



## **TELANGANA ELECTRICITY REGULATORY COMMISSION**

'Vidyut Niyantran Bhavan', G.T.S. Colony, Kalyan Nagar, Hyderabad 500 045

**O. P. No. 32 of 2014**

**Dated 14.08.2025**

**Present**

**Dr. Justice Devaraju Nagarjun, Chairman**

### **ORDER**

In the year 1993, Government of India (GoI) has promulgated a policy framework to promote generation of power from non-conventional energy sources and to reduce the use of fossil fuel thereby to reduce the impact of carbon emission. The said policy has provided for certain incentives for generation of energy through non-conventional energy sources. The tariff to be paid for the power generated through non-conventional energy sources was pre-determined in the year 1993-94, which came into effect from 01.04.1994 with annual escalation.

2. In tune with the policy of Government of India, the then Government of Andhra Pradesh has issued guidelines for promotion of non-conventional energy projects vide G. O. Ms. No. 93 dated 18.11.1997. The said guidelines were amended subsequently on 12.12.1998 by way of a notification, wherein the power purchase price was determined at Rs. 2.25 per kWh, to be escalated at the rate of 5% with base year being 1997-98 and to be reviewed after 3 years.

3. The Andhra Pradesh Electricity Reform Act, 1998 came into force on 01.02.1999 through which Andhra Pradesh Electricity Regulatory Commission (hereinafter referred as APERC) was constituted. Being attracted by the state and central policy and encouraging the production of electricity through non-conventional energy sources,

several renewable energy projects were set up at various places across the then state of Andhra Pradesh. As per the policy, the incentives, that are being given were required to be reviewed for every 3 years from the date of issue of G.O. Ms. No. 93 dated 18.11.1997. Accordingly, the APERC has issued notice to all the stakeholders including the developers or associations and other stakeholders and on hearing the parties concerned, orders have been passed on 20.06.2001 in O. P. No. 1075 of 2000.

4. The important aspects in the orders passed by the APERC on 20.06.2001 in O. P. No. 1075 of 2000 are extracted here under.

- a) The power generated by non-conventional energy developers is not permitted for sale to third parties.
- b) Developers of non-conventional energy shall supply power generated to APTRANSCO / DISCOMs of A. P. only.
- c) Price applicable for the purchase by the supply license should be Rs. 2.25 per unit with 5% escalation per annum with 1994-95 as the base year.
- d) A suo-moto review of the incentives to take effect from 01.04.2004 will be undertaken by the Commission after discussion with all the concerned parties.
- e) There will also be a review of the purchase price with specific reference to each developer on completion of 10 years from the date of commissioning of the project (by which time the loans from financial institutions would have been repaid) when the purchase price will be re-worked on the basis of return on the basis of return of equity, O & M expenses and the variable cost.

5. In the year 2003, the then APERC had initiated suo-moto proceedings in R. P. SR. No. 84 of 2003 to review the status of the pending projects and also to review the tariff and passed the orders on 20.03.2004 determining the tariff for electricity generated through non-conventional energy sources which are made effective from 01.04.2004 to 31.03.2009. The said tariff comprised of fixed cost for the 1<sup>st</sup> to 10<sup>th</sup> year of operation and variable cost varying for each of the financial year i.e., 01.04.2004 to 31.03.2009.

6. Aggrieved by the said orders of the then APERC dated 20.03.2004 in R. P. SR. No. 84 of 2003, some of the developer associations as well as individual developers have filed various writ petitions before the Hon'ble High Court of Andhra Pradesh. Consequent to formation of Appellate Tribunal for Electricity (herein referred as ATE) under the Electricity Act, all the writ petitions pending before the Hon'ble High Court of Andhra Pradesh were disposed off with a direction to approach ATE. The Appellate tribunal has taken up the said Appeals as No. 1 of 2005 and others and allowed them on 02.06.2006 with certain directions. Aggrieved, by the said orders of the ATE dated 02.06.2006, the then APTRANSCO and APERC had approached the Hon'ble Supreme Court vide Civil Appeal No. 2926 of 2006 and the Hon'ble Supreme court in its order dated 08.07.2010 has directed APERC to determine the tariff afresh in the light of the observations made therein.

7. In the meanwhile, the Government of Andhra Pradesh has notified, transferring the rights and obligations vested on APTRANSCO in the existing power project agreements of all the non-conventional energy projects, in favor of the DISCOMS with effect from 09.05.2005. Accordingly, all the PPAs were transferred in favor of the DISCOMS.

8. During the pendency of the appeals before the Hon'ble Supreme Court, the Commission has initiated suo-moto proceedings in O. P. No. 5 of 2009 for determining the variable cost for control period 2009-10 to 2013-14 and passed the orders on 31.03.2009 taking operational parameters contained in the order dated 20.03.2004, in R. P. SR. No. 84 of 2003. Some of the aggrieved persons have filed review petitions before the Commission and same were disposed off on various dates.

9. The Hon'ble Supreme Court in the order dated 08.07.2010 in Civil Appeal No. 2926 of 2006 has observed that the Commission should endeavor to encourage non-conventional energy projects and to determine the tariff for their survival. As per the directions of the Hon'ble Supreme Court, this Commission has restored the petition and after hearing the stakeholders, the Commission has passed orders on 12.09.2011, wherein the then Chairman and the other two then Members determined different tariffs to be paid to Non-Conventional Energy Developers. The said orders of the Commission were again challenged before the ATE in Appeal No. 150 of 2011 and batch. The said



appeals were disposed off by Hon'ble ATE by way of an order dated 20.12.2012 by formulating the parameters required to be adopted by the Commission for determining the fixed and variable cost for the control period 2004-2009. In pursuance of the directions of the ATE, this Commission has re-opened O. P. No. 05 of 2009 and on hearing the stakeholders has passed the orders on 22.06.2013 determining the tariff comprising of fixed and variable cost for the control period 2004-09. The Commission has also passed another order on 06.08.2013 by considering the parameters, as directed by the Hon'ble ATE in Appeal No. 150 of 2011 in respect of tariff and revising the order dated 31.03.2009 determining the variable cost tariff for the control period 2009-2014.

10. In the meanwhile, several NCE projects have completed 10 years of operation from their respective date of CODs. On account of which the DISCOMS have filed petition before the Commission for determination of tariff (fixed cost) from 11<sup>th</sup> year of operation of such projects. The Commission has then undertaken the exercise of determination of variable cost norms for non-conventional energy sources for the FY 2014-15 to 2018-19 to the existing projects by initiating proceedings in O. P. No. 32 of 2014 and said petition was disposed off and orders were passed on 16.05.2014.

11. The orders in O. P. No. 32 of 2014 dated 16.05.2014 were questioned by the Biomass Energy Developers Association (hereinafter referred as BEDA) before the Hon'ble ATE in Appeal No. 250 of 2014 and batch. These appeals were pending consideration till the year 2022.

12. In the meanwhile as decided in O. P. No. 32 of 2014 annual exercise of escalation and fuel cost has been undertaken by this Commission from 2015-16 onwards by orders dated 16.07.2015, 04.04.2016, 08.06.2017 and 10.04.2018 for the respective FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19. Thereafter, applicability of the generic tariff order expired in March 2019.

13. Thereafter, this Commission has determined variable costs for biomass projects for FY 2019-20 and determined variable costs for the period for FY 2020-21 to FY 2023-24 vide O. P. No. 21 of 2020 as per the orders dated 28.08.2020.

14. While things stood thus, the Hon'ble ATE disposed off the appeals on 250/14 and

batch pending on its file on 08.03.2022 and issued certain directions in so far as Biomass based projects are concerned, as under:

*“102. Variable Cost Issues for Biomass based Plants (Appeal 284)*

- |      |                               |   |  |
|------|-------------------------------|---|--|
| i.   | Station Heat Rate             | – | 4500 kCal/KWh                                |
| ii.  | Auxilliary consumption        | – | 10%  |
| iii. | Gross Calorific value of fuel | – | 3300 kCal/kg                                 |
| iv.  | Fuel Cost                     | - | To issue revised fuel cost as per directions |
| v.   | Fuel Cost escalation          | - | To issue revised escalation                  |

*103. We also direct the State Commission (APERC and TSERC) to initiate a study at the earliest for determining the normative parameters for Biomass and Bagasee based Power Plants under their jurisdiction and located in the State of Andhra Pradesh and Telangana and frame Tariff Regulation as per directions given in the foregoing paragraphs.*

*104. The appeals are allowed in part to the extent indicated above. The State Commission shall pass consequential order within 45 days of communication of this judgement.”*

15. Pursuant to such directions, this Commission had initiated proceedings by issuing public notice on 01.06.2022. After receiving comments in the matter, this Commission has constituted a committee to ascertain certain parameters as directed by Hon'ble ATE. Accordingly, it had addressed letters to the concerned stakeholders to nominate the representatives to the committee by order dated 03.09.2022. The Committee ultimately gave a report dated 08.03.2023. In the meanwhile on 16.06.2022 individual notices have been issued to the appellants and others who are part of the original order of the then APERC in OP No. 32 of 2014 dated 16.05.2014 requiring them to participate in the proceedings. The matter was finally heard on 30.08.2023. The Commission ultimately passed order on 09.11.2023.

16. Aggrieved by the said order dated 09.11.2023, the BEDA preferred an appeal before the Hon'ble ATE in Appeal No. 229 of 2024. After hearing the submissions of the parties, the Hon'ble ATE by its order dated 05.12.2024 disposed off the appeal filed by BEDA with the following observations and directions.

*"In such circumstances, we deem it appropriate to set aside the impugned order and direct the 1<sup>st</sup> Respondent – Commission to determine the fuel costs based on (i) actual market purchase price, (ii) composition of fuel mix, (iii) related parameters which would also include moisture content of each of the fuel involved in the composition of the fuel mix. While determining the fuel cost, on the afore-said parameters for the year 2014-15, the 1<sup>st</sup> Respondent – Commission shall also formulate revised escalation for the subsequent years 2015-16 to 2018-19.*

*As this dispute has been pending consideration for the past more than a decade, we request the Commission to determine, both the fuel cost and the revised escalation for the afore-said periods, with utmost expedition, preferably within four months from the date of receipt of a copy of this order. Needless to state that the Appellant shall also co-operate in effective and early adjudication of the dispute. The Appeal and the I.A therein stand disposed of."*

17. In pursuance of orders the Hon'ble ATE notices were given to all stakeholders and the matter has been taken up for hearing on 16.01.2025 and it was heard from time to time on 21.01.2025, 11.02.2025, 08.04.2025 and 25.04.2025 both sides and perused the records. The points that arises for consideration are-

- A) Determination of fuel cost for the FY 2014-15 as per the directions of the Hon'ble ATE
- B) To formulate revised escalation for the year 2015-16 to 2018-19

18. One of the objections raised by the TGDISCOMS is that the Commission shall not rely upon solely on Ritwik Power Projects Ltd (RPPL) data for determining the fuel cost, as the fuel cost to be determined applies not only to the RPPL but also to other generators as well. This aspect is one of the contentious issues considered by the then Commission prior to passing of order on 09.11.2023. As the petitioners could not submit any data



except RPPL, the previous Commission went on to visit the website of Registrar of Companies, Ministry of Corporate Affairs and gathered the Balance sheets submitted by other generators including RPPL and determined the fuel cost. However, the said orders were challenged before the Hon'ble ATE on the ground that no reasons were explained as to why data pertaining to the RPPL for the year 2014-15 was not considered. While setting aside the orders passed by this Commission dated 09.11.2023, the Hon'ble ATE given directions to this Commission to determine the fuel cost based on actual market price, composition of fuel mix and related parameters which include moisture content of each of the fuel involved in the composition of fuel mix. The Hon'ble ATE has also specifically directed that while determining the fuel cost on the basis of the parameters in the order mentioned for the year 2014-15, the first respondent Commission shall formulate revised escalation factor for the subsequent years 2015-16 to 2018-19.

19. Accordingly, this Commission has directed the BEDA to submit the data in respect of actual market price, composition of fuel mix and related parameters which include moisture content of each of the fuel involved in the composition of fuel mix of all the 6 generators. However, BEDA has submitted the data in respect of actual market price, composition of fuel mix and as well as the moisture content of each of the fuel mix in respect of RPPL alone and submitted that the data in respect of other generators is not available. The fuel mix of RPPL consists of Rice Husk, woody biomass and agricultural residue. The percentage of each of the fuel in the fuel mix and moisture content of each of the fuel in the fuel mix has also been furnished.

20. The representative of BEDA has filed affidavit on 04.02.2025 wherein it is stated that.

*“8. Alternatively, it is submitted that the actual market price, the composition of fuel mix and moisture content and other related parameters could also be deemed to be ascertained from the market purchase price data gathered from the petitioner's balance sheets for FY 2014-15 available with the Commission. To ensure a comprehensive and equitable determination of the revised fuel cost for the said period, it is further submitted that the specific issues concerning the balance sheet data, as detailed below, may also be duly considered during the*

recalculation process.

12. In view of the forgoing submissions, it is respectfully submitted that the revised fuel cost for FY 2014-15 be determined primarily based on the relevant data furnished in the RPPL report dated 12.09.2023. Alternatively, it is humbly requested that the Hon'ble Commission consider and take on record the balance sheet data of all the Petitioner companies, namely RPPL, SGEL, GBEL, SPIL, STPPPL, and GACL, for FY 2014-15, to arrive at a comprehensive and equitable determination of the revised fuel cost for the said period."

21. The petitioner has also submitted the data of all the six plants as under:

S.No	Name of the company	Fuel Consumed Value (Rs.)	Energy Generated (kWh)
1	Goutami Bio Energies Pvt Ltd	159391977	42453300
2	Shalivahana Green Energy Limited	137623352	29306000
3	Ritwik Power Projects Ltd	199130045	42396740
4	Surya Teja Power Projects Pvt Ltd	107539379	23881090
5	Saro Power & Infrastructures Ltd	28715169	8272200
6	Gayatri Agro Products Limited	71523667	12478700
		703923589	158788030
	Variable Cost	4.433 Per Unit	

22. In the affidavit BEDA has submitted that the Commission may take the data of RPPL in respect of actual market price, composition of fuel mix and moisture content and decide the issue and alternatively the BEDA has also asked the Commission to consider the available data in respect of all other five plants.

23. This Commission has considered both the submissions carefully. The Hon'ble ATE has categorically directed this Commission to determine fuel cost for the year 2014-15 based on actual market purchase price, composition of fuel mix and related parameters including moisture content of each of the fuel involved in the composition of fuel mix. Therefore, in order to comply the directions of the Hon'ble ATE dated 05.12.2024, this



Commission has to decide the fuel cost for the year 2014-15 only by taking actual market price, composition of fuel mix and moisture content of each of the fuel. This Commission is having the details of all the three parameters above only in respect of RPPL but similar data of three parameters referred above is not available in respect of other five plants. In respect of other five plants data is available only in respect of fuel consumed value and energy generated. In case if the data of five plants is considered to determine the fuel cost for year 2014-15, it amounts to violation of the directions of the Hon'ble ATE. Therefore, this Commission is inclined not to take into consideration the incomplete data furnished in respect of five companies other than RPPL.

24. The other issue which is confronted by this Commission is whether this Commission can determine the fuel cost for the year 2014-15 only basing on the available data in respect of one plant i.e., RPPL. While setting aside the previous orders of this Commission, the Hon'ble ATE has observed that this Commission has failed to mention any reason as to why the available data of three components of RPPL could not be taken into consideration by this Commission for determination of the fuel cost for year 2014-15. In view of the observations of the Hon'ble ATE and considering the fact that the complete data is available only for RPPL and that the data in respect of other five plants is incomplete, this Commission is constrained to consider the data of RPPL available in respect of three parameters namely actual market price, composition of fuel mix and moisture content.

25. As per the information furnished by the petitioners association on 15.01.2025 in respect of RPPL, it is clear that the percentage of rice husk, Woody biomass and agricultural residue is 27.80, 28.12 and 44.08 respectively. The data also shows percentage of moisture as received, percentage of moisture as fired and correction factors of rice husk, woody biomass and agricultural residue. Basing on the data in respect of RPPL, by following the methodology of Central Electricity Authority referred in Hon'ble ATE order dated 05.12.2024, this Commission has arrived at fuel at Rs. 2987.09 per metric ton for FY 2014-15 as shown below.

The Fuel Cost Rs./MT determined by the Commission for FY 2014-15 is as under:

S. No	Fuel	Qty in Fuel Mix (%)	Qty as fired (kg)	Conversion factor	Qty as purchased (kg)	Fuel cost with handling charges		
						Fuel cost (Rs/MT)	Proportionate price	Fuel cost to be considered for tariff determination (Rs/MT)
		(A)	$B=1.363636^*$ A	C	B/C			
	(1)	(2)	(3)	(4)	(5)	(8)	(9)=(5)x(8)	(10)=(9)/1.363636
1	Rice Husk	27.80%	0.379103978	1.0000	0.379104	2838.83	1076.21	2987.09
2	Juliflora	28.12%	0.383441123	0.7500	0.511255	2319.9	1186.06	
3	Agri Residues	44.08%	0.601090899	0.4706	1.277318	1417.84	1811.03	

26. The Hon'ble ATE in its order dated 05.12.2024 directed this Commission to determine the fuel cost for the year 2014-15 basing on the said fuel cost to formulate the revised escalation in subsequent years 2015-16 to 2018-19. In respect of the formula for escalation of the fuel cost for the subsequent years is concerned, the Regulation No. 44 of CERC (RE) Tariff Regulation 2012 provides for an option either to adopt indexation methodology under Regulation 45 or to opt for normative escalation of five percent.

27. O. P. No. 32 of 2014 was originally disposed of on 16.05.2014 prior to bifurcation of erstwhile State of Andhra Pradesh by the time Hon'ble ATE has set aside the said order in ATE Appeal No. 284 of 2014 dated 08.03.2022, the then Andhra Pradesh has bifurcated as Andhra Pradesh and Telangana state, consequently the Telangana Electricity Regulatory Commission has been formulated. O. P. No. 32 of 2014 was remanded back to both the states, accordingly the APERC has taken up O. P. No. 32 of 2014 in respect of Biomass plant in the state of Andhra Pradesh and O. P. No. 32 of 2014 in respect of Biomass plant that are situated in the state of Telangana. The APERC has

disposed of O. P. No. 32 of 2014 by way of its order on 15.12.2022 and as considered the fuel cost escalation at the rate of two percent per annum. The representatives of BEDA have submitted that in case if the Commission is not inclined to consider five percent escalation per annum, as per CERC Regulation, requested to consider at least two percent escalation per annum as decided by APERC in its order dated 15.12.2022 in O. P. No. 32 of 2014.

28. The respondent Discoms have submitted in their counter affidavit that the fuel price escalation at the rate of 5 percent normative rate as per CERC regulation is not acceptable since the determination is being made for retrospective period and such normative rates can only be adopted in case if determination is taken up for prospective period. However, the petitioner's association in their written submissions dated 15.01.2025 and affidavit filed before this Commission dated 04.02.2025 have submitted in clear terms to consider the escalation of the fuel cost basing on the FY 2014-15 fuel cost at the rate of 5 percent as per CERC Regulation or at least 2 percent as determined by the APERC in the same case in respect of the projects situated in the state of Andhra Pradesh.

29. This Commission has carefully considered both the views of the petitioner as well as the DISCOMs in respect of fixation of escalation factor for determining the fuel cost in respect of the years 2015-16 to 2018-19. The petitioner association itself has requested the Commission for considering the escalation factor of two percent instead of 5%, basing on the orders of the Hon'ble ATE, thereby this Commission normally should have accepted two percent as the escalation factor. The APERC in its order dated 15.12.2022 in O. P. No. 32 of 2014 has considered and determined the fuel cost for 2014-15 at Rs. 2987.09 taking into consideration of the statistics of the JOCIL Biomass plant. However, fuel cost determined by this Commission in respect of RPPL is Rs. 2988.75/MT. Therefore, the fuel cost for the year 2014-15 determined by this Commission is much higher than the fuel cost decided by APERC. Therefore, this Commission is of the opinion that there is no need to adopt the escalation factor at two percent annually as was considered by the APERC.



30. In order to fix the escalation formula, this Commission is constrained to take fuel cost for the FY 2014-15 of RPPL and also required to consider the fuel cost for the year FY 2019-20 which was already determined by this Commission. It is to be noted that this Commission has approved fuel cost of Rs. 3168/MT for FY 2019-20 wherein the variable cost is Rs. 4.77/kwh vide order dated 21.04.2020 in O. P. No. 15 of 2020. Since the said order has not been challenged, it has attained finality. Thereby the fuel cost for FY 2018-19 after applying of escalation factor shall not exceed the approved fuel cost of FY 2019-20 which is Rs. 4.77/kwh. Considering the above, taking into consideration of all the factors and circumstances, this Commission is of the opinion in order to meet the ends of justice, the escalation factor fixed at 1.50 % is sufficient year on year on the fuel cost for FY 2014-15. Further for whichever year the variable cost exceeds Rs. 4.77/Kwh, the same has to be restricted to Rs. 4.77/kwh in order to seek that it shall not exceed the variable cost which was already determined for FY 2019-20.

31. Based on the fuel price determined for FY 2014-15 and the escalation factor of 1.5%, the fuel price for the period FY 2014-15 to FY 2018-19 is as follows:

Parameter	Units	Value				
Auxiliary consumption	%	10%				
Station Heat Rate	kcal/kWh	4500				
Gross Calorific Value	kcal/kg	3300				
Base Fuel Cost	Rs./MT	2987.09				
Annual fuel cost escalation	%	1.50%				
Generation	MU					
		2014-15	2015-16	2016-17	2017-18	2018-19
Fuel Cost	Rs./MT	2987.09	3031.90	3077.37	3123.54	3170.39

The Variable cost per unit computed for FY 2014-15 to FY 2018-19 is as shown in table below:

Financial Year	Fuel Cost (Rs. Per MT)	Variable Cost (Rs./kWh)
FY 2014-15	2987.09	4.53
FY 2015-16	3031.90	4.59
FY 2016-17	3077.37	4.66
FY 2017-18	3123.54	4.73
FY 2018-19	3170.39 restricted to 3148.20	4.80 restricted to 4.77

This order is corrected and signed on this the 14<sup>th</sup> day of August, 2025.

**Sd/-**  
**(Dr. JUSTICE DEVARAJU NAGARJUN)**  
**CHAIRMAN**

**//CERTIFIED COPY//**