



ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ

ಅಧಿಕೃತವಾಗಿ ಪ್ರಕಟಿಸಲಾದುದು

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ಸರ್ಕಾರದ ಆಯಾ ಇಲಾಖೆಗಳ ಮುಖ್ಯಸ್ಥರ ಮತ್ತು ಸ್ಥಳೀಯ ಪ್ರಾಧಿಕಾರಿಗಳಿಗೆ
ಸಂಬಂಧಿಸಿದ ಅಧಿಸೂಚನೆಗಳು

Karnataka Electricity Regulatory Commission

No: 16 C-1, Miller Tank Bed Area, Vasanthnagar, Bengaluru – 52.

NOTIFICATION

No: KERC/GC-1/DDP/22-23/1752, dated:04.11.2022

Karnataka Electricity Grid Code (First Amendment), 2022.

PREAMBLE:

The Karnataka Electricity Grid Code (KEGC), 2015 was notified by the Karnataka Electricity Regulatory Commission in exercise of powers under clause (h) of sub-section (1) of Section 86 read with clause (zp) of sub-section (2) of Section 181 of the Act.

Thereafter, the CERC has been issuing amendments to the IEGC to cope with different situations in the interest of maintaining the National Grid.

As required under clause 3.3 of the KEGC, KPTCL has constituted the Grid Code Review Panel for reviewing the Code and to suggest amendments to the Grid Code. The said Committee, after considering the amendments issued by the CERC, has now suggested certain amendments to the various clauses of KEGC 2015 giving justifications against each of them, along with Clause-wise details of the proposed amendments.

KPTCL, vide its letter No: KPTCL/B26/2014-15/4287/685, dated:02.07.2019 has requested the Commission to consider the suggestions of the Grid Code Review Panel for bringing in necessary amendments in the KEGC, 2015.

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The Commission had made certain observations on the proposed amendments, vide its letter No: KERC/M/01/2017-18/816, dated:25.09.2019 and directed KPTCL, SLDC and KPCL to discuss the issues involved in the proposed amendments:

- a. Reactive Power compensation to generating stations.
- b. Inclusion of Clause no. 6.3B of 4th Amendment, 2016 to Indian Electricity Grid Code, 2010 regarding compensation to be provided to generating stations.
- c. Modifications proposed which are State specific and not in line with the IEGC/CEA recommendations.

Further, the Commission, vide its letter No: KERC/M/01/2017-18/860, dated: 10.10.2019, has sought clarification/additional information on the proposed amendments (some clauses) as per the discussion in the meeting held on 30.09.2019.

The Commission, vide its letter No: KERC/M/01/2017-18/1358, dated:10.02.2020, had directed KPTCL to submit its opinion on the published CERC “Report of the Expert Group: Review of Indian Electricity Grid Code” in January 2020, to take further action in the matter.

KPTCL had conducted Grid Code Review Panel meetings on 18.11.2019, 30.06.2020, 07.12.2020 and 08.07.2021 on the observations made by the Commission. KPTCL, after reviewing the amendments has submitted the revised amendments to the Commission vide its letter No: KPTCL/B36/2014-15/4287/1694-1699 dated: 17.01.2022.

The Commission, after carefully considering the submissions made by the KPTCL and Grid Code Review panel, has considered the amendments under Section 10.2 (Power to Amend) of the Karnataka Electricity Grid Code (KEGC), Regulations 2015.

The Commission had issued a draft Karnataka Electricity Regulatory Commission (Karnataka Electricity Grid Code) (First Amendment), 2022 for inviting comments from stakeholders. The Commission also held Public Hearing in the matter on 30.09.2022. After considering the views/comments/suggestions of the Stakeholders in the matter and in exercise of the powers conferred by clause (h) of sub-section (1) of 86 read with clause (zp) of sub-section (2) of Section 181 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, the Karnataka Electricity Regulatory Commission hereby makes the following Regulations: -

Short title, extent and commencement:

- a. These shall be called the **Karnataka Electricity Regulatory Commission (Karnataka Electricity Grid Code) (First Amendment), 2022.**
- b. These shall come into force from the date of publication in the official Gazette of Karnataka.

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
1	2.80	“Spinning Reserve” means part loaded generating capacity with some reserve margin that is synchronized to the system and is ready to provide increased generation at short notice pursuant to Dispatch instruction or instantaneously in response to a frequency drop;	“Spinning Reserve” means the Capacities which are provided by devices including generating station or units thereof synchronized to the grid and which can be activated on the direction of the System Operator and effect the change in active power.
2	2.85	“Supervisory Control and Data Acquisition (SCADA)” means the communication links and data processing systems which provide information to enable implementation of requisite supervisory and control access.	“Supervisory Control and Data Acquisition (SCADA)” means the system that acquires data from remote locations over communication links and processes it at centralized control location for monitoring, supervision, control as well as decision support.
3	4.2 (b)	To promote co-ordination amongst all Users, STU, CTU, RLDC, CEA in any proposed planning and development of the In-STS.	To promote co-ordination amongst all Users, STU, SLDC, CTU, RLDC, NLDC, RPC and CEA in any proposed planning and development of the In-STS.
4	4.5 (d)	All Users, CTU, In-SGS and Karnataka Renewable Energy Development Limited (KREDL) and Users shall supply to the STU, the desired planning data from time to time to enable them to formulate and finalize its plan.	All Users, CTU, In-SGS and Karnataka Renewable Energy Development Limited (KREDL) shall supply to the STU, the desired planning data from time to time to enable them to formulate and finalize its plan.
5	4.6.5.F(c)	In case of thermal units (including coal, gas/diesel and nuclear based) the minimum level of output (ex-generation bus, i.e., net of the auxiliary consumption) shall be taken as not less than 70% of the rated installed capacity. If the thermal units are encouraged to run with oil support, they may be modeled to run up to 25% of the rated capacity.	“The technical Minimum for operation in respect of InSGS shall be 55% of MCR loading or Installed Capacity of the unit in the generating station. The compensation to the InSGS for part loading/Reserve Shut Down (RSD) shall be as per CERC Approved Procedure/IEGC Regulations till such time the compensation procedure is specified by KERC.”
6	4.6.8 (3)	The wind generating stations connected at voltage level of 66kV and above shall remain connected to the grid when the voltage at the interconnection point or any or all phases dips a level of 85% of the nominal voltage (i.e., the wind generators should be capable to have low voltage ride through facility).	The wind and solar generating stations connected to grid shall remain connected to the grid as stipulated in CEA Connectivity Regulations. (i.e., the wind generators should be capable to have low voltage ride through facility)
7	4.7	Planning Data Under this Planning Code, the State Generating Companies / IPPs / licensees are to supply data in accordance with the detailed procedures mentioned in the Karnataka Electricity Regulatory Commission (Terms and conditions for Open Access) Regulations, 2004 as amended from time to time.	Planning Data Under this Planning Code, the State Generating Companies / IPPs / licensees/Users are to supply data as required by STU/SLDC.

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
8	5.1	<p>Introduction All Users connected to, or seeking connection to In-STS shall comply with Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 which specifies the minimum technical and design criteria and Karnataka Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 as amended from time to time.</p>	<p>Introduction All Users connected to, or seeking connection to In-STS shall comply with extant Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, as amended from time to time, which specifies the minimum technical and design criteria and extant Karnataka Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, as amended from time to time.</p>
9	5.3	<p>Scope The connectivity criteria is applicable to all Users connected to or seeking connection to the InSTS. All such entities shall abide by the CEA (Technical Standards for connectivity to the Grid) Regulations, 2007, in order to ensure that the integrated grid is not adversely affected.</p>	<p>Scope The connectivity criteria is applicable to all Users connected to or seeking connection to the InSTS. All such entities shall abide by the extant CEA (Technical Standards for connectivity to the Grid) Regulations, as amended from time to time, in order to ensure that the integrated grid is not adversely affected.</p>
10	5.5	<p>Connection Agreement 1. A connection agreement, or the offer for a connection agreement shall include (but not limited) within its terms and conditions the following: (i) A condition requiring both Agencies to comply with the Grid Code. (ii) Details of connection technical requirements and commercial arrangements (iii) Details of any capital related payments arising from necessary reinforcement or extension of the system, data communication, RTU etc., and demarcation of the same between the concerned parties. (iv) A Site Responsibility Schedule (Annexure-I). (v) General Philosophy, Guidelines etc on protection and telemetry. (vi) Requirement with respect to Harmonics, Direct current (DC) injection and Flicker (as per CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007, amended from time to time). The Connection agreement with above terms and conditions shall be signed by the applicant not-inconsistent with CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007, amended from time to time and the Karnataka Electricity Regulatory Commission (Terms and conditions for Open Access) Regulations, 2004 as amended from time to time.</p>	<p>Connection Agreement 1. A connection agreement, or the offer for a connection agreement shall include (but not limited) within its terms and conditions the following: (i) A condition requiring both Agencies to comply with the Grid Code. (ii) Details of connection technical requirements and commercial arrangements (iii) Details of any capital related payments arising from necessary reinforcement or extension of the system, data communication, RTU etc., and demarcation of the same between the concerned parties. (iv) A Site Responsibility Schedule (Annexure-I). (v) General Philosophy, Guidelines etc., on protection and telemetry. (vi) Requirement with respect to Harmonics, Direct current (DC) injection and Flicker as per extant CEA (Technical Standards for Connectivity to the Grid) Regulations, amended from time to time. The Connection agreement with above terms and conditions shall be signed by the applicant not-inconsistent with extant CEA (Technical Standards for Connectivity to the Grid) Regulations, amended from time to time and the extant Karnataka Electricity Regulatory Commission (Terms and conditions for Open Access) Regulations, as amended from time to time.</p>
11	5.6	<p>Site responsibility schedule 1. For every connection to the State Transmission System for which a connection agreement is required, STU shall prepare a schedule of equipment with information supplied by the respective Users. This schedule, called 'Site Responsibility Schedule' shall indicate the following for each item of equipment installed at the connection site.</p>	<p>Site responsibility schedule 1. For every connection to the State Transmission System for which a connection agreement is required, STU shall prepare a schedule of equipment with information supplied by the respective Users. This schedule, called 'Site Responsibility Schedule' shall indicate the following for each item of equipment installed at the connection site.</p>

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
		<p>i. Ownership of the equipment ii. Responsibility for control of equipment iii. Responsibility for maintenance of equipment iv. Responsibility for operation of equipment v. Responsibility for all matters relating to safety of persons and site. vi. Management of the site.</p>	<p>i. Ownership of equipment; ii. Responsibility for control of equipment; iii. Responsibility for maintenance of equipment; iv. Responsibility for operation of equipment; v. Responsibility for all matters relating to safety of persons at site; vi. Manager of the site; vii. Responsibility for all matters relating to safety of equipment at site.</p>
12	5.8.1(6)	All entities embedded within the State Grid system and interfacing the intra-State transmission system shall provide adequate and reliable communication facility so that SLDC is able to record in its SCADA system the MW/ MVAR flows, bus voltages at all the interface points with the intra-State system.	All entities embedded within the State Grid system and interfacing the intra-State transmission system shall provide adequate and reliable facilities for voice and data communication and transfer of on-line operational data, such as voltage, frequency, line flows, and status of breaker and isolator position and other parameters as prescribed by the SLDC at all the interface points with the intra-State system.
13	5.8 (3)	Southern Regional Transmission System The Connection, protection scheme, metering scheme and the voltage shall be in accordance with the provisions of IEGC.	Southern Regional Transmission System The Connection, protection scheme, metering scheme and the voltage shall be in accordance with the provisions of CEA/ CERC/ KERC Regulations.
14	5.9.4	Responsibilities for safety STU and all users shall be responsible for safety in accordance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, the Karnataka Electricity Regulatory Commission (the terms and Condition for Open Access) Regulations, 2004, as amended from time to time and CEA (Technical Standards for Construction of Electric plants and Electric Lines) Regulations 2010 and Measures Relating to Safety and Electric Supply) Regulations, 2010.	Responsibilities for safety STU and all users shall be responsible for safety in accordance with the extant Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, the extant Karnataka Electricity Regulatory Commission (the terms and Condition for Open Access) Regulations, as amended from time to time and extant CEA (Technical Standards for Construction of Electric plants and Electric Lines) Regulations as amended from time to time and extant Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, as amended from time to time and extant CEA (Grid Standards), Regulations as amended from time to time.
15	5.10	Schedule of assets of the State Grid STU, other transmission licensees granted license by the Commission and Generators shall maintain the schedule of their assets and host the same in their respective websites. The same shall be submitted to the Commission as and when called for	Schedule of assets of the State Grid STU, other transmission licensees granted licence by the Commission and Generators shall maintain the schedule of their assets <i>in which SLDC has operational control and responsibility</i> and host the same in their respective websites.
16	6.2 .vi(i)	Governor Action Governor action for all Generators of different capacity, thermal, hydro, gas and renewable generating units shall be operated as per the provisions of IEGC. a) Thermal generating units of 200 MW and above b) Hydro units of 10 MW and above.	Governor Action Governor action for all Generators of different capacity, thermal, hydro, gas and renewable generating units shall be operated as per the provisions of IEGC. a) Coal/lignite based Thermal generating units of 200 MW and above. b) Open Cycle Gas Turbine/Combined Cycle generating stations having gas turbine of capacity more than 50 MW each. c) Hydro units of 25 MW and above.

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
17	6.2 (vi) (ii)(a)	There should not be any reduction in generation in case of improvement in grid frequency below the upper limit fixed by CERC from time to time (for example if grid frequency changes from 49.8 to 49.95 Hz. then there shall not be any reduction in generation). Whereas for any fall in grid frequency, generation from the unit should increase by 5% limited to 105 % of the Maximum Continuous Rating (MCR) of the unit subject to machine capability.	There should not be any reduction in generation in case of improvement in grid frequency to a level below the upper limit fixed by CERC from time to time (for example if grid frequency changes from 49.8 to 49.95 Hz. then there shall not be any reduction in generation). Whereas for any fall in grid frequency, generation from the unit should increase as per generator droop upto a maximum of 5% of the generation subject to ceiling limit of 105 % of the Maximum Continuous Rating (MCR) of the unit having regard to machine capability.
18	6.2(vi)(iii)	All other generating units including those with pondage upto 3 hours, Gas turbine / Combined Cycle Power Plants, wind and solar generators shall be exempted from clause 6.2 vi and following clauses vii, viii and ix till the situation is reviewed. Provided that if a generating unit cannot be operated under restricted governor mode operation, then it shall be operated in free governor mode operation with manual intervention to operate in the manner required under restricted governor mode operation	All other generating units including those with pondage upto 3 hours, wind and solar generators shall be exempted from clause 6.2 (vi) and following clauses vii, viii and ix till the situation is reviewed. Provided that if a generating unit cannot be operated under restricted governor mode operation, then it shall be operated in free governor mode operation with manual intervention to operate in the manner required under restricted governor mode operation.
19	6.2(viii)	All thermal generating units of 200 MW and above and all hydro units of 10 MW and above operating at or up to 100% of their Maximum Continuous Rating shall normally be capable of (and shall not in any way be prevented from) instantaneously picking up to 105% and 110% of their MCR, respectively, when frequency falls suddenly. After an increase in generation as above, a generating unit may ramp back to the original level at a rate of about one percent (1%) per minute, in case continued operation at the increased level is not sustainable. Any generating unit not complying with the above requirements shall be kept in operation (synchronized with the Regional grid) only after obtaining the permission of SLDC / RLDC. The SLDC can also direct a generator to come to its technical minimum in line with CEA/CERC Notifications from time to time depending on the grid situation.	All coal/lignite based thermal generating units of 200 MW and above, Open Cycle Gas Turbine/Combined Cycle generating stations having gas turbines of more than 50 MW each and all hydro units of 25 MW and above operating at or up to 100% of their Maximum Continuous Rating (MCR) shall have the capability of (and shall not in any way be prevented from) instantaneously picking up to 105%, 105% and 110% of their MCR, respectively, when the frequency falls suddenly. For the purpose of ensuring primary response, RLDC or SLDC shall not schedule the generating station or unit (s) thereof beyond ex-bus generation corresponding to 100% of the Installed capacity of the generating station or unit(s) thereof. The generating station shall not resort to Valve Wide Open (VVO) operation of units whether running on full load or part load, and shall ensure that there is margin available for providing Governor action as primary response. In case of gas/liquid fuel based units, suitable adjustment in Installed Capacity should be made by RLDC or SLDC for scheduling in due consideration of prevailing ambient conditions of temperature and pressure vis-à-vis site ambient conditions on which installed capacity of the generating station or unit(s) thereof have been specified: Provided that scheduling of hydro stations shall not be reduced during high inflow period in order to avoid spillage:

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			<p>Provided further that the VWO margin shall not be used by SLDC to schedule Ancillary Services.</p> <p>Provided that periodic checkups by third party should be conducted at regular interval once in two years through independent agencies selected by RLDC or SLDC as the case may be. The cost of such tests shall be recovered by the RLDC or SLDC from the Generators. If deemed necessary by RLDC/SLDC, the test may be conducted more than once in two years."</p> <p>The SLDC can also direct a generator to come to its technical minimum in line with CEA/CERC Notifications from time to time depending on the grid situation.</p>
20	6.2(ix)	<p>The recommended rate for changing the governor setting, i.e., supplementary control for increasing or decreasing the output (generation level) for all generating units, irrespective of their type and size, would be one (1.0) per cent per minute or as per manufacturer's limits.</p> <p>However, if frequency falls below the limit specified by CERC from time to time, all partly loaded generating units shall pick up additional load at a faster rate, according to their capability. All generators shall inform the SLDC on the Governor status as and when required and also submit the performance analysis of RGMO to SLDC for verification.</p>	<p>The recommended rate for changing the governor setting, i.e., supplementary control for increasing or decreasing the output (generation level) for all generating units, irrespective of their type and size, would be one (1.0) per cent per minute or as per manufacturer's limits.</p> <p>However, if frequency falls below the limit specified by CERC from time to time, all partly loaded generating units shall pick up additional load at a faster rate, according to their capability. All generators shall inform the SLDC on the Governor status as and when required and also submit the performance analysis of RGMO to SLDC for verification.</p> <p>RGMO status point shall be extended to SLDC for better visibility & monitoring by SLDC for following generators.</p> <p><i>a) Coal/lignite based Thermal generating units of 200 MW and above.</i></p> <p><i>b) Open Cycle Gas Turbine/Combined Cycle generating stations having gas turbine of capacity more than 50 MW each.</i></p> <p><i>c) Hydro units of 25 MW and above.</i></p>
21	6.2(xii)	<p>All generating units shall normally have their automatic voltage regulators (AVRs) in operation. In particular, if a generating unit of over fifty (50) MW size is required to be operated without its AVR in service, the SLDC shall be immediately intimated about the reason and duration of such operation, and obtain its permission. Power System Stabilizers (PSS) in AVRs of generating units (wherever provided), shall be properly tuned by the respective generating unit owner duly reporting the AVR and PSS functional availability to SLDC and SLDC shall undertake to do random test to ascertain the functionality of AVR and PSS.</p>	<p>All generating units shall normally have their automatic voltage regulators (AVRs) in operation. In particular, if a generating unit of over fifty (50) MW size is required to be operated without its AVR in service, the SLDC shall be immediately intimated about the reason and duration of such operation, and obtain its permission. Power System Stabilizers (PSS) in AVRs of generating units (wherever provided), shall be properly tuned by the respective generating unit owner duly reporting the AVR and PSS functional availability to SLDC and SLDC shall undertake to do random test to ascertain the functionality of AVR and PSS.</p>

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
			CTU/STU/SRPC/SLDC will be allowed to carry out checking of Power System Stabilizer (PSS) and further tuning it, wherever considered necessary.
22	6.3 (l)	The SLDC shall take in to account the wind energy forecasting to estimate the active and reactive power availability.	The SLDC shall take in to account the wind and solar energy forecasting to estimate the active and reactive power availability.
23	6.4.2 (a)	SLDC / ALDCs / Distribution licensees and bulk consumers shall initiate action to reduce the drawal by their control area, from the grid, within the net drawal schedule whenever the system frequency falls below frequency specified by CERC from time to time.	SLDC / ALDCs / Distribution licensees and bulk consumers shall initiate action to reduce the drawal by their control area, from the grid, within the net drawal schedule.
24	6.4.2 (b)	The SLDC / ALDCs / Distribution licensee and bulk consumers shall ensure that requisite load shedding is carried out in their control area so that there is no over drawal when frequency below the limit specified by CERC from time to time.	The SLDC / ALDCs / Distribution licensee and bulk consumers shall ensure that requisite load shedding is carried out in their control area so that there is no over drawal.
25	Additional Para in 6.4.2 (e)	In order to maintain the frequency within the stipulated band and maintaining the network security, the interruptible loads shall be arranged in four groups of loads, for scheduled power cuts/load shedding, loads for unscheduled load shedding, loads to be shed through under frequency relays / df/dt relays and loads to be shed under any System Protection Scheme identified at the SRPC level. These loads shall be grouped in such a manner, that there is no overlapping between different groups of loads. In case of certain contingencies and/or threat to system security, the ALDCs / Distribution licensee/s or bulk consumer connected to the In-STS to decrease drawal of its control area by a desired quantum. Such directions of SLDC shall immediately be acted upon and the respective Agencies shall send compliance report immediately after compliance of these directions to SLDC.	In order to maintain the frequency within the stipulated band and maintaining the network security, the interruptible loads shall be arranged in four groups of loads, for scheduled power cuts/load shedding, loads for unscheduled load shedding, loads to be shed through under frequency relays / df/dt relays and loads to be shed under any System Protection Scheme identified at the SRPC level. These loads shall be grouped in such a manner, that there is no overlapping between different groups of loads. In case of certain contingencies and/or threat to system security, the ALDCs / Distribution licensee/s or bulk consumer connected to the In-STS to decrease drawal of its control area by a desired quantum. Such directions of SLDC shall immediately be acted upon and the respective Agencies shall send compliance report immediately after compliance of these directions to SLDC. SLDC shall devise standard instantaneous message formats in order to give directions in case of contingencies and/or threat to the system security to reduce deviation from schedule by the DISCOMs/bulk consumer/Users/InSGS at different overdrawal/under-drawal/over-injection/under-injection conditions depending upon the severity. The DISCOMs/bulk consumer/Users/InSGS shall ensure immediate compliance with these directions of SLDC & SRLDC and send a compliance report to the concerned SLDC.
26	6.5.1	In the event of load crash in the system due to weather disturbances or any other reason, the situation would be controlled by SLDC by the following methods in descending priorities:	In the event of load crash in the system due to weather disturbances or any other reason, the situation would be controlled by SLDC by the following methods in descending priorities to the

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
		<p>i. Lifting of the load restrictions, if any.</p> <p>ii. Exporting the power to neighboring regions/ States provided the same does not endanger the security of the ISTS.</p> <p>iii. Backing down of thermal stations with a time lag of 5-10 minutes for short period in merit order.</p> <p>iv. Closing down of hydel units (subject to non-spilling of water and effect on irrigation) keeping in view the inflow of water into canals and safety of canals/hydel channels.</p>	<p><i>extent possible:</i></p> <p>i. Lifting of the load restrictions, if any.</p> <p>ii. Exporting the power to neighboring regions/States provided the same does not endanger the security of the ISTS and is in economical and optimal manner.</p> <p>iii. Backing down/ Reserve Shut Down (RSD) of thermal stations of ISGS/InSGS/LTA/MTOA contracts in merit order. The backing down of LTA/MTOA contracts shall be as per the respective terms and conditions of respective contracts.</p> <p>iv. Closing down of hydel units (subject to non-spilling of water and effect on irrigation and major hydro plant kept as reserves to maintain DSM discipline such as sign change) keeping in view the inflow of water into canals and safety of canals/hydel channels.</p> <p>v. Renewable Energy (RE) Back down.</p>
27	6.6.2 (ii)	All planned outages shall be communicated to SLDC by the 20 th of the previous month so as to enable SLDC to study the impact and communicate to SRPC before 25 th of previous month for outage coordination approval.	All planned outages shall be communicated to SLDC by the 20 th of the M-2 month, where 'M' is the month for which outage proposals are requisitioned (for example outage in June to be communicated by 20 th of April) so as to enable SLDC to study the impact and communicate to SRPC before 25 th of previous month for outage coordination approval.
28	6.7.3 (a)	The SLDC will be primarily responsible for finalization of the Annual Load Generation Balance Report (LGBR) and the annual outage plan for the following financial year by 31st December of each year. The LGBR will be prepared for peak as well as off-peak scenarios.	The SLDC will be primarily responsible for finalization of the Annual Load Generation Balance Report (LGBR) and the annual outage plan for the following financial year by 31 st October of each year. The LGBR will be prepared for peak as well as off-peak scenarios.
29	6.7.3 (b)	The STU, transmission licensees, IPPs, and other generating stations shall provide to the SLDC their proposed outage plan in writing for the next financial year by 31st October of each year. These shall contain identification of each generating unit/transmission line/ICT etc., the preferred date for each outage and its duration, and where there is flexibility, the earliest start date and latest finishing date. SLDC shall prepare LGBR for its control area, for peak as well as off-peak scenario, by 31st December for the next financial year and submit the same to the Commission. The annual plans for managing deficits/surpluses in the control area shall clearly be indicated in the LGBR submitted by SLDCs to KERC.	The STU, transmission licensees, IPPs, and other generating stations shall provide to the SLDC their proposed outage plan in writing for the next financial year by 30 th September of each year. These shall contain identification of each generating unit/transmission line/ICT etc., the preferred date for each outage and its duration, and where there is flexibility, the earliest start date and latest finishing date. SLDC shall prepare LGBR for its control area, for peak as well as off-peak scenario, by 31 st October for the next financial year and submit the same to the Commission. The annual plans for managing deficits/surpluses in the control area shall clearly be indicated in the LGBR submitted by SLDCs to KERC.

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
30	6.7.3 (d)	The final outage plan and the final LGBR shall be intimated by SLDC to Users, STU, CTU, RLDC and other generating stations connected to the In-STS by 31st December of each year for implementation.	The final outage plan and the final LGBR shall be intimated by SLDC to Users, STU, CTU, RLDC and other generating stations connected to the In-STS by 30 th November of each year for implementation.
31	6.7.3 (j) (New sub-clause)	-	Outage Deviation Report needs to be prepared and uploaded on SLDC website on monthly basis.
32	6.10.3	<p>Reportable Events Any of the following events that could affect the State Transmission System requires reporting:</p> <p>a. Exceptionally high / low system voltage or frequency.</p> <p>b. Serious equipment problem relating to major circuit breaker, transformer or bus bar.</p> <p>c. Loss of major Generating Unit, system split, State Transmission System breakaway or Black Start.</p> <p>d. Tripping of Transmission Lines, ICTs (Inter connecting transformer) and capacitor banks.</p> <p>e. Major fire incidents.</p> <p>f. Force-Majeure condition like flooding or lightning etc.</p> <p>g. Major failure of protection.</p> <p>h. Equipment and Transmission Line overload.</p> <p>i. Accidents-Fatal and Non-Fatal.</p> <p>j. Load Crash / Loss of Load</p> <p>k. Excessive Drawal deviations.</p> <p>l. Minor equipment alarms.</p> <p>The last two reportable incidents are typical examples of those which are of lesser consequence, but which still affect the State Transmission System and can be reasonably classed as minor. They will require corrective action but may not warrant management reporting until these are repeated for sufficient time.</p>	<p>Reportable Events Any of the following events that could affect the State Transmission System requires reporting:</p> <p>a. Exceptionally high / low system voltage or frequency.</p> <p>b. Serious equipment problem relating to major circuit breaker, transformer or bus bar.</p> <p>c. Loss of major Generating Unit, system split, State Transmission System breakaway or Black Start/Black Out.</p> <p>d. Tripping of Transmission Lines, ICTs (Inter connecting transformer) and capacitor banks.</p> <p>e. Major fire incidents.</p> <p>f. Force-Majeure condition like flooding or lightning etc.</p> <p>g. Major failure of protection.</p> <p>h. Equipment and Transmission Line overload.</p> <p>i. Accidents-Fatal and Non-Fatal.</p> <p>j. Load Crash / Loss of Load</p> <p>k. Excessive Drawal deviations.</p> <p>l. Minor equipment alarms.</p> <p>m. Grid indiscipline</p> <p>n. Power system instability</p>
33	8.4.5	The SLDC and distribution licensee(s) shall always endeavour to restrict the net drawal of the State from the grid to within the drawal schedules, whenever the system frequency is below the lower limit as specified by the CERC (IEGC) Regulations 2010 and its amendments from time to time. The concerned Distribution Licensee, User, SLDC shall ensure that their automatic demand management scheme mentioned in clause 5.4.2 of IEGC, acts to ensure that there is no over drawal below frequency band limit as specified by the CERC (IEGC) Regulations, 2010, and its amendments from time to time. If the automatic demand management scheme has not yet been commissioned or not working, then action has to be taken as per manual demand management scheme to ensure zero over drawal when frequency is below the lower limit as specified by the CERC (IEGC) Regulations, 2010, and its amendments issued from time to time.	<p>The State entities including Distribution Licensee(s) shall always endeavour to restrict the drawal/injection as directed by SLDCs to ensure that drawal of the state from the grid is within the limits specified by CERC DSM Regulations.</p> <p>Till such time the State DSM Regulations (excluding Wind and Solar) are framed, forecasting, scheduling, deviations and penalties shall be as per CERC DSM Regulations.</p>
34	8.4.6	The SLDC / STU / Distribution Licensees shall regularly carry out the necessary exercises regarding short-term demand estimation for the State / area to enable them to plan in advance as to	In terms of KERC Load Forecasting Regulations, the SLDC / STU / Distribution Licensees shall regularly carry out the necessary exercises regarding short-term/monthly/weekly/daily

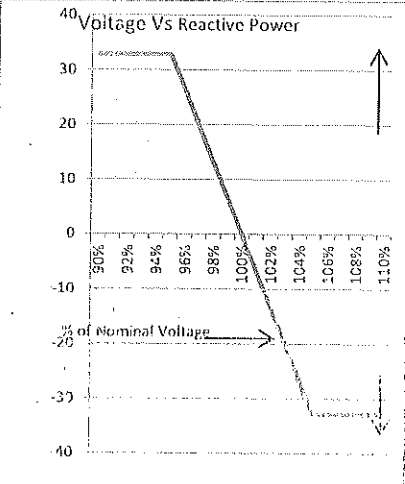
Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
		how they would meet their consumers' load without overdrawing from the drawal schedule.	demand estimation for the State / area to enable them to plan in advance as to how they would meet their consumers' load without overdrawing from the drawal schedule.
35	8.4.8	The In-SGS would normally be expected to generate power according to the daily schedules advised to them. The In-SGS may also deviate from the given schedules within the limits specified in the DSM Regulations of CERC, depending on the plant and system conditions. In particular, they may be allowed to generate beyond the given schedule under deficit conditions as long as such deviations do not cause system parameters to deteriorate beyond permissible limits and/or do not lead to unacceptable line loading. Deviations, if any, from the ex-power plant generation schedules shall be appropriately priced in accordance with DSM Regulations of CERC. In addition, deviations, from schedules causing congestion, shall also be priced in accordance with the Congestion Charge Regulations of CERC. The treatment of injection of infirm power by generating stations during testing shall be in accordance with the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009, and the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014, and amendments issued from time to time.	The In-SGS would normally be expected to generate power according to the daily schedules advised to them. The In-SGS may also deviate from the given schedules within the limits specified in the DSM Regulations of CERC, depending on the plant and system conditions. In particular, they may be allowed to generate beyond the given schedule under deficit conditions as long as Such deviations shall not cause system parameters to deteriorate beyond permissible limits and/or do not lead to unacceptable line loading. Deviations, if any, from the ex-power plant generation schedules shall be appropriately priced in accordance with DSM Regulations of KERC/CERC as applicable . In addition, deviations, from schedules causing congestion, shall also be priced in accordance with the Congestion Charge Regulations of KERC/CERC as applicable . The treatment of injection of infirm power by generating stations during testing shall be in accordance with KERC Regulations / Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009, and the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014, and amendments issued from time to time.
36	8.4.9	Provided that when the frequency is higher than 50.05 Hz, the actual net injection shall not exceed the scheduled despatch for that time block. Also, while the frequency is above the limit as specified by the CERC (IEGC) Regulations 2010 and its amendments from time to time, the In-SGS may (at their discretion) backdown without waiting for an advice from SLDC / RLDC to restrict the frequency rise. When the frequency falls below limit as specified by the CERC (IEGC) Regulations 2010 and its amendments from time to time, the generation at all In-SGS (except those on peaking duty) shall be maximized, at least upto the level to which can be sustained, without waiting for an advice from SLDC / RLDC subject to the condition that such increase does not lead to unacceptable line loading or system parameters to deteriorate beyond permissible limit.	To be deleted

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
37	8.4.19	Hydro generating stations are expected to respond to grid frequency changes and inflow fluctuations. The hydro generating stations shall be free to deviate from the given schedule without causing grid constraint and a compensation for difference between the actual net energy supply by the hydro generating station and the scheduled energy (ex-bus) over day shall be made by the SLDC in the day ahead schedule for the 4th day (day plus 3).	Hydro generating stations are expected to respond to grid frequency changes and inflow fluctuations. Maximum deviation allowed during a time block shall be as per KERC/CERC DSM Regulations.
38	8.5.3	By 08 hours every day, the In-SGS shall inform the SLDC, the station-wise expower plant MW and MWh capabilities foreseen for the next day, i.e., from 00:00 hrs to 24:00 hrs of the following day.	By 06 hours every day, the In-SGS shall inform the SLDC, the station-wise expower plant MW and MWh capabilities foreseen for the next day, i.e., from 00:00 hrs to 24:00 hrs of the following day.
39	8.5.4	The above information of the foreseen capabilities of the In-SGS with corresponding MW and MWh entitlements of the State, will be compiled by the SLDC every day for the next day, and advised to the beneficiaries by 10.00 hours. The SLDC shall review it vis-à-vis the foreseen load pattern and the State's own generating capability including bilateral exchanges, if any, and advise the RLDC by 15 hours its drawal schedule for each of the ISGS in which the State has shares, long-term, medium-term bilateral interchanges and approved short term bilateral interchanges.	The above information of the foreseen capabilities of the In-SGS with corresponding MW and MWh entitlements of the State, will be compiled by the SLDC every day for the next day, and advised to the beneficiaries by 08.00 hours. The SLDC shall review it vis-à-vis the foreseen load pattern and the State's own generating capability including bilateral exchanges, if any, and advise the RLDC by 15 hours its drawal schedule for each of the ISGS in which the State has shares, long-term, medium-term bilateral interchanges and approved short term bilateral interchanges.
40	8.5.8	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 for biomass power plants and non-fossil fuel based cogeneration plants whose tariff is determined by the KERC shall be treated as 'MUST RUN' power plants and shall not be subjected to 'merit order despatch' principles. Provided that, in case of low load conditions, the SLDC shall regulate the generation of Renewable energy power plants to maintain Grid security.	"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 for bio-mass power plants and non-fossil fuel based cogeneration. Plants whose tariff is determined by the KERC shall be treated as "Must Run" power plants and shall not be subjected to 'merit order despatch' principles. Provided that, in case of low load conditions// Congestion (Transmission, Distribution) , the SLDC shall regulate the generation of Renewable energy power plants to maintain Grid Security.
41	8.5.12	While finalizing the drawal and despatch schedules as above, the SLDC shall also check that the resulting power flows do not give rise to any transmission constraints. In case any impermissible constraints are foreseen, the SLDC shall moderate the schedules to the required extent. Any changes in the scheduled quantum of power which are too fast or involve unacceptably large steps may be converted into suitable ramps by the SLDC.	While finalizing the drawal and despatch schedules as above, the SLDC shall also check that the resulting power flows do not give rise to any transmission constraints. In case any impermissible constraints are foreseen, the SLDC shall moderate the schedules to the required extent. Any changes in the scheduled quantum of power which are too fast or involve unacceptably large steps may be converted into suitable ramps (in consultation with Generators) by the SLDC.
42	8.5.14	In case of any grid disturbance, scheduled generation of all the In-SGS and scheduled drawal of all the Distribution Companies shall be deemed to have been revised to be equal to their actual generation/drawal for all the time blocks affected by the grid disturbance.	In case of any grid disturbance, scheduled generation of all the affected In-SGS (excluding wind and solar) and scheduled drawal of all the Distribution Companies shall be deemed to have been revised to be equal to their actual generation /drawal for all the time blocks affected by the grid disturbance.

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
		Certification of grid disturbance and its duration and its duration shall be done by the SLDC/RLDC.	Certification of grid disturbance and its duration shall be done by the SLDC/RLDC. Provided that KERC Forecasting, Scheduling, Deviation settlement and related matters for Wind and Solar Generation sources Regulations, 2015 as amended from time to time shall prevail.
43	8.5.16	<p>Notwithstanding anything contained in Regulation 8.5.15 of this Code, in case of forced outage of a unit of a generating station (having generating capacity of 100 MW or more) and selling power under Short Term bilateral transaction (excluding collective transactions through power exchange), the generator or electricity trader or any other agency selling power from the unit of the generating station shall immediately intimate the outage of the unit along with the requisition for revision of schedule and estimated time of restoration of the unit, to the SLDC. The schedule of beneficiaries, sellers and buyers of power from this generating unit shall be revised accordingly. The revised schedules shall become effective from the 4th time block, counting the time block in which the forced outage is declared to be the first one. The SLDC shall inform the revised schedule to the seller and the buyer. The original schedule shall become effective from the estimated time of restoration of the unit.</p> <p>However, the transmission charges as per original schedule shall continue to be paid for two days. Provided that the schedule of the buyers and sellers shall be revised after forced outage of a unit, only if the source of power for a particular transaction has clearly been indicated during short-term open access application and the said unit of that generating station goes under forced outage.</p> <p>Provided also that, the provision of this sub-regulation in respect of revision of schedule of electricity is applicable to traders and any other agencies (except the generating station). In case of revision of schedule of a generating unit, the schedules of all transactions under the long-term access, medium-term open access and short-term open access (except collective transactions through power exchange), shall be reduced on pro-rata basis.</p>	<p>Notwithstanding anything contained in Regulation 8.5.15 of this Code, in case of forced outage of a unit of a generating station (having generating capacity of 100 MW or more) and selling power under Short Term bilateral transaction (excluding collective transactions through power exchange), the generator or electricity trader or any other agency selling power from the unit of the generating station shall immediately intimate the outage of the unit along with the requisition for revision of schedule and estimated time of restoration of the unit, to the SLDC. The schedule of beneficiaries, sellers and buyers of power from this generating unit shall be revised accordingly. The revised schedules shall become effective from the 4th time block, counting the time block in which the forced outage is declared to be the first one. The SLDC shall inform the revised schedule to the seller and the buyer. The original schedule shall become effective from the estimated time of restoration of the unit.</p> <p>However, the transmission charges as per original schedule shall continue to be paid for two days. Provided that the generator or trading licensee or any other agency selling power from the generating station or unit (s) thereof may revise its estimated restoration time once in a day and the revision schedule shall become effective from the 4th time block, counting the time block in which the revision is advised by the generator to be the first one.</p> <p>Provided that the schedule of the buyers and sellers shall be revised after forced outage of a unit, only if the source of power for a particular transaction has clearly been indicated during short-term open access application and the said unit of that generating station goes under forced outage.</p> <p>Provided also that, the provision of this sub-regulation in respect of revision of schedule of electricity is applicable to traders and any other agencies (except the generating station). In case of revision of schedule of a generating unit, the schedules of all transactions under the long-term access and short-term open access (except collective transactions through power exchange), shall be reduced on pro-rata basis.</p>

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
44	8.6.1	<p>Reactive power compensation should ideally be provided locally, by generating Reactive Power as close to the Reactive Power consumption as possible. The beneficiaries are therefore expected to provide local VAR compensation/generation, such that they do not draw VARs from the state grid, particularly under low-voltage conditions. However, considering the present limitations, this is not being insisted upon. Instead, to discourage VAR draws by beneficiaries, VAR exchanges with Intra-State Transmission System shall be priced as follows:</p> <p>(a) The beneficiary pays for VAR drawal when voltage at the metering point is below 97%, (b) The beneficiary gets paid for VAR return when voltage is below 97%, (c) The beneficiary gets paid for VAR drawal when voltage is above 103%, (d) The beneficiary pays for VAR return when voltage is above 103%.</p>	<p>8.6.1.1</p> <p>Reactive power compensation should ideally be provided locally, by generating Reactive Power as close to the Reactive Power consumption as possible. The beneficiaries are therefore expected to provide local VAR compensation/generation, such that they do not draw VARs from the state grid, particularly under low-voltage conditions. However, considering the present limitations, this is not being insisted upon. Instead, to discourage VAR draws by beneficiaries, VAR exchanges with Intra-State Transmission System shall be priced as follows:</p> <p>(a) The beneficiary pays for VAR drawal when voltage at the metering point is below 97%, (b) The beneficiary gets paid for VAR return when voltage is below 97%, (c) The beneficiary gets paid for VAR drawal when voltage is above 103%, (d) The beneficiary pays for VAR return when voltage is above 103%.</p>
45	8.6.1.2 (New sub Clause)	---	<p>The Wind/Solar inverter based Generating stations are therefore expected to provide local VAR compensation/generation, such that they absorb VARs from the state grid during the High Voltage conditions and inject VAR during low-voltage conditions. The above VAR exchanges by inverter based Wind/Solar Generating stations with Intra-State Transmission System shall be priced as follows:</p> <p>a) The Wind/Solar Generator pays for VAR drawal when voltage at the metering point is below the nominal value.</p> <p>b) The Wind/Solar Generator gets paid for the VAR return to the extent the VAR return is above the stipulated value as per the table below, when voltage at the metering point is below the nominal.</p> <p>c) The Wind/Solar Generator gets paid for the VAR drawal to the extent the VAR drawal is above the stipulated value as per the table, when voltage at the metering point is above the nominal.</p> <p>d) The Wind/Solar Generator pays for VAR return when voltage at the metering point is above the nominal.</p>

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted	
			Voltage in % of rated nominal voltage	KVAR to be supplied / absorbed by solar Generator expressed as a % of KW generated.
			90%	32.87% (from Generator to Grid)
			91%	32.87% (from Generator to Grid)
			92%	32.87% (from Generator to Grid)
			93%	32.87% (from Generator to Grid)
			94%	32.87% (from Generator to Grid)
			95%	32.87% (from Generator to Grid)
			96%	26.24% (from Generator to Grid)
			97%	19.68% (from Generator to Grid)
			98%	13.12% (from Generator to Grid)
			99%	06.56% (from Generator to Grid)
			100%	0%
			101%	-06.56% (from Grid to Generator)
			102%	-13.12% (from Grid to Generator)
			103%	-19.68% (from Grid to Generator)
			104%	-26.24% (from Grid to Generator)
			105%	-32.87% (from Grid to Generator)
			106%	-32.87% (from Grid to Generator)
			107%	-32.87% (from Grid to Generator)
			108%	-32.87% (from Grid to Generator)
			109%	-32.87% (from Grid to Generator)
			110%	-32.87% (from Grid to Generator)

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
			
46	8.6.2	<p>The charge/payment for VARs shall be at a nominal paise/kVArh rate as may be specified by the Central Electricity Regulatory Commission from time to time for inter-State transactions, and will be between the beneficiary and the State Pool Account for VAR interchanges.</p> <p>Notwithstanding the above, SLDC may direct a beneficiary to curtail its VAR drawal/injection in case the security of grid or safety of any equipment is endangered.</p>	<p>Existing Regulations may be modified as "The charge/payment for VARs shall be at a nominal paise/kVArh rate as may be specified by the Central Electricity Regulatory Commission from time to time for inter-State transactions, and will be between the beneficiary/Wind/Solar Generator and the State Pool Account for VAR interchanges and in case of Intra-State transactions, as may be specified by the KERC.</p> <p>Notwithstanding the above, SLDC may direct a beneficiary/Wind/Solar Generator to curtail its VAR drawal/injection in case the security of grid or safety of any equipment is endangered.</p>
47	8.6.3	<p>The SLDC may issue direction to any generator within the State to increase Var generation/absorption up to the machine capability limit. In general, the beneficiaries shall endeavour to minimize the VAR drawal at an interchange point when the voltage at that point is below 95% of the rated voltage and shall not return VAR when the voltage is above 105%. Transformer taps at the respective drawal points may be changed to control the VAR interchange as per the beneficiary's request to SLDC, but only at reasonable intervals. A beneficiary may also request the SLDC for increase/decrease of VAR generation at a generating station for addressing a voltage problem.</p>	<p>8.6.3.1</p> <p>The SLDC may issue direction to any generator within the State to increase VAR generation/absorption up to the machine capability limit. In general, the beneficiaries shall endeavour to minimize the VAR drawal at an interchange point when the voltage at that point is below 95% of the rated voltage and shall not return VAR when the voltage is above 105%. Transformer taps at the respective drawal points may be changed to control the VAR interchange as per the beneficiary's request to SLDC, but only at reasonable intervals. A beneficiary may also request the SLDC for increase/decrease of VAR generation at a generating station for addressing a voltage problem.</p>
48	New sub-clause 8.6.3.2	---	<p>Inverter based Wind/Solar Generators shall supply dynamically varying reactive power support so as to maintain injection VAR to an extent of 33% of KW at voltage of 95% to absorption of VAR to an extent of 33% of KW at voltage of 105% at the Metering point. Beyond the band of voltage of 95% to 105%, the reactive power support by generation/absorption shall increase up to the machine capability limit dynamically.</p>

Sl. No.	KEGC Clause No	Existing Clauses	Clauses as amended / inserted
49	8.6.4	Switching in/out of all bus and line reactors throughout the State Grid shall be carried out as per instructions of SLDC. Tap changing on all transformers in STU system shall also be done as per SLDC's instructions. The SLDC shall monitor the working of shunt capacitor banks installed in the substations of STU or transmission licensee and Distribution substation and direct them to switch in/out as and when required.	Switching in/out of all 400 kV and above bus and line reactors throughout the state grid shall be carried out as per instructions of SRLDC/SLDC . Tap changing on all transformers of 400/220 kV and above in STU system shall also be done as per SRLDC/SLDC instructions. For other switching in/out of bus/line reactors and tap changing, it will be as per instructions of SLDC. The SLDC shall monitor the working of shunt capacitor banks installed in the substations of STU or transmission licensee and Distribution substation and direct them to switch in/out as and when required.
50	9.3.2 (1)	The protection group should do periodic relay setting calculations as and when necessitated by system configuration changes. A relay setting approval system should be in place.	The protection group should do periodic relay setting calculations as and when necessitated by system configuration changes, using suitable software in consultation with SRPC. A relay setting approval system should be in place. STU is responsible for taking up of all the activities like requesting for relay setting, setting calculations, verification, approval and implementation of GRID connected Sub Stations through suitable software in consultation with SRPC to bring the uniformity in the activity.
51	9.3.2 (2)	Relay setting calculations also need to be revisited whenever the minor configuration or loading, changes in the system due to operational constraints. Feedback from the field/substations on the performance of the relay settings should be collected and settings should be reviewed and corrected if required.	Relay setting calculations needs to be revisited whenever the minor configuration or loading, changes in the system due to operational constraints. All the modifications in the configurations and relay settings shall be notified to RPC through Data Modification & Notification System (DMNS). Feedback from the field/substations on the performance of the relay settings should be collected and settings should be reviewed and corrected if required, using the suitable software in consultation with SRPC.
52	9.3.2 (3)	Creating and maintaining data base of relay settings: Data regarding settings of relays in their network should be compiled by the CTU and STUs and furnished to the RLDC and SLDC respectively and a copy should also be submitted to RPC for maintaining the data base.	Creating and maintaining the Database of Relay settings: Data regarding settings of relays in their Network should be compiled by the CTU and STUs. They shall be responsible for updating the data pertaining to assets and Relay settings in database maintained by SRPC.

By the order of the Commission

Secretary
Karnataka Electricity Regulatory Commission

