KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

Present : Shri. T. M. Manoharan

Shri. K.Vikraman Nair, Member Shri. S.Venugopal, Member

Review Petition No. 1/15 in OP No. 20/2015

In the matter of: Review Petition in OP 20/2015 filed by KSEB Ltd, in the matter

of seeking exemption from depositing amount corresponding to the short-fall in achieving Renewable Purchase obligation

for the years 2010 -11, 2011-12, and 2012-13

Petitioner: Kerala State Electricity Board Ltd

ORDER dated 30.03.2016

Background

- M/s KSEB Ltd has filed a petition on 31.10.2015 requesting to review of the order dated 16.9.2015 in Petition No OP 20/2015 in the matter of seeking exemption from depositing amount corresponding to the short-fall in achieving Renewable Purchase obligation for the years 2010-11, 2011-12, and 2012-13.
- 2. The Commission vide the order dated 16.9.2015 in OP No. 20/2015 had ordered as follows:
 - "58. The Commission hereby issues the following orders with regard to the prayers of the petitioner
 - (1) The electricity generated from the partial cogeneration plant of M/s MP Steel, Kanjikode and the plant of M/s Philips Carbon Black, cannot be allowed to be accounted towards the RPO of KSEB Ltd.

- (2) The electricity generated from Maniyar SHP cannot be accounted towards the RPO of KSEB Ltd since it is not purchasing any energy from Maniyar SHP.
- (3) KSEB Ltd cannot be exempted from its RPO as per the regulations and therefore the shortfall in RPO of KSEB Ltd during the years 2010-11, 2011- 12 and 2012-13 cannot be permitted to be carried over to the subsequent years and hence prayer of KSEB Ltd in this regard is declined.
- (4) KSEB Ltd is granted one more chance to purchase the non-solar and solar renewable energy certificates for the deficit in non-solar RPO and in solar RPO for the years 2010-11, 2011-12 and 2012-13 as assessed in para 56 of this order and report compliance on or before 31.10.2015. Or else KSEB Ltd shall deposit the amount of Rs.125 crore in a separate fund, on account of its non-compliance of RPO during the years 2010-11, 2011-12 and 2012-13. It is also clarified that depositing such amount is not by way of penalty and it is only compensatory in nature as clarified by the Hon'ble Supreme Court.
- (5) RPO target fixed as per the existing regulations cannot be reduced and refixed.

KSEB Ltd is directed to report compliance of the above orders either by purchase of REC or by depositing the amount of Rs.125 crore in a separate fund. The amount in the fund shall be placed at the disposal of the ANERT for purchase of REC. The petition is dismissed and it is ordered accordingly."

- Aggrieved by the order of the Commission dated 16-09-2015, KSEB Ltd has filed the review petition requesting to review on the following grounds.
 - (a) Inconsistency among the regulations in force in the state governing renewable energy procurement.

- (b) The inconsistency of State Regulation with notified Central regulation which in effect deactivates the true impact of Renewable Energy Certificate (REC) mechanism.
- (c) Retrospective operationalisation of decision regarding co-generation and captive generation for meeting the RPO, deprives opportunity to take corrective action.
- (d) The absence of provision for addressing force majeure conditions like failure of monsoon requires intervention of Hon'ble Commission especially in view of the fact that generation from renewable sources is highly dependent on forces of nature.
- (e) The order dated 16-9-2015 of Hon'ble Commission in Petition No. OP 20/2015 will create financial distress for KSEB Ltd.
- (f) Other State Electricity Regulatory Commissions are allowing for carry forwarding / adjusting the shortfall in RPO against the surplus RPO achieved in previous years / carry forward to the future years."
- 4. The prayers of KSEB Ltd in the review petition are:
 - (i) Hon'ble Commission may kindly review the order dated 16.9.2015 in Petition No. OP 20/2015 directing KSEB Ltd to either purchase RECs or deposit an amount of Rs. 125 crore for meeting the shortfall in RPO for the years 2010-11, 2011-12, 2012-13 and 2013-14 and allow KSEB Ltd. to use Rs. 125 crore towards capital investment for renewable energy projects under the overall monitoring of the Hon'ble Commission.
 - (ii) KSEB Ltd may be exempted from any penal actions for non compliance of the order dated 16.9.2015 in Petition No. OP 20/2015 pending finalization of the proceedings on this instant review petition.
- The Commission conducted a hearing on the review petition at 11 AM on 4.2.2016 in the Court room of Kerala State Electricity Regulatory Commission at Thiruvananthapuram. During the hearing, KSEB Ltd has further submitted the

following additional grounds for reviewing the order of the Commission dated 16-09-2015.

- (i) UDAY scheme notified by Gol seeks to redraw RPO road map to secure financial stability of DISCOMs.
- (ii) The inconsistency of scheme of State Regulation with the scheme of Central regulation on REC mechanism potentially leads to a vicious circle that may adversely impact RE generation within the State.

During the hearing, the commission directed KSEB Ltd. to file further submission if any, on or before 19.2.2016, based on the discussion held. KSEB Ltd. submitted additional information on 19.2.2016.

- 6. KSEB Ltd has further submitted the initiatives taken by it for the development of solar and non-solar renewable energy sources in the State. The details are given below.
 - (i) A total of 209.12 MWp of solar installations are planned for completion during 2015-16, the details of which are submitted below.

SI.No	Name of project	Installed capacity (MWp)			
1	Solar park at Kasargode district	200			
2	SPV power project at canal bank of Barapole SHEP	1			
3	SPV power project at top of power channel of Barapole SHEP	2			
3	Grid interactive ground mounted SPV plant adjacent to 110KV substation,Kollengode,Palakkad	1			
4	Grid interactive ground mounted SPV plant adjacent to 220KV substation, Kanjikkode	1			
5	Floating SPV plant at Banasurasagar/Kakkayam reservoir 1 st stage	0.5			
6	Solar wrapping at Padinjarathara	0.4			
7	Grid tie rooftop SPV plant at Chalayoor tribal colony,Agali	0.096			
8	Grid interactive roof top SPV plant installation at Poringalkuthu PH	0.050			
9	Grid interactive roof top SPV plant installation at 56 locations of KSEBL buildings	2.07			
10	Connectivity to distribution grid for solar plants owned by consumers as per the KSERC (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014	1.004			
	Total				

- (ii) Further, KSEB Ltd has submitted the details of the solar installations that are under various stages of planning and execution and are expected to be completed in the financial year 2016-17.
 - Installation of 1MWp of solar wrapping at Padinjarathara Dam –Stage II.
 - Installation of 2.5MWp of floating SPV plant at
 Banasurasagar/Kakkayam reservoir 2nd stage
 - Installation of 2 MWp of solar pumping project at Kakkayam
 - Installation of roof top solar for Government buildings.
 - Installation of about 50MW of solar installations in land owned by KSEBL.
- (iii) As part of meeting the Solar RPO, KSEB Ltd. has decided to provide GBI for all off grid solar generators in the State. As the meter reading of these off grid solar generators are not available, it has been proposed to adopt generation at 2.15/ kW SPV/ day for providing GBI. There are 6300KW of off grid solar generation in the state through ANERT scheme, the beneficiaries of which have been identified pro-actively. About 4.94 MU of off grid solar generation is eligible for GBI. KSEB Ltd is proposing to provide GBI for 4.94MU and the same may be accounted under Solar RPO. In addition, all other installations (other than ANERT), are being identified for providing GBI pro-actively.
- (iv) KSEB Ltd submitted that, they are taking earnest efforts to add small hydro generation in the state. The construction works of Barapole SHP (15MW) and Vellathooval SHP (3.6MW) are almost completed and the generation from these projects is forthcoming in the year 2015-16. KSEB Ltd further submitted that,
 - Energy Management Centre in Government of Kerala has invited bids for installing about 200MW of small hydro projects in the state of Kerala in the year 2014. The developers have already signed Implementation Agreement with the Government of Kerala. The energy

- procured by KSEB Ltd. from these developers can be accounted towards the RPO of KSEB Ltd.
- KSEB Ltd. has also planned a total of 14MW (8MW in Agali and 6MW in Kanjikode) wind energy generation in the state in the year 2016-17.
- KSEB Ltd has decided to invite bids from prospective investors for setting up of grid connected solar projects in the State. A total capacity of 200 MW is anticipated in this route.
- Installation of 4MW capacity of wind farms by Kosamattom finance is progressing in Ramakkalmedu area.
- As submitted above, a huge quantum of renewable energy capacity addition is envisaged in the coming years which is expected to help in surpassing the Renewable Purchase Obligation targets stipulated by Hon'ble Commission for the coming years.
- In view of the substantial investments planned above, KSEB Ltd has submitted that the order for remittance of Rs 125 Cr for procurement of RECs from power exchanges may be reviewed and KSEB Ltd may be allowed to utilise the same under the monitoring of Hon'ble Commission for accelerated development of renewable energy projects within the State.

Analysis and Decision of the Commission

7. The main prayer of the KSEB Ltd is to 'review the order dated 16.09.2015 in petition No. OP 20/2015 directing KSEB Ltd to either purchase RECs or deposit an amount of Rs 125 crore for meeting the shortfall in RPO for the years 2010-11, 2011-12, 2012-13 and 2013-14' and allow KSEB Ltd to use Rs 125.00 crore towards capital investment for renewable project under the overall monitoring of the Commission.

- 8. The Section 94 of the Electricity Act 2003 empowers the Commission to review its decisions or orders. The relevant provisions in the Electricity Act-2003 is extracted below.
 - 94. (1) The Appropriate Commission shall, for the purposes of any inquiry or proceedings under this Act, have the same powers as are vested in a civil court under the Code of Civil Procedure, 1908 in respect of the following matters, namely: -
 - (a) summoning and enforcing the attendance of any person and examining him on oath;
 - (b) discovery and production of any document or other material object producible as evidence;
 - (c) receiving evidence on affidavits;
 - (d) requisitioning of any public record;
 - (e) issueing commission for the examination of witnesses;
 - (f) reviewing its decisions, directions and orders;
 - (g) any other matter which may be prescribed
- As per the section 114 and Order XLVII of the Code of Civil Procedure (CPC), a
 Court may allow a review on the following grounds.
 - (a) Discovery of new and important matter or evidence which after the exercise of due diligence was not within the knowledge of the aggrieved person or such matter or evidence could not be produced by him at the time when the order was made; or
 - (b) Mistake or error apparent on the fact of the record; or
 - (c) For any other sufficient reason which is analogous to the above two ground.
- Regulation 67 of the Kerala State Electricity Regulatory Commission (Conduct of Business) Amendment Regulations, 2014 deals with the procedures for reviewing its decisions, direction or orders. The Regulation-67 is extracted below.

"67. Powers of review,-

- (1) Any person or party affected by a decision, direction or order of the Commission may, within forty five days from the date of making such decision, direction or order apply for the review of the same.
- (2) An application for such review shall be filed in the same manner as a petition under Chapter III of these regulations.
- (3) The Commission may after scrutiny of the application, review such decisions, directions or orders and pass such appropriate orders as the Commission deems fit within forty five days from the date of filing of such application:

Provided that the Commission may, at its discretion, afford the person or party who filed the application for review, an opportunity of being heard and in such cases the Commission may pass appropriate orders as the Commission deems fit within thirty days from the date of final hearing:

- 11. As detailed above, the Commission has very limited powers under the section-114 and order XLVII of the code of Civil Procedure Code.
- 12. The first ground raised by the KSEB Ltd for reviewing the order dated 16-09-2015 is regarding the inconsistency among the regulations in force in the State governing renewable energy procurement. The Commission vide its order dated 04-02-2016 'In the matter of clarification on the procurement of electricity from renewable sources by small licensees under the renewable purchase obligation in accordance with the regulations issued by the Commission' has addressed the issue and ordered as follows.

"In view of the above facts and circumstances and the relevant statutory provisions it is clarified that,-

(i) Each distribution licensee within the State including every small licensee shall have its RPO based on the consumption of electricity within its area of supply as specified in the KSERC (Power Procurement from Renewable Energy Sources by Distribution Licensees) Regulations, 2006, the KSERC (Renewable Purchase Obligation and Its Compliance) Regulations, 2010 and the KSERC

- (Power Procurement from Renewable Energy Sources by Distribution Licensees) Regulations, 2013.
- (ii) KSEB Ltd shall have separate solar RPO and non-solar RPO from the year 2013-14 as specified in the KSERC (Renewable Purchase Obligation and Its Compliance) Regulations, 2010.
- (iii) Each of the small distribution licensees within the State which purchases electricity from KSEB Ltd for supply within its area, shall have separate solar RPO and non-solar RPO from the year 2014-15, based on the consumption of electricity within its area of supply as specified in the KSERC (Renewable Purchase Obligation and Its Compliance) Regulations, 2010."
- 13. The second ground raised by the KSEB Ltd is regarding 'the inconsistency of the State Regulation with notified Central regulation, which in effect deactivates the true impact of Renewable Energy Certificate (REC) Mechanism. The Commission has appraised the matter and noted that,
 - (i) The Central Commission vide the notification No. L-1/12/2010-CERC dated 14th January 2010 has notified the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010, which identifies the Renewable Energy Certificate as a valid instrument for meeting the Renewable Purchase Obligation.
 - (ii) The State Commission vide the notification No. 1517/CT/2010/KSERC dated 23rd November 2010 has notified the KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010. Regulation-4 of the said regulations stipulates that, the Certificate issued under the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010 shall be the valid instrument for meeting the RPO. There is no inconsistency between the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010 and KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010. Further, till the Commission notified

KSERC (Renewable Energy) Regulation 2015, the KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 was in force. Hence there is no merit in the ground raised by the KSEB Ltd. The licensee KSEB Ltd has also not raised any inconsistency during the operation of the KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010, i.e., till the said regulation was repealed by the KSERC (Renewable Purchase) regulation 2015.

- 14. The third ground raised by the KSEB Ltd is regarding the 'retrospective operationalisation of decision regarding co-generation and captive generation for meeting the RPO, deprives opportunity to take corrective action. The Commission vide its order dated 16-09-2015 in OP No. 20/2015 has addressed the issue and ordered as follows.
 - (1) The electricity generated from the partial cogeneration plant of M/s MP Steel, Kanjikode and the plant of M/s Philips Carbon Black, cannot be allowed to be accounted towards the RPO of KSEB Ltd.
 - (2) The electricity generated from Maniyar SHP cannot be accounted towards the RPO of KSEB Ltd since it is not purchasing any energy from Maniyar SHP.
- 15. The Commission vide paragraph 48 and 49 of the order dated 16-09-2015 in OP No. 20/2015 has discussed the issue regarding the 'The electricity generated from the partial cogeneration plant of M/s MP Steel, Kanjikode and the plant of M/s Philips Carbon Black'. The relevant portion of the order is extracted below for ready reference.
 - 48. The next issue to be examined is whether or not M/s M.P. Steel and M/s Philips Carbon Black generate electricity by co-generation process. In the case of M/s M.P. Steel, out of its total installed capacity of 10 MW, only 6 MW is earmarked for co-generation and balance 4 MW is coalbased. Therefore, co-generation can be there, only when there is steel production. Electricity generated by co-generation process only can be

treated as equivalent to renewable energy and the electricity generated using coal cannot be treated as renewable energy, since it does not have any environmental benefit. Further, the electricity generated from cogeneration process can be accounted towards RPO of the petitioner only if.-

- i) the petitioner has a PPA to purchase the electricity from co-generation process, at the tariff fixed by the Commission under Section 62 or approved by the Commission under Section 63 of the Electricity Act,2003; ii) M/s M.P. Steel has actually produced electricity by co-generation process and the petitioner has actually purchased as per the PPA; and iii) M/s M.P. Steel has not used the electricity from co-generation process forits captive consumption.
- 49. It has to be specifically noted that, renewable energy generated by independent renewable energy generators cannot be accounted towards RPO of a distribution licensee, unless it is purchased by the distribution licensee at the preferential tariff fixed under Section 62 of the Act. The same logic applies to the generation and purchase of electricity, if any, purchased from M/s Philips Carbon Black also. In the absence of supporting data and documents, it is not possible to assess the quantum of electricity generated by co-generation process, quantum of such electricity consumed by them and the quantity of electricity purchased by KSEB Ltd, out of the electricity generated using co-generation process. Therefore, the first prayer of the petitioner cannot be granted.
- 16. Further, the full bench of the Hon'ble Appellate Tribunal vide the judgment dated 2nd December-2013 in appeal No. 53 of 2012 has ordered that, the generation from fossil fuel based co-generation plant cannot be accounted towards RPO. The relevant portion of the judgment is extracted below.

39. Summary of our findings:

Upon conjoint reading of the provisions of the Electricity Act, the National Electricity Policy, Tariff Policy and the intent of the legislature while

passing the Electricity Act as reflected in the Report of the Standing Committee on Energy presented to Lok Sabha on 19.12.2002, 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 co-generation under Section 86(1)(e) 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.

- 40. In view of above, the Appeal is dismissed as devoid of any merit without any order to costs.
- 17. The paragraph 50 of the order dated 16-09-2015 has addressed the issue on 'whether the generation from the Maniar Captive Generation Power Project towards the RPO of KSEB Ltd. The relevant portion of the order is extracted below for ready reference.
 - "50. The second request of the petitioner is to account the generation from the Maniyar Captive Generation Power Project towards the RPO of KSEB Limited. In the case of Maniyar Small Hydro Project, the entire electricity generated from the said project is renewable energy as per the definition given by MNRE and the regulation relating to renewable energy. M/s Carborandum Universal, which owns the Maniyar SHP, is a captive consumer. As per definition a captive consumer is also an obligated entity with RPO. As per the proviso under Sub Clause (c) of Clause (i) of regulation 5 of the REC Regulation, 2010, as amended by the Second Amendment, captive generating plants based on renewable energy sources shall be eligible for the entire energy generated from such plant for self-consumption for participating in REC Scheme, subject to the conditions specified therein. M/s Carborandum Universal has also objected to the prayer of the petitioner. Therefore, the second prayer of the petitioner cannot be allowed."

- 18. KSEB Ltd., vide their submission dated 19.2.2016 has submitted that the UDAY scheme notified by Government of India allows carryover of RPO. Under UDAY scheme, the state governments, who own the DISCOMS, can take over 75 percent of their debt and pay back lenders by selling bonds. The remaining 25 percent debt will be financed by bonds issued by DISCOM. It is true that the Central Government have announced the UDAY scheme. But there is nothing on record to show that Government of Kerala has adopted or accepted the scheme with the condition to take over 75% of the debt of KSEB Ltd. KSEB Ltd has not made any substantial claim in this regard or submitted copy of the order of the State Government regarding the takeover of the debt of KSEB Ltd. Hence the Commission is unable to assess the merit of the statement of KSEB Ltd.
- 19. KSEB Ltd has also submitted that, Small Hydro is the major renewable energy source available in the State. KSEB Ltd has been planning its RPO based on the generation forecasted from Small hydro projects and Wind Energy projects within the state. However, the energy availability from SHPs and wind energy projects are subject to vagaries of monsoon. Failure of monsoon is a force majeure event crippling the entire activities of KSEB Ltd. The shortfall in RPO in 2012-13 is mainly on account of the failure of monsoon.
- 20. KSEB Ltd has submitted the copy of the notification No. GO (P) No. 497/2012/DMD dated Thiruvananthapuram 31.12.2012 of Government of Kerala, declaring the state of Kerala as drought affected as on 31.12.2012, which read as follows:

"Kerala State Disaster Management Authority in its meeting held on 19.12.2012, after analyzing the rainfall received, drinking water situation, ground water depletion and price situation of essential commodities in the state as on December 2012, has decided to declare the entire districts in Kerala as meteorologically drought affected as per the criteria enumerated under classification of drought – climate variability and drought declaration

in the National Disaster Management Authority guidelines and manual for Drought Management of the Ministry of Agriculture and Co operation, Government of India.

Based on the decision on the Kerala State Disaster Management Authority, all 14 districts in the state are declared as metrologically drought affected."

In this regard it should be noted that, small hydro projects are not the only source of renewable energy. There are wind energy projects and solar energy projects which can be implemented in the State. As per the existing regulations, there are separate RPOs for solar energy and non-solar energy. If the solar energy generated or purchased by the distribution licensee is in excess of its solar RPO, such excess solar energy generated or purchased can be accounted towards its non-solar RPO. During a low rainfall year the generation from small hydro projects would be lower when compared to the generation during high rain fall years. In the low rain fall year, the number of rainy days may be low. But the number of sunny days in low rainfall years would be more facilitating more solar generation. The situation relating to wind energy also may be similar. Therefore the generation of renewable energy from solar and wind energy sources need not necessarily be low in a low rain fall year. Further when the rain fall is considerably less in the State, the total hydel generation in the State will also be reduced and it may result in power cut and load shedding. In the event of power cut / load shedding, the total consumption will come down and correspondingly the RPO will also come down. The impact of all such eventualities can be assessed only based on the real facts and figures. Further there is no provision in the regulations to refix RPO based on low rain fall in any year.

21. The Commission had appraised the main prayer of the KSEB Ltd regarding 'the 'review the order dated 16.09.2015 in petition No. OP 20/2015 directing KSEB Ltd to either purchase RECs or deposit an amount of Rs 125 crore for meeting the shortfall in RPO for the years 2010-11, 2011-12, 2012-13 and 2013-14' and

- allow KSEB Ltd to use Rs 125.00 crore towards capital investment for renewable project under the overall monitoring of the Commission.
- 22. The Commission vide the notification No. 1517/CT/2010/KSERC dated 23rd November 2010 has notified the KSERC (Renewable Purchase Obligation and its Compliance Regulations, 2010. The Regulation-4 of the said regulation recognize the Renewable Energy Certificate issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as the valid instruments for the discharge of the mandatory obligations of RPO. The Regulation-4 is extracted below.

4. Certificates under the regulations of the Central Commission.-

(1) Subject to the terms and conditions in these regulations the Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 shall be the valid instruments for the discharge of the mandatory obligations set out in these Regulations for the obligated entities to purchase electricity from renewable energy sources.

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non solar certificates.

23. The 1st proviso to sub-regulation (2) to Regulation 6 of the RPO regulation-2010 provides for carry forward of compliance requirement to the next year in the case of genuine difficulty in complying the renewable purchase obligation because of non availability of REC. The relevant paragraph of the regulation is extracted below.

"Provided that in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to the next year.

Provided that where the Commission has consented to the carry forward of compliance requirement, the provision of clause (1) of the Regulation or the provision of section 142 of the Act shall not be invoked."

- 24. As per the information available in the public domain, as on 31-12-2015, the total non-solar REC available is 137 lakh (equivalent to 13699 MU) and the solar REC available is 30 lakh (equivalent to 2990 MU). Hence there was no situation of non-availability of RECs.
- 25. Regarding the implementation of the Renewable Energy Regulations notified by the State Commissions, the full bench of the Hon'ble Appellate Tribunal for Electricity vide its judgment dated 20th April-2015 in OP No. 1 of 2013 has ordered as follows.
 - 28. In view of above discussions, we deem it appropriate to give directions to the State/Joint Commissions with regard to implementation of Renewable Energy Regulations in their respective States. The Tribunal after considering the contentions of the petitioners and the State/Joint Commissions, Central Commission and MNRE gives the following directions to the State/Joint Commissions under Section 121 of the Act:-
 - (i) The State Commission shall decide the RPO targets before the commencement of the Multi Year Tariff period to give adequate time to the distribution licensees to plan and arrange procurement of renewable energy sources and enter into PPAs with the renewable energy project developers. The Preferential Tariff for procurement of renewable energy by the Distribution Licensee for a financial year should also be in place before the commencement of the financial year and no vacuum should be left between the end of control period for the previous tariff and the beginning of control period of the new tariff.
 - (ii) The State Commissions shall obtain proposal with supporting documents for renewable energy procurement by the distribution licensee as part of the tariff petition for the ensuing year/Annual Performance Review for the current year as per the RPO Regulations. Suggestion and objections of public shall be invited on the above petition. The State Commission may give necessary directions with regard to RPO after considering the suggestions and objections of the stakeholders. If the distribution licensee is not able

to tie up procurement of renewable energy to meet the RPO target, it may plan to purchase RECs to meet its RPO target as per the provisions of the Regulations. Advance planning of REC purchase will give opportunity to the distribution licensees/other obligated entities to purchase REC when the market conditions are more favourable to them.

(iii) The monitoring of compliance of the RPO should be carried out periodically as provided for in the Regulations. After the completion of the financial year the State Commission may review the performance of the distribution licensees in respect of RPO and give directions as per the Regulations.

Suggestions and objections of the public shall be invited in the review proceedings and decisions taken after considering the suggestions/objections, as per law.

- (iv) The State Commission shall give directions regarding, carry forward/review in RPO and consequential order for default of the distribution licensees/other obligated entities as per the RPO Regulations. If the Regulations recognise REC mechanism as a valid instrument to fulfill the RPO, the carry forward/review should be allowed strictly as per the provisions of the Regulations keeping in view of availability of REC. In this regard the findings of this Tribunal in Appeal no. 258 of 2013 and 21 of 2014 may be referred to which have been given with regard to RE Regulations of Gujarat Commission but the principles would apply in rem. In case of default in fulfilling of RPO by obligated entity, the penal provision as provided for in the Regulations should be exercised.
- (v) The State Commissions are bound by their own Regulations and they must act strictly in terms of their Regulations.
- (vi) The provisions in Regulations like power to relax and power to remove difficulty should be exercised judiciously under the exceptional circumstances, as per law and should not be used routinely to defeat the object and purpose of the Regulations.
 - 29. With the above directions, the above petitions are disposed of. The Registry is directed to send a copy of this Order to all the

Central and State/Joint Commissions, Secretary, Ministry of Power, Government of India and Secretary, Ministry of New and Renewable Energy, Government of India. However, the above directions will not be applicable to the issues where stay has been granted by the High Court or Hon'ble Supreme Court in the proceedings pending before such courts.

- 26. As extracted above, vide the paragraph 28(iv) of the above judgment, the Hon'ble APTEL has issued clear direction that, if the RPO regulation notified by the State Commission recognize REC mechanism as a valid instrument to fulfill the RPO, the carry forward / review should be allowed strictly as per the provisions of the Regulations keeping in view of the availability of REC. As discussed under paragraph-12 above, Regulation-4 of the KSERC (Renewable Purchase Obligation and its Compliance Regulations, 2010 recognizes the REC mechanism as a valid instrument for fulfilling the RPO.
- 27. Regarding the request of the KSEB Ltd to use Rs 125.00 crore towards capital investment for renewable energy projects under the overall monitoring of the Commission, this cannot be done as per the provisions in the KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010. The sub regulation (1) of regulation-6 of the KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 provides as follows.

6. Effect of default.-

(1) If the obligated entities does not fulfill the renewable purchase obligation as provided in these regulations during any year and also does not purchase the certificates, the Commission may direct the obligated entity to deposit into a separate fund, to be created and maintained by such obligated entity, such amount as the Commission may determine on the basis of the shortfall in units of RPO and the forbearance price decided by the Central Commission:

Provided that the <u>fund so created shall be utilised</u>, as may be directed by <u>the Commission</u>, for purchase of the certificates:

Provided further that the Commission may empower an officer of the State Agency to procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfillment of the obligations, out of the amount in the fund:

Provided also that the distribution licensee shall be in breach of its licence condition if it fails to deposit the amount directed by the Commission within 15 days of the communication of the direction.

As detailed above, as per the provisions in the KSERC (Renewable Purchase Obligation and its Compliance Regulations, 2010, the fund created by depositing the amount corresponds to shortfall in RPO determined by the Commission based on the forbearance price decided by the Central Commission, can be utilized only for the purpose of the purchase of the certificates and the same cannot be utilized as capital investment for renewable projects.

Further it has to be noted that the amount of Rs.125 crore to be deposited by the licensee as ordered by the Commission can be utilized for any purpose only after it is remitted by KSEB Ltd. Without depositing such amount it cannot be utilized even for the purposes mentioned by KSEB Ltd. It should also be noted that the capital investment of KSEB Ltd for the development of renewable energy cannot be accounted towards the amount to be deposited by it to compensate for the deficit in meeting the RPO. Therefore the claim of KSEB Ltd in this regard can only be viewed as an attempt in vein to camouflage its failure to comply with its RPO.

28. As per the order dated 16-09-2015 in OP No. 20/2015, the statement showing the shortfall in units of RPO and the amounts to be deposited into separate fund by KSEB Ltd for the period from 2010-11 to 2013-14 are given below.

Table-1. Amount to be deposited in a separate fund on account of short fall in RPO during the years 2011-12 to 2013-14

	Non- Solar Obligation			Solar Obligation			Grand total	
Year	Deficit	Forbearance	Amount to	Deficit	Forbearance	Amount to	amount to be	
		price	be remitted		price	be remitted	deposited	
	(MU)	(Rs/unit	(Rs.Cr)	(MU)	(Rs/unit	(Rs.Cr)	(Rs.Cr)	
(1)	(2)	(3)	(4)= (2) x (3)	(5)	(6)	(7)= (5) x(6)	(8) = (4)+(7)	
2010-11	Nil		Nil	Nil		Nil	Nil	
2011-12	27	3.90	11	Nil			11	
2012-13	135	3.30	45	Nil			45	
2013-14	38	3.30	13	43	13.40	57	70	
Total	200		68	43		57	125	

At the forbearance price prevalent during the respective years under consideration, the total amount arrived by the Commission for the non achievement of non-solar obligation is Rs 68.00 crore and the non achievement of the solar obligation is Rs 57.00 crore.

- 29. However, the Commission vide the order dated order dated 16-09-2015 in OP No. 20/2015 has given one more chance to KSEB Ltd to purchase non-solar and solar REC for the deficit of non-solar and solar RPO. The relevant portion of the said order is extracted below.
 - "(4) KSEB Ltd is granted one more chance to purchase the non-solar and solar renewable energy certificates for the deficit in non-solar RPO and in solar RPO for the years 2010-11, 2011-12 and 2012-13 as assessed in para 56 of this order and report compliance on or before 31.10.2015. Or else KSEB Ltd shall deposit the amount of Rs.125 crore in a separate fund, on account of its non-compliance of RPO during the years 2010-11, 2011-12 and 2012-13. It is also clarified that depositing such amount is not by way of penalty and it is only compensatory in nature as clarified by the Hon'ble Supreme Court."
- 30. As stated under paragraph 24 above, as on 31.12.2015, the total non-solar REC available is 137 lakh (equivalent to 13699 MU) and the solar REC available is 30 lakh (equivalent to 2990 MU). Further, at present the non-solar REC are transacted through exchanges at the floor price of Rs 1.50 per unit and the solar REC are transacted through the exchanges at the floor price of Rs 3.50 per unit. Hence, the amount required for purchasing the non-solar RECs and solar RECs for meeting the shortfall in RPO during the years 2011-12, 2012-13 and 2013-14 would only be about Rs. 45 crore. The details are given below.

Table-2
Amount required to purchase REC for meeting the shortfall in RPO during the years 2011-12 to 2013-14

	Non- Solar Obligation			Solar Obligation			
Year	Deficit	Floor price	Amount required to purchase REC	Deficit	Floor price	Amount required to purchase REC	Grand total amount required to purchase REC
	(MU)	(Rs/unit	(Rs.Cr)	(MU)	(Rs/unit	(Rs.Cr)	(Rs.Cr)
(1)	(2)	(3)	$(4)=(2) \times (3)$	(5)	(6)	(7)= (5) x(6)	(8) = (4)+(7)
2011-12	27	1.50	4	Nil			4
2012-13	135	1.50	20	Nil			20
2013-14	38	1.50	6	43	3.50	15	21
Total	200		30	43		15	45

- 31. As per the clause (e) of the subsection (1) of the Section 86 of the Electricity Act, 2003, the Commission is duty bound to promote generation from renewable energy sources. As per the judgment of the Hon'ble APTEL the Commission is bound by its own regulations and the SERCs should implement such regulations. Government of India and the Hon'ble APTEL had been repeatedly reviewing the compliance of Renewable Energy regulations by the distribution licensees and have expressed their serious concerns over the non-compliance of RPO by distribution licensees and over the passive attitude shown by SERCs over such non-compliance of RPO by the distribution licensees under their jurisdiction. Hence the Commission is duty bound to implement the regulations issued by it, relating to RPO and its compliance.
- 32. As per the KSERC (Renewable Energy) Regulation 2015, the renewable purchase obligation of KSEB Ltd is 5.0%, 5.5% and 6.0% of total energy sold to the consumers, respectively for the years 2016-17, 2017-18 and 2018-19. Out of the above, the minimum percentage of the solar RPO is 0.50%, 0.55% and 0.60% respectively for the years 2016-17, 2017-18 and 2018-19. The annual consumption during 2013-14, 2014-15 and 2015-16 are shown below,-

	Annual consumption (excluding consumption				
Year	by small licensees) (MU)				
2013-14	16931				
2014-15	17899				
2015-16	19095				

The compounded average rate of growth of consumption during the above three years is about 6.20%. At this rate of growth, the projected annual consumption for the year 2016-17, 2017-18 and 2018-19 would be 20279 MU, 21536 MU and 22871 MU respectively. The non-solar and solar RPO for these years are worked out as shown below,-

Financial year	Consumption	Non-solar RPO		Solar RPO	
	(MU)	%	MU	%	MU
2013-14	16931	3.58	606	0.25	42
2014-15	17899	3.85	689	0.28	49
2015-16	19095	4.50	859	0.45	86
2016-17	20279	5.00	1014	0.50	101
2017-18	21536	5.50	1184	0.55	118
2018-19	22871	6.00	1372	0.60	137

- 33. In the recent Paris Conference on Climate Change all the participating nations and International Organisations like UNO have resolved to limit the greenhouse gas emission to such an extent that the global warming will be below two degree centigrade over the pre-industrial global temperature. All the nations have been given option to declare their voluntary contribution towards this common cause. Our nation has committed before the international community of nations that India will increase generation of power from renewable energy sources to 1.7 lakh MW by 2022. Out of this, 1 lakh MW would be from solar sources. Out of this 1 lakh MW solar power 40000 MW has been targeted from solar roof top plants. The roof top targets for Kerala by 2022 is 800 MW.
- 34. In this regard it is most pertinent to invite the attention of all the obligated entities including the petitioner KSEB Ltd, to the notice published by Ministry of New and Renewable Energy (MNRE) Government of India in the leading national dailies, regarding the compliance of RPO and the accumulation of unsold RECs. In the

said notice published in The Hindu dated 22.03.2016, Government of India has requested all the obligated entities to choose the green path for a sustainable tomorrow and to be RPO compliant and be a proud contributor to a green future. The other relevant portions of the said notice is reproduced hereunder,-

"To all Distribution Companies, Captive Power Consumers and Open Access Consumers in India

- All Obligated Entities, as notified by respective State / Joint Electricity Regulatory Commission, are mandated to fulfil their respective Renewable Purchase Obligation (RPO) for each Financial Year by:
 - Utilizing Renewable Power from Own Generation / Third Party.
 - Buying Renewable Energy Certificates (RECs)
- All obligated entities must ensure necessary action for RPO compliance of FY 15-16 & previous FYs (if required) by 31st March 2016.
- In case you have not purchased enough renewable energy or RECs, you may do so by purchasing RECs through energy exchanges. Last trade session of the FY 2015-16 is scheduled on 30.03.2016.
- Non-Compliance will make it liable for penalty and actions under Sec. 142 of Electricity Act, 2003, and any penalty and actions as notified by respective SERC/JERC.
- Hon'ble Supreme Court in the case of Hindustan Zinc Ltd Vs Rajasthan Electricity Regulatory Commission (Civil Appeal No. 4417 of 2015) and Appellate Tribunal for Electricity in the case of Indian Wind Power Association Vs. Gujarat Electricity Regulatory Commission & others (Appeal No.258 of 2013) and Indian Wind Power Association & others Vs. Gujarat Electricity Regulatory Commission & others (Appeal No. 21 of 2014 & IA-28 of 2014) and in numerous SERC judgments, RPO compliance has been mandated.
- Unsold REC till date 17 Million.
- For more information refer to respective SERC/RPO Regulation."

The above notice is more than sufficient to indicate the policy of Government of India and the importance given to the development of renewable energy and compliance of RPO. Even without any compulsion from the Commission the obligated entities should volunteer to fulfil their responsibility and perform their duties for a green sustainable future.

35. KSEB Ltd has presented a rosy picture about the renewable energy projects which it is proposing to implement in the near future. Even if all such renewable energy projects are completed in time and can be put in operation as anticipated, the renewable energy generated would only be sufficient to meet the RPO of KSEB Ltd in the corresponding future years. Therefore there is no justification in the postponement of the deficit in RPO for the years 2011-12, 2012-13 and 2013-14 for compliance in future years. Further such postponement will not be in the interest of KSEB Ltd and in the interest of development of renewable energy as a whole. Due to the reluctance of the distribution licensees to purchase RECs, there is huge accumulated back log of RECs in the market and therefore RECs can be readily purchased at floor price. KSEB Ltd would be able to meet its deficit in RPO for the three years, by purchasing RECs at floor price which would cost only Rs.45 crore (as shown in the paragraph 30 of this order) against Rs.125 crore at forbearance price. If KSEB Ltd purchases RECs worth Rs.15 crore in each year at floor price during next three years, it can meet its deficit without much difficulty. In view of the financial difficulties as well as the facts and circumstances explained by KSEB Ltd the Commission hereby decides to keep in abeyance the implementation of its order dated 16.09.2015. In OP No 20/2015 for a period upto 31.05.2016, subject to the condition that KSEB Ltd shall purchase REC for Rs.15 crore before the said date and submit the details to the Commission. If the order is not complied with on or before 31.05.2016, the order of this Commission issued on 16.9.2015 in OP No. 20/2015 shall automatically stand revived and shall become operative. If KSEB Ltd purchases the RECs worth Rs.15 crore and submits to the Commission the details of such purchase, the Commission will give further directions relating to the steps to be taken to make up for the balance deficit in RPO during the years 2011-12, 2012-13 and 2013-14.

Order of the Commission

- 36. (i) In view of the facts and circumstances explained above, the Commission hereby decides to keep in abeyance the implementation of the order dated 16.09.2015 in OP No. 20/2015 for a period upto 31.05.2016 subject to the condition that KSEB Ltd shall purchase REC for Rs.15 crore before the said date and submit the details to the Commission.
 - (ii) KSEB Ltd shall purchase REC for Rs.15 crore and submit to the Commission, the details of such purchase on or before 31.05.216.
 - (iii) If KSEB Ltd fails to purchase REC worth Rs.15 crore and submit the details of such purchase to the Commission, on or before 31.05.2016, the order of this Commission issued on 16.09.2015 in OP No. 20/2015 shall automatically stand revived and shall become operative.
 - (iv) If KSEB Ltd purchases the RECs worth Rs.15 crore and submits to the Commission the details of such purchase, the Commission will give further directions relating to the steps to be taken to make up for the balance deficit in RPO during the years 2011-12, 2012-13 and 2013-14.

The petition disposed of and ordered accordingly.

Sd/- Sd/- Sd/
K.Vikraman Nair S Venugopal T.M. Manoharan

Member Member Chairman

Approved for issue

Santhosh Kumar.K.B Secretary