

**Before the Appellate Tribunal for Electricity
(Appellate Jurisdiction)**

Appeal No. 258 of 2013
&
Appeal No. 21 of 2014 & IA-28 of 2014

Dated : 16th April, 2015

**Present: Hon'ble Mrs. Justice Ranjana P. Desai, Chairperson
Hon'ble Mr. Rakesh Nath, Technical Member**

Appeal No. 258 of 2013

In the matter of :

**Indian Wind Power Association,
A-509-511, Atma House,
Opp. La-Gajjar Chamber,
Ashram Road, Ahmedabad-380009.**

.....Appellant

Versus

- 1. Gujarat Electricity Regulatory Commission
6th Floor, GIFT ONE,
Road 5C, Zone 5, GIFT City,
Gandhinagar-382355,
Gujarat, India**
- 2. Gujarat Urja Vikas Nigam Ltd. (GUVNL),
Sardar Patel Vidyut Bhavan,
Race Course, Vadodara-390007.**
- 3. Madhya Gujarat Vij Company Limited (MGVCL),
Sardar Patel Vidyut Bhawan,
Race Course Circle, Vadodara-390007.**
- 4. Uttar Gujarat Vij, Company Limited (UGVCL),
Corporate Office, Mehsana-Visnagar Highway,
Mehsana-384001.**
- 5. Paschim Gujarat Vij Company Limited (PGVCL),
Nanamava Road, Laxminagar,
Rajkot-360004.**

6. **Dakshin Gujarat Vij Company Limited (DGVCL)
Kapodara Char Rasta,
Surat-395006.**
7. **Gujarat Energy Development Agency,
4th Floor, Block No.11 &12,
Udyog Bhavan, Sector-11,
Gandhinagar-382017.**
8. **MPSEZ Utilities Pvt. Ltd.,
Adani House,
Near Mithakhali Circle,
Navrangpura, Ahmedabad-380009.**
9. **Kandla Port Trust,
Business Development Cell,
P.O. Box No.50, Administrative Cell,
Gandhidham, Kutch-370201.**
10. **M/s. Aspen Infrastructure Ltd.,
Survey No. 26, Village Pipaliya,
Taluka Waghodia,
Distt. Vadodara-391760 (Gujarat).**
11. **Jubilant Infrastructure Pvt. Ltd.,
Plot No.5, Vilayat GIDC,
Vagra, Bharuch-390012.**
12. **Torrent Power Limited-Ahmedabad,
Electricity House, Lal Darwaja,
Ahmedabad-380009.**
13. **Torrent Power Limited,
“Torrent House”,
Station Road, Surat-395003.**
14. **Torrent Energy Limited,
Electricity House, Lal Darwaja,
Ahmedabad-380009.**
15. **Indian Wind Energy Association,
PHD House, 3rd Floor, Asian Games Village,
August Kranti Marg,
New Delhi-110049.**

.....Respondents

Counsel for the Appellant(s) : Mr. Vishal Gupta
Mr. Kumar Mihir

Counsel for the Respondent(s) : Ms. Suparna Srivastava,
Mr. S.R. Pandey, (Rep.),
Mr. S.T. Anada (Rep.) and
Ms. Nishtha Sikroria for R-1

Mr. M.G. Ramachandran,
Mr. Anand K. Ganesan,
Ms. Swapna Seshadri,
Ms. Anushree Bardhan,
Ms. Poorva Saigal and for R-3 to R-6 &
R-12 to R-14

Appeal No. 21 of 2014 & IA-28 of 2014

In the matter of:

1. **India Wind Power Association,
PHD House, 3rd Floor,
Opp. Asian Games Village,
August Kranti Marg,
New Delhi-110016.**
2. **Green Energy Association,
Sagam Retailers Pvt. Ltd.,
Taqdir Terrace, Shop No. 4, 5, 6,
Plot No.143, Dr. E Borjes Road,
Near Shirodkar High School, Parel,
Mumbai-400012.**
3. **Indian Wind Turbine Manufacturers' Association,
Suite No.A2, OPG Towers, 74 (Old No.133),
Santhome High Road,
Chennai-600004.**

.....Appellants

Versus

1. **Gujarat Electricity Regulatory Commission,
1st Floor, Neptune Tower, Opp. Nehru Bridge,
Ashram Road, Ahmedabad-380009.**
2. **Gujarat Energy Development Agency,
4th Floor, Block No. 11 & 12,
Udyog Bhavan, Sector-11,**

- 3. Gandhinagar-382017.
Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhavan,
Race Course Circle,
Vadodara-390007.**
- 4. Madhya Gujarat Vij Co. Ltd.,
Sardar Patel Vidyut Bhavan,
Race Course Circle,
Vadodara-390007.**
- 5. Dakshin Gujarat Vig. Co. Ltd.,
Kapodara Char Rasta,
Surat-395006.**
- 6. Uttar Gujarat Vij Co. Ltd.,
Corporate Office,
Mehsana – Visnagar Highway,
Mehsana-3894001.**
- 7. Paschim Gujarat Vij Co. Ltd.,
Nanamava Road, Laxminagar,
Rajkot-360004.**
- 8. Torrent Power Ltd. Ahmedabad,
Torrent House, Off Ashram Road,
Ahmedabad-380009.**
- 9. Torrent Power Ltd. Surat,
Electricity House,
Station Road, Surat-395003.**
- 10. Kandla Port Trust,
Nisomess Development Cell,
P.O. Box No. 50,
Administrative Building,
Gandhidham, Kutch-370201.**
- 11. MPSEZ Utilities Pvt. Ltd.,
Adani House,
Near Mithakhali Circle,
Navrangpura, Ahmedabad-380009.**
- 12. M/s. Jubilant Infrastructure Pvt. Ltd.,
24-25/39-40, 1st Floor,
Shri Rang Palace, Rang Multiplex,**

Zadeshwar Road, Bharuch-392012.

13. **M/s. Aspen Infrastructure Ltd.,
Survey No. 26, Village Pipaliya,
Taluka Waghodia,
Distt. Vadodara-391760 (Gujarat).**
14. **M/s. Torrent Energy Ltd.
Dahej SEZ, Dahej-392130.**

.....Respondents

Counsel for the Appellant(s) : Mr. Sanjay Sen, Sr. Adv.
Ms. Shikha Ohri
Ms. Ruth Elwin
Ms. Meghana Aggarwal
Mr. Hemant Singh
Mr. Matrugupta Mishra
Mr. Tusar Nagar
Ms. Ruth Elwin

Counsel for the Respondent(s) : Ms. Suparna Srivastava,
Mr. S.R. Pandey, (Rep.),
Mr. S.T. Anada (Rep.) and
Ms. Nishtha Sikroria for R-1

Mr. M.G. Ramachandran,
Mr. Anand K. Ganesan,
Ms. Swapna Seshadri,
Ms. Anushree Bardhan,
Ms. Mandakini Ghosh and
Ms. Swagatika Sahoo for R-3 to R-9
& R-14

JUDGMENT

Rakesh Nath, Technical Member

Appeal No. 258 of 2013 has been filed by Indian Wind Power Association challenging the order dated 8.8.2013 passed by the Gujarat Electricity Regulatory Commission ("State Commission") in the petitions filed by the Respondent distribution licensee whereby the State Commission has waived the

shortfall in meeting the Renewable Purchase Obligation (“RPO”) by the distribution licensees for FY 2012-13. Appeal No. 21 of 2014 has filed by Indian Wind Energy Association & others challenging the same impugned order on the same grounds.

2. The Appellants are associations representing the interest of various stakeholders in wind energy sector. The Respondent No. 1 is the State Commission. The other Respondents are the Gujarat Energy Development Agency, GUVNL and the distribution licensees/deemed distribution licensees in the State of Gujarat.
3. The brief facts of the case are as under:-
 - (a) The State Commission notified the Renewable Energy Regulations, 2010 (“RE Regulations”) specifying the minimum quantum of purchase from renewable energy (“RE”) sources to be fulfilled by the obligated entities in FYs 2010-11 to 2012-13.
 - (b) The State Commission by order dated 17.8.2012 permitted the distribution licensees to carry forward their RPO of FY 2011-12 to FY 2012-13. An appeal was filed against this order dated 17.8.2012 before this Tribunal by the Wind Energy Project developers. The Tribunal by Judgment dated 25.4.2014 partly allowed the appeal and gave some directions to the State Commission to be followed in future.
 - (c) In the meantime, GUVNL which is responsible for procurement of power for the four State distribution licensees, filed a petition before the State Commission under Regulation 4.2 of the RE Regulations, seeking waiver of the shortfall in meeting the RPO by its distribution licensees in FY

2012-13. Similar petition was filed by Torrent Power Ltd., Ahmedabad and Surat, the distribution licensee, seeking revision of RPO in view of supply constraints and other factors beyond the control of the licensee.

- (d) No public notice was issued in the proceedings. However, Indian Wind Energy Association (Appellant No. 1 in Appeal No. 21 of 2014) and Indian Wind Power Association (Appellant in Appeal No 258 of 2013) upon becoming aware of the aforesaid proceedings participated in the proceedings and furnished their suggestions and objections.
 - (e) The State Commission passed the impugned order dated 8.8.2013 revising/exempting the RPO of the obligated entities of the State for FY 2012-13 by exercising its powers under Regulation 4.2 and 12.1 of the RE Regulations.
 - (f) Aggrieved by the impugned order dated 8.8.2013 revising/exempting the RPO of the distribution licensees, the Appellants have filed these Appeals.
4. The Appellants have made the following submissions:
- (a) The State Commission erred in holding that REC mechanism was evolved only to enable the States not having renewable energy potential to fulfill their RPO through the purchase of RECs generated in the resource rich States.
 - (b) The State Commission wrongly waived the shortfall in RPO and revised the same at actual contrary to its own Regulations and the judgment of this Tribunal dated 25.4.2014.

- (c) The State Commission only has the power to carry forward the RPO in case of genuine difficulty being either non-availability of power from renewable energy source or non-availability of RECs and in the absence of both these difficulties, there was no reason for the State Commission to waive the shortfall.
- (d) The State Commission is not empowered to revise the RPO in terms of Regulation 4.2 as this Regulation only deals with revision in the percentage targets for a year at the beginning of the year and not at the end of the year as otherwise there will be inconsistency between Regulation 4.2 and Regulation 9.1 and the 5th proviso thereof dealing with default on the part of the obligated entities. Even otherwise, Regulation 4.2 can be invoked only in case of supply constraints or other factors beyond the control of the licensee. In the present case, as RECs were available, the RPO compliance was not beyond the control of the obligated entities. Revision of RPO after the expiry of the year amounts to waiver of the default on the part of the distribution licensees.
- (e) It is not correct that the Wind Energy Generators are selling power under captive and open access mode and are having windfall gain from such transactions. Significant capacity has been added under the preferential tariff mode in the State.
- (f) The State Commission has ignored the fact that GUVNL was not willing to enter into PPAs at the revised preferential tariff during the pendency of the review petitions against the said order dated 8.8.2012 and was insisting

on signing PPAs at preferential tariff of the previous control period i.e. as per order no. 1 of 2010 dated 30.1.2010 which was not existing at that point of time and was not a valid tariff.

- (g) The State Commission has erroneously adjusted the excess purchase of solar energy by the distribution licensees to fulfill the non-solar RPO. This is contrary to Regulation 4.1 which only provides for adjustment of excess wind or other energy in the event minimum quantum of solar or other renewable energy is not available in a particular year and not vice versa.
 - (h) Exercise of power to remove difficulty by the State Commission under Regulation 12.1 is wrong as the Regulation 12.1 does not vest judicial powers. This power can be exercised only if there is problem in implementation of a Regulation.
5. In reply, the Respondent GUVNL and the distribution licensees have made the following submissions:-
- (a) The definition of “Renewable Energy Sources” in the RE Regulations is restrictive in nature and does not cover instruments such as REC. Accordingly, the term “Renewable Energy Sources” used in various provisions of the RE Regulations, 2010 has to be given the restrictive meaning ascribed to it in the definition. The renewable energy sources as statutorily defined can encompass only the physical sources of energy within its scope. RPO specified in Regulation 4.1 only imposed obligation to purchase physical renewable energy and does not impose any

obligation in regard to REC. Therefore, the State Commission does not need to consider the availability of REC before exercising the power to revise the targets under Regulation 4.2 read with Regulation 4.1.

- (b) RPO targets are fixed in advance based on expected level of availability of renewable power. Thus, the quantum is fixed not on the basis of any firm concluded long term power generation that would be available. The actual availability of renewable power is subject to vagaries of any kind. The developer may sell power to third parties and many of the renewable projects may be established for captive use. These events are totally outside the control of the distribution licensee. It will be counter productive to insist on the State Commission not to revise the target and force the distribution licensee to purchase REC, as this would lead to the State Commission deciding on the target in future in a conservative manner.
- (c) In the facts and circumstances of the case, the State Commission has duly exercised its discretion to revise the targets for reasons recorded which is in accordance with law.
- (d) The State Commission which has the absolute discretion to determine the quantum of RPO in terms of Section 86(1)(e) of the Electricity Act, 2003 will have the full discretion to revise the targets based on actual unfolding of circumstances.
- (e) Section 86 (1) (e) of the Act also refers to purchase of renewable energy from projects being set up and does not make any reference to REC which has been provided as an enabling provision/promotional

mechanism under section 66 of the Act under developmental of power market. RPO is always fixed with reference to the potential of renewable sources of energy available in the State and not with reference to REC that may be outstanding or available. The primary objective of the State is to promote establishment of renewable energy sources and procurement of renewable energy by distribution licensee at the promotional tariff. The purchase of REC which is not electrical energy in physical form is not envisaged as an obligation under Section 86(1) (e) and it can not be imposed on the obligated entities. REC has been only provided as a mitigating mechanism which can be purchased as per the choice of the obligated entity.

- (f) It was expected that wind power developers would establish significant quantum of renewable energy projects and offer wind power to the distribution licensee at the promotional tariff. The default or failure can be attributed to the distribution licensees if the developers were offering wind power at the promotional tariff but the distribution licensee declined to purchase the same. The distribution licensees can not be placed at a precarious and impossible situation that the wind power developers will establish the projects but will not offer wind power for sale to the distribution licensee and sell power in open access thereby benefitting by recovering tariff in excess of pooled Power Purchase Cost and also claiming REC and demand the distribution licensees to purchase REC to fulfill their RPO.

- (g) The scheme of the RE Regulation, 2010 is to provide an obligation on the distribution licensee to purchase electricity from renewable energy sources as per Regulation 4 (1) and give estimate, etc. as per Regulation 7 (1) and face the consequences of default in procuring electricity from such sources despite availability as provided in Regulation 7 (2) read with Regulation 9. The distribution licensee can, however, mitigate the default or discharge the obligations by alternate sources of procuring REC as per Regulation 5 read with Regulation 9(1). Further Regulation 9(1) is also discretionary.
 - (h) The validity of adjusting excess solar energy against shortfall in wind power RPO stands settled by the decision of the Tribunal in Appeal No. 24 of 2013.
 - (i) There is no infirmity in the reasoning of the State Commission in waiving RPO for SEZ licensees as the SEZs cannot be expected to comply with RPOs at such high cost when they need to operate in absolutely tight and competitive margins.
6. Elaborate submissions have been made by Mr. Sanjay Sen, Learned Senior Counsel and Mr. Vishal Gupta, Learned Counsel for the Appellants, Shri M.G. Ramachandran and Shri Anand K. Ganesan, Learned Counsel for the GUVNL and distribution licensee and deemed distribution licenses and Mrs. Suparna Srivastava, Learned Counsel for the State Commission. They have also filed detailed written submissions. Ms. Suparna Srivastava has made detailed submissions in support of the impugned order. She also refuted the submissions

made by the distribution licensee that Section 86 (1) (e) of the Electricity Act mandates purchase of renewable energy and REC which is not physical energy is neither envisaged as obligation under Section 86 (1) (e) nor can it be imposed as such upon the obligated entities.

7. On the basis of the rival contentions of the parties, the following questions would arise for our consideration:

- (i) Whether the State Commission has erred in waiving the shortfall in Renewable Purchase Obligation for FY 2012-13 on account of lower capacity addition and unwillingness of the wind energy developers to supply electricity to the distribution licensee at preferential tariff determined by the Commission?**
- (ii) Whether the State Commission has erred in waiving the shortfall in Renewable Purchase Obligation for wind and other energy sources despite the availability of Renewable Energy Certificates for wind energy?**
- (iii) Whether the obligation cast upon the obligated entities under Section 86 (1) (e) of the Electricity Act, 2003 read with Tariff Policy is to purchase mandatory minimum prescribed electricity from RE sources and the purchase of REC which is not renewable energy in physical form is neither envisaged as an obligation under Section 86 (1) (e) nor can be imposed as such upon the obligated entities?**
- (iv) Whether the Renewable Energy Certificates have been introduced only for obligated entities in the States which do not have adequate**

potential for renewable energy generation and the obligated entities in the States such as Gujarat having high potential for generation of renewable energy, have to fulfill RPO by procurement of physical renewable energy and for them REC is only a mitigating measure to be purchased at the option of the obligated entities?

(v) Whether the State Commission was justified in adjusting the excess solar energy purchased over the specified Solar RPO by the distribution licensee to set off the shortfall in fulfillment of non-solar power purchase obligation?

(vi) Whether the State Commission has erred in not giving public notice in the proceedings for review of compliance of RPO obligation of the distribution licensees?

8. The first four issues are interconnected and, therefore, being dealt with together.

9. **Let us first examine the relevant findings in the impugned order dated 8.8.2013 passed in Petitions filed by the distribution licensees/deemed distribution licensees for revision of minimum percentage of purchase of energy from renewable sources for FY 2012-13 under the Renewable Energy Regulation, 2010 on the basis of supply constraints and reasons beyond the control of the distribution licensees.**

10. The findings of the State Commission are summarized as under:

- (a) Non-compliance of RPO for FY 2011-12 and 2012-13 was on account of renewable energy supply constraints. Wind energy generators did not come forward to sign PPA under the preferential tariff and they insisted on signing PPAs under the REC mechanism to sell electricity at Average Power Purchase Cost ("APPC rate"). GUVNL had not denied to sign the PPAs under preferential tariff. Thus, there is force in submissions made by GUVNL and Torrent Power Ltd. that no wind energy generator came forward to sign the PPA at preferential tariff with the distribution licensee.
- (b) Wind energy generators were able to sign PPAs with the distribution licensees from April, 2012 to August, 2012. However, no PPA had been signed by any wind energy generators with GUVNL or Torrent Power to sell electricity at preferential tariff after order no. 2 of 2012 dated 8.8.2012 regarding determination of wind energy tariff. During the hearing of review petition of the tariff order, GUVNL had expressed its willingness to sign the PPA with the wind energy project developers provisionally at the tariff decided in earlier order i.e. order no. 1 of 2010 dated 30.1.2010, subject to final decision of the Commission in the review petition. However, no wind energy generator approached the distribution licensees for signing the PPA.
- (c) Wind energy capacity set up during FY 2012-13 is quite low in comparison of capacity addition during the FYs 2010-11 and 2011-

12. Only 207 MW wind capacity was added in Gujarat during FY 2012-13 as against 790 MW during FY 2011-12.

- (d) GUVNL tied up 425 MW capacity with wind energy developers of which only 122 MW was commissioned during 2012-13 that too during the last quarter of FY 2012-13 and balance 303 MW spilled over to the ensuing year 2013-14. It is, therefore, incorrect to say that GUVNL has not tried to procure wind energy during FY 2012-13.
- (e) Torrent Power Ltd. also could not procure adequate wind energy due to the reasons that addition in wind energy generation capacity was quite low in comparison of earlier years and no wind energy generator came forward to enter into PPA at preferential tariff. Further, the power procurement of the distribution licensee also increased resulting in increase in the RPO.
- (f) Thus, GUVNL and Torrent Power were unable to comply with RPO for FY 2012-13 due to insufficient availability of wind energy generation and unwillingness of the generators to sell energy at preferential tariff to them.
- (g) GUVNL has procured 537 MU of solar Energy in excess of its RPO during FY 2012-13. Power Purchase Cost of solar power is much higher than Power Purchase Cost for other sources of renewable energy. Hence, if the excess energy purchased by GUVNL for

solar projects is not allowed to compensate for shortfall in non-solar RPO, then the licensees will be burdened with the financial cost.

- (h) Regulation 4.1 provides that in case of non-availability of solar energy generation, the shortfall of such energy may be compensated through energy generation available from wind and other sources. The said Regulation is silent about the excess energy purchased from solar. The Commission therefore decided that the excess solar energy procured may be allowed for fulfillment of RPO of wind and other sources.
- (i) Regulation 12.1 provides the Commission inherent powers to interpret, add, amend and make modification in the Regulations by giving sufficient reasons.
- (j) Even though RECs were available in the market, the purchase of REC is a commercial decision and management decision of the licensees and the Commission cannot interfere in such decision.
- (k) The Renewable Energy Certificate was initiated to sort out the issues arising out of uneven distribution of renewable sources in the country. It was visualized that States not having renewable potential can fulfill their RPO through purchase of RECs generated in resources rich States. However, Gujarat has high potential of wind and solar energy generation. But distribution licensees could not fulfill the non-solar RPO due to lower capacity addition and unwillingness of wind generators to supply electricity at preferential

tariff. Under such conditions, procurement of REC would unjustifiably burden the consumers of the State.

- (l) There was shortfall to the tune of 1.9% in case of GUVNL and 2.21% in case of Torrent Power. Any carry forward of the same would add to the burden of the licensees and consumers. In view of the above, it is decided to revise RPO for FY 2012-13 at actuals for the year as a special case.
- (m) MP SEZ Utilities Pvt. Ltd., Torrent Energy Ltd. (Dahej SEZ) and Kandla Port are at the nascent stage of operation in their licence area and their RPO quantum is also very low, therefore, it was decided to exempt these licensees from applicability of RPO for FY 2012-13.
- (n) Jubilant Information Pvt. Ltd. and M/s. Synefra Engineering & Construction Ltd. are procuring power from the distribution licensees and Kandla Port is procuring power from GUVNL as consumers at retail supply tariff. The quantum of power procured by these licensees is considered for fulfillment of RPO percentage of the distribution licensees. Hence, any further imposition of RPO on these deemed distribution licensees will lead to double counting of RPO percentage. Therefore, these deemed licensees are exempted from RPO obligation till they continue to procure power from other distribution licensees as consumers.

11. Thus, the State Commission by exercising its inherent power under Regulation 12.1 decided to revise the RPO for FY 2012-13 at actuals for the distribution licensees supplied power by GUVNL and for Torrent Power, Ahmedabad and Surat mainly due to unwillingness of wind energy generators to sell at preferential tariff and inadequate capacity addition. The Commission felt that any carry forward of shortfall in RPO for FY 2012-13 would burden the consumers. The commission also set off part of shortfall of non-solar RPO by the excess solar energy procured by GUVNL. For SEZs (deemed licensees), the State Commission exempted the applicability of RPO for FY 2012-13 as they were in the nascent stage. For some other deemed licensees who were procuring power only from the State distribution licensees/GUVNL at retail supply tariff, the State Commission exempted them from RPO obligation as their consumption was already included in the RPOs of the distribution licensees. The Commission also felt that purchase of REC is a commercial decision of the distribution licensees and the Commission cannot interfere in the same. REC mechanism is meant for fulfilling the RPO of the States who do not have renewable energy potential whereas Gujarat has very high potential of wind and solar energy. The distribution licensees could not fulfill the RPO due to unwillingness of wind generators to supply electricity at preferential tariff. The Commission felt that under such circumstances procurement of REC would unjustifiably burden the consumers of the State.

12. **Let us examine the provisions of the Electricity Act, 2003, National Electricity Policy and Tariff Policy relating to promotion of renewable energy.**
13. The State Commission under Section 61 of the Electricity Act has to specify the terms and conditions for determination of tariff and in doing so is to be guided by inter-alia promotion of co-generation and generation of electricity from renewable sources of energy.
14. Section 86 stipulates the functions of the State Commission. Under Section 86 (1) (e), the State Commission has to promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify for purchase of electricity from such sources, a percentage of total consumption of electricity in the area of distribution licensee.
15. The National Electricity Policy issued by the Central Government under Section-3 of the Act provides that the State Commission shall specify for purchase of electricity from non-conventional sources of energy a percentage of the total consumption of electricity in the area of a distribution licensee. The share of electricity for non-conventional sources would need to be increased as prescribed by the State Commission. Considering the fact that it will take some time before non-conventional technologies compete, in terms of cost, with conventional sources, the Commission may determine an appropriate differential in prices to promote these technologies.

16. National Tariff Policy notified by the Central Government under Section 3 of the Act stipulates that the Appropriate Commission shall fix a minimum percentage for purchase of energy from non-conventional energy sources taking into account the availability of such sources in the region and its impact on retail supply tariffs. Further, it will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.

17. The Tariff Policy was amended on 20.01.2011 as under :

“6.4. Non-conventional and Renewable sources of energy generation including Co-generation:-

(1) Pursuant to provision 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 distribution licensee for purchase of energy from such sources, taking into account availability of such resources in the region and its impact on retail tariffs. Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.

(i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification in the official gazette which will go up to 0.25% by the end of 2012-13 and further up to 3% by 2022.

(ii) It is desirable that the purchase of energy from non-conventional sources of energy takes place more or less in the same proportion in different states. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as renewable energy certificates (REC) would need to be evolved. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensees at the rates for conventional power and can recover the balance cost by selling such certificates to other distribution companies and obligated entities enabling latter to meet their renewable power purchase obligation. In view of the comparatively higher cost of the electricity from solar energy currently, the REC mechanism should also have a solar specific REC.

- (iii) *It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.”*

18. The following position emerges from the amended Tariff Policy:

- (a) The State Commission shall fix the RPO taking into account the availability of such sources in the region and its impact on retail supply tariffs.
- (b) Within the above RPO, the State Commission shall also reserve a minimum percentage of purchase from the solar energy which will go up to 0.25% by the end of 2012-13 and further upto 3% by 2022.
- (c) It is desirable to have purchase of energy for renewable sources more or less in same proportion in different States. As the renewable sources are not evenly distributed and available only in certain parts of the country, an appropriate mechanism such as REC is required to be evolved. Through such mechanism, the renewable energy generators can sell electricity to the local distribution licensee at the rates of conventional energy and recover the balance cost by selling the REC to other distribution licensees/obligated entities to meet their RPO.

19. The Tariff Policy provides for evolving of mechanism such as Renewable Energy Certificate to achieve the objective of development of renewable energy sources in a resource rich State more than that required for meeting the RPO of the State. The Renewable Energy Generators can sell electricity to local distribution licensees at conventional energy rate and recover the balance cost by selling REC to other distribution licensees and obligated entities to meet their RPO.

Therefore, under REC mechanism, the local distribution licensee can physically consume power from all such renewable energy sources over and above its own RPO at a tariff applicable for conventional power.

20. **Let us now examine the Central Commission's REC Regulations, 2010.**

- (a) These Regulations have been issued by the Central Commission under Section 178(1) and Section 66 read with clause (y) of sub-section (2) of section 178 of the Electricity Act. Section 66 provides that the Appropriate Commission shall endeavor to promote the development of market (including trading) in power in such manner as may be specified and shall be guided by the National Electricity Policy. Section 178 is relating to the power of Central Commission to make Regulations.
- (b) 'Renewable Energy Sources' are defined as renewable sources such as small hydro, wind, solar including its integration with combined cycle, biomass, bio-fuel cogeneration, urban or municipal waste and such other sources as recognized or approved by the Ministry of New and Renewable Energy.
- (c) There are two categories of certificates viz. Solar Certificates issued to eligible entities for generation of electricity based on solar and non-solar certificates issued to eligible entities for generation of electricity based on renewable energy sources other than solar. The solar certificates shall be sold to the obligated entities to meet their solar RPO and non-solar certificate shall be sold to the obligated entities to meet their non-solar RPO.

- (d) Under Regulation 5, generating company engaged in generation of electricity for renewable energy sources shall be eligible to apply for registration for issuance of REC if it fulfills the following conditions:-
- i) it has obtained accreditation from the State Agency;
 - ii) it does not have a PPA for the capacity related to such generation to sell electricity at preferential tariff determined by the Appropriate Commission
 - iii) it sells electricity either (i) to the local distribution licensee at a price not exceeding the pooled power purchase price of all sources excluding renewable energy sources of such distribution licensee, or (ii) to any other licensee or to an open access consumer at mutually agreed price or through power exchange at market determined price. Captive power plants based on renewable energy sources are also eligible for REC subject to certain conditions.
- (e) The price of REC shall be discovered in the Power Exchange. However, the Central Commission may provide for a floor price and a forbearance price (ceiling price) separately for solar and non-solar certificates.
21. It would be useful to examine the Statement of Object and Reasons of the Central Commission's REC Regulations, 2010. The concept of REC seeks to address the mismatch between availability of renewable energy sources and requirement of obligated entities to meet their RPO. The REC mechanism aims at promoting investment in the renewable energy projects and to provide an

alternative mode to the RE generators for recovery of their costs. It is indicated that the Forum of Regulators had deliberated on this concept in detail and evolved framework for implementation of this mechanism. The Forum of Regulators felt that it would be necessary for both the Central Commission and the State Commissions to frame suitable Regulations for giving effect to the REC framework.

22. The salient features of REC mechanism as described in the Statement of Object and Reasons of Central Commission's Regulations are:

- REC mechanism is a market based instrument to promote renewable energy and facilitate RPO.
- REC mechanism is aimed at addressing the mismatch between availability of RE resources in State and the requirement of the obligated entities to meet the RPO.
- Cost of electricity generation for renewable energy source is clarified as cost of electricity generation equivalent to conventional energy sources and the cost of environmental attributes.
- RE generators will have two option i) either to sell the renewable energy at preferential tariff or ii) to sell electricity generation and environment attributes associated with RE generation separately. The RE generator can also sell electricity generation to third parties or use for captive consumption.
- The environmental attributes can be exchanged in the form of REC.
- REC will be issued to RE generator for 1 MWh of electricity injected into the grid from RE source.

- REC would be issued to RE generators only.
- REC could be purchased by the obligated entities to meet their RPO under Section 86(1) (e) of the Act. **Purchase of REC would be deemed as purchase of renewable energy for RPO compliance.**
- State Commission to recognize REC as valid instrument for RPO compliance.
- State Commission to designate State Agency for accreditation for RPO compliance and REC mechanism at State level.
- REC would be exchanged only in power exchange approved by the Central Commission.
- Price of electricity component of RE generation would be equivalent to the weighted average for purchase cost of the distribution licensee including short term power purchase but excluding renewable power purchase.
- REC would be exchanged within the forbearance price and floor price as determined by the Central Commission in consultation with central agency and Forum of Regulators from time to time.
- In case of default, State Commission may direct obligated entity to deposit into a separate fund to purchase the shortfall of REC at forbearance price.
- However, in case of genuine difficulty in complying with the RPO because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to in the next year.

23. **Let us now examine the findings of this Tribunal in Judgment dated 24.4.2014 in Appeal No. 24 of 2013 in the matter of Indian Wind Energy Association Vs. Gujarat Electricity Regulatory Commission & Ors.**
24. In that case the State Commission had revised the RPO for FY 2010-11 and carried forward the non-solar RPO for FY 2011-12 to FY 2012-13. The excess solar energy over the specified solar RPO was also adjusted against the shortfall in non-solar RPO. The order was challenged by the Association of Wind Energy Developers before this Tribunal.
25. In the Appeal No. 24 of 2013, the scheme of RPO under the RPO Regulations, 2010 as applicable to the distribution licensee has been summarized as under:
- i) *The distribution licensees shall purchase electricity from renewable energy sources at a specified minimum percentage of total consumption of consumers including T&D loss during a year.*
 - ii) *The minimum quantum energy in percentage from Wind, Solar, Biomass/bagasse & others and the total percentage for FYs 2010-11, 2011-12 & 2012-13 have been specified in the Regulations. In case minimum quantity of energy from solar and other renewable energy sources is not available in a particular year, then the shortfall can be made good by utilizing additional energy from wind or other energy sources.*
 - iii) *The State Commission has power to revise the percentage targets for a year keeping in view supply constraints or other factors beyond the control of the licensee suo motu or on request by the licensee.*
 - iv) *Renewable Energy Certificate shall be the valid instrument for discharge of mandatory Renewable Purchase obligations set out in the Regulations.*
 - v) *Purchase of non-solar certificate shall be utilized for meeting obligation from renewable energy other than solar and solar certificate shall be used for meeting the solar obligation. Only if solar certificates are not available in a particular year then additional non-solar certificates can be purchased for fulfillment of the specified Solar RPO.*

- vi) *Each distribution licensee shall indicate with proof the estimated quantum of purchase from renewable energy sources for the ensuing year in tariff/APR Petition. The estimated quantum shall be in accordance with the specified RPOs. If the actual consumption is different from that approved by the State Commission, the RPO shall be deemed to be modified accordingly. If the distribution licensee is unable to fulfill the obligation, the shortfall of that year would be added to the specified quantum for the next year. However, credit for excess purchase would not be adjusted in the ensuing year.*
 - vii) *Despite availability of renewable energy sources if the distribution licensee fails to purchase energy from renewable energy sources, then it shall be liable to pay compensation as per clause 9 of the Regulations.*
 - viii) *If the distribution licensee does not fulfill the RPO as specified in the Regulations and also does not purchase certificates, the State Commission may direct the licensee to deposit into a separate fund such amount as determined by the State Commission. This fund shall be utilized by the State Commission partly for purchase of REC and partly for development of transmission infrastructure for evacuation of power from renewable sources of energy.*
 - ix) *However, in case of any genuine difficulty in complying with the RPO due to non-availability of power from renewable energy sources or the RECs, the State Commission may carry forward the compliance requirement to next year and in that case payment of regulatory charges shall not be applicable.”*
26. As regards exercise of power by the State Commission under Regulation 4.1 for revision of RPO for FY 2010-11, this Tribunal in Appeal No. 24 of 20013 upheld the same for the reasons that RPO for FY 2010-11 was more than doubled for the previous year and adequate notice was not available to the distribution licensee to tie up the supplies with RE developers as the RPO Regulations were notified only on 17.4.2010 and availability of REC was also limited as REC was introduced only in October, 2010.
27. As regards carry forward of shortfall of non-solar RPO for FY 2011-12 to FY 2012-13, the Tribunal held that under Regulation 9.1, non availability of REC is

also a condition to be satisfied before allowing carry forward of RPO to the next year. The Tribunal held that the aspect of availability of REC during FY 2011-12 has not been dealt with by the State Commission and no reason had been adduced to come to the conclusion that REC were not available, whereas the data showed that RECs were available but the distribution licensees did not make any efforts to purchase REC. However, the Tribunal did not interfere with the findings of the State Commission regarding carry forward of shortfall in RPO for FY 2011-12 to FY 2012-13 since the FYs 2011-12 and 2012-13 and the following year 2013-14 were already over and at that stage the clock could not be turned back and carry forward of RPO could not be reversed. The Tribunal also laid down the following guidelines for future:

- (A) *The State Commission may decide the RPO targets at least one year 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.*
- (B) *The proposal for renewable energy procurement should be submitted by the distribution licensee as part of the tariff petition for the ensuing year/Annual Performance Review for the current year. Suggestion and objections of public have to be invited for 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 should plan purchase of REC. Advance planning of REC purchase will give ample opportunity to the distribution licensees to purchase REC when the market conditions are more favourable to them.*
- (C) *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 should be invited in the review proceedings.*
- (D) *The State Commission should give directions regarding relaxation in RPO and consequential order for default of the distribution licensees as per the RPO Regulations Accordingly, directed for future.*

28. Interestingly, the State Commission in the impugned order has revised the non-solar RPO for FY 2012-13 to negate its own direction given in the order dated 17.8.2012 (impugned in Appeal 24 of 2013) for making good the shortfall of FY 2011-12 in FY 2012-13, which was upheld by the Tribunal.
29. Learned Counsel for GUVNL and the distribution licensees has argued that Section 86 (1) (e) of the Electricity Act, 2003 imposes obligation to procure renewable energy in physical form only and not REC and REC is not renewable energy but only a mitigating mechanism available to the obligated entities as per their own choice. We do not agree that REC is only a mitigating mechanism and is not to be considered as renewable source of energy for fulfilling the RPO obligation specified under Section 86 (1)(e) of the Act. The RE Regulations, 2010 recognize REC as valid instrument to meet the RPO obligation specified under Section 86(1)(e) of the Electricity Act, 2003. As set out in the statement of objects and reasons, purchase of REC is to be deemed as purchase of renewable energy for RPO compliance and accordingly the State Commissions have been mandated to recognize REC as a valid instrument for RPO compliance. The Tariff Policy also envisages introduction of REC for meeting the RPO. We agree with Learned Counsel for the State Commission that by introducing the deeming provision as reiterated in the Gujarat Commission's RE Regulations, a legal fiction has been created by virtue of which purchase of REC is to be construed as fulfillment of RPO by purchase of renewable energy.

30. In *Bhavnagar University Vs. Palitana Sugar Mill (P) Ltd. & Ors.* (2003) 2 SCC 111, it was observed that the purpose and object of creating a legal fiction in the statute is well known. It was held that when a legal fiction is created, it must be given full effect. In *Ashoka Leland Ltd. Vs. State of Tamil Nadu and another*, (2004) 3 SCC 1, the Hon'ble Supreme Court also came to conclusion that whenever a legal fiction is created by a statute, the same should be given full effect.
31. In this connection, it would be relevant to refer to the Statement of Reasons of RE Regulations, 2010 of the State Commission wherein the objections raised by the stakeholders regarding validity of REC were answered. The relevant extracts are reproduced below:

“3.2 Renewable Energy Certificates under Regulations of the Central Commission

The following points were raised regarding inclusion of provision regarding Renewable Energy Certificates in the draft Regulations;

- *Validity of RECs, since neither the Act nor the Policy provides for the same.*
- *Applicability of RECs issued under CERC Regulations to the State Regulation.*

Commission's findings:

It is important to note that the framework of Renewable Energy Certificate (REC) is meant to facilitate and promote the development of market in electricity based on renewable energy sources. The Act and the policies envisages coordinated efforts of CERC and SERCs in promotion of renewable energy in the country. On the basis of the deliberations in the Working Group of the Forum of Regulations (FOR), CERC has notified the Regulations on Renewable Energy Certificate mechanism. The SERCs have specific responsibility under section 86(1)(e) of the Act and the Forum of Regulators (FOR), where all the SERCs are represented, has already evolved a model regulation to be framed by SERCs under the said provision to facilitate inter-alia implementation of the REC framework. The scheme envisages inter-alia central level registry and trading of certificates at the power exchange, which can be facilitated only through a regulation by the Central Commission. This mechanism is aimed at addressing the mismatch between availability of renewable energy sources in some states and the requirement of the obligated entities to meet the renewable purchase

*obligation. While framing the Regulations, SERCs, are eligible to adopt the provisions of CERC regulation. The Act mandates SERCs to promote the development of market including trading. The REC is an instrument of trading, which is tradable at Power Exchange, and **it is also a tool for fulfillment of RPO by the obligated entity.***

The commission therefore decides to retain the provisions regarding RECs as included in the draft regulation.”

Thus the State Commission held that REC is a tool for fulfillment of RPO by the obligated entity and decided to retain provision of REC in the Regulations.

32. REC is issued only to RE generators for generation of renewable energy and is an alternative mode provided to the RE generators for recovery of their costs. One REC is issued for 1 MWh of energy from renewable energy sources injected into the grid or consumed by a captive consumer. REC can be purchased by the obligated entities to meet their RPO under Section 86(1)(e) of the Electricity Act and purchase of REC would be deemed as purchase of renewable energy for RPO compliance. REC is an alternative to physical procurement of renewable energy. The distribution licensees as well as other persons consuming electricity generated from conventional Captive Generating Plant or procuring electricity from conventional generating stations through open access and third party sale are obligated entities who have to meet their RPO. These obligated entities have option to meet their RPO mandated under Section 86 (1) (e) of the Act and the Regulations either by directly procuring energy from renewable sources of energy in physical form or purchasing REC, as deemed procurement of renewable energy. Both have to be considered for fulfilling the RPO specified under Section 86(1)(e). An obligated entity has option to fulfill its RPO either by fully procuring renewable energy in physical form or fully by purchasing REC or

partly in physical form and partly REC. However, the option has to be exercised based on sound economic principles. In case of distribution licensees, the State Commission while approving compliance of RPO has to consider that the distribution licensee has exercised its option prudently.

33. Let us take the example of the State of Gujarat which is endowed with huge potential for development of wind energy sources, much more than required to meet the minimum quantum of purchase specified by the State Commission. Generally the obligated entities in a resource rich State would plan to meet their RPO by procuring power from renewable sources of energy in physical form. While planning for meeting wind energy RPO for a particular year, a distribution licensee would examine the availability of power from firm sources of power with which it has PPAs (including the existing PPAs with the renewable energy sources) vis-à-vis the requirement of power during the time periods when the wind energy to be procured to meet the specified RPO is likely to be available. The distribution licensee may be surplus or just adequate in power with availability from the existing sources during such periods and physical procurement of additional wind energy may result in additional surplus availability. Despite availability of power from wind energy generators for meeting wind energy RPO at preferential tariff, the distribution licensee may take a commercial decision to meet a part of RPO by purchasing REC. The commercial decision will be influenced by the preferential tariff for wind energy fixed by the State Commission, trend of market rate of REC, trend of market rate of surplus power at the relevant time periods and incremental energy rate from the firm

conventional sources with which it has long term PPA, etc. In a situation where rate of sale of surplus energy during the time of generation of wind energy is expected to be low and the price of REC is at or near floor price, it may be prudent to purchase REC instead of procuring renewable energy in physical form at preferential tariff. This would, however, require detailed examination and analysis for different times of the day and months when wind energy contribution is expected to be high. Similarly other obligated entities in Gujarat instead of taking physical energy from wind energy generators to meet their RPO which may involve banking, wheeling, sale of surplus power, etc., may prefer to meet the RPO by purchasing REC. REC though evolved basically to exploit the renewable energy sources in States having abundant potential of renewable energy for the benefit of States which do not have adequate potential of renewable energy sources, is also useful for meeting the RPO of obligated entities of resource rich States. REC mechanism has opened up the market for the renewable energy generators outside the State in which they are located helping in unconstrained growth of the renewable energy sector and needs to be promoted by the State Commissions.

34. One of the main features of the Electricity Act, 2003 is that electricity generation is delicensed and captive generation is freely permitted. Hydro Power, however, needs approval of the State Government and clearance from the Central Electricity Authority relating to issues of dam safety and optimum utilisation of water resources. Hon'ble Supreme Court in Tata Power Company Ltd. Vs. Reliance Energy Ltd. & Ors: (2009) 16 SCC 659, held as under:

“83 The primary object, therefore, was to free the generating companies from the shackles of licensing regime. The 2003 Act encourages free generation and more and more competition amongst the generating companies and the other licensees so as to achieve customer satisfaction and equitable distribution of electricity. The generation company, thus, exercises freedom in respect of choice of site and investment of the generation unit; choice of counter-party buyer; freedom from tariff regulation when the generating company supplies to a trader or directly to the consumer.”

35. Freedom of supply of power as per its choice throughout the length and breath of the country is being freely exercised by the conventional energy sources due to more favourable tariffs, economy of scales and lower transmission cost per unit due to high plant load factor. This led to development of huge capacity of conventional generating plants in private sector in the country. Such unhindered growth opportunity was not available to renewable sources of energy due to higher tariff and high cost of transmission due to poor plant load factor and limited scope of supplying power to distribution licensees and other persons within the State. Growth of expensive RE technologies was also restrained by the RPO fixed by the State Commission of the State where RE projects were set up. The introduction of REC mechanism has opened up the market for RE generators. This has provided a mechanism where the physical form of energy is sold to the distribution licensee and consumers within the State, the green attributes of such energy is sold in the pan India market through the power exchange. REC is a mechanism for facilitating accelerated development of renewable energy potential of the resource rich States thus serving the object of the Electricity Act, 2003 for promotion of renewable sources of energy and attracting investment in private sector for setting up renewable energy based power projects, particularly in rural areas. By treating REC as a valid instrument

for discharge of mandatory RPO, as set out in the Regulations, the State Commission has only followed the mandate of the Electricity Act, 2003 under Section 86(1)e) for promotion of renewable sources of the energy in the State.

36. According to Mr. Ramachandran, Learned Counsel for GUVNL, the RPO specified under Regulation 4.1 are applicable for physical form of energy purchased from renewable energy sources at preferential tariff and would not be applicable to REC. Thus, there is no obligation imposed on the obligated entities to procure REC under Regulation 4.1. If there are supply constraints on other factors beyond the control of the licensee, the State Commission can revise the RPO for a year. The State Commission need not consider the availability of REC before exercising the power to revise the targets under Regulation 4.2 read with Regulation 4.1. "Renewable Source of Energy" is defined in the RE Regulations and therefore, it is not open to extend the scope of the term on assumption or widen the scope by deeming something more. Similarly, the Regulation 7 which deals with failure of the distribution licensee to fulfill the RPO and its liability to pay compensation as per clause 9 is also with respect to renewable energy source and not REC. Regulation 5.1 also makes it clear that REC cannot be read as a part of the term "Renewable Energy Sources". Regulation 5 only provides for mitigating the default or discharge the obligation by alternate means by purchasing REC. If the distribution licensee could not procure adequate energy from renewable energy sources due to non-availability then there is no default on the part of the licensee and therefore penalty under Regulation 9 could

not be imposed. He argued that “Renewable Energy source” wherever used in the Regulations, has to be given restrictive meaning as per the definition.

37. We have already dealt with the issues of purchase of REC by the obligated entities to fulfill their RPO specified under Section 86(1)(e) of the Act. Let us now deal with the issue of exercise of power by the State commission to revise RPO targets. This Tribunal in its judgment in Appeal No. 24 of 2013 though upheld the State Commission’s decision to revise RPO for FY 2010-11 by exercising power under Regulation 4.2, it has not elaborately dealt with the conditions under which the State Commission can revise RPO under Regulation 4.2. However, while upholding the revision of RPO for FY 2010-11 under Regulation 4.2, the Tribunal had examined the availability of REC which was also found to be limited as REC was introduced only in October 2010. It would be necessary to examine the RE Regulations, 2010 before answering the above issue.
38. Regulation 4.1 specifies the minimum quantum of purchase (in %) for renewable energy sources separately from wind, solar, biomass/bagasse and other sources for each of the financial year from FY 2010-11 to 2012-13. However, if the minimum quantum of power purchase for solar and other renewable energy sources is not available in a year, then the additional energy from wind and other energy can be procured over and above their respective RPOs. There is no provision for shortfall in non-solar energy to be made good by procurement of solar energy. This appears to be due to higher price of solar energy.

39. Regulation 4.2 provides that the State Commission, suo moto or at the request of a licensee, revise the percentage targets for a year as per Clause 4.1, keeping in view supply constraints or other factors beyond the control of the licensee.
40. Regulation 5.1 provides that subject to the terms and conditions contained in these Regulations, the certificates issued under the Central Commission's REC Regulations, 2010 shall be the valid instruments for the discharge of the mandatory obligation set out in these Regulations for the obligated entities to purchase electricity from renewable energy sources. Proviso to the Regulation 5.1 provides that in the event of the obligated entity fulfilling the RPO by purchase of REC, the obligation to purchase electricity from generation based on non-solar energy sources can be fulfilled by purchase of non-solar certificates and the obligation to purchase electricity for generation based on solar as renewable energy sources can be fulfilled by purchase of solar certificates only. However, if solar certificates are not available in a particular year, then in such cases, additional non-solar certificates shall be purchased for fulfillment of the specified solar RPO.
41. Under Regulation 5.2, subject to such direction as the State Commission may give from time to time, the obligated entity shall act consistent with the Central Commission's REC Regulations, 2010 with regard to procurement of REC for fulfillment of RPO under these Regulations.
42. Thus, in term of Regulation 5.1, the REC is a valid instrument for discharge of mandatory RPO as specified in the Regulations and is not just a mitigating mechanism. It is an alternative mechanism to physical procurement of renewable

energy. As already discussed earlier, REC is issued in terms of energy ('MWh') injected by a renewable energy source into the grid. REC procured by the obligated entity will have to be treated as deemed energy purchase from such RE source and added to physical renewable energy procured directly from the renewable energy source by the obligated entity to find the total percentage of renewable energy procured in a year vis-à-vis that specified in the Regulations. Thus, for verifying the compliance of RPO, the REC has to be treated as deemed energy from renewable source of energy. When a renewable energy generator which opts for REC scheme generates renewable energy only then the REC is issued to it. Only a renewable energy generator is entitled to trade its REC. Under REC mechanism, the renewable energy is physically drawn either by the local distribution licensee at its average power purchase cost (and not at preferential tariff) or the energy is used for captive consumption or sold to any other licensee or to an open access consumer at mutually negotiated tariff or through power exchange and the green attributes of the same energy is sold as REC as deemed purchase of renewable energy. An obligated entity can fulfill its RPO obligation specified under Regulation 4.1 by purchase of REC. In case of an obligated entity procuring part of the RPO obligation through REC, the deemed energy procurement will have to be added to the energy drawn physically by directly procuring energy from a RE generator for compliance of the RPO specified under Regulation 4.1. Therefore, purchase of REC for the purpose of compliance of Regulation 4.1 has to be considered as deemed procurement of energy from renewable energy source. However, in a resource

surplus State, the obligated entities have to make their own choice for fulfilling the RPO but such choice has to be made on sound commercial principles or based on convenience to avoid hassles of open access, cross subsidy surcharge, banking, etc., involved in physical procurement of renewable energy or if RPO quantum is too small.

43. Under Regulation 7.1, each distribution licensee has to indicate the estimated quantum of purchase from RE sources for the ensuing year in tariff/annual performance review petition. The estimated quantum of purchase has to be in accordance with Regulation 4.1. However, if the actual consumption in the licensed area is different from being approved by the Commission, the RPO shall be deemed to be modified in accordance with Regulation 4.1 corresponding to the actual consumption. If the distribution licensee is not able to fulfill the RPO due to increase in consumption then the shortfall would be added to the specified quantum for the next year i.e. carried forward to the next year. However, credit for excess purchase would not be adjusted in the ensuing year.
44. According to Regulation 7.2, despite availability of RE sources, if the distribution licensee fails to fulfill the RPO, it shall be liable to pay compensation as per Regulation 9.
45. Regulation 9 describes the consequences of default if the obligated entity does not fulfill RPO and also does not purchase REC. In that case the State Commission may direct the obligated entity to deposit into a separate fund such amount as the State Commission may determine on the basis of shortfall in units of RPO and the forbearance price decided by the Central Commission.

However, in case of any genuine difficulty in complying with the RPO because of non-availability of power from renewable energy sources or RECs, the obligated entity can approach the State Commission to carry forward the compliance requirement to the next year. Where the Commission has consented to carry forward the compliance requirement, the provision regarding regulatory charge shall not be applicable.

46. Regulation 12 is power to remove difficulties under which the State Commission may review, add, amend or alter these Regulations and pass appropriate orders to remove any difficulty in exercising the provision of these Regulations. In our opinion, the State Commission by exercise of power under Regulation 12 could not have waived or revised the RPO targets. The first part of Regulation 12.1 is the legislative power for amendment of the Regulation and the second part is for removing difficulty in case there is a problem in implementation of the Regulation. In the present case, the State Commission has not revised or amended the Regulations. There is also no difficulty in implementing the Regulations. Difficulty experienced by the obligated entities in fulfilling the specified RPO has to be dealt with as per the provisions of the Regulations.
47. Conjoint reading of the above Regulations show that Commission can revise/carry forward the RPO for a particular year under the following Regulations:-
- i) Under Regulation 4.2, the Commission suo motu or at the request of the licensee can revise the percentage targets for a year **keeping in view**

supply constraints or other factors beyond the control of the licensee.

- ii) Under 5th proviso to Regulation 9, in case of **any genuine difficulty in complying with RPO because of non-availability of power from renewable sources of energy or the RECs**, the obligated entity can approach the Commission and the Commission may carry forward the requirement to the next year.
48. RE Regulation, 2010 dated 17.4.2010 specified RPO for three years (2010-11 to 2012-13) with increasing quantum of RPO every year. Under Regulation 4.2, the RPOs can be revised before the beginning or during a financial year for that year if the State Commission is convinced that the targets set up by it are unrealistic and can not be achieved. For example, on the basis of the experience of FYs 2010-11 and 2011-12, if the State Commission feels that the targets set up by the Commission for FY 2012-13 are high and unrealistic, it may revise the same at the beginning of FY 2012-13 or during FY 2012-13. The State Commission may also revise the targets during a year due to force majeure such as natural calamity occurring during the year due to which it becomes impossible to achieve the RPO targets.
49. The State Commission may also revise the targets after the completion of financial year under Regulation 4.2 due to supply constraints or factors beyond the control of the licensee which may be due to reasons such as:

- i) Actual renewable energy generation is below normative generation from tied up renewable energy sources due to reasons beyond the control of the distribution licensee.
 - ii) Force majeure such as natural calamity resulting in supply constraints.
 - iii) Inadequate capacity addition in the State and RECs could not be purchased due to non-availability of REC despite efforts made by the distribution licensee. In a resource rich State where the State Commission had set up RPO targets keeping in view the anticipated capacity addition in the State, the State Commission may also revise the targets due to inadequate renewable capacity addition in the State.
 - iv) Minimum energy purchase obligation for renewable sources of energy was fixed on estimated energy consumption of the licensee in the ARR based on estimated growth but the actual consumption has been much lower due to slow growth or negative growth or due to forced majeure. Thus, percentage RPO on actual energy consumption was met but minimum energy purchase target fixed in the ARR based on anticipated energy consumption could not be met.
 - v) A distribution licensee has proposed to meet a part or full RPO by purchase of REC but REC could not be purchased, despite efforts made by the licensee, due to non-availability of REC.
50. If the distribution licensee has not made efforts to procure requisite renewable energy to fulfill the RPO and has also not purchased REC, the State Commission shall not revise the RPO under Regulation 4.2. While revising the RPO targets,

the State Commission has to ensure that such revision should not defeat the object of the Electricity Act and the Regulations. It is important that RPO specified under Regulation 4.1 are applicable to all the obligated entities in the State. Thus, if RPOs are revised due to inadequate capacity addition in the State, the same percentage will be applicable to all the obligated entities. In the present case, State Commission by revising the RPO due to supply constraints as per actual achievement of different distribution licensees has de facto decided different percentage RPO targets for different distribution licensees for the same reason. For some of the deemed distribution licensees the revised RPO is zero, for GUVNL the revised RPO is 7.4%, for Torrent Power 3.81% and for TEL (Dahej) it is 1.49%. In this manner, the State commission in the impugned order for reasons of supply constraints has set up different RPO targets for different distribution licensees. This is not permissible as per the Regulations. The revision of RPO target, under Regulation 4.2 has to be of the same order for all obligated entities as RPOs are revised due to low capacity addition in the State.

51. We want to add that non-availability of REC may not always be a pre-condition for exercise of power to revise under Regulation 4.2. For Example, if the distribution licensees had tied up adequate capacity at preferential tariff but due to actual generation being lower than the normative generation due to reasons beyond the control of the distribution licensee or there is natural calamity in the State and energy consumption in the State has gone down or renewable energy generation in the State has been affected due to natural calamity then shortage of REC may not be a pre-condition to revise RPO targets set up under

Regulation 4.1. Further, if in a resource rich State the State Commission has set up RPO targets keeping in view anticipation of capacity addition in the State, the State Commission may also revise the targets due to inadequate capacity addition in the State due to reasons beyond the control of the distribution licensee.

52. Under 5th proviso to Regulation 9, if the Commission is convinced that the obligated entity has faced genuine difficulty in meeting the RPO due to non-availability of power from renewable sources or the REC, it may allow carry forward the compliance requirement to the next year. However, before exercising power under Regulation 9, the State Commission has to satisfy itself that there was difficulty in meeting the RPO from purchase of REC. Therefore, non-availability of REC is a pre-condition for carry forward under Regulation 9.
53. Let us now examine whether in the specific circumstances in this case during FY 2012-13, the State Commission was correct in exercising its power under Regulation 4.2 to revise the RPO of different distribution licensees. Even though the State Commission has wrongly exercised the power to revise RPO under Regulation 12, we have to examine if the Commission could have revised the RPO by exercising the power under Regulation 4.2, as merely wrong mentioning of the Regulation would not make the order invalid if such powers are available in the Regulation elsewhere.
54. In the impugned order, there is no discussion on the proposal for fulfillment of RPOs of distribution licensees which they were required to furnish with sufficient

proof in their Tariff Petition/ARR before the State Commission as specified in the Regulations. We feel that this should have formed part of the review exercise by the State Commission.

55. Let us examine the case of GUVNL and its four distribution licensees. GUVNL had prayed before the State commission to waive the shortfall in meeting the carried forward RPO during FY 2012-13 and requirement of transferring funds to the Designated Account for FY 2012-13 as the shortfall was on account of supply constraints under “other” and “wind” sub-categories due to non-availability of capacity under preferential tariff. Considering the carry forward shortfall of RPO for FY 2011-12, the position based on the estimated quantum of purchase during FY 2012-13 was as under:

Provisional status of RPPO	(In MUs)			
	Wind	Solar	Others	Total
RE Power purchase for FY 2012-13	3366	1159	76	4601
	5.41%	1.86%	0.12%	7.40%
Shortfall(+)/Excess (-)	532	-390	447	589

56. While GUVNL purchased 247 MU additional renewable energy over the target for FY 2012-13, it was not adequate to meet the shortfall of 836MU carried forward from FY 2011-12 to FY 2012-13. The main reason given by GUVNL for non-fulfillment of RPO was lower wind capacity addition in the State and wind generators not coming forward to enter into PPA. The reason for low capacity addition was given as withdrawal of Generation Based Incentive Scheme and benefit of accelerated depreciation for wind projects.
57. The Commission came to the conclusion that non-compliance of RPO for FY 2011-12 and 2012-13 was on account of supply constraints as wind energy

developers did not come forward to sign PPAs as GUVNL had not denied to sign the PPA under the preferential tariff.

58. We find that the State Commission failed to consider the submissions of the Wind Energy Developers' Association that GUVNL had refused to sign PPA at tariff determined by the Commission by its tariff order dated 8.8.2012 as GUVNL had filed a review petition against the tariff order. GUVNL was insisting for signing PPA at tariff as per tariff order no. 1 of 2010 dated 30.1.2010 subject to the final decision of the Commission in Review Petition filed by GUVNL. We have been informed during the proceeding that the wind energy tariff as per previous order dated 30.1.2010 was Rs.3.56/KWh. The tariff determined by order dated 8.8.2012 was Rs.4.23/KWh which was subsequently revised to Rs.4.15 per KWh in the review order passed by the State Commission. It is also seen that the GUVNL tied up 425 MW wind energy capacity during the year out of which 122 MW was commissioned and balance 303 MW will be commissioned in ensuing year. The wind energy generators signed PPAs from April 2012 to August 2012, however, no PPA was signed after tariff order dated 8.8.2012.
59. We feel that after the passing of the tariff order dated 8.8.2012 the earlier tariff order dated 30.1.2010 did not exist for PPAs to be signed after 8.8.2012. Even though GUVNL had filed a review against order dated 8.8.2012, there was no stay on State Commission's order dated 8.8.2012. GUVNL should have entered into PPA at the tariff which was valid after 8.8.2012 subject to the outcome of the review. Further, out of 207 MW wind energy capacity commissioned during FY 2012-13, 142 MW was under preferential tariff, 23 MW under captive and 42

MW under REC for sale of APPC. Thus, major quantum of wind energy capacity commissioned during FY 2012-13 supplied energy under preferential tariff as decided by the State Commission.

60. We also find that GUVNL had tied up a capacity of 425 MW with wind energy developers out of which only 122 MW was commissioned during 2012-13 and the balance capacity of 303 MW was spilled over to the ensuing year. Therefore, it would be incorrect to conclude that the wind energy generators were not inclined to enter into PPA with the distribution licensees. From the data of wind energy projects submitted by the Appellant, it is seen that as on 30.11.2014 out of total wind energy capacity of 3448 MW only 325 MW capacity is under REC mode, of which 255 MW capacity is selling power at APPC to the distribution licensees. It is also seen that ratio of buy bid to sell bid volume of REC, during FY 2012-13 was about 0.27 indicating large volume of REC remaining unsold during FY 2012-13. The Report on Short-Term Market in India FY 2012-13 issued by the Central Commission as available in public domain also indicates that for major period during FY 2012-13, the REC price remained at the floor price of Rs.1500 per REC (Rs.1.50 per KWh). Therefore, we do not find much force in the argument of the distribution licensees and the conclusion of the State commission that the wind energy generators are not willing to supply power to the distribution licensee and are opting for REC mechanism for making windfall gain.
61. Renewable energy generators not coming forward to enter into PPA at preferential tariff cannot be a reason for revising the RPO target. The obligation

to meet the RPO is of the obligated entities. However, if the Commission has fixed the targets in the year 2010 for the next three years based on the anticipated development of renewable energy sources in the State and the Commission feels that these targets are required to be revised in view of drastic reduction in capacity addition in a year due to reasons beyond the control of the distribution licensees then the State commission can revise the RPO targets by exercising its power under Regulation 4.2. It is an accepted fact that the capacity addition in the State was inadequate due to withdrawal of fiscal incentives by the Government. However, such revision in RPO due to shortfall in capacity addition has to be uniform for all the distribution licensees. Thus, if the State Commission concludes that due to low wind energy capacity addition in the State during the year RPO for wind energy has to be reduced by 1%, such reduction has to be uniform for all distribution licensees. It can not be different for different licensees.

62. As far as Torrent Power (Ahmedabad and Surat) is concerned there was a shortfall of 223.50 MU in non-solar RPO even though the licensee purchased REC to the tune 270 MU. Torrent Power entered into PPA with M/s. GPEC for sourcing 50 MW of wind power. Further it purchased surplus power from renewable captive consumers. The licensee published advertisements in newspapers inviting renewable energy power generators to supply power from renewable energy sources but it did not get any positive response. According to Torrent Power, they had invited bids after revision on the wind tariff for new control period beginning April 2012 and developers were approached but they were waiting for outcome of the Review Petition which was finally decided on

7.1.2013. It is, however, not clear whether Torrent Power had offered the tariff as per order dated 8.8.2012 or insisted for entering into PPA at the pre-revised tariff subject to the outcome of the review. Torrent Power also could not fulfill Solar RPO for which there is no finding that there was shortage of solar energy. Despite this the State Commission revised the RPO as per actual.

63. It is seen that the State Commission has exempted the SEZ (deemed licensee) from RPO compliance for FY 2010-11 and 2011-12 and again during 2012-13, they were exempted even though they did not make any efforts to fulfill their respective RPO. Low energy consumption of the distribution licensee, increase in tariff due to purchase of renewable energy as per the RPOs, nascent stage of operation etc. cannot be the reasons for which their RPO should have been reduced to zero. Smaller entities will have low energy consumption but their RPO will also be low as RPO is fixed as a percentage of energy consumption. These reasons are not related to supply constraints or beyond the control of the licensee and do not qualify for revising of the RPO under Section 4.2. However, we do not find any infirmity in finding of the State Commission to relax the RPO obligation of those distribution licensees who purchase power from GUVNL/ and its four distribution licensees to meet their energy consumption at the retail supply tariff determined by the State commission and their energy consumption is included in the RPO obligation of the supplying company.
64. Looking at the compliance report of GUVNL, we find that the compliance with respect to wind energy has been satisfactory. However, the compliance with respect of bio-mass and other renewable sources has been quite low due to

which there was default in fulfilling the non-solar RPO. Thus during 2012-13, not only there was reduction in capacity addition of wind energy projects but also biomass and other non-solar energy sources. The State Commission has to examine the reasons for reduction in capacity addition and take necessary measures for accelerating the capacity addition of biomass and other sources of renewable energy.

65. In view of above, we hold that the State commission has wrongly revised the RPOs for FY 2012-13 for different distribution licensees as per their actual consumption thereby fixing different RPOs from zero to 7.4% for different entities contrary to the Regulations. This differential RPO could not have been due to reason of reduction in capacity addition in wind and other sources of renewable energy in the State. The State Commission can revise the RPO target for wind and other energy sources in the State due to low capacity addition of wind energy/other sources uniformly for all the obligated entities. For those distribution licensees who have not fulfilled the revised RPO, action has to be taken by the State Commission under Regulation 9.
66. Let us examine the fifth issue regarding adjusting the excess solar energy purchased over the specified solar RPO to set off the shortfall in fulfillment of non-solar RPO.
67. This issue has been dealt with by this Tribunal in Appeal No.24 of 2013 that keeping in view the circumstances of case, the State commission can exercise its power under Regulation 4.2 to allow adjustment of excess solar energy procured for meeting the shortfall in non-solar RPO.

68. Solar energy is more expensive, therefore, distribution licensees should refrain from excessive procurement of solar energy as it would unnecessarily burden the consumers. Excessive procurement of solar energy is also not advisable as the price of solar energy has been declining over the years with advancement in technology and increase in production capacity due to increase in demand. In the initial years of implementation of the RPO Regulations there may be some variations in different sources of renewable energy and such adjustment may be justifiable. In such case the State Commission can exercise its power in the circumstances of the case to set off non-solar RPO with excess solar energy purchase. However, this should not be made as regular practice and the State Commission should ensure that the distribution licensees do not deliberately try to alter the technology specific RPOs to defeat the purpose of giving separate RPOs to solar and non-solar RPOs. Excessive procurement of solar RPO for adjustment of shortfall in non-solar RPO may also be uneconomical in comparison to purchase of non-solar REC to meet the shortfall in non-solar REC. This aspect should also be kept in view by the State Commission in future.
69. In view of our finding in Appeal No. 24 of 2013, we do not want to interfere with the findings of the State Commission in the present case.
70. The issue regarding public hearing has already been dealt with in our Judgment in Appeal No.24 of 2013 in which we have given certain directions with regard to public hearing which are being reiterated. The directives given in Appeal No. 24 of 2013 have been reproduced under paragraph 27.

71. Summary of our findings:

- (i) The National Tariff Policy and the Regulation of the Central Commission and the State Commission recognize REC as valid instrument for fulfilling Renewable Purchase Obligation cast upon the obligated entities under Section 86(1)(e) of the Electricity Act, 2003. Purchase of REC would be deemed as purchase of energy from renewable energy source for fulfilling RPO obligation. When a legal fiction has been created by a statute, the same should be given full effect.**
- (ii) An obligated entity has option to fulfill its RPO either by procuring renewable energy in physical form or by REC or partly by REC and partly by physical renewable energy. However, a distribution licensee has to exercise the option based on economic principles. An obligated entity other than the distribution licensee may also opt for purchase of REC for fulfilling its RPO obligation to avoid the issues involved in banking, open access, sale of surplus power, etc., or if the RPO requirement is too small.**
- (iii) Renewable energy generators like conventional generators have been given freedom under the Electricity Act in respect of choice of site, choice of counter-party buyer, freedom from tariff regulation when the generating company supplies to a trader or directly to a consumer. So far, the renewable energy generators were not able to exercise this freedom due to various constraints. The REC**

mechanism has opened up the market for renewable energy generators helping in expeditious exploitation of renewable energy potential in the country thus, serving the object of the Electricity Act, 2003. Thus, REC mechanism has to be encouraged. By treating REC as a valid instrument for discharge of mandatory RPO as set out in the Regulations, the State commission has only followed the mandate of the Electricity Act, 2003 under Section 86(1)(e) for promotion of renewable sources of energy in the State.

- (iv) The State Commission can revise the RPO before or during a year or after passing of year under Regulation 4.2 of RE Regulation 2010 as explained under paragraphs 47 to 51 above. If the distribution licensee has not made efforts to procure requisite renewable energy to fulfill the RPO and also has not procured REC, the State Commission should not revise RPO under Regulation 4.2. However, while revising the RPO targets, the State commission has to ensure that such revision should not defeat the object of the Electricity Act and the Regulations.**
- (v) If the RPO targets are revised under Regulation 4.2 due to inadequate capacity addition in a resource rich State, such reduction has to be uniform for all the entities.**
- (vi) Under 5th proviso to Regulation 9, if the Commission is convinced that the obligated entity has faced genuine difficulty in meeting the RPO due to non-availability of power from renewable sources or the**

REC, it may allow carry forward the compliance requirement to the next year. However, before exercising power order Regulation 9, the State Commission has to satisfy itself that there was difficulty in meeting the RPO from purchase of REC. Therefore, non-availability of REC is a pre-condition for carry forward under Regulation 9.

- (vii) Admittedly there was substantial reduction in capacity addition of wind energy and other sources of renewable energy in the State during FY 2012-13 due to reasons beyond the control of the distribution licensee. Under such a condition the State Commission can reduce RPO targets for the wind energy and other energy. However, such reduction due to capacity constraints has to be uniform for all the obligated entities in the State.**
- (viii) In the present case, the State Commission has revised the RPO targets for various distribution licensees as per the actual. This way the State Commission has set up different RPO targets for four States owned distribution license, Torrent Power Surat and Ahmedabad at different levels for the same reason of inadequate capacity addition. This is not permissible. The State Commission has incorrectly revised the RPO for the deemed distribution licensees to zero or nearly negligible amount due to financial impact, low energy consumption, nascent stage of operation etc., in contravention to the Regulations.**

- (ix) We find that RPO compliance of GUVNL for wind energy was satisfactory but compliance of biomass and other non-solar energy was quite low due to which there was default in fulfilling the non-solar RPO. Thus, during FY 2012-13 there appeared to be inadequate generation of biomass and other non-solar energy sources in the State. The State Commission has to examine the reasons for the same and take necessary measures for accelerating capacity addition of biomass and other sources of renewable energy in the State.
- (x) We remand the matter to the State Commission to reconsider the whole issue afresh in light of our findings in this judgment. The State Commission is empowered to reduce the RPO targets for all the entities uniformly in view of reduction in capacity addition of wind energy and other sources in the State during the FY 2012-13. However, the consequences of shortfall with respect to the revised RPO for different distribution licensees/deemed distribution licensees has to be decided by the State Commission according to Regulation 9.
- (xi) We do not find any infirmity in the State Commission relaxing the RPO for those deemed distribution licensees who purchase energy from GUVNL/distribution licensees at retail supply tariff and their consumption is included in determining the RPO of the supplying distribution licensee.

(xii) In the circumstances of the case, we do not want to interfere with the decision of the State Commission to set off the shortfall in non-solar energy purchase with excessive solar energy procured during FY 2012-13. However, we have given certain directions in this regard for future in paragraph 68 above.

(xiii) As regards public hearing for review of RPO, we have already given the necessary directions in our judgment in Appeal No. 24 of 2013 which have been reproduced under paragraph 27.

71. In view of the above, the Appeal is allowed in part as indicated above and the State Commission's order is set aside to that extent. The State commission is directed to pass consequential order as per the findings in this judgment within three months of the date of this judgment. No order as to costs.

72. Pronounced in the open court on this 16th day of April, 2015.

(Rakesh Nath)
Technical Member

(Justice Ranjana P. Desai)
Chairperson

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