

# TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

## 5<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004

## O. P. No. 21 of 2021

## Dated 14.03.2022

#### Present

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

AND

Between

M/s The India Cements Limited, "DHUN BUILDING' 827, Anna Salai, Chennai, Tamil Nadu – 600 002.

... Petitioner

- Transmission Corporation of Telangana Limited, State Load Despatch Centre, Vidyuth Soudha, Hyderabad - 500 082.
- Sothern Power Distribution Company of Telangana Limited, H.No.6-1-50, 5<sup>th</sup> Floor, Mint Compound, Hyderabad – 500 063.
   Respondents

The petition came up for hearing on 25.08.2021, 23.09.2021 and 27.09.2021. Sri Challa Gunaranjan, Advocate for petitioner on 25.08.2021, 27.09.2021 and Sri Deepak Chowdary, Advocate representing Sri Challa Gunaranjan, Advocate for petitioner on 23.09.2021 and Sri Mohammad Bande Ali, Law Attachee for respondents on 25.08.2021, 23.09.2021 appeared through video conference. The matter having been heard and having stood over for consideration to this day, the Commission passed the following:

#### ORDER

M/s The India Cements Limited (petitioner) has filed a petition under section 86 (1) (c) of the Electricity Act, 2003 (Act, 2003) seeking exemption from application of RPPO under Regulation No. 2 of 2018.

- 2. The petitioner has contended in the petition as below:
  - a. It is stated that the petitioner is a company incorporated in the year 1946 under the provisions of the Companies Act, 1913 and is in the business of manufacturing and sale of cement. The Petitioner is operating one of its cement manufacturing plants at Vishnupuram, Damarcherla mandal, Nalgonda district, Telangana with a total capacity of 2.856 MTPA.
  - b. It is stated that the petitioner is a highly power intensive industry and our power costs are nearly 20% of our manufacturing costs. In order to meet its energy requirements, the petitioner has commissioned a waste heat recovery system (WHRS) which generates electricity with an installed capacity of 7.7 MW.
  - c. It is stated that the petitioner's WHRS plant is a "co-generation" plant as defined under Sec. 2 (12) of the Act, 2003. The WHRS plant harnesses the waste heat gases emanating from the manufacturing process of cement and uses it for generation of electricity (which otherwise would be let off as waste heat into the environment), without burning of any additional fuel and thus reducing C02 emissions and making it environmentally friendly.
  - d. It is stated that about 360750 nm/hr hot flue gases at temperature of 340°C are emanating from the pre-heater and 191600 nm/hr at temperature of 360°C from cooler of the cement plant. The hot flue gases, which otherwise, would have been emitted as exhaust gases into the atmosphere are being passed through heat exchangers as a part of the WHR System. The hot flue gases from the pre-heater and cooler are passed through the boiler to generate steam. The steam

drives the turbine for generation of electricity. The exhaust steam from turbine, is cooled through water cooled condenser, and recycled back to the boiler.

- e. It is stated that this is a unique project which is utilizing the waste heat from flue gases and it is conserving natural resources such as coal and also reducing thermal pollution by reducing C0<sub>2</sub> emissions, thus making it environmentally friendly.
- 1. <u>BRIEF DESCRIPTION AND OPERATION OF THE</u> <u>CEMENT/CLINKER PLANT UNIT:</u>
  - i. It is stated that the raw material limestone is crushed to -80 mm size and loaded in circular type stockpiles, which are provided with suitable stacking and reclaiming system. The crushed limestone and additives will be extracted from their respective hoppers in a predefined proportion by weigh feeders and will be further transported by belt conveyor to a raw mill in the plant for grinding into fine powder. Post grinding, the raw mix is stored in a concrete silo called 'kiin feed'.
  - It is stated that the raw mix stored in the kiln feed is then ii. heated to a sintering temperature in a 4 stage preheater by hot gas coming from the combustion chamber and rotary kiln and the pre-heated kiln feed is partially calcined with the help of a pre calcinator. Partially calcined kiln feed is then fed into the main burner rotary kiln, where it is completely calcined at a temperature of 1350°C to 1400°C. Coal is used as fuel to provide the heat required to convert the kiln feed into clinker. Hot clinker discharge from the kiln drops onto the grate cooler approximately 1350-1450<sup>°</sup>C cooling from to for approximately 80°C 100°C. It is stated that approximately around 30 KWH of electricity can be generated per tonne of clinker, from a 4 stage preheater kiln, by using the waste flue gases in the WHRS.

iii. It is stated that in this process, large quantities of hot flue gases are being emitted to the atmosphere in cement industries. The sources of these waste flue gases are from the pre-heater and clinker cooler. The heat energy available in these flue gases can be recovered using WHRS boiler effectively used to produce significant amount of electricity.

## 2. <u>OPERATION OF WHRS PLANT</u>:

- i. It is stated that the hot flue gases enter into the dust settling chamber in AQC Boiler, where heavier particles settle down. The waste heat is used to vaporize the fluid to required pressure and temperature of steam. The gases are then passed through an economizer. These gases let out pass through Electrostatic precipitators (ESP) in cooler boiler and bag house in PH Boiler for eliminating dust particles and only dust free gas is let out into atmosphere. HP and LP flushers vent out the oxygen and dissolved gases form the feed water and to increase feed water temperature. The hot water the is decompressed and generated the saturated steam through flushers. The saturated steam is led in to the steam turbine, to increase efficiency of the steam turbine.
- ii. It is stated that thermal energy, generated from pressurized steam, is used to do mechanical work to drive an electric generator, which generator converts mechanical energy into electric power. The steam coming out of the steam turbine is then condensed to water by water cooled condenser.
- iii. It is stated that the condensate return from condenser shall be taken through the condensate pump and fed to low pressure flusher and boiler feed water pump (BFWP).
   Boiler feed water pump transports the hot water to AQC boiler economizer. Economizer output hot water supplies to the generator and super heaters placed in each boiler.

The superheated steam from each super heater coils are collected in a common steam distribution header (CSDH).

- iv. It is stated that the superheated steam form CSDH shall be fed into the turbine to rotate the turbine which in turn rotates the generator and electricity is generated.
- f. It is stated that this Commission issued a draft regulation for the Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy/ Renewable Energy Certificate) (Regulations). Clause 3 of the said draft Regulations provide for the renewable power purchase obligation (RPPO) and clause 3.1 requires every obligated entity in the state of Telangana to purchase of quantum of 6% to 8% of its total purchase of electricity during the FY 2018-19 to 202122 from renewable energy sources. The purchase of renewable energy certificates is also treated as fulfilment of the prescribed RPPO. The regulations, which were subsequently notified on 30.04.2018 as TSERC Regulation No.2 of 2018.
- g. It is stated that the petitioner is having one of its unit at Vishnupuram with the CMD of 16 MVA/16000 kVA with TSSPDCL for manufacturing of cement and also operates a coal base captive power plant 50.4 MW. It also generates 7.7 MW through cogeneration from its WHRS. The petitioner has a RPPO (solar 5.33% and non-solar 0.67% for the FY 2018-19) under section 86 (I) (e) of the Act, 2003. The petitioner is also having one of its units at Tandur, Malkapur with a CMD of 32 MVA/32000 kVA with TSSPDCL and also consumes open access power.
- h. It is stated that the petitioner has conceived its WHRS plant for utilizing the waste heat available in the hot flue gases generated during its cement manufacturing process with a generation capacity of 7.7 MW and the same was synchronized on 16.09.2004. It is further stated that, if the waste heat generated during its cement manufacturing process is not used for generating electricity, it would be emitted into the air as CO<sub>2</sub> discharge. Therefore, the petitioner states that it is entitled for exemption from its RPPO obligations and redressal of the same from this Commission through the present petition.

- i. It is stated that clause II of the regulations enables this Commission to entertain an application from inter-alia an entity mandated under section 86 (1) (e) of the Act, 2003 to fulfil the RPPO to pass appropriate orders to remove any difficulty in exercising the provision of this regulation. As such, the present application is being preferred by the petitioner seeking an exemption from the regulations.
- It is stated that the petitioner operates a captive power plant which uses co-generation and has no further obligation towards RPPO under section 86 (1) (e) of the Act, 2003. It is stated that the petitioner has installed a WHRS wherein the waste heat available in the furnace flue gases is utilized to generate upto 7.7 MW power, which heat otherwise would be let into air as CO<sub>2</sub> discharge. It is stated that the petitioner is entitled for being exempted from the RPPO obligation.
- k. It is stated that the renewable power purchase obligation under Regulation 2 of 2018 is framed by the Commission in exercise of the powers conferred under section 86(1)(e) of the Act, 2003 and the said provision reads as follows:

"Promote co-generation 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 distribution licence."

Further, section 2 (12) of the Act, 2003 defines co-generation as follows:

"Cogeneration" means a process which simultaneously produces two or more forms of useful energy (including electricity)"

I. It is stated that from a reading of section 86 (1) (e) of the Act, 2003 it is clear that there are two categories of generators of electricity that is cogenerators and generators of electricity through renewable sources of energy. The intention of the legislature in including the words cogeneration and generation of electricity from renewable sources in section 86 (1) (e) of the Act, 2003 was to ensure that both the

generators that is co-generators and generators of electricity from renewable sources of energy are entitled for the benefit of the provisions of section 86 (1) (e) of the Act, 2003. It is stated that the petitioner is generating up to 7.7 MW of power from the heat available in the furnace exit flue gas and the same is to be considered as cogeneration and thus the petitioner is entitled for the exemption provided under clause 11 of Regulation No.2 of 2018.

- m. It is stated that a similar contention with regard to the interpretation of the provisions of section 86 (I) (e) of the Act, 2003 came up for consideration before the Hon'ble Appellate Tribunal for Electricity (ATE) in Appeal No. 57 / 2009 dated 26.04.2010 and the ATE has held that the benefit of the provisions of section 86 (1) (e) of the Act, 2003 is also applicable to the cogeneration units and the said judgment squarely applies to the facts of the case.
- n. It is stated that apart from the above case, similar contention was also decided by the Hon'ble ATE in Appeal No.54 / 2012 dated 30.01.2013 and the Andhra Pradesh Electricity Regulatory Commission (APERC) also similarly granted exemption to Rashtriya Ispat Nigam Limited and Rain Cements Limited. The ratio laid down in the above judgments is equally applicable to the facts of the petitioner's case and the petitioner is entitled for exemption from the purview of RPPO. While considering the said issue APERC held as follows;
  - "11. In Century Rayon Vs. Maharashtra Electricity Regulatory Commission and others, Appeal No.57 of 2009, the Appellate Tribunal for Electricity by the judgment dated 26.04.2010 clearly held that the definition of cogeneration in section 2 (12) of the Electricity Act, 2003 did not restrict the said process to mean production of energy from any form of fuel and it may be fossil fuel or may be non-fossil fuel. Section 86 (1) (e) was interpreted to include co-generation irrespective of fuel used and generation from Renewable Sources of Energy. The expression 'co-generation' in Section 86 (1) (e) of the Electricity Act, 2003 does not mean anything different

from what is defined in Section 2 (12) of the Electricity Act, 2003 or co-generation from renewable sources only. The Appellate Tribunal for Electricity referred to the National Electricity Policy, National Tariff Policy and National Electricity Plan then in vogue and also Regulations of some State Commissions which categorized cogeneration as renewable energy without reference to the fuel used for such cogeneration. The conclusions of the Appellate Tribunal for Electricity therefore were with reference to two specific provisions of the Electricity Act, 2003 i.e., Section 86(1)(e) and Section 2(12) which continued to be the same even after the resolution dated 28.01.2016. Regulation 1 of 2012 governing the RPPO defined 'Renewable energy sources' in clause 2 (m) as meaning renewable sources such as cogeneration (from renewable sources of energy like bagasse) etc., and also such other sources as recognized or approved by the Ministry of New and Renewable Energy. Such sources therefore do not cover cogeneration from sources other than renewable energy sources and as already stated Regulation I of 2012 has not been amended making the applicability of RPPOs govern co-generation from sources other than renewable energy sources also. In view of the interpretation by the Hon'ble ATE that Section 86 (1) (e) read with Section 2(12) of the Electricity Act, 2003 mandates the State Commission to promote both the categories: one is cogeneration as defined in Section 2 (12) irrespective of the fuel used and another is generation of electricity from the renewable sources of energy, a cogenerator irrespective of fuel used by it is entitled to be promoted under Section 86(1)(e) and the fastening of the obligation on the cogenerator to procure electricity from renewable energy sources would defeat the object of Section 86 (1) (e).

Therefore, unless the direction in the Resolution dated 28.01.2016 not to exclude co-generation from sources other than renewable energy sources from the applicability of RPPOs is incorporated in Regulation 1 of 2012 or made part of the mandate of section 86 (1) (e) read with section 2 (12) of the Electricity Act, 2003, the interpretation of the Appellate Tribunal for Electricity in Appeal No. 57 of 2009 cannot be considered to have been nullified.

- 13. In the order dated 23.05.2015 in O. P. No. 21 of 2014 (I. A. No. 7 of 2014) and the order dated 06.08.2016 in O. P. No. 7 of 2016, the Commission was dealing with Visakhapatnam Steel Plant and Rain CII Carbon (Vizag) Limited respectively, which claimed to be not obligated entities, as the captive power plant is a co-generation unit as per Section 2 (12) of the Electricity Act, 2003. Taking note of the consistent view of the Appellate Tribunal for Electricity and following the same as a matter of judicial discipline and propriety, this Commission concluded that co-generation being promotable irrespective of the nature of the fuel used, the petitioner therein has to be exempted from the RPPO obligation, if necessary, even in relaxation of Regulation I of 2012. The principles are squarely applicable to the facts of the present case, notwithstanding the declaration of the policy by the Resolution of the Ministry of Power, Government of India dated 28.01.2016 or other factors relied on by the respondents as the statutory provisions, as interpreted by the Appellate Tribunal for Electricity and Regulation 1 of 2012 continued to remain the same and to be of the same effect."
- It is stated that the Hon'ble APTEL in its judgment dated 16.04.2019 in Appeal No. 146 / 2017, while dealing with an entity similarly situated to the petitioner, relied on its judgments in Appeal Nos. 322 and 333 of

2016 dated 09.04.2019, Appeal No. 278 of 2015 and batch dated 02.01.2019, held that as long as captive consumers consume energy from co-generating units beyond the RPP obligations, there is no obligation to purchase RE certificates or consume renewable energy, separately in order to meet their RPP obligations.

- It is stated that the contention that it was the intention of the legislature p. that co-generating would be exempt from meeting RPPO obligations is buttressed by the legislative and judicial history resulting in the issuance of RPPO Regulations, 2017. The law regarding RPPO in the erstwhile state of Andhra Pradesh was governed by APERC Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy/Renewable Energy Certifications) Regulations, 2012 (RPPO Regulations 2012). In the said Regulations, there was no clarity qua treatment of consumption from co-generation plant for the purpose of RPPO compliance. Accordingly, a petition bearing O.P.No.7 of 2016 was filed by Rain CII Carbon (Vizag) Limited (Rain Carbon), seeking exemption for power consumed by it from a WHRS based cogeneration plant towards compliance of RPPO. It was Rain Carbon's contention that the power produced by its WHRS was akin to renewable power and no RPPO can be fastened upon consumption of electricity from its WHRS.
- q. It is stated that on 06.08.2016, the APERC, after relying upon the judgment passed by the Hon'ble ATE in Century Rayon's case (supra), passed its judgment in O. P. No. 7 of 2016, holding that the petitioner therein is exempted from complying with RPPO since co-generation (irrespective of the nature of fuel used) is to be promoted. The relevant extracts of the same are reproduced below:

"A petition under Section 86 (I) (e) of the Electricity Act, 2003 to exempt the power generated by the petitioner from cogeneration process through waste heat received from flue gases from RPPO under Regulation I of 2012 and any other appropriate orders as may be deemed fit.

••• •••

- 2. The petitioner's case is that it is a company engaged in the manufacturing of Calcined Petroleum Coke (CPC) by converting green petroleum coke (GPC) using calcinations process. The petitioner also established a co-generating power plant at its unit at Visakhapatnam with an installed capacity of 49.5 MW. The power produced is totally based on the waste heat recovered from the flue gases generated during the calcinations process of GPC. Explaining the process of production of electricity, the petitioner explained that there is no combustion of fuel and the energy so produced is clean energy or renewable energy.
- 6. The point for consideration is whether the petitioner is entitled to be exempted from the renewable power purchase obligation under Regulation I of 2012 of this Commission.

... ...

In Century Rayon Vs. Maharashtra Electricity Regulatory 8. Commission and others, Appeal No. 57 of 2009, The Appellate Tribunal for Electricity by the judgment dated 26.04.2010 clearly held that the definition of cogeneration in Section 2 (12) of the Electricity Act, 2003 did not restrict the said process to mean production of energy from any form of fuel and it may be fossil fuel or may be non-fossil fuel. Section 86 (1) (e) was interpreted to include co-generation irrespective of fuel used and generation renewable sources of The from energy. expression 'cogeneration' in Section 86 (1) (e) of the Electricity Act, 2003 does not mean anything different from what is defined in Section 2 (12) of the Electricity Act, 2003 or co-generation from renewable sources only. The Appellate Tribunal for Electricity referred to the National Electricity Policy, National Tariff Policy and National Electricity Plan then in vogue and also Regulations of some State Commissions which categorized cogeneration as renewable energy without reference to the fuel used for such cogeneration. The conclusions of the Appellate Tribunal for Electricity therefore were with reference to two specific provisions of the Electricity Act, 2003 i.e., Section 86 (1) (e) and

Section 2 (12) which continued to be the same even after the Resolution dated 28.01.2016. Regulation 1 of 2012 governing the RPPO defined 'Renewable energy sources' in clause 2 (m) as meaning renewable sources such as cogeneration (from renewable sources of energy like bagasse) etc., and also such other sources as recognized or approved by the Ministry of New and Renewable Energy. Such sources therefore do not cover cogeneration from sources other than renewable energy sources and as already stated Regulation 1 of 2012 has not been amended making the applicability of RPPOs govern cogeneration from sources other than renewable energy sources also. In view of the interpretation by the Appellate Tribunal for Electricity that Section 86 (1) (e) read with Section 2 (12) of the Electricity Act, 2003 mandates the State Commission to promote both the categories: one is co-generation as defined in Section 2 (12) irrespective of the fuel used and another is generation of electricity from the renewable sources of energy. A co-generator irrespective of fuel used by it is entitled to be promoted under Section 86 (1) (e) and the fastening of the obligation on the cogenerator to procure electricity from renewable energy' sources would defeat the object of Section 86(1)(e). Therefore, unless the direction in the Resolution dated 28.01.2016 not to exclude co-generation from sources other than renewable energy sources from the applicability of RPPOs is incorporated in Regulation I of 2012 or made part of the mandate of Section 86 (1) (e) read with Section 2 (12) of the Electricity Act, 2003, the interpretation of the Appellate Tribunal for Electricity in Appeal No. 57 of 2009 cannot be considered to have been nullified.

••• •••

10. In O. P. No. 21 of 2015 and I. A. No. 7 of 2014, this Commission by an order dated 23.05.2015 was dealing with the Visakhapatnam Steel Plant which claimed to be not an obligated entity as the captive power plant is a co-generation unit as per Section 2 (12) of the Electricity Act, 2003. Taking note of the consistent view of the Appellate Tribunal for Electricity and following the same as a matter of judicial discipline and propriety, this Commission concluded that co-generation being promotable irrespective of the nature of the fuel used, the petitioner therein has to be exempted from the RPPO obligation, if necessary, even in relaxation of Regulation 1 of 2012. The principles are squarely applicable to the facts of the present case, notwithstanding the declaration of the policy by the Resolution of the Ministry of Power, Government of India dated 28-012016 or other factors relied on by the respondents as the statutory provisions, as interpreted by the Appellate Tribunal for Electricity and Regulation 1 of 2012 continued to remain the same and to be of the same effect. The petition has to therefore succeed."

- r. It is stated that thereafter, this Commission issued the draft TSERC Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy/Renewable Energy Certificates) Regulations, 2018 for the years 2017-18 to 2021-22, for public comments.
- It is stated that on 17.01.2018, this Commission had initiated the s. process of making regulation for the purpose by placing the draft TSERC Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy/Renewable Energy Certificates) 2018 providing its view various Regulations, on comments/objections/submissions made by the parties on the draft TSERC Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy/Renewable Energy Certificates) Regulations, 2018. Upon receipt of comments / objections / submissions, a public hearing was held and the final TSERC Renewable Power Purchase Obligation (Compliance by Purchase of Renewable Energy/Renewable Energy Certificates) Regulations, 2018 was issued is considered by it in O. P. No. 7 of 2016 and it has attained finality. Therefore, co-generation plants are to be exempted from complying with RPPO.

- t. It is stated that it may be noted that recently by the order dated 07.09.2020, the APERC in O. P. No. 11 of 2020, in an identical factual scenario held, after extensively discussing the case laws stated above that co-generation sources shall be treated on par with renewable sources and that the power generated by the petitioner's WHRS plant and consumed by the petitioner is eligible to be set off against its RPPO requirements towards the energy consumed from conventional sources. The relevant extracts of the same is produced herein for ease of reference:
  - "14. The position that emerges from the case law discussed above is that, Section 86 (1) (e) of the Act is interpreted to the effect that irrespective of whether cogeneration sources are renewable sources or otherwise, under the statutory scheme, cogeneration sources shall be treated on par with renewable energy generation sources, that under the Act RPO cannot be fastened on energy' generated through cogeneration sources merely because renewable sources are not utilized in cogeneration process and that irrespective of the fuel used (in Century Rayon, the APTEL has taken an extreme example of fossil fuel being used as a co-generation source), the co-generation captive plants are entitled to be exempted from compliance of RPPO.
  - 15. One last question that remains to be dealt with, though it is not specifically argued by Mr. Siva Rao, but raised in the counter is, to what extent the Petitioner is entitled to the relief. In the counter the Respondent has drawn a distinction between exemption of energy produced by the captive plant from RPPO and claiming such energy for RPPO obligation to be required to be met from conventional energy the order in EMAMI Paper Mills Ltd. v. OERC & Ors (Judgment dated 30.01.2013 in Appeal No.54 of 2012) as extracted by APTEL in JSW case and also in this order supra throws a clear light on this aspect. In para 40 (ii), it clearly laid down that the definition of obligated entity did not cover a case where a person is a consumer and is consuming power from a cogeneration plant. The APTEL also

set aside the State Commissions' order holding that the obligation in respect of co-generation can be met from solar and non-solar sources but the solar and non-solar purchase obligation has to be met mandatorily by the obligated entities and consuming electricity only from co-generation sources shall not relieve any obligated entity. The APTEL clearly spelt out that when such relaxation has been made, the same relaxation must have been allowed in respect of consumers making electricity consumption from captive generation plant in excess of total RPPO obligations and that failure to do so would amount to violation under Section 86 (1) (e) of the Act, which provides both cogeneration as well as generation of electricity from renewable source of energy must be encouraged as per the finding of the APTEL in appeal no. 57 of 2009.

- While the above discussed judgment in Emami case is a 16. complete answer to the question under discussion, this Commission also independently feels that confining the exemption only to captive units defies logic and reason. Once cogeneration is treated on par with renewable energy and on that basis the captive plant is exempted from being an obligated entity, mulcting a consumer of that power with RPPO treating the same as conventional energy is wholly irrational and the same would defeat the legislative intent of treating energy from cogeneration on par with renewable energy. In light of preponderance of judicial opinion reflected in the weighty judgments of APTEL as followed by this Commission atleast in two cases, and the reasons assigned by us herein above, we hold that the power generated by the WHRS's plant and consumed by the Petitioner is eligible to set off against its RPO requirements towards the energy consumed from conventional sources. .... "
- u. It is stated that as is evident from above, various SERCs have always treated consumption of electricity from a WHRS akin to power from renewable energy sources and has also permitted setting off of that

power consumed from a WHRS (a co-generation plant) against RPP Obligations. Thus, in terms of the law laid down by the various SERC's, it is imperative that power consumed from a co-generation plant ought to be considered for setting off the RPPO obligations of an obligated entity (in addition to the existing dispensation provided by Ld. APERC). It is stated that any failure of providing such dispensation would lead to discrimination qua consumption from renewable sources vis-å-vis consumption from co-generation and would also be contrary to the legislative intent.

- ۷.
- It is stated that without prejudice to the above that, the process used in the petitioner's WHRS for generation of electricity is completely nonfossil fuel based and is environmentally friendly and unlike traditional co-generation there is no burning of additional/supplemental fuel for generation of electricity. The flue gas/waste gas released after the manufacturing process of cement (which was earlier emitted into atmosphere) is now being used for the purpose of generation of electricity. In other words, the waste gases are not emitted into environment, thereby reducing greenhouse effect. There is no additional burning of fossil fuel for generating electricity as the WHRS technology merely utilizes the waste heat for generation of electricity.
- w. It is stated that the environmentally friendly nature of the petitioner's WHRS is also evident from the fact that the Ministry of Environment and Forest, Government of India, has vide Notification S.O. 3067 (E) dated 01.12.2009 read with its office memorandum dated 23.01.2019, has exempted such power plants using waste heat boilers without using any auxiliary fuel from seeking environmental clearance under the environmental impact assessment notification, 2006.
- x. It is stated that accordingly, the electricity generated by it and used for captive purpose supplemented through the process of cogeneration using the waste heat from flue gas is to be exempted from RPPO, and for the said purposes the petitioner is constrained to file the present petition.

3. Therefore, the petitioner prayed the Commission the following reliefs in the petition.

"to clarify and/or exempt the petitioner company from the Renewable Power Purchase Obligation (RPPO) and that the energy consumed from its WHRS plant through co-generation process is to be considered for setting off, the petitioner's RPPO requirement qua its consumption from other conventional sources, under the Regulation No.2 of 2018, in view of the consumption of power from its co-generation WHRS unit through waste heat received from flue gases."

- 4. The respondent No.1 has filed counter affidavit and stated as below.
  - a. It is stated that the subject issue is governed under clause 11 of TSERC Regulation 2 of 2018.
  - b. It is stated that the petitioner is a company incorporated in the year 1946 under the provisions of the Companies Act, 1913 and is in the business of manufacturing and sale of cement and is operating one of its cement manufacturing plants at Vishnupuram, Damarcharla mandal, Nalgonda district, Telangana with a total capacity of 2.856 MTPA.
  - c It is stated that the petitioner submitted that, their WHR plant harnesses the waste heat gases emanating from the manufacturing process of cement and uses it for generation of electricity without burning of any additional fuel.
  - d. It is stated that the petitioner prayed before the Commission to exempt the petitioner from RPPO in view of the consumption of power generated from its cogeneration units through waste heat received from flue gases.
  - e. It is stated that the respondent submits that State Load Dispatch Centre of the state of Telangana (TSSLDC) (TSTRANSCO), a statutory body constituted under section 31 of Act, 2003, is defined as 'State Agency' to examine compliance of RPPO by the obligated entities, as per clause 6 of Regulation No. 2 of 2018.
  - f. The respondent states that:
    - (i) As per clauses 5.2.4, 3.1 & 2.10 of Regulation No. 2 of 2018, every captive consumer (who owns a captive generating plant

based on conventional fossil fuel with Installed capacity of 1 MW and above) and every open access consumer (having contract demand of MW & above) shall purchase from renewable energy sources a minimum kWh) of electricity expressed as a percentage of its total consumption of energy, during FY 2018-19 to FY 2021-22 as specified in this table below.

Year / RPPO	2018-19	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
Total	6.00	6.50	7.00	8.00

They may also fulfil their RPPO through purchase of RECs (Renewable Energy Certificates).

- (ii) As per clause 2.14 of Regulation No.2 of 2018
  - "Renewable Energy Sources (or RES)" means renewable sources such as Co-generation from renewable sources, smallhydel, municipal waste, industrial waste, biomass, wind, solar including its integration with combined cycle, bio-fuel cogeneration, Geo-thermal, Tidal and such other sources as recognized or approved by MNRE"
- (iii) As per the Regulation No.2 of 2018 and relevant provisions of National Tariff Policy, 2016 (NTP) as notified by the Government of India, exercising powers under section 3 of the Act, 2003.
  - "(1) Pursuant to 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 be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Power Purchase Obligations (RPPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPPOs."

- (iv) As per clause 8.1 of Regulation No. 2 of 2018, If the captive user or open access consumer does not fulfil the RPPO as per the above table during any year, the Commission may direct them to deposit into a separate fund, to be created and maintained by the state agency that is TSSLDC, such amount on the basis of the short fall in units of the RPPO and the forbearance price decided by the Central Commission, Provided that the fund so created shall be utilized in the manner as may be specified by the Commission either through general or special order.
- (v) As per clause 8.2 of Regulation No.2 of 2018, if the captive user or open access consumer fails to comply with the obligation prescribed in above table, it shall, in addition to the above, be liable for penalty as may be decided by the Commission under section 142 of the Act, 2003.
- (vi) In the point A(ii), it is clearly mentioned by the petitioner that coal is used as fuel to provide the heat required to convert the kiln feed into clinker.
- (vii) In point (7), the petitioner stated that it is having following units in Telangana:
  - 1 One unit at Vishnupuram, Damarcharla mandal, Nalgonda district for manufacturing of cement where in:
    - It operates a coal based captive power plant of 50.4 MW and
    - ii. It generates 7.7 MW through co-generation from its Waste Heat Recovery System (WHRS).
  - Second unit is at Tandur, Malkapur, Vikarabad district which is also for manufacturing of cement, is an open access consumer which consumes power from IEX and also from the 1<sup>st</sup> unit at Vishnupuram.

- (viii) In point (8) the petitioner submitted that, it has conceived its WHRS plant for utilizing the waste heat available in the hot flue gases generated during its cement manufacturing process with generation capacity of 7.7 MW and the same was synchronized on 16.09.2004 and hence entitled for exemption from its RPP Obligations.
- (ix) In view of all the above, the respondent stated the following:
  - (a) TSSLDC has submitted final report on compliance of RPPO target by all the obligated entities for FY 2018-19 to Commission on 13.10.2020 based on Regulation No.2 of 2018.
  - (b) The Commission has initiated suo moto proceedings for determination of compliance of RPPO of obligated entities for FY 2018-19 and issued public notice on 06.12.2020 inviting suggestions and comments from all stake holders before 24.12.2020. After receiving written suggestions and comments from stake holders, commission has held a virtual hearing on 28.12.2020.
  - (c) After receiving written suggestions and comments from stake holders, Commission has held a virtual hearing on 28.12.2020.
  - (d) Based on the following:
    - (i) suggestions and comments received from the stake holders.
    - (ii) Regulation No. 2 of 2018, dated 30.04.2018.
    - (iii) TSSLDC final report.
    - (iv) Obligated Entities submission.
    - (v) Stakeholders submission.
    - (vi) Hon'ble APTEL judgment in the Appeal No. 278 and 293 of 2015 and Appeal No. 23, 24 and 62 of 2016 dated 02.01.2019.

The Commission has passed an order on 09.03.2021 in O. P. No. 31 of 2020.

In the above order, Commission has expressed its view vide clause (36) that

"any consumer consuming electricity from captive cogeneration plant or captive co-generation plant using WHR unit beyond its RPPO target for any specific year as per the Regulation No. 2 of 2018, shall not be required to purchase additional renewable energy/RECs for that year. In case any consumer consuming electricity from captive cogeneration plant or captive co-generation plant using WHR lesser than its RPPO target, the remaining consumption till the RPPO target shall be met through purchase of renewable energy/RECs to meet the RPPO target."

(b) Vide clause (37) of the above order, Commission also directed TSSLDC to

"re-compute the RPPO compliance for FY 2018-19 for all obligated entities which consume electricity through captive co-generation plant or captive cogeneration plant using WHR and submit the relevant details of such computation along with the report on the status of compliance of RPPO for FY 201920."

- (c) Abiding to the above order, TSSLDC has communicated and requested the DISCOMs to form a committee, inspect the captive cogeneration plants and captive cogeneration plants using WHR and furnish their details of such consumption of power through WHR.
- (d) DISCOMs have intimated that inspecting of the captive cogeneration plants using WHR is in process and will furnish their details of such consumption as soon as possible.
- (ix) In view of all the aforesaid points, the respondent submits that, based on the Commission's order in O.P.No.31 of 2020 dated

09.03.2021, with reference to clause (36), it can be concluded as below:

- (a) As said in point (g) above, the second unit of M/s India Cements Limited located at Tandur, Malkapur, HTSC No.VKB 708 (which is an RPPO obligated entity) is consuming power from:
  - The first unit of M/S ICL located at Vishnupuram, Damarcharla mandal, Nalgonda District which consists of both:

coal based power plant of capacity 50.4
 MW.

2. WHR of 7.7 MW.

## 3. From IEX.

In view of above, the consumer need to fulfil RPPO for the power consumed from:

1. Coal based power plant of capacity 50.4

- 2. From IEX that is RPPO obligation to be complied with, will be computed for that particular year, for the power consumed from the above two fossil fuel consumptions and if power consumption from the WHR power plant of 7.7 MW exceeds the above RPPO target for that particular year, consumer shall not be required to purchase additional RECs for that year and in case of any shortfall, consumer shall meet RPPO by purchase of RECs for the remaining consumption.
- g. Hence, it is stated that the respondent's view is as follows:
  - Consumption of power from the petitioner's 7.7 MW capacity of WHRS plant is exempted from RPPO as per the Commission's order in O.P.No.31 of 2020 dated 09.03.2021,

Provided, if the consumption from WHRS exceeds the RPPO target for that particular year, consumer shall not be required to purchase additional RECs for that year and in case of any shortfall, consumer shall meet RPPO by purchase of RECs for the remaining consumption.

- ii. Considering the above WHR consumption, it is not possible to exempt the RPPO for the entire consumption that is from fossil fuel consumption and power from short term sources as sought by the petitioner.
- iii. The Commission's order in O.P.No.31 of 2021 dated 09.03.2021, the Commission has given this order duly keeping in view of the prayer of the petitioner vide para [31(iv)] which is the same prayer of the petitioner in the present petition that is O.P.No.21 of 2021. Hence, there is no valid point in considering the same prayer in present petition for which already an order has been issued.
- iv. In view of above, the petitioner's request is hereby refused.
- v. Further, it is requested that the Commission may be pleased to instruct the petitioner to install meters of appropriate class of accuracy for measurement of gross generation, auxiliary consumption, captive consumption along with cogen captive consumption using WHR at appropriate locations and have them duly sealed by the concerned licensees for the purpose of measuring the generation, captive consumption and cogen captive consumption using WHR and for computation of RPPO compliance.

h. It is prayed that this Commission may be pleased to dismiss the petition.

- 5. The respondent No.2 has filed counter affidavit as below.
  - a. It is stated that the petitioner has one of its units of cement manufacturing plant at Vishnupuram, Damarcharla mandal, Naigonda district which unit is a 132 kV HT consumer of TSSPDCL having CMD of 16 MVA. The said unit also operates a coal based captive power

plant of capacity 50.4 MW. The petitioner is also a regular open access generator an it sells power under Inter-state short term open access through power exchange. The petitioner also has another unit located at Tandur, Vikarabad District which is also HT consumer of TSSPDCL with CMD of 32 MVA. It also avails power from the above captive power plant.

- b. It is stated that the Commission has issued Regulation No.2 of 2018 wherein the 'obligated entity' is defined under clause 2.10 of RPPO regulation and the same reads thus: 'obligated entity' is an entity that is mandated to fulfil renewable purchase obligation under this regulation subject to fulfilment of conditions outlined under clause 3 hereof and for the purposes of this Regulation shall be the following;
  - Distribution Licensee
    Captive user Any consumer who owns a grid connected captive generating plant based on conventional fossil fuel with installed capacity of 1 MW and above, or such other capacity as may be stipulated by the Commission from time to time, and consumes electricity generated from such plant for his own use.
  - iii) Open Access Consumer in the state "Any person having a contracted demand of 1 MW and above and consumes electricity procured from conventional fossil fuel based generation through open access"
- c. It is stated that therefore. TSSPDCL being, the obligated entity as per clause 2.10 of RPPO regulation, does not deal with the verification or accreditation of RPPO obligation by the open access consumers. The same is to be dealt with by the State Agency that is SLDC, as per clause 2.18 of the RPPO regulation which is extracted hereunder:

"2.18: "State Agency" means the State Load Dispatch Center of the State of Telangana as defined under section 2 (66) of the Act, 2003 or their agency so designated by the Commission under Clause (6.6) Of this Regulation to act as the agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under this regulation:"

- d. It is stated that further, as per the clause 3.1 of the said RPPO regulation, every obligated entity in the state of Telangana has to fulfil the RPPO limit specified in the regulation and the same is reproduced below:
  - "3. Renewable Power Purchase Obligation [RPPO)
  - 3.1 Every Obligated Entity shall purchase from Renewable Energy Sources a minimum quantity (in kWh) Of
     electricity expressed as a percentage of its total consumption
     of energy, during FY 2018-19 to FY 2021-22 as specified in this table below

Year / RPPO	2018-19	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
TOTAL	6.00	6.50	7.00	8.00

Provided further that the obligation will be on total consumption of electricity by an Obligated Entity excluding Consumption met from hydro sources of power other small-hydel sources of power."

- e. It is stated that the clause 6.4 of NTP reads thus:-
  - "6.4 Renewable sources of energy generation including Cogeneration from renewable energy sources:
    - (j) Pursuant to 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 licensee for purchase of energy from distribution renewable energy Sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable purchase Obligations [RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs" and the same was referred by TSERC in the preamble of the RPPO regulation.

- f. It is stated that further as per section 14 of the Act, 2003, under the grant of license, the Commission has issued license to TSSPDCL as distribution licensee and the one of the condition of the license as issued by Commission is
  - "4 DIRECTIONS
  - 4.1 The Licensee shall comply with the Regulations, orders and directions issued by the Commission from time to time and shall also act in accordance with the terms and conditions Of this Licence, except where the Licensee obtains the approval of the Commission for any deviation therefrom."
- g. It is stated that as there is no specific clause in the RPPO regulation regarding exemption of RPPO for the cogeneration plants using non-renewable sources, the petitioner shall comply with the RPPO limits specified by Commissions' in the regulation.
- 1. It is stated that as per clause 2 (12) Act 2003,

'cogeneration' means a process which simultaneously produces two or more forms of useful energy (including electricity).'

In the present case the petitioner's company is generating power from the heat available in the flue gas and the same is to be considered as cogeneration but not as cogeneration from renewable source, whereas NTP clearly states that

"Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs"

and the same was referred by Commission while issuing RPPO regulation.

 It is stated that section 86 (1) of the Act 2003 has empowered the State Commission with some functions to be discharged, one of such functions is to "promote co-generation 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;"

j. It is stated that as per clause 2.14 of RPPO regulation

"Renewable Sources (or RES) means renewable sources such as cogeneration from renewable sources, small hydel, municipal waste, industrial waste, biomass, wind, solar including its integration with combined cycle, bio-fuel cogeneration, geo thermal, tidal and such other sources as recognized or approved by MNRE."

- k. It is stated that even though the waste heat recovery power plant is a cogeneration plant as per section 2 (12) of Act, 2003, but the same cannot be termed as cogeneration from renewable source of as per clause 2.14 of RPPO regulation, as the main fuel used in their cement plant is coal as mentioned by the petitioner at para of his affidavit and is a fossil fuel.
- I. It is stated that the waste heat recovery plants from the industrial wastes are detailed in the Indian Renewable Energy Development Agency Limited (IREDA) guidelines which emphasize that waste to heat power projects covered under "Municipal solid waste and Industrial Waste" are the ones' which include the following:

"Biogas generation, purification and bottling project based on cow dung, press mud, poultry litter or other organic material Power generation from biogas based on cow dung, press mud, poultry litter or other organic material Power generation based on biomass gasification pulp and paper mills Poultry forms Dairy farms Sugar mills Distillery Food processing plants Juice and jam processing plant".

Hence, the petitioner company's waste heat recovery power plant cannot be termed as a waste heat recovery power plant from renewable energy source as per MNRE or IREDA guidelines.

- m. It is stated that hence, the petitioner having units in Nalgonda (NLG-162) and Vikarabad (VKB-708) districts being a consumer of TSSPDCL and open access user is an obligated entity to fulfil the renewable power purchase obligation as the said applicant is availing open access power from power exchange (which is not a renewable source of from their 50.4 MW coal based captive power plant and also from their 7.7 MW waste heat based power plant. which cannot treated as renewable source as per MNRE guide lines.
- It is stated that further, the petitioner being an obligated entity shall purchase power from renewable sources a minimum quantity (in kWh) of electricity of its total consumption of energy', during FY 2018-19 and FY 2019-20 as per clause 3.1 of RPPO regulation.
- o. It is stated that clause 5 of CERC Regulation Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Generation) Regulations, 2010 and its subsequent amendments details regarding eligibility and registration for certificates and clause 7 relates to issuance of certificates to generating power plant who has no power purchase agreements and generating power from RE sources shall be eligible to register for issuance of certificates for the electricity produced from such generating plant. Hence, cogeneration plants with renewable sources are only considered for issuance of REC's as per CERC Regulation. Whereas, the petitioner is a generating plant termed as waste heat project which is not extracted from renewable energy source but rather utilizes by-products from cement industry which is non-renewable energy source.
- p. It is stated that the key test for a generating company to be termed as renewable or non-renewable source of is to 100k at the base fuel. If the WHR plant's ultimate source is fossil fuel, then it should not be considered renewable energy. The same guiding principle followed by MNRE to determine the waste-to-energy technology to classify as nonrenewable. The petitioner operating a waste heat recovery plant, cogeneration plant based on fossil fuel that is non-renewable source cannot therefore be recognized as renewable source and for the

transacted from such non-renewable source to their captive consumer that is HT SC. No.SPT-351 need to fulfil the RPPO obligation as per Regulation No.2 of 2018.

q. It is stated that the clause 2.14 of RPPO regulation defines

"Renewable Sources (or RES) as renewable sources such as cogeneration from renewable sources, small hydel, municipal waste, industrial waste, biomass, wind, solar including its integration with combined cycle, bio-fuel cogeneration, geo thermal, tidal and such other sources as recognized or approved by MNRE"

This respondent relies upon the following cases to substantiate its contention:

2. Hon'ble Maharashtra Electricity Regulatory Commission (MERC) vide order dated 20.06.2012 in Case No. 27 of 2012 in the matter of petition filed by Steel Authority of India (SAIL) seeking grant of exemption from purchase of Renewable Certificates in respect of 6 percent of its consumption from power generating plant towards its fulfilment of RPPO held as follows:

"From the Regulation of MERC CRPO-REC)-Regulations, 2010 as stated above, it is clear that only MNRE RE sources are eligible under these Regulations. approved Also any new technology shall be qualified as "renewable energy" only after this Commission approves that technology based on the approval Of MNRE. No such approval of the MNRE has been placed on record.

> Hence, at this moment the petitioner cannot be exempted from its obligation to procure the renewable energy as required under Regulation 7.1 and Regulation 7.2 of MERC (RPO-REC) Regulations, 2010."

II. MERC has disposed the case vide order dated 17.12.2015 in Case No: 56 of 2011 in the matter of petition filed by Lloyds Metals and Energy Limited (30 MW capacity cogeneration power plant based on industrial waste heat generated by its sponge iron plant at Ghugus in Chandrapur District, Maharashtra) for determination of tariff for supply of electricity from its industrial waste heat recovery cogeneration plant at Ghugus, Chandrapur, and stipulating purchase obligation for its generation and the sale of such energy to distribution licensee under renewable purchase obligation has given the following direction which is reproduced for kind consideration of the Hon'ble High Court.

"39. Upon conjoint reading of the provision, we have come to the conclusion that a distribution company cannot be fastened with the obligation to purchase a percentage of its consumption from fossil fuel based cogeneration under section 86 (1) (e) pf the of the Electricity Act, 2003. Such purchase obligation 86 (1) (e) can be fastened only from electricity generated from renewable sources of energy. However, the State Commission can promote fossil fuel based co-generation by other measures such as facilitating sale of surplus electricity available at such co-generation Plants in the interest of promoting energy efficiency and grid security, etc."

It is stated that the MNRE vide letter F. No. 201222 / 2016-17-WTE r. dated: 30.07.2018 through its program guidelines on energy from Industrial and agricultural wastes/residues for plan period (2017urban. 18, 2018-19 & 2019-20) has ruled out Waste heat recovery plant set up based on distillery effluents and on wastes from fossil fuels and waste heat (flue gases) from the eligibility criteria for provision of central financial assistance whose main objective is to promote setting up of projects for recovery of energy in the form of biogas/bio CNG / enriched biogas / power from urban, industrial and agricultural wastes and captive power and thermal use through gasification in industries. Hence, **MNRE** has approved the cogeneration plants based on waste heat power plants from renewable sources as defined in RPPO recovery

regulation, but, not the cogenerating plants as interpretation of the petitioner to be renewable sources.

- s. It is stated that in view of the above, the claim of the petitioner that their cogenerating plant is to be exempted from RPO similar to that of renewable power plants becomes untenable as the same is not recognized to be renewable source of supply by MNRE, regulation of TSERC and IREDA. Even, the 1<sup>st</sup> petitioner, which is under the jurisdiction of TSSPDCL, is an obligated entity to fulfil the RPPO Obligation.
- t. It is stated that all the allegations made by the petitioner that are not specifically dealt with herein are denied and the petitioner is put to strict proof of the same.
- u. It is prayed the Commission to dismiss the prayer of the petitioner with costs.

6. The Commission has heard the parties to the present petition extensively and also considered the material available to it including the order passed by it earlier insofar as compliance of RPPO Regulation, 2018. The submissions on various dates are noticed below, which are extracted for ready reference.

Record proceedings dated 25.08.2021:

"..... The counsel for petitioner stated that the issue in the petition has been partly answered while considering the compliance of RPPO regulation for FY 2018-19. He explained the relevant paragraphs in the order passed by the Commission in that regard in O. P. No. 31 of 2020. The counter affidavit has been filed and there is no necessity of filing any rejoinder in view of the decision of the Commission stated above. He also stated that the submissions in this matter would cover the matter in M/s Navabharat Ventures Limited. In view of the adjournment of O. P. No. 20 of 2020, this matter is also adjourned."

## Record of proceedings dated 23.09.2021:

"... The advocate representing the counsel for petitioner stated that the counsel is unable to attend the hearing due to preoccupation in the Hon'ble High Court and therefore, the case may be adjourned to a shorter date. The

representative of the respondents has no objection. Accordingly, the matter is adjourned."

Record of proceedings dated 27.09.2021:

"... The counsel for petitioner and the representative of the respondents stated that the submissions made in O. P. No. 20 of 2020 are applicable to this case also. In view of the above, the matter is reserved for orders."

7. The Commission had earlier considered the aspect of compliance of RPPO in terms of Regulation No. 2 of 2018 by the obligated entities. The said proceedings came to be initiated pursuant to a report filed by SLDC setting forth non-compliance of the RPPO by certain entities. While dealing with the matter, the Commission had occasion to consider the issue of treating WHRS as a renewable source. In doing so, the Commission had observed in the said order as below.

O. P. No. 31 of 2020

"The submission of obligated entities which meet their complete/partial electricity consumption through their captive co-generation or WHR submitted their representation as under: (i) M/s Nava Bharat Ventures Limited- This obligated entity is a manufacturer of Ferro Alloy. It three (3) captive thermal power generating units with aggregate operates of 114 MW and two (2) WHR plants from flue gases of capacity submerged electric arc furnaces which generate energy upto 5 MW for at its factory premises. It submitted that the entire requirement of captive use electricity for its Ferro Alloys plant is being met from own captive the generating units and excess generated electricity is being sold to DISCOMs and others under Open Access. It also submitted that it has filed O. P. No. 20 of 2020 before the Commission for exemption from RPPO under Regulation 2 of 2018 in view of consumption of power generated from its co-generation units through waste heat received from flue gases. Relying upon the Judgment of the Hon'ble Appellate Tribunal for Electricity (APTEL) in Appeal No. 57 of 2009 dated 26.04.2010 (Century Rayon case) and requested the Commission for exemption from RPPO compliance.

Commission's View

... ...

33. The Commission has noted the submission of the obligated entities stakeholders for exemption from RPPO compliance and considering and the energy consumed from its co-generation/WHR plant for setting off RPPO requirement.

- 34. The Commission is of the view that as per the Regulation No.2 of 2018, any captive consumer consuming electricity from co-generation from conventional sources is considered as an obligated entity. Hence the Commission does not find any merit in the contention for exemption being an obligated entity.
- 35. The Hon'ble APTEL in its Judgment in the Appeal No. 278 and 293 of 2015 and Appeal No. 23, 24 and 62 of 2016 dated 02.01.2019, has as below:

from

ruled

Hindalco

view that

their own

excess

general RREC

generation

generation

**Once Captive** 

who

view of the

- "52. ....... The Rajasthan Electricity Regulatory Commission has also considered the judgment of this Tribunal, as stated supra, in cases of Emami Paper Mills Ltd; Vedanta Aluminum Ltd; Industries Ltd. and India Glycols Ltd; and held that: "In settled legal position, Commission is of the considered no RPO liability shall be fastened on such generators generate electricity through Waste Heat Recovery for purpose and consume it, subject to the condition that from Waste Heat Recovery generation plant is in 14 of 40 of the total RPO required to be complied by the CPP. If is lesser than the requirement to the extent of shortfall rule applies. So far as distinction tried to be made by between solar and non-solar for the purpose of compliance, in the Commission's view does not merit acceptance. Power Plant generating electricity through Waste cannot be fastened with RPO liability under Heat Recovery, Section 86 (1) (e), there is no question of imposition of solar RPO falls in the category of Renewable Energy." also as the same
  - 53. It is rightly pointed out by the counsel for the Appellant that, the judgment of the Hon'ble Apex Court actually covered cogenerators as well has got some substance and it is highly unlikely that the Rajasthan Electricity Regulatory Commission,

whose Regulations were under challenge before the Hon'ble Apex Court, would itself grant relief to the co-generators before it relying on the judgment of this Tribunal in Century Rayon case. Therefore, we hold that a cogeneration facility irrespective of fuel is to be promoted in terms of section 86(1)(e) of the Electricity Act, 2003; an entity which is to be promoted in terms of section 86 (1) (e) of the Electricity Act, 2003 cannot be fastened with renewable purchase obligation under the same provision; and as long as the co-generation is in excess of the renewable purchase obligation, there can be no additional purchase obligation placed on such entities."

36. Based on the above, the Commission is of the view that any consumer consuming electricity from captive co-generation plant or captive co-generation plant using WHR unit beyond its RPPO target for any

specific year as per the Regulation No. 2 of 2018, shall not be required to purchase additional renewable energy / RECs for that year. In case any consumer consuming electricity from captive co-generation plant or captive co-generation plant using WHR lesser than its RPPO target, the remaining consumption till the RPPO target shall be met through purchase of renewable energy/RECs to meet the RPPO target.

37. In view of the above, the Commission directs TSSLDC to re-compute the RPPO compliance for FY 2018-19 for all obligated entities which consume electricity through captive co-generation plant or captive co-generation plant using WHR and submit the relevant details of such computation 15 of 40 along with the report on the status of compliance of RPPO for FY 2019- 20. The Commission will review the compliance of RPPO by these obligated entities for FY 2018-19 at the time of determination of compliance of RPPO for FY 2019-20."

The observations made above were in the context of ascertaining the RPPO compliance by the obligated entities and to settle the aspect of compliance and nothing more. It itself cannot constitute a declaration or exemption as sought by the petitioner in this petition. Either way, the above finding cannot be treated as granting relief to the petitioner as sought by it in this petition, as the proceedings referred to above, had a limited scope in the context of compliance RPPO by obligated entities

upon a report made over to the Commission by the SLDC. This submission that there is already a finding on the prayer of the petitioner, is inappropriate and incorrect.

8. The counsel for petitioner strenuously contended and vehemently relied on the orders passed by the Hon'ble ATE in Appeal Nos. 57 of 2009, 54 of 2012, 322 along with 333 of 2016 and 146 of 2017. The Hon'ble ATE rendered findings with regard to treating cogeneration plants as renewable source and to be considered as being part of compliance of RPPO. The relevant extracts are already placed by the parties in their respective pleadings, as such, they are not reproduced here. With due respect, none of the orders of the Hon'ble ATE were in the context of a regulation, which provided for generic definition of obligated entities as such the same are not relevant and appropriate. Thus, they do not constitute a binding precedent insofar as facts and circumstances of this case.

9. The counsel for petitioner placed reliance on the judgments of the Hon'ble ATE referred above, but as also stated that appeals have been filed in certain of the orders before the Hon'ble Supreme Court, which are pending consideration. In that view of the matter, the findings reached by the Hon'ble ATE cannot be treated as final word on the aspect of treating the petitioner's WHRS as a renewable source under cogeneration. In only one matter an appeal filed before the Hon'ble Supreme Court by the Karnataka Commission had been dismissed on the ground of delay, but not on merits. It cannot be said that the finding is conclusive, as in certain other appeals in Civil Appeal No. 6797 of 2013 filed by the Gujarat Commission, is pending consideration before the Hon'ble Supreme Court. Accordingly, the Commission finds that in the absence of clear finding by the appellate courts, the prayer sought by the petitioner cannot be acceded to.

10. The Commission notices that an appeal had been filed before the Hon'ble Supreme Court in the matter of M/s Emami Paper Mills Limited in Civil Appeal No(s). 5466 / 2013 and it also refers to Civil Appeal Nos.5467/2013 and 6797 / 2013. Thus, it is clear that the finding rendered by the Hon'ble ATE is subject matter of appeals pending before the Hon'ble Supreme Court. As such, in the absence of final verdict, this Commission cannot rely on the judgments as referred by the petitioner. Therefore, the petitioner is not entitled to any relief at this point of time.

11. The counsel for petitioner relied on several orders passed by the APERC in several cases filed before it from time to time on the aspect that is involved in the present petition. Suffice it to state, the findings were rendered based on the judgment of the Hon'ble ATE, which by themselves have not attained finality, as such, cannot be relied upon. Further, the reference made to the orders of the APERC cannot constitute a binding precedent for this Commission to rely upon. Neither they are applicable in the context of the regulation made by the Commission nor based on a conclusive reasoning as affirmed by the Hon'ble Supreme Court. At the most, they are of only persuasive value to this Commission. It is also noticed that the pleadings are made as if the petition is before the APERC and that its findings earlier in several proceedings need to be followed. Alas, the petitioner has failed to distinguish between the Commissions' as to which Commission it is making submissions thereof. For all the reasons mentioned above, this contention of the petitioner does not succeed.

12. The Hon'ble Supreme Court had occasion to consider the issue of compliance of RPPO and the treatment of obligated entities including captive power units. The relevant observations are extracted below:

"... The impugned Regulations fall within the four corners of the Act of as well as Electricity Policy, 2005. The object of imposing RE Obligation is protection of environment and preventing pollution by utilising Renewable Energy Sources as much as possible in larger public interest.

41. Our attention was drawn to the annual report of 2003 of Central Electricity Authority of India (CEA). As per the report, the installed capacity is 107973 MW in the country, the breakup of which is as

under:

Hydro Power	Thermal Power	Nuclear Power	Wind Power
Generation	Generation	Generation	Generation
26910 MW	76607MW	2720 MW	1736 MW
(24.9%)	(71%)	(2.5%)	(1.6%)

Out of thermal power generation, coal comprises 63801 MW, (gas-11633 MW) and (diesel-1173 MW) representing 59.1%, 10.8% and 1.1.% of the total installed capacity respectively. The Coal dominates the Thermal Power Generation which results in Green House Gases resulting in global warming. The said facts were brought to our notice that the same would certainly justify the case of the RERC in framing the impugned Regulation to achieve the object of the Act and the Constitution by imposing RE obligation on the captive gencos.

... ...

50. Article 51 A (g) of the Constitution of India cast a fundamental duty on the citizen to protect and improve the natural environment. Considering the global warming, mandate of Articles 21 and 51A(g) of the Constitution, provisions for the Act of 2003, the National Electricity Policy of 2005 and the Tariff Policy of 2006 is in the larger public interest, Regulations have been framed by RERC imposing obligation upon captive power plants and open access consumers to purchase electricity from renewable sources."

13. The Hon'ble High Court of Andhra Pradesh as it then was while disposing of a writ petition filed by M/s Agri Gold Projects Limited vs. APERC (erstwhile) had observed as below:

"After hearing the learned counsel for the parties and after perusing the material papers placed before this Court and in particular, the orders passed by the APSERC, this Court is of the view that the Power Purchase Agreement between the petitioner and the respondent is governed by the factors, which are in the realm of two separate agencies. So far as the mode of generation of power is concerned, it is totally within the scope of NEDCAP. The nature of fuel and the capacity of generation in the particular area through that process are to be determined by the NEDCAP. ... While dealing with the applications or while passing the order in O. P. 262 of 2003 or in the review petition, the APSERC has taken up on itself, to assess certain factors, which are totally in the realm of the NEDCAP. For example, the age of the plantation, the nature of the fuel, its utility for additional captivity etc., are the matters exclusively within the scope of the NEDCAP, whereas, they were

extensively dealt with by the APSERC for rejecting the application of the petitioner. It is not as if the NEDCAP had rejected the case of the petitioner and the same is taken into account by the APSERC. This Court is of the view that the matter needs to be considered afresh by the APSERC confining itself to the requirement of the respondent to purchase additional power and fixation of the terms of the contract in the event of enhancement of the generating capacity. As regards the other aspects namely, the category of Biomass, the utility of the plantation grown by the petitioner etc., are concerned, the APSERC shall have to take the opinion expressed by the NEDCAP."

As seen from the observations in the above judgment of the Hon'ble High Court of Andhra Pradesh as it then was, it is clear that the status of renewable source or not has to be decided by the renewable energy development authority and in the case of Telangana State, it is the Telangana State Renewable Energy Development Corporation (TSREDCO). No material that the petitioner's unit is a renewable source has been placed before the Commission so as to treat it for the purpose of RPPO. In view of the burden cast on the TSREDCO or like agency, this Commission is constrained not to venture into the field of declaring the petitioner's unit to be a renewable source and thereby treat it for ascertaining RPPO compliance. In these circumstances, this Commission is of the view that declaring or otherwise of the petitioner's WHRS unit to be a renewable source.

14. The counsel for petitioner relied on the communication made by the Ministry of Environment and Forest, Government of India. In its Office Memorandum dated 23.01.2019, the Ministry had exempted certain power plants from environmental clearance. In this regard, the appropriate content of the said memorandum is extracted below:

- "3. The spirit of exempting requirement of environmental clearance for the Thermal Power Plant using waste heat boilers without any auxiliary fuel vide S.O.1599 (E) dated 25<sup>th</sup> June, 2014 is to promote energy conservation, reduce greenhouse emissions and in larger interest of environment including climate change.
- 4. In view of the above, it is hereby clarified that setting up new or expansion of captive power plants employing WHRB without using any

the

auxiliary fuel, in the existing Cement Plants, Integrated Steel Plants, Metallurgical Industries (Ferrous and Nonferrous) and other industries having potential for heat recovery, does not attract the provisions of EIA Notification 2006, read with subsequent amendments therein."

It is clear from the above that the said communication was issued in the context of environmental issues and not with reference to generation and consumption of the electricity from such source. It is also noticed that it is an office order and had no reference to any statutory provisions under which it was sought to be issued. Thus, this communication cannot be the basis for this Commission to declare or treat the petitioner's WHRS as a renewable source. The contention of the petitioner, therefore, stands to be negatived.

15. Coming to the aspect of satisfying that it is a renewable source the pleadings nowhere contemplated that the Ministry of New and Renewable Energy has ever identified the WHRS to be a renewable source. Inasmuch as the regulation framed by the Commission has defined renewable energy sources to be a few of them along with such other sources as approved by MNRE. As such, this Commission cannot in the absence of any material in support of the claim of the petitioner, would venture to declare a particular source to be renewable source. Thus, the petitioner has not made out any case for treating its WHRS plant as a renewable source for being considered under RPPO.

16. The respondents have rightly pointed out that the petitioner is dependent on fossil fuels for generation of electricity through the means of heat recovery produced thereof. Keeping in mind the need that fossil fuels cannot be the basis for generation the petitioner's plant, cannot be termed as renewable source.

17. Adverting, to the discussion and the opinion expressed above coupled with the observations of the Hon'ble Supreme Court, this petition fails and is accordingly dismissed. In the circumstances of the case, the parties shall bear their own costs.

18. Before parting with this case, the Commission would like to make it clear that the observations made by it in O. P. No. 31 of 2020 would stand to be limited period, for which it is made and further it would not be carried for the period subsequent to

this order. The SLDC and the licensee shall ensure compliance of the RPPO in terms of the observations made hereinabove for future period.

This order is corrected and signed on this the 14<sup>th</sup> day of March, 2022.

Sd/-	Sd/-	Sd/-
(BANDARU KRISHNAIAH)	(M.D.MANOHAR RAJU)	(T.SRIRANGA RAO)
MEMBER	MEMBER	CHAIRMAN

## //CERTIFIED COPY//

