Greenko Energies Private Limited
CIN: U40109TG2000FTC034990

Ref: - GEPL/2021-22/CERC/20221030 Date: 30.10.2022

To,

The Secretary,
Central Electricity Regulatory Commission,
3rd & 4th Floor, Chanderlok Building, 36,

Janpath, New Delhi-110001

Subject: - Comments /Observations/Suggestion sought by Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2022

Dear Sir,

At the outset, we extend our gratitude to hon'ble Central Electricity Regulatory Commission for inviting Comments/Suggestions/Observations on Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulation, 2022. We wish to submit our observations/comments and objections/suggestions as attached herewith.

We humbly request the hon'ble Commission to consider our comments/suggestion in larger interest of Stakeholders.

Thanking You,
For M/s GREENKO ENERGIES PRIVATE LIMITED

Authorised Signatory

Comments on Draft Indian Electricity Grid 2022				
SI. No.	**Clause No.**	**Existing Clause**	**Proposed Clause**	**Comments**
1.	Chapter 1: Auxiliary Energy Consumption (Additional insertion)	Additional Insertion	'Auxiliary Energy Consumption' or 'AUX' in relation to a period in case of a generating station / ESS means the quantum of energy consumed by auxiliary equipment of the generating station / ESS, such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station / ESS and the transformer losses within the generating station / ESS, expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station; **Provided that Auxiliary Energy Consumption, in case of ESS, shall not include cycle loss occurred during charging and discharging of ESS.** Provided that auxiliary energy consumption shall not include energy consumed for supply of power to housing colony and other facilities at the generating station and the power consumed for construction works at the generating station and integrated coal mine.	'Auxiliary Energy Consumption' definition need to be inserted as regulation is referring the Auxiliary Consumption at many places.
2.	Chapter 1: Deemed ISTS Line	Additional Insertion	"Deemed Inter-State Transmission System (Deemed ISTS)" means the transmission system utilised to evacuate at least 75% of interstate power. Such transmission system should have received regulatory approval of the	There are many instances wherein transmission line being developed by State Transmission Utilities (STUs) or Intra State transmission licensees, and such transmission lines are mainly utilised to evacuate the Inter-State Power. Such transmission lines / system

	(Additional insertion)		Commission as being used for interstate transmission of power and qualified the ISTS status from respective regional power committee.	should be qualified as deemed ISTS under CERC IEGC Grid Code.
3.	Chapter 2: Resource Adequacy Planning 5 (3) Generation Resource Adequacy Planning:	Additional Insertion	(C) Each Distribution Licensee shall have a responsibility to assess the Energy Storage requirement in different time horizons, namely Long Term, Medium Term, and Short Term. Additionally, while assessing the generation resource adequacy, distribution licensee has to ensure that ESS has to be utilised to store the over generation capacity during certain time periods. Under such scenario, such stored energy shall be utilised later as per requirement.	Ministry of Power (MoP)vide its order dated 22nd July 2022 has issued Renewable Purchase Obligation (RPO) and Energy Storage obligation (ESO) trajectory till 2029-30. Hence, while Generation resource planning / demand forecasting, distribution licensees must access the requirement of ESS in long term, medium term as well as in short term period. Further, under scenarios, wherein distribution licensee anticipates any excess generation from RE resource, instead of curtailing, the same can be stored and utilised during non-RE hours.
4.	Chapter 2: Resource Adequacy Planning 5 (3) Generation Resource Adequacy Planning:	For the sake of uniformity in approach and in the interest of optimality in generation resource adequacy in the States, FOR may develop a model Regulation stipulating inter alia the methodology for generation resource adequacy assessment, generation resource procurement planning and compliance of resource adequacy target by the distribution licensees.	For the sake of uniformity in approach and in the interest of optimality in generation resource adequacy in the States, FOR may develop a model Regulation stipulating inter alia the methodology for generation resource adequacy assessment, generation resource procurement planning and compliance of resource adequacy target by the distribution licensees and levy of penalty for non-compliance of such target.	The referred clause stipulates the requirement to comply with generation resource adequacy assessment. It has been seen in the past that distribution licensee is not complying with the RPO requirement, similarly, Distribution Licensee may forgo to comply with resource adequacy targets unless such non-compliance linked with strict penal charges.
5.	Chapter 2:	Additional insertion under regulation 4 (a)	Transmission deferral – ESS derive most their value inter alia from averting the installation of excessive amounts of transmission	Renewable energy sources have relatively limited utilization (expressed as C.U.F) (Solar ~25% & Wind ~30%) as against conventional sources particularly

	Resource Adequacy Planning 5 (4) (a) (V) Transmission deferral (Additional insertion)		infrastructure. CTU/STU should optimize transmission system requirement with co-located ESS, particularly while designing evacuation system for wind-solar projects located in such resource rich area. Transmission system for RE dense area shall be developed for lower peak and such energy may be stored in ESS for dispatch in non-RE hours.	thermal sources where design utilization is typically 85%. Hence, the utilisation of the associated transmission asset is comparatively low. Since transmission assets are typically created to cater the peak power requirement. This issue assumes significance in case of India which has embarked on an accelerated RE capacity addition i.e. 500 GW by 2030. A transmission system which is being used partially have both technical and cost implications. In view of same, ESS needs to capture under Transmission resource adequacy assessment so that transmission system requirement can be deferred, and system would be optimally utilised.
6.	Additional Chapter incorporation 4 (C) Transmission adequacy planning code	Additional Chapter insertion	It should cover the followings: • Dedicated transmission system for generation assets / PSPs, which are distantly far located from grid connection should be reduced to ~ 25 KM. • Advance strategic transmission planning needs to be carried out for PSPs to provide transmission system ahead of start date of operation of such assets. • Transmission planning should also cover transition process of LTA to GNA.	We suggest that a separate chapter covering transmission system adequacy planning code is required to be incorporated, and it should also cover the various methods needs to be adopted to enable the advance planning of transmission system in India. There is a strong consensus among the various stakeholders in the Indian power sector on need of energy storage assets in India. Pump Hydro Storage Plants are well recognised as a cost-effective long duration energy storage solution to mitigate the challenges of grid stability and curtailment of must-run RE generation. It is to be noted that generally such PSPs are located far from the nearest ISTS substation. In many cases the requirement of dedicated transmission line is beyond ~100 km. Therefore, it is need of hour to

				provide transmission system to all such PSPs at its doorstep.
7.	Chapter 5: Commissioning and Commercial Operation Code Clause 3 (a)	(3) Trial Run of Wind / Solar / Storage / Hybrid Generating Station (a) ……. corroborated with the solar irradiation recorded at site during the day and plant design parameters. **For the trial run, a declaration shall be given by the generating company that no panel has been replaced or added or taken out or design of the plant has been altered:**	(3) Trial Run of Wind / Solar / Storage / Hybrid Generating Station (a) ……. corroborated with the solar irradiation recorded at site during the day and plant design parameters. ~~**For the trial run, a declaration shall be given by the generating company that no panel has been replaced or added or taken out or design of the plant has been altered:**~~	Such condition is in contradiction with the condition mentioned in bidding documents being issued by the Central and State Government Implementing Agencies like SECI/NTPC/NHPC. Considering the same, we suggest not to incorporate the same.
8.	Chapter 5: Commissioning and Commercial Operation Code Clause 22 3 (f)	(f) Where on the basis of the trial run, solar / wind / storage / hybrid generating station fails to demonstrate its rated capacity, the generating company shall have the option to either to go for repeat trial run or de-rate the capacity subject to a minimum aggregated de-rated capacity of 50 MW. If the generating company decides to de-rate the unit capacity, the de-rated		

		capacity in such cases shall be not more than 90% of the demonstrated capacity to cater for primary response.		
9.	Chapter 6: Operating Code Clause 30 (4) Control Hierarchy	(9) Inertia: The power system shall be operated at all the times with a minimum inertia to be stipulated by NLDC so that minimum nadir frequency post reference contingency stays above the threshold set for under frequency load shedding (UFLS). NLDC shall reschedule generation including curtailment of wind, solar and wind-solar hybrid generation, if required, in coordination with the respective RLDCs and SLDCs to maintain the minimum inertia.	(9) Inertia: The power system shall be operated at all the times with a minimum inertia to be stipulated by NLDC so that minimum nadir frequency post reference contingency stays above the threshold set for under frequency load shedding (UFLS). NLDC shall reschedule generation including curtailment of wind, solar and wind-solar hybrid generation, if required, in coordination with the respective RLDCs and SLDCs to maintain the minimum inertia. **Provided that curtailed wind, solar and wind-solar hybrid energy shall be given deemed generation status.** **Provided further that NLDC shall implement the transparent process for data posting related to curtailment of wind, solar and wind-solar hybrid energy to ensure that such curtailment with reason of grid security will be corroborated.** **<u>Provided further that RE generators shall be provided compensation for generation loss in</u>**	It has been seen in past that wind and solar generators connected with state grid have been facing frequent backing down instructions citing grid security and many such instructions are issued verbally without any written communications, and APTEL has also recognised the same in its order vide APPEAL NO. 197 of 2019 & IA NO. 1706 of 2019 dated 2nd August 2022, wherein it has directed that such state agencies shall pay the compensation during which curtailment instruction were issued for the reason other than grid security, at the PPA tariff along with interest. In view of same, it is requested to allow deemed generation status/ compensation mechanism for curtailing wind, solar and wind-solar hybrid energy as such generators is losing revenue under such events and such provisions restrict developers.

			a particular time-block based on wind speed/ solar insolation level in that time-block	
10	Chapter 6: Operating Code Clause 30 (10) E – Primary Control	NLDC may also identify other resources such as ESS and demand resource to provide PRAS for which PRAS Providers shall be compensated in accordance with the Ancillary Services Regulations.	Clarification required in the said clause	CERC Ancillary Service regulation 2022 does not have provision related to compensation of Primary Reserve Ancillary Service. It is requested to clarify under such scenario, how Primary Reserve Ancillary Service provider will be compensated.
11	Chapter 5: Operating Code Clause 30 (10) h	(h) All generating stations mentioned in Table-4 (under clause (g) of this Regulation) shall have the capability of instantaneously picking up to a minimum 105% of their operating level and up to 105% or 110% of their MCR, as the case maybe, when the frequency falls suddenly and shall provide primary response. Any generating station not complying with the above requirements shall be kept in operation (synchronized with the regional grid) only after obtaining the permission of the concerned RLDC.	(h) All generating stations mentioned in Table-4 (under clause (g) of this Regulation) except **Wind/ Solar/Renewable Hybrid Energy Project** shall have the capability of instantaneously picking up to a minimum 105% of their operating level and up to 105% or 110% of their MCR, as the case maybe, when the frequency falls suddenly and shall provide primary response. Any generating station not complying with the above requirements shall be kept in operation (synchronized with the regional grid) only after obtaining the permission of the concerned RLDC.	It is to be noted that Wind/Solar/Renewable Hybrid Projects do not have capability to operate at 105% or 110% of operating level when Solar insolation / Wind speed is not available at site. Moreover, MCR should not be applicable for RE. In view of same, 105% or 110% of MCR would be applicable on Thermal and Hydro units only and not on the wind, solar and hybrid of wind and solar projects.
12	Chapter 6: Operating Code	All renewable energy generating stations and ESS shall be enabled with	Clarification required in the said clause	It is requested to clarify, whether it is mandatory requirement which RE generator /ESS are bound to comply as under CERC Ancillary Service Regulation

	Clause 30 (11) (U)	**frequency controller** to provide secondary control in accordance with the CEA Connectivity Standards and the communication system shall be established in accordance with the CEA Technical Standards for Communication.		2022, SRAS/TRAS is to be provided on voluntary basis.
13	Chapter 6: Operating Code Clause 40 (3). FIELD TESTING FOR MODEL VALIDATION	TABLE 9: TESTS REQUIRED FOR POWER SYSTEM ELEMENTS….	Clarification required in the said clause	Please clarify whether these tests are mandatory to comply for existing projects? We understand that all future projects are required to comply before commissioning. Please clarify.
14	Chapter 7: Scheduling and Despatch Code (45) 10) Optimum Utilization of Hydro Energy and Solar Energy	Additional Insertion	During high Solar isolation period, and if inverters have margin to increase solar generation by 5 to 10% of capacity, the same should be allowed.	Solar Projects are generally installed with high DC capacity and there may be scenarios wherein power limited to contracted capacity is flowing out and inverter has an inherent margin of 5 to 10% beyond the rated capacity. We request that the same should be allowed to inject like hydro power plant in case of high insolation period or shortage scenario.
15	Chapter 7: Scheduling and Despatch Code	NLDC shall notify a procedure for aggregation of pooling stations for the purpose of combined scheduling and deviation settlement for wind	NLDC shall notify a procedure for aggregation of pooling stations and **at regional level** for the purpose of combined scheduling and deviation settlement for wind or solar or renewable hybrid	We agree with the proposed Regulation. State level aggregation of schedule by a QCA is implemented by Karnataka and, Andhra Pradesh. States follow one of the three levels of aggregation of scheduling i.e., plant-level, pooling station-level, and

	45 (11) (b)Scheduling of renewable energy generating station by QCA	or solar or renewable hybrid generating stations within six (6) months of notification of these regulations.	generating stations within six (6) months of notification of these regulations. Provided further that aggregated deviation at regional level shall be charged from such Wind and Solar Generator on proportionate to their individual deviation.	State-level. This specific element of the regulations has material implications for long term viability of RE projects in India. Hence, it is critical that relevance of 'Aggregating schedule of pooling substations by QCA at regional level is very much required. It is to be noted that the forecasting of RE projects is technically constrained because of the two reasons – (i) limited accuracy of weather forecasting models, and (ii) limited spatial resolution available. In such circumstances, RE projects face uphill task to comply with DSM regulations and absence of aggregation of schedule of various pooling substations at regional level by QCA at regional leaves RE project unreasonably exposed to penalty.
16	**Germany – Renewable integration and aggregation model** Germany is one of the market leaders in renewable energy deployment in EU and globally. In Germany, the share of solar and wind generation sources in the installed net power generation capacity more than 60 %. The higher share of the installed RE capacity is driven by government incentives and the must run status given to RE generators. In Germany, the maximum voltage transmission grid is owned by four transmission system operators (TSOs). It is their job to regulate the power supply, including **balancing fluctuating power from renewables with more predictable conventional generation**. Power suppliers must pay the TSOs a "grid fee" for the use of their network. The grid fee also covers the cost of operating the grid and keeping it stable, including voltage and frequency control.			

	All electricity generators, including RE generators, and consumers are assigned to a balancing group in Germany, and there are multiple balancing groups within each TSO. The balancing groups are not in charge of physically balancing the system (i.e., it is not a control area). Rather they are entities that aggregate the schedules from multiple generators and consumers and schedule resources accordingly. There is a financial settlement between the TSOs and balancing groups, which depend on the actual deviations from their schedule. **Hence, the balancing groups have an incentive to balance resources internally to avoid being exposed to the balancing market operated by the TSO**[1]. **The Balancing groups are essentially aggregators like QCAs in India.** The error in schedules by RE generators under a balancing group gets minimized due to averaging of individual errors by each RE generator. The operators of electricity supply grids are obliged to maintain a balancing group which exclusively comprises energy that is remunerated with a feed-in tariff from RE suppliers in the grid area for transmission to the balancing group of the operators of transmission grids. On 1 April 2020, 1946 balancing groups were managed by a total of 686 contract partners in the grid area of 50Hertz Transmission GmbH.			
17	Chapter 7: Scheduling and Despatch Code Clause 11 (F) Scheduling of renewable energy generating station by QCA	Any dispute arising between the generating stations and QCA shall be resolved in accordance with the mechanism in the contracts entered into between them.	Any dispute arising between the generating stations and QCA shall be resolved by the appropriate Commission.	It is to be noted that the QCA is not an entity recognized under the Act. DSM Regulation of States have recognized the concept of QCA. Now the Hon'ble Commission has proposed to be recognized though IEGC. Therefore, any commercial impact on account of deviation is fastened to the generator or QCA, which is representing group of generators. However, QCA has no obligation to bear financial consequences and it will only pass on to the generators. Therefore, only generator is liable. This is clearly contrary and in violation to the Section 28 (4) of the Act which clearly states that the Regional Load Dispatch Centre may levy and collect such fee and charges from the generating companies or licensees engaged in inter-State transmission of electricity as may be specified by the Central Commission. QCA require to be registered with the concerned RLDC.

[1] Source - Report from US Department of Energy

				The Hon'ble Commission is requested to notify qualifying criteria, net worth, creditworthiness etc. Moreover, any dispute resolution between Generating Station/QCA should be under the jurisdiction of CERC. If the QCA is not capable for any payment due to RLDC, could be possible that it might not have received from the generator, RLDC may not allow such QCA to schedule power without payment of past dues. In such case other generators should not be suffered. Therefore, strict qualifying criteria and bringing QCA under the ambit of Hon'ble Commission is necessary.
18	Chapter 7: Scheduling and Despatch Code 12) Minimum turndown level for thermal generating stations	The minimum turndown level for operation in respect of a unit of a regional entity thermal generating station shall be 55% of MCR of the said unit: Provided that the Commission may fix through an order a different minimum turndown level of operation in respect of specific unit(s) of a regional entity thermal generating station: Provided further that such generating station on its own option may declare a minimum turndown level below 55% of MCR:	The minimum turndown level for operation in respect of a unit of a regional entity thermal generating station shall be 55% or 40% of MCR of the said unit: Provided that the Commission may fix through an order a different minimum turndown level of operation in respect of specific unit(s) of a regional entity thermal generating station: Provided further that such generating station on its own option may declare a minimum turndown level below 55% 40% of MCR:	It is to be noted that in accordance with Draft Central Electricity Authority (Flexible operation of thermal power plants) Regulations, 2022, the appropriate Load Despatch Centres shall be allowed to schedule all coal based thermal power plants, up to the Minimum Power Level (MPL) of 40%, to support the operation of must run stations. Further, it also specified that minimum loading or unloading shall be 3% per minutes above the MPL and in case of super critical and ultra-super critical units, it shall be 5 %. Hence, it is requested that same should be reflected in the CERC IEGC regulation.

19	Chapter 7: Scheduling and Despatch Code Regulation 47.1 A V	ESS including pumped storage plant, individually or represented by lead ESS or QCA on their behalf, shall submit aggregate available capacity of the pooled generation and aggregate schedule along with contract-wise breakup for each time-block for 0000 hours to 2400 hours of the 'D' day, by 6 AM on 'D-1' day.	**Provided further that a pumped storage plant, having multiple reversible pumped-turbine coupled with motor-generator units, aggregate charging and discharging schedule for each time block shall not be linked to any particular unit to serve contract with beneficiaries.**	It is to be noted that pumped storage project having multiple pumped/turbine units and multiple beneficiaries should be treated as cloud storage and charging and discharging from any unit should be allowed to serve the contract with beneficiaries for optimum utilization of plant.
20	47 (1) ®	…… Provided that the renewable energy generating stations shall not be subjected to merit order despatch, and subject to technical constraints shall be requisitioned first followed by requisition from other generating stations in merit order.	Wind, solar, wind-solar hybrid with or without storage , standalone storage drawing power from renewable energy sources and hydro power plant (in case of excess water leading to spillage) shall be treated as MUST RUN power plants and should not be subjected to curtailment due to merit order despatch as well as due to any commercial consideration. In the event of transmission constraint or system security constraint renewable energy generation may be curtailed after harnessing flexible resources including energy storage systems. In the event of extreme circumstances of curtailment of MUST RUN plant, the details shall be published on the RLDC/SLDC website within 24 hours, as the case may be, giving the date, name of RE generation plant, installed	It is requested that the existing Regulation 5.2 (u) of the IEGC should be retailed. Wind and solar generators in the state of Andhra Pradesh, Tamil Nadu, Madhya Pradesh, Karnataka face severe backing down due to commercial reason in the past. The Regulation 5.2 (u) supported the RE generators in reducing the curtailment drastically. Hon'ble APTEL in its judgement on deemed energy compensation on curtailment in the Appeal No 197 of 2019 also took shelter of the said Regulations. Now the APSLDC and TANTRANSCO has challenged the said APTEL judgement in the Hon'ble Supreme Court, we request the Hon'ble Commission to retain the said Regulation.

			capacity, curtailment quantum in MWh, duration of curtailment and reasons thereof.	
21	Chapter 7: Scheduling and Despatch Code Power to revise schedule 47 (3) (a) (ii) (a)	Within transactions under GNA, curtailment shall be done first from generation sources other than wind, solar, wind-solar hybrid and run of the river hydro plants with up to three hours pondage (in case of excess water leading to spillage), on pro rata basis based on their GNA quantum.	Within transactions under GNA, curtailment shall be done first from generation sources other than wind, solar, wind-solar hybrid and run of the river hydro plants with upto three hours pondage (in case of excess water leading to spillage), on pro rata basis based on their GNA quantum. **Provided further that curtailed generation based on Wind, Solar, and Wind-Solar hybrid with and without Storage, shall be considered as deemed generation and compensated to generator by its procurer at PPA tariff.**	It has been seen in past generators connected with state grid have been facing frequent backing down instructions citing grid security and many such instruction are issued verbally without any written communications, and APTEL has also recognised the same in its order vide APPEAL NO. 197 of 2019 & IA NO. 1706 of 2019 dated 2nd August 2022, directed that such state agencies shall pay the compensation for during which curtailment instruction were issued for the reason other than grid security, at PPA tariff along with interest. In view of same, it is requested to allow deemed generation status/ compensation mechanism for curtailing wind, solar and wind solar hybrid energy as such generators is losing revenue under such events.
22	Chapter 7: Scheduling and Despatch Code Clause 47 (4) (c)	**(4) Revision of schedules on request of regional entities:** (a) SLDCs, regional entity generating stations, regional entity ESSs, beneficiaries, buyers or cross-border entities may revise their schedules under GNA as per clause (b) and clause (c) of this Regulation in accordance with their respective contracts. …….	(c) Based on the request for revision in schedule made as per sub-clauses (a) and (b) of Clause 4 of this Regulation, any revision in schedule made in odd time blocks shall become effective from **3rd time block** and any revision in schedule made in even time blocks shall become effective from **4th time block**, counting the time block in which the request for revision has been received by the RLDCs to be the first one.	In current regulatory framework, wind and solar generators are being allowed to revise its schedule and such revision shall become effective from the 4th time block, 1st block being the block in which notice has been given. Moreover, one revision for each time slot of one and half hours starting from 00:00 hours of a particular day subject to maximum of 16 revisions during the day. Hon'ble Commission in Statement of Reasons (SOR) order issued while notifying the DSM Regulations, 2014, observed as under: *5.3 Decision of the Commission:*

		(c) Based on the request for revision in schedule made as per sub-clauses (a) and (b) of Clause 4 of this Regulation, any revision in schedule made in odd time blocks shall become effective from **7th time block** and any revision in schedule made in even time blocks shall become effective from **8th time block**, counting the time block in which the request for revision has been received by the RLDCs to be the first one.		*5.3.1 The Commission has taken note of the comments. On the issue of frequency of revisions, the Commission recognizes that accuracy of forecasting improves as one gets closer to time of dispatch. This is borne out by plenty of research that is available on how forecasting accuracy improves as more updates are done aligned with shorter scheduling intervals. In the publication, "A Review 20 of Variable Generation Forecasting in the West, Widiss et al, NREL, July 2013-Jan 2014", 14 Operating Entities (OEs) in the Western Interconnection in the United States were interviewed. Nearly all OEs were reported to have hour-ahead forecasts, the frequency of updating varying from every 10 minutes to hourly. The chart below, prepared by Alberta Electric System Operator (AESO), illustrates improving accuracy with decreasing forecast horizon:* …… *Most stakeholders have supported the proposal of doubling the number of revisions allowed, to 16 per day. Some have suggested even further increase to enable hourly revisions. The Commission is of the view that while increasing frequency of revision would enhance forecasting accuracy, it might be difficult for beneficiaries to manage contracts due to very frequent revisions. As such, the Commission has decided to retain the number of proposed revisions to 16. ……"* It is submitted that the Hon'ble Commission was also in agreement that the increasing frequency of revision would enhance forecasting of accuracy. Considering

				the above observation, we request the Hon'ble Commission that the revision in schedule be made effective from 3rd and 4th time block.
23	Chapter 7: Scheduling and Despatch Code 47 (3) (c)	In case of contingencies such as critical loading of lines, transformers, abnormal voltages or threat to system security, the following steps as considered necessary, may be taken by RLDC: i. Issue directions to concerned entities to adhere to the schedules. ii. Deployment of ancillary services. iii. Switching off pump storage plants operating in pumping mode. iv. Dispatching emergency demand response measures;	In case of contingencies such as critical loading of lines, transformers, abnormal voltages or threat to system security, the following steps as considered necessary, may be taken by RLDC: i. Issue directions to concerned entities to adhere to the schedules. ii. Deployment of ancillary services. ~~iii. Switching off pump storage plants operating in pumping mode.~~ iv. Dispatching emergency demand response measures;	We request you to clarify that the only those pumped storage plants, (i) participating in the Secondary Reserve Ancillary Services (SRAS) and provided standing consent to Nodal Agency AND/OR (2) participating in Tertiary Reserve Ancillary Services (TRAS) up and TRAS down bid and same has been cleared in the Day Ahead Market or Real Time Market, will be asked by concerned RLDC to switching off its pump storage plants operating in pumping mode. Moreover, pumped storage plant not participating in SRAS and TRAS, if required to switching off such plants operating in pumping mode, a mechanism need to be formulated to compensate adequately to such pumped storage plant and its beneficiaries as well as revision of schedules of such pumped storage plants and its beneficiaries within the same time block so that no DSM implication to be borne by them.