APPELLATE TRIBUNAL FOR ELECTRICITY AT NEW DELHI

(APPELLATE JURISDICTION)

APPEAL NO. 197 of 2019 &
IA NO. 1706 of 2019

Dated : 2nd August, 2021

Present: Hon'ble Mrs. Justice Manjula Chellur, Chairperson
Hon'ble Mr. Ravindra Kumar Verma, Technical Member

IN THE MATTER OF :

National Solar Energy Federation of India
Having office at
702, Chirajiv Tower
43- Nehru Palace
New Delhi – 110 019.
Through Authorized Representative … Appellant

Versus

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

2. Tamil Nadu Generation and Distribution Corpn. Ltd.
   (TANGEDCO)
   Rep. by its Chairman
   No.144, Anna Salai
   Chennai – 600 002.

3. Tamil Nadu State Load Despatch Centre
   (TNSLDC)
   Rep. by its Chairman
   (TANTRANSCO Ltd.)
   No.144, Anna Salai

Chennai – 600 002.

4. Tamil Nadu Transmission Corpn. Ltd
(TANTRANSCO)
Rep. by its Chairman
No.144, Anna Salai
Chennai – 600 002.

5. Ministry of New and Renewable Energy
(MNRE)
Rep. by its Secretary
Block-14, CGO Complex
Lodhi Road
New Delhi – 110 0030 ….. Respondents

Counsel for the Appellant(s) : Mr. Sanjay Sen, Sr. Adv.
Mr. Arijit Maitra
Ms. Mandakini Ghosh

Counsel for the Respondent(s) : Mr. R. Venkataramani, Sr.Adv.
Mr. Jayanth Muthraj, Sr. Adv.
Mr. Vinod B. Kanna
Mr. S. Vallinayagam
Mr. Chitvan Singhal for
R-2 to R-4

Mr. Dilip Kumar for R-5

J U D G M E N T

PER HON'BLE MR. RAVINDRA KUMAR VERMA, TECHNICAL MEMBER

1. The present Appeal has been filed challenging the legality, validity and propriety of the findings in the Order dated 25.03.2019 ("Impugned Order") passed by Tamil Nadu Electricity Regulatory Commission ("Respondent Commission/ Respondent No. 1") in Petition M.P. No. 16 of 2016 ("Petition").

2. The Appellant, National Solar Energy Federation of India is a non-profit organization with the objective of solar power development. It is an umbrella organization representing solar energy companies active along the whole photovoltaic value chain, project developers, manufacturers, engineering companies, financing institutions and other stakeholders.

3. The Respondent No. 1, Tamil Nadu Electricity Regulatory Commission ("Respondent Commission") is a statutory authority constituted under the Electricity Regulatory Commissions Act, 1998 with powers vested in it by virtue of Section 86 and 181 of the Electricity Act, 2003. The powers of Respondent Commission, amongst others, include power to determine the tariff for generation, supply, transmission, and wheeling of electricity, within the State and to adjudicate upon disputes between licensees and generating companies.

4. The Respondent No. 2, TANGEDCO Ltd. is an electrical power generation and distribution public sector undertaking that is owned by the Government of Tamil Nadu ("GoTN"). It was formed under Section 131 of the Electricity Act, and is the successor to the erstwhile Tamil Nadu Electricity Board ("TNEB").

5. The Respondent No. 3, Tamil Nadu State Load Despatch Centre is the apex body to ensure integrated operation of the power system in Tamil Nadu. It is the strategic functional unit for discharging various functions under Section 32 of the Electricity Act.

6. The Respondent No. 4, Tamil Nadu Transmission Corporation Ltd. ("TANTRANSCO") is an electric power transmission system operator owned by GoTN. It was established as a result of restructuring of TNEB.

7. The Respondent No. 5, Ministry of New and Renewable Energy ("MNRE") is the nodal ministry of the Government of India for all matters related to new and renewable energy. The broad aim of the MNRE is to develop and deploy new and renewable energy for supplementing the energy requirements of the country.

8. The Appellant has challenged the Impugned Order as it is:-

(a) Contrary to the express provisions of the Electricity Act, 2003 ("Electricity Act") under Section 86 (e), which mandates the Respondent Commission to promote generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid;

(b) Contrary to the representations made by the Tamil Nadu Government vide the Tamil Nadu Solar Energy Policy, 2012, based on which solar power developers had set up their solar plants in the Tamil Nadu;

(c) Discriminatory towards solar power plants, as deemed generation charges have been awarded to hydro power plants and conventional power plants in cases of backing down of generation.

9. **Brief Facts of the Case**:-

The factual background leading to filing of the present Appeal is set out below:-

10. In 2012, GoTN notified the Tamil Nadu Solar Energy Policy, 2012 ("TN Solar Policy"). In terms of the TN Solar Policy, solar power developers willing to set up solar power plants in the state of Tamil Nadu were

promised various incentives.

11. Acting on the assurances of the GoTN in the TN Solar Policy, various solar power developers set up their solar power plants in Tamil Nadu, after incurring substantial cost.

12. Since commissioning of the said solar power plants, Respondent No. 2 and 3 have been issuing frequent backing down instructions to the solar power developers citing grid security as the reason for backing down of generation. Pertinently, these instructions have been issued verbally and no written communication in this regard was ever issued by the Respondents.

13. Aggrieved by the rampant and arbitrary curtailment of generation of solar power, the Appellant on 10.08.2016 filed Petition M.P. No. 16 of 2016 before Respondent No. 1 i.e. the Respondent Commission, inter alia, seeking directions to the Respondents to observe the Must Run status of solar power plants and payment of deemed generation charges for the capacity which could not be generated and supplied due to backing down instructions issued by the Respondents.

14. On 26.10.2016, Respondent Nos. 2 to 4 filed their counter affidavit in Petition M.P. No. 16 of 2016 before the Respondent Commission.

15. On 03.01.2017, the Appellant filed its Rejoinder to the counter affidavit filed by Respondent Nos. 2 to 4.

16. On 24.02.2017, Respondent No. 5 filed its counter statement in Petition M. P. No. 16 of 2016.

17. On 02.06.2017, Respondent Commission passed daily order in Petition M.P. No. 16 of 2016 and issued the following directions:

> *"The counsel for the petitioner prayed to direct the 2nd respondent to file statement on daily basis for at-least two weeks stating reasons whenever instruction for backing down of solar power is issued. The 2nd respondent was directed to submit daily reports detailing the total power absorbed from solar plants, instructions issued for backing down with specific mention on the reason/s for such backing down instructions etc."*

18. On 12.09.2017, the Appellant filed I.A. No. 1 of 2017 in Petition M.P. No. 16 of 2016 seeking directions to the respondents to stagger the commissioning of the new solar power plants and permit commissioning only after the respondents are able to demonstrate the absorption of the entire solar capacity already installed in the state on a sustained basis of at least 6-9 months.

19. On 25.03.2019, Respondent Commission passed the Impugned Order, inter alia, holding as under:

> *"10.14. However, it is to be emphasized that the SLDC cannot curtail the renewable power at their convenience. Backing down of the "Must Run Status" power shall be resorted to only after exhausting all other possible means of achieving and ensuring grid stability and reliable power supply. The backing down data furnished by the petitioners has not been disputed by the respondents. However, they were not able to explain the reason prevailing at each time of backing down beyond the general statements as mentioned in earlier paras. It gives rise to a suspicion that the backing down instructions were not solely for the purpose of ensuing grid safety.*
>
> *Under these circumstances, it is necessary to direct the SLDC to ensure evacuation of the solar power generations connected to the State grid to the fullest possible extent truly recognising the Must Run Status assigned to it in full spirit. In doing so, in view of the problems enumerated supra, the SLDC may resort to backing down in rare occasions in order to ensure the grid safety as stipulated in the Grid Code and to ensure reliable 24 x 7 power supply to the State. It is necessary to log each event of backing down whenever such instructions are issued with the reason(s) which lead(s) to that unavoidable decision. A quarterly return on*

the curtailments with the reasons shall be sent to the Commission. Any whimsical backing down instructions would attract penal action under section 142 of the Electricity Act on the officials concerned.

On the next issue, it is seen that the petitioner has prayed in the I.A. to direct the respondents to stagger the commissioning of the new solar power plants and permit commissioning only after the respondents are able to demonstrate the absorption of the entire solar capacity already installed in the State on a sustained basis of atleast 6-9 months. We find that the said prayer in the I.A., is not tenable for the reason that it goes against the very mandate of promotion of New and Renewable Sources of Energy under section 86 (1) (e) and the power procurement from New and Renewable Sources of Energy Regulations, 2008 which mandate the promotion of New and Renewable Energy. Further, given the fact that the target of 175 GW of green energy has been set by the Government of India for the period ended 2022, the present prayer would go against the stated goal of GOI if acceded to. The petitioners are advised to schedule the generation block-wise on day ahead basis so that the SLDC may be in a position to plan its despatch instructions to other generators so as to ensure reliable power supply. The Commission is of the view that as already stated till such a time accurate forecasting to scheduling becomes possible and adequate affordable balancing sources are available, the SLDC will be left with existing practice of ramping down / ramping up (or) shutting down of existing power plants to the extent it is technically feasible which may vary case to case. However, various stakeholders and Commission are seized of the issue and are contemplating various means to address the same. It is not possible as prayed by the petitioner to stop augmenting the renewable resources till the respondents are able to demonstrate the absorption of the entire solar capacity already installed, since acceding to the above prayer goes against the policy of the Central Government in augmenting additional renewable energy and also achieving the target fixed for renewable energy.

While perusing the rejoinder filed by the petitioner, it is found a fresh prayer seeking deemed generation charges to the solar generating units for the loss of power generation units due to backing down instructions issued by the SLDC. Inasmuch as the Commission considers that (a) in the present circumstances it is unavoidable that the generation from the solar generators need to

be curtailed albeit to a small extent if the grid conditions so warrant, (b) we have given direction to the SLDC not to resort backing down instructions without recording the proper reason which are liable for scrutiny at any point of time and (c) that there is no provision in the agreement signed with the Utility for payment of deemed generation charges, we find it not possible to accede to the prayer of the petitioner."

20. **Questions of Law**:-

The Appellant has raised following questions of law for our consideration:-

I) Whether the Respondent Commission made a patent error in rendering the finding that the prayer seeking deemed generation charges was a fresh prayer contained in the rejoinder filed by the Appellant?

II) Whether the Respondent Commission err in rejecting the prayer of the appellant seeking deemed generation charges on the ground that solar generators need to be curtailed if grid conditions so warrant despite rendering a clear finding of fact that the backing down instruction by Respondent authorities were not solely for the purpose of ensuring grid safety?

III) Whether the Respondent Commission err in rejecting the prayer of the appellant seeking deemed generation charges on the ground that the Respondent Commission has directed the Respondent No. 2 not to resort to backing down instructions without recording proper reasons, etc.?

IV) Whether the Respondent Commission err in rejecting the prayer of the appellant seeking deemed generation charges on the ground that there is no provision in the agreement

signed with the utility for payment of deemed generation charges?

V) Whether Respondent Commission has incorrectly held that deemed generation charges cannot be granted to solar power plants:-

(i) contrary to the mandate of the Electricity Act, the Tariff Policy as amended in 2016 and the National Electricity Policy, 2005 to promote generation of electricity from renewable energy sources?

(ii) despite upholding the must run status of solar power plants in accordance with the Indian Electricity Grid Code Regulations, 2010?

(iii) in violation of the principle of promissory estoppel as established in a catena of judgments passed by the Hon'ble Supreme Court?

VI) Whether the Impugned Order is in direct violation of the promises made by the GoTN in TN Solar Policy 2012?

VII) Whether the Respondent Commission has failed to appreciate the prayers sought by the Appellant in its Petition and wrongly observed that the prayer for deemed generation charges has been sought through the Appellant's Rejoinder?

VIII) Whether the Respondent Commission err in not rendering any finding on the discriminatory treatment to solar power plants, vis-a-vis the wind farms and the thermal power plants while issuing backing down instructions?

21. Learned counsel for the Appellant Mr. Sanjay Sen has filed the following consolidated written submissions:-

BRIEF FACTS:

(A) The solar power plants, being members of the Appellant, were facing enormous monetary loss due to the backing down instructions and forceful disconnection/curtailment, which were issued telephonically by TNSLDC, TANGEDCO, and TANTRANSCO, without rendering any reasons for the same.

(B) Being aggrieved with the arbitrary backing down instructions, the Appellant, on behalf of its member solar generating plants in the State of Tamil Nadu, filed a Petition before the TNERC seeking directions against the Respondents TANGEDCO, TNSLDC, and TANTRANSCO issuing backing down/curtailment of solar projects, to enforce "must-run" status of the solar plants. The Appellant also sought for deemed generation compensation for loss of generation due to unjustified backing down instructions of the said Respondents.

(C) TANGEDCO was issuing orders asking the solar plants to cease generation for as much as 7 to 10 hours in a day comprising of the peak generation period out of 12 hours of generation in a day.

(D) The data available with respect to frequency demonstrated that there was no violation of optimum range of frequency, but on the contrary the sole reason for backing down was the commercial

interest involved in procuring cheaper power rather than the solar power which has “must-run” status.

(E) The total share of solar power being only 4.4% of the total installed capacity of Tamil Nadu, where PLF share of even less than 1% would make it unbelievable that solar plants could disturb grid frequency, apart from the fact that the data showed otherwise.

(F) Due to the loss occurring to solar plants beyond their control and for no fault of theirs, the TNERC was requested to put the solar plants in the same economic position as they would have been, had no backing down taken place. The Appellant even gave a formula for the deemed generation compensation.

(G) In the impugned order, the TNERC casted a clear suspicion on the Respondents that the backing down instructions did not arise for the purpose of ensuring grid security. However, the TNERC failed to grant deemed generation compensation on the premise that there was no provision for the same in the Power Purchase Agreements/Energy Purchase Agreements between the generators and TANGEDCO.

(H) Aggrieved with the impugned order of TNERC, the Appellant preferred the present Appeal for the grounds stated therein.

22. ISSUES UNDER CONSIDERATION / ISSUES THAT ARISE:

(A) Whether TNERC failed to grant the prayers of the Appellant despite having casted a clear suspicion that backing down did not arise for the purpose of ensuring grid security?

(B) Whether the TNERC, having casted a suspicion on the Respondents, failed to undertake a fact finding exercise and thereby abdicated its statutory responsibility under section 86(1)(f) of the 2003 Act?

(C) Whether the Respondents intentionally issued the backing down of solar power in an arbitrary manner solely for commercial reasons?

(D) Whether the member solar plants of the Appellant in the State of Tamil Nadu are entitled to receive deemed generation compensation for the loss occurred to them due to breach of contract by TANGEDCO?

(E) Whether TNSLDC is liable to be penalized for the failure of its statutory functions and for misfeasance?

APPELLANT'S CASE:

23. Solar power is purchased at single part tariff. Hence, if there is no injection, there will be no payment to the solar plants. Conversely, conventional generators get paid fixed charges even if power is backed down. But solar plants do not get fixed charges, even though back-down is completely arbitrary, illegal, and unjustified on facts and in law. Backing down has taken place in Tamil Nadu during many periods for the entire day. Backing down instructions have been given telephonically and on email on a post facto basis where no data has been created regarding the frequency. No logbook has been maintained.

24. The independent report submitted by POSOCO to the Hon'ble Tribunal clearly concludes that there was no abnormal voltage condition at 400 kV level of the grid and no network loading issue which required backing down/curtailment during the said period. No specific constraint is expressed by TNSLDC at the State level. There were no

constraints/violations which necessitated the statewide curtailment during the period under consideration. Importantly, POSOCO rendered a finding that considering the grid frequency and net drawl of Tamil Nadu from the grid, only 5.26% (60 out of 1140 blocks) appears to be justified from grid security perspective.

25. Not only the TNERC casted a suspicion that backing down was not for grid security, now even POSOCO, a statutory body, has substantially confirmed on the same lines.

26. It is clear that backing down was for collateral reasons and not for grid security and hence the Appellant's members would be entitled to damages/compensation for willful losses caused by the Respondents who had acted illegally and in concert.

RESPONDENTS CONTENTIONS:

27. Common submissions have been made on behalf of TNSLDC, TANGEDCO, and TANTRANSCO.

(A) The backing down is justified because generation is to be reduced prior to reaching the limit of frequency band of 50.05 Hz.

(B) The SLDC is authorized under section 32 to issue backing down instructions to secure economic operation of the State Grid.

(C) The optimum frequency operating level of 49.05 Hz to 50.05 Hz requires the SLDC to issue backing down instructions.

(D) Oral instructions are issued to avoid any untoward incident of blackout. Backing down instructions in writing in advance is practically not possible in real time operation of the Grid.

(E) Renewable generators are backed down as a last resort after conventional and hydro.

(F) Deemed generation compensation is a financial burden. The Regulations do not have any provisions for the same to RE generators who are responsible for disturbance in the grid.

(G) There is no finding by the TNERC that backing down instructions given by the Third Respondent are unlawful.

(H) In public proceedings of tariff determination, the issue of backing down instructions and payment of deemed generation was raised by the solar generators. But these were not accepted by the TNERC.

(I) Shutting down of Thermal Stations for maximum evacuation of RE power will cascade into frequency to come down and there will be load shedding.

(J) The Respondents also filed an Affidavit to justify their actions during the lockdown period (caused due to Covid-19 pandemic) wherein they have stated that load had crashed in the State of Tamil Nadu.

DETAILED SUBMISSIONS

28. The Appellant herein has impugned the order dated 25.3.2019 passed by the Respondent Commission in Petition No. M.P. 16 of 2016. The Appellants have contended that Respondent Commission failed to act despite having recorded a clear *suspicion* that the backing down instructions were issued not for the purpose of ensuring grid security. The relevant extracts are:

> *"10.14. However, it is to be emphasized that the SLDC cannot curtail the renewable power at their convenience. Backing down of the "Must Run Status" power shall be resorted to only after exhausting all other possible means of achieving and ensuring grid stability and reliable power supply.* ***The backing down data***

> ***furnished by the petitioners has not been disputed by the respondents. However, they were not able to explain the reason prevailing at each time of backing down beyond the general statements as mentioned in earlier paras. It gives rise to a suspicion that the backing down instructions were not solely for the purpose of ensuing grid safety.***
>
> *10.15. Under these circumstances, it is necessary to direct the SLDC to ensure evacuation of the solar power generations connected to the State grid to the fullest possible extent truly recognising the Must Run Status assigned to it in full spirit. In doing so, in view of the problems enumerated supra, the SLDC may resort to backing down in rare occasions in order to ensure the grid safety as stipulated in the Grid Code and to ensure reliable 24 x 7 power supply to the State. It is necessary to log each event of backing down whenever such instructions are issued with the reason(s) which lead(s) to that unavoidable decision. A quarterly return on the 59 curtailments with the reasons shall be sent to the Commission. Any whimsical backing down instructions would attract penal action under section 142 of the Electricity Act on the officials concerned."*
>
> *{Emphasis added}*

29. Surely, having come to a finding that:

(a) the data furnished by the Appellant has not been disputed by the Respondent and;

(b) the conduct of the Respondents were suspicious, the Commission failed to conduct further inquiry and / or grant relief as prayed for by the Appellant. The data placed before the Commission showed that the solar generating plants across the State of Tamil Nadu were prevented from injecting power to the grid, in terms of the Power Purchase Agreements and the extant regulations. As a result, the solar generating plants were being denied payment of agreed / approved tariff, and that this was being done on a wholesale basis under the garb of grid security.

30. The State Commission in view of the provisions of Sections 33 and 86(1)(k) & (f) of the Electricity Act, 2003 was vested with the requisite jurisdiction to adjudicate and grant relief in the matter. However, the State

Commission failed to do so. The Hon'ble Supreme Court in **Gujarat Urja Vikas Nigam Ltd. Vs. Essar Power Limited: (2008) 4 SCC 755** at para 62, inter alia, held that

> *"[w]e further clarify that all disputes, and not merely those pertaining to matters referred to in clauses (a) to (e) and (g) to (k) in section 86(1) between the licensees and generating companies can only be resolved by the Commission or an Arbitrator appointed by it. This is because there is no restriction in section 86(1)(f) about the nature of the dispute".*

Apart from the aforesaid, the Supreme Court in **A.P. Power Coordination Committee & Others v. M/s. Lanco Kondapalli Power Ltd. & Ors, (2016) 3 SCC 468**, has held as follows:

> *"31. We have taken the aforesaid view to avoid injustice as well as possibility of discrimination. We have already extracted a part of paragraph 11 of the judgment in the case of State of Kerala v. V.R. Kalliyanikutty (supra) wherein Court considered the matter also in the light of Article 14 of the Constitution. In that case the possibility of Article 14 being attracted against the statute was highlighted to justify a particular interpretation as already noted. It was also observed that it would be ironic if in the name of speedy recovery contemplated by the statute, a creditor is enabled to recover claims beyond the period of limitation. In this context, it would be fair to infer that the special adjudicatory role envisaged under Section 86(1)(f) also appears to be for speedy resolution so that a vital developmental factor - electricity and its supply is not adversely affected by delay in adjudication of even ordinary civil disputes by the Civil Court. Evidently, in absence of any reason or justification the legislature did not contemplate to enable a creditor who has allowed the period of limitation to set in, to recover such delayed claims through the Commission. Hence we hold that a claim coming before the Commission cannot be entertained or allowed if it is barred by limitation prescribed for an ordinary suit before the civil court. But in appropriate case, a specified period may be excluded on account of principle underlying salutary provisions like Section 5 or 14 of the Limitation Act. We must hasten to add here that such limitation upon the Commission on account of this decision would be only in respect of its judicial power under clause (f) of sub-section (1) of Section 86 of the Electricity Act, 2003 and not in respect of its other powers or functions which may be administrative or regulatory."*

31. The jurisdiction vested under Section 33 (4) specifically requires the Commission to decide disputes in relation to directions issued by the SLDC. The decision that one has to take under section 33 (4) includes the jurisdiction to grant compensation in the event of wrongful issuance of directions, with the purpose of causing loss to the generator and benefit to the discom. The relevant judgments that explain the scope of such jurisdiction are as follows:

P.L. Lakhanpal v. Union of India & Anr., AIR 1967 SC 908

"8. The question then is: what precisely does the word "decide" in Rule 30-A mean? It is no doubt a popular and not a technical word. According to its dictionary meaning "to decide" means "settle (question, issue, dispute) by giving victory to one side; give judgment (between, for, in favour of, against); bring, come, to a resolution" and "decision" means "settlement, (of question etc.), conclusion, formal judgment, making up ones mind, resolve, resoluteness, decided character".

Aijaz-ud-din v. Taxing Officer etc., A.I.R. 1966 All 227

"12. Counsel for the petitioner has pegged his argument on the word 'decision' in sub-s. (1) of S. 381. Again and again he has reminded me that the Legislature has itself declared that the Tribunal constituted under the Act gives a decision and does not make an order. ***The word 'decision' is not a word of art. It is a word having broad connotation. It may include a decree or an order within the meaning of the provisions of the Code of Civil Procedure; it may also include an award in some cases.*** *In some cases it may include neither of them. Whether it includes any one of them in sub-section (1) of Section 381 will depend not merely upon that expression, but upon its collocation. It may be observed that in sub-section (3) of Section 381 itself the Legislature has said that no appeal shall lie under Section 381 unless the appellant has deposited the money which he is liable to pay under the order from which the appeal is filed. It seems to me that sub-section (3) will apply to a case where the Mahapalika, who is called upon to pay certain compensation, proposes to file an appeal in the High Court. In that event the Nagar Mahapalika would have to deposit the amount of compensation awarded by the Tribunal. The decision of the Tribunal or payment of compensation by the Nagar Mahapalika to a particular person is called an order by the Legislature in sub-section (3) of Section 381. Sub-section (3), therefore, shows that it is necessary to examine the context of sub-section (1) of Section 381 in order to find out whether the word 'decision' in that provision means a decree or an order or an award or none of them. Clause (b) of Section 376 provides that the award of the Tribunal shall be deemed to be the award of the Court under the Land Acquisition Act. It would thus appear that in this provision the Legislature has characterised the decision of the Tribunal as an award of the Tribunal. It has gone on to say that its award shall*

be deemed to be the award of the Court under the Land Acquisition Act. In view of this provision ***I am inclined to hold that the decision of the Tribunal is an award."***

Kanak Sunder Bibi v. Ram Lakhan Pandey & Ors., 1956 SCC OnLine Pat 31

"27. Thus the word 'decision' is equivalent to the word 'decree'. In other words, ***the word 'decision' embraces the final determination of the Court on all the claims put forward in controversy between the parties in a suit or a proceeding****. …"*

32. After the enactment of the Electricity Act, 2003, the generating companies can only invoke the jurisdiction of the State Commission and do not have the ability to apply to any other court / forum. Further, Section 33 (4) of the Act also mandates raising of disputes in matters of directions issued by the SLDC before the State Commission, who has to then adjudicate upon such disputes.

33. While the Respondent Commission in the impugned recorded a clear suspicion that the present Respondent No. 3 / SLDC were carrying out backing down of solar power plants not for the purpose of ensuring grid security, it refused to grant relief of compensation for the loss of power generation due to backing down by the Respondent SLDC. The SLDC was clearly acting illegally, to protect the commercial interest of the distribution licensees. The SLDC, being a statutory body was not acting independently, as is also established from the fact that the SLDC and the distribution licensees are filing common affidavits before this Tribunal and is being represented as if they are one and the same. The denial of compensation was on the ground that there was no provision in the agreement for payment of compensation / deemed generation charges.

The State Commission completely ignored the settled position of law on the subject.

34. The Appellate Tribunal for Electricity in its judgment dated 14.11.2013 in Appeal No. 175 of 2012 titled ***TATA Power Company Limited v. Maharashtra Electricity Regulatory Commission & Ors.***, has, inter alia, held as follows:

> *"….62. As held by the Hon'ble Supreme Court* ***to establish misfeasance on the part of SLDC, it is enough to show that SLDC is guilty of legal mala-fide by knowingly breaching its statutory duty and with knowledge that its action is likely to cause losses to the Appellant****. ….*
>
> *…..*
>
> *77(3). This conduct on the part of the State Load Despatch Centre which is public office cannot be said to be bona-fide and genuine. When SLDC has got the knowledge that they cannot rely upon the Government memorandums on the basis of which the earlier order passed by the State Commission on 29.9.2010 after they were quashed, even then they refused to schedule power to the Appellant as requested by the Appellant,* ***would show the malafide attitude of SLDC and due to that the Appellant suffered a loss. Therefore, we are of the view that since misfeasance by the SLDC with its knowledge has been established, the Appellant is entitled to claim for compensation from SLDC****."*
>
> *(Emphasis Supplied)*

35. Clearly, it is settled law that ***to establish misfeasance on the part of SLDC, it is enough to show that SLDC is guilty of legal mala fide by knowingly breaching its statutory duty and with knowledge that its action is likely to cause losses to the generating company***. Further, it is also settled law that once misfeasance by SLDC with its knowledge has been established, the party aggrieved is entitled to claim compensation from SLDC. Further, the Commission failed to appreciate the submissions made on law and facts by the Respondents. The findings of Commission that there is no provision in the PPA to claim compensation was wrong and deserves to be rejected.

(I) THE IMPUGNED ORDER IS PATENTLY WRONG:

(i) The impugned Order is patently wrong both on facts and in law. At the outset, the Ld. State Commission was exercising regulatory jurisdiction and as such has been vested with wide powers, which includes power to adjudicated disputes. At the outset, the State Commission erred in holding that Appellant's claim for deemed generation compensation was contained in its Rejoinder. This was factually wrong. There was a specific prayer in the petition that was filed before the State Commission, being Petition No. 16 of 2016, wherein, it was, inter alia, prayed as follows:

"(a) direct the respondents to forthwith stop issuing backing down/curtailment instructions to solar projects as the backing down is causing huge losses to the solar developers almost on daily basis, pending final decision in the matter;

(b)Issue a direction to respondent to strictly enforce/implement "MUST RUN" status on all solar power plants in the State of Tamil Nadu and consequently direct the respondent not to issue orders to the solar power plants to switch off generation or to back down generation;

(c) Issue appropriate directions to consider deemed generation to solar plants for the loss of generation due to outages/backing down instructions of respondents and to approve the methodology for estimating deemed generation;

(d) direct the respondents to compensate the petitioners corresponding to loss of generation on account of backing down instructions with retrospective effect at the tariff of the PPAs;

(e) declare that all directions issued by the respondents to the solar plants in the state of Tamil Nadu, directing them to switch of generation or back down generation, till date as invalid, in case they are not able to establish compliance with above stated provisions and to issue guidelines for formal procedure to be adopted and conditions to be satisfied for carrying out/giving backing down instructions in future."

In fact, the Impugned Order even records such prayer so on first page., but then then returns a contradictory finding in the later part of the judgment.

(ii) The State Commission failed to exercise its jurisdiction under section 86(1)(f) and (k) while abdicating its function to make appropriate inquiry into the reason for large scale / across the board backing down of solar power by Respondents in the State of Tamil Nadu. It was a case where arbitrariness and illegality was writ large on the face of it, in the actions of the TNSLDC, TANGEDCO/TANTRANSCO. While the State Commission – sector regulator finds the conduct of a statutory body and state utilities suspicious, it fails to make inquiries and unravel the truth. The impugned order patently illegal for it arbitrary and suffers from abdication of regulatory jurisdiction vested in accordance with law. It has failed to decide the dispute finally, in terms of the mandate provided under the statute. The determination made, which allows the perpetrators of illegal conduct to escape both scrutiny and liability, wrong, inequitable, unfair and unjust.

(iii) There is a serious error of law committed by the TNERC and as a consequence thereof it failed to exercise jurisdiction vested on it by law. The exercise of Appellate jurisdiction is justified in a case of this nature. The ability to claim compensation, in the facts of this case, is not dependent on existence or non-existence deemed generation clause in the PPA. The Appellant's members have jural relations with the Respondents, which are based on contract and statute. The breach of such contract and statutory provisions entails liabilities, in the form of compensation or otherwise. This aspect has been

completely ignored by the State Commission. The failure to provide for compensation, in the facts of the present case, is wrong.

(iv) The TNERC failed to grant relief to the Appellant's Members for the wrongful backing down and switching off the Solar Power Generation of various solar plants in the State of Tamil Nadu by way of arbitrary, unjustified and unlawful verbal and email instructions issued by the State Load Dispatch Centre (R-3), which is part of TANTRANSCO (R-4). Such instructions are being issued by the SLDC / R-3 at the instance of and in order to protect the commercial interest of TANGEDCO (R-2). The Commission did not even inquire into the root-cause of the matter, and / or provide a protocol for ensuring such illegal actions are not repeated in future. In fact, even after the passing of the impugned order, when the matter was pending in appeal, there was widespread and illegal curtailment by the Respondent.

(v) The Commission failed to appreciate that Energy Purchase Agreement has been approved by it and signed by the parties expressly provide "MUST RUN" status to the power plants of the Appellant. The relevant clause of the Energy Purchase Agreement are as follows:

> "*3(a)* ***The solar power generated shall be evacuated to the maximum extent subject to grid stability and shall not be subjected to merit order dispatch principle".***
>
> {Emphasis supplied}

Hence, the MUST RUN status of the plants is a term of the contract and any departure therefrom is a breach.

(vi) Additionally, the actions of the Respondent to back down the Solar Power plant are not only in clear violation of the Energy Purchase Agreements, but also regulation framed by the Central Commission and the State Commission on the subject.

II. REGULATIONS THAT MANDATE SOLAR POWER AS "MUST-RUN"

(i) The statutory provisions are extracted as follows:-

(A) Regulation 5.2(u) of the Indian Electricity Grid Code Regulations, 2010 ("IEGC") notified by the CERC, provides as under:

> *"System operator (SLDC/ RLDC) shall make all efforts to evacuate the available solar and wind power and treat as a must-run station. However, System operator may instruct the solar /wind generator to back down generation on consideration of grid security or safety of any equipment or personnel is endangered and Solar/ wind generator shall comply with the same. For this, Data Acquisition System facility shall be provided for transfer of information to concerned SLDC and RLDC."*

(B) Regulation 6.5(11) of the IEGC provides:

> *"11. Since variation of generation in run-of-river power stations shall lead to spillage, these shall be treated as must run stations. All renewable energy power plants, except forbiomass power plants, and non-fossil fuel-based cogeneration plants whose tariff is determined by the CERC shall be treated as 'MUST RUN' power plants and shall not be subjected to 'merit order despatch' principles."*

The aforesaid regulatory / statutory provisions give effect and / or implement the mandate of Section 61(h) and Section 86(1)(e) of

the Electricity Act 2003, which provides for the promotion of Renewable Energy. Hence, the actions of the Respondents are also in violation of essential provisions of the statute. The Respondents have accepted the aforesaid factual aspects but continued to violate the law. Further, the backing down instructions are arbitrary and violative of Article 14 of the Constitution of India.

(ii) The arbitrary and illegal nature of the backing down by the Respondent SLDC is clearly manifest, especially when the frequency profile during the period 1.4.2016 to 31.7.2016 was optimum. While the upper limit of 50.10 Hz were crossed only for 1% of the total time block during solar generation during the day, severe backing down during that period had taken place. The data relating in support of this fact was duly placed before the Commission and has not been rejected.

(iii) The Hon'ble Supreme Court held that non-exercise of public law or statutory power did create a private law action for damages for breach of statutory duty [Ref.: Union of India Vs. United India Assurance Company Ltd. & Ors.: (1997) 8 SCC 683 at para 41, 46].

(iv) Based on the aforesaid, the Appellant had proposed compensation in the manner akin to deemed generation calculated on the basis of any one of the following basis:

(a) Estimate based on actual radiation for the hours corresponding to backdown/curtailment; or
(b) Average of actual generation during the corresponding period of previous and next day.

This is also recorded in the impugned order.

(v) Though in the impugned order Commission also accepts Must Run status of solar plants, but fails to give relief and provides:-

> *"3.9. The Commission has also pointed out in its Tariff Order dated 28.03.2016 at page 56 that RE Sources (including solar) have been assigned MUST RUN status and do not come under Merit Order Dispatch, which reads as follows:*
>
> *"Chairman/TNERC - Renewable Energy is considered as separate and they have been assigned must run status. These energies do not come under Merit Order Dispatch. Grid Security alone can stop functioning of any of these machines."*
>
> *"10.9. The petitioner also cites the following provisions in the Tamil Nadu Grid Code notified by the Commission:-*
>
> *"8. Scheduling and Despatch:-*
>
> *(1) x x x x*
>
> *(2) x x x x*
>
> *(3) x x x x*
>
> *(a) x x x x*
>
> *(b) SLDC shall regulate the overall State generation in such a manner that generation from following types of power station where energy potential, if unutilised goes, as a waste shall not be curtailed;*
>
> • *Run of river or canal based hydro stations*
>
> • *Hydro-station where water level is at peak reservoir level or expected to touch peak reservoir level (as per inflows)*
>
> • *Wind Power Stations and Renewable Energy Sources*
>
> • *Nuclear Power Stations "*

(III) THE FINDING OF TNERC THAT THE CLAIM FOR DEEMED GENERATION COMPENSATION WAS BY A FRESH PRAYER, IS INCORRECT:

(i) As submitted herein before, the Respondent Commission, while accepting the fact of wrongful backing down, recorded a finding that while perusing the rejoinder filed by the present Appellant it was found that a fresh prayer was added seeking deemed generation charges to their solar units for the loss of power generation due to backing down instructions issued by the Respondent SLDC. In fact the prayers have been recorded by the Respondent Commission at para 1 of the Impugned Order itself inter alia stating "The prayer of the Petitioner in the above M.P. No. 16 of 2016 is to:- .

> *"…*
> *(c) issue appropriate direction to consider deemed generation to solar plant for the loss of generation due to outages/backing down instructions of the Respondent and to approve the methodology for estimating deemed generation.*
> *"(d) direct the Respondent to compensate the Appellant corresponding to loss of generation on account of backing down instructions with retrospective effect at the tariff of the PPAs."*

Hence, the TNERC returned a wrong finding in view of the specific prayer made by the present Appellant in its Petition in MP No.16 of 2016.

(IV) <u>THE CONTENTION OF RESPONDENTS NO. 2, 3 AND 4 THAT REGULATIONS MANDATED BACKING DOWN, AND AS SUCH REGULATIONS CANNOT BE CHALLENGED IN THE PRESENT APPEAL, IS INCORRECT:</u>

(i) The present Appeal does not impugn the vires of any provision of any regulation. In fact, the Appellant is seeking implementation of the Regulations. Accordingly, no question of challenge to regulations arises in the present Appeal. No issue of competence

to enact regulations, or any of its provisions can arise in the present Appeal.

(ii) The Appellants have challenged the impugned order passed by the TNERC being wrong on facts and in law. The argument of the said Respondents that the Appellate Court cannot go into the issues raised in the present Appeal is not apposite nor relevant. It is submitted that all orders of CERC and SERC (here TNERC) are capable of being appealed against before the Hon'ble Appellate Tribunal under sections 110 and 111 of the Electricity Act, 2003. This position is further strengthened by the fact that the Electricity Act, 2003 has been held to be an exhaustive complete code. The Supreme Court has specifically held that "**the 2003 Act is an exhaustive Code on all matters concerning electricity"** [**Ref.: PTC India Ltd. Vs. Secy. CERC: AIR 2010 SC 1338** at para 9].

(iii) The order dated 25.3.2019 passed by TNERC disclosed apparent errors/inconsistencies and accordingly this Hon'ble Tribunal would be required to consider the correctness/legality of the said impugned order in these proceedings.

(V) WHETHER THERE WAS INTENTIONAL AND UNJUSTIFIED CURTAILMENT OF SCHEDULING OF POWER BY THE RESPONDENTS/SLDC, WHETHER IT WAS FOR GRID SAFETY MEASURE TAKEN BY SLDC:

(i) TNERC held in the impugned order that "The backing down data furnished by the Petitioners has not been disputed by the Respondents. However, they were not able to explain the reasons

prevailing at each time of backing down beyond the general statements as mentioned in earlier paras." [**Ref.: Para 10.14 of the impugned order.]**

(ii) There is no answer in the reply in the present Appeal filed by Respondents No.2, 3 and 4, in so far as the data submitted by the Appellants. Instead the said Respondents state that there was no concrete proof brought on record by the Appellants before the Regulatory Commission to substantiate its allegations that the Respondents issued backing down instructions arbitrarily. The respondents also say that there is no document on record by the Appellant to show that the backing down instructions given by the third Respondent are unlawful. The said respondents categorically state that there is no such finding even by the Regulatory Commission. The said Respondents go on to conclude that the allegations and documents brought on record before the Commission only raised a doubt. Alternatively, the said Respondents had contended that regulatory curtailment is necessary for maintaining a safe and secure grid which is the mandate of the 2003 Act and the Indian Electricity Grid Code.

(iii) The above contentions on behalf of Respondents No.2, 3 and 4 are ex facie contradictory in terms and even contrary to the impugned order which holds "**It gives rise to a suspicion that the backing down instructions were not solely for the purpose of ensuring grid safety"**.

(Emphasis added)

[**Ref. Para 10.14 of the impugned order]**

(iv) In the joint counter affidavit filed by Respondents No.2, 3 and 4, the backing down of (curtailment of) solar power generation has been sought to be justified on the ground of crash of demand during the national lockdown from 23.3.2020 due to pandemic Covid-19. However, no data has been furnished to show (a) that grid frequency merits backdown of "**must-run**" generating stations; (b) that merit order despatch principles are being followed; (c) thermal stations are backed down upto their technical minimum or taken to Reserve shut Down; (d) there is no purchase from short-term market (power exchange) (UI overdrawls) during the times when solar plants were backed down.

(v) The Appellants have submitted frequency analysis to show that frequency was well within the permissible range of 49.05 Hz – 50.05 Hz. and still the respondent SLDC backed down solar generation [**Ref.: Written Submissions of Appellant dated 22-10-2020].**

(vi) The Hon'ble Tribunal vide its order in the above appeal dated 26.8.2020 inter alia issued the following direction:

"Both parties have referred to several charts, tables prepared by them for placing on record the data and details, as directed by this Tribunal on earlier dates of hearing. The fact remains that the Tribunal cannot make rowing enquiry into factual data, therefore, such enquiry has to be done by a third party i.e. POSOCO. **We direct POSOCO to make detailed verification of the data after considering the contentions raised by the parties and submit report to the Tribunal within four weeks and indicate whether there was intentional curtailment of scheduling of power by**

the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents. We also direct a clear statement "Was there any fair and justifiable curtailment of power from all generators, both renewable and non-renewable, the actual generation and injection of energy"? "

{Emphasis added}

(vii) In terms of the Hon'ble Tribunal's order dated 26.8.2020 and as directed therein, POSOCO submitted its report on renewable energy curtailment in Tamil Nadu (for the period 01.03.2017 to 30.06.2017).

(VI) POSOCO REPORT VINDICATES THE STAND OF THE APPELLANTS:

(i) POSOCO has analyzed the decision of SLDC as the loss of the margin available for backing down from conventional energy sources. This is evident from the following paras of the report extracted for ready reference:

b" 4.2.1 Considerations for analysis

i. As explained in paragraph 4.1.3 & 4.1.4, the blocks where both generator and TNSLDC data has indicated curtailment has been considered for analysis.
ii. Generation, solar & wind curtailment data as submitted by TNSLDC is used for this analysis.
The curtailment information for the entire state of TN for both solar and wind is available only from the data

submitted by TN SLDC and hence the same has been used. There may be difference between SLDC version and developer version which can be attributed to the time taken for the communication to reach the developer and may be more prominent in the initial time blocks when curtailment is instructed by TNSLDC.

iii. Considering the all the observations made on the data in preceding paragraphs, the analysis has been limited to parameters deviation, margins available in state owned and ISGS conventional generators with the presumption that proper load forecasting and renewable forecasting for state has been done by TNSLDC.

iv. The analysis of curtailment data submitted by TNSLDC is classified under three broad categories as below. Each case of curtailment is expressed as a time block of 15 minutes.

a) Cases of curtailment in which negligible margin was available for backing down from conventional energy sources.
b) Cases of curtailment where 100 % of curtailment could have been avoided with available margins
c) Cases of curtailment where specified % of curtailment could have been avoided to certain extent with available margins

Note: It would be difficult to capture the intent of SLDC. Accordingly, the classification is done to check whether the curtailment was done for grid security or

otherwise rather than classifying whether curtailment was for grid security or intentional curtailment.

v. The formula applied along with details of consideration / reasoning is summarised in below table -11

Sl No	Description	Formula	Remarks
1	*Cases of curtailment in which negligible margin was available for backing down from conventional energy sources.	Margin available / (Curtailment + Deviation) < 20%	Since less margin is available it is considered as all possible actions have been exhausted
2	Cases of curtailment where 100 % of curtailment could have been avoided with available margins	Margin available > (Curtailment + Deviation)	Full Curtailment could have been avoided since sufficient margins are available for backing down in conventional generators
3	Cases of curtailment where specified % of curtailment could have been avoided to certain extent with available margins <u>Ranges</u> a. >80% to 100% b. >50% to 80% and c. >20% to 50%	a. Margin available / (Curtailment + Deviation) > 80% but less than or equal to 100% b. Margin available / (Curtailment + Deviation) > 50% but less than or equal to 80% c. Margin available / (Curtailment + Deviation) > 20% but less than or equal to 50%	Classification done on remaining time blocks. Since margin is less compared to curtailment, classification is done to understand the amount of Curtailment which could have been avoided with the available margins in conventional generators

Table11: Classification of curtailment analysis

* Up to 20% Margin has been considered as negligible margin"

(ii) After detailed analysis POSOCO has reported the following conclusion:

> "An analysis of the frequency and RE curtailment instructions shows the following.
>
> • During 55 blocks (4.82%) out of 1140 blocks (Total curtailed blocks) frequency is above 50.05 Hz (>50.05 Hz)
>
> • During 427 blocks (37.45%) out of 1140 blocks (Total curtailed blocks) frequency is above 50.00 Hz (>50.00 Hz). Out of these 427 blocks, TN was under drawing in 350 blocks. Out of these 350 blocks, there was no margin for backing down in thermal and hydro generation in 60 blocks so as to absorb the renewable energy.
>
> **Considering grid frequency and under drawl of TN from the grid, only 5.26% (60 out of 1140 blocks) appears to be justified from grid security perspective."**
>
> {Emphasis supplied}

(iii) In view of the above, the Appellant respectfully submits that it was unjustified for the Respondent Nos.2, 3 and 4 to resort to any backing down of solar power which has a 'must run' status.

(iv) POSOCO has clearly stated that in only 5.26% (60 out of 1140 blocks) appears to be justified from grid security perspective.

(v) Since POSOCO is the apex technical / statutory body that maintains and operates the grid on a real-time basis, the present Appellant respectfully submits that view of POSOCO on the issue of Grid Security, as enumerated above, may be taken on record and approved. It is respectfully submitted that the Tribunal may consider the above mechanism for all renewable energy plants for the future

period as well which should be strictly followed not only by the Tamil Nadu SLDC but by all other SLDCs in the country.

(vi) The Respondent has also not demonstrated that the findings of the POSOCO are incorrect.

(VII) <u>WHETHER COMPENSATION IN THE FORM OF DEEMED GENERATION IS WITHIN THE AMBIT OF LAW:</u>

Determination of Deemed Generation Compensation

(i) Section 175 of the 2003 Act provides that "its provisions **are in addition to and not in derogation of any other law for the time being in force.**"

(ii) Section 73 of the Indian Contract Act, 1872, provides "73. Compensation for loss or damage caused by breach of contract – When a contract has been broken, the party who suffers by such breach is entitled to receive, from the party who has broken the contract, compensation for any loss or damage caused to him thereby, which naturally arose in the usual course of things from such breach, or which the parties knew, when they made the contract, to be likely to result from the breach of it."

(iii) The energy purchase agreement provides "3… (a) the solar power generated shall be evacuated to the maximum extent **subject to grid security and shall not be subjected to merit order despatch principles.**"

(emphasis added)

(iv) The compensation under section 73 of the Contract Act for the loss of generation caused to the Appellants members is the necessary consequence of:

(a) the parties knew, when they made the energy purchase agreement inter alia providing for the mandate to evacuate solar power subject to grid stability and not subjected to MOD, was likely to result in compensation for any loss or damage, from the breach of the said obligation.

(b) Consequently, TANGEDCO, is the party who has signed the contract and broken the contract, is liable to pay to the Appellants members compensation for the loss/damage caused to them by suffering from such a breach.

(v) Once it is held that wide-spread curtailment of RE power in the State of Tamil Nadu (as has been now confirmed by POSOCO) is not on account of grid security but for collateral reasons, the Appellant / RE generators would be entitled to damages / compensation for willful loss caused by the Respondents, who have acted illegally and in concert. The Respondents have conducted themselves in a manner that is not only contrary to the terms of the contract (PPA) but have also violated the provisions of the statute / regulations. Hence, the Appellant generators have to be compensated for the harm / loss suffered on account of such wrongful action of the Respondents. The principles of damages as provided in the laws of contracts and various judgments of the Hon'ble Apex Courts requires determination of loss suffered in a realistic manner. In the present case the loss suffered is in relation to loss of generation on account of illegal curtailment of solar power. POSOCO in its report has done in-depth exercise to determine the estimation of curtailed energy of Solar Developers and has given its findings in Para 4.1.4 of the report. It has arrived at the conclusion that as follows:

"*ii.* ***Validation of Irradiance-based generation***

The irradiance-based generation as computed above needs to be validated before usage. Accordingly, the median of energy was calculated for both Irradiance based generation and actual generation for non-curtailment Days for each developer for each month. The median of irradiance-based generation and actual generation as computed above was compared as below.

…

It was noted that the difference between the Median Energy of solar generation for non-curtailment days based on actual and irradiance-based generation is marginal thus, ***it is felt that irradiance-based generation is felt appropriate for further processing viz estimation of solar curtailment***."

(para 4.1.4 ii)

"Curtailment estimation (**para 4.1.4 v.)**
The Block-wise Difference between Irradiance based estimated generation (MW) as described above *and actual generation (MW) during the common curtailment blocks as described above were computed on Daily basis. This was taken as the Curtailment Quantum expressed as formula*

Curtailment Quantum (MW) = Irradiance based estimated generation (MW) – Actual Generation (MW)"

(vi) Once the quantum of energy corresponding to backing down is determined on such objective criteria as aforesaid, the only issue that remains is determination of the rate at which the compensation should be paid to the generator. Conventional generators recover tariff under two-part mechanism and in case of backing down, they are paid fixed charges part corresponding to the backed down energy. On the same principle, the solar generators are also required to be compensated for the fixed charges. In case of solar generators entire single part tariff being fixed cost, hence, for the purpose of compensation, the tariff agreed to under the PPA should be considered. The Appellant prays that in view of the wide scale curtailment of solar power and the consequent loss suffered by the

members of the Appellant, there is an urgent need to settle the principle based on which the compensation is to be calculated. The actual computation of loss can be done by the Commission based on the determination of loss of generation made by POSOCO and the principle of compensation settled by this Tribunal. Such compensation should be payable whenever there is wrongful curtailment of solar power.

Determination of compensation

(vii) The Appellant submits that the premise of the case is that TNSLDC being a statutory body, is duty bound under Clause 5.2(u) of the IEGC ***to make all efforts to evacuate the available solar and wind power and treat them as a MUST-RUN station***. In this context, it is relevant to highlight that under Section 32(2)(a) of the Electricity Act, TNSLDC is statutorily responsible for optimum scheduling and despatch of electricity within the State of Tamil Nadu, in accordance with the contracts entered into between TANGEDCO and generating companies. Furthermore, under Section 32(2)(e) of the Electricity Act, TNSLDC is responsible for carrying out real time operations for grid control and despatch of electricity within the State of Tamil Nadu through secure and economic operation of the State grid in accordance with the IEGC.

(viii) However, in the present case, TNSLDC knowingly and wrongfully breached its statutory duty to make all efforts to evacuate the available solar power from the Appellant's Solar Project and to treat the Solar Project as a MUST-RUN station. Rather, TNSLDC issued unlawful and arbitrary curtailment instructions to the Solar Project

belonging to the members of the Appellant which were not on account of any reason attributable to grid safety or security of equipment and personnel, but on account of economic considerations favourable to TANGEDCO.

(ix) In response to an Application under the Right to Information Act, 2005, wherein information was sought regarding any threat to grid security during the relevant period, the Superintendent Engineer, Load Despatch and Grid Operation (Tamil Nadu Transmission Corporation Ltd.) confirmed that no such occurrence had occurred in the grid and that merit order despatch had been followed. TANGEDCO which is the beneficiary of power from the solar plant has supported the illegal actions of the SLDC / R3 and as such has benefitted from the same by refusing to accept energy at the agreed tariff, when the grid was in a position to deliver such power.

(x) The Respondent SLDC has issued backing down instructions to the solar generators of the Appellant Federation even after passage of the impugned order dated 25.3.2019 and during the pendency of the present Appeal. The Appellant preferred I.A. No.1706 of 2019 seeking an injunction on Respondent Nos.3 and 4 from issuing backing down instructions to the solar generators and alternatively as an interim measure sought direction upon the Respondent No.2 to pay deemed generation charges along with interest, during the pendency of the Appeal. Copies of the backing down instructions received during the period April, 2019 till August, 2019 are enclosed to the aforesaid Application for interim reliefs. **.** The Appellant had submitted copies of the backing down instructions received from the Respondent SLDC during the period April, May, and June, 2020.

(xi) As such, the members of the Appellant are entitled to compensation from the Respondents for the losses suffered by the members of the Appellant due to non-generation of power from its Solar Project on account of such unlawful and arbitrary curtailment instructions along with interest.

(xii) It is respectfully submitted that while the backing down has been carried out since the year 2016 when there was no pandemic or lockdown, the Chief Engineer, Grid Operations, Tamil Nadu Transmission Corporation Ltd., had filed a Common Counter Affidavit on behalf of Tamil Nadu Generation and Distribution Corporation Ltd., Tamil Nadu State Load Despatch Centre, and Tamil Nadu State Transmission Corporation (viz. Respondent Nos. 2 to 4) seeking to justify the backing down of solar power during the national lock down from 23.3.2020 due to pandemic Covid-19, when according to the Respondents the demand for power came down in the State of Tamil Nadu. However, there is not a whisper (much less any proof) in the said Counter Affidavit so far as the fundamental issue as to whether the grid frequency was under any endangered limit. It can be seen from the above data that for the dates during which the solar plants were backed down by the SLDC, that is on 10.4.2020, 11.4.2020, 26.4.2020, 18.6.2020, 19.6.2020, 20.6.2020,6.6.2020, 14.6.2020 and 21.6.2020, TANGEDCO was still purchasing power from the power exchange. This would clearly and manifestly show that the solar plants were backed down by the SLDC not for any grid security, but for purchasing cheaper power from the power exchange as compared to the solar power which is higher in rate. Even in the Common Counter Affidavit filed on 17.7.2020, the Respondents appear to justify their action on the

ground of DSM penalty for under-drawal from conventional generators.

(xiii) The SLDC has reduced the generation in huge quantum ranging from 25% to 50%. During the period 1.9.2019 to 8.9.2019 the solar generation was curtailed for almost 42-40 hrs. out of 88 hrs., that is 48% of the time the solar generation was curtailed.

(xiv) During the period 1.9.2019 to 8.9.2019, there were a total of 736 blocks of 15 minutes (one day has 96 time blocks). However, solar generation is only for 352 time blocks in the entire 736 time blocks. The grid frequency crossed the 50.05 limit only during 36 time blocks of solar generation hours. Hence, it is only during 8% of the time that the frequency crossed. The grid frequency remained within the range of 49.85 Hz to 50.05 Hz almost during 323 time blocks. The data downloaded from Southern Regional Power Committee website would show that during 92% of the time, the frequency remained within the permissible band notified by the CERC. It has also not been showed by the Respondents that there are any transmission constraints.

(xv) It is respectfully submitted that in view of the aforesaid analysis carried out by POSOCO for the period 01.03.2017 to 30.06.2017, this Tribunal may kindly direct POSOCO to carryout similar analysis for the balance past period up to June 2021 and submit its report to TNERC with findings on the same lines of its report for the period March 2017 to June 2017 within a specified time line which this Tribunal deems fit.

(xvi) It is further respectfully submitted that the Tribunal may consider laying down an appropriate mechanism relating to backing down of 'must run' renewable energy plants for the future period which should be strictly followed not only by the Tamil Nadu SLDC but by

all other SLDCs in the country. In the light of the analysis carried out by POSOCO, it is submitted that the Tribunal may hold that any curtailment of RE shall not be considered as meant for grid security if the backing down instruction were given under the following conditions:

a) Frequency is in the band of 49.90Hz-50.05Hz;

b) Voltages level is between: 380kV to 420kV for 400kV systems & 198kV to 245kV for 220kV systems;

c) No network loading issues or transmission constraints as per CEA's Transmission Planning Criteria;

d) Margins are available for backing down from conventional energy sources;

e) State is overdrawing from the central grid or State is drawing from grid on short-term basis from Power Exchange or other sources simultaneously backing down power from intra-state conventional or non-conventional sources. {State may enter into short term bilateral, day ahead agreements to procure power from Power Exchanges or from other sources and back down its own generation to limits and then back down RE generation purely on commercial principles. Such an arrangement cannot be considered as back down due to grid security}.

(vii) In view of the above, Respondents (2, 3 and 4) ought to pay the deemed generation charges at the tariff contained in the Power Purchase Agreement for the solar power backed down during the period 01.03.2017 to 30.06.2017 for the entire backed down energy excluding 5.26% as per the aforesaid POSOCO report. Respondents

(2, 3 and 4) also ought to pay carrying cost on the compensation above at the rate as applicable for deferred payments under the PPA.

(viii) The consequence of failing to comply with the statutory mandate to back down generation in the absence of any grid security or safety concerns/issues, is necessarily the payment of monetary compensation for the loss of generation. The contractual mandate to evacuate solar power to the maximum extent subject to grid stability and the negative covenant not to apply merit order dispatch to the solar power, is necessarily the payment of monetary compensation for the loss of generation for not following the contractual mandate along with carrying cost.

(ix) Accordingly, applying the aforesaid principles to the facts of the present case, it is abundantly clear that TNSLDC is guilty of misfeasance and legal malafide as it acted in contravention of its statutory duties under Section 32(2)(a) and 32(2)(e) of the Electricity Act, 2003 and Clause 5.2(u) read with Clause 6.5(11) of the IEGC by issuing unlawful and arbitrary curtailment instructions to the Solar Projects belonging to member of the Appellant, in the absence of any constraints of grid security or safety of equipment or personnel.

(VIII) HON. SUPREME COURT'S JUDGMENTS CLEARLY EMPOWER THIS HON. TRIBUNAL TO PROVIDE THE MECHANISM FOR DETERMINING COMPENSATION FOR LOSS OF GENERATION:

(i) Appellant further submits that since the generation loss suffered by its' members is due to the unlawful and arbitrary curtailment

instructions issued by TNSLDC, which is beyond the control of the Appellant, it cannot be penalised to bear the burden of such generation loss and thus, is required to be paid compensation by the party in breach, i.e., TNSLDC and TANGEDCO. It is humbly submitted that the Appellant ought to be put back in the same economic position as it would have been had such unlawful and arbitrary instructions not been issued to it by TNSLDC, for the benefit of TANGEDCO. In this regard, the Appellant places reliance on the following judgments of the Hon'ble Supreme Court of India, the relevant excerpts whereof are reproduced hereinbelow for ease of reference:

a) **Common Cause, A Registered Society v. Union of India, 1999 (6) SCC 667**

"97. In Three Rivers District Council v. Bank of England (No. 3) (1996) 3 All ER 558, ***it was held that the tort of "misfeasance in public office" was concerned with a deliberate and dishonest wrongful abuse of the powers given to a public officer and the purposes of the tort was to provide compensation for those who suffered loss as a result of improper abuse of power****.*

……

(6) Where a plaintiff establishes (i) that the defendant intended to injure the plaintiff or a person in a class of which the plaintiff is a member (limb one) or that the defendant knew that he had no power to do what he did and that the plaintiff or a person in a class of which the plaintiff is a member would probably suffer loss or damage (limb two) and (ii) ***that the plaintiff has suffered loss as a result, the plaintiff has a sufficient right or interest to maintain an action for misfeasance in public office at common law.*** *The plaintiff must of course also show that the defendant was a public officer or entity and that his loss was caused by the wrongful act"*

98. So far as malice is concerned, while actual malice, if proved, would render the defendant's action by ultra vires and tortious, it would not be necessary to establish actual malice in every claim for misfeasance in public office. In Bourgoin SA v. Ministry of Agriculture, Fisheries and Food (1985) 3 All ER 585 to which a reference has already been made above, the plaintiffs were French turkey farmers who had been banned by the Ministry from exporting turkeys to England on the

ground that they would spread disease. The Ministry, however, subsequently conceded that the true ground was to protect British turkey farmers and that they had committed breach of Article 30 of the EEC Treaty which prohibited unjustifiable import restrictions. The defendants denied their liability for misfeasance claiming that they were not actuated by any intent to injure the plaintiff but by a need to protect British interest. It was held by Mann, J., which was upheld by the Court of Appeal, that proof of actual malice, ill-will or specific intent to injure is not essential to the tort. ***It was enough if the plaintiff established that the defendant acted unlawfully in a manner foreseeable injurious to the plaintiff.*** *……."*

b) **Lucknow Development Authority v. M.K. Gupta, 1994 (1) SCC 243**

"8. ***The administrative law of accountability of public authorities for their arbitrary and even ultra vires actions has taken many strides. It is now accepted both by this Court and English courts that the State is liable to compensate for loss or injury suffered by a citizen due to arbitrary actions of its employees.*** *In State of Gujarat v. Memon Mahomed Haji Hasam: AIR (1961) SC 1885, the order of the High Court directing payment of compensation for disposal of seized vehicles without waiting for the outcome of decision in appeal was upheld both on principle of bailee's, 'legal obligation to preserve the property intact and also the obligation to take reasonable care of it to return it in same condition in which it was seized' and also because the government was, 'bound to return the said property by reason of its statutory obligation or to pay its value if it had disabled itself from returning it either by its own act or by act of its agents and servants'. It was extended further even to bonafide action of the authorities if it was contrary to law in Lala Bishambar Nath v. The Agra Nagar Mahapalika, Agra: (1973) 3 SCR 777. It was held that where the authorities could not have taken any action against the dealer and their order was invalid, 'it is immaterial that the respondents had acted bonafide and in the interest of preservation of public health. Their motive may be good but their orders are illegal. They would accordingly be liable for any loss caused to the appellants by their action.' The theoretical concept that King can do no wrong has been abandoned in England itself and the State is now held responsible for tortuous act of its servants. The first Law Commission constituted after coming into force of the Constitution on liability of the State in Tort, observed that the old distinction between sovereign and non-sovereign functions should no longer be invoked to determine liability of the State."*

c) **Lala Bishambar Nath and Ors. v. The Agra Nagar Mahapalika, Agra and Anr., 1973 (1) SCC 788**

"12. It is immaterial that the respondents had acted bona fide and in the interest of preservation of public health. There motive may be good

but their orders are illegal. They would accordingly be liable for any loss caused to the appellants by their action."

d) **Swaran Singh Chand v. Punjab State Electricity Board & Anr., 2009 (13) SCC 758**

"18. In a case of this nature the appellant has not alleged malice of fact. The requirements to comply with the directions contained in the said circular letter dated 14.08.1981 were necessary to be complied with in a case of this nature. Noncompliance whereof would amount to malice in law. [See Manager, Government Branch Press and Anr. v. D.B. Belliappa: (1979)ILL J156SC, Smt. S.R. Venkataraman v. Union of India and Anr.:(1979)ILL J25SC and P. Mohanan Pillai v. State of Kerala and Ors.: AIR2007SC2840]. Thus, ***when an order suffers from malice in law, neither any averment as such is required to be made nor strict proof thereof is insisted upon. Such an order being illegal would be wholly unsustainable****."*

(Emphasis Supplied)

(IX) RESPONDENT NO.4 (MNRE) HAS SUPPORTED THE APPELLANTS: DOCTRINE OF CONTEMPORANIO EXPOSITO

(i) The Respondent No.4 has supported the Appellants;

(ii) The principle of *Contemporanio Exposito* extends to administrative construction i.e. contemporaneous construction by administrative or executing officers charged with executing a statute. In the present case, the advices, and the communications of the Ministry of New & Renewable Energy (MNRE) would be covered within the doctrine of *Contemporanio Exposito* the said communications/advices in fact make it clear that deemed generation compensation will be payable for backing down of solar power which is otherwise unjustified in the absence of grid security.

(iii) The validity of the impugned order has necessarily to be considered in the present appeal. The decision of this Hon'ble Tribunal thereon will decide the issue of the methodology for arriving at the compensation towards loss of generation in the form of deemed generation for backing down in the absence of proven grid security.

36. **Learned counsel for the Respondent Nos.2 to 4 has filed the following written note** :-

The appellant has sought to challenge the order of TNERC, wherein the State Commission taking into cognizance the grievance of the appellant had passed the following orders:

> *"(a) in the present circumstances it is unavoidable that the generation from the solar generators need to be curtailed albeit to a small extent if the grid conditions so warrant,*
>
> *(b) we have given direction to the SLDC not to resort backing down instructions without recording the proper reason which are liable for scrutiny at any point of time and*
>
> *(c) that there is no provision in the agreement signed with the Utility for payment of deemed generation charges, we find it not possible to accede to the prayer of the petitioner".*

37. The above order of TNERC allowed the petition filed by the appellant before the State Commission, except to the extent of deemed generation.

38. It is submitted that TNSLDC has been scrupulously following the directions given by the State Commission from 15.07.2019 and is submitting a quarterly report to the State Commission in compliance with its directions. No grievance is raised by the in respect of the compliance of directions of State Commission and the quarterly reports submitted by SLDC to the State Commission.

39. The respondents 2-4 crave leave of this Appellate Tribunal to treat the Reply of R2 to R4 in A. No. 197 of 2019, Written Submissions in I.A. No. 1706 of 2019, Additional Affidavit of R2 to R4 - filed online on 20.08.2020 [taken on record vide order dated 26.08.2020] and Written Submissions dated 22.10.2020.

ISSUE OF ARBITRARY CURTAILMENT BY SLDC:

40. The appellant has not disputed the two findings of the State Commission:

> *"it is unavoidable that the generation from solar generators need to be curtailed albeit to a small extent if the grid conditions so warrant"; and*
>
> *"not to resort backing down instructions without recording the proper reason which are liable for scrutiny at any point of time"*

41. The allegation in the appeal is that there is arbitrary curtailment of solar generation by SLDC, which is addressed by the State Commission in the order under challenge.

42. SLDC has to operate within specified limits, prescribed under the IEGC. SLDC operates on a real-time basis taking into account the frequency bandwidth and over drawl/under drawl at any particular point of time. The frequency range of 49.90-50.05 Hz and over drawl/under drawl permitted is +/- 250 MW. As stipulated in the clause 5.2 (u) of IEGC 2010, the system operator makes all efforts in accommodating maximum power and initiate curtailment action under circumstances of grid security and in consideration of safety of equipment within the grid operating frequency range of 49.90-50.05 Hz specified by the CERC vide the notification dated 06.01.14. Hence, it is a regulatory mandate to curtail injection of power whenever the grid conditions warrant.

43. The fact that solar generators were backed down only after backing down the conventional generators to their technical minimum and after

surrendering the CGS Power is evident from the table annexed with this written note. The tables are in respect of the four months [March 2017 to June 2017] filed with the Additional Affidavit taken on record vide order dated 26.08.2020 as per the directions of this Appellate Tribunal dated 30.07.2020.

44. The said tables clearly establish the quantum of generation by conventional and renewable generators; the backdown quantum qua the quantum of generation, for conventional and for renewable generators. The table also depicts the percentage of backdown for conventional and renewable generators for each day for all the four months. A true copy of the tables, which are part of Additional Affidavit dated 20.10.2020, in respect of the four months is annexed with this note for ready reference.

45. The procedure of giving immediate oral instructions takes one-to-two-time blocks of 15 minutes each and the curtailment could be realized at the SLDC in the 3rd block. Codes are given for each instruction and communicated to the solar developers from 15.07.2019 onwards. The time taken in the process of oral backing down instruction which is at the minimum 45 minutes. On the other hand, penal charges for violation of CERC DSM Regulations is laid **for every under drawl <u>per minute from the point of time the frequency increase</u> in the grid.**

46. During the availability of solar generation, the conventional power alone is backed down each day. Hydro power is used sparingly as it depends on Monsoon. Gas power is very low and this could not be taken into account for ramping up / down. Nuclear power cannot be backed down as the same will lead to serious implications with regard to security of the nuclear power plant. Hence only conventional power from State owned thermal generation units and central thermal generation units are backed down to their technical minimum as a first resort.

47. In addition to the penalty imposed by SRLDC for violation of DSM limit and frequency bandwidth, the CERC's Reserve Shutdown Regulations mandate payment of compensation to Central Generating Stations [CGS] on back down of CGS station due to large scale injection of infirm Renewable Energy into the grid. In the event of surrender of CGS power by SLDC, the distribution licensee is obliged to pay the fixed charges to the CGS stations for the quantum of surrendered power. This unwarranted financial burden, due to large scale injection of infirm Renewable Energy into the grid, gets reflected in the ARR and is passed on to the consumers. All the above charges are borne to accommodate 95% of RE in addition to the tariff paid to the wind and solar generators as determined by TNERC. If all the above financial aspects are taken together, the cost per unit of wind and solar energy becomes prohibitively high and seriously affects the general tariff, which is borne by the consumers. The financial implication of the entire scenario taken together is in violation of the express mandate of section 61 (c) & (d) of Electricity Act, 2003.

48. It is submitted that the operating frequency range is 49.90 HZ to 50.05 Hz with under drawl limit at 250 MW as per the CERC DSM Regulations. To maintain the grid security, corrective action must be taken **prior to** the breach of both, the upper limit of the frequency band of 50.05 Hz and under drawl limit of 250 MW. Hence the back down instruction is given when the frequency starts raising from 50.01 Hz and under drawl reaches 200 MW.

49. The table attached [at page 12 & 13] to the Additional Affidavit of R2 to R4 filed online of 20.08.2020 shows frequency after backing down of conventional generators & surrendering CGS power. It is, as a last resort, when the frequency and under drawl are uncontrollable, the renewable

energy is sought to be backed down to maintain the grid frequency coupled with DSM limits.

50. Accurate Forecasting and scheduling of generation along with stringent commercial mechanism for these sources of renewable energy is required for balancing and financial interest of renewable generators and the consumers who bear the financial implication of penalty imposed on the distribution licensee due to the violations of grid parameters on account of injection of infirm power by appellant.

51. The transaction being contractual are governed by the terms and conditions of the contract. The solar generating companies entered into the agreements/contracts with the SLDC agreeing to the conditions stipulated in respect of grid security.

52. It is the admitted case of the appellant that the Regulatory Commission was convinced that backing down instructions were given for the purpose of ensuring Grid safety. The allegations brought on record before the Regulatory Commission only raised doubt or suspicion. To address this suspicion, the State Commission directed the SLDC "not to resort backing down instructions without recording the proper reason which are liable for scrutiny at any point of time"; and the same is being complied with by the SLDC from 15.07.2019.

ISSUE OF DEEMED GENERATION:

53. The appellant association has raised the issue of deemed generation on the ground of it being under "must run" category is baseless and unfounded. Must run status is subject to Regulation 5.2 (u) of IEGC, 2010.

54. It is submitted that the appellant has relied on regulation 2 (q) of the TNERC (Terms and Conditions for Determination of Tariff) Regulations,

2005 to contend that solar generators should also be granted the benefit of **deemed generation** as in the case of hydro generators. The Respondents herein submit that this very specific contention was raised by the appellant association before the Regulatory Commission during the determination of tariff for the solar generators in Tariff Order No. 2/2017 dated 28.03.2017 - Solar Tariff Order. The specific contention made before the Regulatory Commission is extracted as under:

Deemed Generation.

"M/s. Adani Green Energy Limited Existing developers are facing issues of delayed payments and backing down. MNRE has issued a letter on 2.8.2016 to CERC with copy to the Principal Secretary of all states stating that solar power plants should not be given instructions to back down. In view of various statutory provisions and regulations to promote renewable energy, generation loss due to unavailability of grid or issue of backing down instructions may be considered as deemed generation and payments made at the tariff rates of signed PPAs".

The above demand for grant of deemed generation was not accepted to by the Regulatory Commission. There was no appeal filed against the non-grant of deemed generation to solar developers.

55. Subsequently in Tariff Order No. 5/2019 dated 29.03.2019 - Solar Tariff Order again the issue of deemed generation was raised by the appellant herein. The specific contention made before the Regulatory Commission is extracted as under

"National Solar Energy Federation of India, Swelect Energy Systems Limited State shall consider 'MUST RUN' status for solar PV power plants and the power plants shall not be backed down. Any loss of generation owing to unavailability of grid or resulting from backing down should be compensated in full under deemed generation concept. Delivery point may be fixed at Solar generating station end".

56. The above demand for grant of deemed generation was not accepted to by the Regulatory Commission. There was no appeal filed

against the non-grant of deemed generation to solar developers. The above order is binding on the appellant and had become final. The appellant cannot raise this issue in the present appeal. The appellant cannot seek a relief in the present appeal, when it failed to challenge the Tariff Order on the above ground.

57. In addition to the above, it is stated that there is no provision of deemed generation in the TNERC Power Procurement from New and Renewable Sources of Energy Regulations 2008. In the absence of any provision for deemed generation in the Regulations the appellant is not entitled to benefit of deemed generation. The law laid down in (2010) 4 SCC 603 - PTC India Ltd. V. Central Electricity Regulatory Commission, through its Secy. dated 15.03.2010 [5 J] is that *"Measures under Section 79(1), therefore, have got to be in conformity with the regulations under Section 178."* This is applicable to measures under Section 86 as well.

58. It is respectfully submitted that section 86 (1) (e) of Electricity Act, 2003 provides that it is the function of State Commission to promote the renewable sources by providing suitable measures for connectivity within the grid.

> *"86 (1) (e) -- 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 by any person, and also specify, for purchase of electricity from such sources, a percentage of total consumption of electricity in the area of distribution licensee;"*

59. The above section relates to the functions of the State Commission. This section only provides for suitable measures for connectivity with the Grid to evacuate renewable generation. This section has nothing to do with the management or operation of grid or related issues. There is no exemption provided for under this section which exempts renewable

energy generators from the applicability of Regulation 5.2 (u) of IEGC, 2010.

60. The curtailment quantum is decided based on the real time gap between the availability and demand. In order to reduce the grid frequency and DSM limit within the permissible limits, the % curtailment instruction is given only on the available solar generation at that particular point of time. The installed capacity is not of any relevance.

61. The table in the report of POSOCO, in respect of the four months data sought to be analysed by this Appellate Tribunal shows the percentage of curtailment.

TABLE 15 -- MONTHWISE AVERAGE SLOAR AND WIND CURTAILMENT %

SL.NO	MONTH	Solar curtailment average %	Wind Curtailment (%)	
			Solar period	Non-solar period
1	March 17	6%	2%	1%
2	April 17	2%	2%	2%
3	May 17	2%	6%	3%
4	Jun 17	11%	7%	2%
	SUMMARY	**5%**	**4%**	**2%**

62. It is stated that, POSOCO, in the table above, has mentioned that the solar curtailment average is 5% which implies that 95% of the solar

power has been accommodated. Even this 5% curtailment has been done to maintain equitable curtailment among the wind and solar power. Hence this curtailment analysis clearly depicts that TN SLDC has strived to the maximum possible extent to accommodate the solar power and in the absence of forecasting and scheduling mechanism with the limited margin available in flexible generation the action of TN stands to be appreciated. Even the above 5% curtailment of solar could be avoided if the DSM limit for Renewable Energy rich State of TN is allowed from the present +/_ 250 MW to +250 MW to -500 MW.

63. Again, the inference of POSOCO that – *"From the detailed analysis of the data it can be concluded that in 5.26% (60 out of 1140 blocks where solar was curtailed) of the cases appears to be justified from grid security perspective."* is wrong for the following reasons:

(i) It is respectfully submitted that, Curtailment instructions issued to the solar generators is necessitated for grid security and safety only, in the interest of the public and to maintain uninterrupted power supply to the consumers.

(ii) The frequency analysis considered in the report to justify for curtailment is done from grid security perspective is based on post facto Frequency, generation and drawal data only.

(iii) In the analysis, the frequency considered is for 15 minutes time block i.e. average value of minute frequency in the time block; whereas TN SLDC system operator has to take action based on the real time instantaneous frequency.

(iv) In the analyzing period i.e. March 2017 to June 2017, number of days where solar curtailment is done for was 52 days. In each of

the curtailment instructions the instantaneous real time frequency was above 49.98 Hz and TN was in under drawal mode only.

(v) In the report, it is inferred that out of 1140 blocks only 427 blocks, frequency is above 50 Hz; which is post facto frequency (15 minutes average frequency). On the contrary, in order to maintain grid parameters within limit in real time operations, the curtailment instructions were given to solar and wind generators whenever the frequency increased to beyond the permissible limit /tend to increase to beyond the permissible limit only as a last resort. Frequency and deviation are the criteria for the grid security. Bonafide preventive action was taken by the system operator "in real time" to avoid possible breach of the system parameters i.e. more than 50.05 HZ/-250 MW and to maintain it within the IEGC limits of Frequency- 49.90-50.05 Hz and deviation withing +/- 250 MW for Tamil Nadu.

(vi) Further the total margin available for accommodating renewable energy calculated by POSOCO in the report is based on the margin available in State owned thermal generators, ISGS thermal generators, state owned hydro generators, minus additional margin of 100 MW.

64. In this regard, it is respectfully submitted that Tamil Nadu being a RE Rich State, has 36% of RE in the total installed capacity. As suggested by MoP and MNRE Guidelines, a margin of 2000-3000 MW was created by backing down of own thermal and CGS stations to accommodate the RE power. Hence, additional margin is not feasible of compliance for Load-Generation balance since hydro and gas potential is very less.

65. It is also submitted that there was no forecasting and scheduling was given by RE Developers. Without scheduling, TN SLDC has taken all efforts to accommodate RE treating it as Must Run.

66. Therefore, for analysis the post facto parameters should not be considered, and conclusion given by POSOCO that "only 5.26% (60 out of 1140 blocks where solar was curtailed) of the cases appears to be justified from grid security perspective" is not appropriate and totally incorrect.

67. The note at the end of POSOCO report substantiates the above contention of answering respondent. The relevant extract is as under:

> *Note: - All the above analysis is based on post facto Frequency, generation and Drawal data whereas TN SLDC system operator may have taken actions based on prevailing frequency and estimate on likely frequency, RE generation and drawal in subsequent blocks.*

68. Learned senior counsel, Mr. Jayanth Muthraj, appearing for the Respondent Nos. 2 to 4 has submitted following written submissions for our consideration when it was argued in 2020:-

69. This Appellate Tribunal vide its order dated 30.07.2020 directed the Appellant and Respondents to place relevant documents on record before the Tribunal. The relevant portion of the said Order of this Tribunal is as under:

> *"…….We direct Respondent–TANGEDCO to prepare the details showing the availability of each unit of generation of electricity both conventional and renewable along with percentage of backing down, cost of the unit of electricity and details of frequency and generation. They shall furnish such Page 2 of 2 details for the months of March, April, May and June 2017 within a fortnight from today with advance copy to the other side.*

We also direct the Appellant to furnish the details of quantum of generation and backing down on each day for the above stated months by major 56 solar generators who are above 10 MW generators……"

70. The Appellant was directed to place the Data on record by the abovementioned order due to the submissions made by the Respondent that the Members of the Appellant Association has not placed the correct data and suppressed material facts and attempted to mislead this Tribunal. It is pertinent to note that the Appellant again has not placed entire correct Data. The Respondent / TANGEDCO filed detailed affidavit displaying the suppression and fraud committed by the Appellants by showing the backdown of Mega Watts power qua generation capacity instead of actual generation by them and actual injection after curtailment Order. A perusal of paragraphs 3 to 7 of the Additional Affidavit filed by Respondents 2 to 4 would establish the said facts very clearly.

71. Further, the Appellant is trying for rowing enquiries and this Tribunal vide its order dated 26.08.2020 directed the parties to produce documents before M/s. POSOCO and directed POSOCO to file a reply before the Tribunal within a months' time. The relevant portion of the said order is as under:

"……..We direct POSOCO to make detailed verification of the data after considering the contentions raised by the parties and submit report to the Tribunal within four weeks and indicate whether there was intentional curtailment of scheduling of power by the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents. We also direct a clear statement "Was there any fair and justifiable curtailment of power from all generators, both renewable and non-renewable, the actual generation and injection of energy"?….."

72. Subsequent thereto, the Respondent placed all the relevant records with POSOCO, however, the Appellant Association deliberately withheld

the data in their custody in spite of request from POSOCO and in defiance of the Order of this Tribunal dated 26.08.2020.

73. Further, in the report filed by POSOCO it is revealed that out of 56 Solar Generators, only 16 generators with total installed capacity of 1,052 MW submitted the data. Among those submitted, Data of 10 generators were complete and data of 6 generators was partial. (please refer para (a) of the Executive Summary, para 2(d) of the Action Taken and para 4.1.2 and 6.1 of the POSOCO Report)

74. It is pertinent to mention here that the main case of the Appellant before the State Commission was that Solar Generators ought not to have been asked to backdown, and in case of backdown they have to be given Deemed Generation Charges. The Appellant has raised an issue of discrimination between Wind and Solar energy generators, Solar and Thermal Energy generators and between different Tariff in their Rejoinder filed before the State Commission without producing any data to substantiate the same. The Commission rejected the claims made by the Appellants and held that the Respondents are entitled to issue backdown directions depending upon the Grid Security and held that backingdown instructions has to be communicated in writing and Quarterly Returns to be filed before the State Commission. It is to be noted that in compliance of the directions of the State Commission, the Respondent TANGEDCO is following the same scrupulously.

75. Aggrieved by the abovementioned order of the Commission, the present Appeal is filed by the Appellant Association.

76. After perusing the Data and hearing the parties as mentioned above, this Tribunal directed M/s POSOCO to file a Report. POSOCO, in its Report held:

i) There is no disparity between wind and solar generators and equitable backdown was carried out between both solar and wind (refer para 6.3.2 of POSOCO Report),

ii) It would not be appropriate to compare curtailment / backing down of non-renewable plants with renewable energy due to reasons cited in section 4.3.3, and accordingly the analysis was not carried out and no attempt is made for arriving at the inference.

It is submitted that the SLDC after giving back down instructions to all conventional energy sources to optimum level, instructions have been given to renewable energy as stated by the SLDC in para 26 of the Counter Affidavit and there is no discrimination between Solar and Wind Energy Generators. The POSOCO Report categorically proves that the alleged discrimination is nothing but false and unfound.

77. The POSOCO in its report after stating that out of 56 companies only 16 has produced data and out of 16 only 10 has given complete data, has rendered a finding that curtailment quantum in energy terms found to be in order without appreciating that the Appellant has withheld the data pertaining to the actual generation and injection of electricity during the back down instructions subsisting. Further, POSOCO also has said that there should be a proper forecasting of energy generation vide section 5 but in the present case in spite of repeated requests, solar generators have never given the forecast of generation of energy.

78. With regard to justification of curtailment of scheduling power by the Respondent SLDC, POSOCO has held in its conclusion that 60 out 1,140 blocks appears to be justified only on post facto analysis from grid security perspective on the basis of actual breach of 50.05 Hz frequency alone and

not on real time grid operation by SLDC. POSOCO in its report in para 4.2.1 in the conclusion held that in 427 blocks out of 1,140 blocks, the frequency is above 50.00Hz and under drawing in 350 blocks by taking into account frequency, voltages and equipments loading limits as operational parameters for considering the Grid Security. But it has miserably failed to consider the Deviation Factor and the finding is totally incorrect and liable to be rejected.

79. The main submission of the Respondent SLDC is that in a real time basis on anticipation, SLDC has to issue a direction for backing down when likelihood of breach of frequency (49.90 HZ to 50.05 Hz) or deviation (-250 or +250). POSOCO miserably failed to consider the Deviation Factor. POSOCO report is also based only on actual breach and not on the basis of anticipated or likelihood of breach. This is clear from the conclusion of POSOCO report as under:

> "***Note: - All the above analysis is based on post facto Frequency, generation and Drawal data whereas TN SLDC system operator may have taken actions based on prevailing frequency and estimate on likely frequency, RE generation and drawal in subsequent blocks.***"

80. TNSLDC is taking all the efforts to accommodate the solar energy at the maximum possible within the Regulatory Norms. However, in real time operation, in order to maintain grid security/discipline, after backing down the conventional generation to the technical minimum, even after taking out for reserve shutdown, surrendering of CGS power and as a last resort, backing down of renewable energy is inevitable as per section 32 & 33 of the Electricity Act, 2003, Clause 2.7, 5.2(u) of Indian Electricity Grid Code (IEGC), Clause 4.2(e), 8.4 (iii) and (v) of Tamil Nadu Electricity Grid code (TNEGC).

81. SLDC is responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid standards and the State Grid Code as per Section 32.2(e) of the Electricity Act, 2003. Hence SLDC has to regulate surplus power available by backing down of all conventional generation even to the extent of the cheapest CGS power of Talcher which is Rs. 2.00/- Kwhr in order to accommodate the RE power duly treating Must Run and though it is Rs. 7.01/- Kwhr, the same is curtailed only as a last resort and too a meagre quantum (around 6%) since the same is necessitated in real time grid operation for maintaining grid discipline and grid security thereby to maintain the grid parameters such as frequency, deviation, line loadings and voltage within permissible limit.

82. All RE curtailments are carefully done and no intentional backing down is carried out. Though, the curtailment instructions were given orally for getting immediate relief towards grid safety and have been properly recorded in the SLDC. Further, an email communication along with code is being sent to the solar generators while giving curtailment instructions. As directed by the State Commission, the quarterly report is being submitted to the State Commission.

83. Further, in the Energy Purchase Agreement (EPA) between SPD and TANGEDCO, Clauses 2(d), 3(a) and 3(l) clearly mandates that the injection/despatch of solar power is subject to maintaining the safety and security of Grid only.

84. As requested by the POSOCO, complete details were submitted in a fair and transparent manner for analysis by SLDC. Whereas, the Appellant Association did not submit the curtailment data as requested by POSOCO which was mentioned in the report clearly. Hence, POSOCO

had analysed the curtailment details with only 18% of data which is inadequate to make complete report. Therefore, it is evident that the facts put forth by SLDC are in fair and transparent manner.

85. As per POSOCO report in para 4.1.4 under the heading "Curtailment Estimation", the developer-wise summary of estimated curtailment in percentage of the 16 SPGs, reveals a meagre percentage of average of 6% curtailment and 94% of solar generation have been accommodated. Further, even in the absence of forecasting and scheduling mechanism, the TN SLDC has taken strenuous efforts in accommodating the maximum solar power (94%) keeping in view of Must Run Status.

86. It is well known by the solar generators that due to line loading, voltage and network constraints which are localised in nature, the RE injection may be limited due to network constraints which is being permitted in IEGC & TNERC Codes and Regulations. However, as per IEGC Clause 6.4.6 each state has to stick on to their own schedule and should not violate deviation limits which may cause the other parameters (i.e frequency, line loading & voltage) to go beyond permissible limits.

87. Hence, the main operating parameter namely Deviation Limit of plus or minus 250 MW (for RE Rich State of Tamil Nadu) has been left out in the POSOCO report whereas the violation message from POSOCO (SRLDC) to Tamil Nadu, dated 16.06.2017 at 7:54 Hours clearly states that deviation has been accounted as a violation of IEGC Clauses 5.4.2(a), 5.4.2(b), 6.4.6, 6.4.7, 6.4.10, 6.4.12 with a comment to restore to schedule stating as emergency condition of the grid and hence is considered as one of the operating parameters and submitted for kind reference. Further, the grid frequency which is common for PAN INDIA should be maintained by each State by sticking on their schedule thereby collectively maintaining

the grid parameters which otherwise will cause grid separation incident as happened in the year 2012 in Northern India. Hence, voltage cannot be a direct parameter to pose the limitations on State Utility. In other words, even though the voltage is within the permissible limits, that will not indicate that system is in secured condition. The surplus power (under drawal) or less generation (over drawal) may cause these parameters to go beyond the permissible limit. Hence, once again it is reiterated that to maintain grid within the schedule is the prime duty of SLDC Operator. If there is a deviation in this limit, SLDC operator has to take pro-active action to maintain the grid security.

88. Further, due to infirm, intermittent and variable in nature of RE power in real time operation, if there is any cloud cover, the solar generation will drop to 600-700 MW suddenly by its nature, the deviation limit exceeds the permissible limit of plus 250 MW and results in line loadings and possibility of cascade trippings which may lead to load shedding thereby affecting the supply to the consumers which defeats the main motto of GoTN in maintaining uninterrupted power supply by 24x7 in Tamil Nadu. Frequency and deviation are the criteria for the grid security and bonafide preventive action was taken by the system operator in the real time to avoid possible breach of the system parameters i.e more than 50.05 Hz/-250 MW and to maintain within the IEGC limits of Frequency- 49.90-50.05 Hz and deviation - plus or minus 250 MW for Tamil Nadu. Therefore for analysis the post facto parameters should not be considered and conclusion given by POSOCO that “only 5.26% (60 out of 1140 blocks where solar was curtailed) of the cases appears to be justified from grid security perspective” is not appropriate and totally incorrect. Hence, in real time there is a likelihood of breaching of grid discipline. 100% action taken by the real time operator could not be justified in post facto analysis as it does

not give the clear picture of real time grid operation and to that extent, Report needs to be rejected.

89. With regard to the allegation of the Appellant that only Rs. 7.01/- tariff solar generators have been asked to backdown and the observation made in the Report of POSOCO, It is respectfully submitted that there is 109 Solar Generators during the relevant period out of which 30 solar generators (total generating capacity 1,338 MW) having 10 MW and above generating capacity and rest of the 79 (with generating capacity of 262 MW) having lesser that 10 MW generating capacity. In order to ensure small or lesser capacity solar generators to sustain themselves and any backing down by them would be less significant, as a policy decision, the Respondent SLDC was giving direction to backdown only to the solar generators having more than 10 MW generating capacity and as there is no further need, SLDC did not ask the lesser capacity generators to backdown. It is submitted that the abovesaid classification is solely based on generating capacity and not on the tariff basis as claimed by the Appellant and such a classification is valid and reasonable. It is submitted that the said policy and practice was never challenged by any Solar generators.

90. Further, it is crucial to note that ,

a. The Appellant Association have not submitted the data requested by POSOCO for analysis,

b. The data submitted by 16 generators is not correct since the curtailment quantum in MW plus actual generation in MW exceeds the installed capacity.

c. Therefore, SLDC instructions were not followed scrupulously and the same is in violation Section 33 of the Electricity Act, 2003.

91. Under the circumstances stated above, it is respectfully submitted that, the action taken by SLDC on real time basis towards maintaining grid security within the framework of Statutory provisions in the Electricity Act, 2003, IEGC, TNEGC and CERC Regulations, be considered as bonafide, reasonable, genuine and the Appeal be dismissed and thus render Justice.

92. Additional submissions of the Respondents to the reply of the Appellant are as under:

REPLY TO SUBMISSIONS OF THE APPELLANT

A. Submission No.1

93. The submission that the impugned order is patently wrong, is based on a distorted, one-sided perspective of the application of the relevant regulations, more particularly the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010. The entire case is built on two propositions namely, no deviation whatsoever of the must-run norm referred to in Regulation 6.5 (11) and that SLDC has deliberately acted contrary to the Regulations and is guilty of legal malafides by breaching its statutory duty. It may be seen that the must-run norm, is only not to be subjected to merit order dispatch principles.

94. As submitted in the course of hearing, it is reiterated that the Commission was fully alive to the content and the operational implication of the Grid Code. It cannot be said that the Commission has not adverted to the Regulations. It cannot also be said that the Commission has failed to notice the implications of non-compliance to the Regulations. Merely

because the deemed generation compensation has not been granted, can lead to no inference that the order of the Commission is wrong.

95. The jurisdiction under section 86(1)(f) of the Electricity Act, 2003 is only the jurisdiction to adjudicate the issues. However, such conferment of jurisdiction does not confer on the Commission the authority to be a constitutional court such as the High Court or the Supreme Court and to devise constitutional, legal and other equitable remedies outside the scope of the Act, the Regulations or the contract. It is wrong to contend that the jurisdiction under section 86(1)(f) is a catch all jurisdiction. As long as the contract between the parties does not provide for a deemed generation compensation, the Commission or the Tribunal have no role to play.

B. Submission No.2

96. As regards the must-run norm is concerned, it is not absolute. In the very nature of the existence of a grid system, which is integral to the functioning of generation, transmission and supply of electricity, the must-run norm will yield to other factors. The Grid Code has larger technical, economic and public interest dimensions. It is submitted that even renewable energy power plants, enter into the power generation and supply framework and scheme, subjecting themselves to the logic of the Grid Code and its operational requirements. The ever watchful attention involved in the operation and maintenance of the grid system, will necessarily demand certain amount of flexibility in the matter of backing down instructions. As long as merit order dispatch approach, or persuasion has not entered into the picture, the must-run norm, will not receive more attention than it deserves. In the final analysis the balancing of the Grid Code requirement and the must-run norm, is a matter in the domain of the SLDC. This balancing will also not be subjected to rigorous

scrutiny and standards which by themselves cannot be laid down. Consequently, there is no room for legal malice that can be attributed to SLDC.

97. The facts do not show that SLDC has not followed any norm, or operational principle for issuing the backing down instructions.

Submission No. 3

98. It is immaterial that the deemed generation compensation claim was made either in application no. 16/2016 or in the rejoinder statement. The Commission's observation that such a claim is made in the Rejoinder statement by itself is no reason for the Appellate Tribunal to grant that relief. If the Commission could not have granted that relief on merits, this Hon'ble Tribunal will also decline the same. It is reiterated that in the absence of a statutory or contractual support for the deemed generation compensation, the Tribunal will not be authorised to consider that question. The submissions touching upon compensation made in paragraph no. 7, are completely misconceived. Public law remedies evolved by constitutional courts, always come in, when the principle of 'where there is a wrong there shall be a remedy' (ibi jus ubi remedium), is sought to be invoked. Absence of remedies in the statute will then be analysed. Under the constitutionally conferred judicial review power, constitutional court proceeds to devise certain remedies. The compensatory remedies so devised by constitutional court cannot be the source of authority for any other statutory tribunal to follow suit. In the case of **Kashinath G. Jalmi (Dr) v. The Speaker**, (1993) 2 SCC 703, the Supreme Court has held that power under Article 142 of the Constitution to do complete justice between parties is inherent power which vest only

with the Supreme Court and even High Courts do not possess such powers of wide amplitude. Thus, when such powers are not available even to the High Courts, this Tribunal while exercising appellate jurisdiction cannot assume such wide powers to grant compensation under public law. In any event, as long as strong and indisputable foundations even for considering such an issue is not laid, the Tribunal as an appellate court will not convert itself into a primary adjudicating authority, as well as a constitutional court.

99. Reliance placed on POSOCO report is also misconceived. Firstly, POSCO has not considered the entire data placed before it. Secondly, in the absence of explanation solicited from SLDC, conclusion drawn on the basis of selective data supplied by the Appellant, undermines the relevance and reliability of the report. The answering respondents have placed on record data which seriously counters the POSOCO conclusions. In view of the fact that there are serious discrepancies and disagreements on facts, as an appellate body, this Tribunal will desist from accepting any material as final which may warrant further scrutiny and deliberation. It is important to bear in mind that the Commission has called for quarterly reports from SLDC which has been complied with. It is submitted that the Commission is the best authority to look into the data, and solely on the basis of POSOCO report, no adverse conclusion can be drawn.

100. In view of the above, it is submitted that the Appellant by trying to suggest that the Commission is not right in what it has done, is asking this Tribunal, to hold that the Commission is wrong in what it has done and has not done. As long as, by reference to any statute, regulations, or a term of a contract, it is not shown that the Commission has acted wrongly,

this Tribunal will not interfere. Reference in this regard be made to **Dollar Company, Madras vs. Collector of Madras** (1975) 2 SCC 730.

101. The reliance placed upon the observation of the Commission that "it gives rise to a suspicion that the backing down instructions were not solely for the purpose of ensuring grid safety.", is misconceived. While making this observation, the Commission has not entered in any other adverse findings that the backing down instructions were in the context of, or for reasons such as merit order dispatch, or similar factors. In the absence of any finding by the Commission that the backing down instructions were for an unauthorised purpose or reason, the observation regarding suspicion cannot be converted into an adverse finding with adverse consequences. The doubtful area has however been cleared now by the facts available on record which show that grid safety consideration prevailed with SLDC, and not any other impermissible consideration.

102. Learned senior counsel, Mr. Dilip Kumar, appearing for the Respondent No. 5 / MNRE has submitted following reply / submissions for our consideration :-

103. In para 1 to 6 of the appeal the petitioner has given the details of Court proceedings thus they are matter of record hence no specific reply is required to be given on it. The petitioner in its appeal has further stated out the details of the respondents which are also matter of record and hence does not need any specific reply. It is submitted that it is up to the concerned State and State Regulatory Commission for setting up off solar plants and fixing of tariffs. The State load dispatch centres are to enforce the grid code in accordance with stipulated provisions for safety of grids.

104. The Ministry has taken up the matter with Central Electricity Regulatory Commission (CERC) vide letter dated 02.08.2016 following the backing down of solar projects by some load dispatch centres that the issue of backing down may be placed before Forum of Regulators so that some consensus is reached on the issue. In addition, the State of Tamil Nadu was also requested vide letter no. 336/37/2017-NSM dated 18.09.2017 not to curtail the generation from solar power plants, which are in any case a must run plants.

105. Some solar power developers had started asking for two part tariff. This may, however be difficult as most of the cost in solar power projects is fixed cost. There is thus need for clear regulations by appropriate commissions to enforce must run status for solar power projects. They should be paid tariff as per the Power Purchase Agreement (PPA) if they are forced to back down in rare cases. Keeping in view the facts, the answering respondent has requested Central Electricity Regulatory Commission vide its letter dated 02.08.2016 that this issue be placed before Forum of Regulators so that some consensus can be reached on this issue. The issue was further taken up with CERC vide this Ministry's DO letter dated 12.11.2018.

106. The Indian Electricity Grid Code a regulation made by the Central Commission in exercise of power under clause (h) of Sub-section (1) of Section 79 read with clause (g) of sub-section 2 of Section 178 of Electricity Act 2003 inter-alia lays down the rules, guidelines and standards to be followed by various persons and participants in the system to plan, develop, maintain and operate the power system in the most secure, reliable, economic and efficient manner, while facilitating healthy competition in the generation and supply of electricity. Further Section 29 of Electricity Act, 2003 read with sub-section (1) inter-alia provides that the

Regional Load Dispatch Centre may give such directions and exercise such supervision and control as may be required for ensuring the stability of grid operations and for achieving the maximum economy and efficiency in operation of power system in the region under its control and every licensee, generating company, generating station, sub-station and any other person connected with the operation of the power system shall comply with the directions issued by the Regional Load Dispatch Centres. The system operators are to abide by the provisions of the IEGC to evacuate the available solar and wind power and treat a must run station.

107. It is up to Respondent No.1 to take a view on request for exercising inherent powers to meet the end of justice in view of the judgment dated 11.05.2016 in Appeal No.170 of 2014 titled as Gujarat Urja Vikas Nigam Ltd. vs. Gujarat Electricity Regulatory Commission. However, to create confidence among solar developers the State of Tamil Nadu was also requested vide letter No.336/37/2017-NSM dated 18.09.2017 not to curtail the generation from solar power plants, which are in any case a must run plants. It is up to the stakeholders to abide by the stipulated statutory orders/provisions and it is up to the State load dispatch centres to enforce the grid code. Further, the States are required to comply to the Renewable Purchase Obligations (RPOs). In compliance to the 86(1)(E) of the 'Electricity Act 2003', all the State Commissions are notified the Regulations specifying the Renewable Purchase Obligations for the obligated entities in their State. Since Provision of must run state is a regulatory issue. It is up to States to decide and take appropriate action as per the Electricity Act.

108. In order to achieve the target of 175 GW of renewable capacity by March 2022, the Ministry of Power after consultation with MNRE vide order dated 22.07.2016 and 14.06.2018 notified the Long terms growth trajectory

of Renewable Purchase obligations for solar as well as Non Solar Uniformity for all States / Union Territories and has also been communicated to State Government. It is further submitted that as per the information available desired RPO% for the state of Tamil Nadu for the year 2017-18 was 4.75% for solar and 9.50% for non-solar and on the basis of data made available, the RPO achievements for the State comes to 2.75% for Solar and to 12.50% for non-solar. The total cumulative capacity as on 31.06.2019 in Tamil Nadu is 2812.05 MW.

109. At the cost of repetition, it is submitted that the main issue is between the Appellant and the Respondent No.1 and the answering Respondent does not have much role in the same. The submissions filed herein is up to the role of the answering Respondent and hence the same may also be considered, if required.

110. We have heard the learned senior counsel for the Appellant and learned senior counsel for the Respondent Nos. 2 to 4 at considerable length of time and also carefully gone through their written submissions and arguments during the proceedings. The issues raised in the Appeal are discussed and decided in the proceeding paras:-

111. The Appellant, NSEFI, is mainly aggrieved with the decision of the Respondent Commission in the impugned order dated 25.03.2019 to disallow deemed generation charges for the capacity which could not be generated and supplied due to backing down instructions issued by Respondent No 3 (TNSLDC). The Appellant Association has alleged that its members were directed to back down generation of their solar plants by way of arbitrary, unjustified and unlawful verbal and email instructions issued by the State Load Despatch Centre. It is the contention of the

Appellant that the backed down energy must be considered as deemed generation and ought to have been compensated with deemed generation charges as per the tariff applicable under PPA by the Respondent Commission. In this regard, the Respondent Commission, in the impugned order, has decided as under:-

> *"10.17. While perusing the rejoinder filed by the petitioner, it is found a fresh prayer seeking deemed generation charges to the solar generating units for the loss of power generation units due to backing down instructions issued by the SLDC. Inasmuch as the Commission considers that (a) in the present circumstances it is unavoidable that the generation from the solar generators need to be curtailed albeit to a small extent if the grid conditions so warrant, (b) we have given direction to the SLDC not to resort backing down instructions without recording the proper reason which are liable for scrutiny at any point of time and (c) that there is no provision in the agreement signed with the Utility for payment of deemed generation charges, we find it not possible to accede to the prayer of the petitioner."*

112. The Appellant has submitted that the Respondent Commission has erred in considering the claim of deemed generation charges as fresh prayer and disallowing the same on the aforementioned grounds. It is the contention of the Appellant that the decision of the Respondent Commission to reject the claim of deemed generation charges is contrary to Section 61 (b), (c), (h) and Section 86 (e) of the Act; provisions of Tariff Policy, National Electricity policy and the Tamil Nadu Solar Policy 2012; IEGC, Tamil Nadu Grid Code and the Energy Purchase Agreements; and principle of promissory estoppel. The Appellant has also contended that the decision of the Commission is violative of Article 14 of the Constitution for its own Tariff Regulations [TNERC (Terms and Conditions for Determination of Tariff) Regulations, 2005] has provision to grant deemed generation payments to hydro power plants in case of reduced generation due to reasons beyond the control of the generating companies.

113. ***Per Contra***, the Respondents have submitted that as per Section 32 and Section 33 of the Act; Clause 2.7 of IEGC; Clause 4.2 (e) and 8.4

(iii) and (v) of Tamil Nadu Electricity Grid Code, the SLDC is responsible for maintaining continuous power supply to common public in the State by secured and economic operation of grid and, hence, the SLDC is in the position to restrict any surplus power injected into the grid on real time operation for reliable grid operation. It has been submitted that Regulation 5.2 (u) of IEGC, 2010 stipulates back down instructions from SLDC to solar/wind generators whenever grid conditions warrant. Further, Clause 3(a) and 3(l) of the Energy Purchase Agreement provide that the injection/dispatch of solar power is subject to maintaining the safety and security of grid only. Accordingly, in order to maintain the grid discipline and grid security, after taking all possible steps to reduce generation of conventional power and surrendering of CGS power etc, the infirm solar and wind generation are curtailed. It has been stated that the last resort of curtailment is only because of the must run status of these infirm generations. The Respondents have further submitted that in addition to the compensation to CGS for reserve shutdown, the Discom has to pay fixed charges to the conventional generators for the energy not purchased by the discom, penalty for under drawal from conventional generators under Deviation Settlement Mechanism (DSM) in addition to the tariff paid to wind and solar generators. The Respondents have submitted that if above financial aspects are taken together, the cost per unit of wind and solar energy becomes prohibitively high.

114. The Respondents have also contended that there was no concrete proof brought on record by the Appellant before the Regulatory Commission to substantiate its allegation that the back down instructions were issued arbitrarily. It has also been argued by the Respondents that there is no finding in the impugned order by the Commission to show that the back down instructions are unlawful. As regards treatment of solar

energy with hydro energy as per Tariff Regulations, 2005, the Respondents have submitted that this specific submission was raised by the Appellant Association before the Commission during the determination of tariff for solar generators in tariff orders dated 28.03.2017 and 29.03.2019 and was not accepted by the Commission on both the occasions. With regards to provisions of the Act and Policies relied on by the Appellants, the Respondents have contended that these provisions are policy directions and guidelines for encouraging the capacity addition of the non-conventional energy sources and the Appellant cannot seek omnibus relief unmindful of grid security.

Independent enquiry by POSOCO

115. During the hearing held on 26.08.2020, learned senior counsel Mr. Sanjay Sen, appearing for the Appellant and Mr. Jayanth Muthraj, learned senior counsel appearing for Respondent Nos.2 to 4 referred to several charts, tables prepared by them for placing on record the data and details, as directed by this Tribunal on earlier dates of hearing. After hearing both the parties, this Tribunal observed that it cannot make rowing enquiry into factual data, therefore, such enquiry has to be done by a third party i.e. POSOCO. Accordingly, the Tribunal directed as under:-

> *"We direct POSOCO to make detailed verification of the data after considering the contentions raised by the parties and submit report to the Tribunal within four weeks and indicate whether there was intentional curtailment of scheduling of power by the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents. We also direct a clear statement "Was there any fair and justifiable curtailment of power from all generators, both renewable and non-renewable, the actual generation and injection of energy"?*
>
> *Both the parties shall cooperate and assist POSOCO to comply with our direction in conducting enquiry. In other words, whatever data and details POSOCO requires, parties shall furnish the same to POSOCO."*

116. In compliance with the above direction, POSOCO, acting as third party, conducted enquiry, validated data and submitted its findings in report "Report on Renewable Energy Curtailment in Tamil Nadu (for the period 01.03.2017 to 30.06.2017)". The Summary of Findings of POSOCO report is extracted below:-

"6. Summary of Findings

Description of the Hon'ble APTEL Direction	***Findings Summary***
1. Detailed verification of the data after considering the contentions raised by the parties	• *Out of the 56 generators, 16 generators with total installed capacity of 1052 MW submitted the data. Data of 10 generators were complete and data of 6 generators was partial.* • *Period and percentage of curtailment actually implemented by the developer and instruction given by TN was found to be different with varying times of delay in implementation. This could not be verified since all the instructions were oral.* • *Curtailment quantum in Energy (MU) terms over a day was found to be in order however there were inconsistency found in block wise MW data* • *Detailed observations are discussed in section 4.1.3 & 4.1.4*
2. indicate whether there was intentional curtailment of scheduling of power by the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents	• *From the detailed analysis of the data it can be concluded that in 5.26% (60 out of 1140 blocks where solar was curtailed) of the cases appears to be justified from grid security perspective.* • *Detailed observations are discussed in section 4.2*
3. Was there any fair and justifiable curtailment of power from all generators, both renewable and nonrenewable, the actual generation and injection of energy"?	***1. Fairness among Solar Developers*** *It appears that most of the solar generators with per unit cost of Rs 7.01 is curtailed more both in terms of instances of curtailment as well as in terms of percentage generation as*

	compared to other solar generators Detailed observations are discussed in section 4.3.1 *2.* ***Fairness among Solar & Wind Developers*** • ***In terms of Generation (MW)*** *Based on the analysis,* ***it can be concluded that Wind and Solar were curtailed equitably****.* • ***In terms of Energy (MU)*** *Based on the analysis it can be concluded that curtailment among wind and solar is carried out in an equitable manner to a large extent. Detailed observations are discussed in section 4.3.2* *3.* ***Among renewable and non-renewable*** *It was felt that it would not be appropriate to compare curtailment/ backing down of nonrenewable plants with renewable energy due to reasons cited in section 4.3.3 Accordingly, the* ***analysis was not carried out and no attempt is made for arriving at the inference****.*

Note: - All the above analysis is based on post facto Frequency, generation and Drawal data whereas TN SLDC system operator may have taken actions based on prevailing frequency and estimate on likely frequency, RE generation and drawal in subsequent blocks"

117. The Respondents (R2 to R4) have contested the report of POSOCO on the basis that the report is based on data submitted by only 16 generators out of 56. The Respondents have also raised certain other objections with regards to data and analysis done by POSOCO in the report. In this regard, the following facts emerges from the report:

(i) The 16 generators who have submitted data comprised of approximately 68% of the state's total installed capacity of solar.

(ii) POSOCO has considered only those time blocks for analysis where both generator and TNSLDC data has indicated curtailment.

(iii)Generation, solar & wind curtailment data as submitted by TNSLDC is used for this analysis since the curtailment information for the entire state of TN for both solar and wind is available only from the data submitted by TNSLDC.

(iv)POSOCO has also considered frequency and margins available in state owned/ISGS conventional generators for its analysis. It has also taken into consideration the over drawal / under drawal of the state from the central grid.

(v)Irradiance based estimated generation is used in the formula for computation of curtailed energy.

118. In light of the above, we opine that the data set considered by POSOCO was representative enough (more than 2/3rd of the installed capacity) to arrive at a rationale conclusion. Further, POSOCO, has considered data submitted by TNSLDC itself for analysis. POSOCO has considered the grid frequency, drawal of state from grid and the margins available with intra-State and inter-State conventional generators. We have also noticed that the POSOCO has rightly considered Irradiance based estimated generation in the formula for computation of curtailed energy. The Respondents have not disputed the finding of POSOCO that Solar generators with per unit cost of Rs 7.01 are curtailed more as compared to other solar generators. SLDC has made a futile attempt to defend its action stating that there is no regulation which stipulates that renewable generation cannot be curtailed before backing down conventional generators. This is not a tenable argument keeping in view the Must Run status provided in central and state grid codes. Based on detailed examination of the report we do not find any infirmity in the report and accept its findings. The Appellant has supported the report and sought

direction to POSOCO to carry out the same exercise for the remaining period.

Curtailment of Power by SLDC- Intentional or on account of grid security

119. As regards the direction of the Tribunal on 26.08.2020 to *'indicate whether there was intentional curtailment of scheduling of power by the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents',* POSOCO, after conducting an independent enquiry as a third party, has concluded that only 5.26% (60 out of 1140 blocks where solar was curtailed) of the cases of back down instructions appears to be justified from grid security perspective. POSOCO has also observed that there was no abnormal voltage condition or network loading issue at 400kV level of the grid which required backing down / curtailment during the said period. Further, it is also noted by POSOCO that no specific constraint is expressed by TNSLDC at State level during the period under consideration. In this regard, the relevant extract of Para 4.2 of POSOCO report is as under:-

> ***"4.2 Indicate whether there was intentional curtailment of scheduling of power by the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents. The following points are noteworthy from the Grid code provision and grid conditions***
>
> *It is noted that TN SLDC has indicated 'Deviation & Frequency' as the only reason for curtailment. All generators have indicated 'Grid Security' as the only reason for curtailment. Both the parties have indicated that all the instructions were oral in nature. Further APTEL has directed to Indicate whether there was intentional curtailment of scheduling of power by the Respondents/SLDC or whether it was on account of grid safety measure taken by SLDC as contended by the Respondents.*
>
> *Hence, it is necessary to analyse the aspects related to 'Grid security' and ascertain whether 'Grid Security' was a concern which prompted these curtailments. The Important Aspects/Definitions of 'Grid Security' is summarised below*

I .Presently definition of 'Grid Security 'is not specifically defined in Grid Code.

ii. The same has been defined in the 'Report of the Expert Group: Review of Indian Electricity Grid Code' which was submitted to the CERC in January 2020 which has defined 'Grid Security' as "means the power system's capability to retain a normal state or to return to a normal state as soon as possible, and which is characterized by operational security limits;".

iii. Further 'Normal State' is defined as "means the state in which the system is within the operational parameters as defined in this Grid Code;"

iv. Further In the context of system state classification viz Normal, Alert, Emergency, Extreme Emergency and Restorative state, 'Normal State' is stated as "Power system is operating within the operational limits and equipment are within their loading limits. The system is secure and capable of maintaining stability under contingencies defined in the CEA Transmission Planning Criteria"

v. Further Operational parameters defined in IEGC are summarized below

a. Frequency band : 49.90Hz-50.05Hz
b. Voltages: 380kV-420kV for 400kV systems, 198kV-245kV for 220kV systems
c. Equipments within their loading limits

The following points are noteworthy from the Grid code provision and grid conditions

i. Grid frequency is collectively controlled by all entities connected in the grid and not by any individual state or entity. The operating frequency band of 49.90-50.05 Hz indicated above in no way implies that frequency cannot go outside this band. It can go below 49.90 Hz in case of any generator trip but actions by other entities should bring the frequency back to within the band. Adequate generation reserves for UP regulation is to be maintained at both the interstate and intra state level to minimize operation below 49.90 Hz. Similarly, adequate reduction or DOWN capability of generation would help avert operation above 50.05 Hz which signifies generation is greater than load.

iiThere was no abnormal voltage condition at 400kV level of the grid which required backing down / curtailment during the said period. Further No Specific constraint is expressed by TNSLDC at State level during the period under consideration.

iii. There was no network loading issue observed at 400kV level which required backing down / curtailment during the said period. Further No Specific constraint is expressed by TNSLDC at State level during the period under consideration.

iv Voltage and Transmission Constraints tend to be localised. The Curtailment instruction by TNSLDC was state-wide. There were no constraints/Violation which necessitated the state wide curtailment.

v. The area control error / Deviation from the grid is to be controlled by the State using proper load forecasting and Renewable forecasting in line with the clause 5.3 and 6.5.23 of Indian Electricity Grid Code 2010.

4.2.1 Considerations for analysis

i.As explained in paragraph 4.1.3 & 4.1.4, the blocks where both generator and TNSLDC data has indicated curtailment has been considered for analysis.

ii. Generation, solar & wind curtailment data as submitted by TNSLDC is used for this analysis.The curtailment information for the entire state of TN for both solar and wind is available only from the data submitted by TN SLDC and hence the same has been used. There may be difference between SLDC version and developer version which can be attributed to the time taken for the communication to reach the developer and may be more prominent in the initial time blocks when curtailment is instructed by TNSLDC.

iii. Considering the all the observations made on the data in preceding paragraphs, the analysis has been limited to parameters deviation, margins available in state owned and ISGS conventional generators with the presumption that proper load forecasting and renewable forecasting for state has been done by TNSLDC.

iv. The analysis of curtailment data submitted by TNSLDC is classified under three broad categories as below. Each case of curtailment is expressed as a time block of 15 minutes.

a)Cases of curtailment in which negligible margin was available for backing down from conventional energy sources.

b) Cases of curtailment where 100 % of curtailment could have been avoided with available margins

c) Cases of curtailment where specified % of curtailment could have been avoided to certain extent with available margins

Note: It would be difficult to capture the intent of SLDC. Accordingly, the classification is done to check whether the curtailment was done for grid security or otherwise rather than classifying whether curtailment was for grid security or intentional curtailment.

XXXX

Note: The above analysis does not consider the frequency profile which is integral to grid security. As stated in paragraph 4.2, frequency band prescribed in IEGC is 49.90 to 50.05 Hz. An analysis of the frequency and RE curtailment instructions shows the following.

- *During 55 blocks (4.82%) out of 1140 blocks (Total curtailed blocks) frequency is above 50.05 Hz (>50.05 Hz)*

- *During 427 blocks (37.45%) out of 1140 blocks (Total curtailed blocks) frequency is above 50.00 Hz (>50.00 Hz). Out of these 427 blocks, TN was under drawing in 350 blocks. Out of these 350 blocks, there was no margin for backing down in thermal and hydro generation in 60 blocks so as to absorb the renewable energy.*

  Considering grid frequency and under drawl of TN from the grid, only 5.26% (60 out of 1140 blocks) appears to be justified from grid security perspective*."*

120. The above conclusion is also endorsed by the suspicion recorded by the Respondent Commission and consequential direction issued to SLDC in the impugned order as under:-

"10.14 However, it is to be emphasized that the SLDC cannot curtail the renewable power at their convenience. Backing down of the "Must Run Status" power shall be resorted to only after exhausting all other possible means of achieving and ensuring grid stability and reliable power supply. The backing down data furnished by the petitioners has not been disputed by the respondents. However, they were not able to explain the reason prevailing at each time of backing down beyond the general statements as mentioned in earlier paras. It give rise to a suspicion that the backing down instructions were not solely for the purpose of ensuring grid safety.

10.15. Under these circumstances, it is necessary to direct the SLDC to ensure evacuation of the solar power generations connected to the State grid to the fullest possible extent truly recognising the Must Run Status assigned to it in full spirit. In doing so, in view of the problems enumerated supra, the SLDC may resort to backing down in rare occasions in order to ensure the grid safety as stipulated in the Grid Code and to ensure reliable 24 x 7 power supply to the State. It is necessary to log each event of backing down whenever such instructions are issued with the reason(s) which lead(s) to that unavoidable decision. A quarterly return on the curtailments with the reasons shall be sent to the Commission. Any whimsical backing down instructions would attract penal action under section 142 of the Electricity Act on the officials concerned."

121. It is evident that there is no dispute with regard to "Must Run Status" of Renewable energy as per Regulation 5.2(u) and 6.5 (11) of IEGC and Regulation 8 (3) (b) of Tamil Nadu State Grid Code. The Respondent Commission has also observed in Para 10.14 and 10.15 of the impugned order that renewable energy enjoys "Must Run Status". However, the

Respondents (R2 to R4) have submitted that the Grid Code stipulates back down instructions from SLDC to solar/wind generators whenever grid conditions warrant. In this regard, the Respondent Commission has pertinently observed in Para 10.14 of the impugned order that backing down of the "Must Run Status" power shall be resorted to only after exhausting all other possible means of achieving and ensuring grid stability and reliable power supply.

122. From the report of POSOCO and the observation made by the Respondent Commission in the impugned order regarding back down instructions, it is evident that back down instructions were issued to the members of the Appellant Association for reasons other than grid security. This being done by the SLDC in connivance with TANGEDCO is established from the fact that the Respondent No 2 (TANGEDCO), Respondent No 3 (TNSLDC) and Respondent No 4 (TNTRANSCO) have conspicuously come together to make common representations/submissions before the Tribunal in the present appeal through a common legal counsel. We find merit in the submission of the Appellant that SLDC, a statutory body, is not acting independently and is acting on the instructions of the Discom.

123. For the back down instructions were being issued from commercial reasons is evident from the finding in the POSOCO report that the solar generators with per unit cost of Rs 7.01 were curtailed more. The relevant extract of Para 4.3.1 of the report is as under:-

> ***"Summary of findings***
>
> ***It appears from the above three indicators that most of the solar generators with per unit cost of Rs 7.01 is curtailed more both in terms of instances of curtailment as well as in terms of percentage generation as compared to other solar generators."***

Thus, the SLDC and TANGEDCO are acting hand in hand in the control of scheduling of cheaper power as compared to the expensive solar power in breach of their duties and statutory powers. We, therefore, hold that the action of Respondent No 2 (TANGEDCO) and Respondent No 3(TNSLDC) are undoubtedly mala-fide in issuing back down instructions for commercial reasons.

Compensation for energy backed down on the instructions of TNSLDC

124. Having held that SLDC in collusion with TANGEDCO had issued back down instructions to renewable generators for other than grid security reasons and in violation of the provisions of the Grid Code, it is to be seen if the deemed generation charges could be charged from TANGEDCO. Though the Commission has referred to the prayer for deemed generation charges as fresh prayer in the impugned order, it has been clarified by the Appellant that the prayer, being part of the prayers made in the Petition, was not a fresh prayer. The impugned order records the prayers made by the Appellant in the petition before Respondent Commission and from that we have noted that the Appellants did pray for compensation of deemed generation charges at PPA tariff. Be that as it may, the Respondent Commission did not accede to the prayer of Petition for the reasons stated in the impugned order. We have gone through the Energy Purchase Agreement signed by the members of the Appellant Association with TANGEDCO, which was brought on record. The Respondent Commission has rightly observed in the impugned order that there is no provision for payment of deemed generation charges in the contract.

125. At this stage, it would be significant to understand the gravity of this issue in the light of the special emphasis provided in the Act for promotion

of renewable energy and the steps being taken by the Central Government for its promotion in the overall benefit of public at large. The emphasis of Government of India on Renewable energy to reduce dependence on fossil fuels and environmental consideration can be understood from the following submission made by Ministry of New and Renewable Energy (MNRE) before the Respondent Commission in the impugned order

> *"5.1. The 4th Respondent states that as per the Paragraphs 6 and 7 of the Petition is concerned the Petitioner has expressed about their solar projects in State of Tamil Nadu and the problems being faced by them due to backing down from SLDC/ALDC. It is submitted that if the averments made by the petitioner are true then it is a matter of concern and the 4th Respondent is also of the view that generation from Renewable Projects should not be curtailed. However SLDC/ALDC and TANGEDCO/TANTRANSCO may clarify their position and stand in this regard.*
>
> *5.2. With regard to Paragraph 8 & 9 of the Petition, it is submitted that the Government of India has launched the National Solar Mission in January, 2010 with the objective to promote ecologically sustainable growth while addressing India's energy security challenge with a target of setting up of 20 GW by 2022. The target was further enhanced to 100 GW by 2022. The Ministry of New and Renewable Energy (MNRE) has initiated various programmes for the development of solar projects under National Solar Mission (NSM). As on 30.11.2016, about 8875 MW of solar projects have been installed in the country. Further, the Ministry have always been promoting setting up of solar capacity in the States through its various schemes and supporting the State schemes.*
>
> *5.3. It is further submitted that the purpose of solar energy is to promote the production of energy through the use of renewable energy sources in accordance with climate, environment and macroeconomic applications in order to reduce dependence on fossil fuels, ensure security of supply and condense emissions of CO2 and other greenhouse gases. Solar energy shall in particular contribute to ensuring fulfilment of national and international objectives of increasing the proportion of energy produced through the use of renewable energy sources. Continuing on the business-as-usual development of fossil fuel based generation on long term had limitations due to various factors such as limited fossil fuel resource availability, risks in securitizing external fuel supplies, macro-economic constraints like balance of payments problems and high current account deficit, externalities of fossil-based generation, international pressures relating to climate mitigation, constraints of water availability for thermal cooling etc. Dependence on import of fossil fuel would exposes India to risks of volatile prices, foreign exchange rate risks, competition with other importers, and domestic needs of the source countries. Solar energy offers the perfect solution to meeting our energy needs without endangering the climate and the environment.*

5.12. It is further submitted that this Ministry has taken up the matter with Central Electricity Regulatory Commission (CERC) vide letter dated 2nd August, 2016 following the backing down of solar projects by some load dispatch centres that the issue of backing down may be placed before Forum of Regulators so that some consensus is reached on the issue. On the issue of two part tariff, Ministry is of the view that it may be difficult as most of the cost in solar power project is fixed cost. Hence, a broad consensus on the issue of backing down of solar projects is required."

126. The above submission of MNRE is in accordance with the provisions on promotion of renewable energy in the Act and the National Tariff Policy framed by Government of India under section 3 of the Act.

Electricity Act, 2003:

Section 61. (Tariff regulations):

(h) the promotion of co-generation and generation of electricity from renewable sources of energy;

Section 86. (Functions of State Commission):

(e) 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;

National Tariff Policy:

4.0 OBJECTIVES OF THE POLICY

(e) Promote generation of electricity from Renewable sources;

127. From the above, it is evident that there is a clear mandate in the Act and the Policy to promote renewable energy generation. The Must Run status conferred to renewable energy is also meant for its promotion. The MNRE had also stated before the Commission that given its nature renewable energy shall not be curtailed. It is seen that the Government of India is also conscious of the backing down of solar projects by some SLDCs. The Appellant had also submitted that in many states SLDCs are

violating the provisions of the IEGC and the applicable State Grid Codes by curtailing the renewable energy generation for reasons other than grid safety and security. Therefore, any action taken contrary to the objective set out in Act needs to be dealt sternly. The Appellant has also submitted that the Tribunal should look into this issue and frame certain guidelines to curb the unauthorized backing down of renewable energy generation.

128. On the issue of compensation, the Appellant has placed reliance on judgement of Hon'ble Supreme Court in *Union of India vs United India Insurance Company Ltd. & Ors (1997) 8 SCC 683* to contend that non-exercise of public law or statutory power did create a private law action for damages for breach of statutory duty. Reliance is also placed on the judgement of this Tribunal in Appeal No 175 of 2012 *(Tata Power Co Ltd vs MERC & Ors)* wherein the Tribunal had held that the Appellant Tata Power Co Ltd. was entitled to claim compensation from SLDC after establishing that SDLC was guilty of legal mala-fide by knowingly breaching its statutory duty. The Appellant has alleged that Respondents 2 to 4 are not neutral, fair or transparent in discharging their duties and would, therefore, be jointly and severally liable to pay damages for loss of generation apart from the SLDC itself being liable to pay damages.

129. The Tribunal had considered similar issue of allegation of legal mala-fides against Maharashtra SLDC for knowingly breaching its statutory duty with the knowledge that its actions were likely to cause losses to the Appellant TATA Power Company Ltd in Appeal No 175 of 2012 (*TATA Power Company Ltd vs MERC &Ors*). The relevant extract of the judgement dated 14.11.2013 is as under:-

"46. Let us look into these cases one by one:

"In Case No.1999(6) SCC 667 in Common Cause, A Registered Society Vs. Union of India, the Hon'ble Supreme Court has held that the tort of "misfeasance in public office" is concerned with a deliberate and dishonest wrongful abuse of the powers given to a public offer and the purpose of the tort was to provide compensation to those who suffered loss as a result of improper abuse of power. In this judgement it has further been held that so far as the malice is concerned, while actual malice, if proved, would render Respondent's action ultra vires and tortious and it would not be necessary to establish actual malice in every claim for misfeasance in public office. This judgement was rendered by Hon'ble Supreme Court on the basis of the various English cases. The relevant extract of the judgement is as follows:-

> *(6) Where a plaintiff establishes (i) that the defendant intended to injure the plaintiff or a person in a class of which the plaintiff is a member (limb one) or that the defendant knew that he had no power to do what he did and that the plaintiff or a person in a class of which the plaintiff is a member would probably suffer loss or damage (limb two) and (ii) that the plaintiff has suffered loss as a result, the plaintiff has a sufficient right or interest to maintain an action for misfeasance in public office at common law. The plaintiff must of course also show that the defendant was a public officer or entity and that his loss was caused by the wrongful act.*
>
> *98. So far as malice is concerned, while actual malice, if proved, would render the defendant's action bom ultra vires and tortious, it would not be necessary to establish actual malice in every claim for misfeasance in public office. In Bourgoin SA v. Ministry of Agriculture, Fisheries and Food (1985) 3 All ER 585 to which a reference has already been made above, the plaintiffs were French turkey farmers who had been banned by the Ministry from exporting turkeys to England on the ground that they would spread disease. The Ministry, however, subsequently conceded that the true ground was to protect British turkey farmers and that they had committed breach of Article 30 of the EEC Treaty which prohibited unjustifiable import restrictions. The defendants denied their liability for misfeasance claiming that they were not actuated by any intent to injure the plaintiff but by a need to protect British interest. It was held by Mann, J., which was upheld by the Court of Appeal, that proof of actual malice, ill-will or specific intent to injure is not essential to the tort. It was enough if the plaintiff established that the defendant acted unlawfully in a manner foreseeable injurious to the plaintiff. In another decision in Bennett v. Commr. of Police of the Metropolis (1995)2 All ER 1, which was considered in Three Rivers's case 1996 (3) All ER 558 (supra), it was held that the tort of misfeasance in public office required express intent to injure."*

47. *The proposition which would emerge from the judgement in Common Cause is that to maintain an action for misfeasance in public office at common law, the party should establish the following ingredients of the tort for claiming compensation:-*

    i) It must be established that the defendant was a public officer or public entity and that the plaintiff's loss was caused by the wrongful act;

ii) It must be established that the defendant intended to injure the plaintiff or the defendant had the knowledge that he had no power to do what he did and due to the said act, the plaintiff would probably suffer loss or damage.

iii) The plaintiff has suffered loss as a result of the action of the defendant.

69. The State Commission has simply glossed over the manner in which the State Commission continued to deny scheduling of power, even after the date of quashing the Government Memorandums, and after knowing that such a refusal was contrary to law and would cause serious losses to the Appellant.

74. Similarly, SLDC also, even though it was informed that those Government memorandums have been quashed, had again refused to schedule power by merely stating that the earlier order passed by the State Commission on 29.9.2010 had not been quashed and therefore the request was refused to schedule the power. The stand now taken by SLDC both in the earlier Appeal No.32 of 2011 and in the present Appeal No.175 of 2012 that they are bound by the Government memorandums shows that SLDC for the reasons best known to it, has taken a different stand going hot and cold.

75. This conduct on the part of the State Load Despatch Centre which is public office can not be said to be bona-fide and genuine. When SLDC has got the knowledge that they can not rely upon the Government memorandums on the basis of which the earlier order passed by the State Commission on 29.9.2010 after they were quashed, even then they refused to schedule power to the Appellant as requested by the Appellant, would show the malafide attitude of SLDC and due to that the Appellant suffered a loss.

76. Therefore, we are of the view that since misfeasance has been established with the knowledge of SLDC, the Appellant is entitled to claim for compensation from SLDC."

130. Thus, the party has to establish the three ingredients of the tort, as laid down in Para 47 of the above judgement, to maintain an action for misfeasance in public office for claiming compensation. In the present Appeal, there is no denial that SLDC is a statutory body. We have held that the actions of Respondent No 2 (TANGEDCO) and Respondent No 3(TNSLDC) are undoubtedly mala-fide in issuing backing down instructions for commercial reasons. The misfeasance being established from the conduct of SLDC, who in collusion with TANGEDCO has made common representations/submissions in the present appeal through a common legal counsel. Further, POSOCO has indicated in the report that

most of the solar generators with per unit cost of Rs 7.01 were curtailed more. The curtailment was done by SLDC at the behest of TANGEDCO for commercial reasons is also evident from the following submission made by Respondent No 2 to 4 in their common reply to the Appeal wherein it is being justified to curtail power of private solar developers.

> *"18. It is respectfully submitted that, with respect to the Ground (FF) to (II), the conventional power plants are operating from their rated capacity to technical minimum. The maintenance cost of the thermal generators of the state increases, cost of generation increases, Plant Load Factor (PLF) of the thermal generation decreases and all the above costs due to RE injection as Must Run is added in the Aggregate Revenue Requirement (ARR) and paid by the consumers. The private solar developers are unduly benefited at the cost of consumers. In addition to the difficulties faced during infirm penetration, the TANGEDCO faces financial implications by purchasing power at high cost in the real time market, penalty towards DSM charges etc "*

131. Thereafter, the Respondents vide their common reply dated 18.10.2020 to POSOCO report have admitted to have curtailed generators with tariff of Rs 7.01/- per unit to get higher relief as under without such provision being present in the Regulations.

> *"It is respectfully submitted that there is no regulations laid for backing down of RE generators for grid security after backing down of conventional sources, to get higher relief, curtailment instructions issued to the higher capacity generators (1052 MW) which fall under in Rs 7.01/- category and it is essential to start to curtail in this category. If required further to maintain the grid parameters within the stipulated limits, curtailment instructions issued to the rest of the category. Also, it is submitted that low capacity generators were not asked to back down as the quantum of relief for grid requirement was meagre"*

132. The above being a submission of a supposedly, independent statutory body like SLDC, shows its callous attitude towards the Regulations of the Commissions (both Central and State) and its mala-fide intent in issuing curtailment instructions. Therefore, TANGEDCO and TNSLDC were hand in glove in violating the provisions of Grid code for the commercial benefit of TANGEDCO. It is also apparent that the members

of the Appellant Association have suffered financial loss as a result of the actions of TNSLDC and TANGEDCO.

133. The investments made in establishing solar projects, and the solar tariffs so determined, was premised on Must Run status as contemplated in the regulations framed under Act and the provisions in energy purchase agreement. If must run status is not adhered to by the Respondent TANGEDCO and SLDC in violation of law, the members of the Appellant association would be deprived of recovery of legitimate tariff. As solar power tariff is single part and it is predominantly fixed cost in nature, unauthorised curtailment will ultimately result in solar generators failing to repay their loans. If such actions are not penalised, the unauthorised curtailment will go unabated jeopardising the whole objective and intent of the Act. This conduct on the part of the State Load Despatch Centre which is public office cannot be said to be bona-fide and genuine. Therefore, we are of the view that since misfeasance has been established against TANGEDCO and TNSLDC, a statutory body under the Act, the Appellant is entitled to claim for compensation from TNSLDC and TANGEDCO. Both these entities shall jointly pay the compensation to the members of the Appellant Association.

134. In the light of above discussions, we issue following directions:

(i) For the period 01.03.2017 to 30.06.2017, the Respondents shall pay compensation for 1080 blocks considered by POSOCO, during which curtailment instructions were issued for reasons other than grid security, at the rate of 75% of PPA tariff per unit within 60 days from the date of this order. The computation shall be made separately for individual members of the Appellant

Association based on the curtailment period/blocks falling in 1080 blocks.

(ii) POSOCO shall carryout similar exercise for the period up to 31.10.2020 on the same lines and submit report to Respondent Commission within 3 months. Tamil Nadu SLDC and Appellant are directed to submit details to POSOCO. Based on POSOCO report, State Commission shall allow compensation for the backed down energy at the rate of 75% of the PPA tariff per unit.

(iii) Curtailment quantum shall be considered as per POSOCO report.

(iv) The Respondents shall pay compensation along with interest at 9% for the entire period.

Way forward for curtailment of RE power by State Load Dispatch Centre

135. We have noticed that the analysis made by POSOCO is based on the grid parameters, margins available for backing down of conventional energy sources and the status of drawal by the State from the central grid. These parameters are apt for deciding whether the backing down is for the purpose of grid security or on commercial reasons. We also make it clear that the replacement of solar power by purchases of cheaper power from short term power markets shall also be treated as unauthorized activity. Accordingly, the following directions are issued to all the State Commissions, Discoms and SLDCs with regards to curtailment of power generated from Renewable Energy sources.

(i) For Future, any curtailment of Renewable Energy shall not be considered as meant for grid security if the backing down instruction were given under following conditions:

a) System Frequency is in the band of 49.90Hz-50.05Hz

b) Voltages level is between: 380kV to 420kV for 400kV systems & 198kV to 245kV for 220kV systems

c) No network over loading issues or transmission constraints

d) Margins are available for backing down from conventional energy sources

e) State is overdrawing from the grid or State is drawing from grid on short-term basis from Power Exchange or other sources simultaneously backing down power from intra-state conventional or non-conventional sources.

(ii) As a deterrent, the curtailment of Renewable Energy for the reasons other than grid security shall be compensated at PPA tariff in future. The compensation shall be based on the methodology adopted in the POSOCO report. POSOCO is directed to keep the report on its website.

(iii) The State Load Dispatch Centre (SLDC) shall submit a monthly report to the State Commission with detailed reasons for any backing down instructions issued to solar power plants.

(iv) The above guiding factors stipulated by us would apply till such time the Forum of Regulators or the Central Government formulates guidelines in relation to curtailment of renewable energy.

ORDER

136. For the foregoing reasons, we are of the considered view that the issues raised in the Appeal No. 197 of 2019 have merits and hence, the appeal is allowed.

137. The impugned order dated 25.03.2019 passed by the Tamil Nadu Electricity Regulatory Commission in Petition M.P. No. 16 of 2016 is set aside to the extent of denial of deemed generation charges / compensation for issuing backing down instructions to the Members of the Appellant's Association for reasons other than the grid security and our findings and directions, stated supra.

138. The Registry is directed to circulate copy of the Order along with POSOCO report to all the State Electricity Regulatory Commissions, MNRE and Ministry of Power to ensure compliance of directions in Para 7.22 above.

139. The Pending IA, if any, stands disposed of. No order as to costs.

140. Pronounced in the Virtual Court on this **2nd day of August, 2021.**

(Ravindra Kumar Verma)
Technical Member

(Justice Manjula Chellur)
Chairperson

REPORTABLE / ~~NON-REPORTABLE~~