भारत सरकार केंद्रीय विद्युत प्राधिकरण दक्षिण क्षेत्रीय विद्युत समिति बेंगलूरु - 560 009	सत्यमेव जयते	Government of India Central Electricity Authority Southern Regional Power Committee Bengaluru - 560 009	
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सं/No. SRPC/SE-II/2019/518		दिनांक / Date	18.01.2019

Secretary
CERC
3rd & 4th Floor, Chanderlok Building,
36, Janpath,
NEW DELHI – 110 001

Sub: Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the tariff period from 1.4.2019 to 31.3.2024

Sir,

Kind reference is invited to Public Notice No. L-1/236/2018/CERC dated 7th January, 2019. In this regard, the submission of SRPC is attached for kind consideration.

Thanking you.

Yours faithfully,

Encl: as above

(एस.आर. भट्ट/S.R. BHAT)
सदस्य सचिव / Member Secretary

SRPC Secretariat comments on Draft T & C for Tariff Determination 2019-24

3 (16)	**Declared Capacity' or 'DC'** shall have the same meaning as defined in Grid Code;	Declared Capacity or DC is not defined in the Grid Code, though reference is there in 6.4.16, 6.4.18 etc. It can therefore be kindly defined.	
30 (2) (ii) (iii)	ii. in case of a new project, the rate of return shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC; iii. In case of existing generating station, as and when any of the requirements under proviso ii of this Regulation are found lacking based on the report submitted by the respective RLDC, rate of return shall be reduced by 1.00% for the period for which the deficiency continues.	ii. in case of a new project, the rate of return shall be reduced by **2-4**% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC; iii. In case of existing generating station, as and when any of the requirements under proviso ii of this Regulation are found lacking based on the report submitted by the respective RLDC, rate of return shall be reduced by **2-4 %** for the period for which the deficiency continues. Following may please be added: **NLDC in consultation with stakeholders would come out with a procedure for reporting the deficiency in respect of RGMO /FGMO,**	RoE reduction by 1% may not sufficient deterrent for Generating Stations in providing these technical requirements and thus needs to be enhanced. Many of the new and existing generating stations may not be fully complying with these provisions. **A well defined procedure to measure the deficiency in quantifiable terms is required** for it to be implemented. Other technical requirements of ramps, fast start up from cold, warm and hot conditions, MVAR absorption/injection etc also are also required with high RE ingress. NLDC could come out with the Procedure in consultation with stakeholders and after approval of

		data telemetry / communication, protection etc for this Regulation to be implemented in field. The technical requirements of ramps, fast start up from cold, warm and hot conditions, MVAR absorption /injection etc also could be covered in this procedure	the Hon'ble Commission it can be implemented.
34 (a) (i)	Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;	New proviso: If the actual coal stock falls below 3 days wrt to the Installed Capacity, then for each day of non compliance of this condition, the Generating Station FC would be reduced by such rate as specified by the Commission.	Many of the stations are not maintaining this level of stocks thereby affecting energy security of beneficiaries. This is in addition to Advance payment for 30 days towards Cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor
34 (b)	Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;		Gas stations are being scheduled minimally on account of fuel shortage etc and this issue could be looked into.
51 (3)	..... The number of hours of "Peak" and "Off-Peak" periods in a region shall be declared on monthly basis in advance, by the concerned RLDC and the Peak period in a day shall not	..... The number of hours of "Peak" and "Off-Peak" periods in a region shall be declared on monthly basis in advance, **by the concerned RPC** and the Peak period in a day shall not	It may be prudent to discuss the peak hours duration in the OCC where all the beneficiaries and ISG Stations would be

	be less than 4 hours.	be less than 4 hours.	participating. In each OCC, the peak hours could be agreed for the next month.
51(6)	(6) The Plant Availability Factor achieved for a Day (PAFD), Plant Availability Factor achieved for a Month (PAFM) and Plant Availability Factor achieved for a Quarter (PAFQ) shall be computed in accordance with the following formula:	(6) The Plant Availability Factor achieved for a Day (PAFD, **PAFDp & PAFDop**), Plant Availability Factor achieved for a Month (PAFM) and Plant Availability Factor achieved for a Quarter (PAFQ) shall be computed in accordance with the following formula:	PAFDp & PAFDop can be included to have more clarity
51(6)	DCi = Average declared capacity (in ex-bus MW), for the ith day of the period i.e. the month or the year as the case may be, as certified by the concerned load dispatch centre after the day is over.	DCi = Average declared capacity (in ex-bus MW), for the ith day of the period i.e. the month or the year as the case may be, as certified by the concerned load dispatch centre after the day is over. **Provided DC of each block should be restricted to IC *(1-Aux)**	All the computations are based on Ex – bus capability of IC * (1 -Aux) and allowing the generator to declare beyond this value may need to be looked into. Further SRLDC are restricting the schedules to Normative Ex-bus values and therefore there is no check on the capacity between DC and restricted schedule. In case generator is falling short of normative capacity it declares higher DC knowing well that schedules are being restricted. For example Simhadri II is short of normative PAF for FY 2018-19 but

			it declared higher with PAF of > 103% for month of December 2018. Schedules were however restricted to 100 % by RLDC.
52 (2)(a) & (b)			Should the ECR also include Landed Price of other Reagent (Sodium Bi-Carbonate, Urea and Anhydrous Ammonia etc.) ?.
56 (2)	**For Communication System:** a) For ACFM < 99.00% AFC x (NDM/NDY) x (**ACM**/99.00%) b) For ACFM > 99.00% AFC x (NDM/NDY) x (ACFM%/99.00%) … …….. NACF = Normative Availability Factor of Communication system as a percentage, NDPN=No of days up to the end of Nth month of the financial year, NAC1= Communication availability factor in percentage achieved up to the end of the Nth month of the year, = Communication availability factor in percentage achieved up to the end of the Nth month of the year,	**For Communication System:** a) For ACFM < 99.00% AFC x (NDM/NDY) x (ACFM/99.00%) b) For ACFM > 99.00% AFC x (NDM/NDY) x (ACFM%/99.00%)	ACM is not defined. NACF, NDPN & NAC1 are presently not utilized in the formula. If they are to be utilized the formula's are to be modified accordingly.
56 (4)	The Normative Availability	ACFM (Monthly Availability	It may be Monthly

	of Communication System (NACF) for communication system or part shall be computed for each region separately: $NAC\ F = \Sigma\ (Ai)$ (i=1 to N)	Factor of Communication system as a percentage) = $ACFM = \Sigma\ (Ai)$ (i=1 to N)	Availability Factor of Communication system and not the Normative Availability of Communication System (NACF)
65. (2) Note 1	The shares shall be applied in percentages of installed capacity and shall normally remain constant during a month. Based on the decision of the Central Government the changes in allocation shall be communicated by the Member-Secretary, Regional Power Committee in advance, at least three days prior to beginning of a calendar month, except in case of an emergency calling for an urgent change in allocations out of unallocated capacity. ..... **Note 2** The beneficiaries may propose surrendering part of their allocated firm share to other States within / outside the region. In such cases, depending upon the technical feasibility of power transfer and specific agreements reached by the generating company with other States within/ outside the region for such transfers, the shares of the beneficiaries may be prospectively re-allocated by the Central Government for a specific period (in complete months) from the beginning of a calendar month.	The shares shall be applied in percentages of installed capacity. ~~and shall normally remain constant during a month.~~ Based on the decision of the Central Government the changes in allocation shall be communicated by the Member-Secretary, Regional Power Committee in advance, **at least one clear day from implementation** ~~three days prior to beginning of a calendar month,~~ except in case of an emergency calling for an urgent change in allocations out of unallocated capacity. ..... **Note 2** The beneficiaries may propose surrendering part of their allocated firm share to other States within / outside the region. In such cases, depending upon the technical feasibility of power transfer and specific agreements reached by the generating company with other States within/ outside the region for such transfers, the shares of the beneficiaries may be prospectively re-allocated by the Central Government for a specific period (in complete months). ~~from the beginning~~	The unallocated power is allocated as per need and decision taken by Central Govt. Therefore the Regulation could be amended.

	Any such reallocation and its reversion shall be communicated to all concerned by the Member Secretary, Regional Power Committee in advance, at least three days prior to such reallocation or reversion taking effect.	~~of a calendar month.~~ ..... Any such reallocation and its reversion shall be communicated to all concerned by the Member Secretary, Regional Power Committee in advance, **at least one clear day** ~~three days~~ prior to such reallocation or ~~reversion~~ revision taking effect.	
70.	**Sharing of gains due to variation in norms** ..... (2) The financial gains by the generating company or the transmission licensee, as the case may be, on account of controllable parameters shall be shared between generating company or transmission licensee and the beneficiaries or long term transmission customers, as the case may be, on monthly basis with annual reconciliation.	**Sharing of gains due to variation in norms** ..... (2) The financial gains by the generating company or the transmission licensee, as the case may be, on account of controllable parameters shall be shared between generating company or transmission licensee and the beneficiaries or long term transmission customers, as the case may be, ~~on monthly basis with annual reconciliation.~~ each month up to the end of the month for the FY.	There have been deliberations in SRPC forum as few ISGS were sharing the gains each month while few ISGS were only computing the gains and were sharing at the end of FY. The gains up to the end of the month in FY could be shared with beneficiary. The figures will be reconciled at the end of FY.
Appendix-II (1)	1. Transmission system availability factor for a calendar month (TAFPn) shall	1. Transmission system availability factor for a calendar month (TAFM) shall	
Appendix-II (1)	Transmission System Availability shall be calculated separately for each Regional Transmission System and inter-regional transmission system.	Transmission System Availability shall be calculated separately for each Regional Transmission System and inter-regional transmission system. For Inter-regional transmission system one of the RPC (importing RPC) would certify the availability.	To avoid any mismatch.

Appendix-II (1) (iv)	**Bus Reactors/Switchable line reactors**: Each Bus Reactors/Switchable line reactors shall be considered as one element;	**Bus Reactors/Switchable & convertible line reactors**: Each Bus Reactors/Switchable line reactors shall be considered as one element;	Most of the line reactors have been made convertible and can be used as bus reactors if the line is not in service. Their availability computation becomes important in the present context of high voltages.
Appendix-II (1) (vii)	**Static Synchronous Compensation (STATCOM):** Each STATCOM shall be considered as separate element.	**Static Synchronous Compensation (STATCOM):** Each module of STATCOM shall be considered as separate element.	It is learnt that STATCOM comprises of modules of dynamic compensation and mechanically switched compensation (Reactor & Capacitor). Each of the dynamic module and Reactor/Capacitor can be brought into grid independently. If any module is out, other modules can be brought in service. How to account outage of one module, if STATCOM is considered as one element? Therefore it is suggested that each module could be considered as separate element with absolute MVAR capacity as its weight. For example the

			STATCOM coming up in Hyderabad, Udumalpet and Trichy can be considered as 5 elements – 2 modules of 100 MVAR of Dynamic compensation, 2 mechanically switched reactors of 125 MVAR & 1 mechanically switched capacitor . This will take care outage of individual modules.
Appendix-II (1)		**New clause** All the capitalized spare ICTs & Reactors would be considered as separate elements.	Many a times spares are being utilized in place of faulty ICTs and Reactors. These ICTs and Reactors are repaired beyond the time schedules specified in SOP Regulations. Therefore there is a need to monitor the availability of spare elements. This will ensure healthiness of spares also.
Appendix-II (2)	% TAFM for AC system =..		The formula needs to include STATCOM
Appendix-II (2)	p = Total number of bus reactors/switchable line reactors	p = Total number of bus reactors/switchable & convertible line reactors	
Appendix-II (3)(a)	For each circuit of AC line – Number of sub-conductors in the line (NSC) multiplied by ckt-km.	For each circuit of AC line – Surge Impedance Loading (SIL) multiplied by ckt-km. SIL rating for various voltage	SIL values capture the relative values of power flow on the respective

		level and conductor configuration is given in Appendix IV. However, for voltage levels and /or configurations not listed in Appendix, appropriate SIL based on technical considerations may be used for availability calculation under intimation to long-term transmission customers/DICs	voltage levels and type of configuration of lines. Since most of the line reactors are made convertible and can be taken as separate element. Absolute SIL without compensation multiplied by ckt-km can be considered as weight. Number of sub-conductors in the line (NSC) multiplied by ckt-km may give disproportionate values which may not be of practical use.
Appendix-II (5)(a)		**New clause** In case of failure of ICTs and Reactors the same has to be replaced by spare within 7 days. After repair the spare should be replaced with healthy ICT/Reactor within 7 days. Any time beyond 7 days will be booked in Transmission Licensee Account.	The DICs are paying for the spare and the spares are be utilized in a time bound manner. This will ensure clear procedure in utilization of spare and timely rectification of the spares.