matter of GoAP offers no comments.

**T. The Commision is requested not to grant approval to the PPA and advise them to go to the open market, otherwise irreparable loss will occur to the public exchequer**

**Reply of APDIDSCOMs:** GoAP have issued G.O.Ms. No. 17, dated 01.06.2016, wherein it accorded approval for the purchase of 100% power, i.e. 1040 MW (2x520 MW) generated by HNPCL at Visakhapatnam by APEPDCL and APSPDCL as per the tariff approved by APERC under section 62 of the EA, 2003, as the erstwhile APSEB had transferred the infrastructure facilities like land, water & coal linkages and other statutory clearances like Environment Clearance, NOCs from Pollution Control Board, etc., available with APSEB to HNPCL.

**Reply of HNPCL:** GoAP and the Commission have earmarked 100% output of the HNPCL plant which is reflected in the ARR for FY 2014-15 & FY 2015-16

in line with the MOA of 2013 and subsequently, the Continuation Agreement of 2016 to the PPA entered in 1998.

**Objections/Suggestions/Views on O.P.No.21 of 2015 (List of objectors is shown vide Annexure-II) and replies thereto**

**57. A.** The inflated capital cost of Rs.8,087.23 Crores submitted to the Commission on 28.07.2015 is a highly questionable and impermissible expenditure. HNPCL increased the capital cost, excluding IDC & FC by 5.42% and IDC & FC by 71.28%. What are the reasons for inflating the IDC and FC by 71.28% compared to capital cost(excluding IDC & FD) inflation by 5.42%?

**B.** As per the amended and restated PPA dated 15.04.1998, if the actual capital cost exceeds approved cost, the approved cost shall be the capital cost. However, this provision does not find place in the Continuation Agreement. Documents made public as part of the public process do not include APDISCOMs reservations about HNPCL's claims on capital costs. The capital costs to be allowed should be less than the initial capital cost claimed by HNPCL.

**C.** The abnormal delay in implementation of the project and the resultant additional expenditure are attributable to HNPCL and its suppliers or contractors but not to the DISCOMs and their consumers. As such, the approved project cost should be limited to the cost specified in the techno-economic clearance of the CEA by excluding capitalised initial spares.

**D.** When 93.12% progress in the implementation of the project was achieved by November, 2013, an increase in the projected capital cost of the project by Rs.1989.23 Crores or 32.62% for the remaining 6.88% works is hugely inflated and unjustified, more so considering that the revised projected capital cost of Rs.6,098 Crores itself was inflated. The IDC shall be limited to the scheduled COD, i.e. 28.02.2014.

**E.** According to the Continuation Agreement, the SCOD of Unit-I is 28.02.2014 and that of Unit-II, 28.08.2014. As HNPCL failed to declare the CODs of the units on or before the SCODs, it is liable to pay liquidated damages as per the PPA dated 15.04.1998. Further, since the Hud-Hud cyclone occurred during the second week of October 2014, i.e. much after the SCODs of the Units, HNPCL can not justify the delay under the above pretext.

**Reply of APDISCOMs:** APDISCOMs contested the significant increase in the capital cost from Rs. 5,545 Crores to Rs.8,087 Crores including the claim of high costs of land and site development to the tune of Rs. 187 Crores and the delays in the SCODs of the Units in their various counter affidavits and IAs.

**Reply of HNPCL:** HNPCL narrated the sequence of events since the signing of the initial PPA dated 09.12.1994. (Already described in this order supra.) Further, HNPCL stated that the CODs of the units were projected subject to the condition that the GoAP/District Administration, Visakhapatnam hands over the possession of land required for sea water intake outfall system and railway siding at the earliest. However, the actual handing over of the lands took place much later between September 2014 and December 2014 (45.68 acres of land for the railway line and 40.39 acres of land for the sea water intake outfall system). That while constructing the sea water intake outfall system, a hugely powerful and destructive Hud-Hud cyclone struck the city of Visakhapatnam in the month of October 2014 causing extensive damage to the under-construction sea water intake outfall system which necessitated approvals from the environment department of GoAP and the Central Environment Ministry that took almost 9 months. That the aforesaid factors are completely beyond the control of HNPCL.

All references to the project costs, facts and circumstances prior to 1999 are of no relevance to the present proceedings. That the reckoning point for the determination of the tariff is as per the petition filed on 28.07.2015 before the Commission. Hence, all the earlier understandings of project cost stand eclipsed by the present proceedings underway before the Commission. The Project was initially appraised at an estimated cost of Rs 5,545 Crores as per the then existing project milieu. HNPCL submitted a tentatively estimated capital cost of Rs 6,098 Crores vide letter dated 16.05.2013 as it was the requirement by Respondents for signing of the MoA. In the said letter it was made amply clear that cost was only a tentative estimate with decisions on several items still pending. The cost also excluded a few items as mentioned therein. The contents of the letter may be studied in detail to confirm its tentative and cautionary intent. The MoA executed between the parties is a clear proof of acquiescence on the part of the DISCOMs regarding the project cost. Because of the fact that the tariff was to be agreed upon by the parties as determined in the proceedings to be initiated before the Commission, no cost submitted prior to the filing of the original Petition can be termed as project



cost for the purpose of tariff determination. It was only in March 2014 that HNPCL first submitted a detailed estimate of the project Capital Cost Rs 6,998 Crores based on certain assumptions of the timely receipt of governmental support necessary for achieving the commissioning timelines. Thus, the reference of the respondent to the so called project cost of Rs. 5,545 Crores or Rs.6,098 Crores is untenable and misleading. The justification for reckoning of project cost as Rs.6,998 Crores, which can be termed as the original project cost for the present proceedings, has been well explained in the original petition filed on 12.03.2014. Likewise, the reason for revision of the project cost from Rs. 6,998 Cr to Rs 8,087 Cr have been explained in detail in the Revised Capital Cost addendum dated 28.07.2015 as well as in the Rejoinder. The addendum relates back to the original petition and hence the only project cost that needs to be looked into for the purpose of tariff determination is Rs.8,087 Crores in supersession of all the earlier costs.

The COD dates have been anticipated considering the feasibility of road transportation of coal from Gangavaram Ports as the railway line connectivity may not be ready in time. The GoAP took up the matter with RINL for the requisite permissions for transportation of coal through the RINL road in the interim period. Despite the best efforts and repeated requests from the GoAP and HNPCL, the requisite permission from RINL was still awaited. The project also suffered substantial damages from the cyclone, particularly the sea water intake outfall system, Desalination plant, Switchyard, Sub-Station, Stores, Coal Stock Yard, etc. Most of the temporary structures including, but not limited to the HNPCL offices, contractors' offices, storage sheds/godowns, labour colonies, roof sheeting of ESPs, 33 KV construction power supply, etc. were completely damaged. Several permanent piles of the intake outfall jetty were either completely washed away or were bent/tilted irreparably and irreplaceably. The contractors' machinery, equipment, tools & tackles including precast units, walkways, and trolley & working platforms fell into the sea. The occurrence of such a rare event of a Category 1 super cyclone was beyond the control of the Company.

The Company carried out detailed surveys and tests to assess the damage to the sea water intake outfall structure with the help of IIT Chennai, Tata Consulting Engineers, Mott Mac Donald, etc. It was found that the original approved outfall jetty route CRZ Clearance for the original sea water intake outfall scheme which was issued by Ministry of Environment & Forests on

03.01.2014 was found to be not suitable for construction anymore due to depletion of the structural integrity of outfall jetty piles beyond 444 metres. A revised outfall diffuser structure was proposed by IIT Chennai which was submitted to the Environment, Forests, Science & Technology (EFST) Department of GoAP. The EFST Department issued the no objection certificate to the revised outfall diffuser scheme on 04.06.2015.

While the Company awaited the MoEF CRZ Clearance, the Bay of Bengal sea has become rough due to the onset of monsoon, making it impossible to carry out any construction work for the next 3-4 months. Since the main plant was ready for pre-synchronization activities, HNPCL has proposed an interim outfall scheme to temporarily discharge from the outfall chamber through the down-comers until the main revised scheme can be completed after MoEF's approval. The interim discharge proposal has already been put up to the EFST Department for its consent vide letter dated 09.06.2015 .

The aforementioned events have rendered the original COD timelines of 30.06.2014 and 30.09.2014 for Unit-1 and Unit-2 respectively, unachievable. The combined impact of the above reasons has led to a revision in the earlier submitted estimated Capital Cost to Rs. 8,087.06 Crores.

**F.** As per Regulation 11 (A) (1) of CERC Tariff Regulations, 2014 "Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD". According to the Continuation Agreement, the 'Scheduled Date of Completion' will be reckoned from the date of financial closure and the COD of the first Unit shall be achieved on or before 28-02-2014. Therefore, the IDC shall be allowed only up to 28.02.2014.

**Reply of APDISCOMs:** APDISCOMs have contested the IDC claimed by HNPCL in the counter filed in O.P.No.21 of 2015 and the subsequent I.A.

**Reply of HNPCL:** The Capital Cost of the project including IDC shall be determined and approved by the Commission as per Regulation 1 of 2008.

**G.** At para 17 of O.P. No. 19 of 2016, APDISCOMs noted, "further to the above, APDISCOMs vide letter dated 17.05.013 have also informed HNPCL that there will not be any liability on the part of DISCOMs for delay in case APTRANSCO fails to provide the evacuation facility at the time of COD of Unit-I. The same was accepted and acknowledged by M/s HNPCL.

**Reply of APDISCOMs:** Noted.

**Reply of HNPCL:** As per the Continuation Agreement, APDISCOMs are responsible to complete the evacuation system within 12 months from the date of signing the Continuation Agreement, i.e. 28.04.2016. Further, APDISCOMs, vide their letter dated 22.06.2016 have committed to evacuate 978 MW unhindered until the completion of the evacuation system, i.e. up to 28.04.2017.

**H.** As per Article 2.1 (a) of the PPA "... Any revenue (other than recovery of fuel cost) earned by the Company from sale of infirm power, shall be taken as reduction in capital cost and shall not be treated as revenue as per Tariff Regulations". In the light of the above provision in the PPA, income earned by HNPCL from the sale of infirm power which is over and above the cost of fuel, shall be reduced from the capital cost.

**Reply of APDISCOMs:** Noted.

**Reply of HNPCL:** Noted.

**I.** The tariff to be arrived at through the present exercise shall not be higher than the tariff of Rs.3.48 per unit quoted by HNPCL in the Case-1 bidding conducted by APDISCOMs in 2011 to procure 2,000 MW power. In the same bid, Thermal Powertech, which already started power generation, stood fifth. Therefore, the tariff of HNPCL's project shall be lower than that of the Thermal Powertech project.

**Reply of APDISCOMs:** APDISCOMs have been contesting the capital cost and the tariff, based on the tariff quoted by HNPCL in the Case-1 bidding conducted by the then APDISCOMs in 2010-11.

**Reply of HNPCL:** The reference to the Case-1 bid is not relevant since as per the directions of GoAP, 100% Power generated is being sold to APDISCOMS. Further, the Commission in its order dated 13.08.2013 in O.P.No.55 of 2013 has explained the position.

**J.** Article 4.3.1 of the amended and restated PPA dated 15.4.1998 says: "The Company (HNPCL) shall, prior to submitting the same to the Authority, provide the Board (DISCOMs) with the Financial Package and the Financing Terms". Whether HNPCL provided that information to the DISCOMs and

whether the latter examined the same and endorsed it with/without any objection as per article 4.3.2, should be made public.

**Reply of APDISCOMs:** The project achieved financial closure on 29.06.2010, i.e. was much earlier than the GoAP's direction in its letter dated 26.12.2012 to enter into a Continuation Agreement to the amended and restated PPA dated 15.4.1998. Therefore, APDISCOMs could not act in accordance with the above Article. Notwithstanding the same, APDISCOMs filed IA.No.9 of 2016 dated 10.06.2016 in O.P.No.21 of 2015 seeking additional data from HNPCL.

**Reply of HNPCL:** In line with the Continuation Agreement signed on 28.04.2016, all the project documents including the financial documents have already been submitted to APDISCOMs. Further, HNPCL submitted all the project documents to the Commission in its petition.

**K.** Article 8.1 (t) of amended and restated PPA dated 15.4.1998 says: "starting With the date falling six (6) months after Financial Closing, the Company (HNPCL) shall submit half yearly reports ( "Actual Cost Report") certified by the Company's independent auditors to the Board (DISCOMs). Whether HNPCL submitted such reports to the Discoms periodically and up to the COD of the project and whether the DISCOMs have examined the same, if so, the findings of the DISCOMs should be made public. The filings made by HNPCL before the Commission, as seen from the documents put on the latter's web site, do not contain such information, and also the reasons and item-wise break-up of increase in the capital cost of the project from the projected value of Rs.5,545 Crores as per the financial closure achieved on June 29,2010 to Rs.6,098 Crores projected in the HNPCL letter dated May 16, 2013 to APPCC; to Rs.6,998.12 Crores in its petition dated 12.03.2014; and again to Rs.8087.23 Crores in the addendum filed before the commission on 28.07.2015.

**Reply of APDISCOMs:** Same reply as in Par 64 above.

**Reply of HNPCL:** The said clause has been amended in the Continuation Agreement dated 28.04.2016 as *"The Company shall permit access to such papers, documents and records as may be reasonably necessary and required by the Commission and the Procurers to determine the actual Capital Cost and Tariff of the Project."* Accordingly, HNPCL furnished all the details sought by the DISCOMs.

**L.** No extension of the timeline for declaring CODs was sought by HNPCL or agreed to by the DISCOMs. HNPCL, in its rejoinder dated October 8, 2015, to the counter affidavit of the DISCOMs, maintained that "the insurance claims received/to be received would be deducted from the project cost," without even indicating the amount it claimed and received under insurance.

**Reply of APDISCOMs:** APDISCOMs contested the same in their counter affidavit dated 26.09.2015 in O.P.No. 21 of 2015.

**Reply of HNPCL:** Adequate Insurance has been taken as per prudent utility practices. The claims have been submitted and are being pursued by HNPCL.

**M.** The latest projected capital cost of Rs.7.78 Crores per MW for the project is 63.05% more compared to the benchmark capital cost of Rs.4.71 Crores per MW determined by CERC in its order dated 04.06.2012. Had the project been implemented as per the stipulations of the CEA and as per the terms and conditions of the amended and restated PPA, the capital cost of the project would have been much lesser than even the benchmark capital cost determined by CERC with December 2011 as base. In addition to the hard cost, IDC and financing charges should be computed for the period between financial closure and scheduled COD by excluding the period of delay.

**Reply of APDISCOMs:** APDISCOMs, in their counter affidavit dated 26.09.2015 in O.P.No. 21 of 2015, evaluated the capital cost of HNPCL with reference to the the CERC benchmark capital cost and after escalating the same by 3.44% (Jun 2013 base year) added IDC and other expenses to arrive at the conclusion that the capital cost of Rs. 7.78 Crores/MW filed by HNPCL is about 33% higher than the Capital Cost estimated in the above manner.

**Reply of HNPCL:** HNPCL submitted detailed responses to the comparison of the capital cost of the project with CERC benchmark cost in the rejoinder dated 08.10.2015. The revised capital costs(Hard cost) as submitted on 28.07.2015 plus mandatory & optional packages including the operative expenses at Rs.5.484 per MW is more competitive than CERC Benchmark cost of R. 5.59 Crores/MW after suitable escalations are applied. Each power project is unique in its nature because of certain locational, socio-political, technical, commercial and circumstantial features that play a significant role in its costing.



**N.** Dr. E.A.S Sarma, former secretary, Ministry of Power, GOI pointed out in his letter dated 04.11.2015 that the contention of HNPCL that the cost of its project had gone up as a result of the damage caused by Hud-Hud is fallacious as all its installations have been covered by insurance and whatever little damage that had occurred, has already been claimed from the insurance companies. That a discreet probe conducted in this regard would reveal the facts.

**Reply of APDISCOMs:** APDISCOMs have contested the same in their counter affidavit dated 26.09.2015 in O.P.No. 21 of 2015.

**Reply of HNPCL:** The claims of HNPCL are substantiated by the Contractual Agreements and the expenditure certified by the Statutory Auditors. The views expressed by the objectors are mere views without referring to the detailed submissions made by HNPCL. Adequate Insurance has been taken as per prudent utility practices. The claims have been submitted and are being pursued by the HNPCL.

**O.** The originally projected overhead costs of Rs.396 Crores should be examined thoroughly and the additional cost of Rs.193 Crores on this account because of the delays in the completion of the project should not be allowed in the capital cost.

**Reply of APDISCOMs:** The same reply as in par 68 above.

**Reply of HNPCL:** The overheads are bound to increase as the duration of the project execution is extended. In the case of this project, the delay in the execution is due to natural calamities which are beyond the control of HNPCL.

**P.** The capital cost of Stage II of Simhadri project of NTPC having similar units of 2x500 MW and implemented during the same period in the same location of Visakhapatnam was Rs.4.50 Crores per MW, whereas the latest projected capital cost of the project is more by 72.88% even after considering the fact that HNPCL's project is greenfield. Based on the original schedule, the project should be compared with stage-I of Simhadri project and such a comparison, with both the projects being greenfield, emphatically proves that the inflated capital cost of the project is absolutely impermissible.

**Reply of APDISCOMs:** APDISCOMs in their counter affidavit dated 26.09.2015 in O.P.No. 21 of 2015 submitted that NTPC planned to establish 1000 MW (2x500 MW) Simhadri Power Project at Visakhapatnam and obtained

the Techno-Economic Clearance (TEC) from the CEA during the same year when HNPCL obtained the TEC from CEA i.e. in the year 1996. Both projects are similar in configuration, situated at the same location and have the same source of fuel. However, NTPC achieved the COD of its project in March, 2003. The capital costs including IDC and FC of other similar contemporary projects are in the range of Rs. 4.51 Crores to Rs. 5.92 Crores per MW whereas the Capital Cost estimated by HNPCL is about 31% - 72% higher than the above figures.

**Reply of HNPCL:** The DISCOMS have agreed to pay the tariff as determined by the Commission based on the actual project cost including all applicable taxes and duties, etc. The comparison with other generators is untenable and is a complete departure from the earlier agreed and binding position in the MoA. Comparison of project cost with the capital cost of NTPC Simhadri stage-II project which is an expansion project cannot be compared to a greenfield project unless a detailed reconciliation of the common facilities is carried out. Such comparisons are futile and misleading. Every project has unique features in terms of location, technical specifications, land issues, water infrastructure, fuel transportation arrangement, taxes, duties, circumstantial elements, etc. Hence, comparison of one power project with other power projects especially that are not even contemporary in terms of construction timelines can be highly distortive. HNPCL's project is unique in terms of the unprecedented hurdles it faced during the construction phase.

**Q.** Having quoted a tariff of Rs.3.48 per kwh in the case-I bidding, there is no justification on the part of HNPCL to delay the completion of the project abnormally, inflate the capital cost and seek a much higher tariff under the MoU route.

**Reply of APDISCOMs:** APDISCOMs have contested the same in their counter affidavit dated 26.09.2015 in O.P.No. 21 of 2015.

**Reply of HNPCL:** Entire Capacity of HNPCL is encumbered to the State of Andhra Pradesh under the Amended and Restated PPA of 1998 as observed by APERC vide its Order dated 13.08.2013 in O.P.No.55 of 2013. Therefore, both parties have abided the Commission's Order.

**R.** If the GoAP accepts HNPCL's request to take back the unsuitable CRZ land of 500 acres and refunds the money, the same shall be reduced from the cost of the land.

**Reply of APDISCOMs:** According to the MoU dated 17.07.1992 and PPA dated 15.04.1998, the required land to the extent of 1122.38 acres belonging to the Wakf Board was already been handed over to HNPCL in the year 1999 itself.

**Reply of HNPCL:** HNPCL has already represented the matter to the GoAP.

**The following Additional Objections were received on 11.05.2022 & 05.07.2022 to which no replies have been furnished by the DISCOMs and HNPCL.**

**S.** Before determining the capital cost and tariff for the project, the Commission has to examine the need for power from the project to meet the demand at present and in the future. If it is required, then it is to be examined whether the tariff to be determined based on permissible capital cost determined by the Commission is competitive and protects the interest of the DISCOMs and their consumers.

**T.** The capital cost for the railway corridor, as and when it is incurred, will be claimed by HNPCL later, leading to a revision of the fixed charges upwards, if permitted by the Commission.

**U.** If mega power project status is not granted by the GoI, the applicable taxes, duties, etc. payable to a non-mega power project will result in the increase of the capital cost and consequently the annual fixed costs and per unit tariff. It is not within the purview of the Commission to decide or suggest granting mega power project status to the project as requested by HNPCL.

**V.** As per its submissions, HNPCL will claim substantial expenditure for installation of FGD later, necessitating upward revision of capital cost and fixed charges per unit.

**W.** The Commission is expected to protect larger consumer interest on the request of HNPCL to exercise the power to relax and inherent powers as well as power to remove difficulties in approving the O&M expenses based on CERC norms instead of the norms specified in APERC Regulation 1 of 2008.

**X.** The increase in the capital costs claimed by HNPCL from time to time confirms its inefficiency in the execution of the project and conditions of force majeure to the extent applicable cannot justify such an abnormal hike in IDC and FC. The claim of HNPCL that they have incurred the latest capital cost, that their auditors have certified the same and that the lenders' auditor also

assessed it does not provide the required clarifications and evidence for a prudence check.

**Y.** In view of the failure of HNPCL to provide the relevant information and clarifications required for prudence checks, appropriate decisions may be taken by the Commission to disallow impermissible expenditure as requested by the DISCOMs.

**Z.** The expenditure claimed to have been incurred by HNPCL before the date of MoU/Financial Closure should not be considered for the purpose of determining the permissible capital cost of the project. If applicable norms and regulations are to be applied to the period prior to the MoU/financial closure also, they should be applied in all respects accordingly.

**AA.** The benefit of Mega Power Project Status works out to Rs.414 Crores. The Commission has to emphatically make it clear to HNPCL that the benefits of Mega Power Status are deducted from the capital cost of the project and that, irrespective of whether the project gets the permanent Mega Power Status or not in the future, HNPCL shall not claim the said benefit from the DISCOMs because it is the responsibility of HNPCL to get the said status to the project.

**AB.** The Commission is requested to verify whether HNPCL has reduced from the capital cost of the project, the Rs.25.42 Crores it received from the insurance claims or the entire Rs.57 Crores spent for the new equipment installed in place of the damaged equipment. The implication is that the damage of Rs.102.62 Crores assessed by the Company is inflated. Further, if Rs.57 Crores was spent for the new equipment, what steps would it take to get the balance of Rs.26.58 Crores from the insurance company? Foregoing that amount means adding the same to the capital cost which should not be allowed by the Commission. It also needs to be examined whether HNPCL spent the balance of Rs.45.20 Crores for restoration works and included the same in its claimed capital cost and if so, it should be disallowed from the capital cost.

**AC.** The Commission is requested to examine whether the premium paid/being paid by HNPCL towards the advance loss of profit policy (ALOP) is being claimed from the DISCOMs under any head, and if so, to disallow the same.

**AD.** The Commission may determine permissible capital cost incurred before the SCOD operation and thereafter as per the applicable regulations, both for

capital expenditure and IDC. If the Commission considers the capital cost and tariff for the project to be prohibitively high and detrimental to the larger consumer interest, the PPA may not be consented. If the Commission decides to grant consent to the PPA, it may consider the amendments that were already suggested in the written objections filed earlier.

### **Commission's Analysis and decision**

58. As can be seen from the facts noted above, the hearings and litigation in O.P.Nos. 21 of 2015 and 19 of 2016 went on for more than 8 years with both the parties filing multiple IAs, affidavits, Memos, etc., in the OPs and even approaching the Hon'ble APTEL, the Hon'ble High Court of AP and the Hon'ble Supreme Court in these matters. Further, there have been a lot of changes in the Capital Cost and Tariff claims by HNPCL for the project over these years. With the passing of several years since HNPCL filed its first O.P for the determination of Capital Cost culminating in the order of the Hon'ble Supreme Court dated 02.02.2022, the scenario has changed drastically with the result that most of the earlier filings and many of the objections/suggestions/comments raised with reference to these O.Ps have become mere academic and lost their relevance.
59. Therefore, the Commission will carry on its analysis on the latest Capital Costs and tariffs filed by HNPCL in the affidavit dated 18.04.2022. In this process, the Commission will consider the submissions of the DISCOMs and the objectors to the extent they are relevant to the determination of the Capital Cost, tariff, grant of approval to the amended and restated PPA dated 15.04.1998 and the Continuation Agreement to the above PPA, with reference to the latest filings of HNPCL.
60. The Hon'ble Supreme Court at para 94 of its order dated 02.02.2020 in CA No. 1844 of 200 observed as follows:
- “while considering grant of approval to the PPA, the State Commission will have to keep in mind the public interest. It will have to consider, as to whether the PPA, which is subject to approval, sub serves the public interest. It will also be required to take into consideration, as to whether the terms agreed are fair and just while granting approval. While exercising power under Section 86(1)(b) of the Act of 2003, the Commission will have to regulate the price at which the electricity would be procured from the generating companies. Undoubtedly, while doing so, the Commission will be guided by the factors mentioned in Section 61 of the Act of 2003 and the Regulations concerning the same .....”*



61. During the hearings Sri M.G. Ramachandran, Learned Senior Counsel for HNPCL advanced the following submissions:

- A. HNPCL furnished all the statutory audited financial statements, cost over run reports prepared by the Lender's engineers, break-up of the project cost certified by the auditors, loan drawls and other details that are prescribed in the APERC Regulation 1 of 2008 certified by the auditors.
- B. The Hon'ble Supreme Court's judgement in West Bengal Electricity Commission Vs CESC Ltd (2002) 8 SCC 715 case dealt with the status of Auditor's report with regard to the cost incurred. However, he admitted that it is for the Commission to decide the appropriate capital cost.
- C. The PPAs approved shall be based on the requirement of power from FY 2012-13 onwards but not on the present power demand and supply.
- D. The norms specified in APERC Regulation 1 of 2008 in the determination of Capital cost and Tariffs for the project need to be adopted.
- E. The delay in the COD of the project is due to the delay in handing over of the lands required for sea water pipelines and rail corridor by the government agencies, delay in the execution of transmission line for power evacuation and the Hud-Hud cyclone and hence, IDC and FC deserve to be allowed upto the actual COD.
- F. DISCOMS have never objected to item wise expenditure of the project cost and the dispute between the DISCOMS and HNPCL are regarding the land and site development cost, spares, erection, pre-commissioning & overhead expenditure and IDC & FC for which detailed responses, certified by the auditors have been filed. Further, HNPCL is unable to furnish the invoices/vouchers/payment proofs to the contractors as requested by the DISCOMS due to their voluminous nature.

Opposing the above submissions Sri CV Mohan Reddy, Learned Senior Counsel assisted by Sri P. Siva Rao made the following submissions:

- A. That HNPCL has increased Capital Cost from Rs.4628 Cr. to 7558 Cr. from stage to stage which can not be allowed
- B. That the land and site development cost, spares, erection, pre-commissioning & overhead expenditure and IDC & FC are highly inflated and exaggerated.

- C. That the monthly progress reports sought by the DISCOMS have not been furnished by HNPCL which could have enabled the DISCOMS to compare the costs vis-a-vis the loan drawal schedules.
- D. The reasons stated by HNPCL for the delay in the COD of the project are wholly unacceptable.
- E. That the Capital Cost claimed by the HNPCL is more than the benchmark cost fixed by CERC after suitable escalation, which is not permissible.
- F. That the overhead expenditure of the projects shall be about 1.5 percent of the capital cost only as per the practice in APGENCO and thus about Rs.500 crores claim under this head is exaggerated.
- G. That the Commission may adopt the norms filed by the DISCOMS for computation of capital cost and tariff.
- H. That the recurring expenditure claimed by HNPCL due to the Hud-Hud cyclone and the veracity of insurance claims & its subsequent status are not substantiated through any credible material.
- I. That as 93.16 percent works were completed by November 2013, the time taken by HNPCL for completion of the balance works is not justified
- J. That HNPCL is entitled to an IDC amount of Rs.438 Crores only reckoned up to the scheduled COD and that the expenditure incurred by HNPCL is not prudent vis-a-vis CERC tariff regulations.

**Sri M. Venugopala Rao**, Learned objector submitted that having completed the 93.16 percent work by November 2016, the time taken for completion of the balance works is not substantiated and due to inordinate delay, there is increase in the capital expenditure & IDC and all such delays should not be permitted and IDC shall be limited to the period between the date of financial closure and the SCOD and requested the commission for prudent check of the expenditure.

62. Having regard to the respective stands of the parties and the objectors and the submissions made in their behalf, the following common points emerge for consideration in these O.Ps.

- A. Point No.1: Whether the amended and restated PPA dated 15.04.1998 and the Continuation Agreement to the above PPA deserve to be approved?
- B. Point No.2: If the answer to Point No.1 is in the affirmative, what should be the appropriate tariff? and
- C. Point No.3: Are any modifications necessary to the amended and restated PPA dated 15.04.1998 and the Continuation Agreement?

The Commission proposes to address these points in the following paragraphs.

**Point No.1**

63. The project was conceived as far back as the early 1990s and the original PPA was entered into in 1994 itself. Several years passed by since HNPCL filed its first O.P for the determination of Capital Cost culminating in to the passing of the judgement of the Hon'ble Supreme Court dated 02.02.2022. Certain observations of the Hon'ble Supreme court in the aforesaid judgement which are relevant to the present context are reproduced below:

*"Para 104*

*In the present case, though initially, HNPCL had revived its project in the year 2007 as a Merchant Power plant and offered 25% of electricity to the State, it was the State, which offered to purchase 100% power from HNPCL. HNPCL agreed for the said offer of the State Government. It is clear from the record and, particularly, the letter dated 26th December, 2012, that the State had given various facilities/concessions to HNPCL for execution of its power project. The documents on record would reveal that the State has also allotted thousands of acres of land for the project to HNPCL. It is not in dispute that in pursuance of the MoA of 2013 (dated 17th May, 2013) and the Continuation Agreement of 2016 (dated 28th April, 2016), the entire project has been erected and is operational. Not only this, but from the year 2016 till 14th July, 2020, the power has been purchased by the appellants – DISCOMS from HNPCL. It could thus be seen that after investment of huge resources including the land belonging to the State, the project is complete and has become operational. The question, at this juncture, would be, whether to discard such a project is in the public interest or against it. At the cost of repetition, it may be reiterated, that the determination of the capital cost of the project and the rate of tariff at which the power has to be purchased would always be subject to regulatory control of the State Commission.*

In para 105 of the judgement it is observed:

*The record would clearly reveal that from the year 2012 onwards till 4th January, 2018, it was the consistent stand of the State of Andhra Pradesh as well as the APDISCOMS that it would be purchasing 100% power generated from the project of HNPCL. Not only an application being O.P. No.21 of 2015 was filed by HNPCL for determination of capital cost, but also O.P. No.19 of 2016 was filed by the appellants – DISCOMS for grant of approval to the Continuation Agreement dated 28th April, 2016 with the Amended and Restated PPA of 1998.*

*The matters were heard finally on 15th May, 2017 and closed for orders. For some unknown reasons, exclusively within the knowledge of the appellants – DISCOMS, things turned topsy turvy between 15th May, 2017 and 4th January, 2018, on which date, the appellants – DISCOMS did a somersault and filed applications for withdrawal of O.P. No.19 of 2016 and disposal of O.P. No.21 of 2015. As already discussed hereinabove, every decision of the State is required to be guided by public interest and the power is to be exercised for public good. For reasons unknown, the appellants –DISCOMS took a decision to resile from their earlier stand, due to which, not only the huge investment made by HNPCL would go in waste, but also valuable resources of the public including thousands of acres of land would go in waste. As already discussed hereinabove, the reasons/grounds, which are sought to be given in I.A. No. 1 of 2018 in O.P. No.19 of 2016 and I.A. No.2 of 2018 in O.P. No.21 of 2015, filed on 4th January, 2018, were very much available between 2011 till 15th May, 2017. It is not as if something new has emerged between 15th May, 2017 and 4th January, 2018, which would have entitled the appellants – DISCOMS to resile from their earlier stand. We have no hesitation to hold that the appellants – DISCOMS could not be permitted to change the decision at their whims and fancies and, particularly, when it is adversarial to the public interest and public good.*

*Para 107*

*We have no hesitation to hold that I.A. No.1 of 2018 in O.P. No.19 of 2016 and I.A. No.2 of 2018 in O.P. No.21 of 2015 filed by the appellants – DISCOMS, are acts, which have been done wrongfully and wilfully without reasonable and probable cause. It may not necessarily be an act done out of ill feeling and spite. However, the act is one, affecting public interest and public good, without there being any rational or reasonable basis for the same.*

*Para 111*

*We ask a question to ourselves, as to whether public interest, which is so vociferously pressed into service in the present matter by the appellants – DISCOMS, lies in purchasing the power at the rate of Rs.3.82 per unit from HNPCL or by purchasing it at the rate of Rs.4.33 per unit from KSK Mahanadi. We strongly deprecate such a conduct of the appellants – DISCOMS, which are instrumentalities of the State. The appellants – DISCOMS, rather than acting in public interest, have acted contrary to public interest”.*

The project was already considered as a generation source in the Order on the Load Forecasts and Resource Plans issued by the Commission for the 4th and 5th Control Periods on 15.04.2019, and that Order has achieved finality. The capacity of the project has been under consideration before the Commission through a public consultation process. Moreover, in the backdrop of a substantial increase in solar and wind energy particularly the anticipated addition of 7000 MW solar capacity in phases starting from September 2024 to supply power exclusively to the agricultural consumers in the State; the country's march towards integrating more renewable sources in view of the COP21 commitments; the pledge of GoI in Intended Nationally Determined Contributions (INDCs) pursuant to COP21 deliberations to reduce its emissions intensity by 33 to 35% between 2005 and 2030 and to that effect its focus on accelerated use of clean and renewable energy by 40% by 2030 by achieving 450 GW renewable energy installed capacity by 2030; the recent commitments by the Hon'ble Prime Minister in COP26 that India will achieve net zero carbon emissions by 2070 and also keeping in view the likely retirement of the old APGENCO thermal stations in the near future and no permissions from the central government for establishing new thermal plants for the last few years, the need for additional base load generation from this project is very much essential to balance the intermittent generation from the solar and wind plants, safeguard the grid and maintain uninterrupted supply to the consumers.

Further, the year-wise indicative energy deficit for the State as a whole during the 5th Control Period as recorded in the Resource Plan for the 4th Control Period is as under:

<b>Year</b>	<b>Energy Availability in MUs</b>	<b>Demand in MUs</b>	<b>Deficit in MUs</b>
FY25	80,570	97,707	17,138 MU
FY26	80,521	106,247	25,726 MU
FY27	80,446	116,046	35,600 MU
FY28	80,439	127,141	46,702 MU
FY29	80,436	139,665	59,229 MU



Moreover, as per the Long Term Electricity Demand Forecasting done by CEA in August, 2019, the State of AP will be having the following requirement (as per the SUR Model Baseline) in MUs for the period 2024 to 2030:

<b>Year</b>	<b>Requirement in MUs</b>
2024	87,801
2025	93,825
2026	100,169
2027	106,836
2028	113,830
2029	121,156
2030	128,820

Both the above forecasts clearly depict a shortage scenario in the near future and a dire need for capacity addition particularly in the nature of base capacity.

For the aforesaid reasons, the Commission is of the view that it is in public interest that the DISCOMs of the State buy the power from HNPCL which will serve as a base load source besides meeting a part of the deficit in future.

**Point No.1 is accordingly answered.**

**Point No.2.**

64. Now the Commission would determine various costs that are required for payment of the annual fixed charges and energy charges per unit.

**Capital Cost**

- i. Subsequent to the Hon'ble Supreme Court judgement dated 02.02.2022, HNPCL, in the filing dated 18.04.2022 through an affidavit (latest filing on Capital Cost and tariff), claimed a Capital Cost (excluding IDC & FC) of Rs.3,723.14 Crores, Interest During Construction (IDC) of Rs.1,215.49 Crores & Financing Charges (FC) of Rs.31.37 Crores for Unit-I as of its COD on 11.01.2016 aggregating to Rs.4,970 Crores. Similarly, HNPCL claimed a Capital Cost (excluding IDC & FC) of Rs.2,058.74 Crores, IDC of Rs.676.86 Crores & FC of Rs.19.77 Crores for Unit-II as of its COD on 03.07.2016 aggregating to Rs.2,755.37 Crores. Further, HNPCL claimed a

Capital Expenditure of Rs.32.87 Crores incurred for both the units during FY 2017 towards Merry Go Round( MGR) including an IDC of Rs.3,181/-. Thus, the final Capital Cost for the entire project (2 x 520 MW) claimed by HNPCL is Rs.7,758.25 Crores including an IDC of Rs.1,892.35 Crores and FC of Rs.51.15 Crores which works out to Rs.7.46 per MW. Further, HNPCL has stated that there has been no additional capital expenditure incurred to date since 01.04.2017.

- ii. The DISCOMS and the objectors have strongly objected to the high Capital cost claim of HNPCL by comparing it to the Rs.5.33 Crores per MW cost initially projected by HNPCL based on the estimates of the Capital expenditure of Rs 5,545 Crores at the time of financial closure of the project in 2010. However, HNPCL contended that comparing the actual cost to the projected expenditure at the time of financial closure is untenable and it is appropriate to compare the actual project cost to the cost projected at the time of initial tariff application on 12.03.2014 which is at Rs.6,998 Crores or Rs.6.73 Crores/MW. The Commission is of the view that a comparison of actual capital cost claimed with that projected at the time of financial closure would be a proper guiding factor in determining the tariff subject to addition of allowable expenditure. As directed by the Commission, HNPCL has furnished a comparative statement of capital cost, item wise from the date of financial closure to the date on which HNPCL claimed final Capital Cost in its latest affidavit filed on 18.04.22. The Commission ignored the estimations made during the above intervening period as they serve little purpose since the Commission anyway will base its decision considering the final Capital Cost filed by HNPCL.

A brief comparison of the capital cost at the time of financial closure with the final claim, item wise is given below:

Sr. No	Item	Capital cost projected at the time of financial closure (29.06.2010) (Cr.)	Capital cost claim based on purported actuals (Cr.)	Difference (Actual - Estimation) (Cr.)
		(1)	(2)	(2)-(1)
1.0	Cost of Land & Site Development	110	130	20
2.0 (A)	Plant & Equipment			
2.1	Steam Generator Island	1,020	1,042	22
2.2	Turbine Generator Island	754	773	19
2.3(B)	BOP Mechanical	915	862	-53
2.4(C)	BOP Electrical	285	281	-4
2.5	C & I Package	127	127	0
D	Additional Miscellaneous Orders	20	30	10
E	Total Plant & Equipment excluding taxes & Duties (A+B+C+2.5+D)	3,122	3,116	-6
2.6(F)	Taxes and Duties	149	112	-37
	Total Plant & Equipment (E+F)	3,271	3,227	-43
3.0	Initial spares (Mandatory Spares)	0	101	101
4.0	Civil Works	1,258	1,287	30
5.0	Construction & Pre-Commissioning Expenses	413	563	150
6.0	Overheads	43	506	463
7.0	Capital cost excluding IDC & FC	5,094	5,814	720
7.1	Interest During Construction (IDC)	451	1,892	1,441
7.2	Financing Charges (FC)		51	51
8	Capital cost Including IDC & FC	5,545	7,757	2,213
9	Total cost in Crores	5,545	7,757	2,213

As can be seen from the above table, there is no increase in the costs of the total plant & equipment. On the contrary there is a slender reduction in the cost. The bulk of the increase in Capital Cost from Rs.5,545 Crores to Rs.7,757 Crores is attributable to the pre-commissioning expenses, overheads, and Interest During Construction (IDC) & Financing charges (FC).

- iii. In this regard, it may be relevant to refer to the following observation made by the Hon'ble Supreme Court at para 88 of its judgement dated 02.02.2022

*“the State Commission, while approving the cost of the project and determining the tariff at which the electricity would be purchased by the APDISCOMS from HNPCL, would be required to look into various factors as are stated in Section 61 of the Act of 2003, so also under the Regulations notified for that purpose. While doing so, the State Commission would be required to take into consideration the various aspects as well as submissions to be made by the appellants – DISCOMS and HNPCL. Merely because, the cost of the project is estimated by HNPCL at a particular amount, the State Commission is not bound to accept the same. The State Commission would only approve the cost as it would feel appropriate, as guided by the provisions under Section 61 of the Act of 2003 and the Regulations”.*

The Commission will now proceed, keeping in mind the provisions of Sec.61, the extant Regulations and the above observations of the Apex court to determine the Capital Cost in the following paragraphs.

- iv. The DISCOMS, based on the information submitted by HNPCL, have made an assessment of the actual capital cost. An item wise comparison of the DISCOMS' latest assessment of the capital expenditure vis-a-vis the projection at the time of financial closure and the actual claim made by HNPCL in the affidavit dated 18.04.22 is shown below:

Sl. No	Item	Financial Closure-29.06.2010 (Crores)	HNPCL-Latest Submission (18-04-2022)	DISCOMS'Latest Submission
1	Land & Site Development	110	129.8	88.0 <sup>#</sup>
2	Total Plant & Equipment	4329	3116.0	3116.0
3	Initial Spares	0	100.8	0.0
4	Taxes & Duties	149	111.8	111.8
5	Civil Works	162	1287.1	1287.1
6	Construction & Pre-Commissioning expenses	301	563.4	301.0
7	Overheads	43	505.9	43.0
8	<b>Total Hard Cost</b>	<b>5094.0</b>	<b>5814.8</b>	<b>4946.8</b>
9	<b>IDC &amp; FC</b>	<b>451</b>	<b>1943.5</b>	<b>438.0</b>
10	<b>Total Capital Cost</b>	<b>5545.0</b>	<b>7758.3</b>	<b>5384.8</b>
11	<b>Per MW Cost (Rs Crs)</b>	<b>5.33</b>	<b>7.46</b>	<b>5.18</b>

As can be seen from the above, the DISCOMS' assessment differs from the final capital cost filed by HNPCL in respect of items such as the land cost, pre-commissioning expenses, overhead and IDC & FC.

The contentions of the DISCOMS and the replies of HNPCL in brief on the said items are as follows:

**A. Land and Site Development cost:**

**DISCOMS's contention:** In the Affidavit dated 18.04.2022, HNPCL claimed the cost towards land and site development as Rs.129,75,67,297/-. The said claim is incorrect and exaggerated. The actual cost incurred by HNPCL towards land shall be at Rs.87.99 Crores only and it claimed extra costs towards Township, Taxes, Fencing, land relating to the transmission system, and 500 acres of land not utilised for the project.

**Reply of HNPCL:** Various land and site development costs have been entirely excluded by APDISCOMs though they were necessarily incurred towards Township, Taxes, fencing, and land related to transmission. Further, the DISCOMs have not fully considered the land and site development related to Seawater Intake, Rail Corridor, Davada-Rail, Project Land-1, and Project Land-2 as shown in the table below:

Category	Acres	HNPCL (As per Books of Accounts)(Rs)	APEPDCL (Amount Considered) (Rs.)	APEPDCL (Amount Not Considered) (Rs.)	Remark/ Usage
Township	Part of Project land -I	1,39,95,005		1,39,95,005	
Taxes	-	5,33,25,647		5,33,25,647	Conversion Charges
Sea Water	Ac 40.39 cents	4,13,06,488	8,59,61,401	(-)4,46,54,913	Erected seawater system
Rail Corridor	Ac 45.68 cents	13,35,64,91	7,53,12,921	5,82,51,992	Partial erected private line 4 kms outside the plant
Fencing	-	1,30,42,601		1,30,42,601	-
Commission	-	7,73,618		7,73,618	-
Devada-Rail	-	2,06,15,000	2,36,52,556	(-)30,37,556	-
Project Land 1	Ac 1122.38 Cents	52,06,94,616	47,55,46,333	4,51,48,283	Main Plant/ Township
Project Land 2	Ac 301.06 Cents	48,81,50,366	43,14,26,507	5,67,23,859	Ash pond disposal
Transmission		1,20,89,043		1,20,89,043	-
Total		1,29,75,57,297	1,09,18,99,718	20,56,57,579	



Further, with regard to the capital cost not fully considered for Items such as Rail Corridor, Project Land-1 and Project Land-2, they pertain to the Ac 500 of Wakf Land which have been acquired by HNPCL but fall under Coastal Regulation Zone (CRZ) (environmental aspect). The proportionate cost of the said land paid by HNPCL to the GoAP works out to Rs. 21.19 Crores (exclusive of the statutory charges paid). Hence, the difference between the claims of HNPCL and the amount considered by the DISCOMs on the above account is Rs. 41.80 Crores (Rs.20.57 Cr + Rs.21.19 Cr). Since all the costs have been incurred as a part of the project cost, HNPCL intends to establish facilities such as ash dykes, ash disposal systems, etc. in the 500 acres of land falling under the CRZ zone. However, due to the restrictions imposed by CRZ, HNPCL has not been able to utilise the said land till now. HNPCL is not undertaking any other activities on this land. It will be unjust and inequitable to exclude the capital expenditure related to the said 500 acres when HNPCL is not responsible for any failure or default in the matter of CRZ. Therefore, the contention of APDISCOMs to exclude the cost of the said land to the extent of Rs. 21.19 Crores (approx.) and other exclusions as mentioned in the table should be rejected.

**B. Cost towards Construction and Pre-Commissioning expenses:**

**DISCOMS' contention:** In the amended and restated Common Loan Agreement dated 25.03.2013, the total cost towards construction and pre-Commissioning expenses was estimated at Rs.301 Crores. Finally, HNPCL, in its Affidavit dated 18.04.2022, estimated the construction and pre-commissioning expenses at Rs.563.41 Crores, i.e. Rs.463.63 Crores towards erection, testing, and commissioning and Rs.99.78 towards start-up fuel and construction without assigning any reasons and without any documentary evidence. The said amount is highly exaggerated, unsubstantiated, and vague.

**Reply of HNPCL:** HNPCL has rightly claimed a sum of Rs. 563.4 Crores towards construction and pre-commissioning expenses. APDISCOMs have wrongly **restricted** the said admissible claim to Rs. 301.00 Crores, i.e. the value estimated at the time of the Financial Closure on 29.06.2010, without any justification. The said construction and pre-commissioning activities broadly comprise expenses towards erection, testing, and commissioning activities and expenses towards start-up fuel, etc.

The justification with regard to the claim towards construction and pre-commissioning expenses at Rs. 563.4 Crores, interalia, is the increase in the cost of start-up fuel and construction power cost amounting to Rs.102 Crores including the cost incurred due to the running of DG Sets on account of non-availability of the construction power in the initial stage and start-up power during the construction stage. The preliminary and preoperative expenses include road for coal transportation at Rs. 27 Crores, start-up fuel at Rs. 49 Crores, and start-up power at Rs. 27 crores, aggregating to Rs.100 Crores. The audited financial accounts for FY 2011 to 2018-19 have been placed on record **vide** reply dated 12.05.2022. The Construction, pre-commissioning expenses, and the expenses of start-up power are all duly incurred by HNPCL and audited & certified by the Auditor.

**C. Overheads costs**

**DISCOMS' contention:** In the Amended and Restated Common Loan Agreement dated 25.03.2013, the total cost towards Overheads/Contingency provisions was **estimated** at Rs.43 Crores. In the affidavit dated 18.04.2022, HNPCL estimated the overheads costs at Rs.505.93 Crores, i.e. Rs.498.30 Crores towards the establishment and Rs.7.63 Crores towards design and engineering without assigning any reasons and without any documentary evidence. The said amount is highly exaggerated, unsubstantiated, and also not certified by any statutory auditor. Further, HNPCL did not file any vouchers/invoices/proof in support of the said expenditure and the same is not reflected in the Annual Reports for Financial Year 2012-2013 and Final Accounts for Financial Year 2013-2014 filed along with the third Addendum or the Annual Report for Financial Year 2014-2015 filed along with the rejoinder to the counter dated 24.09.2013. The establishment cost as a part of project capital expenditure is admissible with effect from the date of financial closure only. The expenditure incurred towards establishment and overheads right from the formation of the company till the date of financial closure has to be treated as preliminary expenditure and required to be charged to the Profit/Loss account of the company to be amortised in the later years with appropriate adjustments. All these prior period expenditures need to be deleted from the establishment cost. As per the prevailing market practice, only 1.5% of the Capital Cost can be allowed towards Establishment Costs and Contingencies. The failure on part of HNPCL to contain the overhead costs within the limit specified cannot be loaded onto the Capital Cost burdening

the DISCOMs in the form of higher fixed costs. Further, as per the Continuation Agreement to the amended and restated PPA dated 15.04.1998, HNPCL was required to submit monthly progress reports to the DISCOMs which were never submitted to date. At no point of time during the execution of the project, HNPCL sought approval from the competent authority for the revised project implementation schedule. HNPCL acted unilaterally and is now claiming unsubstantiated and exaggerated amounts towards overhead costs.

**Reply of HNPCL:** The actual expenditure incurred by HNPCL in respect of the overheads costs is Rs. 505.9 crores as of the COD of the project. APDISCOMs are wrongly limiting the costs to a value of Rs. 43 Crores estimated on the date of the Financial Closure, i.e. 29.06.2010. The overhead expenses claimed by HNPCL comprise various components namely, expenses towards advisory services, salaries, insurance, bank charges, rental payouts, other administrative expenses, etc. There are 22 Items of Overhead expenses aggregating to Rs. 498.30 Crores that are related to the establishment and other costs of overheads involving 13 Items aggregating to Rs. 7.63 Crores. The aggregate of the above two is Rs. 505.93 Crores and they are certified by the Auditors. With regard to Monthly Progress Reports, HNPCL has always allowed APDISCOMs to have access to all the information of the project from time to time as and when they have sought the same. APDISCOMs did not specifically insist on furnishing the monthly progress reports and as such no such monthly progress reports were furnished. APDISCOMs are raising the issue of progress reports after the COD of the project.

**D. Furnishing copies of the invoices:**

**DISCOMS' contention:** APDISCOMs requested HNPCL to furnish copies of invoices/vouchers/**documents** relied upon by HNPCL to support and substantiate the figures/amounts claimed by it related to "Construction and Pre-Commissioners expenses" and "Overhead Costs"

**Reply of HNPCL:** It **would** not be practically possible to furnish all the invoices/ vouchers, etc. due to the voluminous nature of the data so requested. HNPCL has already furnished details of the project cost incurred in the form of a Chartered Accountant Certificate dated 10.05.2022.

**E. Delays, Interest During Construction (IDC):**

**DISCOMS' contention:** The total capital cost including IDC & FC claimed by HNPCL in its latest affidavit dated 18.04.2022 is at Rs.7,758.25 Crores

including IDC & FC at Rs.1943.50 Crores. The reasons cited by the HNPCL for the delay in the COD of the project are problems in land access/right of way for seawater system and railway siding, non-completion of transmission line for evacuation of power, and the Hud-Hud cyclone. In this regard, it is may be noted that HNPCL in its application dated 12.03.2014 in O.P.No.21 of 15 stated that as per the 6th Construction Monitoring Report (CMR) dated November 2013 of the Lenders Independent Engineer (LIE), it completed the execution of the project to the tune of 93.12%. Further, HNPCL stated in the said application that the cost incurred till 31.12.2013 was only Rs.4,800 Crores and that it requires 6 months to complete the balance 6.9% works to achieve the COD by 30.09.2014. That the said 6 months time is required for completing the works related to seawater system and railway siding, which would be undertaken after the lands are acquired and handed over by the Government. Even after handing over the lands required for the seawater system and railway siding on 12.09.2014 and 04.12.2014 respectively, HNPCL failed to complete the balance of 6.9% of the works until 03.07.2016,i.e. after 18 to 21 months. As regards the Sea Water Intake Outfall System, it was originally contemplated to use water from Yeleru reservoir and necessary permission from the GoAP was also accorded. APDISCOMs were never intimated about the change in the water intake system. The Sea Water System was completed by HNPCL four months after the SCOD. Water is the working medium in a Thermal Power Plant and the most critical input element for the functioning of the plant. Failure of HNPCL to identify this most critical element (Sea Water Intake System) and complete the same within the stipulated time led to the project getting delayed, thus causing huge commercial and financial loss to the firm. The delay caused in the construction of the Sea Water Intake System beyond the SCOD of the project, therefore, cannot be attributed to APDISCOMs. As regards the Railway Siding, it is not a critical element as per the project management and even without the completion of the same, the project is operating now without any hassles. Since the nature of this work is non-critical, a delay in its implementation would not hamper the project's progress. Hence, delay in implementing this element does not cause Cost & Time overrun and consequential abnormal IDC of the project. As regards the Transmission Line Construction, APTRANSCO was already informed at the time of MoA dated 17.05.2013 that the subject Transmission line cannot be commissioned before the SCOD of the project and no LDs can be levied which was accepted by HNPCL. For the

purpose of back charging, Start-up, testing & commissioning of the project, HNPCL at its cost, under the supervision of APTRANSCO, laid a short distance line from its plant to the nearest APTRANSCO substation located at Kalapaka and the first and second circuits of the said line was completed in February 2014 and May 2016 respectively. Delay in the construction of associated transmission systems cannot be a cause for the delay in implementation of the project and the same can not be attributed to APDISCOMs. As regards the Hud-Hud Cyclone, it occurred after the SCOD and therefore HNPCL cannot claim IDC & FC for any delay caused in the completion of the project due to the same.

In view of all the reasons mentioned above, APDISCOMs contend that IDC should be restricted to the period between the date of financial closure and Scheduled CoD as there are no uncontrollable factors contributing to the delay in the execution of the project beyond the SCOD. Even as per Article 11.1(2)(c)(ii) of the PPA, any delay on the part of HNPCL or its contractors in fulfilling their obligations does not constitute a force majeure.

**Reply of HNPCL:** APDISCOMs are wrong in limiting the IDC and FC to Rs. 438 Crores or Rs. 451 Crores which was the estimated value at the time of the financial closure on 29.06.2010. The said estimation was on adhoc basis and does not reflect the actual cost that might have been incurred based on the phasing of the Investments, the terms, and conditions on which the loans are sanctioned, the time overrun, the cost overrun, the implications of the force majeure events such as Hud-Hud cyclone and the variation in FERV, etc. That HNPCL furnished the Certificate of the Chartered Accountant on the project cost incurred and specifically the quarterly Loan Drawl, the Interest Cost, and Equity infusion from June 2010 to March 2017 in the reply dated 12.05.2022. The IDC for the entire period aggregating to Rs.1,892 Crores and FC aggregating to Rs. 51.14 Crores form part of the certification done by the Auditor.

Further, HNPCL stated that the IDC and FC are with reference to the servicing of the debt borrowed during the period till the COD, which in the present case are 11.01.2016 for Unit-1 and 03.07.2016 for both the units, i.e. for the entire power project. HNPCL claimed IDC and FC only in respect of the above and on the admissible project cost and further based on the interest rate and charges actually claimed by the lenders and not any other amount.



Further, the point raised by APDISCOMs regarding the completion of 93.12% of the project as per the sixth Construction Monitoring Report (CMR) November 2013 refers to the overall project progress. The assumption of completion of the project by 30.09.2014 is subject to the handing over of the land required for seawater intake outfall system and Railway siding by the GOAP/the District Administration Visakhapatnam at the earliest and the feasibility of transportation of coal by road as the Railway line connectivity may not have been ready in time. In addition to the Hud-Hud cyclone, the other reasons/circumstances affecting the implementation of the project included the delay in the land acquisition and the laying of the transmission line by APTRANSCO to supply the commissioning power.

In terms of the provisions of the amended and restated PPA dated 15.04.1998 read with the Continuation Agreement dated 28.04.2016, APTRANSCO has to establish the transmission line connectivity at least 180 days before the SCOD of the Power Project to enable drawal of Start-up & Commissioning Power, etc., and for evacuation of the generated power after the COD. Due to the delay on the part of APTRANSCO to provide the connectivity to the transmission system, HNPCL constructed an alternative transmission system from the plant location at Palavalasa village to Kalpaka Substation by incurring a capital cost of Rs. 67.46 Crores to get the start-up and commissioning power and to enable the evacuation of the power after the declaration of Commercial Operation. The alternative transmission was commissioned on 02.07.2014 (line #1) and 02.05.2016 (line#2). The said cost incurred was an additional project cost that could have been avoided if the transmission system had been completed by APTRANSCO in time.

Based on the facts and circumstances mentioned above, HNPCL is claiming the capital cost including IDC and FC related to the establishment of the above transmission system as a part of the project cost. HNPCL has not claimed any damages or compensation for the loss on account of the transmission system delayed by APTRANSCO. Therefore, HNPCL is entitled for servicing the capital cost incurred by it in accordance with the accepted principles of capital cost based tariff.

#### **F. Loan Drawdown schedule**

**DISCOMS' contention:** HNPCL submitted a Loan Drawdown schedule spanning 28 Quarters, even though as per the norms, the scheduled timelines for the completion of the first unit is 44 months from the zero date (Financial

Closure) and for the second unit and the project completion, the timelines are 50 months from the zero date. Accordingly, IDC should be allowed for only 17 Quarters(the 17th quarter covering only two months)

**Reply of HNPCL:** The loan drawdown/equity infusion schedule is for the period from **the** beginning of construction till the COD of the project. Therefore, the details mentioned for the 28 quarters are appropriate and provide complete information with respect to the loan drawdown, consequent interest thereon, and the equity infused during the said period. The submission of APDISCOMs that the loan drawdown/equity infusion schedule is to be limited up to the SCOD is wrong and denied.

**G. Details related to No Lien Bank Account**

**DISCOMS' contention:** HNPCL has to furnish the details relating to the "No Lien Bank Account" with the Bankers along with the entire bank statement reflecting **the** receipt of the project expenditure and the manner in which it was expended.

**Reply of HNPCL:** HNPCL opened an "Escrow account (Construction Fund Account)" with the lead bank, the State Bank of India. During the project construction period, all the funds received from the lenders were routed through the Construction Fund Account which is the only account being maintained with the State Bank of India. All the project lenders transferred their individual shares into this account only for further spending on the project.

**H. Manner of financing the project**

**DISCOMS' contention:** APDISCOMs requested HNPCL to furnish the details relating to the manner in which it initially proposed to finance the entire project and details relating to the cost overrun incurred by it in relation to the project and the manner in which it proposed to finance the cost overrun along with necessary documentary proof. Furnish the aforesaid details with necessary breakups and clarify whether the said transactions are reflected in the No Lien Bank Account(s).

**Reply of HNPCL:** The details of the original project cost, debt and equity, and the revised project cost are as hereunder

Project Cost (Cr)	5,545	8,580
Debt (Cr)	4,159	5,985
Equity (Cr)	1,386	2,595

A copy of the sanction letter dated 01.04.2017 issued by the State Bank of India, approving the estimated revised project cost at Rs.8,580 Crores, detailing the debt and equity component is attached. All the transactions have been routed through the Construction Fund Account post availment of the Rupee Term Loan from the long-term lenders.

#### **I. Debt: Equity Ratio**

**DISCOMS' contention:** HNPCL has claimed IDC for 28 months as per the latest filings based on the COD dates and cut-off dates as per the Regulation. Further, a total loan of Rs 6,457.44 Crores appears to have been drawn as per the Statement furnished by HNPCL. An amount of Rs. 2,486.57 Crores has been shown as the aggregate of the quarterly IDC. But, based on the 70:30 Debt: Equity Ratio for the claimed Capital Cost of Rs 7,758 Crores, the portion of debt should be Rs 5,430.6 Crores including IDC. Equity & Debt are supposed to be infused in the prescribed ratio in each quarter for the purpose of meeting the Capital expenditure. Drawdown of only loans during early/middle quarters of project implementation would increase the IDC. From the loan drawdown schedule furnished by HNPCL, it is observed that the loan drawal/equity infusion is not commensurate with the project capital cost incurred, as noted from the Affidavit dated 18.04.2022 submitted by HNPCL.

**Reply of HNPCL:** In the schedule of loan drawdown, there are references to certain additional amounts, which have no effect on the final computation of the amount claimed, even after ignoring such additional amounts. HNPCL has revised FORM-15 after excluding the above additional references. It can be seen that the actual amount of debt is Rs. 5,335 Crores, which is within the amount of Rs. 5,430 Crores. The debt-equity was infused in line with the borrowings and maintained appropriately except for a few initial quarters. The revised working on loan drawal duly certified by a Chartered Accountant is attached.

**J. Overall capital cost:**

**DISCOMS' contention:** The capital cost excluding IDC & FC claimed by HNPCL is contrary to the Benchmark Capital Cost (Hard cost) for Thermal Power Stations with Coal as Fuel determined by CERC in its order dated 04.06.2012. APDISCOMs in their Counter Affidavit computed the Benchmark Capital Cost for the project at Rs.4.8 Crores per MW as per the said order after duly taking into consideration the escalation rates at 3.44% and the Hard cost fixed for similar projects up to June 2013. The capital costs approved by CERC for comparable power plants are much lower than what has been filed by HNPCL. Therefore, the capital cost excluding IDC & FC claimed by HNPCL at the rate of Rs.5.59 Crores per MW in its Affidavit dated 18.04.2022 is highly exaggerated, incorrect, and impermissible. If IDC and FC are included, the per MW capital cost works out to Rs.7.46 Crores.

**Reply of HNPCL:** HNPCL submitted detailed responses to the comparison of the capital cost of the project with the CERC benchmark cost in its rejoinder dated 08.10.2015. The revised capital costs(Hard cost) as submitted on 28.07.2015 plus mandatory & optional packages including the operative expenses at Rs.5.484 per MW are more competitive than the CERC Benchmark cost of Rs. 5.59 Crores/MW after suitable escalations are applied. Each power project is unique in its nature because of certain locational, socio-political, technical, commercial, and circumstantial features that play a significant role in its costing.

**K. Furnishing of fixed cost per unit**

**DISCOMS' contention:** APDISCOMs requested HNPCL to furnish the details relating to the indicated per unit fixed cost in the Case-1 Bidding participated by HNPCL in relation to the project capacity offered to APDISCOMs in the Case-1 Bidding conducted during October 2010 as per the Ministry of Power Guidelines.

**Reply of HNPCL:** HNPCL offered the tariff in the above Case-I bidding for a restricted capacity of 55.8% (580 MW) and it was entitled to establish the project based on the PPA with the DISCOMs for such restricted capacity and offer the balance capacity to others on completion as merchant plant. During that period, there was a good possibility of the balance capacity being sold at a significantly higher price. The indicative levelized fixed charge was Rs. 1.652 per unit according to the cost firmed up till the year 2010 and it is subject to

various changes including on account of force majeure events such as cyclone Hud-Hud and Change in Law provisions. The above aspects have been specifically and repeatedly raised by APDISCOMs before the APTEL in Appeal No. 41 of 2018 and before the Hon'ble Supreme Court in Civil Appeal No. 1844 of 2020, and the claims of the DISCOMs in this regard were rejected. It is therefore not valid or legal for APDISCOMs to raise such issues based on the case-I competitive bidding at this stage, i.e. after the proposal of the DISCOMs was specifically rejected by the GoAP and it is not permissible to approbate and reprobate.

**L. Insurance claims & ALOP on account of Hud-Hud:**

**DISCOMS' contention:** HNPCL claimed the damage assessed on account of Hud-Hud at Rs.102.62 Crores and the Insurance Company settled the claim for Rs.25.42 Crores. But, HNPCL did not take any steps to claim additional insurance amount if the damage caused was really to the tune of Rs.102.62 Crores, more particularly when the policy coverage is for Rs. 420 Crores. As regards the loss due to the delay in the completion of the project, HNPCL received Rs.129.7 Crores. Therefore, HNPCL cannot claim IDC&FC for the said period since it received compensation for the delay in the commencement of the project. It is also not clear whether the amount of Rs.129.71 Crores was disbursed up to the period of the initial ALOP Policy, i.e. 31.12.2013, or till the COD. There is no clarity in this regard. Even as per Article 11.2 (e) of the PPA, insurance amounts received by HNPCL for force majeure events should be adjusted against payments made by APDISCOMs. Therefore, insurance amounts received by HNPCL should be excluded from the capital cost of the project.

**Reply of HNPCL:** HNPCL took insurance for plant and machinery and also towards the loss of profit. The insurance with regard to the damage to the seawater pipeline was claimed by HNPCL from United India Insurance Company Ltd. The insurance claim was assessed at Rs.25.42 Crores by the Insurance company, as against the material damage loss assessed by HNPCL at Rs. 102.62 Crores. HNPCL has decapitalized the expenditure incurred on the damaged system and the decapitalized project cost is not part of the aggregate project cost of Rs.7,758.30 Crores for which the tariff is being claimed. Further, the expenditure incurred on the new equipment which was installed in place of the damaged equipment was limited to Rs. 57 Crores approx. and the same has been further reduced by the amount of the



insurance claim received by HNPCL for the damaged equipment. That the other insurance taken by HNPCL relates to the Advance Loss of Profit Policy (ALOP). An amount of Rs.129.71 Crores was received from the Insurance company against the ALOP. HNPCL is proposing to claim a further amount for the loss of profit based on the final capital cost to be determined by the Commission. The said claim is independent of the capital cost determination for the purposes of the tariff admissible to HNPCL under OP No. 21 of 2015.

**M. Cost of Infirm Power:**

**DISCOMS Contention:** HNPCL admitted in the first and the second Addenda that revenue received by HNPCL from the sale of infirm power has not been considered while computing the capital cost. But the details of the said revenue have not been disclosed by HNPCL in its Affidavit dated 18.04.2022. The said revenue needs to be excluded from the total capital cost excluding IDC & FC.

**Reply of HNPCL:** It has accounted for Rs. 113 Crores for both Unit-I(Rs.15 Crores) and Unit-2 (98 Crores).

**Commission's decision on the capital cost:**

- v. Para 8(t) of the amended and restated PPA dated 15.04.1998 states that HNPCL shall submit the half-yearly reports certified by the company's independent auditors to APDISCOMs and the authority about the Capital Cost actually incurred in completing the project, as determined in accordance with the generally accepted accounting principles in India.
- vi. Clause 10.8 of APERC Regulation 1 of 2008 specifies that, subject to prudence checks by the Commission based on information filed by the generating company, licensees, evidence from other Commissions, generating companies, licensees, and international experience, etc, the Commission shall determine the Capital Cost of the project.
- vii. The Commission has examined the capital cost per MW approved by CERC for the projects that were commissioned around the same time as that of the project at hand.

SL No	NAME of the Plant	COD YEAR	Capacity in MW	Total Capital Cost approved as per CERC order	Capital Cost per/MW	References
1	Mauda STPS Stage I	Unit-I(13.03.2013), Unit-II (30.03.2014)	1000	5533	5.53	Petition No 69/GT/2013 Dt 21.09.2015
2	NTECL Vallur	Unit-I(29.11.2012), Unit-II (25.08.2013), Unit-III (26.02.2015)	1500	7905	5.27	Petition No 277/GT/2014 Dt 11.07.2017

From the above table, it is seen that the Capital Cost claimed by HNPCL at Rs.7.46 crores per MW is far higher than the Capital Costs approved by CERC for similarly placed projects commissioned around the same period as that of HNPCL's project. Allowing the Capital Cost as claimed by HNPCL will impose a heavy financial burden on the DISCOMs and ultimately on the consumers of the State.

- viii. In support of its Capital Cost claims, HNPCL primarily relied on the audited financial statements and cost overrun reports furnished by the lenders' engineers from time to time. It has also referred to the following observation in the Hon'ble Supreme Court's judgement in West Bengal Electricity Commission Vs CESC Ltd (2002) 8 SCC 715 case which dealt with the status of Auditor's report with regard to the cost incurred.

*"96. The High Court further came to the conclusion that in view of the fact that there is no challenge to the accounts of the Company by the consumers, the said accounts of the Company should be accepted by the Commission. Here again we are not in complete agreement with the High Court. There may be any number of instances where an account may be genuine and may not be questioned, yet the same may not reflect good performance of the Company or may not be in the interest of the consumers. Therefore, there is an obligation on the Commission to examine the accounts of the Company, which may be genuine and unchallenged on that count still in the light of the above requirement of Sections 29(2)(g) to (h). In the said view of the matter admitting that there is no challenge to the genuineness of the accounts, we think on this score also the accounts of the Company are not ipso facto binding on the Commission. However, we hasten to add that the*

*Commission is bound to give due weightage to such accounts and should not differ from the same unless for good reasons permissible in the 1998 Act.”*

- ix. Sri M.G. Ramachandran, the Learned Senior Counsel for the HNPCL, while relying on the above observations of the Hon'ble Supreme Court, admitted at the same time that audited accounts only constitute a basis to certify the expenditure incurred but it is for the Commission to decide the legitimacy, genuineness & appropriateness of the expenditure incurred to finally arrive at the total capital cost. The Hon'ble Supreme Court also observed at para 92 of its judgement dated 02.02.22 in HNPCL's case that the Commission shall decide the capital cost 'appropriately'. Therefore, the expenditure certified by the Auditors alone can not form the basis for the determination of the Capital cost of the project.
- x. HNPCL awarded firm contracts worth Rs.5,052 Crores to about 198 firms out of which approximately Rs.4,500 Crores worth of contracts have been awarded to seven firms only and the remaining 500 Crores worth contracts have been split among the balance firms. A significant increase in the construction, pre-commissioning, and overheads expenses (which form part of the hard costs) compared to the estimates at the time of financial closure is observed which the DISCOMS have disputed vehemently.
- xi. HNPCL stated that it is not in a position to furnish all the invoices, contracts and proofs of payments to various firms for verification of the veracity of the expenditure because of their voluminous nature in spite of the DISCOMS' requests.
- xii. HNPCL admitted the fact that it has not submitted the periodical reports on the progress of the project to the DISCOMS though the same is envisaged in the amended and restated PPA and the MOA signed with the DISCOMS. On specific queries by the Commission during the hearings on contemporaneous correspondence made with the DISCOMS by HNPCL from time to time on the progress and escalation of the project cost, the Learned Senior Counsel for HNPCL stated that the latter has not corresponded with the DISCOMS on the same. As a result, DISCOMS were denied the opportunity to verify the veracity of the expenditure incurred during the relevant period.

- xiii. 'Prudence Check' as defined in CERC tariff regulations means scrutiny of the reasonableness of capital expenditure incurred or proposed to be incurred, financing plan, use of efficient technology, cost and time overrun, and such other factors as may be considered appropriate by the Commission for determination of tariff. While carrying out the Prudence Check, the Commission shall look into whether the generating company or transmission licensee has been careful in its judgments and decisions for executing the project or has been careful and vigilant in executing the project.
- xiv. Keeping in view the above points and specifically in the absence of correspondence by HNPCL from time to time on the progress of the project and cost escalation during its execution and also the absence of breakup of the benchmark hard cost item wise for similar projects in the CERC order dated 04.06.2012, the commission is of the view that prudence check of the project cost item wise is not possible .
- xv. The DISCOMS have estimated the capital cost based on the norms for benchmark hard cost specified by CERC in its order dated 04.06.2012 and contested the hard cost claimed by the HNPCL as the same is found to be very high. HNPCL in its counter stated that its expenditure is well within the benchmark cost specified by CERC. Therefore, in principle, both the parties based their stands on the CERC fixed benchmark cost, the objections being in respect of the escalation factors and other optional packages that are not part of the benchmark cost.
- xvi. Therefore, the Commission decides to adopt the Benchmark hard cost of Rs.4.71 Crores/MW determined by CERC in its order dated 04.06.2012 for greenfield coal based thermal plants having two units of 500 MW capacity each, as a reference in arriving at the hard cost of the project. The Commission adopted a similar approach in the determination of the hard cost in the case of new APGENCO projects. With the above CERC Benchmark hard cost as a reference, the Commission has arrived at the hard cost of the project to be permitted for the project as described in the following paragraphs.

### **Hard cost**

- xvii. The investment approval/financial closure date of the project is 29.06.2010 which is the zero date. The scheduled COD (SCOD) of the project as per the application dated 12.03.2014 filed by HNPCL for the determination of the Capital Cost of the project is 30.09.2014. However, HNPCL achieved the COD of the project on 03.07.2016 after a delay of nearly two and half years beyond the SCOD. The acceptability or otherwise of the reasons for the delay will be discussed in the subsequent paras while determining IDC &FC. In the continuation agreement dated 28.04.2016 , HNPCL agreed to the following COD targets.
- A. With respect to the First Generating Unit, the date falls no later than 44 months from the date of financial Closing; and
- B. With respect to the Second Generating Unit, the date falls no later than 50 Months from the date of Financial Closing.
- xviii. Accordingly, the project should have achieved its COD by 28.08.2014. The Benchmark costs for coal based thermal projects as of December 2011 are specified in the order of CERC dated 04.06.2012 which are understood to be for the projects commissioned in FY 2011-12. The financial closure of the project is on 29.06.2010 in FY 2010-11. As per the information available on record, HNPCL has awarded firm contracts worth Rs.5,052 Crores out of the total projected hard cost of Rs.5094 Crores as of the date of financial closure. Out of the said total firm contracts, Rs.4,440.87 Crores worth of contracts have been executed by the end of FY 2011-12. Therefore, the escalation factor needs to be applied to the balance portion of the hard cost only while arriving at the benchmark cost to be considered for the projects to be commissioned in FY2015-16. The reason for applying the escalation factors is to account for inflation during the period under consideration. Inflation factors have been applied only on a part of benchmark cost corresponding to the ratio of firm contracts in the total hard cost at the time of financial closure as detailed in the table below to arrive at the benchmark hard cost in FY 2014-15 which is the SCOD year of the HNPCL.



<b>Hard cost computations of APERC , HNPCL's project (1040 MW)</b>			
<b>Sl.no</b>	<b>Description of item</b>	<b>Crores</b>	
1	Firm Contracts upto 2011-12	4440.87	
2	Hard Cost as per HNPCL's financial closure	5094	
3	Taxes as per HNPCL's as per financial closure	149	
4	Net Hard Cost as per HNPCL [(2)-(3)]	4945	
5	% of Firm Contracts in the total estimated capital cost [(1)*100/(4)]	89.81	
6	CERC Benchmark Rate per MW as on Dec 2011	4.71	
7	Firm value in benchmark cost [(6)*(5)%]	4.23	
8	Remaining Value in benchmark cost to be considered for escalation [(6)-(7)]	0.48	
9	Escalation rate for FY2012-13	5.00%	0.50
10	Escalation rate for FY2013-14	5.00%	0.53
11	Escalation rate for FY2014-15	5.00%	0.56
12	Benchmark Cost per MW[ (7) + (11), i.e 0.56] ] applicable for FY2014-15	4.79	
13	Hard Cost for 1040 MW based on benchmark cost (12)*1040, for FY2014-15	4977.11	
14	Actual taxes & duties, statutory charges paid by HNPCL	111.77	
15	Hard Cost arrived at by the APERC including Taxes & Duties as per benchmark cost for FY 2014-15 [(13)+(14)]	<b>5088.88</b>	
16	Cost of infirm power received by HNPCL	<b>113.10</b>	
17	Net Hard Cost arrived at by APERC (15)-(16)	<b>4975.78</b>	

Having arrived at the hard cost of Rs.4,975.78 Crores as against the claim of Rs.5,814.80 Crores by HNPCL, the Commission would now examine the IDC & FC to be allowed on the hard cost in the following paragraphs.

#### **Interest During Construction (IDC) & Financing Charges (FC).**

- xix. HNPCL claimed IDC & FC charges of Rs.1,892.35 Crores and 51.15 Crores respectively up to 31.03.2017. As per the information placed on record, the loan and equity infusion into the project as of 31.03.2017 is as follows:

All figures are in crores	
Loan	5335.04
IDC	1892.35
FC	51.14
Equity	2302.27
Loan plus equity	7637.31
Debt Equity ratio	69.9/30.1

- xx. The loan and equity infused into the project up to the SCOD mentioned in the amended and restated PPA is as follows

All figures are in crores	
Loan	4140.37
IDC	967.56
FC	40.27
Equity	1672.7
Loan plus equity	5767.65
Debt Equity ratio	71.79/28.21

As can be seen from the above tables, the IDC & FC have increased from Rs.967.56 Crores to 1892.35 Crores and Rs.40.27 Crores to Rs.51.14 Crores respectively from the SCOD mentioned in the amended and restated PPA to 31.03.2017.

- xxi. Now the question before the Commission is whether to allow IDC&FC during the delay period and if so, up to what extent, and also if not allowed, what should be the IDC & FC to be permitted against the IDC & FC incurred up to the COD by HNPCL.
- xxii. For taking a decision on the same, the Commission examined the following reasons furnished by HNPCL for the delay in the execution of the project:
- A. delays in the handing over of the lands for seawater intake and railway siding by the district administration
  - B. Delay in the construction of the intended power transmission system by APTRANSCO.
  - C. Non-grant of permission from Rashtriya Ispat Nigam Limited (RINL) for the usage of their road for coal transportation
  - D. Hud-Hud cyclone
  - E. HNPCL's reliance on APTEL's judgement dated 27.04.2011 in Appeal No.72 of 2010 on the IDC & FC to be allowed after SCOD.

APERC Regulation 1 of 2018 is silent on the factors to be considered for permitting delay in the CODs of thermal units from the zero date. Therefore, the Commission is inclined to examine these reasons with reference to the relevant CERC Tariff Regulations in terms of Sec.61(a) of the Electricity Act and Clause 10 of APERC Regulation 1 of 2008 which enable the Commission to be guided by the principles and methodologies specified in the CERC Tariff Regulations while fixing tariffs.

As per proviso 2 to Regulation 1 of CERC Tariff Regulations, 2019, CERC Tariff Regulations, 2014 are applicable to the project or a part thereof declared under commercial operation after the commencement of the 2014 regulations and whose tariff has not been finally determined by the Commission till that date. Admittedly, the commercial operation of the project under consideration has been declared in the year 2016 and its tariff has not been finally determined. Therefore, the project satisfies the twin criteria viz; the declaration of the unit under commercial operation after the commencement of 2014 Regulations and non-fixation of tariff therefore, for application of the 2014 Regulations. Regulation 12 of CERC Tariff Regulations, 2014 deals with the controllable and uncontrollable factors in the matter of cost escalation impacting contract prices, IDC, and IEDC of the project. Under proviso 1 of the said Regulation, land acquisition issues and delay in the execution of the project on account of the contractor, supplier, or agency of the generating company or transmission licensee are included as controllable factors. Further, Regulation 11 of CERC Tariff Regulations, 2014 deals with IDC and IEDC. It provides that in case of delay in achieving SCOD, the generating company shall be required to furnish detailed justification with supporting documents for such delay including prudent phasing of funds. It further provides that on such an examination, if the delay is found not attributable to the generating company and if the same is due to uncontrollable factors as specified in Regulation 12, IDC may be allowed after a due prudence check. It is therefore clear from these regulations that a prudence check of reasons for the delay is envisaged by the regulations, only in respect of uncontrollable factors, and that no such prudence check is required to be undertaken with regard to the controllable factors, meaning thereby, cost escalation is not allowable on controllable factors.

With regard to reasons (A), (B), and (C) put forth by HNPCL, all the reasons furnished by HNPCL fall within the ambit of controllable factors and therefore HNPCL is not entitled to claim IDC&FC during the delay period. It is also pertinent to note that the alternate transmission system was ready for evacuation and to demonstrate COD test as per the DISCOMS and HNPCL's submissions before the scheduled date of COD and hence the contention raised in this regard can not be attributed to the Delay caused by the DISCOMs.

- xxiii. As regards the reliance placed on the APTEL's judgement dated 27.04.2011 in Appeal No. 72 of 2010 in the matter of Maharashtra State Power Generation Co. Ltd Vs Maharashtra Electricity Regulatory Commission, a perusal of the same shows that APTEL has considered the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2009, which were in force at that time and observed that the CERC has not laid down any benchmark norms for prudence check and that its Regulations only indicate the area of prudence check including cost overrun and time overrun. The APTEL found fault with the Maharashtra State Commission for not examining the reasons for the delay in commissioning the project and attributed the entire time overrun related cost with respect to the contractual schedule agreed with BHEL to the Generating Company and that this was not a prudence check. In the absence of specific regulations, the APTEL has undertaken a prudence check of time overrun related costs. A comparison of the CERC Tariff Regulations, 2009 with that of its 2014 Regulations, which replaced the former Regulations, shows that the CERC has dispensed with the concept of prudence check as envisaged in its 2009 Tariff Regulations in respect of the controllable factors and confined the same to the uncontrollable factors for considering the inclusion of IDC and IEDC for delays in the tariff. Therefore, in the Commission's view, the APTEL's judgement in Appeal No. 72 of 2010 has no application as the present exercise is undertaken in terms of CERC Tariff Regulations, 2014 in the matter of IDC which, as aforesaid, has done away with the concept of prudence check in respect of the controllable factors.
- xxiv. The reason 'D' advanced by HNPCL is the Hud-Hud cyclone. which occurred after the SCOD. As noted supra, while SCOD was 30-09-2014, HUD-HUD cyclone occurred later. As HNPCL is solely responsible for not achieving SCOD, the alleged losses on account of such cyclone, though an uncontrollable factor, can not be fastened on the end consumers.
- xxv. In the light of the above analysis, the Commission is not inclined to allow IDC & FC beyond SCOD. Consequently the Commission has to examine the permissible extent of IDC & FC upto SCOD.
- Concededly, the progress and cost overrun reports have not been furnished to the DISCOMS from time to time during the execution of the project. As seen from the information placed on record, the quarter wise

equity injected by HNPCL into the project was not in accordance with the ratio prescribed by Regulation 1 of 2008. In fact, as per its own admission, HNPCL has not infused any equity during certain initial quarters. Therefore, computing IDC on loan amount proportionately each year is not justified. Hence, the Commission finds it appropriate to compute the IDC proportionate to their spending based on the financial statements at the weighted average rates of loans furnished by HNPCL for the respective years. Accordingly, the IDCs computed year wise up to the SCOD on 70 percent of loan part in Hard cost as determined in this order supra, are shown below.

Year	No of Months in year	Loan Amt	Cum Loan Amt	Op Loan Balance	Loan Taken during the year	Closing Balance	Avg Balance	Rate of Interest	Interest Amount
2010-11	9	487.42	487.42	0.00	487.42	487.42	243.71	0.0833	15.23
2011-12	12	540.88	1028.31	487.42	540.88	1028.31	757.86	0.1083	82.08
2012-13	12	1288.09	2316.40	1028.31	1288.09	2316.40	1672.35	0.1115	186.47
2013-14	12	815.80	3132.20	2316.40	815.80	3132.20	2724.30	0.1285	350.07
2014-15	5	350.85	3483.05	3132.20	350.85	3483.05	3307.62	0.1300	179.16
Total	50	3483.05			3483.05				813.00

**Finance charges:** Based on the percentage of finance charges claimed by HNPCL on the total IDC of Rs. 1,892 crores, the proportionate financing charges on the IDC amount of Rs.813 crores work out to Rs.21.97 Cr.

On the analysis as above, the details of total capital cost computed by the Commission for the project are shown below:

Sl.No	Item	Crores
1	Hard cost including taxes & duties	4975.78
2	IDC	813
3	FC	21.97
4	Total Capital Cost	5810.75
5	Per MW cost	5.59

- xxvi. Accordingly, the Commission approves the capital cost for the project at Rs.5,810.75 Crores as determined in the above manner against the capital cost of Rs.7,758 crores claimed by HNPCL. The Capital Cost approved by the Commission is comparable to the similarly placed projects.



65. Having determined the Capital Cost in the above manner, the Commission now proposes to compute the different components of the tariff in the following paragraphs:

**Tariff payable by APDISCOMS to HNPCL from the actual COD of the unit-1 till 31.07.22**

66. Ordinarily any tariff approved by the Commission shall date back from the commencement of PPA. However, the case on hand has undergone a checkered career. There was an air of acute uncertainty as to whether the PPA between the parties will come through. The DISCOMS have even gone to the extent of repudiating the PPA by withdrawing the OP filed for its approval. Due to the enormous Renewable Energy obligation, the requirement of scheduling Renewable Energy from the developers who are having must run status is also imposing a huge financial burden on the DISCOMS. Added to this the Covid pandemic has caused enormous loss to the DISCOMS. The DISCOMS are also bleeding with financial losses to the tune of Rs.28,000 Crores. In the realm of uncertainties, application of tariff now fixed for the anterior period from the date of CoD results in heavy true-up against the DISCOMS which will ultimately be passed on to the consumers. This, in our opinion, causes heavy damage to the public interest. Therefore, in the extraordinary facts and circumstances of the case, we direct that the adhoc tariff fixed from time to time shall be the final tariff for the period from actual CoD of unit-I till 31.07.2022.

**Tariffs payable by APDISCOMS to HNPCL from 01.08.2022 to 31.03.2024 (the balance period of the fourth control period)**

67. The DISCOMS have stated that they have no objection to fixation of O&M expenses as per CERC norms as requested by HNPCL. The DISCOMS accordingly requested the Commission to adopt norms viz Station Heat Rate, Auxiliary Consumption, Specific Fuel Oil Consumption and Threshold PLF as specified in the Tariff Regulations issued by CERC instead of considering the norms as per the terms of the PPA. The norms as adopted by HNPCL in tariff application and norms as per CERC are shown in the table below:

S.No.	Norm	HNPCL's claim as per the PPA	As per APDISCOMs based on CERC Regulations
1.	Station Heat Rate	2450	2372 <sup>#</sup>
2.	Auxiliary Consumption	7%	5.25%
3.	Specific Fuel Oil Consumption	2 ml	0.5 ml
4.	Threshold PLF	80%	85%

# The applicable station heat rate = 1.045 X Design Heat Rate (kCal/kWh).based on the following parameters furnished by HNPCL:

Design Turbine Heat Rate = 1940.7

Boiler Efficiency = 85.5%.

Designed Station Heat Rate = 2260.82

Escalation as per CERC Regulation = 4.5%

Calculated Station Heat Rate = 2372

The Commission would discuss all the above parameters at appropriate places in the subsequent paragraphs as detailed below:

#### **Depreciation:**

68. In the affidavit filed on 18.04.2022, HNPCL proposed to claim depreciation based on the weighted average rate of spreading the depreciation admissible over 25 years and made the filing accordingly subject to finalisation of the above methodology for depreciation with an appropriate agreement with the lenders of the Project. Further, HNPCL stated in the affidavit that this would reduce the front-loading of the tariff, and to the said extent, there will be a reduction in the fixed cost in the initial years. That they proposed the above to the benefit of the DISCOMs and thereby to the consumers in the State in line with the decision made by the Commission for Sri Damodaram Sanjeevaiah Thermal Power Station.

Since the actual loan repayment period for the project is 20 years as per the filings of HNPCL and the depreciation allowed is adjusted towards the loan repayment every year as per the norms, the Commission adopts a depreciation rate of 3.5% for the first 20 years of the PPA so that the total depreciation at the end of 20 years will be 70% of the Capital Cost which is equal to the

normative loan. For the balance 5 years of the PPA, the Commission adopts a depreciation rate of 4% so that the total depreciation at the end of the PPA period of 25 years will be equal to 90% of the capital cost (excluding land cost) that shall be allowed as per the norms specified in APERC Regulation 1 of 2008. The depreciation rates adopted by the Commission will avoid front loading of the tariff on the consumers and at the same time will not be a burden to HNPCL as its loan repayment period is 20 years. As per Clause 12.2 of APERC Regulation 1 of 2008, the land is not a depreciable asset and shall not be included in the Capital Cost for computation of depreciation. Accordingly, depreciation has been computed by excluding the land cost. The depreciation amounts approved by the Commission for the balance period of the fourth control period are shown below.

**Depreciation (Rs. Crores) approved by the Commission**

FY 2022-23 (01.08.2022 to 31.03.2023)	FY 2023-24
133.05	199.58

**O&M Charges**

69. Though HNPCL computed the O&M charges in the affidavit dated 18.04.2022 as per Clause 12.3.2 of APERC Regulation 1 of 2008, it requested the Commission to allow O&M expenses to the project as per the norms specified in the Tariff Regulations of CERC which were allowed to the power plants of APGENCO and Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) under the power to relax and inherent powers as well as power to remove difficulties. In support of its request, HNPCL quoted the judgment dated 21.03.2018 by the Hon'ble APTEL in Appeal Nos.107 and 117 of 2015 and enclosed a copy of the same with the affidavit.

Clause 12.3.2 of APERC Regulation 1 of 2008 specifies the norms for O&M charges for unit capacities up to 500 MW only. Clause 10 of APERC Regulation 1 of 2008 states that the tariffs shall be determined in accordance with the norms specified therein, guided by the principles and methodologies specified in CERC (Terms and Conditions of Tariff) Regulations 2004 as originally issued and that any further amendments thereto shall be applicable on their adoption by the Commission, by means of a general or special order, with or without any modification. Further, the Commission previously adopted CERC norms for computing the O&M charges of APGENCO new stations and SDSTPS. Therefore, based on the above and in the absence of norms for O&M

charges in APERC Regulation 1 of 2008 for unit capacities that are above 500 MW, the Commission accepts the request of HNPCL and accordingly adopts the O&M norms specified in the relevant CERC Tariff Regulations for units of 500 MW and above capacity. Accordingly, the Commission computed the O&M charges. The O&M charges approved by the Commission for the balance period of the fourth control period are shown below.

**O&M charges (Rs. Crores) approved by the Commission**

FY 2022-23 (01.08.2022 to 31.03.2023)	FY 2023-24
173.13	268.74

**ROCE (Return on Capital Employed)**

70. HNPCL claimed ROCE based on the norms specified in APERC Regulation 1 of 2008. As per Clauses 12.1 (a) & (b) of APERC Regulation 1 of 2008, ROCE is computed by multiplying the (Gross Fixed Assets - Accumulated Depreciation + Working Capital) by WACC (Weighted Average Cost of Capital). Gross Fixed Assets is the Capital Cost determined by the Commission. WACC is the weighted average of Return on Equity(ROE) and interest on loan computed in accordance with the formula specified in Clause 12.1 (b) of Regulation 1 of 2008. As per Clause 12.1.b of Regulation 1 of 2008, the Cost of Debt shall be determined at the beginning of the Control Period after considering the Generating Company's proposals, the present cost of debt, market conditions, and other relevant factors, and the return on equity shall be determined at the beginning of the Control Period after considering CERC norms, Generating Company's proposals, previous years' D/E mix, risks associated with generating business, market conditions, and other relevant factors. For the computation of WACC, HNPCL adopted rates ranging from 11.2% to 13.04% for different years (based on the ROE at 15.5% and interest on loans ranging from 9.36% to 11.99% for different years). In the MYT order of APGENCO stations for FY 2019-24 and MYT Orders of SDSTPS IV, the Commission adopted 15.5% as ROE. Accordingly, the Commission finds it appropriate to adopt 15.5% as RoE as claimed by HNPCL. As regards the interest on loan, the Commission adopts the rates filed by HNPCL as they are the weighted average rates for different years at which HNPCL availed loans from different lending agencies.

As per Clause 12.4 of Regulation 1 of 2008, Working Capital includes the cost of coal & oil for one month at target availability, O&M expenses for one month,

Maintenance spares @ 1 percent of the historical cost as per indexation of O&M norms and Receivables for sale of electricity equivalent to two months of the sum of annual fixed charges and energy charges calculated at target availability. For computing the Working Capital component, HNCPL adopted the norms specified for 500 MW units in APERC Regulation 1 of 2008. However, APERC Regulation 1 of 2008 specifies the operational norms for certain parameters like the auxiliary consumption, Station Heat Rate(SHR) which are used in the computation of the Working Capital, for units up to 500 MW capacities only. Therefore, the Commission adopts the norms for these parameters which are derived based on the norms specified by CERC for units of 500 MW and above capacity, i.e. 5.75% for auxiliary consumption and 2,372 kCal/kWh for Station Heat Rate in terms of clause 10 of APERC Regulation 1 of 2008. As regards the other parameters like specific oil consumption (secondary fuel oil consumption), target availability which are also used in the computation of the Working Capital, reference is drawn to the 2016 Tariff Policy which states that the norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipment, nature of operations, level of service to be provided to consumers, etc. The power plants commissioned in the recent past like the current project are capable of much better performance compared to the old units due to the technological advancements in materials and design and the economy of scale because of the deployment of higher capacity units. Therefore, the Commission finds it appropriate to adopt stricter norms specified by CERC for these parameters. Further, clause 10 of APERC Regulation 1 of 2008 provides for adoption of CERC norms with and without any modifications. Moreover, HNPCL itself requested the Commission for adoption of O & M norms for computing the O&M charges which indicates that it is also not averse to the adoption of CERC norms wherever appropriate. Therefore, the Commission adopts 0.5 ml/kWh for specific fuel oil consumption and 85% for target availability. Accordingly, the Commission computed the Working Capital amounts (See Table No.1 of the Schedule for details). The Working Capital amounts approved by the Commission for the balance period of the fourth control period are shown below.



**Working Capital (Rs. Crores) approved by the Commission**

FY 2022-23 (01.08.2022 to 31.03.2023)	FY 2023-24
482.34	724.81

The Commission computed the ROCE in accordance with the formula specified in APERC Regulation 1 of 2008 after determining its constituent components as above, i.e., Gross Fixed Asset, Depreciation, Working Capital, and WACC (See Table No. 2 of the Schedule for details). The WACC and ROCE approved by the Commission for the balance period of the control period are shown below.

**WACC (%) approved by the Commission**

FY 2022-23 (01.08.2022 to 31.03.2023)	FY 2023-24
11.21	11.2

**ROCE (Rs. Crores) approved by the Commission**

FY 2022-23 (01.08.2022 to 31.03.2023)	FY 2023-24
398.17	574.67

**Annual Fixed Charges**

71. The Annual fixed charges computed by the Commission for the balance period of the fourth control period by summing up the ROCE, O&M expenses, and the Depreciation, are shown below.

**Fixed Charges (Rs. Crores) approved by the Commission**

Item	FY 2022-23 (01.08.2022 to 31.03.2023)	FY 2023-24
Depreciation (A)	133.05	199.58
O&M charges(B)	173.13	268.74
ROCE(C)	398.17	574.67
Fixed Charges (A+B+C)	704.35	1042.99

**Note:** The fixed charges approved above are at normative availability of 85 percent and the claim should be limited to the actual availability.

## **Energy Charge Rate/ Variable Charges**

72. HNPCL claimed the following variable charges for the third and fourth control periods in accordance with the norms and formula specified by the Commission in APERC Regulation 1 of 2008.

Clause 13.1.a. of Regulation 1 of 2008 specifies the formula for the computation of variable charges (Rs./kWh). The components used in the formula are the landed cost of coal, price of oil, GCVs of coal and oil, normative values for specific fuel oil consumption, auxiliary consumption, and Station Heat Rate. Regulation 1 of 2008 does not specify the normative values for parameters such as auxiliary consumption and Station Heat Rate for units above 500 MW capacity. As stated in supra, the Commission has already adopted the norms for these parameters which are derived based on the norms specified in the relevant CERC Tariff Regulations (for units of 500 MW and above capacity). As regards the specific fuel oil consumption also, the Commission adopted the CERC norm as stated in supra. For the landed cost of coal, the price of oil, GCV of coal, and GCV of oil, the Commission adopts the values filed by HNPCL for FY 2016-17 (the year in which both units of the project commenced commercial operation together) i.e., Rs.3,711/MT, Rs.35,975/KL, 3,850 Kcal/Kg and 10,000 Kcal/L respectively.

As against the claim of variable costs for different years in the third and fourth control periods by HNPCL, the Commission determines a single base variable cost of Rs. 2.44/kWh as per the formula specified in APERC Regulation 1 of 2008 after adopting the above values (See Table No. 3 of the Schedule for details).

The above approved base variable cost is indicative only. If there are any variations in the landed cost of fuel or freight charges or GCV of coal and oil, the variable costs will vary from the indicated value, which HNPCL can collect/pass from/to APDISCOMs strictly in accordance with the procedure specified in clause 13.1 of Regulation 1 of 2008 duly adopting the norms approved in this order.

Further, the FCA (Fuel Cost Adjustment) bills shall be limited to +15% of the approved base value. Variation over and above 15% of the approved base value is subject to scrutiny and approval by the Commission.

HNPCL is directed to ensure to obtain billed grade coal by collecting samples as per the standards at source duly ensuring the presence of its officials/third

party as per the joint protocol. All such sampling and test reports shall be verified by DISCOMs in comparison with grades received at generating station end and if there is any significant variation in quality of grade, all such cases shall be brought to the notice of the Coal companies by HNPCL for appropriate action and HNPCL shall take all possible action for enforcement of its contractual rights regarding the same. The Commission shall be kept informed to enable it to invoke its regulatory jurisdiction in this regard whenever called for.

With reference to sampling and testing of GCV at the receiving end of generating stations, HNPCL shall comply with the CERC directions as reproduced below :

*“As per the directions of the Hon'ble High Court of Delhi, the CERC vide its order dated 25.1.2016 in Petition No. 283/GT/2014 has decided as under: (a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc. to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher set up inside the generating station, in terms of Regulation 30(6) of the 2014 Tariff regulations. (b) The samples for the purpose of measurement of coal on as received basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section 1)-1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part1/Section 1)-1964 which has been elaborated in the CPRI Report to PSERC.”*

The GCV shall be calculated at the receiving generating station for the computation of energy charges/variable cost as per the above sampling procedure duly considering the margin recommended by CEA in the letter dated 18.10.2017 on loss of GCV measured at wagon top at unloading point till the point of firing in boiler. In this regard, HNPCL is directed to establish the third-party sampling and testing system and the licensees shall cross check such third party sampling and testing systems periodically. All such periodical inspection reports with their remarks shall be submitted to the Commission every month from 1st September 2022 onwards for a review by the Commission.

Shortage of coal at thermal power plants which have PPAs with the DISCOMs will force the DISCOMs to purchase costlier power in exchanges to meet the demand. Therefore, HNPCL shall maintain the required coal stocks at its project as per the relevant clause in PPA since the working capital requirement has been allowed in this order as per the norms. HNPCL shall submit monthly compliance reports in this regard by 10th of every succeeding month commencing from August, 2022 and the DISCOMs or any other stakeholders are at liberty to bring to the notice of the Commission any non-compliance in this regard by HNPCL at any time.

**PLF, Income tax, Incentives, and other charges**

73. As already stated in this order supra, the power plants commissioned in the recent past are capable of much better performance as compared to the old plants due to the improvements in design, materials and economy of scale because of the deployment of higher unit capacities. As such, plants like the current project should have no problem operating at Plant Load Factors(PLF) above 85%. Further, as per clause 11.1 of APERC Regulation 1 of 2008, for thermal plant capacities other than that mentioned in Regulation, the Commission has to fix the norms on a case to case basis. The CERC tariff regulations have specified 85 percent availability for all sizes of thermal units. Therefore, the Commission is inclined to fix the target availability & PLF for this project at 85%, above which HNPCL is entitled to claim incentives at the rate of Rs.0.25/kWh as specified in APERC Regulation 1 of 2008. As regards the Income Tax and other charges, they shall be claimed and paid as per APERC Regulation 1 of 2008.
74. HNPCL shall recover the tariff as determined in this order from APDISCOMs in proportion to the capacity and energy supplied to them from 01.08.22 to 31.03.2024.
75. Considering various factors discussed above, the Commission is of the view that approval of the Continuation Agreement and the amended and restated PPA dated 15.04.1998 (with certain amendments) with the tariffs determined as above, is not detrimental to the interests of the consumers. As discussed supra, there is a dire need to utilize the project as a base load station for maintaining proper grid balancing and grid integrity due to its reliable nature. The tariff determined for this project is also reasonable and does not impose an undue burden on the DISCOMs and consumers..

**Point No. 2 is accordingly answered.**

**Point No.3.**

76. The Commission examined the Continuation Agreement and the amended and restated PPA dated 15.04.1998 filed by the DISCOMs and is of the view that certain amendments to the same are required to balance the interests of all the stakeholders and also to ensure that they are compliant with the relevant Regulations. The amendments fall into two groups. Group 1 covers the amendments that need to be carried out based on the objections raised during the hearings on certain Articles in the above agreements. Group 2 covers the amendments that need to be carried out based on the Suo-Motu observations of the Commission.
77. The following paragraphs discuss in detail the amendments that need to be carried out under both groups.

**Group 1:**

A. Many objectors and the DISCOMS have requested the Commission to adopt CERC operational norms for the project and HNPCL requested the Commission to adopt CERC norms in respect of O&M charges and APERC norms in respect of others. The Commission gave detailed reasons in supra for adopting the CERC norms in respect of certain parameters as shown below.

<b>Sl. NO.</b>	<b>ITEM</b>	<b>AS PER CERC ORDER Dated 21st February, 2014</b>	<b>AS PER PPA</b>	<b>AS PER TARIFF FILINGS BY HNPCL</b>	<b>DISCOMS' &amp; Objectors request</b>	<b>As approved by the Commission in the this order</b>
<b>1</b>	<b>Station Heat Rate</b>	2372	Station heat rate shall be 2,550 Kilo calories per kWh during the Stabilization Period and 2,450 Kilo calories per kWh thereafter;	2450	2372	2372
<b>2</b>	<b>Auxiliary Consumption</b>	5.75%	7.5 (seven point five) percent of Gross Electrical Output during the Stabilization Period and 7.0 (Seven point zero) thereafter;	7%	5.25%	5.75%
<b>3</b>	<b>Specific Fuel Oil Consumption</b>	0.5 ml	Secondary fuel oil consumption shall be 5 ml per kWh during the Stabilization period and 3.5 ml per kWh thereafter.	2 ml	0.5 ml	0.5 ml
<b>4</b>	<b>Target Availability/PLF</b>	85%	80%	80%	85%	85%



- B. The norms approved in the above table are subject to review by the Commission for each control period while determining the tariff for that control period based on the performance of the project.
- C. The third party sales, sharing of gains on account of the third party sales and other modalities as agreed to by the DISCOMS and HNPCL as agreed in joint Memo, in accordance with the Ministry of Power Guidelines as amended from time to time shall be incorporated in the PPA as it would benefit both the parties.

Group 2:

- A. The parties have agreed to the term of the PPA as 30 years from the date of commercial operation date of unit 2. However, the Commission is inclined to accept the term of the PPA for only 25 years from the date of COD of unit 2 as the fair useful life of thermal power plants is only 25 years as notified in MoP's notification dated 27th March 1994 and also as per CERC tariff regulations.
- B. Clause 7.4 of the restated amended PPA dated 15.04.1998 provides that Board shall purchase the land from HNPCL at the original price paid for the land plus simple interest at the rate of eight (8) percent per annum plus any costs (including, without limitation, any Taxes) associated with any such transfer in the event of exhaustion of all options for purchase of the project that spelt out in the agreement after termination or expiry of the agreement in any event. As the Commission is allowing RoCE on the cost of the land also which is part of the Capital Cost, the interest component shall be excluded from price paid by APDISCOMs to the land at the time of termination or expiry of the PPA.
- C. Transit losses during the transportation of coal, technical limits for backing down and ramping up and ramping down of the units shall be as per the relevant guidelines/regulations issued by the APERC/CERC/CEA/Ministry of power from time to time.
- D. In view of the latest Ministry of Power guidelines on strict compliance with the maintenance of LC mechanism for payments made to the generators, the clause relating to the Escrow account shall be deleted.

**Other Issues**

**78. Financial Impact of not granting Mega Power Project Status:**

As per the cost overrun report furnished by the LAHMEYER INTERNATIONAL (INDIA) PVT. LTD. (THE LENDER'S ENGINEER) , the financial impact on

account of not granting Mega Power Project Status (MPPS) to HNPCL was estimated at Rs.414 Crores including the interest liability and Rs.328 Crores excluding the interest liability. HNPCL stated in its Affidavit dated 18.04.22 that the computation of the capital cost, annual fixed charges and the per unit cost have been based on the project being eligible for mega power status which entitles the remissions/reductions in the payment of import duties, taxes, etc. HNPCL requested the Commission to approve the capital cost factoring the need for the grant of MPPS to its project to enable it to pursue with the Central Government for granting of permanent MPPS to its project. HNPCL further stated that the implication of taxes, duties, etc. payable as applicable to a non MPPS will result in an increase in the capital cost and consequently the annual fixed cost and per unit tariff. During the hearing, the HNPCL counsel Sri M.G. Ramachandran fairly submitted that HNPCL will not raise any claim in future as a non-MPPS plant. For the aforementioned reason and the fact that the Capital Cost of the project determined in this order is based on the benchmark Capital Cost determined by the CERC for coal based thermal stations in the order dated 04.06.2012 which factors all the expenditure relating to the Commissioning of the project in all respects irrespective of the MPPS status, the Commission holds that HNPCL is not entitled to raise any claims on APDISCOMs in future in the event of non-grant of permanent MPPS to the project. However, HNPCL is at liberty to pursue with the Central government for grant of permanent MPPS to its project and it may retain any gain derived by the grant of permanent MPPS.

79. **Railway Corridor work:** As per HNPCL's admission, the gross Capital Expenditure incurred by it upto 01.04.2017 is Rs.7,758 Crores and it has remained the same till date. The total capital cost claim includes railway corridor work whose expenditure is yet to be incurred. Further, HNPCL stated that it continues to get coal through the railway sidings at Gangavaram station, Kantakapalli station and Bayyaram station and from there to the project by road. The capital cost approved in this order covers expenses incurred towards the railway corridor also and the company shall not raise any claims in future on APDISCOMs on this account. Further, since the present temporary arrangement for transportation of coal increases the variable charges imposing additional burden on the end consumer, HNPCL is directed to expedite and complete the rail corridor work within one year from the date of this order failing which the cost incurred towards road transport will be disallowed by the Commission.

80. **FGD installations:** HNPCL stated that it will file a separate application before the Commission with regard to the compliance with the directions contained in the Environment Protection Act and the rules notified therein regarding the installation of FGDs. If such application is filed, the Commission will dispose of the same in accordance with the law.
81. **Insurance claims and Advance loss of Profit (ALOP):** As per clause 8.1 (s) of the Continuation Agreement dated 28.04.2016, *any insurance proceeds received by the Company shall be applied in the manner provided in Schedule B (Insurance).* As per clause 10.4 (b) of the Continuation Agreement dated 28.04.2016, *“subject as provided herein, the Procurers will meet Debt service, insurance costs and operating costs of the Project, arising during the period that such right is being exercised by the Procurers but shall have no liability to pay Tariff”*. As per the new insertion in continuation agreement is schedule B, *“the Company shall follow the Tariff Regulations with respect to insurance coverage”*. As per clause 3.3 of the amended and restated PPA dated 15.04.1998, *“the construction all risk insurance is that The Company shall obtain and maintain, throughout the period from the effective date of the EPC Contract up to COD of the Project, all construction period insurances appropriate to a project of the size and with the characteristics of the Power Station (including location) including Construction All Risks and Marine/Air Cargo Insurances and associated delay in start-up/advance loss of profit cover. This insurance shall include coverage for fire, earthquakes and flood perils including transit of Indian goods within India, testing, incidental storage, structures, equipment, buildings, extended maintenance, improvements .and temporary structures used in the construction of or as part of the permanent Project (subject to the normal exclusions), from the start of construction through to the Commercial Operation Date of the Second Generating Unit. The coverage shall be no less than the full replacement cost of the Power Station from time to time or such lesser sum as may be agreed between the Parties, subject to a reasonable deductible, which is commercially available at similar rates for projects of similar size and similar location. The limits for earthquake and flood perils shall, subject to paragraph 1.2 above, be no less than 40 percent of the full replacement values of the Power Station. Sublimits deemed to reasonably protect the value of the property will be in effect, and the Company will provide written notification as to these sub limits and any changes to these sublimits”*. As per paragraph 4 of schedule B, *“the Company shall provide evidence that insurance for the coverage specified in this Schedule B will be placed in effect on or prior to the Financial Closing or in the*

*case of insurance which is to take effect upon the completion of construction the Commercial Operation Date of the relevant Generating Unit. During the term of the Agreement, the Company shall furnish the Board with certified copies of the insurance policies described in this Schedule and shall not cancel any insurance policy without giving 30 days prior notice to the Board”.*

As can be seen from the above provisions, HNPCL is required to take adequate insurance coverage from the date of financial closure up to the commissioning of the last unit of the project and shall provide evidence of the same to APDISCOMs. However, HNPCL furnished the report of the surveyor appointed by the Insurance company to estimate the Advance loss of profit (ALP) only after the Commission issued directions to it in the hearing dated 02.07.22. On perusal of the “Final report dated 28.03.2018 for ALOP loss on account of damages at 2 x 520 MW thermal power plant under construction A/c HNPCL vizag” prepared by “Proclaim surveyors and loss adjusters” for United India Insurance company Ltd, the sum insured against the ALOP is found to be Rs.902.46 Crores. HNPCL claimed damages to the extent of Rs.810.39 Crores on account of the loss suffered due to the Hud-Hud which occurred on 12.10.2014. The surveyor recommended an interim payment of Rs.125 Crores with Rs.314.92 Crores being the maximum liability, were the APERC to agree to the tariff figures petitioned by the insured.

Further, HNPCL submitted in the addendum dated 23.07.2015 in O.P.No. 21 of 2015 that the issues of Advance Loss of Profit, etc. are currently under process and the final compensation received from the insurers shall be adjusted from the revised Capital Cost. In the affidavit dated 20.06.2022, HNPCL has stated that ALOP is towards loss of revenue to the company and it has nothing to do with the plant and machinery. It is on account of loss due to delay in the commencement of the commercial operation. HNPCL also stated that an amount of Rs.129.71 Cr. has been received from the insurance company against ALOP. As per the extant principles, the amount received by HNPCL towards insurance proceeds should be adjusted against the Capital Cost determined in this order. However, since the Commission has allowed the IDC upto the SCOD of the project only and the Capital Cost determined by the Commission in this order is based on the benchmark Capital Cost without consideration of the loss caused to the company due to the Hud-Hud cyclone, HNPCL is allowed to retain the insurance proceeds received by it. However, HNPCL shall submit the details of any future proceeds it receives to the



Commission based on the judgement of APTEL for taking an appropriate decision by the Commission in this regard.

**82. Permission for procurement of the shortfall in coal through e-bidding/ICB route and import of coal for FY 2022-23.**

As per new clause 2.90 in the Continuation Agreement, *“the Parties agree that although HNPCL has 100% coal linkage on Normative Availability basis from Mahanadi Coalfields Limited, the Company shall be allowed, subject to the approval of the Procurers, as laid down herein, to import additional coal or procure it from other alternate sources, including but not limited to e-auction etc., to meet any short supply by MCL and/or to maximize its Declared Capacity and generation up to Normative Availability. For seeking the approval of the Procurers, the Company shall, in addition to complying with other requirements laid down in this Agreement, intimate the Procurers about the alternate source of coal identified by it, including details of the cost and GCV, the procedure for procurement, the agreement to be executed with the alternate Coal Supplier, and such other information as may be desired by the Procurers. From the date of receipt of such information from the Company, Procurers shall respond within 15 days. It is hereby clarified that any procurement of coal from the approved alternate source shall be limited to the short fall of Coal from MCL and/or to maximize its Declared Capacity and generation up to the Normative Availability and shall be met with equivalent quality of indigenous/imported coal on strict requirement basis in terms of GCV. The approval for usage of alternate coal and payment of Tariff will be followed as per the procedure followed by State/Central generating stations with approval of APERC”.*

As per clause 8.1 (v) of the Continuation Agreement, HNPCL shall *“use its best efforts to maintain coal stocks at the Site equivalent to at least thirty (30) days’ supply of coal at the Target Availability including using its best efforts in consultation with the Procurers to (i) obtain alternative coal supplies as per the provisions outlined in Article 2.9 from sources other than Mahanadi Coalfields Limited as required to maintain such coal stocks and /or in the event of any coal supply shortfall to meet the Target Availability and/or to maximize its Declared Capacity; (ii) provide reasonable notice of, and permit representative(s) of the Procurers to be present at, meetings with potential alternative Coal Suppliers; (iii) provide reasonable notice of, and permit representative(s) of the Procurers to be present at, meetings with the Coal Supplier, (iv) provide copies of all notices of default given or received under the Coal Supply Agreement and (v) provide in*



*a timely manner copies of all other information reasonably requested by the Procurers concerning the coal supply arrangements”.*

As per new clause 1.1 of the Continuation Agreement, *“Target Availability/Normative Availability for recovery of Fixed Charges shall be as per the Tariff Regulations, which is currently (80%) eighty percent”.*

As can be seen from the above provisions, HNPCL has an agreement with MCL for supply of coal at 80% availability. Therefore, HNPCL shall pursue with MCL to amend the Coal Supply Agreement to enhance the coal supply to meet the project requirement at 85% normative availability determined in this order. Meanwhile, in order to meet any shortfall from MCL and to maximize the Declared Capacity and generation up to the Normative Availability as determined in this order, the provisions as agreed to by both the parties in clause 2.9 of the Continuation Agreement shall be followed.

Further, after referring to the various orders of the Ministry of Power, the provisions in the amended and restated PPA and the Continuation Agreement, this Commission’s approval letter dated 10.06.22 with regard to the import of coal by APGENCO and SDSTPS and directions to HNPCL on the import of coal, HNPCL by the letter dated 23.06.22, has requested the Commission to:

- (i) approve blending of 10% coal to the extent of 3.46 lakh tons proposed to be imported by it as per the notification by the Ministry of Power in the circular dated 28.04.2022 for FY 2022-23.
- (ii) issue necessary directions to APDISCOMs for a temporary mechanism of pass-through of the cost incurred towards blending of 10% imported coal by HNPCL as APDISCOMs shall be paying an interim tariff of Rs.3.82/KWh to mitigate the coal shortage in view of the fact that the coal stock in the plant is very low and the project remains in continuous critical coal stock list of the CEA.

After examining all the aspects related to coal shortage and in order to mitigate the coal shortages and ensure 24X7 power supply to the consumers during the balance period of FY 2022-23, the Commission is inclined to accept the request of the HNPCL to procure proportionate quantity of imported coal communicated by Ministry of Power for the balance period of FY 2022-23 directly through International Competitive Bidding route or through Coal India Limited (CIL). APDISCOMS are permitted to claim the pass-through of any

increase in the variable costs due to the blending of imported coal through the quarterly Fuel and Power Purchase Cost filings which they can pass on to the consumers as per clause 12.5 (C) of Regulation 4 of 2021.

83. **Expenditure incurred towards alternate transmission system:** As per HNPCL and the DISCOMS, an alternate 400 kV DC twin moose power transmission system constructed by HNPCL from the plant location at pallavalasa village to Kalpaka forms part of Transmission network being operated by APTRANSCO and the evacuation of power from HNPCL is under the purview of the DISCOMS. Therefore, HNPCL shall be paid the actual cost incurred for the above work as per the statutory auditors' report since the capital cost of the project was restricted to benchmark.
84. **Un-utilised 500 acres of land acquired for the HNPCL's project:** As the capital cost of the project was restricted to benchmark cost, HNPCL is at liberty to utilise this land as per their requirement.
85. In the light of the above discussion, the Commission hereby grants consent to the Continuation Agreement dated 28.04.2016 and the amended and restated PPA dated 15.04.1998 with the tariff as determined and the amendments/modifications stated above. The DISCOMs are directed to incorporate the changes as directed in the foregoing and submit a fresh PPA signed by both the parties after duly consolidating the amended and restated PPA dated 15.04.1998 and the Continuation Agreement dated 28.04.16 within 30 days from the date of this Order for final approval by the Commission.

The OPs and the connected IAs accordingly stand disposed of.

**Sd/-**  
**Thakur Rama Singh**  
**Member**

**Sd/-**  
**Justice C.V. Nagarjuna Reddy**  
**Chairman**

**Sd/-**  
**P. Rajagopal Reddy**  
**Member**

## **SCHEDULE**

**Table1 : Working Capital (Rs. Crores)**

Items	FY 2022-23 (from 01.08.2022 to 31.03.2023)	FY 2023-24
One month coal cost (A)	98.13	147.2
One month oil cost (B)	0.86	1.29
One month O&M expenses (C)	14.43	22.39
Maintenance spares at 1% of Capital Cost (D)	53.47	83.02
Two months receivables (E)	315.42	470.88
Working Capital (A+B+C+D+E)	482.34	724.81

**Table2 : ROCE (Rs.Crores)**

Items	FY 2022-23	FY 2023-24
Gross Fixed Assets (A)	5810.75	5810.75
Accumulated Depreciation (B)	1205.89	1405.47
Working Capital	723.51	724.81
WACC	11.21	11.20
ROCE [( A-B+C) *WACC)*8/12] (from 01.08.2022 to 31.03.2023)	398.17	574.67

**Table 3: Base Variable Cost (Rs./kWh)**

Items	Values
Station Heat Rate(Kcal/kWh)	2372
Auxiliary Consumption(%)	5.75
Landed Cost of Coal(Rs/Ton)	3711
GCV of Coal(KCAL/Kg)	3850
GCV of oil (Kcal/L)	10000
Price of oil (Rs/kL)	35975
Specific Oil Consumption(ml/kWh)	0.5
Base Variable Cost(Rs./kWh)	2.44

## **ANNEXURE-I**

### **List of Objectors (O.P.No.19 of 2016)**

<b>S.No.</b>	<b>Objector</b>	<b>Address</b>
1	Sri M. Venugopala Rao	Senior Journalist and Convenor, Centre for Power Studies, H.No.7-1-408 to 413, F-203, Sri Sai Darshan Residency, Balkampet Road, Ameerpet, Hyderabad – 500 016.
2	Sri.M. Timma Reddy	Convener/Peoples Monitoring Group of Electricity Regulations 139, Kakativa Nagar, Hyderabad - 500088
3	Sri.B. Tulasidas,	S4 , Devi Towers, Sambamurthy Road, Vijayawada
4	Sri. Penumalli Madhu	State Secretary, Coir.munist Party of India (Marxist)
5	Sri Ch Narsinga Rao.	Secretariat Member, Communist Party of India (Marxist) Andhra Pradesh Committee, H.No. 28-6-8, N.P.R Bhavan. Jagadamba Junction, Visakhapatnam
6	Sri. A Punna Rao	Convener, Praja Energy Audit Cell, 59-2-1, 1st Lane Ashok Nagar, Vijayawada - 520010
7	The Secretary	APSEB Engineers Association,Vijayawada

## **ANNEXURE-II**

### **List of Objectors (O.P.No.21 of 2015)**

<b>S.No.</b>	<b>Objector</b>	<b>Address</b>
1	Sri M. Venugopala Rao	Senior Journalist and Convenor, Centre for Power Studies, H.No.7-1-408 to 413, F-203, Sri Sai Darshan Residency, Balkampet Road, Ameerpet, Hyderabad – 500 016.
2	Sri. M.Timma Reddy	Convener/Peoples Monitoring Group of Electricity Regulations 139, Kakativa Nagar, Hyderabad - 500088
3	Sri.B. Tulasidas,	S4, Devi Towers, Sambamurthy Road, Vijayawada
4	Sri. Penumalli Madhu	State Secretary, Coir.munist Party of India (Marxist)
5	Sri Ch Narsinga Rao.	Secretariat Member, Communist Party of India (Marxist) Andhra Pradesh Committee, H.No. 28-6-8, N.P.R Bhavan, Jagadamba Junction, Visakhapatnam
6	Sri. A Punna Rao	Convener, Praja Energy Audit Cell, 59-2-1, 1st Lane Ashok Nagar, Vijayawada - 520010
7	Smt. T. Sujatha	Deputy Director, FTAPCCI Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry.