TAMIL NADU ELECTRICITY REGULATORY COMMISSION

(Constituted under section 82 (1) of the Electricity Act, 2003)

(Central Act 36 of 2003)

PRESENT:

Thiru M. Chandrasekar		**…. Chairman**
Dr.T.PrabhakaraRao		**…. Member**
	and	
Thiru. K. Venkatasamy		**…. Member**

M.P.No.27 of 2016

M/s.SEPC Power Private Limited
Represented by its Vice President
395 Anna Salai,
Teynampet
Chennai – 600 018.

… Petitioner
(Thiru Rahul Balaji,
Advocate for the Petitioner)

Vs

The Tamil Nadu Generation and Distribution
Corporation Limited
Represented by its Chairman and Managing Director
No.144, Anna Salai, Chennai – 600 002.

…. Respondent
(ThiruAbdul Saleem,
Advocate for the Respondent)

Dates of hearing : **09-12-2016; 24-02-2017; 28-04-2017; 29-08-2017; 19-09-2017; 25-10-2017; 13-11-2017; 31-01-2018; 15-03-2018; 08-06-2018; 14-08-2018; 18-09-2018; 16-10-2018; 30-10-2018; 20-11-2018; 27-11-2018; 30-11-2018; 31-01-2019; 04-02-2019; 01-04-2019; 27-08-2019; 05-09-2019; 17-09-2019; and 24-09-2019**

Date of Order : **10-01-2020**

The M.P.No.27 of 2016 came up for final hearing on 24-09-2019. After hearing the learned Counsels for both the parties and upon perusal of the petition, counter and other connected records and as a sequel to the orders of the Commission in PPAP no.5 of 2012, the Commission passes the following order: -

ORDER

1. Prayer of the Petitioner in M.P.No.27 of 2016:-

The prayer of the Petitioner in the above M.P.No.27 of 2016 is to take on record the financial closing date as 30-10-2015 by considering the waivers/ relaxations submitted herein and to direct the Respondent to-

(i) convey the comments on the CSTA already submitted and further to be submitted by the Petitioner in a time bound manner;

(ii) discuss the Addendum 3 with Petitioner for conclusion and thereafter execute the same;

(iii) take up the interconnection facilities, Transmission facilities and 400 kV Ottapidaram Sub-Station for timely completion within a schedule that may be fixed by the Commission with directions to file progress reports in that regard in a timely manner thus avoiding payment of damage/ deemed generation to Petitioner;

(iv) Convey the decision on sharing of sea water intake in case feasible in a time bound manner;

(v) Constitute Project Co-ordination Committee as per clause 3.1.3 and 4.2 (a) of the amended PPA approved by the Commission;

(vi) Take timely action on issues as and when requested by Petitioner in furtherance of the Project or Agreement or Orders of the Commission; and also extend the time limit for obtaining approval

of CSTA as “One-month prior to submission of Tariff Adoption Petition”.

2. Facts of the Case: -

(2.1)This Petition is sequel to the directions / orders issued by the Commission in MP 18 of 2010 on 9.5.2011 and PPAP 5 of 2012 on 30.4.2015 wherein the Commission prima facie directed for taking up the project for implementation and also approved the capital cost and terms of the amended PPA

(2.2) Therefore, the Petitioner filed the present Petition seeking further directions and orders as prayed for in furtherance of the Orders of the Commission issued earlier & furtherance of amended PPA between the Parties.

(2.3) Petitioner and the Respondent have entered into a Power Purchase Agreement (the "**PPA**") dated 12.2.1998 pursuant to the then prevailing policy guidelines for Tuticorin Thermal Power Project Stage IV - 1X525 MW (Unit 1) which is an Imported Coal Based thermal power station (the "**Project**").

(2.4)The above Project is being established adjacent to the existing 5X210 MW power station of TANGEDCO implemented in 3 Stages within the 36.81 Hectares of land leased by VO Chidambaranar Port Trust, Thoothukudi, Tamilnadu, India.

(2.5)The implementation of the Project was inordinately delayed due to which the Petitioner filed MP 18 of 2010 for taking up the Project for implementation in accordance with the PPA and the Commission in the Order passed on 9.5.2011 in M.P.18 of 2010 issued directions for proceeding with the implementing the Project in terms of the PPA.

(2.6)The Petitioner, in terms of the Order in MP no.18 of 2010, amended the PPA on 10.1.2012 and subsequently finalized the EPC Contract based on the Competitive Bidding and finalized financing & capital cost as ordered by the Commission and thereafter filed the PPAP no.5 of 2012 on 13.1.2012, seeking approval of the Commission for the amended PPA and Capital Cost. The Commission passed the Order in PPAP no. 5 of 2012 on 30.4.2015 approving the amended PPA and capital Cost and also issued further directions.

(2.7)The Petitioner thereafter achieved the financial closure on 30.10.2015 and filed an affidavit on 16.11.2015 intimating the Commission and the Respondent on achievement of the financial closure.

(2.8)The Petitioner subsequently finalized the Coal Supply & Transportation Agreement (the **CSTA**) and the Coal Handling Agreement (the **CHA**) in terms of the amended PPA and the orders of the Commission and submitted the same in full form and shape for approval of Respondent and thereafter by the Commission.

(2.9)As per the submission of the Parties, the construction of the Project is underway and is in the advanced stage of commissioning.

3. Contentions of the Petitioner in the Affidavit filed on 8.11.2016: -

The Petitioner submitted as follows: -

3.1.The Commission has fixed the capital cost of the Tuticorin Thermal Power Project Stage IV–1x525 MW (Unit 1) in its order dated 30-04-2015 in P.P.A.P.No.5 of 2012.

3.2.The Petitioner has taken the following steps to achieve the financial closing date for the project: -

3.2.1.The promoters invested equity funds on 24-08-2015 and contributed 40% of the project equity.

3.2.2.The Petitioner paid 10% advance to the EPC Contractor on 24-08-2015.

3.2.3. Consent to establish was revalidated on 16-11-2015 for extension until 10-11-2017.

3.2.4. Interconnection facility and Transmission facility, Coal Supply and Transportation Agreement ("CSTA") with port were waived/relaxed by lenders.

3.2.5.The Government of Tamil Nadu Guarantee, Escrow and Disbursement, Agreement with Respondent, Security and Hypothecation Agreement with Respondent Establishment of Escrow Account, written commitment from Public Sector Bank for LC to be furnished by Respondent, Foreign Exchange Convertibility and collateral arrangement with Respondent have all been waived and these would be extended by the Respondent at a later date and until such time "Direct Payment with standby Letter of Credit" is to be followed.

3.2.6.Each of the service would be taken up with the Respondent by the Petitioner as and when required and subject to feasibility by the Respondent.

3.2.7. Petitioner has intimated the achievement of financial closure of 30-10-2015 to the Respondent on 14-11-2015 after the receipt of the first disbursement on 10-11-2015.

3.2.8. Petitioner also filed additional affidavit on 16-11-2015 as directed in P.P.A.P.No.5 of 2012 to the Commission for recording the date of 30-10-2015 as the financial closing date.

3.3.The Respondent is neither taking actions in furtherance of the PPA nor in furtherance of the orders of the Commission for providing inter-connection and transmission facilities and hence the Petitioner proceeded implementation of the Project without confirmation from Respondent for taking up the interconnection as this condition precedent was waived by Petitioner / the lenders in the interest of implementing the Project.

3.4. As per clause 6.2 (h) of PPA, the CSTA and CHA executed by the Petitioner shall be approved by the Respondent and the Petitioner has earlier concluded discussions with M/s.RioTintoGroup, Australia and Stage I of the international competitive bidding has been completed and 4 bidders are shortlisted. Price bids would be invited from shortlisted bidders and selected bidder with price details would be submitted to the Respondent and thereafter to the Commission for final approval.

3.5. The Commission in its order in P.P.A.P.No.5 of 2012 has held that the coal supply agreement which is an essential component of price should be approved by the Commission. Commission also held that Tariff Adoption Petition which includes CSTA and CHA should also be filed by the Petitioner. In view of the above, Petitioner would submit CSTA and CHA to TANGEDCO and thereafter to the Commission prior to Tariff Adoption Petition. This is not a condition precedent now which was relaxed by lenders.

3.6. The Petitioner is establishing the project within the Port in the land leased by Port and water front leased by the Port for Captive Coal Jetty.

3.7. The Petitioner has obtained allotment order from the Ministry of Shipping, GOI on 25-11-2009 and in principle allocation from Port on 01-04-2010; permission to enter the site project activities on 14-07-2011 and final allotment letter from Port on 28-12-2012.

3.8. The Petitioner has to enter Land Lease Agreement (LLA) for the land leased for the Power Project and a separate Concession Management Agreement (CMA) for licence of water front for Captive Coal Jetty.

3.9. The Land Lease Rentals are pass through in PPA/Tariff approved by the Commission and hence the Respondent has to take the following actions-

(i) Categorisation of land for levy of land lease as "Service" instead of "Industrial".

(ii) The lease rentals to be levied from the date of Physical possession and not from date of in principle allocation.

(iii)Prospective collection of increased rentals instead of retrospective collection of increased lease-rentals.

(iv)Dredging costs to be borne by Port and not by the Respondent.

(v)Recording the date of financial closure as 30-10-2015.

The delay in execution of LLA and (Concession management Agreement) CMA is attributed to the time required for the efforts taken by the Petitioner for reduction of costs/tariff payable by the Respondent.

3.10. With regard to achievement of financial closing date, the Petitioner has complied with the following: -

(i) Issued notice to lenders on 29-10-2015 intimating compliance of the various conditions laid down by lenders for drawal of funds.

(ii) Lenders confirmation received on 30-10-2015.

(iii) Notice to proceed to EPC contractor was issued on 30-10-2015.

(iv) First disbursement from the lenders received on 10-11-2015.

3.11.As per the orders of the Commission in P.P.A.P. No.5 of 2012, FCD should have been achieved by 30-07-2015 against which actual FCD was achieved on 30-10-2015 i.e. 3 months after the date. Considering the factual developments and the overall nature of the project and the normal timelines for such activities this period of 3 months is miniscule and probably for this reason Commission has also taken the affidavit filed in this regard on file and not issued further directions.

3.12.The Petitioner has taken the following actions to get the approval of the Respondent to Addendum 3 to the PPA:-

(i) Draft Addendum was submitted to the Respondent on 08-12-2015.

(ii) The Respondent replied on 01-02-2016, the draft Addendum is not in tune with the orders of the Commission in P.P.A.P.No.5 of 2012.

(iii)Petitioner resubmitted the draft Addendum on 03-02-2016 to the Respondent.

(iv)Respondent on 29-02-2016 again returned the draft Addendum stating that it was not in line with the orders passed by the Commission in P.P.A.P.No.5 of 2012 and also requested various documents of the Petitioner.

(v) Petitioner submitted related letters on 26-07-2016 to the Respondent on sharing of intake, approval of term sheet of CSTA, action on interconnection and Amendment of PPA.

(vi)Respondent on 11-08-2016 informed that the issues raised by the Petitioner would be examined after approval of revised FCD by the Commission.

(vii)Petitioner on 16-09-2016 submitted revised Addendum 3 along with financial package.

3.13. Petitioner has submitted that it has submitted the financial package to the Commission & Respondent on 30-09-2016 as per the orders of the Commission.

3.14. Petitioner has been requesting the Respondent to act on the following issues: -

(i) approval/comments of term sheet of CSTA.

(ii)Taking up interconnection and transmission facilities.

(iii)Sharing of sea water intake if feasible.

(iv)Constituting the project co-ordination committee.

But the Respondent in their letter dated 11-08-2016 and 14-10-2016 is taking a stand that all the above issues would be considered only after the approval of the Commission for the achievement of financial closing date.

4. Contentions of the Respondent in the Counter Affidavit filed on 23.12.2016: -

4.1.An MOU was signed between TNEB and M/s.Tamil Nadu Petro Products Limited on 18-02-1995 for setting up a Power Project of 500 MW capacity (Thermal Power Plant) at Tuticorin. A SPV "SPIC Electric Power Corporation Limited (SEPC)" has been formed to promote the project by Tamil Nadu Petro

Products Limited. The Techno Economic Clearance (TEC) was obtained on 31-07-1997. The Firm Financial Package (FFP) was to be submitted within 9 months from the date of issue of TEC.

4.2. Based on the above terms, the Power Purchase Agreement (PPA) was executed on 12.02.1998 for a revised capacity of 525 MW and the same was approved by the Government of Tamil Nadu on 13.07.1998. Final deadline for submission of Firm Financial Package was extended and the same lapsed on 31.12.2000.

4.3. It is to be stated that since the petitioner did not fulfil certain conditions like execution of Fuel Supply Agreement (FSA) etc., and due to cancellation of Land Lease Agreement by the Tuticorin Port Trust for non-payment of lease rent, Escrow cover was not extended to the petitioner by the Respondent. However, an alternative land was allotted to the petitioner by the Tuticorin Port Trust during the November 2009. Consequent to the intervention of MOP by way of a letter dated 24.2.2010, the PPA was revived vide TNERC's order dated 09.05.2011 in M.P.No.18 of 2010 with certain directions to amend the PPA in line with their Regulation 2005.

4.4. Extraordinary extension was given with a view to support the off take of power from this project since TNEB was reeling under huge shortage of power during the period 2007-2015.

4.5.In P.P.A.P No.5 of 2012 TNERC vide their order dated 30.04.2015, the Commission approved a ceiling Capital Cost of the Petitioner at Rs.3,514Crores with the following conditions..

"Capital Cost

The Commission accords approval of the Capital Cost at Rs.3514 crores which shall include all variations in foreign exchange but exclude changes due to changes in Taxes and Duties and changes in law and as per other conditions as below: -

(a) . ..

(b). ..

(c) The Petitioner shall achieve financial closure within 3 months from the date of this order of the Commission and the Commercial Operation shall be achieved with in a period of 39 months from such financial closure.

(d) The financial package to meet the capital cost shall be submitted to the Commission immediately after financial closure.

Coal Supply Agreement

The Commission orders that the company firms up the Coal Supply Agreement in accordance with the PPA and submit the same to the Commission for the final consent".

4.6. As per the above conditions of the Commission, the Petitioner's Project shall achieve financial closure and submit the financial package on or before 30.07.2015 (within 3 months from 30.04.2015). The Commission also ordered that the Company firms up Coal Supply Agreement in accordance with the PPA and submit the same to the Commission for final consent. However, the Project has neither achieved the Financial Closure nor the Coal Supply Agreement has been firmed up as on 30.07.2015.

4.7.In the above circumstance, the Petitioner in its letter dated 14.11.2015, addressed to the Director (Generation)/TANGEDCO stated that as per PPA, they have achieved Financial Closure on 30.10.2015, without furnishing any supporting documents.

4.8. Without the supporting documents for achievement of Financial Closure as on 30.10.2015, it is not known whether the Petitioner has satisfied the conditions to initial borrowings as on 30.10.2015. Till date the Petitioner has not furnished the Financing Documents to this Respondent for verification, even after repeated reminders since, February 2016.

4.9. As per PPA and Commission's order dated 30-04-2015, the following "Conditions Precedent" shall have been achieved on or before 30-07-2015 by the Petitioner's project:

(i) The project shall have received all Governmental authorizations – No documents furnished.

(ii) The execution of Coal Supply Agreement, Coal Transport Agreement and Coal Handling Agreement – Not executed and submitted on or before 30-07-2015 for TANGEDCO's approval.

(iii) Execution of EPC Contract -- No copy of EPC contract has been furnished by the Petitioner.

(iv) Achievement of Financial Closure -- No documents furnished.
(The Petitioner claims that the financial closure has been achieved on 30.10.2015.)

(v) Signing of Land Lease Agreement - No documents furnished.

(vi) Written undertaking from TPL ('Project Sponsor') that they are holding 50% shares in M/s.SEPC -- Not furnished.

4.10. It is stated that without signing the Coal Supply and Coal Handling Agreements before Financial Closure, variable cost of power, quality of coal, availability of coal, source of fuel, transport constraints, cost of transport, measurement point of GCV, risk involved in the supply etc. are not known.

4.11. Similarly, the Petitioner has not signed the land lease agreement till date. The allotment letters of Tuticorin Port are not a valid legal document in lieu of land lease agreement.

4.12.The Petitioner in their letter dated 30.10.2015 had issued 'Notice to Proceed' to the EPC Contractor, without achieving the 'Conditions Precedent' stipulated in the PPA. Hence in the absence of documentary evidence, 30.10.2015 cannot be considered as 'Effective Date' of the Project.

4.13.Now, after a lapse of 16 months, M/s. SEPC filed this petition praying the Commission to take on record the said belated financial closure date apart from some other prayers. The company is yet to sign the amendments proposed to the PPA as ordered by the Commission in its order dated 30.4.2015 in disposal of PPAP No.5 of 2012.

4.14.Meanwhile on commissioning of TANGEDCO's own plants to the tune of 2000 MW, Kudankulam unit I of 1000 MW and Long-term power purchase of around 3300 MW under Case I bidding, TANGEDCO had become surplus and the fact was informed to the Commission in the case of M/s. Cuddalore power, a similar MOU route PPA holder. In the recently concluded short term power purchase tender, power purchase, to the tune of 650 MW at the rates less than Rs.4/- per unit has been approved by the Commission.

4.15.To sum up, the petitioner has not fulfilled the conditions stipulated by the Commission in its order dated 30.04.2015, while approving the capital cost at Rs.3514 Crores.

4.16.Therefore, in TANGEDCO's views, the petitioner has forfeited his extended opportunity given by the Commission and TANGEDCO is not agreeable to any further time extension for achieving financial closure and the PPA is to be treated as null and void.

4.17. Regarding the alternate payment security mechanism, the Commission in the order dated 30.04.2015 in PPAP No.5 of 2012 directed as follows:

"The Commission takes note of the parties on the acceptance and also notes the withdrawal of W.P.No.7241 of 2001 pending in High Court of Madras and accordingly accepts for adoption of "Direct Payment backed by Stand by Letter of Credit" as the alternate payment security mechanism instead of escrow cover in the PPA. "

4.18.Hence, the Petitioner is always eligible for Stand by Letter of Credit only as alternate payment mechanism and no other mode of security.

4.19.As already stated, the amendments to the PPA ordered by the Commission in PPAP No.5 of 2012 is yet to be signed by the parties. The draft addendum proposed by the Petitioner was not in line with the Commission's order dated 30.04.2015. Hence, this Respondent sent a draft addendum to the Petitioner strictly in line with the Commission's order. The Petitioner is yet to sign the addendum.

4.20.The Petitioner's request for approval of Coal Supply and Transportation Agreement in multiple stages is not acceptable to this Respondent, since the same is against the provisions of the PPA.

The Respondent's Affidavit extracted above is duly corrected incorporating the correction affidavit filed by Respondent on 13.3.2017

5. Reply Affidavit filed by the Petitioner on 31.1.2017: -

5.1.The Petitioner states that the following achievements have been made in the project and these are being submitted to the Respondent in the form of Quarterly Progress Report:

(i) The Financial Closing Date (FCD) was achieved on 30.10.2015 with the Scheduled Commercial Operation Date (SCOD) of 36 Months from the FCD;

(ii) The Notice to Proceed to EPC Contractor was issued on 30.10.2015 copy of which was furnished to Respondent with the SCOD of 36 Months from the FCD;

(iii)The First disbursement of funds from Lenders were availed on 10.11.2015

(iv)The Petitioner intimated the achievement of FCD of 30.10.2015 to the Respondent on 14.11.2015;

(v) The Petitioner also filed an Additional Affidavit on 16.11.2015 to PPAP 5 of 2012 to the Commission for recording the date of 30.10.2015 as the FCD for the Project and duly submitted the copy of the Additional Affidavit to the Respondent.

(vi) The Site works commenced in full swing and the equipment foundations for Power Block are nearing completion and Mechanical erection works have already commenced by vendors such as M/s.BHEL, Paharpur, L&T and GE etc.

(vii) The Land Lease Agreement (the "LLA") and the Concession Agreement (the "CA") with Port were signed on 28.12.2016

(viii) The Petitioner filed this Petition as directed by Respondent for recording the FCD of 30.10.2015

5.2.At the outset, it would be pertinent to state that the very purpose of the present Petition is to place on record the date for achieving Financial Closure. Further, though the Financial Closure was achieved 3 months later than the original planned date, the project itself is scheduled to achieve the Commercial Operation Date as per the original schedule and as such it is fully in compliance with the directions of the Commission. The need to file the petition arose since the Respondent took the stand that further approvals and progress and compliance with its obligations would have to await the consideration and grant of approval by the Commission to the fresh date of achieving Financial Closure.

5.3. The petitioner is not dealing with the Counter filed by the Respondent in detail except to state that anything contrary to the terms of the orders of the Commission and the terms of the PPA between the parties are denied. Inasmuch as, the principal position of the Respondent appears to be that the further progress is dependent upon the Commission approving the date of achieving financial closure, the petitioner submits that the same may be formally approved. With regard to the Counter filed by the Respondent, the following are the reply of the Petitioner: -

(i) Financial Closing Date & Commercial Operation Date:

(a)The Commission on 30.4.2015 in PPAP No.5 of2012 ordered that:

"The Petitioner shall achieve financial closure within 3 months from the date of this order of the Commission and the Commercial Operation Date shall be achieved within a period of 39 months from such financial closure"

(b) Thus, effectively, the Commission has ordered for the scheduled Commercial Operation Date to be 42 Months from the date of order. That is to say the COD shall be achieved by 30.10.2018 which is 42 months from the order date of 30.4.2015

(c) Against the above order of the Commission, the Petitioner achieved FCD on 30.10.2015 which is 6 Months from the order date of 30.4.2015 with Commercial Operation Date scheduled for 36 Months from FCD as per Financing Documents as well as EPC Contract. That is to say the COD shall be achieved 42 months from FCD which falls on 30.10.2018.

(d) Thus, the Petitioner has fulfilled and complied with the intent of the order of the Commission to achieve COD within 42 Months of the order date

(e) In view of the above, no relief is required (or) prayed for other than recording the date of 30.10.2015 as the FCD with the SCOD to be retained as originally ordered by the Commission in PPAP no.5 of 2012.

(ii) Coal Supply & Transportation Agreement (CSTA)

(a) The Commission in para (3) (c) of the Order on 30.4.2015 in PPAP no.5 of 2012 ordered that:

"Since the Commission is mandated to approve the price of electricity, the Coal Supply Agreement which is an essential component of price should have the approval of the Commission. Accordingly, the Commission orders that after the Company firms up the Coal Supply

Agreement; it shall be submitted to the Commission for its final approval."

(b) Thus, it has been ordered that the Petitioner to approach the Commission for approval of CSTA "after the Company firms up the Coal Supply Agreement"

(c) Even though there is specific time limit set for FCD & SCOD, the Commission has passed orders for "after the Company firms up the Coal Supply Agreement"

(d) As stated by the Commission, since CSTA is an essential component of the price of electricity, the Petitioner with due discussions and intimation to Respondent proceeded with the two stages of International Competitive Bidding process for the CSTA.

(e) In fact, the Respondent in its letter dated 14.10.2016 has informed the Petitioner that the request for approval of terms sheet of CSTA can be examined by Respondent only after approval of revised date of financial closure by the Commission.

(f) Thus, the CSTA terms and thereafter the CSTA would be examined for approval by the Respondent only after approval of revised date of financial closure by the Commission which has already been communicated by the Respondent to the Petitioner.

(iii) Land Lease Agreement (LLA) and Concession Agreement (CA) with Port:

(a) The Petitioner has obtained the allotment orders from the Ministry of Shipping as well as from Port for the Land & Water front

(b) The Petitioner also obtained the specific letter dated 14.07.2011 from Port for commencing the Project activities pending signing of the Agreements.

(c) The Petitioner has entered into the LLA and CA with Port on 28.12.2016.

(d) In view of the fact that Port has permitted the Petitioner to proceed with Project pending execution of the Agreements and considering that these were executed by the Petitioner with Port on 28.12.2016 and furnished to the Respondent vide Petitioner's letter dated 9.01.2017, it is submitted to the Commission to take the same on record on its Regulatory side.

5.4. With regard to the Counter filed by the Respondent, the following are the reply of the Petitioner: -

(i) Alternate payment security mechanism in para 24 & 25: The Petitioner has noted the averments of the Respondent.

(ii) Addendum to PPA in para 26: The Petitioner submits that it is incorrect to state that the draft addendum proposed by Petitioner was not in line with the Commissions' order as the following were not agreeable to the Respondent:

(a) In O&M and Insurance Expenses: The Petitioner proposed that "O&M and Insurance Expenses shall be as per final orders of the Commission in MP 36 of 2015";

(b) In Other Charges, the Petitioner has informed that it shall be Income other than income from sale of electricity shall be grouped as Other Income as provided for in Regulation 40 of TNERC Tariff Regulations

2005 (As Amended). As provided for in Regulation 41 (2) of TNERC Tariff Regulations 2005 (As Amended), “the annual capacity charges recoverable by the Company shall be worked out by deducting Other Income from the annual capacity charges".

However, Respondent states that 100% other charges shall be passed on to it without defining the other charges which is neither as per order nor as per TNERC Tariff Regulations 2005 (As Amended);

(iii) Approval of CSTA in para 27: The Petitioner submits that the reply has already been provided in para 5 (ii) above which is as per terms of para (3) (c) of the Order on 30.4.2015 in PPAP 5 which states that the CSTA shall be submitted for approval of the Commission after the Company firms up the Coal Supply Agreement;

(iv) Tariff adoption petition in para 28: The Petitioner has noted the averments of the Respondent;

(v) Further directions in para 29: The Petitioner states that the further directions requested by the Petitioner in para 13 (ii) & 13 (iii) "are the actions to be taken by the Parties to act in furtherance of the PPA and notes the averments of the Respondent;

(vi) Achievement of Financial Closure & Condition Precedent in para 31 which is also stated in paras (8), (9), (10) & (15):

(a) The Petitioner noted the averments of the Respondent.

(b) The Petitioner states that signing of the Addendum is an activity done to record the orders of the Commission in PPAP 5 of2012 which in any case has to be complied even without such Addendum.

(c) Further, the Petitioner states that the definition of the Financial Closure as per terms of the PPA and as extracted in para (8) of the counter of the Respondent is :

"The date on which binding commitments to provide financing for the Project are issued and effective, condition to initial borrowings are satisfied, and amounts become available or borrowing from Lenders"

(d) Thus, since the amounts became available to Lenders on 30.10.2015 and it was actually drawn from Lenders on 10.11.2015, it cannot be denied that the Financial Closure was in effect achieved on 30.10.2015

(e) Furthermore, the definition of Financial Closure and achievement of Conditions precedent (which leads to Financial Closure) thereof are for the amounts become available or borrowing from Lenders.

(f) The Petitioner became eligible for drawl of funds on 30.10.2015 and actually demonstrated it by drawing the funds on 10.11.2015.

(g) The submission of documents thereof is incidental acts without conflicting the achievement of Financial Closure.

6. Additional Affidavit filed by the Respondent on 13-03-2017: -

6.1.The M.P.No.27 of 2016 was heard by the Commission on 24-02-2017 while according approval for the amendments filed under P.P.A.P.No.5 of 2012, the Commission vide their order dated 30-04-2015 approved a ceiling capital cost of the Petitioner at Rs.3,514 Crores with the following conditions:-

“Capital Cost

The Commission accords approval of the Capital Cost at Rs.3514 crores which shall include all variations in foreign exchange but exclude changes due *to changes in Taxes and Duties and changes in law and as per other conditions as below: -*

(a) .

(b). .

(c) The Petitioner shall achieve financial closure within 3 months from the date of this order of the Commission and the Commercial Operation shall be achieved with in a period of 39 months from such financial closure.

(d) The financial package to meet the capital cost shall be submitted to the Commission immediately after financial closure.

Coal Supply Agreement

The Commission orders that the company firms up the Coal Supply Agreement in accordance with the PPA and submit the same to the Commission for the final consent".

6.2.As per the above orders of the Commission, the Petitioner's Project should have achieved financial closure and submitted the financial package on or before 30.07.2015 (within 3 months from 30.04.2015). However, the Project did not achieve the Financial Closure as perdirections of the Commission. It is pertinent to note that as per the PPA there are several conditions precedent to be fulfilled by the petitioner before achieving financial closure.

6.3. Without fulfilling the conditionalities attached to financial closure and without furnishing any supporting documents, the Petitioner in its letter dated 14.11.2015, addressed to Director (Generation)/TANGEDCO stated that as per PPA, they have achieved Financial Closure on 30.10.2015. There was exchange of correspondence between the parties wherein this respondent emphasized the fact that the petitioner had not complied with the directions of the Commission. It is only in November 2016 that the present application for recording the date 30.10.2015 as the FCD for the Project has been filed stating that the lenders have waived all other conditions precedent.

6.4.The Commission while passing the order in PPAP No 5 of 2012 dated 30.04.2015 had also noted the additional affidavit of the petitionerdated 20.02.2014 wherein it was stated that the term sheet was under final stages of signing which would be converted into coal supply agreement upon receiving comments / approvals and that changes after finalisation would be submitted to respondent for approval. It was ordered that the Company firm up Coal Supply Agreement in accordance with the PPA and submit the same to the Commission for final consent.

6.5. It is stated that as per the PPA, the Petitioner should have executed the Coal Supply Agreement, Coal Transport Agreement and Coal Handling agreement on or before FCD, 30.07.2015 through competitive bidding. TANGEDCO thereafter had 60 days on receipt of the said agreements to grant consent. The Coal Supply Agreement has not been firmed up as on 30.07.2015 or even as on date. TANGEDCO has not waived any of the Conditions Precedent including the execution of the agreements with respect to coal supply.

6.6. As per clause 4.6 (e)(i)(B) of the PPA, the Petitioner is obliged to furnish copies of executed Coal Supply Agreement and Coal Transport Agreement to TANGEDCO on or before Financial Closing Date. There has thus been a breach of the conditions of the PPA by the petitioner. Parties have to comply with their obligations in accordance with the contractual terms and petitioner's contention that lenders have waived some of their conditions would not amount to compliance by the petitioner of the Conditions Precedent in the PPA.

6.7.The Petitioner in its letter dated 22.03.2016 submitted only the Term Sheet for Coal Supply Agreement without even the preliminary requisites like source of coal (name of supplier, origin of supply), price etc. Petitioner has proposed to furnish the details at a subsequent date under the second stage. Variable charge is the major component (around 80%) of the price of power and the variable charge is a pass-through component under the tariff. PPA does not provide for any two-stage approval. The finalisation of the agreements relating to coal supply and the grant of consent or otherwise would thus constitute a very important and critical part of the project. Therefore the request of the Petitioner for recording 30.10.2015 as FCD, retrospectively would be contrary to the contractual terms. ,

6.8. There are certain contractual obligations of the respondent in the PPA that would commence only after the petitioner's complying with the conditions precedent at the time of financial closure. It is submitted that the relief sought by the petitioner for retrospective fixation of the FCD would constitute rewriting of the contractual terms which is impermissible.

6.9.It is stated that the execution of EPC contract is another condition precedent. The petitioner executed the EPC contract on 10.01.2014 with M/s. MeghaEngineeringandInfrastructures Limited and had not furnished copy of the contract to this Respondent as required under the PPA till 30.01.2017.

6.10.It is stated that while reviewing the said EPC contract it is observed that the Guaranteed Heat Rate of the Project is 2,241 Kcal/Kwhr against the PPA norms of 2,391 Kcal/Kwhr (for imported coal). Also, the Guaranteed Auxiliary Consumption is 5.5% against the PPA norms of 7.44% (for imported coal).

6.11. Without prejudice to the foregoing, it is submitted that if the request of the Petitioner for extension of date for Financial Closure were to be considered, then the Respondent submits the following for the consideration of the Commission:

a. The date of Financial Closure may be prospective, from the date of approval of Coal Supply Agreement by the Respondent as provided in the PPA.

b. The Completed Capital Cost of the Project shall not exceed the ceiling cost of Rs.3,514Crores already approved by the Commission.

c. The obligation or this Respondent specified in Article 4 (Clause 4.1.2) of the PPA would commence only after the date specified in para (a).

d. The Heat Rate and Auxiliary Consumption norms in the PPA shall be aligned with EPC contract.

7. Written Submission filed on behalf of the Petitioner on 28-04-2017: -

7.1.The Petitioner submits that this Commission in its order passed in PPAP No. 5 of 2012 on 30.4.2015 ordered for Financial Closure to be achieved within 3 Months from the date of order and Commercial Operation to be achieved within 39 months thereafter thus making the commercial operation within 42 months from the order dated 30.4.2015.

7.2. The Petitioner thereafter achieved the Financial Closure on 30.10.2015 with the scheduled Commercial Operation date of 36 months thereafter as per the Loan documents and EPC Contract and thus making the scheduled Commercial Operation date within 42 months from the date of order of 30.4.2015.

7.3. However, the Respondent directed the Petitioner to obtain the specific approval from the Commission for recording the Financial Closing Date of 30.10.2015 achieved by the Petitioner. Accordingly this petition M.P. No.27 of 2016 has been filed for recording the Financial Closing date of 30.10.2015 achieved by the Petitioner Company

7.4.The PPA provision with regard to achievement of Financial Closing Date by certain date is found under "Condition Precedent (CP)" which contains the following conditions to be achieved by the Petitioner:

(a) Achievement of Financial Closure

(b) Enter into Coal Supply & Transport Agreement (CSTA)

(c) Enter into Land Lease Agreement

(d) Execution of EPC Contract

(e) ………….

(f) …………

7.5. It is submitted that all the Conditions other than 7.4(b) has been achieved by the Petitioner and for 7.4(b), the Petitioner submits that time extension is being sought for achievement by August 2017. The Respondents obligations such as provision of "Interconnection and Transmission Facilities (Amongst others)" are conditioned upon achievement of the CP by Petitioner.

7.6. Thus, the achievement of Financial Closure is one such CP which has already been achieved. However, in view of CSTA not being achieved, the date for making ready of "Interconnection and Transmission Facilities (Amongst others)" may have to be fixed considering the current status and requirement.

7.7. Therefore, it can be seen that the recording of 30.10.2015 as the financial closing date does not legally bind the Respondent from obligations such as provision of "Interconnection and Transmission Facilities (Amongst others)" as these are to be performed by a date which could be fixed considering various factors such as readiness of power plant, current status of "Interconnection and Transmission Facilities (Amongst others)" and time when the power is required from the project.

7.8. It is also submitted that; the Petitioner has taken action on behalf of TANTRANSCO to execute the "Interconnection and Transmission Facilities" fast and TANTRANSCO has also worked out alternate arrangement of "Interconnection and Transmission Facilities" by which these would be made available by the time required by SEPC.

7.9.Therefore, without causing any risk to Respondent in the PPA and as a way forward, the Financial Closing Date of 30.10.2015 can be recorded as an Interim Order in M.P.No.27 of 2016 with the issues such as "CSTA execution by Petitioner" and "Provision of Interconnection and Transmission Facilities by Respondent" be set as issues for further discussions / arguments wherein a date could be worked out before the commission for performing balance obligations of Petitioner & Respondent keeping in mind the latest development on "Provision of Interconnection and Transmission Facilities by Respondent".

8.Affidavit filed by the Respondent on 09.11.2017 :-

8.1. The Commission in the Daily Order dated 25-10-2017 ordered the Petitioner to submit the finalized CSTA to TANGEDCO before 31-10-2017 and seek their concurrence on the same. But the Petitioner has submitted the same only on 02-11-2017 to this Respondent. Further, the said agreement is not in line with the provisions of the Power Purchase Agreement and hence the Respondent has not granted concurrence for the same.

9. **Affidavit filed by the Respondent on 04.05.2018 :-**

9.1.As directed, the Petitioner had not furnished the Coal Supply, Transport and Handling Agreement in full shape until 31.01.2018 to the Respondent. The Petitioner submitted the Coal Supply and Transport Agreement (CSTA) on 12.02.2018 and Coal Handling Agreement (CHA) on 27.02.2018 without enclosing the Bid Specifications, Bids and other supporting Documents for this Respondent's review.

9.2.It is further stated that the Bids were submitted to this Respondent only on 06.03.2018. This date is to be taken as the submission date of Coal Supply, Transport and Handling Agreement as directed by the Commission in the Daily Order dated 13.11.2017.

9.3.By scrutinizing the Coal Supply & Transport Agreement and Coal Handling Agreement of the Petitioner's project, the variable cost varies from Rs.3.08 to Rs.3.85 (Net) during the period from June 2017 to January 2018. The Fixed cost of the project would be around Rs.2.50 per Unit (with TNERC approved Capital Cost of Rs.3,514 crores including construction cost of Coal Jetty + impact of Goods and Service Tax (GST) and meeting new norms of Ministry of Environment, Forest and Climate Change (MOEF)].

9.4. The power purchase cost of Long-Term Power Purchase Agreements varies from Rs.3.10 to Rs.5.15 Ex-bus/Unit (Variable Charges + Fixed Charges) as per the Tariff Invoices of February 2018.

9.5. TNERC had approved Rs.3.25/Unit at Ex-bus (Variable Charges + Fixed Charges) for the extended Medium-Term Power Purchase Agreements up to 31.01.2019 (two years) with the contracted capacity of 100 MW from M/s. NETS and 200 MW from M/s.Jindal.

9.6.The Commission approved power purchase through Short Term tender at Rs.4.20 per Unit (Variable Charges + Fixed Charges) for the Months of March 2018/April 2018.

9.7. The power purchase costs, in Power Exchanges, are very competitive. The average Market Clearing Price (MCP) for the FY 2016-17, is Rs.2.83 per Unit in IEX and Rs.2.45 per unit in PXIL.

9.8.In the TNERC's Tariff Order T.P.No.1 dated 11.08.2017, the Commission have not permitted TANGEDCO to purchase power beyond Variable Cost of Rs.3.12/Unit from the generators, and allowed fixed cost only for the year 2018-19.

9.9. It is stated that in the above said order, the Commission directed the TANGEDCO to purchase 10% of its requirements from power exchanges to reduce the power purchase cost by purchasing short term power to optimize the power purchase cost. For the Financial Year 2017-18 (as on 15.03.2018) Power purchase through exchanges by TANGEDCO is 1,889 MU and this works out to 1.93 % of the total electricity consumption.

9.10. The Petitioner has not signed the Addendum to the Power Purchase Agreement as ordered by the TNERC's order dated 30.04.2015 in PPAP No.5 of 2012. It is submitted that due to high variable cost, the Petitioner's power projects may not be dispatched under Merit Order Ranking and the Respondent would be forced to pay fixed charges. It is stated that during wind season also, the Petitioner's power project may not be dispatched. [The peak penetration is 5,096 MW on 27.07.2017 / 102.579 MU on 04.08.2017. The average penetration is about 3,000 MW during the wind season for the year 2017 - 2018 (June - Sept '17)].

9.11.The Respondent is concerned about the dispatchability of the Petitioner's power plant due to high variable cost as per the Coal Supply Agreement submitted by the Petitioner and in view of the large ingress of renewable power in TANGEDCO's grid. The fixed charges per unit at normative PLF at Commission approved capital cost of Rs.3514 crores will be around Rs.1.93 per unit. This when translated to GST compliance and MOEF compliance, which are change in law events, will be around Rs.2.50 per unit.

9.12.The MOU for the Petitioner's power plant was executed way back in the year 1996 with a 30-year term of the PPA, when there were no investments in the power sector. The tariff proposed was on cost plus basis to attract investments in power sector. Post to the Electricity Act, 2003, the power sector scenario has changed completely with the de-licensing of generation activity.

9.13.The Petitioner's power plant has not been operationalised in time, neither as envisaged in the MOU/PPA during nineties or during its revival post the TNERC's order dated 09.05.2011 in M.P.No.18 of 2010, when this Respondent was facing huge power deficit and was forced to dispatch high cost IPPs and resort to Medium and Long term power procurements.

9.14.As per tariff policy 2006 and revised in 2016, all future procurements of the distribution licensee has to be through competitive bidding route only. The GOI guidelines for competitive bidding provide for medium term procurement for periods 1-5 years and long-term procurements for periods 7 years and above.

9.15. TANGEDCO has planned for State owned projects to the tune of 5700 MW thermal and 500 MW hydro which are under various stages of execution.

9.16. Therefore, in Respondent's prudence it would not be wise to contract the Petitioner's power for a period of 30 years at a high rate. It is stated that the Petitioner's project Tariff should have to be aligned with the current Market Tariff so as to make the Petitioner's project always, under Merit Order.

10. Additional Affidavit filed by the Respondent on 11-10-2018: -

10.1.In addition to the affidavit dated 04-05-2018, the additional affidavit is filed by the Respondent as orally directed by the Commission during the hearing held on 18-09-2018.

10.2. It is stated that the Petitioner in the letter dated 05.07.2018 addressed to the Respondent, proposed certain changes in the fixed and variable charges of the proposed project. Since the said proposal of the Petitioner was not in line with the earlier orders of the Commission and Regulations, the Respondent was not in a position to consider the proposal.

10.3. The Respondent in the letter dated 21.08.2018, informed the Petitioner that M/s.PTC India Limited had floated a tender for Procurement of Aggregated power of 2,500 MW for three years on behalf of Discoms (as per Ministry of Power, New Delhi, Resolution dated 10.04.2018) and they are ready to supply power to the Respondent at a total cost of Rs.4.24 per unit. It was also informed to the Petitioner that there is no fixed charges/capacity liability for less or nil off take of power. In case, if this Respondent off takes power more than 55% of the contracted capacity, then this Respondent will get 1% discount in tariff applicable for incremental 5% off-take beyond 55%.

10.4.In reply, the Petitioner in their letter dated 12.09.2018 didn't accept the tariff of Rs.4.24 per unit and term of 3 years stating that the same are not as per the PPA.

10.5.It stated that the Commission in its order dated 30.04.2015 in PPAP No.5 of 2012 ordered that since the Commission is mandated to approve the price of electricity, the Coal Supply Agreement shall be submitted to the Commission for its final consent as per para 13.1.3 (c) of the Order. It is prayed that the Commission may accord its final consent such that the Respondent may not be liable to pay fixed charges and 'Take or Pay' charges for not dispatching the plant outside Merit Order Ranking.

10.6.It is submitted that the PPA with the Petitioner project was executed on 12.02.1998. Even after two decades the project is yet to be commissioned. If the Petitioner's project had been commissioned in time, the Respondent would not have been forced to procure power from short term and through power exchanges at a higher price.

10.7. Hence, the Commission may consider the above economic loss faced by the Respondent due to delayed commissioning of the Project, and the delay is due to the Petitioner, the Commission may direct the Petitioner to offer a considerable discount in the fixed charges. Further, the Commission may consider a ceiling for variable charges and review the ceiling and other terms of the PPA once in three years.

10.8. The Commission had already determined the capital cost of the project, a major factor for computation of fixed capacity charges vide order dated 30.04.2015. The Commission may consider discount as prayed in para-12 on the fixed charges. The Coal supply Agreement and working for variable charges is now before the Commission in term of para 13.1.3 (c) (Other issues considered by the Commission) in the order dated 30.04.2015 in PPAP No.5 of 2012 as prayed in para 10.) It is prayed that the Commission may consider fixing of a maximum ceiling for variable cost of the Petitioner's project with a provision to review the ceiling in an interval of three (3) years and in line with the Government of India's Tariff Policy / CERC & TNERC Regulations / Market trend etc.

11. Additional Affidavit filed by the Petitioner on 13.10.2018 pursuant to the hearing held on 18-09-2018 and reply to the Additional Affidavit filed by the Respondent on 11-10-2018: -

The following are the replies to the additional counter affidavit filed by the Respondent on 11-10-2018: -

Para No	TANGEDCO's Averments filed on 11.10.2018	Clarification by SEPC filed on 13.10.2018
9	The ceiling variable cost of TTPS/NTPL using domestic coal are with different station heat rate and based on TNERC/CERC Regulations, respectively. Further the imported coal-based IL&FS/Coastal Energen power plants are selected through competitive bidding, having different combination of fixed &variable charges and discount in variable charges. During non-dispatch periods of the above plants due to Merit Order Ranking, the Petitioner's plant may not be dispatched. Hence, adopting a floating ceiling for variable charges for the Petitioner's power Project with the maximum variable charges of the above plants is not justified.	The ceiling variable cost proposed in letter dated 12.9.2018 is neither linked to variable cost of TTPS/NTPL nor to IL&FS/CEPL. On the contrary, it is linked to Domestic Coal based VFC determined based on the price of "Domestic Coal" and by applying domestic coal norms already provided for in the PPA. Since, the operating norms in our PPA are already tighter, the ceiling cost that would be arrived at based on the variable charges and discount in proposal submitted would be much lower than all these power plants cited and hence it would be justified and allow for substantial benefit to the Respondent.
10	Since the Commission is mandated to approve the price of electricity, the Coal Supply Agreement shall be submitted to the Commission for its final consent as per para 13.1.3 (C) of the Orders in P.P.A.P.No.5 of 2012 dated 30-04-2015. The Commission may accord its final consent such that the Respondent may not be liable to pay fixed charges and 'Take or Pay' charges for not dispatching the plant outside Merit Order Ranking.	FCC is payable as per the PPA which has already been determined by the Commission. Further, the present issue is with regard to determination of VFC and hence the consent for CSTA & CHA. Since, the operating norms are already tighter, the ceiling cost as per the proposal submitted would be lower and hence, the plant would come under MoD. With regard to "Take or Pay charges" due to Merit Order, it is clarified that Respondent is not liable for the same as per CSTA submitted.
11	The PPA with the Petitioner project was executed on 12.02.1998. Even after two decades the project is yet to be commissioned. If the Petitioner's project had been commissioned in time, this Respondent would not have been forced to procure power from short	The Capital Cost and hence the FCC has already been determined by TNERC in PPAP 5 of 2012 and the Project is being implemented on that basis. It is informed that TNERC while fixing the Capital Cost in PPAP 5 of 2012, arrived at Rs.3630 Crs. as the Capital

	term and through power exchanges at a higher price.	Cost. However, in para (h) in page 78, TNERC states: "However the Commission is not inclined to admit the 3.3% margin over the cost arrived at based on the exchange rates and would limit it to Rs.3514/- Crores to petitioner also to part bear the cost of delay". Therefore, this aspect of offering concession in FCC for bearing the cost of delay has already been considered by the TNERC in PPAP 5 of 2012 and this finding has already attained finality. Further, the Petitioner has already offered a substantial concession in VFC which protects Respondent from Exchange Rate & Index Price risks. Such proposal has been made only with a view to ensure dispatch. With regard to review of the ceiling and other terms of the PPA once in 3 years, as stated in prayer (13)(c) of additional counter affidavit, the ceiling VFC alone is subjected to review once in three years. Other terms are subject to review in accordance with the terms of the PPA and not once in 3 years.
12	The Commission may consider the above economic loss faced by the Respondent due delayed commissioning of the Project, and the delay is due to the Petitioner, the Commission may direct the Petitioner to offer a considerable discount in the fixed charges. Further the Commission may consider a ceiling for variable charges and review the ceiling and other terms of the PPA once in three years.	

12. Additional Affidavit filed by the Petitioner on 26.10.2018 pursuant to the hearing held on 16-10-2018: -

12.1. With regard to variable cost proposal (hereinafter referred to as "BASE OPTION"), earlier submitted by the Petitioner:

1. In the letter dated 12.9.2018 to the Respondent, the VFC was proposed as:

   "The VFC shall be as determined in accordance with the PPA, CSTA & CHA. However, as a way forward, for the first 5 years, such VFC shall be subjected to a Ceiling VFC determined based on domestic Coal based VFC determined from time to time……."

2. The imported coal (hereinafter referred to as the "BASE COAL") envisaged in CSTA to be used for the BASE OPTION was:

Grade of Coal:6000 kcal / kg (NAR)

Index Used:Average of NEWC (New Castle) & API4

(Richards Bay)

Publishing Agency: globalCoal for NEWC and Argus for API4

3. The VFC Ceiling in the BASE OPTION was to be determined by:

Price of Coal to be used:

Domestic Coal prices prevailing from time to time being sourced by TTPS

Norms to be used:

Domestic coal norms in the PPA between Petitioner & Respondent

12.2. The Petitioner thereafter held discussions with the BTG Supplier as well as the coal suppliers and the outcome of the discussions on various grades / mix of coals that could be considered are with the summary finding as below:

1.The Power Plant (Boiler & Auxiliaries) parameters relating to coal specifications are as already provided for in the PPA which forms the basis for EPC Contract specifications;

2. Within the parameters provided for in the Boiler & Auxiliaries and PPA, the major / key limitations are:

Calorific Value (CV), Total Moisture (TM), Volatile Matter (VM),

Ash content

3.API4& NEWC Coal (Considered as BASE COAL): These are 6000 kcal / kg (NettAsReceived) coal and considered at 100% usage as BASE OPTION. This is the coal specified in the CSTA already submitted;

4.API3 & API5: These are 5500 kcal / kg (NAR) coal (hereinafter referred to as "ALTERNATE COAL"). In view of high Ash content of 25% (Max) in Alternate Coal against 14% Design Value of Power Plant, 100% usage is not possible at present. However, 50% blend with BASE COAL resulting in Ash content at 20% has been considered with incremental plant additions in Coal Mill & Ash Silos.

5. ICI2 & ICI3: These are 5500 kcal / kg (NAR) and 4800 kcal / kg (NAR) coal from Indonesia. Their available quantity in the market is very limited and increasingly purchased for niche markets with reference to Australian prices. These coals have higher TM & VM. In view of their limited availability, selling pattern & higher TM&VM, they can be considered only as spot purchase option if available and are not readily available for long term contracts.

6. Thus, a nearest coal that could be considered in terms of quality, usage and price would be API5 & accordingly the same is considered for cost minimization by the Petitioner.

12.3. The Petitioner submits the option (hereinafter referred to as "BLENDED OPTION") as below:

1. The VFC shall be determined using 50% of the Base Coal along with 50% of the Alternate Coal.

2. The Alternate Coal would be:

Grade of Coal: 5500 kcal / kg (NAR)

Index Used: Average of API3 (Richards Bay) & API5 (New Castle)

Publishing Agency: Argus for API3 & API5

3.The specification of resultant Blended Coal is provided

4.The CSTA would be amended in order to incorporate the specifications and Indices of Alternate Coal considered above.

12.4.To sum up, the Petitioner submits the following for the variable cost:

1.Option 1 (Base Option):

"The VFC shall be as determined in accordance with the PPA, CSTA & CHA. However, as a way forward, for the first 3 years, such VFC shall be subjected to a Ceiling VFC determined based on domestic Coal price prevailing from time to time & domestic coal norms in the PPA"

2. Option 2 (Blended Option): The Alternate Coal would be:

"VFC shall be determined based on usage of 50% of Base Coal blended with 50% of Alternate Coal"

13. Reply Affidavit filed by the Respondent for the Additional Affidavit filed by the Petitioner dated 26-10-2018: -

13.1. The Petitioner has considered API4 and NEWC Indices coal as "BASE COAL", which has a GCV of 6,000 Kcal/Kg (NAR), which is approximately equivalent to 6500 Kcal/kg (GAR). This appears to be closer to the upper limit design specifications, where NEWC and API4 coal are generally costlier leading to a higher variable charge. As per the Additional Affidavit of the Petitioner, the variable cost as on October 2018 using the NEWC & API4 coal at USD 110.13/MT works out to Rs.4.36/Unit. This is very much higher than maximum allowed variable cost of Rs.3.12/Unit under Merit Order Ranking of the Commission for the year 2018-19. For the same period, the Indonesian Coal ICI2 with 5,500 Kcal/Kg (NAR) costs USD 70.07 and ICI 3 with 4,600 Kcal/Kg (NAR) costs USD 51.76/MT only.

13.2. The Freight and Port Charges component based on October 2018 Indices works out to USD13.71/MT for Australia/South Africa coal as per the above calculation. But, for Freight and Port Charges for Indonesia coal works out to USD10.59/MT only, which is less by USD3.1/MT compared to Australia/South Africa coal Freight.

13.3. The grade of coal to be used in the Petitioner's Project may range from GCV of 4,570 to 6,600 Kcal/Kg (GAR) and Ash content from 6% to 31.9%. Further, BHEL make boilers (Sub-critical type), similar to the one being supplied to the Petitioner's Project is generally designed for coal having GCV range of 4,200 to 6,000 Kcal/Kg (GAR). Hence, instead of blending the ALTERNATE COAL with BASE COAL, the ALTERNATE COAL (API 3 & API5) itself can be used as BASE COAL. Further, the other Indices like NEWC-HA, ICI2 & ICI 3 and even ICI4 may also be used as BASE COAL in the Petitioner's power Project, since the power Project is designed to use the coal with ash content up to 31.9%.

13.4.The following table shows the cost of coal from various sources for the month of October 2018:

Coal Grade	Country of Origin	Calorific Value in Kcal/Kg(NAR)	FOB Price in USD/MT
NEWC	Australia	6,000	114.16
AP2	Northwest Europe	6,000	100.28
AP3	South Africa	5,500	73.36
AP4	South Africa	6,000	99.45
AP5	Australia	5,500	65.20
AP6	Australia	6,000	105.8
AP8	China	5,500	77.51
AP10	Colombia	6,000	90.78
ICI 1	Indonesia	6,200	97.41
ICI 2	Indonesia	5,500	70.07
ICI 3	Indonesia	4,600	51.76
ICI 4	Indonesia	3,800	37.31
ICI5	Indonesia	3,800	23.20

13.5. The API3 and API5 grade coal, which are considered by the Petitioner as ALTERNATE COAL having GCV of 5,500 Kcal/Kg (NAR) equivalent to 6,000 Kcal/Kg (GAR) will actually be ideal to keep as "BASE COAL". The Petitioner has given the reason for choosing the API3 &API5 as alternate coal stating that the ash content is high ie,25% against 14% of design value. As already discussed, the Petitioner's Project can be operated with maximum Ash content of 31.9%.

13.6. Among the other ALTERNATE COAL option of using Indices ICI2 and ICI3 of Indonesian origin, with 5,500 Kcal/Kg & 4,800 Kcal/Kg (NAR) which is equivalent to 6,000 Kcal/kg, 5,300 Kcal/kg (NAR), the Petitioner stated that it is available in limited quantity only. But, ICI3 Index coal is being used by all NTPC/Joint Venture power plants including NTECL and there cannot be any difficulty in availability. Further for cost comparison, only ICI2 coal is considered by the Petitioner. Cost comparison for ICI3 was not furnished.

13.7. It is to be stated that to the knowledge of this Respondent, the ICI2 & ICI3 Indices coal are readily available for Long Term Coal Supply Contracts. The Petitioner may pursue with the Coal Supplier for supply of ICI2 & ICI3 Indices coal.

13.8. It is stated that the Petitioner in the letter dated 12.09.2018 had stated that "At the most; TANGEDCO could compare the SEPC VFC to the LTOA VFCs of IL&FS or CEPL or OPG or to the Domestic Coal VFC of TTPS or NTPL". Now, all of sudden the Petitioner has changed their stand that TTPS (which is 35 years old plant) only shall be considered for VFC ceiling.

13.9. It is submitted that during non-dispatch periods of the above plants due to Merit Order Ranking, the Petitioner's plant may not be dispatched. Further, fixing maximum ceiling for variable cost of the Petitioner's Project comparing with 35 years old TTPS plant is not reasonable. Hence, adopting a ceiling for variable charges for the Petitioner's power Project with the maximum variable charges of the above plants is not acceptable to the Respondent. Instead, the Commission may consider a fixed variable cost, such that the plant of the Petitioner will always be dispatched under Merit Order Ranking of the Commission.

13.10. It is stated that as per EPC contract, the designed Heat Rate of the Petitioner's Project is 2,241 Kcal/Kwhr against the PPA norm of 2,391 Kcal/Kwhr (for imported coal) and Auxiliary Consumption is 5.5% against the PPA norm of 7.44% (for imported coal). The Respondent prays that the Commission may consider the Heat Rate and Auxiliary Consumption specified in the EPC contract for arriving ceiling variable cost.

13.11.In view of the above, the Commission may direct the Petitioner to amend the Coal Supply and Transportation Agreement in such a way that the variable cost of the Project shall always be within the Merit Order Ranking of the Commission and pass such other orders as deemed fit by considering this affidavit, earlier counter affidavit dated -23.12.2016, additional affidavits dated 13.03.2017, 09.11.2017, 04.05.2018 & 11.10.2018 filed by the Respondent and thus render justice.

14. Submission by the Petitioner on details sought by the Commission in the hearing held on 27-11-2018: -

14.1. The Commission asked the Petitioner to calculate and submit the discounted fixed costs by considering the various depreciation rates for resuming the hearing.

14.2.In continuation of the same, the Petitioner submits the fixed costs (in Rs./Unit) for various depreciation rates as under:

Levelised FCC for various Depreciation Rates (Rs./Unit)				
Method adopted for the Depreciation	Depreciation Rate	1st Year	Levelised FCC	
		FCC	30 years	1st 5 years
Earlier Sample Calculations (A2)	6.00%	2.642	2.056	2.5
CERC – Weighted Average (A3)	5.35%	2.578	2.013	2.434

CERC-SLM Rate (A4)	5.28%	2.571	2.006	2.427
Normative Assumed Rate (A5)	5.00%	2.543	2.002	2.399
Average of SLM & WDV (A6)	4.28%	2.471	1.956	2.326
Normative Assumed Rate (A7)	4.00%	2.444	1.936	2.298
TNERC-Thermal (A8)	3.64%	2.408	1.91	2.262

14.3.The Petitioner submits that the fixed cost workings submitted above are based on certain set of assumptions and variables existing as on the date of submissions and should these assumptions and variables change, the fixed costs would also change in accordance with the terms of the PPA between the parties approved by the Commission.

14.4. Thematter was heard and thereafter the orders were reserved on 30.11.2018 with daily order as under:

"…….The counsel for Petitioner submitted that the present levelised Tariff for first 5 year will be around Rs 5.30 / Unit and the variable cost will be reviewed once in 3 years. The standing counsel for Respondent submitted that TANGEDCO has entered recently Medium term Agreement with PTC at a rate of Rs 4.24 (ex – bus) and NLC India Ltd., have also offered an in-principle proposal to supply power at a cost of Rs 4/unit from one of the stressed assets which NLC India Ltd., is going to bid in the tender to be invited. The standing counsel of TANGEDCO prayed to consider the above facts. Arguments heard. Orders reserved"

15.This being so, the Petitioner on its own on 4.1.2019 through written submissions filed on 4.1.2019 sought to "Reopen and Record the written submissions of the Petitioner pursuant to the developments that have taken place subsequent to the hearing held on 30.11.2018" and offered / submitted the following:

(a) Usage of 100% of Alternate Coal

(b) Usage of ICI2 grade Indonesian coal
(c) The freight benefits of ICI2
(d) CSTA would be amended to incorporate the above
(e) VFC ceiling linked to Merit Order cut off of the Commission every year up front
(f) 5 year levelised per unit FCC of Rs.2.262 / Unit to be considered for payment of FCC as per PPA
(g) Aligning the norms with guaranteed norms in EPC Contract as per Regulations
(h) Review and re-fixing the norms at the end of 3 years of operation
(i) Fixed discount of Rs 0.225/Unit on tariff being passed on as discount in the VFC for the first three years
(j) VFC to be determined from time to time as per formula in CSTA, CHA and PPA
(k) Discount offered subject to prompt payment, 80% dispatch, 3 years validity and operating norms review at the end of 3 years of operation
(l) Respondent not to effect Buy Out clause as is the case practiced for other generators

16. The Respondent while responding on the reopen petition, in the affidavits filed on 14.02.2019 stated the following with regard to variable cost and CSTA which was reiterated in the affidavit filed on 18.09.2019:

- Approval of CSTA and CHA by the Commission
- Reduction in operating norms in line with the norms guaranteed in the EPC Contract – Heat Rate and Auxiliary Consumptions
- Ceiling variable cost
- Discount
- Review mechanism

17.The Commission in its order passed on 01.04.2019 allowed the main Petition to be reopened and in that process have also considered for further hearing the matter not only on the re open filings but also on the Tariff.The commission examined the said application and ordered on 01.04.2019 which is as below: -

“2.In the said interim application, the petitioner has submitted as follows:-

(a) The petitioner has confirmed for usage of 100%Alternate Coals instead of 50% blend.

(b) The FOB price in the CSTA would be linked to 100% of the average of ICI2, API3 and API5 indices published by Argus for the reference period.

(c) The freight would also take into account of the freight for Indonesian coals which in the instant case would be ICI2 Coal freight

(d) Thus, the price advantage of High Ash & High Moisture Coal as well as the price advantage of ICI coal is considered by the petitioner.

(e) The CSTA would be amended to incorporate the above changes

(f) With regard to cap on the ceiling costs, the petitioner has confirmed that such cap / ceiling is applicable for the Alternate Coal also as was considered for Base Coal and as rephrased as below:

"The ceiling VFC shall be the Merit Order Cut Off determined every year by this Commission and in case, no such Cut Off is determined for the Year, then the cap shall be on the basis of usage of domestic coal in the Petitioners plant".

(g) The 5-yearLevelised FCC (the “LFCC”) is already submitted vide submissions on 29-11-2018 and the same is Rs.2.262 / unit for the first five-year period. The applicable FCC payable for a particular period shall be determined based on the PLF as defined in PPA for such period and LFCC per unit (Rs/Kwhr) for such period.

(h) With regard to determination of the variable charges, the Petitioner is offering reduction in norms of operation as prayed for by Respondent and considering the revision in coal specs and operating loads etc. as below:

Operating parameter	*Existing Norms*	*Proposed Norms*
Heat rate	*2391/Kcal/Kwhr*	*2351/Kcal/Kwhr*
Auxiliary Consumption	*7.44%*	*6.75%*
Coal Losses (As received to As fired)	*100 Kacl/Kg*	*50 Kacl/Kg*

(i) These revised norms are subject to review at the end of 3rd year based on the actual operating norms for the previous years. Should there be any adverse variation, the

same would be corrected and incorporated by mutual discussion and agreement of the parties subject to the present Norms in PPA as the ceiling.

(j) The petitioner is further offering a fixed discount of Rs.0.225 / Unit for first three years and thereafter such fixed discount is subject to mutual discussion and agreement of the Parties.

(k). The per unit VFC would be determined in accordance with the formula provided for in PPA by applying the revised norms as above, applying the landed coal costs from CSTA & CHA and applying the fixed discount as above

(l) The per unit VFC determined based on the reduced norms, fixed discount and current CSTA & CHA terms for the FOB Index price of 59 USD/MT and Exchange Rate of 69 Rs/USD works out to Rs.2.598/ Unit as shown in the detailed statement attached which also contains the landed cost calculations for coal as per CSTA & CHA.

(m) The VFC payable (Rs) for any period shall be determined using the applicable per unit VFC for the units generated for such period.

(n) The discount offered in the VFC in para (c) above and reduction in norms offered, takes into account of and subject to:

i. Prompt payment of Invoices within 30 days of submission of Invoice and shall not be applicable thereafter;

ii. Dispatch of the plant at 80% levels.

iii. The Fixed discount is valid for initial 3-year period and thereafter subject to review and acceptance by the Parties

iv. The reduced Norms of operation offered in para (b) above is subject to review and re-fixation at the end of 3rd year based on the actual norms achieved for the previous 3 years subject to the present norms in the PPA as ceiling.

3. The Petitioner also has submitted to treat their plant on par with respondent's LTOA generators by ensuring that the respondent does not exercise the buyout of the petitioner's plant. The petitioner also contended that except those specifically mentioned above all other terms shall be governed by the PPA and during the 3 years period, if the Commission extends any increase in tariff or additional charges to its generators, the same shall be extended to the petitioners also.

4. Inasmuch as the Commission reserved its orders on the main petition on 30-11-2018 itself, the additional submissions made in the present application cannot be taken into account unless the case is permitted to be re-opened by the Commission. Therefore, we confine ourselves to the issue of re-opening the main petition and we leave the other issues to be decided in the main petition. We also make it clear that in this interim application only the question of re-opening M.P.No.27 of 2016 which has been reserved for orders on 30-11-2018is taken up for consideration and not the merits or otherwise of the written submissions made herein.

5. In the present I.A., the petitioner has stated among other things, that he is offering a further discount of Rs.0.225 per unit. Any discount, in our view will be beneficial not only to the financial interest of the Utility and also the consumer at large. However, considering the stage at which the said discount is offered, we would like to treat the same as interim application simplicitor to re-open the case for the limited purpose of detailed examination of the commercial impact in depth and the consumer interest involved on it. This could be ascertained only if the response of the licensee is known to us.

6. A case can be re-opened after it being reserved for orders, if it is to clarify certain ambiguity etc. in the document, evidence etc. Moreover, this case is one which involves huge public money and considering the principles governing the tariff fixation including clause (b) and (d) of section 61 of the Electricity Act, 2003 we consider to exercise the power to re-open the case with utmost caution and not as a matter of routine.

7. Further, it is apposite to mention here that the Commission has got inherent powers to make such orders as may be necessary under Regulations 48 (1) of the Conduct of Business Regulations. Hence, we find it necessary and expedient to take recourse to said regulation.
For the above reasons, we allow the case be re-opened. It is made clear that we have neither observed nor passed anything on the merit on the main petition which will be examined as and when the same is listed for further hearing. Ordered accordingly."

18. Thus, when the matter was heard on 5.9.2019, the Commission vide its daily order on 5.9.2019 directed the Counsel for the Petitioner to file written submissions on various issues within 2 days as under:

> "*The Chief Engineer (PPP), TANGEDCO submitted that the petitioner has not achieved the financial closure and hence the rates to be fixed can only be prospective. He further submitted that the power is available in the market at Rs.4.02 per unit as compared to the rate of Rs.4.65 (Fixed Cost at Rs.2.20/- + Variable Cost at Rs.2.45/-) offered by the petitioner and the Generators are ready to supply at the said rate up to 7 months in a year and without insisting for fixed cost for the period during which power is not drawn by TANGEDCO.*
>
> *The Commission directed the petitioner to further offer discount in the fixed cost to which the petitioner agreed. The petitioner further submitted that it is developing infrastructure for the evacuation of power on behalf of TANTRANSCO and CoD would be achieved in thirty-nine months from the date of financial closure. The CE/PPP further submitted that what is being quoted by the petitioner is a levelized tariff and the actual cost may be much more. However, Thiru.Sathya Kumar, Vice-President of M/s.SEPC Power Private Limited stated that the rates quoted by the petitioner are a frozen one. The counsel for the petitioner is directed to file the details on the above issue in the form of written submission within two days. "*

19.The Petitioner filed the written submissions as directed by the Commission on 11.9.2019 wherein the fixed cost workings, variable cost workings and assumptions were submitted and in addition the Auxiliary consumption was further reduced from 6.75% to 6.25%. The Petitioner also responded on the Tariff comparisons to be made on EX TANGEDCO basis instead of comparing on EX BUS and EX TANGEDCO basis.

14.6. In reply to the TANGEDCO's contention and the Commission's daily orders dated 5.9.19 the petitioner has submitted the replies by way of written submissions on 13-9-2019 in which it is mentioned as,

"1.The petitioner has submitted the petition in MP no. 27 of 2016 to take on record the date of Financial Closing achieved by the Petitioner and to direct the Respondent to act in furtherance of putting up the Tuticorin Thermal Power Project Stage IV- 1x 525 MW (unit 1) in accordance with the terms of the amended power Purchase Agreement between the parties and the order passed by this Hon'ble Commission on 30.04.2015 in PPAP no.5 of 2012.

2.TheHon'ble commission proceeded to seek further details for the purpose of fixation of tariff in this petition itself, in exercise of its Regulatory powers and orders were passed from time to time. Final hearing in the matter was concluded on 30.11.2018 and thereafter, this Hon'ble Commission reserved the subject petition or orders while orally indicating that any further reduction on the basis of Respondents submission may be considered for a decision by the Hon'ble Commission.

3. Pursuant to the above, the petitioner had considered on the issue of further reducing the tariff, and put forth by this Hon'ble Commission in the hearing on 30.11.2018 and in view of the subsequent developments that have taken place, the Petitioner vide IA No.1 of 2019 in MP no.27 of 2016 on 04.01.2019 offered final reductions, pursuant to which the Respondent filed its affidavit on 14.02.2019. This Hon'ble Commission in Its order on 01.04.2019 allowed the reopening and took the same on file.

4. In the daily orders of the Hon'ble TNERC issued on 10.09.2019, this Hon'ble Commission directed the Counsel of the Petitioner to file the details on Various issues in the form of written submissions within 2 days pursuant to which the Petitioner is filing the present written submission by setting out its response to the various contentions.

a. ***<u>Contention that the petitioner has not achieved financial closure and hence the rates can only be prospective</u>****:*

I. The petitioner vide filing dated 16.11.2015 has already informed the achievement of the financial closure to the Hon'ble Commission with copy to the Respondent and the same is now attached as Annexure 1 for ready reference to the Hon'ble Commission

II. Further, the petitioner has so far drawn loan funds of Rs 1130 Crs. from Lenders and as per the physical progress which is being shared with Respondent also, the Petitioner has made substantial progress in construction to an extent of 80% progress in the interconnection work awarded by TANTRANSCO to petitioner.

III. Therefore, the Financial Closure has been achieved which itself is one of the prayers of petition, namely "Reckoning of Financial Closing date".

b. <u>Contention that the Power is available in the market at Rs 4.02 per Unit:</u>

I. The actual cost of power available in the market as indicated by the Respondent is Rs.4.24 (Ex bus) which was stated at the hearing on 5.9.2019 and already recorded in daily order 30.11.2018.

II. The petitioner had already considered the above cost and had already offered reduction in the norms of operation and variable cost in the affidavit filed on 4.1.2019 based on which the present cost of the petitioner comes to Rs. 4.65/-unit (Ex -TANGEDCO) which would thus be a better rate.

III. Further, as already stated by the Petitioner, the following are submitted which would be clear advantage to the TANGEDCO/Consumer: -

1. *The power from petitioner's project would be cheaper on similar terms*
2. *In the long term, there would be reducing costs as and when loans are getting repaid*
3. *Project ownership is with Respondent unlike other generators wherein ownership is not with Respondent.*

c. The contention that rates being quoted by the Petitioner is a levelized tariff and the actual cost may be much more. However, the petitioner stated that the rates quoted by the Petitioner is a frozen one:

The petitioner reiterated that as per the hearing in the matter on 27.11.2018 and 29.11.2018 and pursuant to the directions of the Hon'ble Commission on 27.11.2018 to freeze the fixed costs, a written submission was made on 29.11.2018 furnishing the frozen costs of various depreciation rates. During the hearing held on 29.11.2018, the Hon'ble Commission considered the depreciation of 3.64% and accordingly this was considered as the frozen fixed costs for adoption. The Petitioner once again stands by the above submission of freezing the fixed costs as submitted in Annexure 8 of 29.11.2018 which is now attached as Annexure 3& 4 to this Submission for ready reference.

d. The position that the Rate of Rs. 4.65 per unit offered by the Petitioner, Fixed cost at Rs. 2.20 per unit and variable cost at Rs. 2.45 per unit.

I. It is submitted that the petitioner has already submitted a detailed working for determining the variable costs as Annexure to the reopen petition filed on 4.1.2019 and the same is attached as Annexure 2 to this written submission for ready reference.

II. It is further submitted that the petitioner has already submitted fixed costs calculations for various assumptions and one such calculations already submitted and considered by the Hon'bleCommission for adoption is being attached as Annexure 3 (Assumptions) and Annexure 4 (fixed Costs) for ready reference.

e. The further offer of discount pursuant to hearing on 5.9.2019

I. The petitioner submits that after substantial internal discussions and workings, the petitioner had already offered overall discount of Rs. 0.225/-

Unit in the variable cost submitted on 4.1.2019 which also includes discount on fixed costs as well.

ii. However, the petitioner as suggested for consideration by the Hon'ble Commission in the hearing on 5.9.2019, is submitting that auxiliary Consumption at 6.25% (as opposed to 6.75%) may be fixed, subject to review and refixation at the end of first 3 years of operation similar to refixation of heat rates.

iii. This would thus result in a further discount to the reductions already agreed to and the reworked Variable Cost in Tariff is being filed as Annexure 5.

iv. The petitioner is offering the "reduction in norms" and discount to tariff" over and above the approved PPA norms and tariff, keeping in mind the interest of consumers as insisted by TANGEDCO and the Hon'ble Commission.

f. <u>COD would be achieved in four months from the date of financial closure</u>:

The petitioner submits that it would achieve the COD within six months from the date of availing start up power from Respondent/TANTRANSCO"

20.The matter was once again heard on 17.09.2019 and the Respondent was directed to file their written submissions with case being adjourned to 24.09.2019.

21. The Counsel for the Respondent filed the submissions on 18.9.2019 and the Petitioner filed its reply submissions on 19.09. 2019.All the points raised by the Respondent's submission on 18.09.2019 were responded to in the Petitioner's submission. The submissions of Respondent and Petitioner are as given under:

Clause No.	Respondent's Submission (18.9.2019)	Petitioner's Reply Submissions (19.9.2019)
2	This Hon'ble Commission approved the ceiling Capital Cost of the Petitioner's project as Rs.3,514crores with the following conditions vide its order dated 30.04.2015 in P.P.A.P No.5 of 2012 against the request of this Respondent for a ceiling Capital Cost of Rs.2,833 Crores. **Capital Cost** The Commission accords approval of the Capital Cost at Rs.3514 crores which shall include all variations in foreign exchange but exclude changes due to changes in Taxes and Duties and changes in law and as per other conditions asbelow: - (a)…… (b)……. "(c) The Petitioner shall achieve financial closure within 3 months from the date of this order of the Commission and the Commercial Operation shall be achieved within a period of 39 months from such financial closure. (d) The financial package to meet the capital cost shall be submitted to the Commission immediately after financial closure. **Coal Supply Agreement** "The Commission orders that the company firms up the Coal Supply Agreement in accordance with the PPA and submit the same to the Commission for the final consent."	The Petitioner submits the following from the submissions made: The Capital cost of Rs 3514 Crs approved is subjected to variations in taxes and changes in law *The increase in cost due to increase in Taxes, change in law and IDC on these alone are submitted.* The SCOD is 42 months from the order date: *The SCOD was also maintained at 42 months as per submissions made by Petitioner* Financial package shall be submitted after financial closure: *These were submitted to TNERC on 30.9.2016 with copy to Respondent* The company firms up CSA and submits to the Commission for final consent *The approval process is being considered in the present MP 27 of 2016*
3	Accordingly, the Petitioner's project should have achieved financial closure and submitted the financial package on or before 30.07.2015 to this Hon'ble Commission (within 3 months from	As per the orders passed by this Hon'ble Commission on 30.4.2015 in PPAP 5 of 2012, the FCD should have been achieved within 3 months which falls on 30.7.2015 and the

	30.4.2015). However, the Project has neither achieved financial closure nor firmed up Coal Supply Agreement as on 30.07.2015	Scheduled Commercial Operation Date (the "**SCOD**") of 39 months thereafter thus making the SCOD of 42 Months from order date Against the above, the Petitioner achieved the financial closure within 6 Months which falls on 30.10.2018 with the SCOD of 36 months thereafter (as per the EPC Contract and Loan Documents) thus making the SCOD of 42 months from the order date. In both cases, the SCOD is 42 Months which was also stated in the Affidavit submitted immediately by Petitioner on 16.11.2015 to the Commission which was never disputed by the Respondent. However, the Respondent in the Additional Affidavit filed on 13.3.2017 have prayed for: *"It is respectfully submitted that if the request for extension of the date of financial closure were to be considered, then the Respondent submits the following for the kind consideration of this Hon'ble Commission. The date of financial closure may be prospective, from the date of approval of coal supply agreement…….. the obligation of this Respondent in PPA would commence only after approval of the coal supply agreement"* Thus, it can be seen above that the Respondent only requires its obligations to commence prospectively after approval of coal supply agreement. In view of the progress made in the

		Construction, the only remaining obligation of Respondent until SCOD is the providing of Interconnection Power which again is already settled issue as the same is taken over by Petitioner: Therefore, the Commission may be pleased to consider setting the prospective timelines for: Availing Start up Power; & Fixing SCOD which shall be 6 months from availing start up power
4	This Hon'ble Commission heard this MP No.27 of 2016 on 16.10.2018 and by the daily order observed as follows: "Thiru.ArvindPandian, Additional Advocate General appeared for the Counsel on record for the Respondent and submitted that the respondent stood by its earlier counter filed by the respondent and PPA had no validity since the petitioner has not attained financial closing date as specified by the Commission….."	It is submitted that subsequent to this, the Commission considered that this is not an issue and proceeded with Tariff determination in the subsequent hearing. Even in subsequent filings of Respondent on 26.11.2018 or 14.2.2018 this was not considered as an issue by the Respondent. Accordingly, the Commission also in the subsequent hearings / daily orders considered only the issue of Tariff determinations. Further, even in the submissions filed by the Respondent, only the issue of Tariff determination is discussed in detail and this was not an issue
5	Since the Petitioner have not achieved financial closure and firmed up coal supply agreement on or before 30.07.2015 as per conditions imposed by this Hon'ble Commission, the Tariff and other terms of the PPA shall be competitive and in line with present market trend.	The Commission in its order on 30.4.2015 in PPAP 5 of 2012 in page 86 under para (c) states that: *"Since the Commission is mandated to approve the price of electricity, the Coal Supply Agreement which is essential component of price should have the approval of the*

<table>
<tr><td></td><td></td><td> Commission. Accordingly, the Commission orders that after the company firms up the Coal Supply Agreement, it shall be submitted to the Commission for its final consent.” As could be seen, the commission ordered for submission after firming up and accordingly, the Petitioner submitted the same through respondent soon after the same was firmed up. </td></tr>
<tr><td>6</td><td> The fixed cost for the first five tariff years was arrived by the petitioner as below: <table><tr><td>Year</td><td>Fixed cost in Rs./KwHr (Nett)</td></tr><tr><td>1st Year</td><td>2.40</td></tr><tr><td>2nd Year</td><td>2.33</td></tr><tr><td>3rd Year</td><td>2.24</td></tr><tr><td>4th Year</td><td>2.16</td></tr><tr><td>5th Year</td><td>2.07</td></tr></table></td><td>Factual</td></tr>
<tr><td>7</td><td>The above fixed cost was arrived by the Petitioner based on the following assumptions (Page 9, Annexure-3 of the written submission dated 11.09.2019 of the Petitioner) with comments of the Respondent are as below:</td><td>Item wise reply furnished</td></tr>
<tr><td></td><td>Capital cost at the rate of Rs.3,844.5 crores – Hon’ble TNERC’s approved capital cost is Rs.3,514 crores only including coal jetty</td><td>As per Note 6 & 7 in page 3 of the financial package submitted by Petitioner on 30.9.2019, the capital cost does not include coal jetty cost.</td></tr>
<tr><td></td><td>Increase in land lease rental of Rs.75 crores and increase in IDC of Rs.55 crores – These are not admissible as per order dated 30.4.2015 in PPAP No.5 of 2012</td><td>Land Lease rentals are levied as ordered by Tariff Authority for Major Ports (TAMP) which is a statutory body. Hence change in law is applicable as per PPA as and when new rentals are notified. Rs 75</td></tr>
</table>

		Crs,increase in Lease Rentals is due to upward revision of Rent by more than 10 times on retrospective basis from 2007 onwards. As per definition of Capital Cost in PPA (Page 104) read with the TEC of CEA (Page 183 of PPA), the IDC increase is allowed due to change in law / reasons not due to the Petitioner.
	Increase due to Taxes/GST Rs.200 crores was not substantiated with valid documents.	Rs 200 Crs is a present estimated increase in Taxes over and above Rs 186 Crs already provided. The Petitioner would substantiate the actual Taxes & Duty at the time of final Capital Cost if so required as substantiation can be made only then.
	Land Costs Rs.9.14 crores – To be excluded for depreciation Calculation	Land costs are excluded from the Depreciation in the Model already submitted
	Since there is no proposal to develop coal jetty, the capital cost of the project to be reduced to such extent.	As already stated, the capital cost excludes the coal jetty cost.
	Income Tax Rate at 33% – The applicable Minimum Alternate Tax is 28% only due to Tax holiday.	Petitioner confirms adoption of 28% MAT in the actual working and not 33% as wrongly furnished under Assumptions.
	Interest on Rupee Term Loan at 13.9% - The present market rate is around 10% only.	Present Interest rate of 12.9% as applicable from PFC and REC are used along with the penal interest rate of 1% which is charged in view of TANGEDCO not providing the consent as required under Clause 17.10 of the PPA.
	Interest on WC Loan at 11.9% - The present market rate is 8.2% only.	As per WCIR in Regulation 17, the present rates are around 13% against which we have taken our applicable rate of 11.9%. The rates

		submitted are for generators with high cash flows who practically may not require working capital.
	Way Leave charges Rs.1.946 Crores& Water Front Charges Rs.1.823 crores – To be absorbed under the head 'O&M Expenses' and not payable by TANGEDCO separately.	These are not applicable at present and hence we would exclude the same for now. Further, being meagre, this does not alter the Tariff even to unit.
8	The variable cost of Rs 2.45 Kcal/Kwhr (NETT) calculated by the Petitioner using (page 9, Annexure-3 of the written submission dated 11.09.2019 of the Petitioner) the following parameters and the comments of the Respondent are as below: Station Heat Rate of 2391 Kcal/Kwhr – Station Heat rate as per EPC Contract is 2,241 Kcal/KWhr only. Auxiliary Consumption 7.44% - Auxiliary consumption as per EPC contract is 5.5% only	As per CERC Regulation (36)(C)(b)(i) on page 106, the Gross Station Heat Rate (GSHR) is arrived at as below from the Design Heat Rate (DHR) guaranteed by the supplier: GSHR = 1.045 X DHR Therefore, 1.045 X 2241 = 2341.8 ~ 2342 and accordingly this has been considered in our filing on 11.9.2019 for GSHR to be at 2342 Kcal/Kwhr As per CERC Regulation (36)(E)(ii) on page 109 & 110, Auxiliary consumption for induced draft CT is 5.75% + 0.5% and accordingly it comes to 6.25% which is the Auxiliary Consumption given in our submission on 11.9.2019. Accordingly, the heat rate of 2342 Kcal/Kwhr& auxiliary consumption of 6.25% may be considered with a review mechanism as already prayed for.
9	This Hon'ble TNERC may fix a year wise ceiling on fixed and variable cost for 5 years / 3 years and review the ceiling at regular interval of three (3) years	It is submitted that; the Petitioner has proposed: FCC: Year wise freezed FCC for the entire 30-year term with a provision for 5 year freezedlevelised FCC which may be adopted

		VFC: Determined based on Imported Coal as per the working provided in the submissions on 11.9.2019 (which in turn is as per PPA, CSTA & CHA submitted) The Ceiling VFC is either the upfront & annual Merit Order Cut – Off (OR) Domestic coal based VFC (in case such cut off is not determined or published).

21. In view of the various submissions and reply submissions and in view of the hearing that took place on 24.09.2019, the Commission by the daily order issued on 24.09.2019, reserved the Petition for orders:

22.Findings of the Commission: -

22.1. Brief History of the case: -

A memorandum of understanding was signed between the erstwhile TNEB and M/s. Tamil Nadu Petro products ltd on 18.02.1995 for setting up a power Ltd. project of 500 MW capacities at Tuticorin. A special purpose vehicle, viz, SPIC Electric power corporation Ltd. (SEPC) was formed to promote the project by M/s. Tamil Nadu Petro products Ltd. The power purchase Agreement (PPA) between the petitioner and the Respondent Board was first initiated on 29.01.1997 in accordance with GO.No.4 dated 07.01.1997 and it was finally signed on 12.02.1998. The petitioner sent a letter on 03.08.2009 requesting the Respondent Board to confirm the taking up of the project for implementation. The Respondent Board replied on 18.08.2009 confirming that the PPA has been signed and ratified. In that letter the Respondent Boardfurther stated that the petitioner is to take up the matter with the appropriate authority, TNERC for necessary approval for implementation of the project.

22.2. Thus, a petition was filed before the commission in MP No. 18 of 2010 to direct the Respondent TNEB to act in accordance to the terms contained in the concluded PPA between the petitioner and the Respondent.

22.3. The commission dealt with two issues in the MP No. 18 of 2010, viz, on the prayer seeking a direction to the Respondent to act in accordance with PPA for putting up 1 X 525 MW Tuticorin Thermal project and the effect of Tariff Policy and subsequent clarification issued by the Ministry of Power, Government of India. On the first issue, namely to act in accordance with PPA, the position taken by two parties being identical, no direction was passed. On the second issue of compliance of the provisions in Tariff policy and the provisions of Act 2003 vis a vis the clarificatory letters issued by the Ministry of Power, Commission observed that there is no impediment in the project being continued in the MOU route. The PPA was also subjected to examination with regard to section 185 of the Electricity Act 2003 that mandates that any instrument executed prior to the enactment of Electricity Act, 2003 shall be valid to the extent that it does not conflict with the provisions of the Electricity Act 2003. It was viewed that the clauses of the PPA executed between the TNEB and the Petitioner in 1998 would remain valid to the extent that they do not conflict with the Tariff Regulations 2005 of the Commission. Accordingly, after hearing both sides, the Commission issued the following order on 09.05.2011: -

"***10.4.4. Capital Cost***: -

The capital cost of the project including financing cost shall be got approved from the Commission once the EPC contractor is selected. The *selection of the EPC contractor shall be on the basis of international competitive bidding. The amendments directed by the Commission in para 10.4.3 shall be finalized by the parties within a period of 3 months of this order. The financing for the project shall be tied up within a period of nine months from the signing of the amended PPA. The commercial operation of the project shall be achieved within a period of 39 months as stipulated in the PPA. The Respondent states that the capital cost of this project works out to Rs.5.398 crores per MW at the current exchange rate as against the cost of Rs.4.69 crores per MW approved by the Commission for Cuddalore Power Project. Subsequently, the TNEB in their counter affidavit filed on 31-1-2011, has modified their stand to say that the capital cost of the project shall not exceed the capital cost approved in the PPA. The TNEB is directed to take a clear stand on the issue and amend the PPA, if necessary, to limit the capital cost at the rate of Rs.4.69 crore / MW.*

X.Directions

1. The PPA shall be amended to correct the norms, as directed in para 10.4.3, so as to fall in line with the TNERC (Terms and Conditions for determination of tariff) Regulations – 2005 within a period of three months.

2 The project mile stones set out in sub-para 10.4.4 of para ix shall be complied with

3. The amended PPA shall be submitted to the Commission in terms of Section 86 of the Electricity Act 2003 for approval."

22.4. Thereafter, the petitioner and respondent TANGEDCO agreed upon the amendments to the PPA as ordered by the Commission in MP no.18 of 2010 and in MP No. 26 of 2011 the petitioner had filed a petition seeking extension of time for submission of amended PPA till 15.09.2011 and the same was allowed by the Commission. The amended PPA was submitted by the Petitioner on 13.01.2012 which was admitted by the Commission as PPAP No 5 of 2012. After an elaborate hearing of the case where all issues from adoption of norms of cost of operation to the process of selection of EPC bidder were discussed and comparison of capital cost of other projects, the majority order of the Commission accorded approval to the amended power purchase Agreement subject to certain conditions.

22.5.The capital cost at Rs. 3514 cr. approved in the Order issued on 30.04.2015 in PPAP No 5 of 2012 has not been challenged before any legal forum by any parties and allowed to become final. Further, consequential actions weretaken by the parties and hence it is enforceable.

22.6. The petitioner M/s. SEPC Power Private limited filed this petition MP.No.27 of 2016 on 08.11.2016 to accord a formal approval of the achievement of Financial closure and for further directions to the Respondent (detailed in the prayer in para 1 above) to act in furtherance of putting up of the Tuticorin Thermal power project Stage IV-1 x 525 MW in accordance with the terms of the amended power purchase Agreement between the petitioner and the Respondent Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and the order passed by the Commission on 30.04.2015 in PPAP No. 5 of 2012.

22.7. Thus, the Petition MP.No.27 of 2016 was filed by the Petitioner as a sequel to the orders of this Commission issued in PPAP No.5 of 2012, which in itself sequel to as earlier orders was issued by the Commission in MP.No.18 of 2010. In view of the above facts, the findings by this Commission and the orders issued hereinafter are also sequel to the earlier orders issued by the Commission in PPAP.No.5 of 2012 and MP.No.18 of 2010.

22.8. With the above backdrop of events, we now proceed to list out the main prayers made out by the Petitioner in this Petition. The issues would be framed and confined to the original prayers of the Petition. However, all the other issues raised during the hearing are listed under “Other Issues”. Accordingly, the Prayer of the Petitioner in the Petition filed on 08.11.2016 are:

(i) Take on record the financial closing date as 30.10.2015 by considering the waivers /relaxations submitted herein;

(ii) Direct the Respondent to;-

(A) convey the comments on the CSTA already submitted and further to be submitted by petitioner in a time bound manner;

(B) discuss the Addendum 3 with Petitioner for conclusion and thereafter execute the same;

(C) take up the interconnection Facilities, transmission facilities and 400KV Ottapidaram Sub-station for timely completion within a schedule that may be fixed by this Commission with directions to file progress reports in that regard in a timely manner, thus avoiding payment of damage /deemed generation to petitioner;

(D) Convey the decision on sharing of sea water intake in case feasible, in a time bound manner;

(E) Constitute the project Coordination Committee as per Clause 3.1.3 and 4.2 (a) of the amended PPA approved by this Commission forthwith;

(F) Take timely action on issues as and when requested by petitioner in furtherance of the Project (or) Agreement or Orders of this Commission

(iii) extend time limit for obtaining approval of CSTA as “one month prior to submission of tariff Adoption Petition”

22.9. The following issues are framed from the prayer of the Petition: -

Issue No.1:-To take on record the financial closing date (FCD)

Issue No.2:-Direct the Respondent to convey comments on the CSTA already submitted and to be submitted by Petitioner in a time bound manner.

Issue No.3:-Direct the Respondent to discuss the Addendum 3 with the Petitioner for conclusion and thereafter execute the same:

Issue No.4:-Direct the Respondent to take up interconnection and transmission facilities:

Issue No.5:- Direct the Respondent to Constitute the Project Coordination Committee:

Issue No.6 :- Direct the Respondent to take timely action on other Issues as and when requested for furtherance of the Project:

Issue No.7:-Extend time limit for obtaining approval of CSTA as "one month prior to submission of tariff adoption Petitionand captioned as "Other Issues".

23. After having framed the above, issues based on the Prayer of the Petition, we now proceed to analyse the facts and render the findings of the Commission issue by issue as under; -

Issue No. 1:-

23.1. According to the petitioner, the Respondent TANGEDCO did not take any action in furtherance to the PPA or the orders of the Commission in PPAP No.5 of 2012.

23.2. The Respondent contended that while informing of the achievement of financial closure on 30.10.2015 vide their letter dt.14.11.2015, no supporting documents to the above effect were enclosed by the petitioner. The petitioner did not comply with the order of the PPAP No. 5 of 2012 dt.30.04.2015 nor the terms in the PPA. The financial closure as per PPAP No. 5 of 2012 should have been achieved by 30.07.2015.

23.3.The conditions precedent in the PPA namely, receiving all governmental authorizations, furnishing of Land Lease Agreement execution of Coal Supply Agreement, coal transport Agreement and Coal handling Agreement executed should have been submitted for TANGEDCO's approval on or before 30.07.2015 and this conditions were not complied.

23.4. Until the date of filing of the petition, the petitioner had not furnished any of the above documents including land Lease Agreement. The Respondent in their counter affidavitdated 23.12.2016 prayed that the Commission may exercise prudence check on the request of the petitioner for any extension of time to achieve financial closure beyond 30.07.2015. In the additional affidavit dated 13.03.2017, the Respondent requested to consider the date of financial closure from the date of approval of coal supply agreement subject to conditions of capital cost not exceeding Rs. 3514 Crores approved in PPAP No. 5 of 2012 and align Heat rate and Auxiliary Consumption norms in the PPA with EPC contractand commencement of TANGEDCO obligations would commence only from the said approved Financial Closure Date (FCD_).

23.5.In the course of the hearing, the petitioner has submitted the Coal Supply and Transport Agreement (CSTA) on 12.2.2018 and Coal handling Agreement (CHA)on 26.02.2018 and the Bid documents and other supporting documents of the CSTA, CHA agreement were submitted on 06.03.2018. On scrutiny, it is found that the variable cost ranged from Rs.3.08/- to Rs.3.85/ unit and adding a fixed cost of Rs.2.50/ per unit by considering the approved capital cost of Rs.3514 crores in PPAP No. 5 of 2014, the petitioner's power supply cost would be higher than any of the other power procurements made by TANGEDCO. Due to this high variable cost, the Respondent were apprehensive of the dispatch of power from the petitioners power plant under the merit order dispatch system and as a consequence, the respondent has apprehension over contracting the power from the petitioner's power plant for a period of 30 Years, in which case, the respondent would have to pay fixed cost to the petitioner without drawing any power from the petitioner's power plant.

23.6. The arguments of the Respondent over the losses suffered due to undue delay of the project for over two decades and to issue a direction to the petitioner to offer discounts to the fixed charges and set a ceiling for the variable cost set the **tone for reduction** in fixed costs and variable costs offered by the petitioner.

23.7. In the written submissions dated 13.09.2019 and 20.09.2019. the petitioner has offered discounts of Rs. 0.225 per unit on variable cost for three years which makes the variable cost at Rs. 2.598 and a levelized fixed cost for a five-year period atRs. 2.262 considering a capital cost of Rs. 3844.5 Crores, auxiliary consumption of 6.25%, which brings the tariff of power plant to Rs. 4.86 per unit.

23.8. The respondent has opposed the capital cost of Rs. 3844.5 crores adopted by the petitioner and various other norms, which are dealt by us in subsequent paragraphs and prayed to fix a year wise ceiling on fixed and variable cost for 5 years/3 years and to review the ceiling at regular interval of 3 years.

23.9. The Commission in a majority order in PPAP.No.5 of 2012 dated 30.04.2015 has granted approval to the amended PPA under Section 86 of the Electricity Act, 2003 subject to certain conditions. The order in PPAP No. 5 of 2012 required the petitioner to file the tariff adoption petition under Regulation 6 of Commission's Tariff Regulations 2005 along with actual completed cost at the time of Commercial operation. The said order also required inter alia that the company firms up the Coal Supply Agreement in accordance with the PPA and submit the same to the Commission for final consent and also achieve financial closure within 3 months from the date of the said order and the commercial operation shall be achieved within a period of 39 months from such financial closure.

23.10. Obviously, the petitioner did not achieve the financial closure within the stipulated time period of 3 months from the date of order of PPAP No. 5 of 2012 and this resulted in the filing of the present petition in MP No. 27 of 2016.

23.11. The submissions made by the petitioner and the respondent narrows down to two important points as follows, for consideration of the Commission: -

i) Whether the delay in achieving the financial closure may be condoned and the date of financial closure may be reckoned on 30.10.2015 as stated by the petitioner or to a later date i.e, of acceptance of the coal supply and transportation agreement and approval by the Commission which is the date of this order and to set timelines prospectively;

ii) Whether the regulatory powers under section 86 (1) (b) of the Electricity Act 2003 may be exercised by the Commission in this case

23.12. This Commission in its order in PPAP No.5 of 2012, in sub para (c) on capital cost has directed as follows: -

> *"The petitioner shall achieve financial closure within 3 months from the date of this order of the commission and commercial operation shall be achieved within a period of 39 months from such financial closure*."

23.13. The definition of Financial Closing date as defined in the PPA is:

> "The *date on which binding commitments to provide the financing for the project are issued and effective conditions to initial borrowings are satisfied and amounts become available for borrowing from lenders".*

23.14. The petitioner has issued notice to the Lenders on 29.10.2015 intimating the compliance of various conditions laid down by lenders for drawl of funds and confirmation from Lenders was received on 30.10.2015. Notice to the EPC contractor was issued on 30.10.2015 itself and the first disbursement from the Lenders was availed on 10.11.2015.

23.15. Although as per the orders of the Commission passed in PPAP No.5 of 2012, the financial closure should have been achieved by 30.07.2015, but the actual date of financial closure achieved by the Petitioner was on 30.10.2015. There has been a delay of three months. The petitioner has tried to justify the delay on the ground that the petitioner has acted upon financial closure from the date of order in PPAP No.5 of 2012and a period of three months is miniscule and the delay would be compensated in the time for achieving Commercial operation date which would be 36 months from FCD instead of 39 months and by doing so, the petitioner would not deviate from the total timeline of 42 months fixed by the Commission in the PPAP No.5 of 2012.

23.16. The petitioner has pointed outthat the Respondent's concern was principally with the commencement of its own obligations prospectively after the approval of coal supply agreement and referred the following prayer of the Respondent in the additional affidavit filed by the respondent on 13.03.2017: -

> *'It is respectfully submitted that if the request for extension of the date of financial closure were to be considered, then the Respondent submits the following for the kind consideration of this Hon'ble Commission. The date of financial closure may be prospective, from the date of approval of coal supply agreement…. the obligation of this Respondent in PPA would commence only after approval of the coal supply agreement"*

23.17. The petitioner has also filed an affidavit before the commission on the progress made in achieving financial closure on various dates starting from 15.05.2015. The said status report has also been furnished to the respondents.

23.18. Considering the huge investments made and the progress made in the construction of the project to an extent of 80% (the petitioner is stated to share physical progress with TANGEDCO) and also 80% of interconnection work with TANTRANSCO,the commission is inclined to condone the delay of three months in achieving the financial closure by the petitioner.But at the same time, theCommission would consider the responsibility / obligation of the respondent is on prospective basis only.

23.19. The Respondent's contention to make effect, the FCD from the date of approval of Coal Supply Agreement is being dealt in the subsequent paragraphs. The issue No.1 is answered accordingly.

Issue no. 2.

24.1. Exercising the regulatory powers of Section 86 (1) (b) of the Electricity Act 2003.

As per Section 86 (1) (b) of the Electricity Act 2003, the State Electricity Regulatory Commission *inter-alia* has to regulate the electricity purchase and procurement process of distribution licensees including the price at which the electricity shall be procured from generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State.

24.2. In PPAP No.5 of 2012, Commission ordered that the Company firms up the Coal Supply Agreement in accordance with the PPA and submit the same to theCommission for the final consent.

24.3. One of the conditions precedents on the part of obligations of the Company is, the execution of the Coal Supply Agreement, Coal Transport Agreement and the Coal Handling Agreement with the approval of TNEB, which approval shall not be reasonably withheld or delayed pursuant to clause 6.2(h) of PPA. This agreement forms an important document of the whole process of power procurement from the project as the thermal power plant's dispatchability depends on the variable cost of the project. The Respondent's obligation in the PPA such as provision of transmission lines, Project co-ordination etc. commences from the date of fulfilment of conditions precedent in the PPA.

24.4. Pursuant of the directions of the Commission, and the concerns expressed by the Respondent on the high variable cost and a commitment of 30 years required forthe project, the petitioner as a way forward, offered concessions in the variable cost of power.

24.5. Sequence of events of the offer of discounts:

i) In the letter dated 12.09.2018 addressed to TANGEDCO and affirmed in the additional affidavit filed before the Commission on 18-09-2018, the petitioner submitted as follows:

"With regard to the FCC, since the Capital cost and PPA has already been approved by the TNERC, the FCC shall be determined in accordance with such PPA Terms.With regard to VFC, the VFC shall be as determined in accordance with the PPA, CSTA & CHA. However, as a way forward, for the first five years, such VFC shall be subjected to a Ceiling of VFC determined based on domestic coal based VFC. (that is to say, the VFC to SEPC shall be domestic Coal based VFC or imported coal based VFC whichever is less) and a suitable review mechanism can be incorporated to review the VFC periodically (say once in five years) in case SEPC (or) TANGEDCO is affected by such VFC with the approval of TNERC in line with PPA".

(ii) Further, in the additional affidavit dated 26.10.2018, the petitioner has furnished various options of using alternate coal and blends to ensure minimal variable cost and offered base option and blended option of coal:

"BASE OPTION:

- *'The Power Plant (Boiler & Auxiliaries) parameters relating to coal specifications are as already provided for in the PPA which forms the basis for EPC contract specifications.*
- *Within the parameters provided for in the Boiler & Auxiliaries and PPA, the major / key limitations are:*
- *Calorific value*
- *Total moisture*
- *Volatile matter*
- *Ash content*
- *API4 & NEWC coal (considered as Base coal specified in CSTA) – 6000 kcal/kg coal with 100% usage:*
    - *API 3 & API 5 – 5500 kcal/kg coal (referred as alternate coal) – in view of high ash content of 25%, 100% usage is not possible. However, 50% blend with Base coal when considered results in ash content of 20%.*

- *ICI2 & ICI3 – 5500 kcal/kg and 4800 kcal/kg coal from Indonesia – Available quantity in market is very limited. These coals have higher moisture and volatile matter. To be considered as spot purchase option. The nearest coal that could be used in terms of quality, usage and price would be API 5 and accordingly the same is considered.*

- ***Blended option –***
- *VFC to be determined using 50% of Base coal along with 50% alternate coal.*
- *Alternate coal would be:*
- *grade of coal – 5500 kcal/kg*
- *Index used – Average of API 3 (Richards Bay) & API 5 (New Castle)*
- *Publishing agency – Argus for API 3 & API 5'.*

24.5.The Respondents in the affidavit dated 26.11.2018, pointed out that the Design specification of the petitioner's power plant allows usage of coal with GCV of 4500 to 6600 Kcal/Kg and ash content of 6% to 31.9% and suggested that the petitioner pursue supply of ICI2 & ICI3 where the variable cost works out to Rs.2.96 per unit.

24.6. Subsequent to the hearing on 30.11.2018 and after reserving this petition for orders, the petitioner through I.A.No.1 of 2019 in M.P.No.27 of 2016 offered final reductions in tariffs in their affidavit dated 04.01.2019 with reduction in proposed norms of operation. Commissionconsiders the price offered by the petitioner in the last of their affidavits dated 11.09.2019 and the substantial reasoning offered on 20.09.2019 vis a vis the contentions made by the Respondent TANGEDCO.

24.7. The other Offers made by the petitioner:

(a) 5 year levelised FCC as submitted on 29.11.2018 is Rs.2.262 for the first five-year period. Applicable FCC payable for a particular period shall be determined based on the PLF as defined in PPA for such period and FCC per unit for such period.

24.8. Usage of 100% alternate coals instead of 50% blend i.e. FOB price in CSTA would be linked to 100% of average of ICI2, API3 and API5 indices published by Argus for reference period and accounting for freight for Indonesian coals.

a) Operating parameter –

Operating parameter	Existing norm	Proposed norm
Heat rate	2391 Kcal/Kwhr	2351 kcal/kwhr
Auxiliary Consumption	7.44%	6.75%
Coal losses	100 Kcal/Kg	50 Kcal/Kg

The above revised norms are subject to review at the end of 3rd year based on actual operating norms of previous years.

(b)A fixed discount of Rs.0.225 / unit for first three years and thereafter such fixed discount is subject to mutual discussion and agreement of the parties.

(c) The per unit VFC would be determined in accordance with the formula provided for in PPA by applying revised norms as above, applying landed coal costs from CSTA & CHA and applying fixed discount.

(d) Discount offered is subject to :-

i. Prompt payment of invoices within 30 days of submission of invoice and shall not be applicable thereafter.
ii. Dispatch of the plant at 80% levels
iii. Fixed discount is valid for three-year period and thereafter subject to review and acceptance by the parties.

iv. Reduced norms of operation are subject to review and re-fixation at the end of 3rd year based on actual norms achieved for the previous 3 years subject to the present norms in the PPA as ceiling.

v. Respondent not to excise buy out of the petitioner's project.

24.9. In the written submission filed on 18.09.2019 the respondent canvassed the following points:

i. The tariffand other terms of the PPA shall be competitive and in line with the present market trend.

ii. Commission's approved capital cost is Rs.3514 crores including coal jetty and there is no proposal to develop coal jetty and therefore capital cost to be reduced to such extent.

iii. Increase in land lease rental of Rs.75 crores and increase in IDC of Rs.55 croresare not admissible as per order in PPAP No.5 of 2012.

iv. Applicable minimum alternate tax is 28% only due to tax holiday.

v. Increase due to taxes / GST of Rs.200 croresare not substantiated with valid documents.

vi. Land cost of Rs.9.14 croreshas to be excluded from Depreciation.

vii. Interest on Rupee term loan at 13.9% cannot be accepted as the present market rate is around 10%.

viii. Interest on Working capital shall be at 8.2%.

ix. Way leave charges Rs.1.946 crores and water front charges – Rs.1.823 croreshas to be absorbed under the head O&M expenses and not payable by TANGEDCO.

x. Station heat rate considered by petitioner is 2391 Kcal/Kwhr.Butas per EPC contract, station heat rate is 2241 kcal/kwhr. Auxiliary consumption 7.44% - As per EPC, auxiliary consumption is 5.5%.

xi. A year wise ceiling on fixed and variable cost shall be fixed for 5 years / 3 years and review the ceiling at regular interval of three years.

24.10. Our attention is drawn by the respondent to the fact thatwhile fixing the capital cost in PPAP No.5 of 2012, the Respondents had indicated that they were put to great hardships due to abnormal delay in execution of the project that resulted in power cuts and load shedding over a period of time and in purchase of high cost power from other sources. Presently, respondents are able to procure power from cheap sources at the rate of Rs.4.24 per unit with no obligation to pay fixed cost. State owned projects have been planned and are at various stages of execution. There is high penetration of sources of renewable power. The Respondents have made it clear that they are not agreeable to the conditions putforth by the petitioner while offering discounts in variable cost.

24.11. The Petitioner vide its letter dated 22.03.2016 submitted the term sheet of CSTA to Respondent and sought Respondent's Comments / Approval for finalizing the CSTA by inviting comparative bids. But the Respondent vide their letter dated 11.08.2016 informed the Petitioner that the comments / approval of Term sheet would be considered and conveyed by Respondent only after Petitioner obtains approval from the Commission for extending the financial closing date;

24.12. It is under this context that the Petitioner in the Petition filed on 08.11.2016 seeking the following directions to be issued to the Respondent: -

(i) to “Convey comments on the CSTA already submitted and further to be submitted by the Petitioner in a time bound manner”

(ii) “Extend the time limit for obtaining approval of CSTA as “One month prior to submission of Tariff Adoption Petition”.

24.13. Since the Commission is mandated to approve the price of electricity, the Coal Supply Agreement which is an essential component of price should have the approval of the Commission:

24.14. However, the Respondent in para 27 of the Affidavit filed on 23.12.2016 has stated that the Petitioner’s request for approval of CSTA in multiple stages is not acceptable to this respondent, since the same is against the provisions of the PPA.

On the other hand, The Petitioner in para (6)(ii) and (7)(iii) of the affidavit filed on 13.01.2017 informed that, as per para (3)(c) of the Commission’s order passed on 30.4.2015 in PPAP No.5 of 2012,there is no specific time limit for submission of the CSTA for approval as extracted below. It is on this basis, the Petitioner sought multistage approval as well as submission of CSTA prior to COD:

“Since the Commission is mandated to approve the price of electricity, the Coal Supply Agreement which is an essential component of price should have the approval of the Commission. Accordingly, the Commission orders that after the Company firms up the Coal Supply Agreement; it shall be submitted to the Commission for its final approval”

24.15. Further, the Respondent in para (10) of the affidavit filed on13.3.2017 stated that: -

i. Variable charge is the major component of the price of power and it is a pass through in Tariff;
ii. PPA does not provide for two stage approval
iii. The stage wise grant of approval without the price constitute a critical part;
iv. The financial closing date may be prospective from the date of approval of CSA by the Respondent

24.16. The Commission takes note of the above and also the averment of the Petitioner in para 7.5 of the Affidavit dated 28.11.2017 and felt that the finalization of CSTA and thereafter its approval by the Commission is necessary for the Respondent'sobligation to commence instead of multistage approval proposed by the Petitioner in its prayer. Accordingly, in the hearing held on 28.4.2017, the Commission has directed the following as extracted from the daily order on 28.04.2017: -

"The Petitioner was directed to finalise the CSA as promised by August 2017"

The above time limit was further extended until 31.10.2017 in the daily order passed by the Commission on 25.10.2017

24.17. The affidavit filed by the Respondent on 09.11.2017, the Respondent has stated that:-

i. The CSTA dated 27.10.2019 was submitted by the Petitioner only on 02.11.2017;
ii. The agreement submitted is not in line with PPA
iii. Respondent has not granted concurrence for the same
iv. Respondent has already written a letter dated 03.11.2017 to the Petitioner

24.18.In continuation, the Commission in the daily order on 13.11.2017 directed as under:

“The Petitioner was directed to furnish the CSA in full shape to the respondent. The case shall be taken up thereafter”

24.19. Subsequently, as informed by the Respondent, the Petitioner submitted the coal supply agreements comprising of Coal Supply and Transportation Agreement (CSTA) and Coal Handling Agreement (CHA) in full form and shape along with all related documents on 06.03.2018 and Respondent sought one-week time for scrutiny of these documents which was granted by the Commission.

24.20. The Respondent after scrutiny, submitted its affidavit on 04.05.2018herein the concern regarding dispatch of Petitioner’s project were brought to the notice and in para (24) of the affidavit, the Respondent quoting the earlier directions of the Commission, informed that:

> *“As per the above direction, Hon’ble Commission is the authority to accord final consent to the CSTA and CHA of the Petitioner’s power project”*

Accordingly, in the hearing held on 08.06.2018, at the request of the Parties, the Commission granted time for discussing and reverting on the concerns raised.

24.21. The matter was heard and the orders were reserved on 30.11.2018with daily order as under:

> *“……. The counsel for Petitioner submitted that the present levelised Tariff for first 5 year will be around Rs 5.30 / Unit and the variable cost will be reviewed once in 3 years. The standing counsel for Respondent submitted that TANGEDCO has entered recently Medium term Agreement with PTC at a rate of Rs 4.24 (ex – bus) and NLC India Ltd., have also offered an in-principle proposal to supply power at a cost of Rs 4/-unit from one of the stressed assets which NLC India Ltd., is going to bid in the tender to be invited. The standing counsel of TANGEDCO prayed to consider the above facts. Arguments heard. Orders reserved”*

24.22. This being so, the Petitioner on its own on 04.01.2019 through written submissions filed on 04.01.2019 sought to “Reopen and Recordthe written submissions of the Petitioner pursuant to the developments that have taken place subsequent to the hearing held on 30.11.2018” and submitted the following:

1) Usage of 100% of Alternate Coal
2) Usage of ICI2 grade Indonesian coal
3) The freight benefits of ICI2
4) CSTA would be amended to incorporate the above
5) VFC ceiling linked to Merit Order cut off of the Commission every year up front
6) 5 year levelised per unit FCC of Rs. 2.262 / Unit to be considered for payment of FCC as per PPA
7) Aligning the norms with guaranteed norms in EPC Contract as per Regulations
8) Review and re-fixing the norms at the end of 3 years of operation
9) Fixed discount of Rs.0.225/Unit on tariff being passed on as discount in the VFC for the first three years
10) VFC to be determined from time to time as per formula in CSTA, CHA and PPA
11) Discount offered subject to prompt payment, 80% dispatch, 3 years validity and operating norms review at the end of 3 years of operation
12) Respondent not to effect Buy Out clause as is the case practiced for other generators

24.23. The Respondent while responding on the reopen petitionhas filed an affidavit on 14.02.2019 wherein it has stated the following with regard to variable cost and CSTA which was reiterated in the affidavit filed on 18.9.2019:

i. Approval of CSTA and CHA by the Commission
ii. Reduction in operating norms in line with the norms guaranteed in the EPC Contract – Heat Rate and Auxiliary Consumptions

iii. Ceiling variable cost
iv. Discount
v. Review mechanism

24.24. The Commission in its order passed on 01.04.2019 allowed the main Petition to be reopened and in that process have also considered for further hearing the matter not only on the reopen petition but also on the Tariff.

24.25. The Petitioner filed the written submissions as directed by the Commission on 11.09.2019 wherein the fixed cost workings, variable cost workings and assumptions were submitted and in addition the Auxiliary consumption was further reduced from 6.75% to 6.25%. The Petitioner also responded on the Tariff comparisons to be made on EX TANGEDCO basis instead of comparing on EX BUS and EX TANGEDCO basis

24.26. In view of all the issues on CSTA, CHA and VFC being addressed by the Parties, the Commission now proceeds to test and analyze each component / parameter and variable which significantly impacts the VFC as below for its adoption: -

(A) Reference Index Price
(B) GCV of Coal
(C) Coal Losses
(D) Freight
(E) Statutory Components
(F) Handling Charges
(G) Heat Rate
(H) Auxiliary Consumption
(I) Secondary Fuel Costs
(J) Discount Offered

(A) <u>Reference Index price</u>

Petitioners submissions:

The Petitioner submitted for adopting 100% usage of alternate coal with indices API3, API5 and ICI 2 published by Argus.

Respondent's submissions:

The Respondent in para (12) of the affidavit filed on 26.11.2018 requested for:

"The API3 and API5 grade coal, which are considered by the Petitioner as ALTERNATE COAL having GCV of 5500 Kcal/Kg (NAR) equivalent to 6000 Kcal/Kg (GAR) will be ideal to keep as "BASE COAL"

The Respondent further in para (15) of the affidavit filed on 26.11.2018 requested for pursuing with coal supplier for ICI2 and ICI 3 grade coal

Commissions view

The Commission adopts usage 100% alternate coal with indices API3, API5 and ICI2 published by Argus. As and when ICI3 grade coal is beneficial and is available, the same shall be sourced and benefits passed on to the Respondent. The formula for determining the VFC already has provisions for usage of various grades of coal.

(B) GCV of Coal

Petitioners submissions:

The Petitioner submitted for adopting 5500 Kacl/Kg NAR Coal

Respondent's submissions:

The Respondent in para (12) of the affidavit filed on 26.11.2018 requested for the API3 and API5 grade coal, which are considered by the Petitioner as ALTERNATE COAL having GCV of 5500 Kcal/Kg (NAR) equivalent to 6000 Kcal/Kg (GAR) will be ideal to keep as "BASE COAL.

Commissions view

The Commission adopts usage 5500 Kcal/kgNet As Received (NAR) Coal. However, as already stated in previous component, the range of coal to be adopted shall cover ICI2 and ICI3 grade of coal also as prayed for by Respondent which shall be suitably provided in the PPA / CSTA

(C) Coal Losses

Petitioner's submissions:

The Petitioner submitted reducing the Coal Losses from 100 Kcal / kg to 50 Kcal / Kg for converting from (As received) to (As Fired) basis

Respondent's submissions:

Respondent did not offer any views

Commissions view

The Commission adopts usage 50 Kcal / Kg for converting from (As Received) to (As Fired) basis with a provision for review at the end of 3 year of operation to fix the actual norm subject to ceiling already provided in the PPA.

(D) Freight

Petitioners submissions:

The Petitioner submitted for freight by including cheaper freight of Indonesian coal also and thus the freight to be determined in CSTA shall include freight from Indonesia also.

Respondent's submissions:

The Respondent in para (8) of the affidavit filed on 26.11.2018 informed that the lesser freight of Indonesia shall also be considered.

Commissions view

The Commission adopts for usage of average of 3 freights by considering the Indonesian freight as the 3rd freight in the CSTA

(E) Statutory Components

Petitioners submissions:

The Petitioner assumed the present statutory components for arriving at the landed cost calculations.

Respondent's submissions:

Respondent did not offer any views

Commissions view

The Commission adopts the present levies with a stipulation that the rates prevailing from time to time shall be adopted in the landed cost calculations from time to time.

(F) Handling Charges

Petitioners submissions:

The Petitioner have taken the handling charges taken from the CHA finalised by it by inviting Competitive Bids which comprises of Port Component, Statutory Component and 3rd Party Component.

Respondent's submissions:

Respondent did not offer any views and requested the Commission for the approval of CHA.

Commissions view

The Commission adopts the rates given in the CHA as these have already been tested in the landed cost working.

(G) Heat Rate

Petitioners submissions:

The Petitioner in the Tariff Calculations submitted Gross Heat Rate at 2342 Kcal / Kwhr. The Petitioner further informed that as per CERC Regulations, the normative gross Heat rate is 1.045 times the guaranteed heat rate in EPC Contract.

Respondent's submissions:

Guarantee Heat Rate as per EPC Contract is 2241 Kcal/Kwhr

Commissions view

In CERC Regulations 2014, the normative Gross Station Heat Rate is 1.05 times the guaranteed / design station heat which would come to 2342 Kcal / Kwhr .whereas in Regulation 36(C)(b)(i) of CERC Regulation 2019, the normative Gross Station Heat Rate is 1.05 times the guaranteed / design station heat rate in EPC Contract which would come to 2351 Kcal / Kwhr. However, for the power plants spanning these two regulations, lesser norms shall be adopted. Accordingly, the lesser normative station heat of 2342 Kcal / Kwhr is considered for adoption. There shall be a provision for review and aligning with actual norms in case there is reduction.

(H) <u>Auxiliary Consumption</u>

<u>Petitioners submissions:</u>

The Petitioner in the Tariff Calculations submitted Auxiliary Consumption at 6.25% as considered by the Commission in the hearing held on 5.9.2019. The Petitioner further informed that as per CERC Regulations, the normative Auxiliary Consumption for similar plants is fixed at 6.25%.

<u>Respondent's submissions:</u>

Auxiliary Consumption guaranteed in the EPC Contract is 5.5%.

<u>Commission's view</u>

As per Regulation 36(E)(ii) of CERC Regulation 2019, The normative Auxiliary Consumption is 5.75% PLUS 0.5% in case of power plants with Induced Draft Cooling Tower (IDCT). Accordingly, Auxiliary Consumption of 6.25% is considered for adoption. There shall be a provision for review and aligning with actual norms in case there is reduction

(I) <u>Secondary Fuel Costs</u>

<u>Petitioners submissions:</u>

The Petitioner assumed Fuel Oil rate with oil specific consumption of 1 ml/kwhr.

<u>Respondent's submissions:</u>

Respondent did not offer any views.

<u>Commissions view</u>

The Commission adopts the specific consumption of 1 ml/kwhr which is as per TNERC Tariff regulations and as ordered in MP.No. 18 of 2010.

Further, the oil cost shall be as per the oil price of the public sector oil companies like IOC Ltd. Since the cost of secondary fuel is very minimal, the Commission would like to fix it as Rs 0.04 / Unit instead of present Rs 0.05 / Unit used in the tariff working submitted by the Petitioner.

(J) <u>Discount Offered</u>

<u>Petitioners submissions:</u>

The Petitioner offered a discount of Rs. 0.225 / Kwhr

<u>Respondent's submissions:</u>

Respondent requested the Commission to decide on the discount

<u>Commissions view</u>

The Commission adopts the discount of Rs 0.225 / Unit offered on the VFC.

24.27. The VFC determined based on the adoption of various parameters as above would be:

- Rs 2.40 / Unit with average FOB Index of 51.68 USD per MT and Exchange Rate of 71.08Rs/USD prevailing in December 2019
- The sample working incorporating the above norms / parameters and hence the VFC calculations are given below which shall be included in the PPA for guidance:

	IMPORTED COAL LANDED COST AND VFC CALCULATIONS As per PPA,CSTA&CHA			
	1. FOB Price Component		**Existing Norms**	**Reference Clause / Terms**
1.1	Reference Index Price (Average of API3, API5 & ICI2 Considered) - Dec '19	**$/MT**	**Average as offered** 51.68	As per CSTA and Additional Affidavit (Average of all 3 indices for Reference period)

1.2	CV for Price Basis (NAR)	kcal/kg	5,500	As per Specs of Argus/globalCoal
1.3	CV of Supplied Coal - NAR	kcal/kg	5,500	Actual NCV of supplied Coal to be considered
1.4	GCV of Coal (As received)	kCal/kg	5,750	Actual GCV of supply to be taken.
1.5	Losses (As Invoiced to As Fired)	kCal/kg	50	As per Definition of GCV (As Fired) in Page 11 of PPA
1.6	GCV of Coal (As Fired)	kCal/kg	5,700	As per Definition of GCV (As Fired) in Page 11 of PPA
1.7	Adjusted Index price for Supply	$/MT	51.68	As per CSTA Clause A.2 Under Schedule 1 / Page 53
1.8	Index Price Adjustment Factor	$/MT	3.90	As per CSTA Clause A.2 Under Schedule 1 / Page 53
1.9	Average Base FOB Price	$/MT	55.58	Calculation (Adjusted Index + IPAF)
	2. Freight & Port Charges Component			
	Freight to be considered		15.94	
2.1	Average Freight to be considered	$/MT	12.67	As per CSTA & Affidavit. Average Freight for 3 destinations considered for the Reference Period.
	3. CIF Price Calculation			
3.1	CFR price	$/MT	68.25	FOB Price + Freight
3.2	Insurance (SEPC)	$/MT	0.1	Insurance in Petitioner's Scope
3.3	CIF Price	$/MT	68.35	CFR Price + Insurance
3.4	Exchange Rate	Rs/USD	71.08	Exchange Rate - Average exchange rate for previous month. Actual as per PPA would apply
3.5	CIF Price	INR/MT	4,858	Calculation
	4. Statutory Components (Present rates taken. However, prevailing rates shall apply)			
4.1	Landing charges@1%	1%	48.58	Present rates
4.2	Assessible value for customs	INR/MT	4,907	Calculation (CIF + Landing Charges)
4.3	Basic Customs Duty	1.667%	82	Average BCD considered including concessional BCD (NIL) for ASEAN.

4.4	Social Welfare Surcharge on BCD	10%	8	Present rates
4.5	Total Value of Import	INR/MT	4997	Calculation (Ass. + BCD & SWS)
4.6	IGST	5%	250	Present GST / IGST Rates
4.7	IGST / Pollution Compensation Cess	INR/MT	400	Present Rates
4.8	Cost with Statutory Components	INR/MT	5,647	Calculation (Import Value + GST + PC)
4.9	Gross landed cost at port (less landing charges)	INR/MT	5,598	Calculation (Cost - Landing Charges)
	5. Handling Charges at Anchorage & Port			
5.1	Port Charges - Wharfage	INR/MT	48.53	Present rates as per Schedule 2 of CHA in Page 24
		18%	8.74	
5.2	Port charges - (Levy, Royalty, Storage time)	INR/MT	87.20	Present rates as per Schedule 2 of CHA in Page 24
		18%	15.70	
5.3	Handling Fees to PPP - HMC & Conveyor	INR/MT		As per Schedule 2 of CHA in Page 24. Not applicable for this option
		18%	-	
5.4	Handling Charges to Logistics Provider - Stevedoring	INR/MT	31.00	Present rates as per Schedule 2 of CHA in Page 24
		18%	5.58	
5.5	Pollution Cess by Port (Charged by Port) with GST	INR/MT	5.00	Present rates as per Schedule 2 of CHA in Page 24
		18%	0.90	
5.6	Intercarting& Transportation and Reverse Charge GST	INR/MT	100.00	Present rates as per Schedule 2 of CHA in Page 24
		5%	5.00	
5.7	Total Handling charges at anchorage & port with GST	INR/MT	308	Calculation (Summation)
5.8	Gross Landed Coal price at Plant	INR/MT	5,906	Calculation (Gross landed + Handling)
	6. Variable Fuel Charge (VFC) Calculation			
6.1	Cost of Coal	Rs/MT	5,906	Calculation (From gross landed)
6.2	Total Moisture	%	15	Considered as per PPA Specs
6.3	Heat Rate	kCal/kWHr	2,342	As per Definition of Heat Rate in Page 11 of PPA and affidavit
6.4	Cost of Primary Fuel (Gross)	Rs/kWHr	2.42	As per Page 107 of PPA
6.5	Cost of Secondary Fuel (Gross)	Rs/kWHr	0.05	As per Page 108 of PPA and as amended on 10.1.2012

6.6	Variable Fuel Charges (Gross)	Rs/kWHr	2.47	Calculation (CPF + CSF)
6.7	Auxiliary Consumption	%	6.25%	As per Definition in Page 4 of PPA & Affidavit
6.8	Variable Fuel Charges (NETT)	Rs/kWHr	2.63	Calculation
6.9	Discount offered for first 3 years	Rs/KWHr	0.225	As per Affidavit (To be considered for first 3 years)
7	**VFC (NETT) after discount**	**Rs/kWHr**	**2.40**	**Present VFC after discount and based on revised norms**
	Note: The operating norms namely Heat Rate, Auxiliary Consumption and the Coal Losses shall be reviewed&refixed at the end of 3 years on the actual norms achieved in 3 years of operation as already stated in the submissions.			

24.28. Present position of the Petitioner in the MOD stack of Respondent:

From the Monthly Power Purchase report of Respondent for July 2019, the present MoD was prepared and compared with the present VFC of Rs 2.40 / Unit of the Petitioner as furnished below:

Sl no	Source	Actual Units in MU	Cumulative Units in MU	% of Cumulative units	Variable Cost-Rate in Paise
1	PTC India ltd	68.458	68.458	1.06%	131.12
2	NTPC/Talcher	228.172	296.63	4.58%	165.38
3	Jindal case 1 Bidding (LTOA)	262.627	559.257	8.63%	209.00
4	NTPC/ER	22.307	581.564	8.98%	210.72
5	Jindal Case 1 Bidding (MTOA)	109.365	690.929	10.66%	218.71
6	GMR energy Trading Ltd	97.496	788.425	12.17%	219.09
7	D B Power Ltd	119.717	908.142	14.02%	225.69
8	NLC India Ltd Expan- TS –I	124.367	1032.509	15.93%	240.46
9	NLC India Ltd Expan- TS –II	53.032	1085.541	16.75%	248.10
10	LANCO Tanjore (Aban)	75.844	1161.385	17.92%	251.83
11	Pioneer power (Penna)	15.491	1176.876	18.16%	263.36
12	NLC India ltd - TS-II	191.856	1368.732	21.12%	264.87
13	NTPC/SR- Stg III	77.182	1445.914	22.32%	267.32
14	Valuthur Phase I&II	51.139	1497.053	23.10%	268.57
15	NTPC/SR	258.328	1755.381	27.09%	272.52
16	Dhariwal infrastructure Ltd	69.861	1825.242	28.17%	275.59
17	NCP/MAPS	98.241	1923.483	29.69%	279.50
18	IL&FS Tamil nadu Power	325.739	2249.222	34.71%	291.48
19	BharathAluminium	148.56	2397.782	37.01%	306.37

20	NTPC/KUDIGI	32.346	2430.128	37.50%	312.67
21	NTPC/Simhari ST-2	107.135	2537.263	39.16%	318.12
22	Coastal EnergenPvt Ltd	89.493	2626.756	40.54%	320.72
23	NTPL	113.983	2740.739	42.30%	325.88
24	OPG Pvt Ltd	31.279	2772.018	42.78%	336.19
25	NCTPS- Stage II	431.203	3203.221	49.44%	343.08
26	TTPS	456.61	3659.831	56.48%	350.89
27	NCTPS Stage 1	282.578	3942.409	60.84%	355.09
28	NPC/KAIGA	133.392	4075.801	62.90%	364.94
29	TAQA/STCMS	44.693	4120.494	63.59%	375.5
30	NTECL Vallur	359.835	4480.329	69.15%	386.26
31	MTPS Stage II	158.392	4638.721	71.59%	390.05
32	Kudangulam Nuclear power	634.937	5273.658	81.39%	410.44
33	MTPS- Stage –I	455.36	5729.018	88.42%	412.68
34	Power Purchase -PEXL/EXL	730.816	6459.834	99.70%	426.45
35	KovilKalppal	17.415	6477.249	99.96%	506.78
36	NVVN bundled power	2.287	6479.536	100.00%	569.45
	Total/Average	6479.536			

24.29. From the above Table, it is seen that the Petitioner's plant figures as 8th station (out of 36 stations) and in between 14% to 16% of the total dispatch required by Respondent. This indicates higher probability of dispatch of the plant compared others as there are 26 plants below the Petitioner in the MoD stack ie, the petitioner plant will be supplying around 300 MU of power every month to the Respondent as it will be placed between the quantum of 1100 MU to 1200 MU per month out of 6500 MU (appx)purchase from Thermal Conventional power by the respondent.

24.30. In view of the above, the commission adopts the VFC of Rs. 2.40/- per unit along with its associated CSTA and CHA as further detailed under: -

a) A fixed discount of Rs. 0.225 / Unit for the first 3 years;

b) **Reduction in Norms of Operation as below**:

i. Heat Rate reduction of 49 Kcal/Kwhr to make it 2342 Kcal/Kwhr;
ii. Auxiliary Consumption Reduction by 1.19% to make it 6.25%
iii. The Coal Losses for As Received to As Fired to be 50 Kcal / Kg instead of 100 Kcal / Kg

c) VFC to be determined from time to time in accordance with the PPA and the landed cost of coal as per CSTA and CHA and a sample calculation provided above

d) The ceiling on variable cost: Shall be the annual Merit Order Cut Off determined every year by the Commission and in case no such Cut Off is determined or published for the Year, then the cap shall be on the basis of domestic coal (From Talcher mines) based variable cost applicable to the Petitioners plant.

e) Review mechanism: The revised norms, the fixed discount and Ceiling on variable costs shall be reviewed and re-fixed at the end of 3 years based on the actual operation for the past three years

25. Issue No. 3. Direct the Respondent to Discuss the Addendum 3 with petitioner for conclusion and thereafter execute the same

The Commission perused the letters exchanged between the Parties with regard to signing of the Addendum No 3. While the Petitioner prayed for direction to be issued, the Respondent in its letter dated 24.10.2016, informed that the signing of Addendum No 3 is based on extending of financial closure by the Commission. Further, there are other issues being addressed in this Order which are to be incorporated in the Addendum.

Accordingly, the Addendum No 3 shall cover various directions / orders contained in the orders of PPAP No.5 of 2012 as well as in MP No.27 of 2016.

26.0. Issue No. 4: Direct the Respondent to take up Interconnection and Transmission Lines: -

a) The only impediment for the commencement of transmission Line and interconnection facilities are with regard to extension of FCD and approval of CSTA & CHA

b) Since, the FCD is already reckoned and CSTA & CHA are approved there are no further impediments in establishing the Transmission Line and interconnection facilities as per PPA and as approved by CEA.

c) However, with regard to the progressive nature of obligation prayed for by the Respondent, the following are considered appropriate by the Commission:

(i) The Transmission line and interconnection facilities shall be established within 3 months from the date of this order

(ii) Respondent is not liable for the obligation as per the PPA for establishment until theestablishment of the Transmission Line stated in (i) above

27.0. Issue No 5. Direct the Respondent to Constitution of Project coordination Committee:

The Respondent should take up the formation of Project Coordination committee and also comply with various items of services/Obligations required to be performed by it under the PPA

28.0. Issue No 6. Direct the Respondent to take timely action on other Issues as and when requested for furtherance of the project.

29.0. Issue No 7 : Approval of CSTA and other Issues;-

a. The CSTA & CHA: The CSTA and CHA are to be amended to incorporate various conditions in the order.

b.The following milestones are to be ensured

Extending Start up power: Within 3 months of thisOrder

SCOD: 6 Months thereafter

30.Grant of Approval:

Considering the points discussed above, the Commission conveys the following orders and / or directions in terms of Section 86 of the Electricity Act 2003 and subject to the conditions mentioned therein as below: -

30.1. Reckoning of the Financial Closing date:

The actual financial closing date of 30.10.2015 achieved by the Petitioner is deemed to be taken as the Financial Closing Date.

30.2. Approval of CSTA and CHA and thereby the Variable Fuel Cost (VFC):

(i) Variable Fuel Charges (VFC)

(A) The variable fuel cost shall be determined as per PPA, CSTA and CHA by suitably incorporating the amendments to the norms of operation in the PPA as under:

Heat rate : 2342 Kcal/Kwhr;
Auxiliary Consumption:6.25% and
Coal Losses :50KCal/kg

The above norms shall be reviewed and refixed by considering the actual norms of operation achieved in the first 3 years of operation.

(B) The CSTA and CHA be amended for the revision of indices, sources & coal grade as discussed in this Order and as per the sample working provided in this order.

(C**) The VFC determined in (A) above** Shall be the annual Merit Order Cut Off determined every year by the Commission and in case no such Cut Off is determined or published for the Year, then the cap shall be on the basis of domestic coal (From Talcher mines) based variable cost applicable to the Petitioner's plant.

(D) A fixed discount of Rs.0.225/unit is applicable for first 3 years for the variable cost up to the ceiling VFC. For the variable costs beyond the ceiling VFC, the ceiling VFC shall alone be charged/payable without discount.

(E) The revised norms of operation, ceiling price and discounts shall be reviewed, mutually discussed and incorporated at the end of 3years.

(ii) Approval of CSTA &CHA:-

CSTA and CHA are approved subject to incorporating the following conditions which are to be complied by the Petitioner.

(a) The pricing to be used shall be the Argus for 5500Kcal/Kg (NAR Basis) coal indices API 3, API 4 and ICI 2

(b) The MTC obligations due to ceiling VFC shall not be payable by the Respondent

(c) The VFC payment alone shall form the basis between petitioner & Respondent

(d) There shall not be any liability for the Respondent in the CSTA and CHA other than the payment of the applicable VFC

(e) The validity period & review of CSTA and CHA shall coincide with the validity and review of VFC and Ceiling

(f) The specification shall cover wide range of coal envisaged

(g) The Respondent is directed to formally convey the approval of CSTA and CHA to Petitioner incorporating the above terms and such other related terms if any within a period of 30 days

(h) The petitioner shall submit the amended CSTA & CHA to the Respondent and to the Commission for recording with in a period of 30 days thereafter in (g) above.

(iii)Determination of Fixed Capacity Charge (FCC) and hence Tariff:

(a)The Parties are directed to approach the Commission within a period of 6 Months from COD with actual completed capital cost duly certified by the statutory auditors of the Petitioner by following the

Regulation 18 of TNERC Tariff regulation for true up and fixing the actual completed capital cost.

(b)Meanwhile, in the intervening period between COD and actual completed cost fixation by the Commission, **the provisional FCC may be paid by the Respondent to the Petitioner based on the capital cost of Rs. 3514 crs. already approved by the commission in its order on 30.4.15 in PPAP no. 5 of 2012.**

(c)Once the actual completed cost is trued up, the difference between the provisionaltariff and the actual tariff shall be recovered (or)refunded in accordance with the CERC tariff Regulations 10 (7) of 2019 more specifically covered under PPA (Clause 3.9) as extracted as under: -

“When the actual cost/tariff is finalized, the amount of over charge or under charge will be refunded or paid (as the case may be) in 12 equal payments at the time of payment of next 12 monthly tariff payments after such finalization with interest determined pursuant to clause 9.6 ie, late payment.

(iv)Tariff Determination & Adoption:

In view of grant of approval for the VFC above and also determining the provisional cost and fixed costs, the same is adopted as per of Section 86 and Section 62 of Electricity Act and Section (6)(7) of TNERC Tariff regulations.

30.3. Amendment to PPA:

The parties are directed to amend the PPA as envisaged in PPAP No.5 of 2012 as well as ordered in this Petition including the disputes resolution mechanism within a period of 2 months from the date of this order and submit the same for approval of the Commission. It is made clear that the amended

PPA shall contains provisions strictly in compliance with the provisions of the Electricity Act, 2003.

30.4. Extending start up power:

Respondent is directed to take up the interconnection and Transmission facilities through the Petitioner and TANTRANSCO and complete the same in order to avail startup & Evacuation power within 3 months from this order date OR such later date as Respondent, Petitioner and TANTRANSCO may in good faith jointly determine and agree which agreement shall be recorded in the amendment to PPA.

30.5. Coordination Committee:

Respondent is directed to form a coordination committee within a period of 30 days from this order date in order to take timely action in furtherance of the PPA & Project;

30.6. Timely Implementation

The Parties are directed to take timely action in furtherance of the PPA & Project and in terms of orders / direction issued by the Commission

30.7. (a)Scheduled Commercial operation (SCOD):

The COD of the project shall be achieved within 6 months from the date of availing start up power in (29) (b) above.

30.7. (b)Progress Report:

The petitioner shall submit monthly progress report to the commission with a copy to the Respondent including the progress on Transmission lines and other activities till the achievement of COD

30.7.(c) VFC Workings:

The VFC calculations provided in this order shall be appended to the amended PPA with applicable changes.<u>The petitioner must take all out efforts to minimize the cost of generation.</u>

Further it is ordered that <u>the gains earned due to variations in norms has to be shared with the respondent as per clause 60 of the CERC</u> Regulations which is referred as under: -

> *"(1) The generating company or the transmission licensee shall workout gains based on the actual performance of applicable Controllable parameters as under:*
> *i)Station Heat Rate;*
> *ii)Secondary Fuel Oil Consumption; and*
> *iii)Auxiliary Energy Consumption.*
> *(2) The financial gains by the generating company or the transmission licensee, as the case may be, on account of controllable parameters shall be shared between generating company or transmission licensee and the beneficiaries or long-term customers, as the case may be on annual basis."*

With the above directions and orders, this petition is finally disposed of.

(Sd........)	(Sd......)	(Sd......)
(K.Venkatasamy)	**(Dr.T.PrabhakaraRao)**	**(M.Chandrasekar)**
Member (Legal)	**Member**	**Chairman**

/True Copy /

Secretary
Tamil Nadu Electricity
Regulatory Commission