



To

Date: 20.10.2014

The Secretary,

Central Electricity Regulatory Commission (CERC),
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Respected Sir,

Sub: Mytrah Energy (India) Ltd. (MEIL)'s comments/submissions on "Staff Paper on Transmission Planning, Connectivity, Long Term Access, Medium Term Open Access and other related issues"

Reference: CERC Ref.: Engg./DP-Transmission/2014-CERC Dated 19.09.2014

We would like to introduce ourselves as Mytrah Energy (India) Limited MEIL a wholly owned subsidiary of Guernsey based and AIM/LSE listed MEL in India, which is now one of India's fastest growing Independent Power Producers with operating assets of more than 500MW and aims to own & operate 1500 MW of wind power in India by 2016.

The Company intends to acquire and develop wind farms in conjunction with some of the world's leading wind turbine manufacturers. Clear cut guidelines and policy framework always support to bring in investment in the country.

MEIL intends to own a portfolio of wind farms with a target total installed capacity of 5,000 MW through a judicious mix of turnkey contracts and self-development model.

This Hon'ble Commission has come up with a "Staff Paper on Transmission Planning, Connectivity, Long Term Access, Medium Term Open Access and other related issues"

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In regards to the above MEIL would like to submit humble comments/suggestions w.r.t the CERC staff paper on Transmission Planning, Connectivity, LTA/MTOA and related issues" for consideration.

Following are Mytrah's Submissions:

- 1) It is one of the excellent report in the recent past by the Staff paper on Transmission Planning, Connectivity, and LTA/MTOA/STOA and associated issues. The report mainly contains issues related to ongoing problems with **Conventional generation** and transmission planning procedures/criteria's, timing of planning /construction, transmission charges/cost allocation and existing procedure. Since the Renewable mix at CTU is minimum, issues are not highlighted with anticipated problems, however on the outline it has been mentioned.
In case of Wind generation, due to diversity factor do exist in the inherent characteristics of geography, consideration of installed capacity for LTA makes technically higher capacity transmission planning.
- 2) Grant of connectivity and LTA capacity shall be made maximum limit as per the Transmission planning criteria.
As staff paper already acknowledges that wind generation can come much faster than the transmission network, maximum limits as per CEA guidelines of transmission planning criteria shall be considered while granting connectivity / LTA. Further incase if the CTU network and its connectivity point is under planning stage or construction stage, then grant/LTA would be provisioned to give lesser than the capacity of application as the time frame of CTU network would vary.
- 3) It is very serious to note that wind generation operates to its maximum only for 3 months (May mid to August mid) and transmission planning always takes the worst scenario of maximum generation and rest of the period it become a stranded capacity. **Hence three months shall be declared as a RENEWABLE MONTHS of the country** and utilize maximum capacity from Wind without backing of any wind generation. No doubt it may seems not comes under LTA/MTOA/STOA, but while making load flow studies for

transmission planning for LTA applicant, this shall be considered as a critical scenario, especially for southern LTA/MTOA applicant as a standard policy.

Transmission planning cannot be made in isolation with only LTOA /MTOA applicant, it is not just a coordinated activity but integrated activity. The point here mentioned about not on the evacuation transmission line from the generation point, but from the state interface point to CTU network and further.

In Tamil Nadu State because of either the state level or Central level poor planning or non-realization of planned network or due to poor governance or poor inter co-ordination of state with central planning, backing down of generation is at highest level, despite renewable generation is considered to be MUST RUN status. It is estimated around 10-15 million units per day the maximum backing down of generation during high wind season. Hence because of this situation, renewable addition in Tamil Nadu has comes to Stand still for the current year.

While making load flow study at the central while issuing LTA/MTOA, state loads and its generation with multiple load/generation scenario will be taken only and not the State constraint part assuming that it is host state transmission problem. Hence problem remains entangles continuously.

The whole reiteration of the point with example is because there are loose ends in transmission planning either at state or central or in the procedure.

- 4) Identifying LTA consumer is one of the challenging task for conventional generator even though their generation is controlled one and identifying LTA consumer for wind generation which is uncontrolled is much more challenging. Knowing the fact of the season generation and to accommodate variation in the system, many state have brought the concept of wheeling and banking for wind generation/ renewable generation.

There is no mentioning of energy banking concept for LTA/MTOA for infirm source of renewable energy like wind, solar and mini hydel. Hence it is requested to bring the concept of **energy banking for renewable LTOA/MTOA/STOA applicant.**

- 5) It is also mentioned that Long term PPA's have not been firmed up by IPP's and there is a uncertainty about the drawl of the state, under this condition how the power flow situation going to be on the 11 HCPTC which are under various stages. Hence thought process shall be initiated that **whichever the state is having deficit as per LGBR, it shall be made mandate by CERC to states to buy power under STOA. /MTOA.**
This ensures generator to approach for the state utility, if LTOA consumer identification is taking time.
- 6) Understating the generation requirement for power evacuation and asking for installed capacity transmission planning is technically incorrect. It is already very clearly mentioned that generator is not bothered to pay 15-20 paise/unit on transmission charges and it is true. Saying that, uncertainty part of the commissioning of full capacity and huge financial burden in large capacity is a major issue in committing full capacity at the starting. Hence pertaining to Wind it shall be allowed with year wise additional to LTA with two or three year cap.
- 7) For renewable generation, Group **captive concept** under LTA /MTOA/STOA shall be propelled. This could be one of the very significant step as it solves major transmission planning issue of non- identification of customer.
- 8) Present transmission planning for LTA/MTOA talks about three major issues and need to address on high priority.
- I. Deviation from Commissioning Schedule.
 - II. Shifting of Target Region
 - III. Exist from LTA.
- On the second point, the reason for shifting of Target Region could be many reasons, however Tariff of the particular state is one of the main driving force for generator to look for maximum gain. Hence transmission planning shall take such intrinsic note of TARIFF of the state with LGBR status so that common interest can attended in much better way.
- 9) As wind cannot be possible to schedule accurately due to variable in nature, transmission planning under LTA/MTOA has to address this issue either through RRF mechanism or any other mechanism.

- 10) For wind energy, GNA has to be considered based on the actual usage and shall not be based on the fixed quantum as it will be maximum for only three months.
- 11) It is mentioned that entity seeking connectivity to ISTS shall submit information once in a year i.e. January and it will not accept during ensuing year. This is very good move, however twice in year is more appropriate as it indirectly impacts other planning.
- 12) It is mentioned in 6.5.3 (K) that network data will be published and given access to authorized entities. It is generally presumed as authorized entities are only State transmission entities. It is requested to provide access to interested stake holders also and even to private companies on scrutinizing minimum criteria. This will ensure maximum participation of private entity at the stage of planning itself.
- 13) Construction Bank guarantee increase from 5 lakhs to 50 Lakhs does not justify this increase. Further it is requested to keep the renewable energy generator aspect as separate and shall not be made common with conventional generation.

Any increase in construction cost, dampens the plan of renewable integration on CTU network
- 14) Exit or relinquishing generator list shall be provided in the web portal on monthly basis for more transparency in knowing the list and also willing generator for replacement.

MYTRAH as a stakeholder answer to the questions in page 124 to 126 in **Black bold colour**

Question No. 1:

Whether Connectivity should be retained as a separate product: (A) Yes (B) No

Ans : NO

Question No. 2(a)

If Yes, what are in your opinion are the advantages of Connectivity as a separate product?

Question No. 2(b)

If connectivity is retained as a separate product , then what whether is should be free or transmission charges should be borne by generator or drawee entity which is applying for connectivity ?

Question No. 2(c)

Whether for connectivity, only transmission charges corresponding to connectivity transmission system should be charged or some part of Grid transmission charges (25% as proposed) should also be charged ?

Ans : Only 25 % should be charged.

Question No. 3:

If no, what is in your opinion are the dis- advantages of Connectivity as a separate product?

Ans. : Generally all state utility gives approval based on the installed capacity or applied capacity. There is no separate process for bifurcation. It is only in CTU it is in two bifurcated system. It is evident from the system planning that transmission planning going to impact if it is considered as two product.

Question No. 4: Bank Guarantee

What should be amount of sufficient construction bank guarantee to safe guard against the risk of stranded asset in case generating project fails to get commissioned?

(a) Is existing construction bank guarantee amount(Rs 5 lakh per MW) sufficient when transmission cost is about Rs 1 cr per MW.? **Sufficient**

(b) Is proposed bank guarantees equivalent to cost of transmission line is sufficient? **YES**

(c) Is proposed bank guarantees are very high? **Nominal**

Question No. 5: Bank Guarantee

What should be amount of sufficient construction bank guarantee to safe guard against the risk of stranded asset or transfer of liability to other consumer in case generating project wants to exit/ downscale LTA after commissioning (Please give justification for your views)

(a) NPV equivalent to 12 year transmission charges

(b) NPV equivalent to 7 year transmission charges

(c) X Rs per MW of installed capacity –One time charge

(d) Five years Average Injection and withdrawal charges

(e) Five years Average injection charges only

Ans : X Rs per MW of installed capacity – One time. However depends in which year generator is taking exist route. Hence year wise X Rs per MW of installed capacity is better. Further If the alternative generator being identified by the exit generator, then only process charges shall be levied as it hardly impacts to the grid. Further alternative generator shall multiple generator in a period of one year.

Question No. 6: Delay in Commissioning

In case of delay in generating unit(s) /project:

(a) Date of LTA should be firm and no relaxation should be provided: **Relaxation should be provided**

(b) If information of delay is provided sufficiently in advance some staggered relief can be granted:

(c) Issue should be decided mutually between generating company and transmission licensee subject to condition that no burden is transferred to other users

Question No. 7: Shallow Connection vs Deep Connection:

(a) What is your view on shallow connection vs deep connection?

(b) Shallow connection should be permitted to only renewable generation or to both Renewable and conventional generators.

(c) Under shallow connection system how transmission planning will be done and who shall bear the Grid level transmission charges

Ans : Shallow connection

a) Shallow connection is the one generally in practice in our country for renewable and all the commercial IRR has been worked with the same principle. Hence the Shallow connection is good for the overall Industry.

b) As a Renewable generation, Yes.

c) It has to be born by the transmission licensee and cost shall be socialized.

Question No. 8:

a. Whether you are a injecting entity or Drawee entity or both? : **Injecting Entity**

Question No. 9: GNA

a. What is your opinion on General Network Access (GNA) proposed by CEA ?

It is a very good proposal.

b. Whether it should be adopted for transmission access and transmission charges?

Yes with a classification for Renewable as stated in our points

c. What should be bank guarantees and Exit Charges under GNA mechanism?

Difficult to evaluate as there are many scenario's and criteria's. Single method definitely seems difficult to justify

d. Whether it would be possible to plan transmission system to give assured access in all directions?

On techno-commercial ground it is almost impossible. However scarifying little commercial it is possible.

Question No. 10: Transmission Planning:

a. How Transmission planning in the country needs to be reviewed under present condition to take care of future need of robust transmission system?

- i. **Should involve private stake holder participation in transmission planning and design.**
- ii. **Even after 67 years of independence, each state transmission planning criteria's are different. State Transmission licensee will not follow the guidelines of the CEA and CEA cannot enforce the same. It is evident that just making rules without enforcement, will not have any use. Just to take example APERC mention about transmission planning with loading of transmission limits as follows. Further diversity will not be considered in the process.**

At EHT level:

Project interfacing		EHT Level	Existing permissible capacity	Proposed Wind power capacity	
From	To				
Pooling SS	Existing APTRANSCO EHT SS	132 KV	40 MW	(i)	Up to 50 MW on SC Line
				(ii)	Above 50 MW to 100 MW on DC Line
Pooling SS	Existing APTRANSCO EHT SS	220 KV	80 MW		Above 100 MW

Voltage level/ Aggregation level	132kV / Individual wind/solar farm	220kV	400kV	State (as a whole)
Capacity Factor (%)	80 %	75 %	70 %	60 %

However transmission planning activity is not an isolated activity and it to be in sync with the state transmission planning. When it is said sync with state, it does not just taking generation and load details to model in the load flow. It calls for much smarter planning from both the end on almost day to day basis and not once in a year. Once in a year shall be a consolidated planning.

- iii. There is a major mismatch in the private generation under plan After approval and generation evacuation approved without implementation plan. This is making huge mismatch in transmission planning as all approved generation will be considered as generation to realize. Apparent congestion of transmission lines due to non realization of evacuation approved capacity makes the new generation to bauld from entry.

Hence each State transmission planning / criteria's / procedure shall be governed by center with common principle. If we look in to the generation approved capacity of the each state vs the realization rate, transmission planning will take a huge beating though current process.

IPP generation approval process is governed by local state and state cannot cancel the approval if it is not realized within time frame because it is governed by the state government. State government cannot understand the technical integrated Grid transmission issues. Hence state transmission licensee transmission plans cannot be robust and then the data shared by the state to center will be of the same quality and finally Robust transmission plan cannot be achieved until proper mechanism is built seriously.

b. Whether there is need for a separate Regulation for transmission planning to make it more participative?

Yes there is a need for separate Transmission regulation.

Whether transmission planning should mandatorily make margins available for short term power market?

Half Yes and feel that it will be available inherently if materialization of transmission plans are intact. Separate transmission planning for short term power market is required only for constraint corridors and should not be generalized.

c. Whether transmission system planned by CEA /CTU need to be adequately explained from cost benefit point of view?

Gives an advantage, if given

e. Is there requirement of making submission of information related to transmission planning legally binding?

NO

Question No. 11: Utilization of Congestion charges

a. Whether proposal of using congestion charges to reduce the long term ISTS transmission charges acceptable ?Or

b. Whether Congestion charges are to be utilized for creation of specific transmission assets for relieving the congestion? How should this be treated- as equity, loan or grant?

No answer

Question No.12:

Transmission corridor allocation for Power market:

a. Whether participants of Power exchanges should be allowed to participate in e-bidding for transmission corridor? or

b. For power market development, certain quantum of corridor may be reserved for power market with all participant of Power Exchange sharing the transmission charges of reserved corridor.

No Answer

At the end, it is most respectfully requested that this Hon'ble Commission may be pleased to address the above concerns while finalizing the regulation. And may be implemented in best interest of all in general including provisions for renewable energy shall not be overlooked in any case.

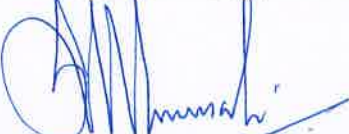
We request this commission to please consider such issues also while pronouncing the final order in this matter.

Further it is prayed that an opportunity of hearing may be provided enabling our organization to present and place additional facts and materials.

Thanking you,

Yours faithfully

For – Mytrah Energy India Limited



Authorised Signatory

Please do contact if any queries at v.kiran@mytrah.com