

Appellate Tribunal for Electricity
(Appellate Jurisdiction)

APPEAL No.112 of 2012

Dated: 10th July, 2013

Present: HON'BLE MR. JUSTICE M KARPAGA VINAYAGAM, CHAIRPERSON
HON'BLE MR. RAKESH NATH, TECHNICAL MEMBER

In the Matter of:

Tamil Nadu Generation and Distribution Corporation Ltd.,
144, Anna Salai
Chennai-600 002

...Appellant

Versus

- 1. M/s. Penna Electricity Ltd.,**
Sri Bezawada Vikram
New No.37, Vijayaraghava Road,
T. Nagar, Chennai-600 017

- 2. Tamil Nadu Electricity Regulatory Commission**
TIDCO Office Building
No.19a, Rukmini Lakshmipathy Salai
Egmore,
Chennai-600 008

..... Respondent

Counsel for the Appellant(s) : Mr. S Vallinayagam

Counsel for the Respondent(s): Mr. R Muthu Kumaraswamy, Sr Adv
Mr. Buddy A Ranganadhan
Ms. Richa Bhardwaja
Mr. A Satyaseelan
Mr. Najeeb Ahmed

J U D G M E N T

**PER HON'BLE MR. JUSTICE M. KARPAGA VINAYAGAM,
CHAIRPERSON**

1. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) is the Appellant herein.
 2. Aggrieved by the order dated 30.12.2011 passed by the Tamil Nadu State Commission allowing some claims in the Petition filed by M/s. Penna Electricity Company Limited as against the Appellant, the present Appeal has been filed.
 3. The short facts are as follows:
 - (a) The Appellant is the Distribution Licensee. M/s. Penna Electricity Company Limited is the 1st Respondent.
 - (b) The Government of Tamil Nadu selected DLF Power Limited through International competitive bidding for setting up a 52.8 MW Diesel Generation Based Power Plant at Hosur in Tamil Nadu.
 - (c) On 29.4.1998, a Power Purchase Agreement relating to generation employing diesel engine Technology was executed between the Appellant, the Electricity Board and the Generator's Predecessor in Interest. The tariff for the sale of electricity as per the said PPA was fixed at Rs.2.374102 per Unit.
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(d) It was mutually agreed between the Appellant and the Respondent to have a Natural Gas Based Generator and the place of project was shifted to Ramnad District of Tamil Nadu due to availability of Natural Gas in that District.

(e) Thereupon, on 16.12.1999, there was a Fuel Supply Agreement for supply of natural gas entered into by the Generator's predecessor-in-interest and Gas Authority of India Limited on 9.3.2001.

(f) Accordingly, on 28.12.2001, the Government of Tamil Nadu approved the change of Fuel from HSFO to Natural Gas as well as for change of location. Similarly, Government of Tamil Nadu by the order dated 21.5.2002, approved the change of Technology of Generation from Gas Engine to Gas Turbine.

(g) The Respondent, the Generator entered into an amended PPA with the Appellant on 25.8.2004. As per the amended PPA, the Respondent agreed to set-up a Combined Cycle Gas Turbine to generate electricity.

(h) On 3.8.2005, the Tamil Nadu State Commission notified its Tariff Regulations, 2005 contemplating that the Combined Cycle plant would have different commercial operation dates for its Gas Turbine and for its Steam Turbine separately.

(i) The Appellant Board by the letter dated 17.10.2005, permitted the Respondent generator to synchronise its Gas Turbine with the Grid with some conditions. In the said letter, the Appellant Board stipulated that till the Commercial Operation Date, the energy generated by the Plant in open cycle mode would be made available at variable charges as per Clause 5 (3) of the PPA. Through this letter, the Appellant Board sought the consent of the Respondent to the conditions set-out in the letter for permitting synchronization with the Grid.

(j) In reply to the letter of the Appellant dated 17.10.2005, the Respondent generator by its letter dated 25.10.2005, requested the Appellant to consider the energy generated by the Plant during the commissioning trials and performance establishment period as infirm power. The Generator further stated in the letter that once the capacity and performance of gas turbine generator is established, the Generator would commit firm power to the Grid which may be treated as firm power from the time of commitment.

(k) The Appellant sent a reply through letter dated 28.10.2005 reiterating the stand that separate permission should be obtained for synchronizing the Steam Turbine Generator and till the Date of

Commercial Operation, the energy generated by the Plant could be treated as infirm power and only the variable charges for the same would be paid. Accordingly, the generator synchronized its gas turbine unit with the Grid on 29.10.2005 in open cycle mode.

(l) The Generator, the Respondent again sent a letter on 10.11.2005 intimating the Appellant that the Gas Turbine Generator has reached the base load along with its auxiliaries and was able to deliver continuously power at 30 MW under open cycle operation on a firm basis. The Generator also requested the Board to consider its request for payment of fixed cost in addition to variable cost to enable the generator to complete the Combined Cycle Operation of the Plant.

(m) From 29.10.2005 to 1.7.2006, the Generator (Respondent) continuously fed 30 MW of power to the Grid under the open cycle operation achieving a plant load factor of more than 80%.

(n) On 1.7.2006, the Generator achieved commercial operation under the Combined Cycle Operation. The Generator sent several letters to the Appellant requesting the Appellant to make interim payment for the Fuel Cost and other charges.

(o) In response to these letters, the Appellant informed the Generator through letter dated 25.9.2006 that the Electricity Board was yet to take a decision for the payment of fixed charges for that period.

(p) At last, on 9.3.2007, the Appellant Board approved the payment of fixed charges for supply of 30 MW continuous power for the period before the commercial operation date of the combined cycle on the condition that if there was an audit objection in future on payment of fixed up charges, then the Generator would be liable to refund the entire payment in one lump-sum along with the interest.

(q) Then the Respondent sent a reply on the same date requesting the Electricity Board to make the payment of fixed charges without the conditions as stipulated in their letter.

(r) Then the Appellant through the letter dated 15.5.2008, reiterated its stand by stating that as per Section 5.3 of the PPA, the Generator would be eligible only for the variable charges for the infirm power supplied by it before the date of commercial operation.

(s) Again on 12.5.2009, the Appellant informed the Respondent that the Respondent was entitled to only variable charges as per the PPA provision and

requested the Respondent, the Generator to submit invoices for the supply of infirm power to the Appellant prior to the date of commercial operation.

(t) Aggrieved by the non payment of the fixed charges as claimed, the Generator Respondent filed a Petition before the State Commission on 23.7.2009 seeking for the directions for the payment of fixed charges and variable charges for the power generated during the period between 29.10.2005 and 30.6.2006. The Appellant contested the matter by denying the contention and claims made by the Respondent Generator.

(u) Ultimately, after hearing the parties, the State Commission by the impugned order dated 30.12.2011 allowed the Petition holding that the fixed charges shall be payable to the Respondent by the Appellant for the period between 29.10.2005 and 30.6.2006 during which period, the plant operated in Open Cycle.

(v) Aggrieved by the impugned order, the Appellant has presented this Appeal.

4. The learned Counsel for the Appellant has urged the following grounds in this Appeal:

(a) According to the PPA, the date of Commercial Operation is only for the Project i.e. combined cycle

operation and not for Gas Turbine Generator in Open Cycle mode independent of the Steam Turbine Generator.

(b) The definition of infirm power in PPA is the electricity produced by the project and delivered to the Appellant prior to the date of commercial operation, not on any request or dispatch instructions of the Board, for which the Board has to make payment to the generator variable charges only.

(c) The State Commission cannot direct the Appellant to make the payment of fixed charges to the Respondent for the infirm power supplied by the Respondent to the Appellant prior to the Commercial Operation Date of the Generator and can not fix the separate Heat Rate for the Open Cycle Operation when the PPA does not provide for the same.

(d) The State Commission could not hold the infirm power supplied by the Respondent Generator to be the firm power for the period prior to the Date of Commercial Operation contrary to the PPA agreed to between the parties.

(e) The State Commission cannot pass an order directing the payment for fixed charges for the infirm power on the ground that the Generator was supplying

30 MW power continuously till the Date of Commercial Operation.

(f) When the PPA envisages a heat rate which had been agreed to between the parties after negotiations, the same is protected under the saving clause provided under Regulation 35 of the Tamil Nadu Regulatory Commission, Tariff Regulations, 2005 and hence, the PPA entered into between the Appellant and Respondent cannot be interfered with by the State Commission.

(g) In this case, the State Commission wrongly adopted the Central Commission's Regulations. The Central Commission's Regulations cannot be applied to a PPA entered into between a private Generator and the Appellant licensee. The application of the Central Commission's Regulations is restricted to issues arising between the Central Generating Companies and Transmission Utilities or Generating Companies supplying electricity to the licensees in more than one State. Hence the Central Commission's Regulations would not apply to the present case.

(h) The State Commission has wrongly held that the infirm power supplied by the Generator Respondent to the Appellant to be firm power by interpreting the

Schedule VI of the PPA. This Schedule is only a format for supply of electricity after the date of Commercial Operation.

(i) The State Commission is not justified in declaring the date of synchronization as the Date of Commercial Operation. Therefore, the power supplied by the Generator prior to the Date of Commercial Operation is only entitled to a variable charges and not fixed charges.

5. On behalf of the Generator, the 1st Respondent, the following points have been urged by way of reply:

(a) In the present case, the amended PPA was executed between the parties on 25.8.2004 i.e. after the Electricity Act, 2003 came into force and before the effective date of Tamil Nadu State Commission's Tariff Regulations, 2005. U/s 86 (1)(b) of the Electricity Act, 2003 a Power Purchase Agreement between a Generator and Distribution Licensee has to be approved by the State Commission. Under this Section, the Distribution Licensee has to approach the State Commission for approval of the PPA but this was not done by the Appellant, "Distribution Licensee". Accordingly, in this, no approval from the State Commission by the Distribution Licensee was obtained.

In law, if there is a conflict between the unapproved PPA and the concerned Notification and Regulations, then it is the provision of the said Notifications and Regulations which alone would hold the field and not the terms of the Power Purchase Agreement.

(b) As per the Government of India Notification dated 30.3.1992 and the Regulations made by the Central Commission and the State Commission, each of the units namely the Gas Turbine in Operation of Open Cycle Mode and Gas Turbine and Steam Turbine in Combined Mode will have separate Commercial Operation dates. Under the Government of India Notification for Gas based projects, the Commercial Operation Date is deemed to be the date of synchronization with the Grid. In the present case, the Gas Turbine in Open Cycle Mode was tested for its reliability and capacity. Thereupon, the Appellant granted permission for synchronizing the unit with the Grid. Accordingly, the Gas Turbine in Open Cycle Mode generated and supplied power on continuous basis to the Appellant and therefore, the said power generated and supplied from the Gas Turbine Unit in Open Access Cycle Mode cannot be termed as infirm power.

(c) The Tariff Regulations, 2004 of the Central Commission and the Tariff Regulations, 2005 of the State Commission do not prohibit payment for the infirm power generated and supplied. The only condition imposed in the said Regulations is that the revenue generated through sale of such infirm power shall, to the said extent, cause reduction in the capital cost.

(d) In fact, the Appellant in regard to payment of fixed charges sent a communication to the Respondent on 9.3.2007 agreeing to pay the fixed charges subject to the condition that the Respondent should execute an undertaking for refund of the payment in case of any audit objection. This Respondent did not agree for the same. Once the Appellant consented to allow the claim of the Respondent, it was for the Appellant Board to satisfy their auditors about the correctness of their decisions rather than to penalise the Respondent by denying their rightful dues.

(e) In this case, the State Commission has correctly passed the order and directed the payment of fixed charges and variable charges by treating the alleged infirm power as firm power on the facts and circumstances of the case as per the settled position of law.

(f) In Regulation 35, the protection as claimed by the Appellant is in respect of “Existing Generating Companies”. This expression has been defined under Regulation 2(s) of the Regulations, 2005. This is to mean that the Generating Stations declared under the Commercial Operation prior to the date of Notification of the Regulations. The Commercial Operation in unit cycle operation was on 29.10.2005. The Tariff Regulations, 2005 of the State Commission came into force on 3.8.2005. Thus, the entry into Commercial Operation of the Open Cycle Operation and the Combined Cycle Operation of the Generating Station occurred after these Regulations came into force. Therefore, the provision of Regulation, 35 is not applicable to the Generating Station of the Respondent.

(g) The Central Commissions Regulations, 2004 came into force on 1.4.2004. The Tamil Nadu Tariff Regulations, 2005 was notified on 3.8.2005. Under Regulation 3 of the 2005 Regulations, the State Commission has the power to determine the tariff. Under Regulation 4, the State Commission while determining the tariff has to be guided by the principles and methodology specified by the Central Commission. It was in that premise, the State Commission while exercising its power u/s 62 of the Act, 2003 in the

absence of its own Regulations, has placed their reliance on the Central Commission's Regulations 2004 while giving the relief to the parties. This is in accordance with the provisions of the Act. Hence there is no infirmity in the impugned order.

6. Having regard to the rival contentions as referred to above, the principle questions that may arise for consideration are as follows:

(a) Whether the Power Purchase Agreement entered into between the parties was required to be approved by the State Commission and if not approved, what is the effect thereof?

(b) Whether the State Commission shall merely adopt the tariff as per the PPA in accordance with Section 63 of the Act, 2003 or to decide the tariff u/s 62 of the Act, 2003?

(c) Whether the PPA could be said to be protected under Regulation 35 of the 2005 Regulations of the State Commission?

(d) Whether in the absence of any approved Power Purchase Agreement and in the absence of the State Commission's Regulations, the State Commission could rely upon the Central Commission's Regulations and determine the rights and obligations of the parties

for Power Generation on continued, committed and firm basis and supplied to the Appellant Board?

(e) Whether the claim of the Generator with regard to the payment of fixed charges for the power supplied by the Generator to the Appellant in open cycle mode prior to the Commercial Date of Operation of the plant in combined cycle mode could be allowed by the State Commission treating the said power as firm power?.

7. Let us first recall the relevant facts which are relevant to decide the issues which arise in this Appeal.
8. The Respondent M/s. Penna Electricity Limited, the Generator, is an independent power producer operating and maintaining a Combined Cycle Gas Turbine Power Generating Station in Ramnad District of Tamil Nadu. The said Generating Station is exclusively dedicated to the Tamil Nadu Electricity Board, the Appellant. Thus, the entire power generated by the Respondent has to be supplied only to the Appellant. The original Power Purchase Agreement in respect of the said parties was signed on 29.4.1998, incorporating the provisions relevant to the technology and tariff determination based on the factors determined by the Central Government relevant to the project. Later, the consortium led by M/s. DLF Power Limited i.e. the predecessor of the present Respondent was changed into

the consortium by M/s. Arkay Energy Limited, now named as M/s. Penna Electricity Limited with the approval of Government of Tamil Nadu. Subsequent to the PPA dated 29.4.1998, as the price of the liquid fuel was on increase, the Company was asked to find out for the alternate fuel. Accordingly, it was found that the Natural Gas which was available in Ramnad District, was identified as an alternate fuel. During 2001, the Government of Tamil Nadu approved the change of technology of the said project from Diesel Generation to Gas based Combined Cycle Power Generation and also the shifting of the location of the project from Hosur to Valantharavai in Ramnad District. Subsequent to the change of technology and location, the amended PPA was entered into between the Appellant and the Respondent on 25.8.2004.

9. Thereupon, the permission was granted by the Electricity Board on 17.5.2005 for synchronization of the Generator in open cycle mode. Accordingly, the Gas Turbine Generating Station in Open Cycle Operation was synchronized with Electricity Board Grid on 29.10.2005. From the date of synchronization, the Gas Turbine Generating Unit of the Generating Station was generating and supplying continuously 30 MW in to Electricity Board Grid. Thereupon, the Respondent, after completing construction relating to the Steam Turbine Generator, requested for the permission from

the Appellant for synchronizing the Steam Turbine Generator. Accordingly, the Appellant Board granted its approval on 6.4.2006. Thereafter, the Respondent Generator commenced the Combined Cycle Operation of the Generating Station on 1.7.2006.

10. In respect of the power generated and supplied from the Gas Turbine Generating Station Unit in Open Cycle Operation during the period 29.10.2005 to 30.6.2006, the Generator claimed the payment of fixed charges in addition to the variable charges. However, the Appellant informed the Generator that the said power supply from the Gas Turbine Unit in Open Cycle Operation would be treated as infirm power qualifying for payment of variable charges only.
11. There were several correspondence between the parties. During July, 2009, the Generator sent a letter to the Electricity Board claiming and justifying each and every claim for payment of fixed charges and variable charges in respect of the said period and requested the Board to refer to arbitration.
12. At last on 9.3.2007, the Appellant approved the payment of fixed charges for power supply in open cycle subject to the condition that if there was any audit objection in future, the Generator would refund the amount with interest. This condition was not accepted by the Generator and, therefore,

no payment for fixed charges for open cycle operation was made by the Appellant to the Respondent Generator.

13. Under those circumstances, the Generator Respondent approached the State Commission claiming the payment of fixed charges and variable charges in respect of the relevant period. The Generator, the Respondent in the Petition made two prayers in respect of the relief sought for:

(a) The 1st prayer relates to claiming of Rs.25.63 Crores towards fixed charges and Rs.8.10 Crores towards variable charges in respect of the Power generated and supplied during the period 29.10.2005 to 30.6.2006 through Open Cycle Operation of the Gas Turbine.

(b) The 2nd prayer relates to the claim of sum of Rs.18.06 Crores towards underpaid fixed charges in respect of the operation of the Generating Station of the Generator for the period 1.7.2006 to 15.6.2009 in Combined Cycle Operation of the Gas Turbine and the Steam Turbine and also claiming Rs.12.77 Crores towards underpaid variable charges in respect of the period from 1.7.2006 to 15.6.2009 in the Combined Cycle Operation.

14. The State Commission, through the impugned order dated 30.12.2011, allowed the first prayer holding that the

Generator Respondent would be entitled to get the fixed charges and the variable charges for the period between 29.10.2005 to 30.6.2006. However, the State Commission rejected the second prayer by the Generator claiming underpaid charges for the period between 1.7.2006 to 15.6.2009.

15. As against, the portion of the order allowing the 1st prayer made by the Respondent, the Appellant has filed this Appeal in Appeal No.112 of 2012. Similarly, the Generator, as against the disallowance of the 2nd prayer, filed separate Appeal in Appeal No.145 of 2012 before this Tribunal in which the judgment is being pronounced separately.
16. In the present Appeal, we are only concerned with the findings which have been rendered by the State Commission allowed in favour of the Generator Respondent in respect of the 1st prayer holding that the Generator would be entitled to the fixed charges and the variable charges in open cycle operation for the period from 29.10.2005 to 30.6.2006 and the questions framed above relate to the said finding alone.
17. Before dealing with the questions framed above, it would be better to refer to the findings rendered by the State Commission with reference to the issues which are relevant to this Appeal. The relevant findings are as under:

“9.1 Whether the PPA is in accordance with Section 63 or Section 62 of Electricity Act 2003.

The TNEB floated global tender inviting bids for a diesel based power project to be located at Dharmapuri. M/s. DLF power qualified as the lowest bidder on the basis of tariff. M/s. DLF Power and TNEB signed a Power Purchase Agreement on 29-4-1998. The PPA envisages use of diesel generating sets with HSFO as fuel, location being Hosur. Subsequently, the project was acquired by M/s. Arkay Energy who in turn has organized procurement of natural gas through GAIL by entering into an Agreement. There after M/s. Arkay Energy and TNEB executed a amended power purchase agreement on 25-8-2004 with natural gas as fuel, location of the project in Ramanathapuram District. The PPA dated 29-4-1998 was apparently approved by the Government of Tamil Nadu. The amended PPA which was executed on 25-8-2004 after the enforcement of the Electricity Act, 2003 should have been submitted to the Commission for approval. This was not done by both the parties. The contention of TNEB is that this project is under Section 63 of the Electricity Act, 2003 and therefore the Commission shall only adopt the tariff is not tenable. Although the original PPA of 29-4-1998 was based on the offers quoted in the tender, the subsequent PPA on 25-8-2004 was finalized through negotiations. Therefore, it would be untenable for the TNEB to claim that the Commission should adopt the Tariff under Section 63 of the Electricity Act, 2003.

The respondent's argument that this project has to be considered as competitively bid project wherein the Commission shall only adopt the tariff seems to be a later thought. The original PPA of 29-4-1998 has been amended to some extent on 25-8-2004 to incorporate the requirements of combined cycle power project.

Even this PPA has not been placed before the Commission for approval in accordance with Section 86(1) (b) of the Electricity Act, 2003, especially when the amended PPA was executed after the enactment of Electricity Act, 2003. In this connection, Commission would like to refer to its Order dated 9-5-2011 in M.P. No. 18 of 2010 wherein the Commission has directed amendment of the PPA signed in 1998 to fall in line with the TNERC (Terms and Conditions for the determination of Tariff Regulations, 2005) within a period of 3 months and submit the amended PPA for approval to the Commission in terms of Section 86 (1) (b) of the Electricity Act, 2003. Any PPA executed after the enactment of the Electricity Act, 2003 should have been placed before the Commission but both the parties in this case have failed to do the same and are blaming each other at this late stage.

9.2 Whether the Petitioner is entitled for payment of fixed charges for the period 29-10-2005 to 30-6-2006 when the gas turbine operated separately in open cycle and whether the petitioner is entitled for payment of variable charges based on the heat rate applicable for open cycle operation.

The power purchase agreement between the two parties was executed on 29-4-1998. This was based on the notification of the Government of India dated 30-3-1992 of the Ministry of Power issued under Section 43(A)(2) of Electricity (Supply) Act, 1948. This PPA was amended on 25-8-2004 after the enforcement of the Electricity Act, 2003. Therefore, the PPA should have been in consonance with the Electricity Act 2003 and the Regulations framed there under.

The proviso to Section 61 of the Electricity Act 2003 is extracted below:-

“Provided that the terms and conditions for determination of tariff under the Electricity (Supply) Act, 1948 (54 of 1948), the Electricity Regulatory Commission’s Act, 1998 (14 of 1998) and the enactments specified in the Schedule as they stood immediately before the appointed date, shall continue to apply for a period of one year or until the terms and conditions for tariff are specified under this Section, whichever is earlier.”

Thus, the validity of the action taken under the provisions enacted including notification was protected for a year after the enforcement of the Electricity Act i.e. 10-6-2004. Thereafter the notification dated 30-3-1992 of the Government of India cease to have force. The PPA signed on 25-8-2004 should have been in alignment with the Electricity Act 2003 and the Regulations framed there under. Although the TNERC notified Tariff Regulations on 3-8-2005, the CERC Tariff Notification was in place from 26-3-2004 and therefore, the Commission rules that the PPA should have been in alignment with the CERC Regulations notified on 26-3-2004.

This Commission notified its tariff regulations on 3-8-2005. The CERC notified its terms and conditions of tariff regulation on 26-3-2004. In view of the proviso to Section 61 of the Electricity Act, 2003 we cannot rely on the Government of India tariff notifications dated 30-3-1992 for an amended PPA which was signed on 25-8-2004. We therefore rely on the CERC Tariff Regulation. CERC notification dated 26-3-2004 envisages as follows with regard to gas turbine power project.

**“Gross Station Heat Rate
Regulation 16 (iii) (e)**

(e) Gas Turbine/Combined Cycle generating stations

(i) Existing generating stations owned by National Thermal Power Corporation Ltd.

Name of Generating Station	Combined Cycle (kCal/kWh)	Open Cycle (kCal/kWh)
Gandhar GPS	2000	2900
Kawas GPS	2075	3010
Anta GPS	2075	3010
Dadri GPS	2075	3010
Auraiya GPS	2100	3045
Faridabad GPS	2000	2900
Kayamkulam GPS	2000	2900

(ii) Generating stations declared under commercial operation on or after 1.4.2004

<u>Advanced Class Machines</u>	<u>E/EA/EC/E2 Class Machines</u>
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Open Cycle-	2685 kCal/kWh	2830 kCal/kWh
Combined Cycle-	1850 kCal/kWh	1950 kCal/kWh

(iii) Small Gas Turbine Power Generating Stations:

(a) Assam Gas Based Power Station, Kathalguri:

Open Cycle- 3225 kCal/kWh
 Combined Cycle- 2250 kCal/kWh

(b) Agartala Gas Based Power Station,
 Ramachandranagar,

Open Cycle- 3580 kCal/kWh

(c) Other than (a) and (b) above:

	<u>With Natural Gas</u>	<u>With Liquid Fuel</u>
Open Cycle-	3125 kCal/kWh	1.02x 3125 kCal/kWh
Combined Cycle-	2030 kCal/kWh	1.02x 2030 kCal/kWh

Auxiliary Energy Consumption

Regulation 16 (b) (v)

(b) Gas Turbine/Combined Cycle generating stations:

- (i) Combined cycle 3.0%
- (ii) Open Cycle 1.0%

The definition of Date of Commercial Operation or COD is as follows:-

'Date of Commercial Operation' or 'COD' in relation to a unit means the date declared by the generator after demonstrating the Maximum Continuous Rating (MCR) or Installed Capacity (IC) through a successful trial run after notice to the beneficiaries and in relation to the generating station the date of commercial operation means the date of commercial operation of the last unit or block of the generating station;

The definition of declared capacity in the CERC Regulation is as follows:-

Declared Capacity' or 'DC' means the capability of the generating station to deliver ex-bus electricity in MW declared by such generating station in relation to any period of the day or whole of the day, duly taking into account the availability of fuel;

Note

In case of a gas turbine generating station or a combined cycle generating station, the

generating station shall declare the capacity for units and modules on gas fuel and liquid fuel separately, and these shall be scheduled separately. Total declared capacity and total scheduled generation for the generating station shall be the sum of the declared capacity and scheduled generation for gas fuel and liquid fuel for the purpose of computation of availability and Plant Load Factor respectively.

The corresponding definitions in the TNERC's terms and conditions of tariff are extracted below for the purpose of comparison:-

“Date of Commercial Operation” or ‘COD’ in relation to a unit means the date declared by the generator after demonstrating the Maximum Continuous Rating (MCR) or Installed Capacity (IC) through a successful trial run, after notice to the beneficiaries, and in relation to the generating station the date of commercial operation means the date of commercial operation of the last unit of the generating station;

Declared capacity

(o) “Declared Capacity” or “DC” means the capability of the generating station to deliver ex-bus electricity in MW declared by such Generating Station in relation to any period of the day or whole of the day, duly taking into account the availability of fuel;

Note :

In case of a gas turbine Generating Station or a combined cycle Generating Station, the Generating Station shall declare the capacity for units and modules on gas fuel and liquid fuel separately, and these shall be scheduled separately. Total declared

capacity and total scheduled generation for the Generating Station shall be the sum of the declared capacity and scheduled generation for gas fuel and liquid fuel for the purpose of computation of availability and Plant Load Factor respectively.

Heat rate of gas turbine / combined cycle generating station

Gas Turbine/Combined Cycle Generating Stations

	<i>Advanced class machine</i>	<i>E/EA/EC/E2 class machine</i>
<i>Open Cycle</i>	<i>- 2685 Kcal/kWh</i>	<i>2830 Kcal/kWh</i>
<i>Combined Cycle</i>	<i>-1850 Kcal/kWh</i>	<i>1950 Kcal/kWh</i>

The examination of the regulation of CERC indicates that gas based power project can operate in two modes. Viz., Open cycle and combined cycle. The waste heat of the open cycle operation is captured in a waste heat recovery boiler for additional power generation in the associated steam turbine generator, thereby increasing the overall efficiency of the system. As a method of enhancing the efficiency, the power station can also be designed only in combined cycle mode. It, therefore, is a decision which is taken at the very initial stage whether the gas turbine should be operated in open cycle or not. There are many projects in the country which has the facility for operation in both the open cycle mode and the combined cycle mode. It is not only during the initial commissioning that the operation of open cycle is resorted to. It is quite likely that even after the Commercial Operation of the station, at times the gas turbine may be called upon to operate in open cycle,

when the bottom steam cycle is not available for any reason. As regards advance class machines, most of the plants may be designed to operate only in combined cycle mode in view of large size of the gas turbine and higher efficiencies.

The contention of the petitioner is that he has commissioned the gas turbine alone in open cycle and has been requesting the respondent TNEB for payment of fixed charge for open cycle operation and also the variable charge based on the applicable station heat rate for open cycle operation. The respondent has stated that the open cycle operation is not envisaged in the PPA and the plant can be operated only in combined cycle mode and any power generated in open cycle can be treated as infirm power only. In this connection, it is necessary to examine the PPA with regard to the definition of infirm power. The definition of infirm power in the PPA dated 25th August 2004 is extracted below:-

“Infirm Power” means the Electricity produced by the Project and delivered to the Board prior to the Date of Commercial Operation at the Supply Point, not on any request or Despatch Instruction of the Board, in respect of which the Board shall pay to the Company, Variable Charges calculated as per the formula pursuant to Section 7.3.”

It has been argued by the petitioner that the PPA contains Schedule 6 regarding availability declaration and dispatch declaration and schedule format 6.1 envisages availability declarations and format 6.2 provides for dispatch declaration Schedule. Format 6.1 of Schedule 6 provides for hourly forecast of capacity of the facility for the next 24 hours and format 6.2 brings out the hourly power dispatched from the facility for the past 24 hours. If this is the intention of

the parties, then the power generated by the open cycle gas turbine cannot be termed as infirm power and can only be treated as firm power. Once this view is taken that the power generated by open cycle operation is firm power after the commercial date of operation of the gas turbine in open cycle which is the date of synchronization of the gas turbine with the grid. This cannot include the testing and trial operation period and at the same time the firm power delivered would be related to the availability declaration and dispatches based on the schedule 6 appended to the PPA. We are inclined to agree that the power dispatched in open cycle on a firm basis as per schedule 6 of the PPA would be firm power and therefore the fixed charges are payable on a pro-rata basis in accordance with schedule 29 of the PPA which provides for fixed charges on a Rs/Kwh basis. Since the open cycle operation of the gas turbine would be producing less energy as compared to the energy produced by combined cycle operation, the fixed charges recovered would be on the lower side as compared to combined cycle operation. The Commission would like to further point out that the issue of payment of fixed charges during open cycle operation has been drawing the attention of TNEB not only in this case but also in another similarly placed project of M/s. Aban Power Ltd. In that case the Board has agreed to pay the fixed charges for open cycle operation and has actually made this payment but subsequently based on Audit objection of the Accountant General, issued a notice for recovery of the fixed charges for open cycle operation already released to M/s.Aban Ltd. M/s.Aban had preferred an appeal before the High Court of Madras on which a Stay was granted and the stay is stated to be continuing even now. In the instant case which we are dealing with, the respondent made an offer for payment of fixed charges for open cycle operation and

asked for a corporate guarantee for refund of fixed charges so paid in the event of any objection by the Accountant General. The petitioner in this case has not given any such guarantee and therefore did not receive any payment and the offer of the TNEB for payment of fixed charges was subsequently withdrawn. From the above it appears that even the TNEB was convinced that the payment of fixed charges for open cycle operation cannot be denied. After examining the above points, the Commission comes to the conclusion that the power delivered by open cycle gas turbine, after initial trial run and commissioning, is firm power when it is delivered on continuous basis in accordance with schedule 6 of the PPA. In view of this the Commission orders that the fixed charges shall be payable for the period 29-10-2005 to 30-6-2006 during which period the plant operated in open cycle. The PPA has fixed the negotiated heat rate of 1980 Kcal/Kwh for closed cycle against the CERC norm of 2030 K.Cal/Kwh. In the same manner, the variable charges for the open cycle operation is fixed at the heat rate of 3048 Kcal/Kwh against the CERC norms of 3125 KCal/Kwh in the proportion of 1980/2030.”

18. Keeping these findings in mind, we shall now discuss each of the issues framed above.
19. The **First Issue** is relating to the fact relating to the failure to get the approval for the amended PPA dated 25.8.2004.
20. The main argument advanced by the Appellant is that the State Commission has given the finding in favour of the Generator Respondent which is not in consonance with the PPA entered into between the parties and in the absence of

any finding, pointing out any discrepancies or illegality relating to the PPA, the State Commission cannot interfere with the terms and conditions of the PPA merely on the ground that the PPA was not placed for its approval.

21. After coming into force of the Electricity Act, 2003 on 10.6.2003, the Power Purchase Agreement executed shall be approved by the State Commission in terms of Section 86 (1) (b) of the Electricity Act, 2003. In the present case, the Power Purchase Agreement between the Generator Respondent and the Distribution Licensee, the Appellant was entered into on 25.8.2004. Admittedly, the said Power Purchase Agreement dated 25.8.2004 was never placed for approval before the State Commission.

22. The State Commission has given the finding in the impugned order pointing out the failure on the part of the Distribution Licensee in getting the Power Purchase Agreement approved by the State Commission. The relevant portion of the finding are extracted as below:

“.....The amended PPA which was executed on 25-8-2004 after the enforcement of the Electricity Act, 2003 should have been submitted to the Commission for approval. This was not done by both the parties.

“.....The original PPA of 29-4-1998 has been amended to some extent on 25-8-2004 to incorporate the requirements of combined cycle power project. Even this PPA has not been placed before the Commission for approval in accordance with Section

86(1) (b) of the Electricity Act, 2003, especially when the amended PPA was executed after the enactment of Electricity Act, 2003. In this connection, Commission would like to refer to its Order dated 9-5-2011 in M.P. No. 18 of 2010 wherein the Commission has directed amendment of the PPA signed in 1998 to fall in line with the TNERC (Terms and Conditions for the determination of Tariff Regulations, 2005) within a period of 3 months and submit the amended PPA for approval to the Commission in terms of Section 86 (1) (b) of the Electricity Act, 2003. Any PPA executed after the enactment of the Electricity Act, 2003 should have been placed before the Commission but both the parties in this case have failed to do the same and are blaming each other at this late stage.

- 23.** The above findings would make it clear that the State Commission has held that in the absence of the approval of the State Commission, the Power Purchase Agreement which came into existence on 25.8.2004 i.e. after the enactment of Electricity Act, 2003, does not become a legally enforceable and binding document between the parties.
- 24.** To substantiate this position of law, the learned Senior Counsel for the Respondent has cited the Judgment of this Tribunal in the judgment dated 21 October, 2011 in Appeal No.51 of 2011 in the case of M/s. Rithwik Energy Generation Private Limited Vs Karnataka Power Transmission Corporation Limited and Ors. The relevant portion of the said judgment is as under:

“10.4. According to Section 86 (b) of the 2003 Act, the State Commission is empowered to regulate electricity purchase and procurement process of the distribution licensees including the price at which electricity is procured from the generating companies through agreement for purchase of power.

10.5. In view of above, the distribution licensee has to obtain the consent of the State Commission for procurement of power against the PPA. Unless the State Commission gives its consent to the PPA, the distribution licensee can not procure power under the PPA. Thus, the PPA will come into effect only after obtaining the consent of the State Commission. If the consent is denied by the State Commission, the PPA shall become void as per Section 25(3) of the Karnataka Reform Act and Section 86(b) of the 2003 Act. Accordingly, the second respondent had submitted the PPA dated 3.5.2007 signed with the appellant before the State Commission on 25.5.2007 for its consent.”

- 25.** According to the Appellant, the tariff was approved by the Government of Tamil Nadu prior to coming into force of the Electricity Act, 2003 and hence it is not required to get the approval from the State Commission. This contention is not tenable. In terms of the Electricity Regulatory Commission Act, 1998 as also the Regulation 4 and 5 of the 2002 Regulations of the State Commission, the tariff, as approved by the Government of Tamil Nadu during 2002 ought to have been approved by the State Commission.
- 26.** That apart, under Section 86 (1) (b) of the Electricity Act, 2003, it is only the licensee who has to approach the State

Commission for approval of its Power Purchase Agreement with the Generator.

- 27.** Under this provision, the Power Purchase procurement process of the Distribution Licensee is subject to scrutiny and approval of the State Commission. The said provision does not contemplate any scrutiny and approval by the State Commission for the sale of energy by a generator independently from that of the Power procurement of the Distribution Licensee. If there is conflict between the terms of unapproved PPA and the concerned Notification and Regulations, it is the provision of the concerned notification and Regulations which would hold the field and not the terms of the PPA.
- 28.** In this case, the 1st Power Purchase Agreement between two parties was executed on 29.4.1998. This was based on the Notification of the Government of India dated 30.3.1992 issued through the Power Ministry under the Electricity Act, 1948. This PPA dated 29.4.1998 was subsequently amended on 25.8.2004 i.e. after enforcement of Electricity Act, 2003. Therefore, this PPA dated 25.8.2004 should have been in consonance with the Electricity Act, 2003 and the Regulations framed therein. The proviso to Section 61 of the 2003 Act which came into force on 10.6.2003 stipulates that the validity of the action taken under the provisions of the earlier Acts, prior to the Act, 2003, would be protected

only for a year after the enforcement of Electricity Act, 2003. This means, after one year, the Notification dated 30.3.1992 of the Government ceased to have force.

- 29.** In the present case, the State Commission notified its tariff Regulations on 3.8.2005. However, the Central Commission notification was notified as early as on 23.6.2004. In the absence of the State Commission's own Regulations it had to be guided by the Central Commission's Regulation for approval of the PPA dated 25.8.2004. Therefore, the PPA which was entered into between the parties on 25.8.2004 should have been in arraignment with the Central Commission's Regulations notified earlier i.e. on 26.3.2004 under the powers conferred under the Act, 2003.
- 30.** In view of the proviso to Section 61 of the Act, 2003 in which only one year period was provided for saving validity of the Notification earlier issued; the Government of India Tariff Notification dated 30.3.1992 cannot be relied upon for the amended PPA which was entered into on 25.8.2004.
- 31.** Under those circumstances, the State Commission relied upon the Central Commission's Regulations issued on 26.3.2004 with regard to Gas Turbine Power Project. On that basis, the State Commission concluded that the unapproved PPA which is not consistent with the Act, 2003

or the Regulations framed there under, are not enforceable and binding on the parties.

- 32.** Therefore, in the absence of the approval of the PPA by the State Commission, the present PPA would not become binding contract between the parties. As such, there is no infirmity in the finding on this issue rendered by the State Commission.
- 33.** The **Second Issue** relates to the applicability of Section 63 of the Electricity Act whereby the State Commission has to merely adopt the tariff.
- 34.** According to the Appellant, the original PPA which had been entered into between the parties based on the tariff based competitive bidding process and therefore, the State Commission ought to have merely adopted the determined tariff u/s 63 of the Act, 2003.
- 35.** The First Power Purchase Agreement was executed on 29.4.1998 with reference to the Diesel Engine Based Generation Technology. In the said Agreement, the tariff was fixed as Rs.2.374102. During the year, 2002, the Government of Tamil Nadu approved the change of location, change of fuel and change of technology with an amendment to the tariff. Thereupon, the amended Power Purchase Agreement was entered into on 25.8.2004. As per this Agreement, the tariff was to be Rs.2.2798 per unit.

Therefore, the amended Power Purchase Agreement dated 25.8.2004 was virtually a new Power Purchase Agreement executed between the parties. Admittedly, (1) There was a change in location (2) there was a change in fuel (3) there was a change in technology in the generation and (4) a change in the tariff also. Therefore, the amended PPA dated 25.8.2004 in which the entire base had been altered, could not be linked to the First Power Purchase Agreement dated 29.4.1998 executed pursuant to the selection of the Project under Tariff based competitive bidding during 1996.

- 36.** The competitive bidding undertaken in the year 1996 cannot be said to be a bid undertaken in terms of the guidelines issued after the Electricity Act, 2003 was enacted.
- 37.** In other words, the principle propounded by the Appellant would apply only to the competitive bids under taken after 10.6.2003 i.e. the date of enactment of Electricity Act, 2003 that too, in accordance with the guidelines issued by the Government of India pursuant to Section 63 of the Act, 2003.
- 38.** Section 63 of the Electricity Act, 2003 relates to the determination of the tariff by bidding process notwithstanding anything contained in Section 62 which empowers the State Commission to determine the tariff in accordance with the provisions of the Electricity Act, 2003.

Even Section 63 of the Act, 2003 does not dispense with the mandatory approval of the Power Purchase Agreement by the State Commission as provided u/s 86 of the Electricity Act, 2003. Admittedly, in this case, the PPA had not even been placed before the State Commission for approval. Hence, the question of application of Section 63 of the Electricity Act, 2003 would not arise.

- 39.** As a matter of fact, u/s 62 of the Electricity Act, 2003, the State Commission is required to determine the tariff and accordingly in the present case, the State Commission has rightly determined the same by invoking section 62 of the Electricity Act, 2003 as Section 63 of the Electricity Act, 2003 cannot be invoked. As such, there is no infirmity in the finding rendered by the State Commission on this issue.
- 40.** Let us now come to the **3rd Issue** relating to applicability of Regulation 35 of the Regulations of the State Commission, 2005.
- 41.** According to the Appellant, the Power Purchase Agreement executed on 25.8.2004 stands protected by Regulation 35 of the 2005 Regulations of the State Commission.
- 42.** Let us deal with the said Regulation. Regulation 35 of the 2005 Regulations of the State Commission came into force on 24.6.2005. This provides as under:

“Regulation 35:

Application for Determination of Tariff

- (1) *The Generating Company may file application for determination of tariff in the manner specified in Chapter II of these Regulations.*
- (2) *In respect of **existing Generating Companies** covered under Power Purchase Agreement already entered, the tariff and norms shall be as per the terms agreed to. However, modification to the existing Power Purchase Agreement may be undertaken through mutual discussion between the parties to the agreement to explore possibilities of reducing costs and aligning the Power Purchase Agreement with the near market structure.”*

43. On the strength of this Regulation, the Appellant submits that existing Generating Companies would be protected. The reading of the Regulations would make it clear that a Power Purchase Agreement entered into by “Existing Generating Stations” alone is protected. The term “Existing Generating Stations” is defined in Regulation 2(s) of the Regulations, 2005. The same reads as follows:

*“(s) **Existing Generating Station**’ means a generating station declared under commercial operation **from a date prior to the notification of these Regulations.**”*

44. In the present case, the Gas Turbine in Open Cycle achieved Commercial Operation Date on 29.10.2005. The Steam Turbine in Combined Cycle achieved the Commercial Operation Date on 1.7.2006. The Regulation 35, came into

force on 24.6.2005 i.e. prior to the Commercial Operation Dates of these units. Therefore, on the date on which the Regulation came into force i.e. on 24.6.2005, these Stations had not achieved the Commercial Operation Dates.

45. As indicated above, the Gas Turbine in Open Cycle achieved Commercial Operation Date on 29.10.2005 whereas the Steam Turbine in Combined Cycle achieved the Commercial Operation Date on 1.7.2006. Therefore, these units on 24.6.2005 the date of the Regulation, cannot be termed to be “Existing Generating Stations” as defined in Regulation 35. Therefore, the Power Purchase Agreement which had not been approved and which could not be protected under Regulation 35, could not bind the parties. Therefore, the finding on this issue given by the State Commission, is justified.

46. The **4th and 5th Issues** are interconnected and therefore being dealt with together.

47. According to Section 61 of the Act, 2003, the State Commission in specifying the terms and conditions for determination of tariff is guided inter-alia, by the Tariff Regulations of the Central Commission. When the amended PPA dated 25.8.2004 was signed between the Generating Company and the Electricity Board, the State Commission’s Tariff Regulations had not been notified.

However, the Central Commission's Tariff Regulations were available. Under these circumstances, the State Commission was guided by the terms and conditions specified by the Central Commission, in the absence its own Regulations. Thus, the State Commission has correctly relied on the provisions of the Central Commission's Tariff Regulations in deciding the dispute between the Generating Company and the Electricity Board.

- 48.** According to the Generator, the 1st Respondent, the power generated between 29.10.2005 and 30.6.2006 at 30 MW in Open Cycle Operation and fed continuously on firm basis into the Grid would be entitled to the payment of fixed charges and variable charges.
- 49.** On the other hand, the Appellant has submitted that Distribution Licensee as per Schedule 6 to the PPA, the Generating Company shall on daily basis submit an Availability Declaration for the project and however, the Generator did not follow the above procedure prior to its Commercial Date of Operation and in the absence of scheduling of power injected into the Grid prior to the Date of Commercial Operation, the Generating Company would be entitled to only variable charges as per the formula for the infirm power.

50. On this issue, the State Commission has given the following findings:

“It has been argued by the petitioner that the PPA contains Schedule 6 regarding availability declaration and dispatch declaration and schedule format 6.1 envisages availability declarations and format 6.2 provides for dispatch declaration Schedule. Format 6.1 of Schedule 6 provides for hourly forecast of capacity of the facility for the next 24 hours and format 6.2 brings out the hourly power dispatched from the facility for the past 24 hours. If this is the intention of the parties, then the power generated by the open cycle gas turbine cannot be termed as infirm power and can only be treated as firm power. Once this view is taken that the power generated by open cycle operation is firm power after the commercial date of operation of the gas turbine in open cycle which is the date of synchronization of the gas turbine with the grid. This cannot include the testing and trial operation period and at the same time the firm power delivered would be related to the availability declaration and dispatches based on the schedule 6 appended to the PPA. We are inclined to agree that the power dispatched in open cycle on a firm basis as per schedule 6 of the PPA would be firm power and therefore the fixed charges are payable on a pro-rata basis in accordance with schedule 29 of the PPA which provides for fixed charges on a Rs/Kwh basis.”

51. The Gas Turbine Generator in Open Access Cycle Operation during the period between 29.10.2005 and 30.6.2006 generated and supplied 153.26 MUs to the Appellant. The said generation and the supply into the Grid were after the testing of the Gas Turbine Generating Units for its reliability and capacity test. This was done only after

the Appellant granted the permission for synchronization of the Grid. Ever since then, the Gas Turbine Generating Unit was generating and supplying continuously 30 MW of power per hour into the Electricity Board Grid.

52. The Power Purchase Agreement dated 25.8.2004 incorporating the norms, terms and conditions was based on the approval granted by the Government of Tamil Nadu during the Financial Year 2001-2002. That apart, at that time, when the said PPA was executed, the Tariff Regulations issued by the Central Commission on 26.3.2004 framed under the Act, 2003 was in force. In these Regulations, separate norms and factors have been provided in relation to the Operation of Units in the Gas Based Turbine Generator Combined Cycle Operation Generating Units. The said Regulations also provided separate "Heat Rates" for payment of tariff separately for the units functioning under Open Cycle Operation and the Generating Stations operating in Combined Cycle Mode.

53. The Tariff Regulations framed by the Central Commission under the Act, 2003 also provided separate entry into Commercial Operation for each of the units of the Combined Cycle Operation Generating Station. Thus, the Generation and supply was not only as contemplated in the provisions of the PPA namely Schedule-6, but also with reference to the Statutory Prescription of the norms and factors relating

to Combined Cycle Operation as in the provisions of the Tariff Regulations of the Central Commission.

54. As mentioned earlier, the amended PPA dated 25.8.2004 did not contain the relevant and appropriate provisions relating to the generation of electricity employing Gas Turbine in open cycle operation. Since, the PPA between the parties was not approved by the State Commission, the State Commission was not bound by the same as it is entitled to direct for the alteration of the terms of the PPA to bring it in line with the Rules of the Regulations. Therefore, the State Commission as a Regulatory Authority, having the power and obligation to ensure the procurement process of the State Government Utilities in concurrence with the provisions of the Act, has got the power to direct the payment of fixed charges to the Respondent after finding the alleged infirm power as firm power qualifying for such payment.

55. This power has been recognised and endorsed in the judgment of this Tribunal in the case of GVK (Goindwal Sahib) Ltd Andhra Pradesh Vs Punjab State Electricity Regulatory Commission 2011 ELR (APTEL) 0234. The relevant portion of the judgment is as follows:

“16. From the above observations, it is clear that the scope of approval under Section 86 (1) (b) of the Act includes the power to reject, modify, alter or vary the

terms of the agreements for purchase of power and to further direct the distribution licensee to re-write the terms found reasonable by the State Commission”.

- 56.** In the light of the well established principle of law, it is to be held that the State Commission, in the absence of approved Power Purchase Agreement has rightly held that the said PPA would not bind the parties and correctly directed by discharging its responsibility according to the relevant Regulations in force during the relevant period. This is not only in accordance with Section 62 read with Section 86 (1) (b) of the Act, 2003 but also is in consonance with its power and jurisdiction under the Tariff Regulations. Hence, the finding on this issue by the State Commission is valid in law.
- 57.** Let us now take up the issue relating to the State Commission’s finding giving interpretation of the term “Commercial Operation Date” for Open Cycle Operation and deciding the heat rate therefore by applying the Central Commission’s Regulations.
- 58.** According to the Appellant, the Commercial Date of Operation of a generator cannot be declared without declaration of capacity by conducting a capacity test. In the absence of any capacity test conducted for the Gas Turbine Generator prior to 28.6.2006, the State Commission cannot declare separate Commercial Operation Date for the Gas Turbine Generator as against the express terms of PPA in

order to grant fixed charges in respect of the infirm power supplied by the Respondent to the Appellant.

- 59.** As mentioned earlier, the claim of the Generator was that the power generated and supplied in Open Cycle Operation and fed continuously into the Grid was firm power.
- 60.** It is not disputed that during the period of Open Cycle Operation, the Generator was continuously feeding 30 MW of power into the Grid. The definition of “infirm power” as referred to in the PPA has also been provided in the Gazette Notification dated 30.3.1992 of the Government of India and the Central Commission as well as the State Commission’s Regulations.
- 61.** As referred to in the Government of India Notification as well as the Regulations of both the Central Commission and State Commission, each of the units namely Gas Turbine in Open Cycle Mode and the Steam Turbine in the Combined Cycle Mode will have separate Commercial Operation Date.
- 62.** Under the Notification dated 30.3.1992, the Commercial Operation Date for Gas based projects is deemed to be the date of synchronization with the Grid. Moreover, in this case, the Gas Turbine in Open Cycle Mode was tested for its reliability and capacity. On that basis, the Appellant granted permission for synchronizing the unit with the Grid. The Gas Turbine Generating Unit in the Open Cycle Mode

generated and supplied power on continuous basis to the extent of 30 MW per hour. In fact, the Electricity Board relied upon the various letters exchanged between the parties and on the strength of the letters it was argued that the Appellant was not liable to pay fixed charges.

- 63.** In this context, it would be better to examine these letters.
- 64.** The Gas Turbine Generator on 13.10.2005 sent a letter to the Electricity Board intimating that the Gas Turbine Generating Unit in the Open Cycle Mode was ready for synchronization with the Grid and sought permission for synchronization to establish Open Cycle Operation.
- 65.** In reply to this letter, the Electricity Board sent a letter on 17.10.2005, according permission to synchronize on the condition that the permission was only in respect of Gas Turbine Generating unit through the Open Cycle Operation and that the power so supplied, would be treated as infirm power.
- 66.** Thereupon, on 25.10.2005, the Generator Respondent sent a letter to the Appellant confirming the permission granted for synchronization of the Gas Turbine Generating Unit. They also requested in the said letter to the Electricity Board to consider energy generated by the Plant during the commissioning of the trials and performance in the said period as infirm power and once the capacity and

performance of the Gas Turbine Generators is established, they would commit the firm power to the Grid which may be treated as firm power from the time of said commitment.

- 67.** The Electricity Board, by the letter dated 28.10.2005, informed the Generator stating that till the date of Commercial Operation, the energy generated by the Plant would be treated as infirm power only and variable charges alone will be paid. The Generator sent a reply on 28.10.2005 on the same date, confirming that the conditions imposed are agreeable and requested for synchronization by 29.10.2005. Accordingly, this synchronization was done on 29.10.2005 itself.
- 68.** The Generator wrote a letter on 10.11.2005 to the Electricity Board stating that since the project has been delayed for extraneous reasons beyond their control, they requested the Board to consider for the request for payment of fixed cost in addition to variable cost which will enable them to complete the unit in all respects for Combined Cycle Operation.
- 69.** The Generator again wrote a letter to the Electricity Board on 26.11.2005 for the proposed schedule of power generation from their power project for the current financial year ending 31.3.2006. This schedule given through the letters dated 10.11.2005 and 26.11.2005 had been accepted

by the Electricity Board. Accordingly, the power generated through the Open Cycle Unit, was supplied.

- 70.** According to the Generator, the Power supply through the Open Cycle unit during this period should be calculated applying the separate Station Heat Rate for the Gas Turbine Unit in Open Cycle Operation and consequently, the Generator would be entitled for the full payment of fixed and variable charges.
- 71.** As pointed out by the learned Counsel for the Generator Respondent, the PPA entered into between the parties did not contemplate a separate Commercial Operation Date for the Open Cycle Operation and the Combined Cycle Operation.
- 72.** It is an admitted fact that the PPA contemplated only one Commercial Operation Date for the Combined Cycle Operation of the plant. The PPA executed on 25.8.2004 had to be was with reference to the generation technology adopted in the Generating Station. The PPA was also not in line with the then prevalent Central Commission's Regulations. The State Commission's Regulations, 2005 also contemplate separate Commercial Operation Dates for the Open cycle Operation and combined Cycle Operation. This is also clear from the Regulation 14 (x) read with

Regulations 14 (xiv) of the Central Commission's Regulations, 2004.

73. These Regulations are as follows:

“(x) Date of Commercial Operation’ or ‘COD’ in relation to a unit means the date declared by the Generator after demonstrating the Maximum Continuous Rating (MCR) or Installed Capacity (IC) through a successful trial run after notice to the beneficiaries and in relation to the generating station the date of commercial operation means the date of commercial operation of the last unit or block of the generating station..

(xxiv) “Unit” in relation to thermal power generating station means steam generator, turbine generator and auxiliaries, or in relation to a combined cycle thermal power generating station, means turbine generator and auxiliaries.”

74. The Tamil Nadu Commission's Regulations also defines the term Date of Commercial Operation under Regulation 2(1) (m) of the 2005 Regulation in pari material with the CERC Regulations. This Regulation is as follows:

“(m) “Date of Commercial Operation” or “COD” in relation to a unit means the date declared by the generator after demonstrating the Maximum Continuous Rating (MCR) or Installed Capacity (IC) through a successful trial run, after notice to the beneficiaries, and in relation to the generating station the date of commercial operation means the date of commercial operation of the last unit of the generating station.”

- 75.** Both, the Central Commission and the State Commission Regulations, prescribe a different Station Heat Rate for Open Cycle Operation and Combine Cycle Operation. Thus, the PPA in question is not at all in accordance with the Regulations framed either by the Central Commission or by the State Commission.
- 76.** In the present case, the PPA was executed on 25.8.2004 and during that period the Central Commission's Regulations, 2004 was in existence.
- 77.** In the present case, the Commercial Operation Date of Open Cycle was on 29.10.2005 and the Combined Cycle was on 1.7.2006. The State Commission's Tariff Regulations were notified on 3.8.2005.
- 78.** In the light of the above facts, the State Commission has determined the tariff in accordance with the Regulations in force at the relevant point of time. Section 61 of the Electricity Act, 2003 mandates that appropriate Commission has to specify the terms and conditions for determination of tariff and in doing so, the State Commission shall be guided by the principle methodologies specified in the Regulations framed by the Central Commission for determination of tariff applicable to the Generating Companies. In this case, the Generating Company was a private Company. The Electricity Act, 2003 defines the Generating Company u/s 2

(28) without any distinction as to the private generators or the others.

- 79.** Section 62 of the Act, 2003 provides that the appropriate Commission has to determine the tariff for supply of electricity by a Generating Company to a Distribution Licensee and such determination has to be in accordance with the provisions of the Act.
- 80.** The Hon'ble Supreme Court also in (2010) 4 SCC 603 in the case of PTC India Limited Vs Central Electricity Commission has held that the appropriate Commission shall determine the actual tariff in accordance with the provisions of the Act as well as the terms and conditions in the Regulations which may be framed or specified by the Commission u/s 61 of the Act.
- 81.** In the light of the interpretation of the Hon'ble Supreme Court, the determination of tariff by the State Commission u/s 62 of the Act has to be in accordance the terms and conditions specified u/s 61 of the Act and also has to be based on the principles specified in the Regulation framed by the Central Commission.
- 82.** In the present case, the amended PPA which was executed in 2004, was the one approved by the Government of Tamil Nadu during the December, 2001 and June, 2002 but the Act, 2003 has provided in the mandate to the State

Commission to determine the tariff in terms of Section 61 and 62 of the Act which came into force on 10.6.2003.

- 83.** The Central Commission's Regulations framed and notified on 26.3.2004 provided the terms and conditions. In the light of the statutory prescription, the State Commission has determined the tariff for open cycle operation based on the Central Commissions Regulations which was existing during that time.
- 84.** Even assuming that the Central Commission's Regulations were not applicable, the only other Regulations which can be made applicable were Tariff Regulations of 2005 framed by the State Commission. Even under these Regulations, the separate and different Commercial Operation Dates have been provided for Gas Turbine Generating Units and Steam Turbine Combined Cycle Units.
- 85.** It is also noticed that the Station Heat Rate for the Plant is mandated for Open Cycle and Combined Cycle separately which is in pari materia with the Central Commission's Tariff Regulations, 2004. The findings on this issue by the State Commission is as follows:

".....Thus, the validity of the action taken under the provisions enacted including notification were protected for a year after the enforcement of the Electricity Act i.e. 10-6-2004. Thereafter the notification dated 30-3-1992 of the Government of India cease to have force. The PPA signed on 25-8-2004 should have been in

alignment with the Electricity Act 2003 and the Regulations framed thereunder. Although the TNERC notified Tariff Regulations on 3-8-2005, the CERC Tariff Notification was in place from 26-3-2004 and therefore, the Commission rules that the PPA should have been in alignment with the CERC Regulations notified on 26-3-2004.

This Commission notified its tariff regulations on 3-8-2005. The CERC notified its terms and conditions of tariff regulation on 26-3-2004. In view of the proviso to Section 61 of the Electricity Act, 2003 we cannot rely on the Government of India tariff notifications dated 30-3-1992 for an amended PPA which was signed on 25-8-2004. We therefore rely on the CERC Tariff Regulation. CERC notification dated 26-3-2004 envisages as follows with regard to gas turbine power project.”

- 86.** The reasonings given by the State Commission for relying upon the Central Commission’s Regulations, in our view is valid and justified.
- 87.** That apart, the Central Commission Regulations, 2004 and the State Commissions Regulations, 2005 do not prohibit for the infirm power generated and supplied. The only condition imposed in the said Regulations is that the revenue generated through sale of such infirm power shall to that extent cause reduction in the capital cost. However, the PPA dated 25.8.2004, provides for the payment of the variable charges only for sale of infirm power that too applying the Heat Rate applicable to the Generating Station in Combined Cycle Operation.

- 88.** As indicated above, the Notification dated 30.3.1992 issued by the Government of India and the Regulations framed by the Central Commission as well as the State Commission provided that each of the units namely Gas Turbine and Gas Turbine as well as Steam Turbine jointly shall have a different Station Heat Rate for the purpose of payment of tariff for the power supplied from the Gas Turbine Unit of the Combined Cycle Generating Station. In that event, the Generator would be entitled to the payment of fixed charges and variable charges based on the plant availability and heat rates specified for such units in such legislations.
- 89.** In fact, as pointed out by the Respondent, the Appellant Board has earlier taken a decision to pay the fixed and variable charges for the said power supply by the Generator to the Electricity Board through the letter dated 9.2.2007. However, there was a condition imposed on the Generator that in the event audit objections were raised in regard to the payment of fixed charges and variable charges, the Generator would be liable to refund the same. The contents of the said letter assumes significance which reads as under:

*“From
Er. S.Arounassalame, B.E., F.I.E.
Member (Generation),
800, Anna Salai,
Chennai-2.*

To
M/s Penna Electricity Limited
(formerly M/s Arkay Energy Limited)
No.55, Vijayaraghava Road,
T.Nagar,
Chennai 600 017

Lr.No.CE/PPP/EE/TPP/AEE4/F.Penna/D.125/2007 dt
09.03.2007

Dear Sirs,

Sub: IPP- M/s Penna Electricity Limited (formerly M/s Arkay Energy Limited)—Request for payment of fixed charges for supply of the 30 MW continuous power before COD (01.02.2006 to 15.04.2006)---- Accepted with certain conditions and outside the purview of the PPA- Reg:

Ref: 1.M/s Penna Electricity Limited Letter No. AEL/TNEB/150/2005 Dt 10.11.2005.
2.M/s Penna Electricity Limited Letter No. AEL/TNEB/189/2006 Dt 07.02.2006.
3. M/s Penna Electricity Limited Letter No. AEL/TNEB/223/2006 Dt 13.04.2006.
4. Minutes of 900th Board Meeting held on 20.02.2007.

The Board in its minutes dated 22.02.2007 has approved to pay the fixed charges for supply of 30 MW continuous power for the period before COD from 01.02.2006 to 15.04.2006 (date of synchronization of Steam Turbine Generator) in open cycle mode without prejudice to the provisions contained in the PPA subject to the following conditions:-

- i. For each of the units supplied to TNEB grid from 01.02.2006 to 15.04.2006 fixed charges will be paid as follows:
= (1st year fixed charges per kwhr x 30 MW x Actual PLF for the billing period)/(52.8 MW x 85% PLF).
- ii. The combined cycle tariff heat rate (1980 kcal/Kwhr) will be adopted before CC even during open cycle operation for calculation of variable charges.

- iii. *M/s Penna Electricity Limited is not eligible for any deemed generation during the period on any account.*
- iv. *Board will not pay gas transmission charges for this period*
- v. *This payment has no bearing on COD and Liquidated Damages to be levied for the delayed entry into commercial operation and should not be quoted as binding precedent.*
- vi. *This does not absolve M/s Penna Electricity Limited's responsibilities to comply with PPA in all respects.*
- vii. *M/s. Penna Electricity Limited shall give an Corporate Undertaking agreeing to the above conditions and that, if there will be any audit objection in future for the payment of this fixed charges, then M/s Penna Electricity Limited will refund the entire amount along with interest at default rate as defined in the PPA in one lump sum or agree for adjustment from the future claims of the company.*
- viii. *This payment of fixed charges is made outside of the purview of the PPA.*

You are requested to furnish an undertaking in a non judicial stamp paper valued at Rs.80.00 as per the format enclosed to Chief Engineer/PPP/Chennai-2. Further, the invoices for the period from 29.10.2005 to 01.07.2006 may be submitted to Chief Financial Controller/General/Chennai-2."

90. While referring to the above letter, the State Commission has observed as follows:

"In the instant case which we are dealing with the respondent made an offer for payment of fixed charges for open cycle operation and asked for a corporate guarantee for refund of fixed charges so paid in the event of any objection by the Accountant General. The

petitioner in this case has not given any such guarantee and therefore did not receive any payment and the offer of the TNEB for payment of fixed charges was subsequently withdrawn. From the above it appears that even the TNEB was convinced that the payment of fixed charges for open cycle operation cannot be denied. After examining the above points, the Commission comes to the conclusion that the power delivered by open cycle gas turbine, after initial trial run and commissioning, is firm power when it is delivered on continuous basis in accordance with schedule 6 of the PPA.”

- 91.** This finding with reference to the stand of the Appellant Board earlier would indicate that the Electricity Board was convinced that the Generator would be entitled to the fixed charges since the power supplied on continuous basis from 29.10.2005 to 30.6.2006 under the Open Cycle Operation by applying the Central Commission’s Regulations and on that basis, the decision was taken in Board Meeting. This is neither disputed nor denied by the Appellant. Only condition that was put in the letter is that in the event of any audit objection it was liable to refund the amount.
- 92.** The fact remains that the Appellant earlier felt convinced and to that effect a resolution was passed in the Board Meeting on 22.2.2007 agreeing and approving to pay the fixed charges for supply of 30 MW continuous powers for the

period before the date of synchronization of Steam Turbine Generator.

93. The State Commission has held rightly that the unapproved PPA could not bind the parties. When that being so, the supply of power made between 29.1.2005 to 30.6.2006 by way of 30 MW regular supplies generated through the open cycle operations of Gas Turbine Generating Units by the Generator, cannot be classified as “infirm power” by the Appellant Board in order to avoid their obligation to pay for what the Generator was entitled to. As such, the Appellant is not entitled to take advantage of the infirmities in the PPA which is contrary to the law.

94. Therefore, the findings on this issue rendered by the State Commission is also well justified.

95. Summary of Our Findings

i) The amended PPA dated 25.8.2004 should have been placed before the State Commission by the Electricity Board for obtaining approval of the State Commission in terms of Section 86(i)(b) of the Electricity Act,2003. Admittedly, the PPA was never placed for approval before the State Commission. In the absence of the approval of the State Commission, the PPA does not become a legally enforceable and binding document before

the parties and if there is some conflict between the terms of the unapproved PPA and the provisions of the Act, Rules and Regulations, it is the provisions of the Act, Rules & Regulations which would hold the field and not the terms of the PPA.

- ii) We do not accept the contention of the Appellant that the original PPA was entered into between the parties based on the tariff based competitive bidding process and therefore, the State Commission should have adopted the tariff under Section 63 of the Electricity Act,2003. The first PPA dated 29.4.1998 was based on the Diesel Engine based generation technology. However, subsequently, the fuel, the location of plant, technology of power plant and tariff were changed to enable use of natural gas instead of fuel oil. Therefore, the amended PPA dated 25.8.2004 was virtually a new PPA executed between the parties. With the amended PPA, the Power Plant, could not be considered as a project based on tariff based competitive bidding project. Moreover, the competitive bidding conducted in 1996 could not be said to be undertaken in terms of the bidding guidelines issued under Section 63 of Electricity Act,2003. Even Section 63 of the Act,2003 does not**

dispense with the mandatory approval of the PPA by the State Commission under section 86 of the Act.

- iii) The amended PPA dated 25.8.2004 is not protected under Regulations,2005. The “Existing Generating Station” defined in the Tariff Regulations is the generating station declared under Commercial Operation from the date prior to the notification of the Regulations i.e. 24.6.2005. These Regulations were notified before the Commercial Operation Date of the generating station and therefore, the Generating station of the Respondent generating Company, could not be termed as “Existing Generating Station”.
- iv) The State Commission has correctly relied upon the Central Commission’s Tariff Regulations in deciding the fixed and variable charges for the electricity supplied by the Gas Turbine Unit in open cycle mode.
- v) The Central Commission’s Regulations as well as the State Commission’s Regulations provide for Commercial Operation date for each of the gas Turbine Unit of the Combined Cycle Gas Turbine Operation and heat rates for open and closed cycle

operation. The State Commission has correctly decided the fixed charges and variable charges for the energy supplied by the Generating Station to the Electricity Board in Open Cycle Operation.

96. Accordingly, the Appeal is dismissed as devoid of any merit.
No order as to costs.

97. Pronounced in the open Court 10th day of July, 2013.

(Rakesh Nath)
Technical Member

(Justice M. Karpaga Vinayagam)
Chairperson

Dated: 10th July, 2013

✓ ~~REPORTABLE/NON-REPORTABLE~~