IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
NEW DELHI

(APPELLATE JURISDICTION)

APPEAL NO. 191 OF 2018,
APPEAL NO. 195 OF 2018 & IA NO. 896 OF 2018,
APPEAL NO. 265 OF 2018 & IA NOS. 1170 OF 2018 & 529 OF 2020
AND
APPEAL NO. 406 OF 2019 & IA NO. 1029 OF 2019

Dated: 28th January 2021

Present: Hon'ble Mr. Ravindra Kumar Verma, Technical Member
Hon'ble Mr. Justice R.K. Gauba, Judicial Member

APPEAL NO. 191 OF 2018

In the matter of:

Tamil Nadu Spinning Mills Association
2, Karur Road,
Modern Nagar, Dindigul – 624 001
Tamil Nadu …. Appellant

Versus

1 **Tamil Nadu Electricity Regulatory Commission**
Rep. By its Secretary
No. 19-A, Rukmini Lakshmipathy Road,
Egmore, Chennai – 600 008

2 **Tamil Nadu Generation and Distribution Company Limited (TANGEDCO)**
144, Anna Salai,
Chennai – 600 002
Represented by its
Chairman and Managing Director

3 **Tamil Nadu Transmission Corporation Limited (TANTRANSCO)**

144, Anna Salai,
Chennai – 600 002
Represented by its
Chairman and Managing Director … Respondents

Counsel for the Appellant (s): **Mr. M.G. Ramachandran, Sr. Adv**.
Mr. Kumar Mihir

Counsel for the Respondent (s): **Mr. Sethu Ramalingam** for R-1

Mr. Balaji Srinivasan, AAG
For State of Tamil Nadu
Mr. B. Vinodh Kanna
Ms. Pallavi Sengupta
Mr. Arindam Ghosh for R-2 (TANGEDCO)

APPEAL NO. 195 OF 2018

In the matter of:

Indian Wind Power Association
Rep. by its Secretary General
Door No. E, 6th Floor, Shakti Towers-II
766, Anna Salai
Chennai 600 002 …. Appellant

Versus

1 Tamil Nadu Electricity Regulatory Commission
Rep. by its Secretary
No. 19-A, Rukmini Lakshmipathy Road,
Egmore, Chennai – 600 008, Tamil Nadu

2 Tamil Nadu Generation and Distribution Company Limited (TANGEDCO)
144, Anna Salai,
Chennai – 600 002
Represented by its Chairman and Managing Director

3 Tamil Nadu Transmission Corporation Limited (TANTRANSCO)
144, Anna Salai,

Chennai – 600 002
Represented by its
Chairman and Managing Director … Respondents

Counsel for the Appellant (s): **Mr. Rahul Balaji**
Mr. Senthil Jagadeesan
Ms. Sonakshi Malhan
Ms. Mrinal Kanwar

Counsel for the Respondent (s): **Mr. Sethu Ramalingam** for R-1

Mr. Balaji Srinivasan, AAG
For State of Tamil Nadu
Mr. B. Vinodh Kanna
Ms. Pallavi Sengupta
Mr. Arindam Ghosh for R-2 (TANGEDCO)

APPEAL NO. 265 OF 2018

In the matter of:

Watsun Infrabuild Pvt. Ltd
Office No. 4, First Floor,
City Centre, Opp. Mandavi Octroi,
Commerce College Road,
Bhuj Kachchh,
Gujarat 370001 …. Appellant

Versus

1. **Tamil Nadu Electricity Regulatory Commission**
Through Director (Legal)
No. 19-A, Rukmini Lakshmipathy Salai
(Marshalls Road),
Egmore, Chennai – 600 008

2. **Tamil Nadu Generation and Distribution Company Limited (TANGEDCO)**
Through, The Legal Advisor,
10th Floor, NPKRR Maaligai,
144, Anna Salai,
Chennai – 600 002 … Respondents

Counsel for the Appellant (s): **Mr. Sanjay Sen, Sr. Adv**.
Ms. Mandakini Ghosh
Mr. Sumant Nayak
Mr. Samiron Borkataky
Ms. Kritika Angirish
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For State of Tamil Nadu
Mr. B. Vinodh Kanna
Ms. Pallavi Sengupta
Mr. Arindam Ghosh for R-2
(TANGEDCO)

APPEAL NO. 406 OF 2019

In the matter of:

Tamil Nadu Generation and Distribution Company Limited (TANGEDCO)
Represented by Chief Engineer/NCES
NPKRR Maaligai, 144, Anna Salai,
Chennai – 600 002 …. Appellant

Versus

1 Tamil Nadu Electricity Regulatory Commission
Rep. by its Secretary
No. 19-A, Rukmini Lakshmipathy Road,
Egmore, Chennai – 600 008, Tamil Nadu

2. Indian Wind Power Association
Rep. by its Secretary General
Door No. E, 6th Floor, Shakti Towers-II
766, Anna Salai
Chennai 600 002, Tamil Nadu

3. Tamil Nadu Spinning Mills Association
Rep. by its Secreary
2, Karur Road, Modern Nagar,
Dindigul – 624 001, Tamil Nadu … Respondents

Counsel for the Appellant (s): **Mr. Balaji Srinivasan, AAG**
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Mr. B. Vinodh Kanna
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Ms. Sonakshi Malhan
sMs. Mrinal Kanwar for R-2

Mr. M.G. Ramachandran, Sr. Adv.
Mr. Kumar Mihir for R-3

J U D G M E N T

PER HON'BLE MR. JUSTICE R.K. GAUBA, JUDICIAL MEMBER

1. These matters have been taken up by video conference mode on account of pandemic conditions, it being no advisable to hold physical hearing.
2. The question of fairness of promotional dispensation in the nature of "*power banking*" for wind power generators has surfaced yet again before this tribunal.
3. These appeals are directed against the Wind Tariff Order (no. 6/2018) dated 13.04.2018 passed by Tamil Nadu Electricity Regulatory Commission (hereinafter referred to as "TNERC" or "the

State Commission" or "the Commission") determining the Tariff Components and all other allied issues related to Wind Energy Generators (WEGs) installed in the State of Tamil Nadu for the control period of two years with effect from 01.04.2018 to the extent thereby it made certain modifications in the dispensation on the subject of "*power banking*" declining to withdraw the facility altogether as pressed for by the distribution licensee i.e. Tamil Nadu Generation and Distribution Corporation Limited (hereinafter referred to as "TANGEDCO" or "the distribution licensee" or "the Discom").

4. By the impugned order dated 13.04.2018, the State Commission has, *inter alia*, increased the banking charges from 12% to 14% apart from holding that any WEG installed or commissioned after 31.03.2018 is not eligible for banking facility; withdrawn the banking facility to the existing WEGs including those which are selling power generated from such WEGs under the Third Party Sale Scheme; directed that Open Access Charges, hitherto collected at 40% of the charges applicable for thermal power plants, would be hereafter collected at 50% (Transmission and Wheeling Charges); increased the Scheduling and System Operation Charges from 40% to 50%; also increased the cross subsidy surcharge to 60% from existing 50%; determined the "Feed in Tariff" (FIT) for sale of power to the

utility at Rs.2.86 without Accelerated Depreciation (AD) and Rs.2.80 with AD; retaining the payment period at 60 days but reducing delayed payment levy to 1% interest from 1.5%.

5. The distribution licensee TANGEDCO is in appeal before us (by Appeal no. 406 of 2019) being aggrieved because, in its submission, the banking facility is proving financially detrimental to its interest and deserves to be done away with, it also pressing for increase in Cross subsidy surcharge from 50% to 100% (instead of 60% as granted by the Commission).

6. It is the contention of TANGEDCO that the State Commission is not justified in rejecting the prayer for withdrawal of banking facility to WEGs in State of Tamil Nadu in larger public interest, it having failed to consider the provisions of section 61 of Electricity Act, 2003 and the Tamil Nadu Electricity Regulatory Commission Regulations, 2006 ("TNERC Regulations, 2006") in the right perspective, having glossed over the fact that the benefit of banking facility is not provided under the statute, the financial impact for providing such promotional facility passed on to the general consumer under the tariff order being heavy, the factual data presented for consideration instead establishing that the banking facility has resulted in substantial financial loss to the distribution licensee, State Load Dispatch Centre (SLDC) and the transmission licensee. It is

contended that the order is inherently contradictory since the banking facility has been unjustifiably extended for WEGs commissioned prior to 01.04.2018 even while on correct understanding of the issue it has been disallowed for WEGs commissioned on or after 01.04.2018.

7. The other three appeals, in contrast, are by entities which have been insistent on continuance of the facility of power banking, particularly for WEGs, arguing that there is no cause for the reliefs afforded to this sector to be taken away since the grounds on which such promotional measures were adopted continue to hold good till date.

8. The appellant (in Appeal no. 191 of 2018) Tamil Nadu Spinning Mills Association ("TNSMA") represents the Spinning Mills in the State of Tamil Nadu which have established and continue to establish Wind Power Projects (WPPs) in the State and contends that the impugned decision is retrograde and violates the letter and spirit of the extant law which lays great emphasis on such environmentally friendly renewable sources of energy as wind power, the promotion of which is the declared State policy and that such dispensation as at hand would discourage private participation and not be in the overall interest of the sector, the argument of Discom being actuated by self-interest which instead must yield to larger public interest.

9. The appellant (in Appeal no. 195 of 2018) Indian Wind Power Association (“IWPA”), as the name suggests, represents the interest of owners of various WEGs. It is a registered association consisting of members who have invested in the putting up of Windmills in India, having on its rolls more than 1500 WEGs all over the country including in the State of Tamil Nadu, professing to espouse their cause and representing their case before various fora, also interacting with the regulatory bodies such as TNERC and State Governments.

10. The other appellant (in Appeal no. 265 of 2018) Watsun Infrabuild Pvt. Ltd. (“Watson”, for short) similarly is an aggrieved party. It had resolved to set up a wind power project with a capacity of 150 MW at Periyapatti, Tamil Nadu. It built its own 230/33kV substation to evacuate the entire 150 MW, the said substation being ready by 31.03.2016 as per the approvals received from time to time and connected to Tamil Nadu Transmission Corporation (TANTRANSCO) Ltd.’s 400/230/110 kV Anaikadavu substation, in which the Bay earmarked for the appellant was scheduled to be commissioned by April 2016, but actually made operational with substantial delay only by the first week of November 2017. It is stated that during the period, due to the looming uncertainty regarding evacuation of the entire quantum of 150 MW, the

appellant could complete financial closure of only 54 MW of its entire capacity and subsequently commissioned 54 MW by second week of December 2017 within a month of the commissioning of the aforesaid TANTRANSCO Ltd.'s (400/230/110 kV) Anaikadavu substation, the financial closure for the balance 96 MW being completed by 29.12.2017. On the same date, the appellant also paid to the WEG Supplier advance of 25% of the cost of WEGs issuing Letters for Credit for the balance 75%. It is at that stage that the appellant could vigorously pursue efforts to execute Power Purchase Agreements ("PPAs") for the balance quantum, the new users becoming shareholders pursuant to signing of the PPAs, as mandated under the regulations relating to Group Captive generators. The remaining 96 MW capacity could be commissioned in phases from May 2018 to November 2018. Thus, Watsun's project was commissioned broadly in two phases; 54MW capacity by December 2017 and 96MW capacity by November 2018. It is the case of this appellant that It had never envisaged to operationalize its project in phases and that the split occurred because of delay by TANTRANSCO Ltd. in commissioning its 400 KV substation at Anaikavadu.

11. The WEGs, through their appeals, assail the impugned order as bad in law, unfounded and arbitrary.

12. Historical perspective always helps in focussing on the areas where the shoe pinches. We must trace it to the extent necessary.

HISTORY OF BANKING

13. The Electricity Act, 2003, by its preamble, envisages not only "*taking measures conducive to development of electricity industry, promoting competition therein, protecting interest of consumers*" but also "*promotion of efficient and environmentally benign policies*". By section 3, it places the responsibility on the Central Government to formulate and enforce the National Electricity Policy and Plan, *inter alia*, "*for development of the power system based on optimal utilisation of resources such as coal, natural gas, nuclear substances or materials, hydro and renewable sources of energy*", laying a special emphasis, by section 4, on "*permitting stand alone systems (including those based on renewable sources of energy and other non-conventional sources of energy) for rural areas.*". The statute has delicensed generation of electricity, encourages private participation in the interests of overall growth of electricity industry and while placing other connected activities – transmission, trading and distribution - under regulatory control, assures open access. Crucially, it is one of the important functions of the State Electricity

Regulatory Commission, in terms of Section 86(1)(e), to "*promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee*". Thus, the scheme of the law gives a thrust to the promotion of generation of electricity from renewable and sustainable energy resources which can be achieved only by the sustained efforts of all stakeholders. Accordingly, the regulatory Commissions across various States have incorporated appropriate provisions in the regulatory framework towards this end, the concept of Renewable Power Obligations (RPO) targets being one good illustration on the subject.

14. The concept of "*power banking*" has been subject of dispute in the past. It was explained by a bench of this tribunal in judgment in the matter of *Tamil Nadu State Electricity Board vs. Tamil Nadu Electricity Regulatory Commission* (Appeal no. 98 of 2010), decided on 18.03.2011 reported at 2011 SCC OnLine APTEL 38: [2011] APTEL 38, as under:

> *"18. … Banking of energy is analogous to small saving bank account in a financial bank. A person deposits his surplus amount in a saving bank account. He can withdraw his*

money from bank any time according to his requirement. For this deposited money, he earns some interest. The bank in turn gives loan to some other needy customer at a higher rate of interest. In this process, saving account holder as well as bank are benefited. Now come to electricity banking. Electricity is a commodity which cannot be stored. It is to be consumed at the very instant it is produced. Generation by Wind Energy Generators solely depends upon availability of wind at a particular velocity. In other words it is periodical in nature. Its generation is not constant even during a period of 24 hours of a day. It could be possible that it generates electricity when captive user does not require it. In such a case energy generator banks it with distribution licensee who supplies this energy to its consumers at applicable tariff. However, for returning the banked energy, Licensee may have to procure additional electricity from other sources. Unlike the Banks which pay interest to saving account holder, here the licensee, banker of electrical energy, earns interest on this banked energy. Thus banking rate electrical energy should be nominal."

(emphasis supplied)

15. Again, in *Maharashtra State Electricity Distribution Company Limited v. Maharashtra Electricity Regulatory Commission*, 2014 SCC OnLine APTEL 166, it was explained thus**:**

"*31. Banking of wind energy is an essential feature to enable commercial viability of a wind energy generator supplying power to a consumer, captive or otherwise, through open access. The quantum of generation at the wind energy generator varies during the time of the day and season to season from nil to full capacity and does not match with the load profile of the consumer. The generation of wind energy generator in excess of the load of the open access consumer in a metering time block is fed into the grid and consumed by the Distribution Licensee. Various State Commissions have provided different type banking facilities to the wind energy generators to discharge their function of promotion of renewable sources of energy under the Electricity Act,*

2003 under which the surplus energy injected by the wind energy generator and utilized by the Distribution Licensee is considered as banked energy which is supplied back to the consumer during the period when the wind energy generation is less than the demand of the open access consumer in the same Financial Year. Different models for levy of banking charges and payment for the unutilized energy by the open access consumer at the end of the Financial Year by the Distribution Licensee exist in various States."

(emphasis supplied)

16. Speaking of the State of Tamil Nadu, following the same spirit as above, the TNERC framed the *Power Procurement from New and Renewable Sources of Energy Regulations, 2008* ("Regulations, 2008") which interestingly, *inter alia,* empower the Commission to make provisions for banking of energy generated by Renewable Sources of Energy and mandates that:

"*3. Promotion of new and renewable sources of energy….*
(4) The Commission may consider appropriate banking mechanism for generation of power from a particular kind of renewable source depending upon the inherent characteristics of such source."

(emphasis supplied)

17. It is admitted case for all stakeholders before us that power banking facility, introduced initially in 1983, has been afforded consistently since 1986, the quantum allowed (in beginning by TNEB and later by TNERC) having varied from time to time, it having gone up to two years in November 1989 but having continued

(barring a brief period in 2001) to the extent of twelve months since March 2002 till the impugned change by impugned order.

18. The TNERC had issued two tariff orders one on 15.05.2006 (Tariff Order 2006) and another on 20.03.2009 (Tariff Order 2009). By the time the second Order came, the Commission had framed the Power Procurement from New and Renewable Sources of Energy Regulations, 2008. These Regulations, *inter alia*, provided thus:

> "*"6. Agreement and Control period*
>
> *The tariff as determined by the Commission by a general or specific order for the purchase of power from each type of renewable source by the distribution licensee as referred to in clause 4(3) shall remain in force for such period as specified by the Commission in such tariff orders. The control period may ordinarily be two years. When the Commission revisits the tariff and allied issues, the revision shall be applicable only to the generator of new and renewable energy sources commissioned after the date of such revised order."*
>
> (emphasis supplied)

19. Thus, there can be no dispute that with each new control period, the Commission has the jurisdiction to introduce new dispensation based on updated information and experience, the existing operators having the privilege of continuity of previous norms.

20. In each of the above-said Tariff Orders (of 2006 and 2009), the applicability clause clarified that the existing contracts and

agreements between Non-Conventional Energy Sources (NCES) based generators and the distribution licensee signed prior to the date of issue of such orders would continue to remain in force, such parties though having the option to mutually re-negotiate the existing agreements / contracts, if any, in line with new dispensation before the expiry of the contracts. The banking period was considered in Tariff Orders of 2006 and 2009 as twelve (12) months from April to March, the unutilized energy having been allowed to be encashed at 75% of the preferential tariff rate.

21. In the tariff order passed on 31.07.2012 (Tariff Order 2012), the aforesaid period of twelve (12) months banking was retained and the banking charges were fixed as the difference between the average power purchase cost through bilateral trading on all India basis taken for a period of two years and the maximum preferential tariff specified in the order which worked out to Rs.0.94 per kWhr. This order on banking charges was challenged by stakeholders before this tribunal (by Appeal Nos.197, 198 of 2013 etc.) wherein the matter raised was remanded for reconsideration. The decision rendered on 24.05.2013 summarises the conclusions as under:

> "*170. Summary of Our Findings*
> *i) Circulation of Consultative Paper prior to issuing the tariff order:*
> *No prejudice has been caused by non circulation of Consultative Paper regarding determination of tariff of wind*

energy generators for procurement of power by the distribution licensee as the base for this proceeding was the last tariff order. All the stake-holders had given their suggestions for either retaining or modifying the various norms decided in the earlier tariff order and the State Commission after giving them an opportunity of hearing and after considering their suggestions and objections on the various components of tariff has finally determined the tariff. However, regarding the some issues relating to the transmission and wheeling of energy from wind generators for captive use and third party sale, the State Commission has introduced new method for determination of charges as well as the mode for recovery of charges and revised the charges substantially, Hence, we feel that the State Commission should have circulated a Consultative Paper on these issues. All these issues have been specifically challenged by the Appellants in these Appeals. At this stage, when the State Commission has already given its findings and given its own reasons for the same, Circulation of a Consultative Paper by the State Commission and denovo hearing of the case would not be necessary. However, after considering the submissions of the parties on some specific issues, we have given our findings and remanded the matter to the State Commission for reconsideration of those issues where we felt that the Appellants have to be heard by the State Commission.

ii) Applicability of Tariff order:
The Tariff of the wind energy generators for procurement of energy by the distribution licensee would apply prospectively i.e. w.e.f. 1.8.2012 for the projects which are commissioned and entered into PPA on or after 1.8.2012. For wind energy generators who have entered into PPAs for sale of power to the distribution licensees prior to 1.8.2012, the then prevailing tariff would be applicable. However, the transmission and wheeling charges for wind energy wheeled for captive use or third party sale irrespective of date of wheeling agreement, the rate as decided in the impugned order will be applicable w.e.f. 1.8.2012.
iii)Capital cost:
We confirm the order of the State Commission regarding Capital cost.

iv)Return on Equity:
We do not find any infirmity in the findings of the State Commission.

v) Annual Maintenance Contract Charges and Insurance Charges:
We direct the State Commission to allow the same O&M charges and insurance charges as a percentage of Capital Cost as decided in the previous tariff order dated 20.3.2009.

vi)Plant Load Factor/Capacity Utilisation Factor:
We are not inclined to allow any reduction in Capacity Utilisation Factor on account of loss of generation due to grid problems. However, we have given directions to the State Commission, TANGEDCO and TANTRANSCO in paragraph 114 for augmentation of transmission and distribution system to avert loss of generation at Wind Energy Generators due to inadequate power evacuation infrastructure.

vii) Time Value of Money:
This issue is decided in favour of the Appellants in terms of this Tribunal's findings in judgement dated 18.12.2007 in Appeal No.205 and 235 of 2006.
viii) Recovery of Transmission Charges on the basis of Plant Load Factor:
This issue is decided as against the Appellants in terms of our findings in judgment dated 4.2.2013 in Appeal No.102 of 2012.
ix)Abnormal Rise of Banking Charges:
The findings of the State Commission on this issue are set aside. The State Commission is directed to reconsider the computation of the charges after hearing the stake holdings and decide the issue afresh keeping in view the observations made by this Tribunal in Appeal No.98 of 2010.
x) Levy of transmission charges and transmission loss:
Levy of a single transmission and wheeling charges is not possible after unbundling of the erstwhile Electricity Board. The State Commission has determined the transmission charges for TANTRANSCO and wheeling charges for TANGEDCO by the orders 1 of 2012 and 2 of 2012 respectively. When the captive users of wind energy do not pay the full transmission charges, wheeling charges and

losses, the burden of the same falls on the consumers of the distribution licensees and other open access customers/consumers. No doubt the wind energy has to be promoted but the promotion has to be balanced with the interest of the consumers of the distribution licensees. The State Commission has balanced the interest of both by charging only 40% of the normal transmission and wheeling charges and recovering the actual losses fully from the wind energy generators supplying energy for captive use or third party sale.

xi)Scheduling& System Operation Charges:

We do not find any infirmity in the order of the State Commission in deciding the Scheduling & System Operation Charges payable by the Appellants.

xii) Deemed Demand Charges:

We set aside the order of the State Commission and remand the matter to the State Commission for reconsideration after giving opportunity to all the persons concerned and in the light of the earlier tariff orders.

xiii) Encashment or lapsed Units by REC Captive users:

The findings of the State Commission on this issue are set aside and the matter is remanded back to the State Commission with directions to hear all the parties concerned and decide the issue in the light of the judgment rendered by this Tribunal in Appeal No. 45 and 91 of 2012."

22. It is stated that appeals against the above decision are pending before the Supreme Court. In the remand proceedings, however, TNERC by order dated 31.03.2016 (in R.A No.6 of 2013) fixed the banking charges at 10% in kind. In tariff order (No. 3 of 2016), twelve (12) months banking was retained and the banking charges fixed at 12% in kind.

23. On expiry of the control period for the last said order, the Commission issued another "*Comprehensive Tariff Order on Wind Energy*" (Tariff Order 2016) on 31.03.2016 (no. 3 of 2016). It may

be added that in wake of said order TANGEDCO had filed a Miscellaneous Petition (MP no. 24 of 2016) seeking alteration of the banking period for the existing WEGs from Financial Year to Calendar Year and to dispense with the banking arrangement for the new WEGs to be commissioned after 01.11.2016 which was not entertained by order dated 13.03.2018 for the reason the Commission was then examining the proposal for issuing a fresh Order on Wind Energy, covering the period from 01.04.2018 onwards. The Tariff Order 2016, however, is under challenge by Appeal (no. 177 of 2016) which is pending,

24. It is clear from the above that ever since inception, banking has been retained *albeit* on changing terms under every Tariff Order passed from time to time.

25. The distribution licensee in State of Tamil Nadu (TANGEDCO) has been opposed to the facility of power banking for long. It appears that in every successive consultative process undertaken before issuance of every tariff order by the State Commission, the said utility has been requesting for removal of the facility of banking provided to WEGs but, on each occasion, the respondent Commission has deemed it otherwise and, therefore, retained it.

26. To illustrate the above, it may be noted that during the consultative process for the tariff order of 2009 (passed on

20.03.2009), TNEB had submitted that "*the banking facility should be restricted to one month instead of allowing yearlong banking and the banking charges should be increased to 15%.*" The suggestion was found to be "*too radical to be accepted by the Commission.*" When assailed in appeal (no. 98 of 2010), this tribunal upheld the view taken by the Commission observing that it was TNEB which itself had increased it within a span of one year (March 2001 to March 2002) on "*some rationale*", no "*new development*" having been cited as might have "*warranted the curtailment of banking period*", since the acceptance of suggestion would render "*banking mechanism as meaningless*". The relevant part of the said decision may be extracted as under:

> "*20. … it is clear that concept of banking has been introduced by Appellant Board itself in 1986 to encourage generation of electricity from abundant wind power potential available in the state. Banking charges were fixed at 2% in 1986 which were enhanced to 5% in 2001. The figure remained at 5% till 2009 when the impugned order was delivered by State Commission. Thus, there was no reason for State Commission to enhance the same to 15%. State Commission has rightly observed that Page 25 of 67 Judgment in Appeal No 98 of 2010 the plea of TNEB (Appellant) to raise the banking charge from 5% to 15% were too radical. As regards Appellant Board's demand for reduction of banking period from one year to one month, it is pointed out banking period was fixed at one month in March 2001, doubled to two months in September 2001 and then further increased to one year in March 2002 by Appellant Board itself. Thus Appellant Board has increased it from one month to one year within a span of one year. There should have been some rationale on the part of*

Appellant Board to do so. Appellant Board has not assigned any new development, which was not present in 2001-02 and which has warranted the curtailment of banking period from one year to one month now. The State Commission has rightly rejected it as otherwise it would have rendered banking mechanism as meaningless."

(emphasis supplied)

27. Similarly, at the time of consultative process anterior to tariff order dated 31.07.2012 the Discom had urged that the concessional or promotional benefit of banking facility may be withdrawn and dispensed with arguing that *"(e)xtending the concessional promotional benefit of banking will hinder the financial position of the TANGEDCO*", pleading that the "*surplus energy after adjustment on every month may be paid at 75% of the concerned power purchase cost*". The Commission rejected the prayer referring, *inter alia*, to the decision of this tribunal (*in Appeal No. 98 / 2010*), observing thus:

"8.2.11 … The Electricity Act 2003 does not have a specific provision regarding banking but at the same time Section 86 (1) (e) of the Act as well as Section 61 of the Electricity Act mandates the Appropriate Commission to promote co-generation and generation of electricity from renewable sources of energy. The Commission has also issued the Regulation for Renewable energy, providing for banking … the Commission could continue the banking in pursuant to section 86(1) (e) of the Electricity Act 2003 to promote the renewable energy in the state, subject to the adjustment of energy rates between the two periods relating to banking of energy and drawal of energy from the banking."

(emphasis supplied)

28. Almost in similar vein, in the course of assisting the Commission for tariff order 2016 (passed on 31.03.2016), the

TANGEDCO had pressed that banking provision be dispensed with not only for "*the future projects but also to the existing projects commissioned before and after 15.05.2006 irrespective of the tariff order in which the WEG is covered for which necessary amendments may be effected in the existing energy wheeling agreement*". The Commission, however, decided as under:

> "*10.11.5 TANGEDCO has contended in R.A No.6 of 2013, wherein the remanded issues by ATE were taken up by the Commission, that banking is detrimental to the finances of the utility. Commission has observed in R.A No.6 of 2013 that such concessions are not to be continued forever and has to be gradually withdrawn. All stakeholders with the exception of the distribution licensee has requested to provide banking facility for a period of 12 months.*
> *10.11.6 The Commission decides to continue with the provision of banking period in this order also. The banking period shall be for a period of twelve months commencing from the 1st of April and ending on 31st March of the following year.*"

29. The sum and substance of the above is that the banking facility has continued in State of Tamil Nadu with some variation brought about here and there in formulation, the impugned order making substantial changes in the category of beneficiaries and the terms of the package.

THE IMPUGNED ORDER

30. On 03.03.2018, the respondent Commission as a prelude to the dispensation respecting next control period issued a

consultative paper for issuance of Tariff order for Wind energy and related issues, inviting comments/suggestions on or before 23.03.2018. On the specific subject of banking, these are the various alternatives proposed by the Commission in the said consultative paper:

> *i) To dispense the facility of banking of wind energy but with deemed purchase of excess generation.*
>
> *(OR)*
> *ii) Banking facility of one month with time block wise adjustments on implementation of DSM regulations and purchase of unutilized energy at the end of each month.*
>
> *(OR)*
> *iii) Banking facility for 12 months from January to December with time block wise adjustments on implementation of DSM regulations and banking charges of 14% in kind and purchase of unutilized energy at the end of the year.*
>
> *(OR)*
> *iv) Banking facility for 12 months from April to March with time block wise adjustments on implementation of DSM regulations and banking charges of 14% in kind and purchase of unutilized energy at the end of the year.*
>
> *There shall be no facility of banking of energy for third party power purchase.*

31. On 13.04.2018, the Commission issued the Impugned Order (made effective from 01.04.2018), ruling on various aspects of reliefs in nature of or connected to power banking for WEGs. The challenge by WEGs is to the following aspects of the impugned order (the observations of the Commission extracted against each):

(a) Withdrawal of banking facility (i) for 12 months to Wind Power Projects commissioned after 31.03.2018 and (ii) altogether for all existing and new WEGs selling under Third Party Open Access Sale Scheme, irrespective of date of Commissioning and Increase in banking charges from 12% to 14%:

"*10.1 Banking :*

…

10.1.14 As can be seen from para 10.1.9, both the parties i.e the WEGs and the distribution licensee have taken extreme positions. There is also a difference in the data furnished by the WEGs and the distribution licensee. In the absence of any robust data, Commission is unable to verify the correctness or otherwise of the claims and counter claims made by them. Further, the decision of the Commission on banking in R.A No.6 of 2013 itself has been contested by both the developers and the utility. In view of the above, the Commission decides not to disturb the current position in this order and decides to continue with the present banking period of 12 months from the 1st of April to 31st of March of the succeeding year for the WEG machines commissioned on or before 31.3.2018 under captive wheeling in the case of normal and REC scheme (for REC as provided in Order No.3 of 2016 and R.A No.6 of 2013) with increase in the banking charges from 12% to 14% as proposed in the consultative paper.

…

10.1.17 Consistently, before issue of every order on wind energy, the distribution licensee has been requesting to dispense with the banking facility. In response to this consultative paper also they had made the same request. During the State Advisory Committee meeting, CMD/TANGEDCO stated that though they have been praying for completely dispensing with banking facility many times, in case the Commission finds it difficult to immediately withdraw the banking facility for all categories, at least for future projects banking facility may be

withdrawn altogether. There are also suggestions from stakeholders that dispensation of banking facility may be done prospectively to the new projects/installations. The Commission decides to extend banking facility of one month to the new WEG machines commissioned on or after 01.04.2018 both under normal and REC category, from 01.04.2018.

10.1.18 Any new WEG machines commissioned from the date of applicability of this order in the normal category or REC scheme shall have facility of banking of energy for a period of one month. There shall be no banking charges. The purchase of excess generation/ unutilized banked energy shall be at 75% of respective wind energy tariff for normal wind energy captive users and 75% of Pooled cost of power purchase as notified in the orders of the Commission from time to time for captive generators under REC scheme at the end of the month.

10.1.19 There shall be no facility of banking of energy for third party power purchase…."

(b) Increase in Cross subsidy surcharge from 50% to 60%:

"*10.3 Cross subsidy surcharge*

10.3.1 The Commission in its previous tariff orders related to different renewable power, had ordered to levy 50% of the cross subsidy surcharge for third party open access consumers. Wind energy being in a position to compete with conventional power sources, Commission decides to levy 60% of cross subsidy surcharge of that applicable to conventional power."

(c) Determination of the Capacity Utilisation factor at high level of 29.15%:

"*6.0 Tariff components*

…

6.3 Capacity Utilisation Factor (CUF)

6.3.1 Different views on adoption of CUF have been received. Some of the stakeholders have sought for retention of CUF at 27.15% and some of them have requested to adopt lower CUFs of 18.15%, 23% etc. Some of the stakeholders have requested to adopt CUF of 34 to 35% due to sophisticated technologies and capability of machines to generate in low wind areas with better plant load factor. TANGEDCO has stated that high generating capacities of 34% to 40% have been validated by developers themselves and developers who participated in the bidding process have filed petitions to relax the CUF limit specified as 27.15% in the tender, and they have suggested to adopt a CUF of 34%.

6.3.2 Commission has also observed in many of the reports and journals that the present machines are capable of high generation at low speeds of wind and this has also resulted in scaling down of costs. To reflect increased performance of wind turbines, advancements in technology, Commission has decided to adopt a CUF of 29.15%."

(d) Increase in Open Access Charges from 40% of the normative charges for conventional sources of power to 50% of Transmission and Wheeling Charges and the basis of levy on the installed capacity instead of generated units and Imposing 100% Scheduling and System Operation Charges for REC WEGs:

"*10.0 Issues related to open access:*

…

10.2 Open access charges - Transmission, wheeling charges & scheduling and system operation charges and losses :

10.2.1 Transmission, Wheeling and Scheduling & System operation charges are generally regulated by the Commission's Tariff regulations, Grid

Connectivity & Open access regulations and Commission's order on open access charges issued from time to time. However, as a promotional measure, under sections 61 and 86(1) (e) of the Act, Commission in the tariff orders of 2012 and 2016 fixed 40% of the charges applicable for conventional power for wind energy.

10.2.2 Wind power has adequately been promoted and the tariffs lower than that of conventional power plants. The concessions granted are being subsidized by other users of the network and ultimately borne by the consumers.

10.2.3 In the case of scheduling and system operation charges, the work done by SLDC is the same as in the case of conventional power. SLDC has to monitor the grid operations effectively on real time basis. The scheduling and system operation charges have to be determined in a non-discriminatory manner with reference to the functions of SLDC and there cannot be any concession.

10.2.4 Some of the stakeholders have requested to levy the proposed rate of 50% of charges applicable for conventional power for the new machines commissioned during the control period of the proposed order of 2018 and to levy rate of 40% of that applicable for conventional power prescribed in the previous orders of 2012 and 2016 for existing machines commissioned prior to this order. Some of the stakeholders have sought for retention of the charges and few of them have drawn attention to the case pending on the issue of the applicability of these open access charges across all WEGs commissioned irrespective of date of commissioning. Some stakeholders have expressed views to levy higher charges or 100% charges as applicable for conventional power as these concessions weigh down on other users of the network

10.2.5 The issue on applicability of open access charges in the tariff orders of wind energy has been

dealt by Hon'ble APTEL in the judgments in Appeal Nos.197,198 of 2012 etc. dt.24.5.2013 wherein APTEL has observed that there cannot be a differentiation in open access charges on the basis of date of signing of the wheeling agreement and the charges decided in the order are applicable for wind energy generators supplying for captive use or third party sale irrespective of the date of commissioning though an appeal is pending before the Apex court.

10.2.6 Determination of transmission charges based on allotted transmission capacity which shall be the installed capacity in the case of wind energy generators has been dealt in the order of Hon'ble APTEL in Appeal No.91 of 2012, No.45 of 2012 and No.102 of 2012, and the issue of payment of the transmission charges without the burden falling on other consumers and other open access consumers have been dealt in the order of APTEL in Appeal Nos. 197,198 of 2012.

10.2.7 Commission feels that it is time the concessions are withdrawn and relief granted to other users of the network gradually, and hence decides to fix each of the transmission, wheeling and scheduling and system operation charges at 50% of that applicable for conventional power as notified in the orders of the Commission from time to time. In respect of the WEGs availing Renewable Energy Certificates (REC), 100% of the respective charges as specified in the relevant orders shall apply.

10.2.8 Line losses :
The generators shall bear the actual line losses in kind as specified in the respective orders of the Commission issued from time to time."

(e) *FIT* fixed at Rs.2.86 without Accelerated Depreciation (AD) and Rs.2.80 with AD without considering relevant parameters:

"*7.0 Tariff Determinants*

7.1 . The financial and operational parameters in respect of Wind Power projects proposed in the paper are tabulated below:

Tariff Components	*Values*
Capital cost	*Rs. 5.25 Crores/MW*
CUF	*29.15%*
Operation and maintenance expenses	*1.1% on 85% of Capital investment and 0.22% on 15% of the Capital investment with an escalation of 5%*
Insurance	*0.75% on 85% of the Capital Cost for the first year and to be reduced by 0.5% every year*
Debt-Equity ratio	*70:30*
Life of plant and machinery	*25 years*
Return on Equity	*17.56%(pre-tax)*
Term of Loan	*10 years with 1 year moratorium period*
Interest on loan	*9.95%*
Depreciation	*3.6% p.a*
Working Capital components	*one month O&M cost and two months receivables*
Interest on working capital	*10.95%*
Discount factor	*8.75%*

Levellised Tariff without Accelerated Depreciation	*Rs.2.86*
Levellised tariff with Accelerated Depreciation	*Rs.2.80*

(f) Reduction in liability for delay in Invoice payment on Sale to TANGEDCO/ DISCOM category to 1% interest:

"*9.3 Billing and Payments*

9.3.1 When a wind generator sells power to the distribution licensee, the generator shall raise the bill every month for the net energy sold after deducting the charges for power drawn from distribution licensee, reactive power charges etc. The distribution licensee shall make payment to the generator in 60 days of receipt of the bill. Any delayed payment beyond 60 days is liable for interest at the rate of 1% per month. TANGEDCO has suggested for levy of interest at 0.75% per month. Some of the stakeholders have sought for interest of 1.5% to 2% for delayed payments beyond 60 days and some of them have requested for payment within 30 days. Having considered a receivables of two months, Commission decides to retain the duration for payment by the distribution licensee as 60 days as proposed and adopted in previous order and decides to adopt rate of interest of 1% per month for any delayed payment by the Distribution licensee beyond 60 days. …"

(g) Retrospective application of Tariff Order issued on 13.04.2018 from 01.04.2018:

"*3.0 Applicability of this order*
3.1 This Order shall come into force from 01.04.2018. The tariff fixed in this order shall be applicable to all wind power plants commissioned during the control period of the Order. The tariff is applicable for

purchase of wind power by Distribution Licensee from Wind Energy Generators (WEGs). The open access charges and other terms and conditions specified shall be applicable to all the WEGs, irrespective of their date of commissioning."

(emphasis supplied)

32. We may observe here itself that there is not much substance in objection to the date from which order has been made effective. True that such order should come before the period to which it is to be applied. But administrative delays do at times make it difficult to achieve. In the case at hand nothing turns on it.

33. It is, however, vivid that the changes substantially affect adversely the facility of power banking not only for WEGs commissioned after coming into force of the impugned tariff order (01.04.2018) but also those operating from earlier periods, the benefits available on various counts having been curtailed. The applicability clause strikes a jarring note when it says at the end by rendering the date of commissioning inconsequential not only for charges but also "*other terms and conditions*" though that is the basis of creating two categories of beneficiaries of banking.

ARGUMENTS AGAINST BANKING & RATE OF CROSS-SUBSIDY

34. It is the argument of TANGEDCO that the WEGs have significantly grown during the past few years, the State of Tamil Nadu having seen growth of wind energy capacity of more than 7000 MW as against the energy demand of 13000 MW, this reflecting surplus wind energy in the State. It is pointed out that as per the mandate of National Electricity Policy, non-conventional energy sources are required to be brought at par with the conventional sources of energy.

35. The Discom TANGEDCO seeks to press for abolition of the banking facility for all the WEGSs irrespective of date of commissioning. Its argument is that the issue relating to the banking facility provided in the wind tariff orders had led to serious financial implication on the distribution licensee, the SLDC and TANTRANSCO. The Discom submits that it is under an obligation to serve its consumers as well as the captive consumers of the WEGs to supply energy during non-wind season. The unit-to-unit adjustment provided under the Tariff order has impacted the finances of appellant to a larger extent, the penalty imposed by Sothern Region LDC (SRLDC) for the deviations in Demand Side Management bringing about additional serious impact. The lack of spinning reserves with the WEGs, absence of scheduling and forecasting and the "*must run*" status of WEGs has led to continuous

injection of wind power in the grid even when there is no requirement by the captive consumers of WEGs and the distribution licensee. The continuous un-scheduled and excess injection of power compels the distribution licensee to back down generators supplying cheaper power on a round-the-clock basis, the Discom being obliged to pay compensation to the backed-down conventional generators and also pay fixed charges for the quantum of energy contracted with conventional generators under respective PPAs.

36. It is pointed out that TNERC in Tariff Order 2012 had accepted that TANGEDCO has been incurring losses on account of banking:

> "*This is stated to be in view of the fact that when the banked energy is redrawn by the wind generators, power has to be procured from the market at higher rates and therefore the licensee is losing money. The Commission has observed in its recent exercise of the Tariff Order that the wind energy for captive use has been on the increase year after year. Quantum of wind energy wheeled for captive use is about 6000 MUs during 2011–12. It is quite possible that excess capacity has been created by some of the consumers so that they can meet all their requirements only through captive wind generation. Wind season being limited, during the balance months energy is being drawn from the banked energy.*"
>
> (emphasis supplied)

37. The contention is that wind sector has been more than adequately promoted to such extent that utilities in the State are finding it difficult to handle the energy generated from WEGs and facing complaints of rampant back down. It is argued that such

concessions ought not be continued for ever beyond the point of optimum growth of NCES which has already been achieved.

38. It is the ethos embedded in law that in the interest of overall growth of electricity industry, the activities in nature of generation, distribution and transmission of have to be conducted on commercial principles. The statute does not prescribe power banking. The TANGEDCO points out that Section 61(d) nowhere contemplates that banking facility should be provided in addition to recovery of cost of electricity in a reasonable manner. The activity of providing banking services exclusively for WEGs is not contemplated under the commercial principles envisaged under Section 61 (b). The regulatory Commission, on the other hand, is under statutory mandate to safeguard the interest of consumers and at the same time ensure recovery of the cost of electricity "*in a reasonable manner*". The argument is that banking facility for WEGs directly impinges upon the tariff paid by the public at large in the State of Tamil Nadu and, therefore, must go.

39. It is argued that Section 61 (g) Electricity Act specifically mandates that the tariff paid by the consumer should progressively reflect the cost of supply of electricity and that cross-subsidies are reduced. The plea is that cost of supply of wind energy by the distribution licensee instead includes the expenses incurred in providing banking which is ultimately passed onto the consumers. It is stated that while WEGs are granted undue benefit at the cost of public, the activity of banking has the adverse effect on the reduction of cross subsidy.

40. In the argument of TANGEDCO, for promotion of cogeneration and generation of electricity from renewable sources

of energy, in terms of Section 61(h) of Electricity Act, schemes providing loan at discounted rates of interest or for longer period of loan repayment are the appropriate course. The facility of banking provided exclusively to WEGs, it is submitted, is not a promotional activity but a source of guaranteed revenue. The cost which the distribution licensee incurs in providing banking facility, in contrast, as per the submissions, includes over/under drawl charges, penalty paid on account of grid disturbance, purchase of high-cost power for supply to the third party / captive consumers of WEGs during non-wind season and loss of energy charges. All such costs incurred on account of providing banking facility are ultimately passed on to consumers through tariff fixed by TNERC. The banking facility, thus, results in a situation where the consumer's interest is compromised against the letter and spirit of section 61 which expressly mandates safeguarding of consumers interest.

41. The TANGEDCO argues that TNERC has passed the impugned tariff order without taking into consideration above mentioned facts and grounds erroneously failing to dispense with banking, in spite of taking note of the losses incurred by the appellant in continuing to provide such facility to WEGs.

42. The Discom TANGEDCO places reliance on the views on the subject of two other State Commissions viz. Gujarat and Rajasthan – both States with substantial growth of infrastructure for wind energy generation.

43. The Gujarat Electricity Regulatory Commission (GERC), by it tariff order (no. 02) dated 30.04.2020, held as under:

"2.12 Clause 3.7: Banking of Surplus Wind Energy

2.12.1 Proposed in Discussion Paper "Since, Wind Power generation is intermittent in nature, as a promotional

measure, the Commission in its existing Wind Tariff Order decided to continue the practice of settlement of excess generation after set off during one billing cycle in case of captive wind power projects in the State.

.. For promotional measure, the Commission stated that the captive WEGSs not registered under REC are eligible for one-month banking for the electricity generated during the same calendar month.

… the generators are eligible to utilize the same during the billing cycle (1 month) in proportion to the energy generated during peak and normal hours. The Commission further stated that the banking facility shall not be available for third-party sale of wind energy and set off will be done in the 15-minute time block with Open Access consumers' consumption. The above approach is proposed for all prospective wind power projects."

2.12.2 Comments Received TPL suggested that the banking facility should be completely done away with, and settlement should be done in 15-minutes time block basis at par with other OA consumers. Significant time has elapsed since the introduction of generic tariff order framework for promotion of wind energy. Further, banking of energy even for limited period has financial implication on the Distribution Licensee.

GUVNL submitted that the banking facility should be discontinued even for non-REC based captive wind power projects who have set up capacity equivalent to more than 50 % of sanctioned load, to protect the interest of consumers. Further, Banking Charges should be enhanced from the present 2% in kind to 5% in kind, since, banking of energy has financial impact on Utility and also since, cost of wind generation has reduced significantly. Considering the fact that the intra-State ABT and DSM mechanism have been adopted in the State, banking of energy even for limited period has financial impact on Utility.

InWEA submitted that yearly banking facility or six-monthly banking facilities should be provided for captive as well as third-party consumers, as limiting the banking facility for

captive users will affect the third-party/OA nature of wheeling transactions, which is against the idea of promotion of RE. Other States allow banking for third-party consumers. InWEA added that in the last Wind Tariff Order, Banking Charges of 2% were imposed only on the banked energy and not on the total generation. Similar clarity is required for the new framework.

2.12.3 Analysis and Commission's Ruling
The Commission has not proposed any change in the existing Banking facility in the Discussion Paper. However, the Banking Charges have been removed. The Commission is of the view that the same are appropriate and provide sufficient encouragement for RE sources. Hence, no modification has been made to this Clause.

2.13Clause 3.8: Purchase of Surplus power from Wind Projects
2.13.1 Proposed in Discussion Paper "The Commission is of the view that these Projects are set up with the primary objective of captive consumption, and any sale of surplus power is incidental, and on account of being unable to absorb the entire generation through captive consumption. Further, there is a need to rationalise the charges for procurement of surplus power from those consumers who are setting up the captive wind power projects, with the intention of selling the surplus power to the Distribution Licensees, who will not be able to plan their Non-Solar RPO based on such uncertain and infirm source of wind power. Hence, the rate for purchase of such surplus power by the Distribution Licensee has to be reasonable, yet not so high so as to incentivise sale of surplus power. Further, the tariffs discovered through competitive bidding are lower than the Average Power Purchase Cost (APPC), hence, it would be inappropriate to link the rate for purchase of surplus power to APPC.

In view of all the above, and in order to provide the same dispensation to Wind and Solar power projects in this regard, it is decided that in case of wind power projects availing Open Access for captive use/third party sale but not opting for Renewable Energy Certificates (REC), the surplus

power after set off will be purchased by the concerned Distribution Licensee at the rate of Rs. 1.75 per kWh."

2.13.2 Comments Received IWTMA and Clean Max submitted that the rationale behind the rate of Rs. 1.75 per kWh for purchase of surplus power is required. Clean Max and IWPA suggested that the tariff discovered under the latest competitive bid may be considered as rate for purchase of surplus power, and the rate thus determined should be applicable for the life of the project.

InWEA and IWPA submitted that excess generation should be sold at the tariff rate determined by the Commission till the Distribution Licensee fulfils the RPO targets. The proposed mechanism for sale of surplus power to the Distribution Licensee will lead to partial recovery of cost of generation and will make such transactions uneconomical.

2.13.3 Analysis and Commission's Ruling The Commission has clearly explained the rationale for the rate of Rs. 1.75/kWh for purchase of surplus power generated by the Wind projects, i.e., the rate for purchase of such surplus power by the Distribution Licensee has to be reasonable, yet not so high so as to incentivise sale of surplus power. These Projects are set up with the primary objective of captive consumption or third-party sale, and any sale of surplus power is incidental, and on account of being unable to absorb the entire generation through captive/third-party consumption. As the rate is stipulated, it shall remain constant for the life of the project. Hence, no modification has been made to this Clause.

3.7 Banking of Surplus Wind Energy

The Commission decides to continue the practice of settlement of excess generation after set off during one billing cycle in case of captive Wind Power Projects in the State. Captive WEGSs not registered under REC are eligible for one-month banking for the electricity generated during the same calendar month. Settlement shall be on the basis of peak and normal hours. Generators are eligible to utilize the same during the billing cycle (1 month) in proportion to the energy generated during peak and normal hours.

Banking facility shall not be available for third-party sale of wind energy and set off will be done in the 15-minute time block with Open Access consumers' consumption.

3.8 Purchase of Surplus Power from Wind Power Projects opting for Captive use and Third-Party Sale under Open Access In case of Wind Power Projects availing Open Access for captive use/third-party sale but not opting for Renewable Energy Certificates (REC), the surplus power after set off will be purchased by the concerned Distribution Licensee at the rate of Rs. 1.75 per kWh."

44. The GERC, by its earlier tariff order dated 30.01.2010, had held as under:

"*6.2 Banking*

The Commission had in its draft order, proposed that the WEGS units set up after 1st July, 2009 and opting for captive use of the energy generated shall be eligible to get set off against the energy generated during peak and normal hours as specified by the Commission in the tariff orders. The WEGSs are eligible for one month banking for the electricity generated during the month. However, they are eligible to utilize the same during the month in proportion to the energy generated during peak and normal hour period.

Suggestions of the Objectors

GETCO and GUVNL have suggested that on implementation of Intra-State ABT in the State if one month banking is provided for captive use, that will create imbalance in energy accounting. GETCO has further suggested that the proposed mechanism for giving set off should be applicable to Industrial consumers only. Otherwise, such condition will distort the tariff recovery of Discoms. M/s Kenersys India Pvt Ltd., Azalea Enterprise Ltd., Indian Wind Power Association, M/s Acciona Wind Energy Pvt Ltd. and M/s Gujarat Flouro chemicals Ltd. have suggested to keep banking of surplus wheeled energy period for 12 months. It is also proposed that set-off during peak-hours and normal peak hours should not be applied on banking units. M/s. Acciona Wind Energy Pvt Ltd. have

suggested that adequate flexibility may be allowed for migration between sale to utility or third party sale or to the captive consumption in the PPA.

Commission's Ruling

The Commission had issued intra-State ABT order in August 2007. Thereafter, all the constituents have been participating in the mock trial. The state energy accounts are also been prepared by the SLDC. At present, as per earlier order No. 2 of 2006 dated 11.8.2006 the banking of wind energy for captive purpose is permissible and accordingly the same is allowed. The state energy accounting is also prepared by the SLDC taking into consideration banking of wind energy generation. Neither any constituent nor SLDC/GETCO had so far raised the issue of imbalance in energy accounting. Hence, the submission of GETCO/GUVNL that banking will distort energy account is not acceptable and the same is rejected. So far as wheeling of wind energy to be allowed to only industrial consumers and not to commercial consumers is concerned, it is also not acceptable because Electricity Act, 2003 and Open Access regulations, 2005 framed by the Commission emphasize allowing non-discriminatory open access to the consumers irrespective of their categories by the transmission and distribution licensees. Thus, such restriction is against the provisions of the Act and regulations framed under it. Moreover, such action will imply discrimination between the two categories of consumers which is also not permissible under the Electricity Act, 2003. Hence, the suggestion of GETCO to this effect is not accepted. So far as the banking of surplus units for a period of 12 months is concerned the same is not allowed because banking is allowed to captive users due to the infirm nature of the wind energy. It provides flexibility to project developers to utilize the banked units within one month time, which should be sufficient. So far as the consumption of energy during peak, and normal hours is concerned, it is a well known fact that due to shortage of power, rates of the electricity sold/traded in the market during the peak hours and normal hours are different. Moreover, the Commission has approved the tariff rates for peak hours and normal hours. Thus, there is no reason to accept the suggestion that consumption of surplus energy by the captive users during of peak-hours, and normal hours

should have similar treatment. Hence, the Commission decides to retain the relevant clause as per the draft.

6.3 Purchase of Surplus Power from WEGSs Wheeling Power for their Captive use after adjustment of energy against consumption at the recipient unit(s)

Wind Energy Generation is an infirm power and is not predictable, creating uncertainty for the distribution licensees regarding availability. It is also a fact that wind energy generation is available both during peak and off-peak hours. One month banking is allowed during which WEGSs would be able to utilize the surplus power generated by them. At times, when they are unable to utilize the same within a month, it needs to be considered as sale to the Distribution licensee concerned."

45. The Rajasthan Electricity Regulatory Commission (RERC) by 'Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources - Wind and Solar Energy) Regulations, 2014' has provided for the banking charges as under:

"*39. Banking*

(1) Energy shall be allowed to be banked at consumption end for only captive consumption within the State.

(2) Period of banking: The banking shall be on monthly basis.

(3) Energy Accounting:

(a) RE Power Generator/Developer shall intimate to SLDC and to the concerned Distribution Licensee on first day of every month, out of available energy for that particular month, the quantum of energy it wishes to bank for captive consumption within the State: Provided that where no such intimation is received on or before first day of the month, the intimation last received would become applicable for the month.

(b) The banked energy in a month shall not exceed the quantum of energy injected in the grid in the month. In case

the energy injected in the month is lower than indicated banked energy, the banked energy would be deemed to get restricted upto the energy injected.

(c) The RE Power Generator/Developer would be entitled to get payment @60% of energy charges applicable for large industrial power tariff, excluding fuel surcharge, if any, in respect of 10% of unutilized banked energy after the end of month of banking. Unutilized banked energy, in excess of 10% shall lapse.

(4) The Distribution Licensee shall make the payment, if any, on or before the last working day of the month, next to the relevant month of banking, beyond which, the Late Payment Surcharge (LPS) at the rate, as specified in these Regulations, would become applicable.

(5) Banking charges at the rate of 2% of banked energy in each month would be payable in kind."

46. It is pointed out that Technical Committee constituted by Ministry of Power (MoP) in the Government of India (GoI), by its Report of December, 2017, while dealing with balancing of Energy Sources/Energy Storage Devices to Facilitate Grid Integration of Renewable Energy Sources and Associated issues has, *inter alia*, observed pertaining to wind power in Tamil Nadu in para 2.3 sub para (5) as under:

"*"(5) <u>Since Solar and Wind Power Plants are must run power plants, Tamil Nadu has to absorb all this power</u>, most of which is through a feed in or regulated tariff, fixed by the Tamil Nadu Electricity Regulatory Commission (TNERC). This rate ranges from Rs 2.75 per unit to Rs. 4.16 per unit. (This rate depends on the date of commissioning of the unit fixed by TNERC; for wind mills commissioned prior to May 15, 2006, the rate is Rs 2.75 per unit; units commissioned between 15-05-2006 to 18-09-2008, the rate is Rs 2.90 per*

unit; units commissioned between 19-09-2008 to 31-07-2012, the rate is Rs. 3.30 per unit; units commissioned from 02-08-2012 to 31-03-2016, the rate is Rs. 3.96 per unit, and units commissioned on or after 01-04-2016 and upto 31-03-2018, the rate is Rs.4.16 per unit (all without accelerated depreciation benefits) as per the TNERC Order issued in RA No. 6 of 2013 dated 31-03-2016). Tamil Nadu has to absorb this power, even if cheaper generation with a fuel charge of less than Rs 2.0 per unit is available from their coal based power plants."

(emphasis supplied)

47. The Discom TANGEDCO relies upon *Kusumam Hotels. v. KSEB & Ors.* 2008(13) SCC 213, *Transmission Corporation of AP & Anr. v. Sai Renewable Power Pvt. Ltd. & Ors* 2011(11) SCC 34 and *Chairman, Public Service Commission, J& K v. Sudarshan Singh Jamwal* 1998 (9) SCC 327.

48. In *Kusumam Hotels. v. KSEB & Ors.* (supra), the Supreme Court held as under:

"*20.Indisputably, the State is also entitled to change or alter the economic policies. Appellants do not have any vested right to enjoy the concessions granted to them forever, particularly when the Board is constituted and incorporated under the provisions of Electricity (Supply) Act, 1948. Any policy decision adopted by the State would not be binding on the Board, save and except provided for in the Act. The Board being an independent entity, the duties and functions of the Board vis-à-vis the State are enumerated in the Act. The Board, however, would be bound by any direction issued by the State Government on questions of policy. A dispute which may arise as to whether a question is or not a question of policy involving public interest, Central Government is the final arbiter. The policy decision adopted by the State on the basis whereof the Board felt obligated to grant electrical connection in favour of the appellants on the*

basis of industrial tariff must, therefore, be understood in the context of Section 78A of the 1948 Act. What is binding on the Board is the policy of the State. The direction of the State was to apply a particular category of tariff to the appellants. Such directions could have been withdrawn while making another tariff. The State indisputably has the power to grant subsidy from its own coffer instead of directing the Board to grant concession.

21. It is now a well settled principle of law that the doctrine of promissory estoppel applies to the State. It is also not in dispute that all administrative orders ordinarily are to be considered prospective in nature. When a policy decision is required to be given a retrospective operation, it must be stated so expressly or by necessary implication. The authority issuing such direction must have power to do so. The Board, having acted pursuant to the decision of the State, could not have taken a decision which would be violative of such statutory directions."

(emphasis supplied)

49. In *Transmission Corporation of AP & anr. v. Sai Renewable Power Pvt. Ltd. & Ors* (supra) it was held thus:

82. The principle of promissory estoppel, even if, it was applicable as such, the Government can still show that equity lies in favour of the Government and can discharge the heavy burden placed on it. In such circumstances, the principle of promissory estoppel would not be enforced against the Government as it is primarily a principle of equity. Once the ingredients of promissory estoppel are satisfied then it could be enforced against the authorities including the State with very few extra ordinary exceptions to such enforcement. In the United States the doctrine of Promissory Estoppel displayed remarkable vigor and vitality but it is still developing and expanding. In India, the law is more or less settled that where the Government makes a promise knowing or intending that it would be acted upon by the promissory and in fact the promissory has acted in reliance of it, the Government may be held to be bound by such promise.

83. It is a settled canon of law that doctrine of promissory estoppel is not really based on principle of estoppel but is a doctrine evolved by equity in order to prevent injustice. There is no reason why it should be given only a limited application by way of defence. It can also be the basis of a cause of action. Even if we assume that there was a kind of unequivocal promise or representation to the respondents, the reviews have taken place only after the period specified under the guidelines and/or in the PPAs was over. This is a matter which, primarily, falls in the realm of contract and the parties would be governed by the agreements that they have signed. Once these agreements are singed and are enforceable in law then the contractual obligations cannot be frustrated by the aid of promissory estoppel.

50. In *Chairman, Public Service Commission, J& K v. Sudarshan Singh Jamwal* (supra), the Supreme Court discussed the scope of section 21 of the General Clauses Act as under:

"3. The decision in the case of Sampat Prakash [AIR 1970 SC 1118 : (1969) 2 SCR 365] speaks of the application of Section 21 of the General Clauses Act. Section 21 of the General Clauses Act says that where by any Central Act or Regulation a power to issue notifications, orders, rules, or bye-laws is conferred, then that power includes a power, exercisable in the like manner and subject to the like sanction and conditions (if any), to add to, amend, vary or rescind any notifications, orders, rules or bye-laws so issued. The order, upon which the first respondent relied, was, according to the High Court itself, issued in the exercise of the State Government's inherent power, meaning, apparently, the power derived from Section 21 of the General Clauses Act. The order was not issued in exercise of the power to make the said Rules and power was not exercised in the like manner and subject to the like sanction and conditions which operated for the making of the said Rules. Reliance upon the judgment in the case of Sampat Prakash [AIR 1970 SC 1118 : (1969) 2 SCR 365] was,

therefore, misplaced as also reliance upon Section 21 of the General Clauses Act. The exemption order did not, therefore, entitle the first respondent to appear at the recruitment examination."

(emphasis supplied)

51. Relying upon the above-noted case law, it is the contention of TANGEDCO that the WEGs have no vested rights and the principles of promissory estoppel or legitimate expectation would not apply. TNERC which is a statutory body has the power, and the duty, to comply with Section 61 of the Electricity Act and protect the interest of both the generators and public at large.

52. The Discom TANGEDCO is also aggrieved by the dispensation vis-à-vis Cross Subsidy Surcharge (CSS). It is submitted on its behalf that CSS is meant to partially compensate the under privileged general public who are being served by the utility by way of giving subsidized power. It is argued that all WEGs are liable to pay same CSS as paid by conventional generators, there being no differentiation on such levy under the Electricity Act, the concession under the impugned Tariff Order being against legislative mandate, the decision of TNERC to levy 60% CSS on WEGs being wrong. The plea is that all WEGs have to comply with Corporate Social Responsibility and TNERC cannot grant a concession on such social responsibility.

COUNTER-ARGUMENTS FAVORING BANKING & ANCILLARY MEASURES

53. The WEGs, on the other hand, argue that it is the State policy that they are promoted by all possible measures and, therefore, there is no justification whatsoever for the demand that *power banking* and ancillary reliefs be abolished. They point out that productivity of the processes and technology used by wind power projects is not consistent, it being dependent essentially on uncontrollable factors such as wind speed, velocity, direction, climate etc. and, therefore, the lean periods/seasons have to be taken into account. It is pleaded that the provision for high production (during high wind periods) be accommodated and adjusted to make up for the losses incurred during lean periods (of low or no wind seasons) and, therefore, the banking facility is fully justified even in present-day scenario. It is stated that the very basis of introduction of this equitable privilege in 1986 in State of Tamil Nadu, as also adopted in various other States of the country, continues to be valid.

54. These appellants representing WEGs challenge the impugned decision to the extent it holds that *the banking period* of twelve (12) months (i.e. from the 1st of April to 31st of March of the

succeeding year) will be continued for WEGs commissioned on or before 31.03.2018 but the same period (*of 12 months*) will not be given to those WEGs commissioned after 01.04.2018. For such new WEGs under normal and REC category, banking period / facility is only for one month. They contend that the impugned Order discriminates between WEGs regarding banking period on basis of the dates of commissioning and, therefore, is illegal being without jurisdiction and contrary to the TNERC Power Procurement from New and Renewable Sources of Energy Regulations, 2008.

55. The WEGs point out that *cross-subsidy surcharge* (CSS) has been raised from 50% to 60% only on the basis that the wind power projects are in a position to compete with conventional generation projects. It is pointed out that the State Commission had, by earlier orders, maintained the liability to pay CSS at 50% but has chosen to do so now without reason. It is contended that the decision is in the teeth of the objectives of the law and the policies of the Central and State Government prodding promotion for renewable power (green power) to substitute fossil fuel generation. According to the WEGs, it is the duty of the Commission to adopt measures to maximise wind power sources instead of placing more onerous terms such as payment of additional CSS in the end use of the wind power. It is urged that the claim made by TANGEDCO in its cross-

appeal for 100% CSS must be rejected, it being contrary to the scheme and objective of the prevalent law.

56. The WEGs submit that the increase in *banking charges* is without proper reasoning or justification, such increase going against the spirit of suitable measures already considered and implemented in regard to the quantum of compensation to be provided for availing the banking facilities considering the wind power as renewable, there being no change in circumstances to provide for any increase and making it onerous to wind power projects. It is stated that TANGEDCO did not provide any detail or material before the Commission to establish that it is not being adequately compensated for providing the banking facility. It is argued that even if it be assumed that banking charges need not be reduced such charges cannot be more than what is reasonable for the services provided. In the submission of WEGs, the increase to 14% amounts to unjust enrichment of TANGEDCO.

57. By impugned order, the *Capacity Utilisation Factor* (CUF) has been determined at 29.15% as against 18.15% on average prevalent over the last 5 years computed for the WEG installations in the State. From amongst various factors which have impact on the generation only machine availability is under the control of the generator, the other two (extent of wind availability or grid

availability) being beyond such control. The WEGs submit that 11% increase is an unrealistic call on the performance of WEG.

58. The *Open Access* (OA) *charges* have been increased for WEGs from 40% of normative charges for conventional sources of power to 50% of transmission and wheeling charges and scheduling system operation charges. It is the contention of WEGs that levy of such charges qua the installed capacity of the WEG is when the capacity utilisation factor is only about 20% on annual basis while, in contrast, the Plant Load Factor (PLF) for the conventional generation can be above 85%. Again, the argument is, the changes made violate the policy that renewable generation is to be promoted by adopting suitable measures for grid connectivity and sale to any person as per section 86 (1) (e) of the Act. A case is made out that it has to be borne in mind that there is also levy of banking charges for the use of the grid to bank and that the OA charges should be based on the units transacted in the grid and that there is no rationale for increasing the charges payable from 40% to 50%. It is pointed out that the State Commission had in the earlier orders for reasons recorded had reduced level of OA charges and further that the Central Electricity Regulatory Commission (CERC) has waived the transmission charges etc. in regard to inter-state system for conveyance of electricity generated from wind sources.

59. It is argued that the norms in regard to parameters such as interest on loan, interest on working capital and O&M expenses have been considered at lower level ignoring that small wind projects less than 25 MW cannot be compared with bigger projects. As per WEGs, the *capital cost* and *feed in tariff* (FIT) determined without appropriate parameters and based on higher capacity utilisation factor is unrealistic.

60. The WEGs are also aggrieved over retention of the *period for payment* by Discoms at sixty days and reduction of *liability for delay in payment* at 1% interest from 1.5% per month. The argument is that no justification is provided for such accommodation to TANGEDCO which results in adverse financial cash flow to the WEGs.

61. The impugned order was passed on 13.04.2018 and made effective from 01.04.2018. The WEGs contend this renders the order *retrospective* and hence bad.

TAKING STOCK

62. Our considered view is that the contentions urged by each side of the divide are partly sound and partly misguided, the approach of the Commission being half-baked and wholly devoid of

any logic, the legislative scheme and public policy having been violated. There are many a weighty reason for the banking facility to continue. At the same time, the concerns of the distribution licensee that the benefit of power banking is costing it dear cannot be lightly brushed side. There is need to evolve formulae such that it may be possible for each stakeholder to gain from non-renewable sources like wind power – a win-win scenario – rather than sulk over being the one to suffer wrong end of the stick.

63. Globally, the need for progressive substitution of fossil fuel-based generation which leads to global warming by renewable sources including wind power has been recognised and various measures have been taken. The WPPs are renewable sources of energy, environment friendly (green power) and are envisaged to be promoted under the provisions of the Electricity Act, 2003 and the National Electricity Policy and National Tariff Policy notified by the Central Government in exercise of the powers under Section 3 of the Electricity Act, 2003.

64. From the legislative scheme enshrined in the Electricity Act, 2003, particularly sections 61(h) and 86(1)(e), it is quite clear that the mandate to the Regulator is to promote generation of electricity from renewable sources of energy. Such promotional measures are envisaged in matters of tariff as well as on matters of connectivity

with the grid and sale to any person. The reforms brought in through this legislation require consistency and continuity of public policy thereby promulgated, the thrust areas including the promotion of renewable energy. In this context, reference needs to be made to (paragraphs 5.2.20, 5.12, and 5.1.22 of) the vision statement on the subject of "*Non-conventional Energy Sources*" in the National Electricity Policy, 2005:

> "*5.2.20 Feasible potential of non-conventional energy resources, mainly small hydro, wind and bio-mass would also need to be exploited fully to create additional power generation capacity. With a view to increase the overall share of non-conventional energy sources in the electricity mix, efforts will be made to encourage private sector participation through suitable promotional measures.*
>
> *5.12 COGENERATION AND NON-CONVENTIONAL ENERGY SOURCES*
>
> *5.12.1 Non-conventional sources of energy being the most environment friendly there is an urgent need to promote generation of electricity based on such sources of energy. For this purpose, efforts need to be made to reduce the capital cost of projects based on nonconventional and renewable sources of energy. Cost of energy can also be reduced by promoting competition within such projects. At the same time, adequate promotional measures would also have to be taken for development of technologies and a sustained growth of these sources.*
>
> *5.12.2 The Electricity Act 2003 provides that co-generation and generation of electricity from non-conventional sources would be promoted by the SERCs by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. Such percentage for purchase of power from non-conventional*

sources should be made applicable for the tariffs to be determined by the SERCs at the earliest. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions. Such purchase by distribution companies shall be through competitive bidding process. 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."

(emphasis supplied)

65. There is no dispute that the legislative policy envisages that:

I. All feasible potential of non-conventional energy sources needs to be exploited fully;
II. Additional power generation capacity from non-conventional energy sources is to be encouraged;
III. The aim is that overall share of non-conventional energy source in the electricity mix must increase;
IV. Efforts have to be made to encourage private sector participation through suitable promotional measure;
V. Renewable energy sources being most environment friendly – there is an urgent to need to promote generation based on such sources of energy;
VI. Such adequate promotional measure are to be taken as lead to development of technologies and a sustained growth of these sources; and
VII. Progressively the share of electricity from non-conventional sources is to be increased as per prescription of the SERCs which are under a mandate to determine appropriate differential in prices to promote non-conventional technologies so as to allow such technologies in terms of cost to compete with conventional sources.

66. That the aforesaid policy prescriptions have a statutory force is not disputed before us [see *Energy Watchdog v. CERC*, (2017) 14 SCC 80].

67. In every such discourse on the subject reference compulsorily comes up to the close connection between power generation and climate change. In this context, it is relevant to note that the Government of India has committed itself to reducing green-house gas emissions, India's climate change policy having been articulated, *inter alia*, through *National Action Plan on Climate Change* (NAPCC) adopted on 30.06.2008 and *India intended Nationally Determined Commitment* (INDC) which was submitted to the UN Framework Convention on Climate Change (UNFCCC) on 02.10.2015.

68. The NAPCC has a domestic focus on tackling climate change issues, there being a specific reference to increase in renewable energy generation capacity in the country and changing the mix of power so that renewable energy component becomes more dominant with time. The following part of NAPCC may be quoted:

> "*2. Principles*
>
> *Maintaining a high growth rate is essential for increasing living standards of the vast majority of our people and reducing their vulnerability to the impacts of climate change. In order to achieve a sustainable development path that simultaneously advances economic and*

environmental objectives, the National Action Plan for Climate Change (NAPCC) will be guided by the following principles:

- *Protecting the poor and vulnerable sections of society through an inclusive and sustainable development strategy, sensitive to climate change.*

- *Achieving national growth objectives through a qualitative change in direction that enhances ecological sustainability, leading to further mitigation of greenhouse gas emissions.*

- *Devising efficient and cost-effective strategies for end use Demand Side Management.*

- *Deploying appropriate technologies for both adaptation and mitigation of greenhouse gases emissions extensively as well as at an accelerated pace.*

- *Engineering new and innovative forms of market, regulatory and voluntary mechanisms to promote sustainable development.*

- *Effecting implementation of programmes through unique linkages, including with civil society and local government institutions and through public private-partnership.*

- *Welcoming international cooperation for research, development, sharing and transfer of technologies enabled by additional funding and a global IPR regime that facilitates technology transfer to developing countries under the UNFCCC.*

…

4.2.2 GRID CONNECTED SYSTEMS

The Electricity Act, 2003 and the National Tariff Policy, 2006, provide for both the Central Electricity Regulatory Commission (CERC) and the State Electricity Regulatory Commissions (SERC) to prescribe a certain percentage of total power purchased by the grid from renewable based sources. It also prescribes that a preferential tariff may be followed for renewables based power.

The following enhancements in the regulatory/ tariffs regime may be considered to help mainstream renewables based sources in the national power system:

(i) A dynamic minimum renewables purchase standard (DMRPS) may be set, with escalation each year till a pre-defined level is reached, at which time the requirements may be revisited. It is suggested that starting 2009-10, the national renewables standard (excluding hydropower with storage capacity in excess of daily peaking capacity, or based on agriculture based renewables sources that are used for human food) may be set at 5% of total grids purchase, to increase by 1% each year for 10 years. SERCs may set higher percentages than this minimum at each point in time.

(ii) Central and state governments may set up a verification mechanism to ensure that the renewables based power is actually procured as per the applicable standard (DMRPS or SERC specified). Appropriate authorities may also issue certificates that procure renewables based power in excess of the national standard. Such certificates may be tradeable, to enable utilities falling short to meet their renewables standard obligations. In the event of some utilities still falling short, penalties as may be allowed under the Electricity Act 2003 and rules thereunder may be considered.

(iii) Procurement of renewables based power by the SEBs/other power utilities should, in so far as the applicable renewables standard (DMRPS or SERC specified) is concerned, be based on competitive bidding, without regard to scheduling, or the tariffs of

conventional power (however determined). Further, renewables based power may, over and above the applicable renewables standard, be enabled to compete with conventional generation on equal basis (whether bid tariffs or cost-plus tariffs), without regard to scheduling (i.e. renewables based power supply above the renewables standard should be considered as displacing the marginal conventional peaking capacity). All else being equal, in such cases, the renewables based power should be preferred to the competing conventional power."

(emphasis supplied)

69. On similar lines, India's *Intended Nationally Determined Contribution* is a statement of efforts to be undertaken by India to combat and arrest climate change. India announced her NDCs in the run up to the Paris Climate Change summit held in December 2015. In the said document India has, *inter alia*, committed as follows:

"… *Government of India, intends to ensure renewable installed capacity from 40% of India's total energy mix. For meeting its international commitments in 2015, the present Central Government set a target for achieving renewable energy generation 175 GWs by the year 2022, this goal has been subsequently revised to 227 GWs of renewable energy capacity by 2022. The treaty obligations form a part of domestic law unless in conflict with enacted legislations and statutes. In the present case, India's treaty obligations are in conformity with the Central Government's vision under the Electricity Activity 2003 and various policies enacted thereunder. It is submitted that India being a signatory to the Paris Agreement is under an obligation to comply with its treaty obligations*"

(emphasis supplied)

70. The study of these documents reveal that India's commitment to global community is that it shall adopt a path that is climate-friendly and cleaner than the one followed hitherto by others at a corresponding level of economic development; reduce the emissions intensity of its GDP by 33 to 35 by 2030 from 2005 levels; achieve about 40% cumulative electric power installed capacity from non-fossil-fuel energy resources by 2030 with the help of technology transfer and low-cost international finance, including support from the Green Climate Fund.

71. Promotion of, and preferential treatment for, the environment-friendly renewable sources of power like wind energy is, thus, the declared State policy for India it being directly connected with our National goals and commitments in relation to climate change, the dependence on fossil-fuel based energy impeding the former initiative. All organs and agencies of the State are duty-bound to conduct themselves such that their actions are veered to sub-serve the cause espoused by the public policy rather than be in detriment thereof.

72. The Electricity Act, 2003 was enacted by Parliament under Schedule VII List 3 Item 38 and as such, the Central Government has the ability to make policies in a subject matter over which a

Central law has been enacted. Therefore, the national policies both relating to climate change and governing electricity sector will have primacy and, as such, the sector Regulator also has an obligation to implement the same.

73. It is apt to note here certain observations of this tribunal which are germane to the issues raised in this *lis* as recorded in similar dispute that had emanated from the State of Maharashtra, one of the other States of the Union that have by commendable promotional measures tapped wind energy. In *Maharashtra State Electricity Distribution Company Limited v. Maharashtra Electricity Regulatory Commission* (supra), this tribunal held:

> *"24. The third issue is regarding continuation of banking facility for wind energy generators.*
>
> ***...***
>
> *29. We find from the impugned order that the State Commission in various orders has been directing continuation of banking facility by the Distribution Licensee.*
>
> ***...***
>
> *30. Thus, it is seen that the State Commission has consistently been maintaining the same position and that the banking facility provided under order dated 24.11.2003 has continued to be in operation. The order dated 09.09.2011 has been passed after notification of the Tariff Regulations and the subsequent tariff orders. As regards contentions raised by the Distribution Licensee pertaining to commercial and financial implication of providing banking facility to wind*

energy generator, the State Commission has already given directions to the Appellant to carry out a detailed study and submit a report to the State Commission. Accordingly, the Appellant has been given liberty by the State Commission to put up a case to remedy any commercial and financial implication of providing the banking facility.

...

32. *Similar banking facility have been provided by the wind energy generators by the State Commission by order dated 24.11.2003 which has been extended from time to time by the State Commission. We do not find any illegality in continuation of the banking facility to the wind energy generators in pursuance of Section 86(1)(e) of the Electricity Act as a promotion measure for wind energy generators. However, we agree with Ms. Deepa Chawan, Learned Counsel for the Appellant that such banking facility should not be at the cost of other consumers of the Distribution Licensee especially as the wind energy generators are supplying energy to third parties or for captive use on commercial basis. The Distribution Licensee may incur same cost as a result of difference in price of electricity during high wind season when the energy is banked and rest of the year when the banked energy is supplied. If the Distribution Licensee is incurring same cost for providing the banking facility, the same should be recovered from the wind energy generators/open access consumers availing such facility. Accordingly, liberty is granted to the Appellant to submit a case with supporting data for charges for providing banking facilities and the State Commission shall consider the same."*

(emphasis supplied)

74. The banking facilities which were extended for good reasons from 1986 onwards pursuant to the State policy have been in force in one form or the other in various States even after promulgation of

Electricity Act, 2003. There is no doubt that Wind-Power capacity has grown exponentially over the years and the stark reality is that the wind capacity is seasonal and available for only a few months in a year. But the moot question begging for an answer is as to whether the objectives set out in law and State policy have been achieved and the time has arrived for the promotional measures like power banking and ancillary benefits for renewable sources of power to be switched off or rolled back. Given the vintage of NAPCC and INDC, and the continued validity of legislative mandate reflected by Electricity Act, the answer must be given emphatically in the negative.

75. We find the claim of TANGEDCO for permanent discontinuance of the banking facilities to be radically extreme and, patently contrary to the contemporary letter and spirit of the prevalent law particularly concerning Wind Energy Resources. There can be no doubt as to the fact that mandate of Section 86(1)(e) of Electricity Act is that renewable sources of energy are to be promoted and that for such promotion, suitable measures for connectivity with the grid and sale of electricity to any person are to be adopted, this besides such measures wherein mandatory quantum purchase of electricity from renewable sources of energy can be enforced. These aspects are wide enough to include

providing connectivity to the grid, open access and evacuation facilities.

76. The maximisation of renewable power as substitute of fossil fuel generation is one of the objectives of law and present State policy, the RPO obligations, envisaged by Section 86(1)(e) being just one mode of achieving the desired results. It cannot be disputed that wind power projects are established to operate on long-term basis, generally for periods of more than twenty-five years. The private players in this field get attracted to contribute to the cause by setting up projects based on the terms and conditions that are prevalent at the time of investment, these including tariff terms and conditions and other facilities such as banking, connectivity, open access, concessional transmission charges, zero or concessional rate of cross subsidy surcharge etc. The private investors in the wind power projects cannot hope to get the desired returns on short-term operations. In this view of the matter, there is merit in the argument of the WEGs that it is necessary to maintain continuity of policy and certainty for the Investor and that it would possibly be unfair and unjust to modify the terms adverse to its interest during the life of the project.

77. The State Commission has chosen to maintain the banking facility for the existing WEGs for twelve months but has made a

modification in the case of new WEGs by reducing and restricting the banking facility to one month and in the case of all existing and new WEGs disallowed banking when the generated electricity is sold to third parties. We do not find any reasons, much less sufficient, set out in the impugned order for such stipulation. This makes the impugned order injudicious and consequently unsustainable.

78. We find substance in the plea of WEGs that wind (as also solar) power is intermittent generation source and, by its very nature, not available for continuous availability and end-use/consumption. The quantum of wind velocity obtainable, which determines the quantum of possible generation, varies seasonally during periods known as high wind season, low wind season and sub-marginal wind season. It is this phenomenon which makes it imperative that banking facility be provided to Wind Power Projects for the whole year. It is doubtful that a wind power project, including a new project, can operate effectively with the banking facility being allowed for one month only. The generation during high wind season cannot be consumed fully in the same month of generation. It is necessarily required to be banked and consumed in later seasons. This inherent nature of use of wind generated power has been glossed over by the State Commission. The one-month period of

banking affects the fundamentals of functioning of wind power projects providing a consistent quantum for consumption.

79. The State Commission could have considered other means to ensure that the end use or consumption of banked units takes place before the end user chooses other purchasers; this possibly necessitating effective use of energy accounting. We have some doubts as to the justification for restricting banking for sale of electricity to third parties. In terms of Section 49 of the Electricity Act, the freedom has been given for a generating company to sell electricity to end-users without the tariff being regulated by the Regulatory Commission. The statute also provides for non-discriminatory open access for wheeling or transmission of power from the place of generation to the place of end use. Section 86 (1)(e) of the Electricity Act provides for promotion of renewables by adopting suitable measures for connectivity with the grid and sale of electricity to any person. The end user procuring electricity from sources other than the distribution licensee of the area is also an obligated entity for fulfilment of RPO (Renewable Purchase Obligation) under the regulations notified by the State Commissions in terms of section 86 (1)(e) of the Electricity Act. The denial of banking facility to third party sale is, therefore, contrary to the above specific provisions and to the scheme and objective of the Act.

80. It appears that the Commission, by the impugned order, has introduced the questioned modifications because of the constant grouse of TANGEDCO that it has been affected by the banking facilities being provided to Wind Power Projects. While consumer interest and financial health of distribution licensee are important the provisions in regard to third party sale, open access and renewable energy sources are of equal significance. The Parliament in its wisdom has considered it necessary that in larger public interest the environment-friendly sources be promoted by balancing such other interests. In competing interests, balance has to struck. Moving pendulum-like from one end to the other is *ad-hoc* and myopic approach not expected of such high-powered statutory regulatory authority as TNERC. It is, if we may use such analogy, akin to stretching the sheet to cover one extremity only to render the other unjustly uncovered.

81. There is no foundation laid to support the view that wind power projects have become so economical as to establish that continued support by such promotional measures as in question has become undeserved. Similarly, there is no scrutiny undertaken by the Commission to infer that banking facility is proving to be too onerous for the distribution licensee making it financially wholly unviable for it to operate or sustain.

82. The Discom TANGEDCO, in the course of hearing on these appeals, did offer some data through affidavits to demonstrate that the banking facility as it stood prior to the impugned order (along with such dispensation on ancillary issues as mentioned earlier) has been unjustly eating into its revenues and, therefore, not in the interest of consumers at large who would bear the impact on account of "*pass through*". The learned counsel for WEGs however argued that the books of accounts show that instead of losing money the distribution licensee has actually been the gainer by extending banking facilities to wind energy generators. Though on our asking a stand was sought to be taken that clear, sufficient and authenticated statistics was made available to the State Commission as well at the time of hearing anterior to the impugned order, we have to assume the contrary to be the position for two reasons – one, no discussion of such input is reflected in the order which is assailed and, two, the Commission has expressly stated (in para 10.1.14, quoted verbatim earlier) that "(i)*n the absence of any robust data, Commission is unable to verify the correctness or otherwise of the claims and counter claims made by them*", which statement, if untrue, would have prompted the TANGEDCO to seek a review.

83. We, thus, do not have the advantage of the views of the Commission based on statistical information. Further, and this tells poorly on the impugned order, it is clear that the State Commission has taken a view on various aspects without ascertaining the factual position.

84. The WEGs also point out procedural infirmity on the part of TNERC. The facts relating to the Consultative Paper anterior to the issuance of Tariff order, particularly the only four alternatives in relation to the facility of banking suggested therein have been noted earlier. The decision arrived at by the Impugned Order, however, to provide banking facility for twelve months or one month, on the basis of the date of commissioning before or after 01.04.2018, was not amongst the said alternatives. It is submitted that the view take caught the WEGs off-guard since they did not have the opportunity to argue against such conditions, this rendering the procedure non-transparent and contrary to the dicta in decision of this tribunal given (in Appeal Nos. 197,198 of 2013) on 24.05.2013 mandating wide publicity through consultative paper before introducing a new rule. Be that as it may, the distinction in applicability of distinct banking facility depending on date of commissioning of WPP is inherently contradictory in view of the clause (in Para 3) on *"Applicability"* of the Impugned Order itself, which provides that open access charges

and "*other terms and conditions*", shall be applicable to all the WEGs, irrespective of their date of commissioning. It is also arbitrary in that it does not take into account such WEGs as appellant *Watsun* which falls in grey zone its project having been commissioned in two phases, clearly for reasons beyond its control, one on either side of the dividing line (01.04.2018).

85. In the matter of *Fortune Five Hydel Ltd. V. Karnataka Electricity Regulatory Commission & Ors* (Appeal No. 42 of 2018 & batch), this tribunal by judgment dated 29.03.2019 had rejected the finding of the Karnataka Electricity Regulatory Commission (KERC) that "*the continuance of the promotional tariffs and other concessions, which are finally passed on to the consumers, is no longer justified*" and further held that banking is not a sole commercial transaction but is a physical support to RE generation on account of generation being infirm and periodical in nature., the following part of the said decision being germane:

> *"14.16 Having regard to the submission made by the learned counsel for the Appellants as well as learned counsel for the Respondents and various judgements of the Hon'ble Supreme Court and this Tribunal, we opine Judgment of that the finding of the State Commission that promotional measures for enhancing RE generation is no longer required, based on the present day landed cost of RE generation and technological development, is not supported by the adequate analysis and also not justified in the eyes of law. Besides, amendment in the terms and conditions of the executed WBAs during the currency of its validity is*

considered beyond the regulatory ambit of the State Commission. Once the RE generators have come forward to invest in the sector and given certain representations such as flexibility in banking and consumption pattern, the same cannot be taken away by simply passing an order which is not permissible under the settled principles of law. It is not in dispute that over the period, there has been increase in RE generation in Karnataka but the banking of energy account for only a small percentage of total power purchase / supply of the State from all sources. The State Commission, being the sector regulator in the State has a mandate to strike judicious balance among all the stakeholders as required under various provisions of the Act. The small RE plants cannot be compared with major/mega RE plants which are generally supplying power to inter-state and are taken care of, for their balancing on the regional / all India basis. The banking is not a sole commercial transaction but is a physical support to RE generation on account of their generation being infirm and periodical in nature. Moreover, any amendment has to take place for future projects and not for the already commissioned projects for which wheeling and banking agreements have been executed and valid for a period of 10 years from the date of execution.

14.17 In view of the aforesaid facts and circumstances, we are of the considered view that the impugned order passed by the State Commission reducing the banking period and imposing other Judgment of restrictions during currency of validity period of WBAs cannot be sustainable in law.

…

16.8 In view of the forgoing reasons, we are of the considered view that for taking such a decision of modifying the Wheeling and banking arrangement, sufficient data, analysis and evaluation have to be considered which in the instant case is virtually lacking. As the similar request of ESCOMs for reduction in banking period of RE generators was rejected by the State Commission in 2013-14 and since then no additional data or analysis or ground has been generated by the ESCOMs, the findings of the State Commission in the impugned order without judicious analysis and evaluation do not appear justified."

[emphasis supplied]

86. The afore-quoted reasons apply on all fours to the matter at hand, the TNERC having committed similar errors as its counterpart in Karnataka. The similarity between the present case and the Fortune Hydel case is more striking since Karnataka Discom had also sought reduction of banking period from time to time, but KERC had been repelling the request for want of data to justify any reduction. However, by its order dated 09.01.2018, the Karnataka Commission acceded and reduced the banking period. The said order was set aside by this tribunal on the ground that no additional data or analysis had been provided for a different view to be taken than the one taken earlier. The error committed is identical to the one committed by another State Regulatory Commission as noticed in *Maharashtra State Electricity Distribution Company Limited v. Maharashtra Electricity Regulatory Commission*, 2014 SCC OnLine APTEL 166 wherein the need "*to carry out a detailed study*" was underscored.

87. As noted earlier, TNERC has been rejecting the request for reduction in banking period for last several control periods. The impugned order is bereft of any reason as to why the request of TANGDCO merited acceptance the way it was done on banking period and ancillary issues. On the contrary, as earlier noted, the

Commission itself lamented that no "*robust data*" had been provided. If so, it should have insisted on supportive material instead of mindlessly accepting the suggestions ignoring the mandate of law and public policy.

88. The WEGs submit that as on 31.03.2020, the Ministry of New and Renewable Energy has pegged the wind potential of Tamil Nadu at 33,799.65 MW whereas the installed wind generation stands at 9,304.34 MW. It is argued that despite such low performance of the State, the Commission jumped at the suggestion of rolling back on incentives and promotional measures of banking without any analysis regarding the financial implications of such withdrawal which creates uncertainty for the sector and, therefore, is not conducive for its growth. All that we wish to say in this regard is that decisions of such import cannot be taken on current whims or fancies.

89. We, however, must add that we are not to be misunderstood having rejected the contentions of TANGEDCO as to financial losses incurred by it due to banking facility. The difficulty is that this is yet to be established. We are not inclined to undertake such scrutiny at appellate level without the advantage of views of the forum of first instance on the data offered to us by the distribution licensee. We are not impressed with submission that wind energy

capacity has grown optimally so as to render further promotion unnecessary. We agree and so reiterate what was observed in *Maharashtra State Electricity Distribution Company Limited v. Maharashtra Electricity Regulatory Commission* (supra) that "*banking facility should not be at the cost of other consumers of the Distribution Licensee*". There is possibility that the banking facility is resulting in difficulties for the distribution licensee on account of "*must run*" nature of wind power, it consequently causing some instability of grid and compelling the licensee to ask its other sources (thermal) to back down, and in the bargain constrained to compensate the latter. All that we are highlighting here is that the regulatory commissions are under a statutory mandate to adopt such measures wherein balance is struck and the legislative objective of encouraging environmentally benign sources is pursued even while larger consumer interest of availability of quality economical electricity is protected. These targets, it is clear, are to be aimed at by minimising the possibility of one interest group feeding at the cost of the other. These goals cannot be achieved by knee-jerk reactions, or whimsical or arbitrary unreasoned orders, not the least without the aid of scientific data analysis of costs involved for all stakeholders.

90. As highlighted in discussion above, several State Commissions have been struggling to find fair and equitable solutions to the vexed issues arising from power banking. But we feel the *ad hoc* approach is more to blame for such state of affairs. It is not correct to contend that law does not prescribe power banking to be adopted as a measure. In the case of Tamil Nadu, as noted earlier in this judgment, the Regulations framed by TNERC (which have the force of law) do envisage such facility. While we are very clear in our mind that, so long as the preferential treatment for renewable sources of electricity is mandated by law and public policy, the benefit of power banking cannot be taken or wished away, we also acknowledge the need for a fair dispensation wherein the facility causes minimal disturbance to the economic interests of other utilities and consumers.

91. It appears that despite being cajoled, no serious study based on scientific data has been initiated or undertaken by various State Commissions, including TNERC, to evolve a fair package on power banking for renewable sources of energy. We do not know the reasons for such default seemingly across the board. The reasons may be myriad: lack of sufficient persuasion; lack of understanding; want of resources; apathy *et al*. The Regulatory Commission are expert bodies manned by persons with requisite knowledge and

experience. They are equipped with all necessary powers and wherewithal and such studies should have by now evinced interest. In view of the decision we intend to render on this batch of appeals, we wish to remind the State Commission that under Section 86 of Electricity Act, it is also expected to exercise its powers such that they lead to not only “promote cogeneration and generation of electricity from renewable sources of energy” but also “promotion of competition, efficiency and economy” as indeed “promotion of investment” and “reorganisation and restructuring” of electricity industry. It is vested with power and authority to frame regulations which have the force of law. There can be no doubt that in order to carry out its functions and discharge its responsibility, the Commission should be eager to undertake studies to help evolve equitable, fair and reasonable uniform principles that would have continuity and certainty rather than rest content with policies that remain *ad hoc*.

92. Be that as it may, we also feel that since the issues plague the electricity industry in several States, there is need for uniform policy on the subject which may have pan-India application. Ideally, the subject would be better covered in National Electricity Policy and Plan. But that is the domain of the executive organ (Central Government).

93. We feel that the Central Electricity Authority, also a creature of the Electricity Act, can contribute to the cause. After all, it serves in advisory capacity to the Central Government and, as part of its functions (prescribed by Section 73), is also competent, *inter alia*, to *"formulate short-term and perspective plans for development of the electricity system and co-ordinate the activities of the planning agencies for the optimal utilisation of resources to subserve the interests of the national economy and to provide reliable and affordable electricity for all consumers*"; to "*collect and record the data concerning the generation, transmission, trading, distribution and utilisation of electricity and carry out studies relating to cost, efficiency, competitiveness and such like matters*"; to "*promote research in matters affecting the generation, transmission, distribution and trading of electricity*"; and to "*carry out, or cause to be carried out, any investigation for the purposes of generating or transmitting or distributing electricity*".

THE RESULT

94. While deciding these appeals to direct what is deemed necessary and proper for the parties to do, we request the Central Government to call upon the Central Electricity Authority to

undertake the necessary study and recommend fair and equitable solutions balancing the competing interests bearing in mind the legislative scheme and public policy of the State such that all State Commissions are properly guided.

95. For the foregoing reasons, we find the impugned order, to the extent challenged, to be suffering from the vices of being shorn of reasons, arbitrary, capricious, unjust and inequitable. We, therefore, set aside and vacate the directions of the State Commission in the impugned order to the extent it stipulated (a) withdrawal of banking facility (i) for 12 months to Wind Power Projects commissioned after 31.03.2018 and (ii) altogether for all existing and new WEGs selling under third party open access sale scheme, irrespective of date of commissioning; (b) increase in banking charges from 12% to 14%: (c) increase in cross subsidy surcharge from 50% to 60%: (d) determination of the capacity utilisation factor at high level of 29.15%: (e) increase in open access charges from 40% of the normative charges for conventional sources of power to 50% of transmission and wheeling charges and the basis of levy on the installed capacity instead of generated units and imposing 100% scheduling and system operation charges for REC WEGs: (f) fixed feed-in-tariff at Rs.2.86 without accelerated depreciation (AD) and Rs.2.80 with AD without considering relevant parameters: and (g)

reduction in liability for delay in Invoice payment on sale to Discoms category to 1% interest. In the result, the orders on the above subjects, as prevailing prior to impugned order, shall stand restored and revived for the control period covered by the impugned order. The State Commission shall ensure all necessary consequential orders are passed and these directions are scrupulously complied with by all concerned.

96. We would not allow further *ad hoc* approach on the subject. We, thus, also direct that the State Commission shall not bring about changes in the rules for power banking (of the kind attempted through the non-speaking impugned decision) by any further order without undertaking a study based on requisite data properly gathered and analysed so as to draw informed conclusions about financial impact on various stakeholders. We are given to understand that there is sufficient time available for such study before the time for issuing fresh order on the subject for the next control period arrives. The work in this regard, thus, must begin forthwith and in right earnest. All stakeholders shall be duty-bound to cooperate for making the endeavour meaningful.

97. The appeals, and pending applications, are decided in above terms.

98. Besides making available copies of this judgment for the parties, we direct that the Registry shall send a copy also to the Secretary, Ministry of Power in the Central Government for necessary action with reference to the observations recorded above.

PRONOUNCED IN THE VIRTUAL COURT THROUGH VIDEO CONFERENCING ON THIS 28th DAY OF JANUARY, 2021.

(Justice R.K. Gauba)
Judicial Member

(Ravindra Kumar Verma)
Technical Member

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