



**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
HYDERABAD.**

5th Floor, Singareni Bhavan Lakdikapul Hyderabad 500004

O. P. No. 2 of 2017

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I. A. No. 27 of 2017

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I. A. No.28 of 2017

Dated: 07.01.2019

Present

Sri. Ismail Ali Khan, Chairman

Between:

M/s. NSL Krishnaveni Sugars Limited
Reg and Corp office NDL Icon, Plot No. 1 to 4
Road No. 12, Banjara Hills, Hyderabad – 500034.

... Petitioner

AND

1. Southern Power Distribution Company of
Telangana Ltd. 6-1-50, 2nd Floor,
Mint Compound, Secretariat Road,
Hyderabad – 500 063.

2. Northern Power Distribution Company of
Telangana Limited, Corporate Office,
Vidyut Bhavan, Hanumakonda,
Warangal.

... Respondents.

This petition came up for hearing on 02.11.2017, 16.11.2017, 08.12.2017, 30.04.2018, 17.05.2018 and 08.06.2018. Sri. K. Gopal Chowdary, Advocate alongwith Sri. Challa Gunaranjan, Counsel for the petitioner appeared on 02.11.2017, Sri. K. Gopal Chowdary, Advocate along with Sri. Vizhay Babu, Advocate representing Sri. Challa Gunaranjan, Counsel for the petitioner appeared on 16.11.2017, Sri. Vizhay Babu, Advocate representing Sri. Challa Gunaranjan, Counsel for the petitioner appeared on 08.12.2017, Sri. K. Gopal Chowdary, Advocate representing Sri. Challa Gunaranjan, Counsel for the petitioner appeared on 30.04.2018, Sri. K. Gopal Chowdary, Advocate along with Sri. M. Sridhar,

Advocate representing Sri. Challa Gunaranjan, Counsel for the petitioner appeared on 17.05.2018 and Sri. K. Gopal Chowdary, Advocate along with Sri. N. Phanindra Kumar, Advocate representing Sri. Challa Gunaranjan, Counsel for the petitioner appeared on 08.06.2018. Ms. M. Pravalika, Advocate alongwith Smt. Nanditha, Advocate representing Sri. Y. Rama Rao, Standing Counsel for the respondents appeared on 02.11.2017, Sri. Y. Rama Rao, Standing Counsel for the respondents alongwith Ms. M. Pravalika, Advocate appeared on 16.11.2017, 30.04.2018, 17.05.2018 and 08.06.2018 and Ms. M. Pravalika, Advocate representing Sri. Y. Rama Rao, Standing Counsel for the respondents appeared on 08.12.2017. This petition having stood over for consideration to this day, the Commission passed the following:

ORDER

M/s. NSL Krishnaveni Sugars Limited (petitioner) has filed a petition under 86 (1) (b) and (e) Electricity Act, 2003 (Act, 2003) seeking determination of the tariff for the 28.2 MW bagasse based co-generation plant and to direct the licensee to purchase the power under the long term power purchase agreement (PPA).

2. The petitioner stated that it is a company incorporated under the provisions of Companies Act, 1956, having its registered & corporate office at NSL Icon, Plot No. 1 to 4, Road No. 12, Banjara Hills, Hyderabad, Telangana and is engaged in the business of manufacture and sale of sugar and allied products. It has established sugar manufacturing unit with 3500 TCD capacity at Ramakrishnapuram Village, Kothakota Mandal, Mahaboobnagar (presently Wanaparthy) District, Telangana in the year 2010 – 11. It has also established a 28.2 MW bagasse based co-generation power plant in the same premises. The petitioner 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 Andhra Pradesh (AP) state till its bifurcation, and later to the DISCOMs of Telangana state under short term PPAs year on year.

3. The petitioner stated that the respondent No. 1 is the distribution licensee operating within the area of the petitioner, while the respondent No. 2 is the only other distribution licensee (DISCOMs) in the state of Telangana. It may be pertinent

to first set out briefly the background and the principles underlying the promotion of Non-Conventional Energy (renewable sources of energy), including the bagasse based co-generating 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.

4. The petitioner stated 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 utilizing local resources including renewable sources of energy, so as to reduce transmission and distribution losses.

5. The petitioner stated 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 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.

6. The petitioner stated that the Government of India (GoI) had set up the Ministry for Non-Conventional Energy Sources (MNES) to promote and develop non-conventional energy (NCE) and to evolve policy guidelines. Accordingly, institutional mechanisms (e.g. 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.

7. The petitioner stated that the state government was also required to promote and facilitate the establishment of non-conventional energy projects based on the guidelines issued by the MNES. For development of NCE projects in the composite erstwhile state of A.P. established Non-conventional Energy Development Corporation (NEDCAP) and also encouraged the establishment of non-conventional 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 then APSEB / Transmission Corporation of Andhra Pradesh (APTRANSCO). The government of composite state of A. P., keeping in view of the policy formulated and the guidelines issued by the Gol for promotional and fiscal incentives, formulated incentives schemes for non-conventional sources of energy including bagasse based co-generation plants, and improved upon the same from time to time.

8. The petitioner stated that pursuant to enactment of A. P. State Reorganization Act, 2014 the state of Telangana was formed with effect from 02.06.2014. Most of the renewable energy projects including sugar co-generation plants are located in residual A. P. state. 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 the state of Telangana 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 57.25 MW are selling surplus power to state DISCOMs under long term PPAs. 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 co-generation need to be encouraged in terms of statutory mandate under the provisions of Act, 2003 read with national electricity policy (NEP) and National Tariff Policy (NTP) issued under Sec 3 of the Act, 2003. The relevant provisions are extracted in the petition.

9. The petitioner stated about that the RPPO trajectory specified by Gol under tariff policy. Paragraph 6.4 (1) specifies that the long term growth trajectory of RPPO will be prescribed by the Ministry of Power (MoP) in consultation with Ministry of New

and Renewal Energy (MNRE). Further paragraph 6.4 (1) (i) specified that within the percentage so made applicable to be fixed as RPPO, the State Electricity Regulatory Commissions (SERCs) shall also reserve a minimum percentage for purchase of solar power, which progressively should reach 8% of the total energy by March, 2022. The MoP in consultation with MNRE issued orders dated 22.07.2016 notifying long term growth trajectory of renewable purchase obligations for non-solar as well as solar uniformly for all the states from 2016-17 to 2018-19 as under:

Long term trajectory	2016-17	2017-18	2018-19
Non-solar	8.75%	9.50%	10.25%
Solar	2.75%	4.75%	6.75%
Total	11.50%	14.25%	17.00%

Further it is stated that the said obligations are exclusive of hydro power. Under this order all the SERCs are required to notify RPPO for their respective states.

10. The petitioner stated that the brief facts leading to filing of this petition are being narrated herein below. It is stated that a 28.2 MW bagasse based cogeneration power plant using bagasse as primary fuel by making substantial investment of ₹ 1,293,330,541/- (₹ 129.33 crores) as RE sources including bagasse based co-generation are encouraged by GoI as well as state government as stated supra.

11. The petitioner stated that it obtained provisional sanction from NEDCAP of composite state on 18.10.2007 for 20 MW capacity and a formal agreement was entered with NEDCAP on 18.10.2007 subsequently the NEDCAP further accorded sanction for additional capacity of 8 MW on 07.07.2011. The captive power requirement including auxiliary power consumption of the petitioner is 10.49 MW during season and 2.4 MW during off-season from out of the power generated from the power plant. Further, upon a request made by the petitioner company, the then Transmission Corporation of Andhra Pradesh (APTRANSCO) accorded approval for synchronization of the plant and accordingly the power plant was synchronized with the grid on 18.01.2011 and CoD was declared on 27.01.2011.

12. The petitioner stated that as the erstwhile Andhra Pradesh Electricity Regulatory Commission (APEREC) did not determine the generic tariff applicable for

the new renewable energy projects established after 31.03.2009. It is supplying the surplus power of about 17 MW during season and about 25 MW during off-season to the DISCOMs in the composite state and after bifurcation of state of A. P. in to states of A. P. and Telangana in the year 2014, to the respondent DISCOMs under short term power purchase agreements (PPA). The term of the existing short term PPA dated 27.02.2016 will expire on 25.05.2017. It is also stated that the petitioner intends to sell the surplus power generated from the project to the DISCOMs in the state of Telangana on a long term basis at the tariff to be determined by the Commission. It's project is a bagasse based power plant and thus is a renewable and green energy initiative.

13. The petitioner stated that it has made substantial investments for establishment of the project and has made representations to all concerned agencies, the respondents are not entering a long-term PPA with it. It initially addressed a letter to the respondents on 04.07.2016 requesting to purchase the surplus power under long term PPA. As there was no response, it also addressed a letter dated 20.07.2016 to the Principal Secretary, Government of Telangana (GoTS) requesting to issue necessary instructions to the DISCOMs in the larger interest of the state. It by letter dated 22.07.2016 also requested the CMD Transmission Corporation of Telangana Limited (TSTRANSCO) and Chairperson of Telangana State Power Coordination Committee (TSPCC), to purchase the surplus power under long term PPA. It by letter dated 08.08.2016, even brought to the notice of Telangana New and Renewable Energy Development Corporation (TNREDCL), which is the state nodal agency to promote renewable sources of power that it intended to sell the surplus power to TSDISCOMs and requested it to make necessary recommendation in that regard. But the respondent No. 1, by letter dated 11.08.2016 informed it that since it has achieved surplus power situation and has enough capacity to meet RPO from non-conventional energy sources, the request for purchase under long term PPA cannot be considered. However, the petitioner believes that the view of the respondent No. 1 is not based on factual position of non-solar RPPO specified by the Commission in Regulation No. 1 of 2012 and the contention of respondent No.1 on RPPO compliance, is misconceived as explained in subsequent paragraphs.

14. The petitioner stated that from a conjoint reading of section 86 (1) (e) of Act, 2003 and para 5.12.3 of NEP, it is very much evident that the legislature specifically recognized the need for encouragement of co-generation from renewable energy sources and more particularly from co-generation sugar industry and also mandates SERCs to promote arrangements between co-generator and DISCOMs for purchase of surplus power. Though the erstwhile Commission of composite AP state has not determined generic tariff for RE projects including the bagasse based co-generation projects commissioned after 31.03.2009, it is mandatory that DISCOMs shall purchase the power from such sources by entering long term PPA for fulfillment of RPO at the generic tariff determined by the Commission on application by the RE generating company. Further, the Commission has ample powers under section 86 (1) (b) read with 86 (1) (e), to direct the DISCOMs to purchase power at the tariff determined by the Commission from the available RE capacity within the State as long as RPO remains unfulfilled.

15. The petitioner stated that the Commission under section 86 (1) (e) is required to specify a percentage of total consumption of electricity for purchase from renewable energy sources. In discharge of the function, the Commission has issued Regulations No. 1 of 2012. In the regulation, the Commission has specified that every obligated entity shall purchase not less than 5% of its total requirement through renewable energy sources. It is also stated that in terms of Sec 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.

16. The petitioner stated that TSDISCOMs being obligated entities under Regulation No. 1 of 2012, are required to purchase power from renewable energy sources, at generic tariff rate determined by the Commission for purchase of electricity from different types of renewable energy sources a quantum of not less than 5% of its total consumption of energy, out of which 0.25% shall be from solar energy. The details of availability of renewable sources and the purchase of RE approved by the Commission in the Tariff Order of 2016-17 is extracted here under:

NCE Sources	Filings by Licensee (MU)	Approved (MU)
Biomass	156.62	156.62
Bagasse	128.48	128.48

Municipal Waste Energy	154.33	154.33
Industrial Waste Projects	54.61	54.61
Wind Power	175.02	175.02
Mini Hydel	0.34	0.34
NCL Energy Ltd.	0.00	0.00
Solar Power	1327.71	1327.71
NTPC Bundled Power	402.73	402.73
Total	2399.84	2399.84

These details would show that the status of compliance of RPO for 2016-17 would be as follows:

Power purchase approved by TSERC for FY 2016-17: 52,000 MU

Sl. No.	Particulars	Non-solar	Solar	Total
1.	RPO specified by TSERC (%)	4.75%	0.25%	5.00%
2.	Required RE procurement (MU)	2,470	130	2,600
3.	Availability as per ARR (MU)	670	1328	1998
4.	Approved in Tariff Order (MU)	670	1730 (1327+403)	2,400
5.	RPO compliance expected (%)	1.29%	3.33%	4.62%
6.	Short fall / surplus in compliance with reference RPO specified by TSERC (%)	-3.46%	3.08	-0.38
7.	Additional RE to be procured to meet shortfall in RPO (MU)	1800	(-)1602	198

17. The petitioner stated that the above data reveals that there is huge shortfall of about 73.5% in compliance of non-solar RPPO, requiring the DISCOMs to procure 1800 MU of non-solar renewable energy in addition to 670 MU available and approved by the Commission for procurement in 2016-17. The position for 2017-18 would be similar to that of 2016-17 considering the NCE power plan indicated by the respondents in para 10.3.4 & 10.3.5 of ARR and tariff filing of 2016-17 which is extracted hereunder:

“10.3.4 Renewable Energy: Rise in agricultural demand is planned to be served using renewable sources, more specifically using the solar power generation. Total renewable capacity an addition as planned by Telangana State is 3,789 MW by 2018-19 as mentioned in table.

Source	Capacity (MW)
NCE – Wind Power upcoming in FY 16-17	100
NCE - Wind Power upcoming in FY 17-18	200
NCE - Wind Power upcoming in FY 18-19	573
NCE – Solar Competitive Bidding Upcoming in FY 18-19	2,916

10.3.5 By taking into account above mentioned capacity additions, power purchase availability has been projected for the state of Telangana.

Energy availability projection from various sources (in MU)				
Period	FY2015-16	FY2016-17	FY2017-18	FY2018-19
Thermal power stations	17,730	21,450	26,974	34,101
Hydel Power Stations	130	3,421	2,019	2,018
Total (Thermal and Hydel)	17,860	24,870	28,992	36,119
Central generating stations (CGS)	13,121	14,760	16,854	17,519
Gas power corporation limited	82	81	112	112
IPPs	3,197	2,075	85	0
NCE	947	2,400	4,669	6,663
Others	4,221	13,036	14,501	20,046
Total	39,429	57,222	65,214	80,459
Availability from existing	34,850	36,651	33,795	33,693
Availability from upcoming	4,579	20,570	31,419	46,766
Market purchases	14,257	7,448	-	-
Grand Total	53,686	64,669	65,214	80,459"

18. The petitioner stated that the bulk of the availability of the NCE for the control period ending 2018-19 will be from the solar sources and hence the shortfall in compliance of RPPO of non-solar sources will continue throughout the control period as per the computations shown hereunder:

Sl. No.	Particulars	2016-17	2017-18	2018-19
1	Energy available from existing Non-solar projects			
A.	Energy from wind source (MU)	0	175	525
B	Energy from other than wind (MU)	495 (199 + 296)	495 (199 + 296)	495 (199 + 296)
	Total (MU)	495	670	1020
2.	Energy projected from new non-solar projects			
A	Energy from wind source @ 20% CUF (MU)	175	350	1000
B	Energy from other than wind (MU)	-	-	-
	Total (MU)	175	350	1000
3	Total Non-solar energy availability (MU)	670	1020	2020
4	Total projected energy requirement of State (MU)	54710 (39292 + 15418)	64299 (43365 + 20934)	76778 (48252 + 28526)
5	Energy required as per non-solar RPO target of 4.75% (MU)	2598	3054	3647
6	Projected RPO compliance RPO (%)	1.22%	1.58%	2.63%

7	Present RPO target as per Regulations (%)	4.75%	4.75%	4.75%
8	Projected shortfall (-) / Excess (+)	-3.53%	-3.17%	-2.12%

19. The petitioner stated that the adjustment of excess compliance of solar RPPO against shortfall of non-solar RPPO as contended by respondent No. 1, can be done only to the extent of non-availability of non-solar energy, but not by denying the available non-solar capacity, especially bagasse based co-generation energy, considering the dismal level of procurement of only about 128 MU out of the total non-solar RPPO of 2,470 MU in 2016-17. The petitioner is ready and willing to supply 17.71 MW of power during the season (Nov-March) and 25.8 MW during off-season (April-May) that is about 75 MW per year in energy terms from its bagasse based co-generation plant to the respondents at the generic tariff as may be determined by the Commission for its project on this petition. It is stated that the respondents are obliged to purchase the power offered by the petitioner to improve the level of compliance of their RPPO which is mandatory.

20. The petitioner stated that the erstwhile APERC has already determined the generic tariff applicable to all those projects which are generating power based on renewable energy sources such as bio-mass, bagasse, hydel, wind, etc., exercising powers under secs 62 (1) and sec 86 (1) (b) of the Act, 2003 for the control period 2004-09. The erstwhile APERC by order dated 22.06.2013, pursuant to order dated 20.12.2012 in Appeal No. 150 of 2011 and batch and order dated 30.04.2013 in R. P. No. 3 / 2013 and batch passed by Hon'ble ATE, has determined fixed charges and variable charges for the control period 2004-09. Further, in a consequential order dated 06.08.2013, it had also determined the variable charges for the period FY 2009-14 and by orders dated 16.05.2014 in O. P. No. 32 of 2014, determined variable charges as applicable for the year 2014-19.

21. The petitioner stated that but for the above orders re-determining the fixed charges for the projects commissioned in 2004-09 and variable costs up to FY 2014-19, the erstwhile APERC has not passed any other order determining the generic tariff for bagasse based co-generation projects commissioned after 31.03.2009 for purchase of power by DISCOMs from such plants. In these circumstances, the petitioner is constrained to approach the Commission with a request for

determination of tariff for the petitioner's project for supply to DISCOMs of Telangana under a long term PPA for the balance period of normative 20 year project life.

22. The petitioner stated that in the absence of regulations of erstwhile APERC, the Commission may determine the tariff on the principles and methodologies specified by the Central Electricity Regulatory Commission (CERC) and as per the Judgment dated 20.12.2012 of Hon'ble ATE in Appeal Nos. 150, 166, 168, 172, 173 of 2011 and 9, 18, 26, 29 and 38 of 2012. It requests the Commission to determine the tariff for the surplus power offered to DISCOMs its project on the following considerations:

- A) Fixed Charges (F.C)
 - i) Capital Cost (CC): CERC in its RE tariff regulations of 2009 and 2012, specified the capital cost for base years that is 2009-10 and 2012-13 as ₹ 4.45 crores / MW and ₹ 4.20 crores / MW respectively for bagasse based co-generation projects. The petitioner has incurred a capital expenditure of ₹ 129.33 crores for the 28.2 MW co-generation plant which works out to about ₹ 4.59 crores / MW.
Hence the petitioner humbly requests the Commission to adopt this capital cost of ₹ 4.60 crores / MW for determining the fixed charges for the project.
 - ii) Plant load factor (PLF): The Commission may adopt the PLF at 55% as per the erstwhile APERC norm confirmed by the Hon'ble ATE in its order dated 20.12.2012.
 - iii) Operation and Maintenance Expenses: The Commission may adopt the norm decided by the Hon'ble ATE in order dated 20.12.2012, as follows.
O&M expenses: 4% of capital cost.
Annual escalation: As per actual CAGR of WPI & CPI indices for 2004-09 with 40% weight age to CPI and 60% to WPI as given for the biomass projects.
 - iv) Auxiliary Consumption: The petitioner requests that the norm for auxiliary consumption may be considered as 9% as per the erstwhile APERC norm confirmed by ATE in its order dated 20.12.2012.
 - v) Working capital components:

The petitioner requests the Commission to adopt the principle specified by Hon'ble ATE that is one month fuel costs, 2 months receivables, one month O & M expenses and maintenance spares cost at the rate of 1% of capital cost.

vi) Return on Equity (ROE):

As per the principles of Hon'ble CERC, the ROE is to be grossed up with Income Tax, while the principle adopted by the erstwhile APERC is to allow post-tax return. It requests the Commission to allow 19% ROE up to 10th year and 24% for the balance period of the life of the project.

vii) Other (Financial) Parameters relevant for F.C:

The petitioner requests that these norms as considered by Hon'ble ATE in its order dated 20.12.2012, may be adopted by the Commission.

B. Variable Charges (V.C):

i) V.C. for 2014-19

The erstwhile APERC determined the variable charges for the 5 year period 2014-19 vide its order dated 16.05.2014 as follows:

Financial Year	Variable cost (Rs. / Unit)
FY 2014-15	2.73
FY 2015-16	2.89
FY 2016-17	3.06 (2.78)**
FY 2017-18	3.25
FY 2018-19	3.44

* The fuel price escalation is indicative (6%). Actual fuel price escalation would be notified by the Commission before the start of each financial year starting from FY 2015-16.

** Both TSERC and APERC of residual AP have separately fixed this rate in 2016 as per the indexation formula mentioned in the order dated 16.05.2014.

(ii) Indexation Formula:

In respect of the indexation formula, the petitioner makes the following submissions for consideration by the Commission:

- a) APERC of composite AP has followed the indexation formula specified by CERC, but omitted the option of 5% annual escalation available under CERC regulation. The Commission should have given the choice to the co-gen plants to opt either CERC indexation formula or flat escalation of 5% as per CERC regulations.
- b) Indexation formula of erstwhile APERC which was based on CERC formula did not undergo public consultation or stakeholder objections as the CERC regulations provide options to the co-generation plants.
- c) Composite APERC should have given opportunity of hearing to stake holders both at the time of issue of order dated 16.05.2014 for VC of 2014-19, and TSERC / APERC of residual AP should have heard the stakeholders at the time of issue of order specifying the VC for 2016-17.
- d) CERC formula has an inherent flaw that is the bagasse price fluctuations have no relation whatsoever to the fluctuations in price, fluctuations of captive coal mines, which contributes 60% weightage as per CERC indexation formula.
- e) Bagasse price is dependent on sugar cane farming and its fluctuations are subject to vagaries of weather and various other factors affecting agriculture sector, while captive coal mines have no such risks. On the other hand captive coal sector was affected by recent change of policy of GoI. Any adverse impact if any pursuant to such policy changes should not be transferred to sugar industry.
- f) In fact biomass energy developers association (BEDA) objected to the indexation formula on publication of consultation paper, stating that cost of captive coal is not relevant for biomass cost, as recorded in para 2.5.4 of the order dated 16.05.2014.
- g) This is a vital and valid objection but the then APERC ignored their objection without giving any reasons, while giving reasons for

rejecting their claim to consider subabul price or variations in biomass fuels.

- h) MERC has followed a better principle which is in line with the object of promotion of RE sources under Act, 2003. Relevant provision in para 61 of its RE tariff regulations of 2015 is extracted hereunder:

“The bagasse fuel price shall be revised by the Commission taking into consideration the bagasse fuel price determined by the Central Commission or a normative escalation factor of 5% per annum, as it may consider appropriate.”

- i) The Commission may exercise the powers vested in it under the Act, 2003, to deviate from the procedure specified in the order dated 16.05.2014, to fix the price for respective years based on the prevailing market rates or at least retain the 6% escalation proposed provisionally in the said order dated 16.05.2014.
- j) Such action would be in line with the mandate of promotion of RE sources including co-generation u/s 61 and 86 (1) (e) of the Act, 2003.

iii) Bagasse Pricing:

- a) In its order dated 16.05.2014, the erstwhile APERC determined the VC for the control period 2014-19 with bagasse price of Rs. 1553 / MT, (which was considered by CERC for AP in its generic tariff order dated 15.05.2014 for 2014-15), as the base price for 2014-15 for the control period 2014-19.
- b) The petitioner stated that this base price and 6% provisional escalation adopted by the erstwhile APERC may be considered for determining the VC for 2016-17 for remaining period of the present control period the Commission may consider the submission made supra in respect of indexation formula and decide the matter and allow appropriate variable charges for 2017-18 and 2018-19.:
- c) The generic tariff for the period beyond 31.03.2019, the variable charges as may be decided by the Commission for next control period may be made applicable for this project.
- d) The MoP, Gol in exercise of powers conferred under sec 3 (3) of Act, 2003 read with para 6.4 (1) of NTP issued orders dated

22.07.2016 notifying long term RPPO growth trajectory of RPPO's for non-solar and as well for solar for the period 2016-17 to 2018-19. The obligations are made applicable uniformly to all the states. Therefore, considering these obligations vis-à-vis the compliance reported by DISCOMs, the mismatch and shortfall in compliance of non-solar RPPO will be much higher than the shortfall projected supra. The contention of respondent that it has sufficient capacity to meet RPPO from non-conventional energy by the year 2017-18 is totally misplaced. Therefore, it is constrained to file the present petition seeking direction to the respondent to purchase the energy generated by it by entering into a long term PPA as per the generic tariff to be determined by the Commission as mentioned supra.

23. The petitioner stated that if the long term PPA is not entered the petitioners project will not be able to service the loans obtained by it. If it is further delayed would be facing great difficulty and that apart the installed capacity of the company would become unutilized especially when the state is very much in need of electricity. It is stated that substantial amounts have been invested by it with the noble objective of generating clean power which is environment friendly and now it is ready and willing to sell power to the respondent as per the tariff fixed by the Commission, the respondent is not coming forward.

24. The petitioner stated that if the long term PPA is in place for it, better socio-economic benefits can be achieved in backward areas of Wanaparthy District. The welfare of sugar cane farmers and sugar industrial workers will be better assured on account of support from co-generation activity which is incidentally in line with one of the objective of new industrial policy framework for state of Telangana, it will be able to generate consistent revenues and which will enable it to pay the sugar cane payments to the farmers in time.

25. The petitioner has sought the following prayer in the petition.

“a) Determine the tariff for the petitioner's 28.2 MW bagasse based co-generation project.

b) Direct the respondents to purchase the surplus power generated by the petitioner company from its 28.2 MW bagasse based non-conventional energy

co-generation project by entering into a long term power purchase agreement with effect from 01-04-2017 for the balance period of normative life of the project, to meet the non-solar renewable power purchase obligation as specified under Regulation 1 of 2012.

26. The petitioner also filed two interlocutory applications seeking the following interim reliefs pending disposal of the original petition.

- a) "To direct TSDISCOMs to purchase the surplus power generated by the petitioner company from its 28.2 MW bagasse based non-conventional energy cogeneration project by entering into a long term power purchase agreement from the date of commencement of supply till the expiry of the balance period of normative life of the project, to meet the non-solar renewable power purchase obligation as may be specified under regulation and / or in terms of section 86 (1) (b) read with section 86 (1) (e) of the Act, 2003 and the notification dated 22.07.2016 issued by the MoP, Gol in terms of para 6.4 (1) of NTP, 2016.
- b) To fix an interim tariff of Rs.4.51 per unit for the surplus energy to be supplied from the petitioner's 28.2 MW bagasse based NCE cogeneration project to the DISCOMs pending determination of final tariff."

27. The Southern Power Distribution Company of Telangana Limited (TSSPDCL) being the respondent No. 1 has filed counter affidavit on behalf of the respondents and stated as below.

- i. It is stated that as could be seen from the prayer that the petitioner is trying to take advantage of the RPPO order (on non-solar) for entering into long term PPA with TSDISCOMs by contending that the respondents are not fulfilling the non-solar RPPO minimum stipulation (4.75%). The petitioner further contended that adjustment of excess solar energy beyond minimum stipulation of 0.25% solar RPPO can be done against the non-solar RPPO, only to the extent of non-availability of non-solar energy but not by denying the available bagasse cogeneration (non-solar) energy and stating this, the petitioner sought the direction.
- ii. It is stated that the petitioner had established a 28 MW bagasse based cogeneration power project at Ramakrishnapur Village, Kothakota Mandal,

Mahabubnagar District as per the erstwhile NEDCAP sanction proceedings dated 18.10.2007 and 07.07.2011. The project is reportedly commissioned on 27.01.2011. Since then the petitioner is engaged in short term trading and never approached DISCOMs for long term PPA.

iii. It is also stated that

- a) The present RPPO, stipulated in the Regulation No. 1 of 2012 mandates for procurement of power by DISCOMs from RE sources, a quantum not less than 5% of total DISCOM consumption out of which 0.25% is to be met from solar sources.
- b) Thus the regulation mandates for meeting the 0.25% of total consumption with the solar energy, balance to be procured from RE sources other than solar (non-solar). However, the minimum 5% power requirement has to be met by obligated entities from RE sources, on overall basis. As such, the respondents stated to the Commission to consider set off of excess solar energy against non-solar RPPO. Even the Commission in its order dated 26.04.2016 passed in O. P. No. 61 of 2015, observed as below.

“...there is sufficient compliance of renewable purchase obligation by the obligatory entities.....”
- c) Further, in a similar matter, even the Hon'ble ATE in judgment dated 25.04.2014 in Appeal No. 24 of 2013 held that the adjustment of excess solar energy by the Commission procured against non-solar RPPO. The Hon'ble ATE in judgment dated 16.04.2015 in Appeal No. 258 of 2013 and Appeal No. 21 of 2014, permitted to set off the shortfall in non-solar energy purchase with excessive solar energy procured.
- d) As such, the petitioner cannot be permitted to exploit the non-solar RPPO to its advantage for entering into long term PPA. Entering into a long term PPA with generators by DISCOMs is a commercial proposition for which the cost benefit analysis has to be done. Earlier to encourage NCE sources. cost plus methodology was approved but the NTP, 2016 mandates the procurement of power from RE sources except waste to energy projects on competitive

bidding route. On this ground alone, the Commission may decline the prayer of the petitioner.

iv. With regard to the prayer made by the petitioner to determine the tariff of the petitioner's 28.2 MW bagasse based cogeneration plant, it is stated that the section 62 of the Act, 2003 mandates that the Commission shall determine the tariff for supply of electricity by a generating company to a distribution licensee in pursuance of an agreement (PPA). Since there is no subsisting PPA with the petitioner the determination of tariff for the petitioner's project does not arise.

28. The Southern Power Distribution Company of Telangana Limited (TSSPDCL) being the respondent No. 1 has filed counter affidavit in the interlocutory applications and stated as below.

i. As could be seen, the prayer of the petitioner in two I. As. is basically to direct the DISCOMs to enter into a long term PPA with them at the interim tariff of Rs.4.51 / kwh to be fixed by the Commission for the surplus energy supplied by it from its 28.2 MW bagasse based NCE project, pending determination of final tariff with effect from the date of commencement of supply till expiry of the balance period of normative life of their project.

ii. Further, it could be seen from the prayer, on the pretext of fulfilment of RPPO by DISCOMs, the petitioner seeks directions from the Commission to thrust upon DISCOMs to enter into long term PPA with it, citing the following:

a. Provisions of sections 62 and 86 (1) (b) and (e) of the Act, 2003 and also clauses 5.12.3 and 6.4 (1) of NTP, 2016, which mandates the Commission to promote cogeneration and to fix a minimum percentage of total consumption of electricity by a distribution licensee from the renewable energy sources.

b. In terms of MoP, GoI order dated 22.07.2016 specifying long term growth trajectory of RPOs from FY 2016-17 to 2018-19.

iii. The attention of the Commission is drawn to the sections 62, 86 (1) (b) and (e) of the Act, 2003, which are extracted below for better appreciation:

"62. Determination of Tariff:- (1) The Appropriate Commission shall determine the tariff in accordance with 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;

.....

86. (1) (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 licence;”

iv. It may stated that the condition precedent under section 62 (1) and also section 86 (1) (b) is that there shall be a PPA subsisting between the parties for determination of tariff. The petitioner had taken advantage of the short term market and undertook sale of power to TSDISCOMs on short term basis from the year 2011 onwards and now seeks to take shelter under RPO order for entering into long term PPA with TSDISCOMs under cost plus approach.

v. The respondents stated the following:

a. As already stated, the section 62 (1) of the Act, 2003 mandates the Commission to determine the tariff for supply of electricity by a generator to a DISCOM in pursuance of an agreement. Since the respondents have no subsisting agreement with the petitioner, as such the petitioner is trying to take shelter under RPPO of the obligated entities that is the respondents, hence the prayer of the

petitioner for determination of interim tariff till the final tariff is not justified.

- b. The RPPO stipulated vide Regulation No. 1 of 2012, mandates for procurement of power by DISCOMs from RE sources, a quantum not less than 5% of total DISCOM consumption out of which 0.25% is to be met from solar sources.
- c. Thus the regulation mandates for meeting the 0.25% of total consumption with the solar energy, balance to be procured from RE sources other than solar. However, the minimum 5% power requirement has to be met by obligated entities from RE sources, on an overall basis. Even the Commission in its order dated 26.04.2016 passed in O. P. No. 61 of 2015, observed as below.

“...there is sufficient compliance of renewable purchase obligation by the obligatory entities.....”
- d. It is stated that TSDISCOMs have achieved RPPO at the rate of 5.56% during the FY 2017-18 from April 2017 till November 2017 being more than 5% target from RE sources adequately. Hence, the prayer of the petitioner to consider their request under section 86 (1) (e) may not be considered.
- e. It is stated that the NTP, 2016 mandates the procurement of power from RE source except waste to energy projects on competitive bidding route. As such, the petitioner is at liberty to participate in the future tenders to be called by TSDISCOMs and bid for the capacity available with it but cannot compel the DISCOMs to purchase surplus energy from their project under long term PPA with cost plus methodology in view of the mandatory competitive bidding process stipulated in the NTP, 2016.
- f. It is stated that the basic requirement under the Indian Contract Act, 1872 that agreements are to be entered by the competent parties with free consent only. It is stated that the PPA is a contract agreement to be entered into by the parties voluntarily on mutually agreed terms and conditions, duly taking into account the relevant tariff policies, Commission's regulations and other orders and cannot be thrust upon DISCOMs by any party to enter into long

term PPA with cost plus methodology under the pretext of RPPO fulfilment. The Commission is empowered to pass appropriate directions to the DISCOMs in case of non-fulfilment of RPPO by DISCOMs. The tariff regime has changed for procurement of RE power from cost plus methodology to competitive bidding route and it is the DISCOMs prerogative to procure RE power as per their requirement duly considering cost optimization.

29. The counsel for the petitioner has filed written submission, which is stated below.

i. The petitioner stated that it had established 28.02 MW bagasse based cogeneration plant and the project was declared COD on 27.01.2011. It's power plant is both a cogeneration power plant as well as generation from renewable sources of energy.

ii. The petitioner stated that it has incurred capital cost of Rs.129.33 Crores for the project that 4.6 crores per MW. It's holder configuration is 110 with 3500 TCD sugar plant capacity.

iii. The petitioner stated that as the erstwhile APERC had determined fixed cost component of tariff of the projects established only up to 2009 and no further determination was done for the projects established subsequently, as it was supplying power to the DISCOM's under short term purchase orders from time to time. There is no tariff applicable to it's project. It has, therefore, become necessary for it to file the present petition under section 62 read with section 86 (1) (e) and (b) of the Act, 2003 for determination of tariff for the plant and to further to direct the DISCOMs to purchase power from it in terms of the tariff.

iv. The petitioner stated that the promotion of energy from renewable sources of energy is a global concern and there have been several international treaties, agreements and protocols whereby nations are required to promote energy from renewable sources and reduce carbon emissions. India is a signatory to such treaties, agreements and protocols and the obligations undertaken therein or thereby are national obligations to the comity of nations. The promotion of renewable sources of energy is thereby and thus of paramount public interest of global dimension.

v. The petitioner stated that the participation in international conferences and entering into treaties and agreements with foreign countries and the implementation of treaties, agreements and conventions with foreign countries falls within the exclusive power and jurisdiction of parliament under entries 13 and 14 of the List I – Union List in the 7th schedule to the Constitution. The executive power of the GoI is coextensive with the legislative power of parliament. The GoI is therefore empowered under the Constitution to implement treaties and agreements and for such purpose issue guidelines or directions for such implementations. All organs and authorities within the country are required and expected to exercise their statutory and other powers and carry out their functions in conformity with the guidelines and directions issued by the GoI such that the national obligations undertaken in international treaties and agreements are met.

vi. The petitioner stated that section 86 (1) (e) of the Act, 2003 mandates the promotion of renewable sources of energy and cogeneration by the Commissions. This must be in conformity with and following the guidelines and directions of the GoI. The NEP and the NTP issued by the GoI under section 3 and further notifications thereunder have been held to have force of law [Energy Watchdog case (2017) 14 SCC 80]. The Commission is bound to exercise its powers and carry out its functions in conformity with the NEP, NTP and the notifications, guidelines and directions issued by the GoI with respect to promotion of renewable sources of energy.

vii. The petitioner stated that the GoI has issued a notification dated 22.07.2016 prescribing the trajectory for renewable purchases from 2016-17 to 2018-19 in terms of clause 6.4 of the NTP. This is in pursuance of the obligations under the international treaties and agreements to which India is a signatory and bound. It is stated that the Commission is bound in law to exercise all its powers and carry out its functions under the Act, 2003 to be in conformity with the trajectory prescribed by the GoI to the extent possible.

viii. The petitioner stated that the issue of RPPO regulation by the Commission itself ought to be in conformity with the trajectory prescribed by the GoI to the extent possible. However, the RPPO only specifies the minimum amount of renewable power purchase by the obligated entities including the DISCOMs. It does not preclude the DISCOMs from purchasing

or being directed to purchase, renewable energy in excess of the minimum specified in the RPPO regulation.

ix. The petitioner stated that section 86 (1) (b) of the Act, 2003 provides wide power to the Commission to regulate the power purchase by the distribution licensees. The power of the Commission under section 86 (1) (b) of the Act, 2003 read with the mandate to promote renewable sources of energy under section 86 (1) (e) of the Act, 2003, the NEP, NTP and the notifications of the Gol is not exhausted merely by issue of an RPPO regulation. The promotion of renewable energy is a continuing requirement from time to time. The Commission can and must exercise its power of regulating the power purchase of the DISCOMs by directing the licensees to purchase renewable energy over and above the RPPO minimum if there is further renewable source of energy available, more particularly when the RPPO minimum is far below the trajectory notified by the Gol. Otherwise, it would tantamount to discouraging renewable sources of energy contrary to the spirit, object and mandate of the Act, 2003.

x. The petitioner stated that in the present case, the investment in the cogeneration bagasse based power plant is ready and available. It ought not to be left stranded. It is within the power of the Commission under section 86 (1) (b) and (e) of the Act, 2003 to direct the DISCOMs to purchase the renewable power generated at the tariff determined by the Commission even though it may be beyond the RPPO minimum, more particularly when the RPPO minimum is far below the renewable purchase trajectory notified by the Gol.

xi. The petitioner stated that under section 62 of the Act, 2003, the Commission is required to determine the tariff for supply to a DISCOM upon an application by a generating company for such determination.

xii. The petitioner stated that the determination of tariff is to be done independent of the any pre-existing power purchase agreement and it is not a precondition that such agreement exists. It is incorrect and unreasonable for a DISCOM to contend that no determination of tariff can be done because the licensee does not wish to purchase power from the renewable energy source on the grounds of cost. The question of cost can be considered only after the tariff has been determined by the Commission under section 62 of the Act,

2003 and therefore such a contention of the licensees is premature. Further, as stated earlier, the Commission has the duty and power to direct purchase renewable energy when such energy is available in conformity with the trajectory prescribed by the Gol in furtherance of international treaty and statutory obligation and in exercise of its constitutional and statutory powers.

xiii. The Commission is therefore required to determine the tariff for the petitioner's renewable energy in accordance with law.

xiv. The petitioner stated that it has incurred actual capital cost of Rs.129.33 Crores for the project that is Rs. 4.6 Crores / MW in support of which the petitioner has placed relevant audited accounts and other details sought by the Commission.

xv. The petitioner stated that during the hearing held on 30.04.2018, the Commission directed it to submit financial details of the past seven years as well as details of DPR and investment made. Further the Secretary, TSERC vide letter dated 11.06.2018 directed the petitioner to furnish additional information such as financial statements, major equipment purchase bills, loans sanctioned documents etc. It has submitted all the required information with supporting documents by and under cover of letter dated 23.06.2018.

xvi. The petitioner stated that it installed boiler with configuration of 110 ata with 3500 TCD sugar plant. As against corresponding normative capital cost of Rs. 5.45 Crores / MW based on principles emphasized by CERC and ATE in respect of high pressure boilers, the petitioner has claimed capital cost of Rs. 4.60 Cores / MW on actual basis.

xvii. The petitioner stated that as the petitioner is in the 8th year of operation, the petitioner has suggested two alternative methods for determining tariff –

- Levelized tariff, or
- Fixing tariff for specific years depending upon the 'nth year' of operation.

30. The matter was listed for hearing on the above said dates and arguments were advanced in the matter. Later the arguments were concluded and I have perused the record and the material available therefor including the material which was directed to be filed during the course of hearing.

31. While the matter stood thus for consideration and passage of orders, this Commission noticing that there is a need for determining the generic tariff in respect bagasse based power plants initiated the necessary process. After undertaking thorough exercise by following the due procedure, this Commission had passed an order on 20.10.2018 determining the generic tariff for bagasse based power projects, which is applicable for the period 2018 -2020. In the conclusion the Commission observed as below.

“Conclusion:

42. The Commission has considered all the parameters and submissions brought before it with reference to its discussion paper and it is of the view that the submissions made in respect of certain issues do not satisfy the normative conditions nor can they be factored while determining the tariff. Therefore, the Commission has arrived at the tariff based on the normatives that are taken into consideration and discussed thoroughly in this order. Based on the discussion, the final tariff is arrived at, which is applicable in the State of Telangana for bagasse based co-generation projects for the period FY 2018-2020 (FY 2018-19 and 2019- 20) in terms of the applicability stated at paragraph 16 of this order.

43. The Commission has determined the levellized fixed cost to be at Rs.2.23 per unit as shown in the Table – 2 above read with the calculation regarding year-wise fixed cost indicated in the Annexure – III. Insofar as variable cost is concerned, the Commission adopts the methodology of notifying the actual fuel cost escalation and consequent variable cost every year based on the indexation methodology.”

32. In view of the determination made in the above said order, there is no necessity of undertaking a separate exercise of determination of tariff with reference to the petitioner’s project specifically. Suffice it to state that the determination would equally apply to the petitioner also. It is also appropriate to state that the Commission is not required to go into the rival contentions in view the order passed in the above said proceeding. That all the contentions left open except the determination of the tariff, which is covered by the said order and the same is being applied to this case also.

33. Accordingly, having considered the rival contentions and relevant material including the discussion in the preceding paragraphs, the present petition is disposed in terms of the above said order. However, in the circumstances without any costs.

34. As a sequel as there is no necessity of going into to merits of the interim applications which are pending consideration, therefore, they having become infructuous are dismissed.

This order is corrected and signed on this the 07th day of January, 2019.

**Sd/-
(ISMAIL ALI KHAN)
CHAIRMAN**