



**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**  
5<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004.

**O.P.No.9 of 2021**

**Dated 09.09.2021**

**Present**

Sri T. Sriranga Rao, Chairman  
Sri M. D. Manohar Raju, Member (Technical)  
Sri Bandaru Krishnaiah, Member (Finance)

Between:

M/s Madhucon Sugar and Power Industries Limited,  
Rajeswarapuram, Ammagudem Post,  
Nelakondapalli Mandal, Khammam District.

... Petitioner.

AND

Northern Power Distribution Company of Telangana Limited,  
Corporate Office, # 2-5-31/2, Vidyut Bhavan,  
Nakkalgutta, Hanamkonda, Warangal - 506 001.

... Respondent.

The petition came up for virtual hearing through video conference on 01.03.2021, 09.06.2021, 28.06.2021 and 29.07.2021. Sri Challa Gunaranjan, Advocate for petitioner appeared on 01.03.2021, 28.06.2021 and 29.07.2021, Sri Deepak Chowdary, Advocate representing Sri Challa Gunaranjan, Advocate for petitioner appeared on 09.06.2021. Sri Mohammad Bande Ali, Law Attaché for respondent have appeared on 01.03.2021, 09.06.2021, 28.06.2021 and 29.07.2021. The matter having been heard and having stood over for consideration to this day, the Commission passed the following:

**ORDER**

The petitioner has filed the present petition under sections 62 and 86(1)(b) and (e) of the Electricity Act, 2003 (Act, 2003) seeking determination of tariff for the petitioner's 24.2 MW bagasse based cogeneration project and consequent direction

to the respondent to purchase the power under long term PPA. The averments of the petitioner are as below.

- a) that it is a company incorporated under the provisions of the Companies Act 1956, having its registered office at Rajeswarapuram, Ammagudem Post, Nelakondapalli Mandal, Khammam District, Telangana and inter alia engaged in the business of manufacture and sale of sugar and allied products. It had acquired a sick 1250 Tons of Cane per Day (TCD) sugar manufacturing unit at Rajeswarapuram, Ammagudem Post, Nelakondapalli Mandal, Khammam District, Telangana in the year 2002 and had subsequently expanded the factory capacity to 3500 TCD. It has also established a 24.2 MW bagasse based co-generation power plant in the same premises in the FY 2008-09. It uses bagasse as fuel for generation of power. Ever since the commissioning of the co-generation plant, the power generated is partly used for its captive purpose and surplus power is being sold to DISCOMs of composite State of Andhra Pradesh till its bifurcation and later to the DISCOMs in the Telangana State under short term PPA(s) year on year.
- b) that it may be pertinent to first set out briefly the background and the principles underlying the promotion of Non-Conventional Energy (NCE) (renewable sources of energy), including the bagasse based cogenerating projects inasmuch as the Act, 2003 mandates promotion and development of electricity from renewable sources of energy in consonance with national policy and international treaties and covenants.
- c) that the demand for electricity has been growing by leaps and bounds over the last several years and the country has been in the grip of chronic power shortages. The erstwhile policy was to vest the monopoly for generation of power in public sector enterprises. It was subsequently realized that state resources would be insufficient to meet the growing demand for electricity and new policy initiatives were taken to enable and encourage the participation of the private sector in the generation, transmission and distribution of electricity. It was also considered necessary to establish small generating stations, geographically

distributed and utilising local resources including renewable sources of energy, so as to reduce transmission and distribution losses.

- d) that it is necessary to recognize that the present renewable sources of energy such as wind, hydel, etc. are resources which cannot be preserved and maintained for the use of future generations and if they are not used beneficially now, they are lost forever. Simultaneously other renewable sources like biomass, bagasse and Municipal Solid Waste (MSW) based projects need to be encouraged to avoid fast depletion of fossil fuels like coal, lignite, gas etc. It is therefore mandatory that, even at higher direct or indirect costs, the present generation is bound to support the development of renewable sources of energy and to consume and support all energy generated from such sources by suitable preferential treatments and incentives.
- e) that the Government of India (GoI) set up the Ministry for Non-Conventional Energy Sources (MNES) to promote and develop NCE and to evolve policy guidelines. Accordingly, institutional mechanisms (viz., IREDA, etc.,) were established and the GoI announced a policy package of incentives, which included duty concessions, tax exemptions, subsidies, concessional and promotional finance, etc.
- f) that the State Governments were also required to promote and facilitate the establishment of NCE projects based on the guidelines issued by the MNES. For development of NCE projects in the composite State, the erstwhile State of AP established NEDCAP and also encouraged the establishment of NCE power projects by private enterprise. The facilitation and incentives to these power projects included sale of electricity to third parties, wheeling by the State Utilities, banking of energy and purchase of electricity by the APSEB/APTransco. The Government of composite State of AP, keeping in view of the policy formulated and the guidelines issued by the Central Government for promotional and fiscal incentives, formulated incentives schemes for non-conventional sources of energy including bagasse based cogeneration plants and improved upon the same from time to time.
- g) that pursuant to the A.P. State Reorganisation Act, 2014 the Telangana State was formed with effect from 02.06.2014. Most of the renewable

energy projects including sugar co-generation plants are located in residual State of AP. Consequently, the consumption of energy from RE sources including from bagasse based co-generation plants is far below the level of Renewable Power Purchase Obligation (RPPO) specified by the Commission especially in non-solar sources. Presently, in Telangana State there are only seven sugar mills having cogeneration facilities and out of which six are in operation. These six sugar mills have co-generation with a capacity of 105.25 MW. Four sugar mills with a capacity 58.8 MW are selling surplus power to State DISCOM's under long term PPA's. As only few sugar co-generation power plants are in operation and having regard to the nature of industry, availability of resources, the bagasse based cogeneration need to be encouraged in terms of statutory mandate under the provisions of Act, 2003 read with National Electricity Policy (NEP) and Tariff Policy issued under section 3 of the Act, 2003. The relevant provisions read as under:

**Section 86 (1) (e) of Act, 2003**

"86. **Functions of State Commission**

(1) The State Commission shall discharge the following functions, namely:-

.....

(e) Promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources a percentage of the total consumption of electricity in the area of a distribution license;"

**National Electricity Policy**

National Electricity Policy notified by the Central Government under section 3 of the Electricity Act, 2003 makes specific mention of purchase of surplus power from sugar cogeneration plants, which are extracted here under:

"5.12.3 Industries in which both process heat and electricity are needed are well suited for cogeneration of electricity. A significant potential for cogeneration exists in country, particular in the sugar

industries. SERCs may promote arrangements between co generator and the concerned Distribution Licensee for purchase of surplus power from such plants. Cogeneration system also needs to be encouraged in the overall interest of energy efficiency and also grid stability."

### **Tariff Policy**

Tariff Policy notified by Central Government under section 3 of the Electricity Act, 2003 reflects the mandate under section 86 (1) (e) in Para 6.4 (1), which is extracted here under:

"Pursuant to the provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall take into account while determining tariff by SERC's. Long term growth trajectory of Renewable Purchase Obligation (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE."

### **RPO Trajectory specified by Central Government under Tariff Policy**

Para 6.4(1) specifies that the long term growth trajectory of Renewable Purchase Obligation (RPO's) will be prescribed by the Ministry of Power (MoP) in consultation with Ministry of New and Renewable Energy (MNRE). The MoP in consultation with MNRE issued an order dated 14.06.2018 notifying long term growth trajectory of RPO for Non-solar as well as solar uniformly for all the states from 2019-20 to 2021-22 as under:

<b>Long term RPO trajectory</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>
Non-Solar	10.25%	10.25%	10.50%
Solar	7.25%	8.75%	10.50%
Total	17.50%	19.00%	21.00%

**This Commission vide Regulation No.2 of 2018 had notified the RPPO for the FY 2018-19 to 2021-22 as under:**

<b>Year/RPPO</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>
Solar	5.33	5.77	6.21	7.10
Non-Solar	0.67	0.73	0.79	0.90
Total	6.00	6.50	7.00	8.00

- h) that it has a 3500 TCD Sugar Mill at Rajeswarapuram, Ammagudem Post, Nelakondapalli Mandal, Khammam District, Telangana along with a 24.2 MW bagasse based cogeneration power plant, using bagasse as primary fuel by making substantial investment of Rs.115,00,43,262/- as RE sources including bagasse based cogeneration are encouraged by Central Government as well as State Government as stated supra.
- i) that upon a request made by it, APTransco accorded approval for synchronization of the plant and accordingly the power plant was synchronized with the grid on 20.10.2008 and CoD was declared on 20.10.2008.
- j) that it is supplying the surplus power of about 18.5 MW during season and about 22.20 MW during off-season to the DISCOMs in the composite State of Andhra Pradesh and after bifurcation of State of Andhra Pradesh to States of A.P. and Telangana in the year 2014, to the respondent DISCOM under short term PPA(s). It has been supplying power to the DISCOM since 2009 onwards, including the entirety of FY 2015-16, 2016-17 and for substantial periods of FY 2017-18, FY 2018-19 and FY 2019-20. The term of the latest short term PPA dated 26.04.2019 and was valid until 31.03.2020.
- k) that the petitioner intends to sell the surplus power generated from the said project to the respondent distribution licensees in the Telangana State on a long term basis at the tariff to be determined by this Commission. It's project is a bagasse based power plant and thus is a 'Renewable and Green Energy' initiative.
- l) that the petitioner company has made substantial investments for establishment of the project and the respondent has been purchasing power from the petitioner under the aforesaid short term agreements.
- m) that in terms of section 86(1)(e), the Commission is required to promote generation of electricity from renewable sources of energy by providing

suitable measures for connectivity with the grid and sale of electricity to any person.

- n) that this Commission vide order dated 20.10.2018 had determined the generic levelized fixed tariff for NCE based cogeneration plants at Rs. 2.23 / unit from FY 2010-11 to FY 2029-30 for all projects achieving COD during the control period of FYs 2018-20 and adoptable for projects which had achieved COD after 2009. It's project had achieved COD on 20.10.2008, that is around 5 months before the date from which the said order is made applicable.
- o) that this Commission's order dated 20.10.2018 has taken into account the prevailing parameters for existing bagasse based projects. However, even otherwise, alternatively, for the balance period, the fixed cost component of the tariff for the petitioner's project has to be determined on a project specific basis for which the petitioner has furnished the relevant data along with this petition.

A. **Fixed Charges (F.C.)**

- (i) Capital Cost (CC): The Hon'ble CERC in its RE tariff Regulations of 2009 and 2012, specified the capital cost for base years that is 2009-10 as Rs. 445 lakh/MW and this Commission has considered a capital cost of Rs. 435.5 lakh / MW. It has incurred an actual capital expenditure of Rs.115 crore for the 24.2 MW Co-generation plant, as it's plant is fully automated and it has its own reservoirs of water for operating its plant. Further, it had also installed its own transmission line for 13 km to the interconnection point of the DISCOM. It has also installed a fully automated fuel handling system and standby redundancy equipment which contributes to the safety of the plant. As such, its capital cost of the project works out to about Rs.4.75 crore / MW. Hence it is stated that this Commission adopt the capital cost of Rs.4.75 crore / MW for determining the fixed charges for the project.
- (ii) Debt and Equity Amount: The petitioner has set up its project with a debt component of Rs.322.661 / MW and an equity component of Rs.142.569 / MW, due to the higher capital cost and it

requested the Commission may be pleased to adopt the same for determining the fixed charges for the project.

- (iii) Operation and Maintenance Expenses: The petitioner has incurred an amount of Rs. 24.24 lakh per month, as per actual, as O & M expenses towards repairs and maintenance, employee expenses and other overheads, including expenses incurred for safety measures, for smooth and safe running of the project and requested the Commission to adopt the O & M expenses of Rs. 24.24 lakh / month / MW for determining the fixed cost for the project.
- (iv) Interest on Debt: The petitioner's debt of Rs.80.5 crore incurred in setting up of the project is being serviced at an actual rate of 11%. Hence, the petitioner requests the Commission to adopt this interest rate of 11% for determining the fixed charges for the project.
- (v) Other parameters: The petitioner requests that the other parameters and norms may be fixed as per this Commission in its Order dated 20.10.2018. The parameters fixed by this Commission as against the variation in the petitioner's project to the extent of the capital cost and debt and equity amounts are as follows:

Sl. No.	Particulars	Units	As per Order dt.20.10.2018	petitioner
1	Installed power generation considered for workings	MW	1	1
2	Auxiliary Consumption	%	9.00%	9.00%
3	PLF	%	55.00%	55.00%
4	Useful Life	Years	20	20
5	Capital Cost	Rs Lakhs / MW	435.5	475.23
6	Debt	%	70%	70%
7	Equity	%	30%	30%
8	Total Debt Amount	Rs. In Lakhs	304.85	332.661
9	Total Equity Amount	Rs. In Lakhs	130.65	142.569

Sl. No.	Particulars	Units	As per Order dt.20.10.2018	petitioner
10	Interest on Debt	% PA	10.25%	11%
11	Return on Equity (Pre-Tax)	% PA	17.60%	17.60%
12	Discount Rate (Equity to WACC)	%	9.29%	9.29%
13	Depreciation			
a	Depreciation Rate for first 13 years	%	5.28%	5.28%
b	Depreciation Rate 14 <sup>th</sup> year onwards	%	3.05%	3.05%
14	Working Capital			
a	For fixed charges			
	O&M Charges	Months	1	1
	Maintenance Spares (15% of O&M Expenses)	Rs. in Lakh	3.327	3.636
	Receivables for Debtors	Months	2	2
b	For variable charges			
	Bagasse stock	Months	1	1
15	Interest on working capital	% PA	11.25%	11.25%
16	Heat Rate	kcal/kWh	3600	3600
17	GCV	kcal/kg	2250	2250
18	O&M Expenses	Rs.lakh/MW	22.18	24.24
19	O&M Escalation		5.00%	5.00%
20	Levelized fixed cost for the life of the plant	Rs./Unit	2.23	2.42

- p) that the parameters of capital cost, debt and equity amounts, and O&M expenses which are slightly higher than those determined by this Commission may be considered for the purposes of the present petition.

**B. Variable Cost (V.C.)**

- q) that this Commission vide its order dated 21.04.2020 in O.P.No.15 of 2020 had determined the variable cost for inter alia bagasse based power projects for the FY 2019-20, and vide order dated 28.08.2020 in O.P.No.21 of 2020 determined the variable cost for inter alia bagasse based power projects for the FY 2020-21 to FY 2023-24. The said variable cost as determined by this Commission will apply equally to its project, and as such, the present petition is confined to the determination of fixed cost.
- r) that if the long term PPA is not entered the petitioners project will not be able to service the loans obtained by the petitioner. If it is further delayed, the petitioner company would be facing great difficulty and that apart, the installed capacity of the company would become unutilized. It is stated that substantial amounts have been invested by it with the noble objective of generating green power which is environment friendly and now the petitioner is ready and willing to sell power to the respondent as per the tariff fixed by this Commission.
- s) that, if the long term PPA is in place, better socio-economic benefits can be achieved in backward areas of Khammam district. The welfare of sugar cane farmers and sugar industrial workers will be better assured on account of support from cogeneration activity which is incidentally in line with one of the objective of MNRE's scheme to support promotion of biomass based cogeneration in sugar mills and other industries in the country. It will be able to generate consistent revenues and which will enable it to pay the sugar cane payments to the farmers in time.

**2. The petitioner has sought the following prayer in the petition**

- “a) To determine the fixed cost component of tariff at Rs.2.42 per unit and variable cost as per the Commission's order dated 28.08.2020 in O. P. No. 21 of 2020 for the petitioner's 24.2 MW bagasse based cogeneration project.
- b) To direct the respondent to purchase the surplus power generated by the petitioner company from 24.2 MW bagasse based non-conventional energy cogeneration project by entering

into a long term power purchase agreement for the balance period of normative life of the project.”

3. The respondent has filed counter affidavit and the averments of it are as below:
- a) that the petitioner has have established 24.2 MW bagasse based cogeneration project in the premises of 3500 TCD sugar manufacturing unit at Rajeswarapuram, Ammagudem post, Nelakondapalli mandal, Khammam district and that the COD of the plant was declared on 20.10.2008.
  - b) that it has been stated by the petitioner that the plant has been supplying the surplus power of about 18.5 MW during season and about 22.2 MW during off-season to the respondent since 2009 onwards under short term basis and the latest short term agreement dated 26.04.2019 was valid until 31.03.2020.
  - c) that in the context of petitioner's prayer for determination of specific tariff for their project, the kind attention of this Commission is drawn to the following sections 61 (h), 62 (1) (a) and 86 (1) (a), (b) & (e) which are extracted below for better appreciation:

**Section 61 (Tariff Regulations):**

"The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following namely:-

... ..

(h) the promotion of co-generation and generation of electricity from renewable sources of energy;

... ..

**Section 62 (Determination of tariff):**

(1) The Appropriate Commission shall determine the tariff in accordance with the provisions of this Act for –

(a) supply of electricity by a generating company to a distribution licensee:

Provided that the Appropriate Commission may, in case of shortage of supply of electricity, fix the minimum and maximum ceiling of tariff for sale or purchase of electricity in pursuance of

an agreement entered into between a generating company and a licensee or between licensees, for a period not exceeding one year to ensure reasonable prices of electricity;

... .."

**Section 86 (Functions of State Commission)**

(1) The State Commission shall discharge the following functions, namely:-

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case maybe, within the State:

Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

... ..

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;

... ..

d) that as submitted above, section 61 of the Act, 2003 confers powers to the Commission to specify terms and conditions for determination of tariff, guided by several factors. However, the condition precedent under section 62 (1) and also sections 86 (1) (a) and 86 (1) (b) mandating the Commission to determine the tariff for supply of electricity by a

generating company to a distribution licensee is that there shall be a PPA subsisting between the parties for determination of tariff. Since the respondent has no subsisting agreement with the petitioner as on date the prayer of the petitioner seeking determination of the project specific tariff is not justified.

- e) that without prejudice to the above, this Commission may kindly appreciate that erstwhile APERC vide orders dated 20.03.2004 determined the tariff payable to the renewable energy projects (biomass, bagasse, mini hydel & industrial waste based projects) commissioned upto 31.03.2009.
- f) that aggrieved by the APERC orders dated 20.03.2004, appeals were filed before Hon'ble APTEL by various developers. Hon'ble APTEL passed order dated 02.06.2006 setting aside APERC orders. DISCOMs filed appeals before Hon'ble Supreme Court against Hon'ble APTEL orders dated 02.06.2006. The Hon'ble Apex court by its order dated 08.07.2010 disposed the civil appeals quashing the orders of Hon'ble APTEL and remanded the matters to the then APERC directing to hear the NCE generators afresh and to fix the price. Upon the directions of the Hon'ble Supreme Court, APERC after conducting public hearings, issued order dated 12.09.2011, incorporating the three individual orders passed by the Chairman and two Members. The APERC order was challenged by the DISCOMs and the generators filed appeals before Hon'ble APTEL. Hon'ble APTEL disposed the appeals by its common order dated 20.12.2012, directing the APERC to determine the tariff for the NCE projects on the basis of norms/parameters fixed by the Tribunal.
- g) that as such after series of litigations before various forums, pursuant to the directions of Hon'ble APTEL, the said APERC order culminated into APERC order dated 22.06.2013, wherein fixed cost was determined for first 10 years of operation for the RE projects (including bagasse based cogeneration projects). The order clearly stipulates that the tariff so determined is applicable for the RE projects which were existing as on 31.03.2004 and those commissioned between 01.04.2004 to 31.03.2009, except for those projects covered by negotiated PPAs. It is stated that the developer's project was commissioned in 2008 that is well

within the period for which the erstwhile APERC determined tariff is available and as such, had the developer entered into PPA as per the requests of DISCOM at that time itself, then erstwhile APERC tariffs would have been continuing to their project.

- h) that further, the joint APERC for the states of Telangana and Andhra Pradesh vide orders dated 05.08.2014, determined generic tariff for the bagasse based co-generation projects wherein the Fixed was determined for 11<sup>th</sup> to 20<sup>th</sup> year of operation.
- i) that after bifurcation of the State, the Commission vide Regulation No.1 of 2014 adopted all regulations, decisions, directions, orders issued by the erstwhile APERC as in existence as on the date of constitution of the Commission.
- j) that apparently, it drives the point that in spite of availability of tariff for the petitioner's project (which was commissioned during October 2008) and that the developer did not chose to enter into PPA with the respondent DISCOM and instead preferred to sell the power under short term basis as they found it more beneficial at that time than to enter PPA. In fact, this resulted in additional power purchase cost by the DISCOMs in open market.
- k) that further under section 86 (1) (e) this Commission conferred with the powers to specify percentage of purchase of power from renewable sources, issued RPPO Regulation No. 2 of 2018 mandating TSDISCOMs for purchase from renewable energy sources a minimum quantity (in kWh) of electricity expressed as a percentage of its total consumption of energy.
- l) that this Commission is empowered to pass appropriate directions to the DISCOMs in case of non-fulfilment of RPPO obligation and DISCOMs cannot be thrusted by any party to enter into long term PPA at a tariff as demanded by the developers.
- m) that without any prejudice to the submissions made above it submitted as below:
  - i) The tariff determined by TSERC in the order dated 20.10.2018 cannot be applied to the developer's project, since the same is applicable for the bagasse based cogeneration projects

commissioned during the control period 2018-2020 and the developer's project was commissioned in 2008;

- ii) Determination of project specific tariff under section 62 (1) read with section 86 (1) (a) & (b) is also not justified since there is no subsisting PPA between DISCOM and the developer as such;
  - iii) Most importantly, the tariff determined by erstwhile APERC vide orders dated 22.06.2013 (applicable for the projects commissioned upto 31.03.2009) can also be not made applicable to the developer's project directly for the balance life period of the project that is upto 2028, since the developer did not come forward to enter into PPA at that time for sake of additional financial benefits and this action of the developer forced the DISCOM to purchase energy in the open market at higher prices to the extent of the quantum of plant capacity for which the developer did not come forward for PPA at that time.
- n) In light of the above, the respondent prays this Commission to grant liberty to the DISCOM to take a decision on entering into PPA with the petitioner, duly taking into consideration the power requirement of the licensee and Non-Solar RPPO % to be met. Further, respondent prays this Commission to give liberty to the respondent to negotiate a tariff lower than the erstwhile APERC tariffs (22.06.2013 & 05.08.2014 order) available since because of the action of the developer not to enter the PPA after COD resulted in DISCOMs purchase power at higher prices from open market, as submitted above.

4. The petitioner has filed rejoinder to the counter affidavit and the averments of it are as below:

- a) that it is pertinent to mention at the outset that it has set-up the 24.2 MW bagasse-based cogeneration project (project) in the premise of 3500 TCD Sugar manufacturing unit and it has setup the same on the principles underlying the promotion of nonconventional energy (renewable sources of energy), including the bagasse based cogeneration projects and in as much as the Act, 2003 which mandates promotion and development of electricity from renewable sources of

- energy in consonance with the NEP and international treaties and conventions and the actions of the respondents in entering into short PPA's on year on year basis has put immense pressure on the petitioner.
- b) that it sought for vendor registration 19 MW (earlier 18.5 MW) exportable RTC (round the clock) capacity during the season and accordingly TSTransco issued proceeding vide Lr. No. ED / Comml / SE-IPC / DE-1 / F.VR-Madhucon / D. No. 254 / 20 dated 29.01.2021 for 19 MW during the season, enabling petitioner to avail open access; which is valid till 2026.
- c) that the contention of the respondents' that existence of a PPA or signing of a PPA is a condition precedent for the Commission to determine the Tariff of the project exercising its powers u/s 62, 86 (1) (a) and 86 (1) (b) is totally misconceived. It is the legislative intension that power to fix tariff has been conferred on the Commissions and once the tariff is fixed, the parties i.e., the generating companies and licensees who enter into agreement of purchase shall be bound by the said tariff. It is pertinent to mention that the Commission had on many occasions fixed either the generic tariff or project specific tariff for non-conventional energy projects, basing in which the licensees have concluded the PPAs.
- d) that the respondents contention that it had not come forward to sell power to DISCOM / respondent is misplaced in as much as it has been all through requesting the purchase power on long term basis, however they preferred to purchase only under short term purchase during intermittent intervals when there was power shortage, no document has been placed before the Commission that the respondents have offered to purchase power in terms of above referred generic tariff by calling upon the petitioner to enter into long term PPA, unlike other similarly situated bagasse based plants.
- e) that the Central Government in exercise of powers u/s 3 (1) of the Act, 2003 has fixed the trajectory specifying the percentage (%) renewable energy to be procured by the obligated entities / DISCOMS which is in terms of NEP. The said trajectory specifies the projection as below:

Year	Solar RPO	Non- Solar RPO			Total RPO
		HPO	Other Non-Solar RPO	Total Non-Solar RPO	
2019-20	7.25%		10.25%	10.25%	17.50%
2020-21	8.75%		10.25%	10.25%	19.00%
2021-22	10.50%	0.18%	10.50%	10.68%	21.18%
2022-23	To be specified later	0.35%	To be specified later	To be specified later	To be specified later
2023-24		0.66%			
2024-25		1.08%			
2025-26		1.48%			
2026-27		1.80%			
2027-28		2.15%			
2028-29		2.51%			
2029-30		2.82%			

- f) that the Commission issued Renewable Power Purchase Obligation (RPPO) - Regulation No.2 of 2018 specifying the obligation as under:

Year/RPPO	2018-2019	2019-20	2020-21	2021-22
Solar	5.33	5.77	6.21	7.10
Non- Solar	0.67	0.73	0.79	0.90
<b>Total</b>	<b>6.00</b>	<b>6.50</b>	<b>7.00</b>	<b>8.00</b>

- g) that the above specified obligation is yet to be achieved by the respondent's besides the object and intention was not meant to restrict the purchase of non-conventional energy power beyond the percentage (%) specified and there is no embargo under section 86(1)(e) placing any restrictions on such purchases.
- h) that the fixation of tariff is essentially legislative function to be exercised by the Commission and that the parties on their own cannot agree to any specific tariffs, therefore, it is only the Commission which alone is empowered to fix the same and definitely not by way of any mutual negotiations between the parties. The Central Government as well as State Government have conceived to achieve a huge task of achieving 175 GW by March, 2022, and further enhance to 450 GW by 2030,

therefore the licensees have onerous job of aiding and discharging the above objective in-line with Central Government trajectory and directions of this Commission. At the cost of repetition, the petitioner submits that the percentage (%) specified in regulation No.2 of 2018 is only a minimum percentage (%) and not maximum and the DISCOMs being instrumentalities of State have to fall in line with the Central and State policies.

5. The commission has heard the counsel for the petitioner and the representative of the respondent. It has perused the material available on record. The submission on different dates are recorded below:

Record of proceeding dated 01.03.2021:

“... ..The counsel for the petitioner stated that the petition is filed for determination of the tariff for the petitioner’s project. The representative of the respondent sought time of two months for filing counter affidavit in the matter. The respondent is permitted to do so and the counter shall be filed on or before 19.04.2021 by serving a copy of the same to the counsel for petitioner through email or in physical form. The counsel for petitioner may file rejoinder, if any, on or before 26.04.2021 by serving a copy of the same to the respondent through email or in physical form. ... ..”

Record of proceeding dated 09.06.2021:

“... .. The counsel for the petitioner stated that the counter affidavit is yet to be filed in the matter. The representative of the respondents stated that the counter affidavit has been filed. The Commission pointed out that the counter affidavit has been filed and it is available in the record. At that point it directed the office to ensure filing of acknowledgement of service of counter affidavit and rejoinder. The matter is adjourned. The representative of the respondent shall ensure serving a copy on the petitioner of its counter affidavit immediately and the counsel for petitioner shall file a rejoinder if any without out fail by next date of hearing.”

Record of proceeding dated 28.06.2021:

“... .. The counsel for petitioner stated that the matter involves determination of tariff and as the counter affidavit has been filed, he requires further time to

make submissions in the matter, accordingly sought for scheduling the matter to another date. The representative of the respondent has no objection.”

Record of proceeding dated 29.07.2021:

“... .. The counsel for petitioner stated that the matter involves determination of tariff for the cogeneration project. The project was originally established in the year 2008 and the petitioner has been undertaking sale of energy to the DISCOMs under short term sale.

The counsel for petitioner stated that the petitioner’s project is a renewable source of energy and it will aid the DISCOMs in complying with the renewable power purchase obligation as mandated in the Act, 2003, National Electricity Policy and National Tariff Policy. He has referred to various provisions applicable in Act, 2003, the NEP and NTP. He referred to the RPPO trajectory fixed by the Commission as well as the Government of India. He pointed out that there is a vast difference in the non-solar trajectory of RPPO. The Commission had fixed only the minimum percentage of RPPO at 0.9% of total sales of DISCOMs, however, they can procure higher quantum of power under non-solar as there is no restriction in the Commission’s trajectory. It will also aid the DISCOMs to comply with the trajectory fixed by the Government of India. The Government of India fixed 10.75% towards non-solar power. Therefore, the DISCOMs should procure power under renewable sources from the petitioner and others.

The counsel for petitioner stated that the tariff now sought in this petition has been elaborately explained. Further, the counsel for petitioner identified certain parameters with regard to determination of tariff based on CERC Regulation. He has referred to the capital cost, debt equity ratio, interest on working capital and O&M expenses. He stated that all the other parameters are taken from the order of the Commission only.

The counsel for petitioner stated that the tariff parameters to be considered were determined from time to time by the then combined Commission and this Commission also. This project being of the year 2008, the parameters mentioned in the order of the year 2004-09 have to be considered. The petitioner has submitted the parameters in terms of the CERC Regulation as well as the combined APERC orders. The petitioner’s project is in the 14<sup>th</sup> year of operation. The combined APERC had determined tariff for 11<sup>th</sup> to 20<sup>th</sup> year

of operation by its order in O.P.No.8 of 2014 dated 23.08.2014, which has been adopted by this Commission. This Commission also passed orders in the year 2018 fixing tariff for the control period FY 2018-20. The counsel for petitioner pointed out the variations that need to be considered, which are at a difference to generic parameters in the case of the petitioner.

The counsel for petitioner adverted to the contentions of the respondent that the tariff cannot be determined unless there is an agreement between them and rebutted it by explaining the provisions of sections 62, 86(1)(a) and (b) of the Act, 2003. It is his case that variable cost is being determined by the Commission, this petition is limited to determination of fixed cost only. He also stated that the petitioner is a cogeneration project and the respondents have sent a letter stating that they are willing to enter into an agreement provided the entire capacity is sold to them, which is uncalled for as it is a captive cogeneration plant. He sought determination of tariff so as to enable the parties to enter into an agreement for sale of energy by the petitioner to the respondents.

The representative of the respondent stated that the petitioner had been supplying power to the DISCOMs all these years through the short term procurement process and never came forward to sign the PPA. Had the petitioner approached the DISCOM at the relevant time, the petitioner's case would have been considered. He opposed the contention that the DISCOMs are not required to enter into an agreement before the tariff is determined by the Commission by explaining the provisions of the Act, 2003. It is his case that the DISCOM is willing to enter into an agreement and procure the power provided the petitioner is agreeable to sell the entire capacity of the unit."

6. Based on the submissions of the petitioner and the respondent, the following issues arises for consideration, before delving into the merits of the tariff parameters proposed by the petitioner:

Issue No.1: Whether the petitioner's request to determine the project specific tariff can be accepted in the absence of PPA with the respondent?

Issue No.2: Whether the petitioner's request to direct the respondent to enter into a PPA with the petitioner can be considered?

**Issue No.1:**

7. The contentions of the petitioner are –
- a) that it intends to sell the surplus power generated from its 24.2 MW Bagasse based cogeneration power plant to the respondent on a long term basis at the tariff to be determined by this Commission.
  - b) that the Commission vide order dated 20.10.2018 had determined the generic levelized fixed tariff for NCE based cogeneration plants at Rs. 2.23 / unit from FY 2010-11 to FY 2029-30 for all projects achieving COD during the control period and adoptable for projects which had achieved COD after 2009. It's project had achieved COD on 20.10.2008, that is around five (5) months before the date from which the said order is made applicable and requested the Commission for determination of tariff by considering the parameters proposed by it.
  - c) that the contention of the respondents' that existence of a PPA or signing of a PPA is a condition precedent for the Commission to determine the Tariff of the project exercising its powers u/s 62, 86(1)(a) and 86(1)(b) is totally misconceived. It is the legislative intension that power to fix tariff has been conferred on the Commission and once the tariff is fixed, the parties i.e., the generating companies and licensees who enter into agreement of purchase shall be bound by the said tariff and the Commission had on many occasions fixed either the generic tariff or project specific tariff for non-conventional energy projects, basing in which the licensees have concluded the PPAs.
  - d) that the respondents contention that it had not come forward to sell power to respondent is misplaced in as much as it has been all through requesting the purchase power on long term basis, however they preferred to purchase only under short term purchase during intermittent intervals when there was power shortage, no document has been placed before the Commission that the respondents have offered to purchase power in terms of above referred generic tariff by calling upon the petitioner to enter into long term PPA.
  - e) that the non-solar RPPO percentage (%) specified in Regulation No.2 of 2018 is yet to be achieved by the respondents and the percentage (%) specified in the Regulation is only a minimum percentage (%) and not

maximum.

- f) that in terms of section 86 (1) (e), the Commission is required to promote generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person.
- g) that the fixation of tariff is essentially legislative function to be exercised by the Commission and that the parties on their own cannot agree to any specific tariffs, therefore, it is only the Commission which alone is empowered to fix the same and definitely not by way of any mutual negotiations between the parties. Section 62 of the Electricity Act, 2003 empowers the Commission to determine tariff for supply of electricity by a generating company to a distribution licensee.

8. On the other hand, the contentions of the respondent are -

- a) Section 61 of the Act, 2003 confers powers to the Commission to specify terms and conditions for determination of tariff, guided by several factors. However, the condition precedent under section 62 (1) and also sections 86 (1) (a) and 86 (1) (b) mandating the Commission to determine the tariff for supply of electricity by a generating company to a distribution licensee is that there shall be a PPA subsisting between the parties for determination of tariff. Since the respondent has no subsisting agreement with the petitioner as on date the prayer of the petitioner seeking determination of the project specific tariff is not justified.
- b) that APERC in its order dated 22.06.2013, determined the fixed cost for first 10 years of operation for the RE projects (including bagasse based cogeneration projects). The order clearly stipulates that the tariff so determined is applicable for the RE projects which were existing as on 31.03.2004 and those commissioned between 01.04.2004 to 31.03.2009, except for those projects covered by negotiated PPAs. The respondents' project was commissioned in 2008 that is well within the period for which the erstwhile APERC determined tariff is available and as such, had the developer entered into PPA as per the requests of DISCOM at that time itself, then erstwhile APERC tariffs would have been continuing to their project. Further, the joint APERC for the States

of Telangana and Andhra Pradesh in its orders dated 05.08.2014, determined generic tariff i.e., fixed cost for 11<sup>th</sup> to 20<sup>th</sup> year of operation for the bagasse based co-generation projects.

- c) after bifurcation of the State, this Commission vide Regulation No.1 of 2014 adopted all regulations, decisions, directions, orders issued by the erstwhile APERC as in existence as on the date of constitution of the Commission. Apparently, it drives the point that in spite of availability of tariff for the petitioner's project (which was commissioned during October 2008) and that the developer did not choose to enter into PPA with the respondent DISCOM and instead preferred to sell the power under short term basis as they found it more beneficial at that time rather than to enter PPA. In fact, this resulted in additional power purchase cost by the DISCOMs in open market.
- d) that further under section 86 (1) (e) this Commission conferred with the powers to specify percentage of purchase of power from renewable sources, issued RPPO Regulation No. 2 of 2018 mandating TSDISCOMs for purchase from renewable energy sources a minimum quantity (in kWh) of electricity expressed as a percentage of its total consumption of energy.
- e) determination of project specific tariff under section 62 (1) read with section 86 (1) (a) & (b) is also not justified since there is no subsisting PPA between DISCOM and the developer as such.
- f) the tariff determined by erstwhile APERC vide orders dated 22.06.2013 (applicable for the projects commissioned upto 31.03.2009) can also be not made applicable to the respondent's project directly for the balance life period of the project i.e., upto 2028, since the developer did not come forward to enter into PPA at that time for sake of additional financial benefits and this action of the developer forced the DISCOM to purchase energy in the open market at higher prices.
- g) the respondent prays to grant liberty to the DISCOM to take a decision on entering into PPA with the petitioner, duly taking into consideration the power requirement of the licensee and non-solar RPPO percentage (%) to be met and to negotiate a tariff lower than the erstwhile APERC tariffs (22.06.2013 & 05.08.2014 order) available since because of the

action of the developer not to enter the PPA after COD resulted in DISCOMs purchase power at higher prices from open market.

9. Section 86 (1) (b) of the Electricity Act, 2003 empowers the Commission to regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State. The petitioner's cogeneration power plant was commissioned on 20.10.2008 i.e. in FY 2008-09 and eventually there exists the Commission already determined generic tariffs to the cogeneration plants which were commissioned during the period FYs 2004-09 for first 10 years of operation and subsequently for 11<sup>th</sup> to 20<sup>th</sup> years of operation vide orders dated 22.06.2013 and 05.08.2014 respectively.

10. Section 62 of the Electricity Act, 2003 empowers the Commission to determine tariff for supply of electricity by a generating company to a distribution licensee. The petitioner has requested the Commission for determination project specific tariff, without having PPA with the respondent. In the present case, there is disagreement between the petitioner and the respondent on the basis to be considered for tariff, let alone the non-existence of the Power Purchase Agreement (PPA). Such disagreements can be ironed out only if a PPA is executed between the parties. Tariff determination in the present case would be a futile exercise as there is no mutual consent of the parties for sale and purchase of electricity, in the form of PPA. In view of the same, the Commission does not find it appropriate to accept the petitioner's request to determine the project specific tariff in the absence of PPA.

11. The Commission makes it amply clear that the above decision shall not be construed as an approval to the petitioner as eligible for project specific tariff determination at a later date or to the respondent to negotiate the tariffs with ceiling tariffs as that determined in the Order dated 22.06.2013 and 05.08.2014. The issue of tariff is left open at this stage.

12. Section 86 (1) (e) of the Electricity Act, 2003 mandates promotion of cogeneration and generation of electricity from renewable sources by providing suitable measures for connectivity with the grid and sale of electricity to any person,

and also to specify, for purchase of electricity from such sources a percentage of the total consumption of electricity in the area of a distribution license. The Commission, in fulfilment of this mandate, had issued the Regulation No.2 of 2018 wherein the RPPO had been specified for the Obligated Entities (including respondent), for the period from FY 2018-19 to FY 2021-22. The Commission finds merit in the petitioner's submission that RPPO specifies the minimum quantity (in kWh) of electricity to be purchased from NCE sources. However, the Commission does not find it prudent to delve into the petitioner's submission that the respondent has not fulfilled RPPO as neither material evidence has been placed by the petitioner nor the same is the subject matter of the present petition.

**Issue No.2:**

13. The respondent being a distribution licensee is empowered to purchase required energy for distribution and retail supply in accordance with the regulations, guidelines, directions issued by the Commission from time to time, which shall further be subject to approval of the Commission. A power purchase agreement (PPA) contains provisions related to commercial, technical, tariff and other related matters and therefore it is the exclusive domain of the respondent to take decisions on entering into PPA for availing the required power. In the petitioner's case, the Commission finds that there is a fundamental disagreement between the petitioner and respondent on the capacity itself. Essentially what emerges from the submission is that the parties are seeking adjudication, without even having PPA between themselves, which is unwarranted. In light of the above, the petitioner's request to direct the respondent to enter into PPA with the petitioner is beyond the regulatory purview of the Commission and hence the Commission does not accept the same. The petitioner is at liberty to approach the respondent for execution of PPA, if it intends to sell power from its bagasse based cogeneration power plant.

14. The petition is disposed of in the above terms.

**This order is corrected and signed on this the 9<sup>th</sup> day of September, 2021.**

<b>Sd/-</b> (BANDARU KRISHNAIAH) MEMBER	<b>Sd/-</b> (M.D.MANO HAR RAJU) MEMBER	<b>Sd/-</b> (T.SRIRANGA RAO) CHAIRMAN
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