# HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA NOTIFICATION

#### Shimla, the 09th October, 2018.

**No.: HPERC-Grid Code (388).-** The Himachal Pradesh Electricity Regulatory Commission, in exercise of the powers conferred under sub-section (1)(h) of Section 86, sub-section (2)(zp) of Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, after previous publication, hereby makes the following amendment in the Himachal Pradesh Electricity Grid Code, 2008, namely:-

#### REGULATIONS

- **1. Short title and commencement**.- (1) These regulations may be called the Himachal Pradesh Electricity Grid Code (First Amendment) Regulations, 2018.
- (2) These regulations shall come into force from the date of their publication in the Rajpatra, Himachal Pradesh.

#### 2. In Chapter-1 of the said Code -

(I) for the existing sub-para 1.3.1 of para 1.3, the following shall be substituted, namely:-

"This Code shall apply to all parties that connect with and/or utilize the IaSTS, including SLDC, which are required to abide by the principles and procedures defined in this Code to the extent it applies to them and, where the context so permits, shall also apply to those connected to and/or using such component(s) of the State Power Grid as may not form part of IaSTS.";

- (II) in the existing sub-para 1.3.2 of para 1.3, the word "transmission" shall be substituted with the word "flow";
- (III) for the existing clause (d) under sub-para-1.4.1 of para 1.4, the following shall be substituted, namely:-

"This Chapter specifies the minimum technical and design criteria which shall be complied with by STU and any User connected to, or seeking connection to the IaSTS. This chapter also sets out the procedures by which STU shall ensure compliance by all Users with the above criteria as a pre-requisite for the establishment of an agreed connection.";

- (IV) for the existing para 1.6, including sub-para 1.6.1,1.6.2 and 1.6.3 thereunder, the following shall be substituted, namely:-
  - "1.6 Restricted Governor Mode of Operation
  - 1.6.1 All thermal and hydro (except those upto three hours pondage) generating units shall operate under Restricted governor mode of operation with effect from 01.04.2019.
  - 1.6.2 Any exemption from the above, other than that already provided for in Chapter-5, may be granted only by the Commission for which the concerned agency shall file a petition in advance.";
  - (V) in sub-para (1.9.1) of para 1.9 -
    - (i) after the existing definition of "Act", the following new definition shall be inserted, namely:-

Area Load Despatch	A Load Despatch Centre established by the		
Centre (ALDC)	distribution licensee operating in the State to		
	carry out the relevant operating directives		
	issued by SLDC to the distribution licensee		
	and to assist SLDC for safe and integrated operation of the concerned network.		

(ii) after the existing definition of "BIS", the following new definition shall be inserted, namely:-

Bulk Consumer	Any consumer who avails supply	at 33 kV
	or above.	

(iii) after the existing definition of "Disturbance Recorder (DR)", the following new definition shall be inserted, namely:-

Distribution Licensee	A licensee authorized under section 14 of the Act		
	to operate and maintain a distribution system for		
	supplying electricity to the consumers in his area		
	of supply. At present 'Himachal Pradesh State		
	Electricity Board Limited (HPSEBL)' is the		
	distribution licensee in the State.		

(iv) for the existing definition of "State Energy Account", the following shall be substituted, namely:-

"An Account, in terms of the energy quantum as well as the amounts payable/receivable by various State Entities for the billing and settlement of various charges, to be prepared by SLDC on the basis of transactions during the period to which such account relates.";

(v) after the existing definition of "State Energy Account", the following new definitions shall be inserted, namely:-

State Entity	Such person who is in the SLDC control area		
	and whose metering and energy accounting is		
	done at the state level and as described in more		
	detail in sub-para 6.5.5 of para 6.5 under		
	Chapter-6 of this Code.		
State Power Grid	The Intra-State Transmission System/ network		
	owned by the State Transmission Utility		
	(STU)/Transmission Licensee(s) and/or the		
	EHV/ 33 kV Distribution System/network owner		
	by the distribution licensee(s) within the State.		

(vi) for the existing definition of "State Pool Account", the following shall be substituted, namely:-

"The account which shall be opened, maintained and operated by the SLDC for receiving/making payments on account of Charges for Deviation, Additional Charges for Deviation, and interest if any, based on the weekly deviation statements to be prepared by SLDC in accordance with the provisions of Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018.";

(vii) for the existing definition of "State Sector Generating Stations (SSGS)", the following shall be substituted, namely:-

"Generating Stations connected with the State Power Grid including IPP, Captive Generating Plant, Co-Generators and NCES. However for the purpose of scheduling/dispatching the provisions made in Chapter-6 shall be applicable.";

- (viii) in the existing definition of "Time Block" -
  - (a) for the sign ".", the sign ":" shall be substituted; and
  - (b) the following proviso shall be added, namely:-

"Provided that the Commission may revise the duration of time block to 5 minutes, or any other duration, from the date to be notified by it from time to time.";

(ix) for the existing definition of the term "Transmission Licensee", the following shall be substituted, namely:-

"A licensee authorized under section 14 of the Act to establish or operate transmission lines. At present 'Himachal Pradesh Power Transmission Corporation Limited (HPPTCL)' is transmission licensee in the State."; and

(x) for the existing definition of the item "User", the following shall be substituted, namely:-

"A term used in various sections of HPEGC to refer to the person/agencies using the IaSTS and shall also include distribution licensee and /or any other person/agency not using IaSTS but using any other component of State Power Grid, as the context may require and as more particularly identified in each section of HPEGC."

# 3. In Chapter -2 of the said Code -

for the existing item (f) in sub-para 2.6.3 of para 2.6, the following shall be substituted, namely:-

"(f) Operation of State Deviation Pool Account and State reactive energy account."

# 4. In Chapter - 3 of the said Code -

for the sub-para 3.7.2 of para 3.7, the following shall be substituted, namely:-

"3.7.2 Users shall mean any person/agency using IaSTS (or intending to use IaSTS) and shall also include a person/agency using the ISTS(or intending to use the ISTS) through their lines(or otherwise) erected or to be erected in State of Himachal Pradesh."

# 5. In Chapter-4 of the said Code -

- (i) after clause (a)(iii) of sub-para 4.7.2 of para 4.7, the following new item shall be added, namely:-
  - "(iv) 400 milli seconds (ms) for 33 kV.";
- (ii) for the existing sub-para 4.8.4 of para 4.8, the following shall be substituted, namely:-
  - "4.8.4 All 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 above 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 Grid 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 grid) only after obtaining permission from SLDC.";

- (iii) for the existing sub-para (4.10.1) of para 4.10, the following shall be substituted, namely:-
  - "4.10.1 Reliable and efficient speech and data communication systems shall be provided to facilitate necessary communication and data exchange and supervision/control of the grid by the SLDC, under normal and abnormal conditions. All Users, including generating stations not falling under the definition of State Entity, shall provide systems to telemeter power system parameter such as power flow, voltage and status of switches/ transformer taps etc. in line with interface requirements and other guideline made available to SLDC. The associated communication system to facilitate data flow up to SLDC, shall also be established by the concerned User as specified by STU in connection agreement. All Users in coordination with STU shall provide the required facilities at their respective ends and SLDC as specified in the connection agreement.";
- (iv) for the sub-para (4.17.1) of para 4.17, the following shall be substituted, namely:-
  - "4.17.1 STU shall submit annually to the Commission by 30th September each year schedule of such transmission assets, indicating ownership also, in electronic form, which constitute a part of State Power Grid as on 31st March of that year and on which SLDC has operational control and responsibility.";
  - (v) after para 4.17, the following new para shall be added, namely:-
    - "4.18 Cyber Security
    - 4.18.1 All Intrastate Utilities shall have in place, a cyber security framework to identify the critical cyber assets and protect them so as to support reliable operation of grid."

# 6. In Chapter - 5 of the said Code -

- (I) for the existing sub-para 5.3.6 of para 5.3, the following shall be substituted, namely:-
  - "5.3.6 All thermal generating units of 200 MW and above and all hydro units of 25 MW and above, which are synchronized with the grid, irrespective of their ownership, shall have their governors in operation at all times in accordance with the following provisions; namely:-

- i) all the Thermal generating units having capacity 50 MW and above and Hydro (except those upto three hours pondage) generating units having capacity 25 MW and above shall be operated under Restricted Governor Mode of Operation with effect from 01.04.2019;
- ii) the restricted governor mode of operation shall essentially have the following features;
  - a) there should not be any reduction in generation in case of improvement in grid frequency below 50.05 HZ (for example, if grid frequency changes from 49.9 to 49.95 Hz, there shall not be any reduction in generation). For any fall in grid frequency, generation from the unit should increase by 5% limited to 105% of the MCR of the unit subject to machine capability;
  - b) ripple filter of +/-0.03 Hz shall be provided so that small changes in frequency are ignored for load correction, in order to prevent governor hunting;
  - c) if any of these generating units is required to be operated without its governor in operation as specified above, the SLDC shall be immediately apprised about the reason and duration of such operations. All governor shall have a droop setting of between 3% and 6%; and
  - d) after stabilization of frequency around 50Hz, the SERC may review the above provision regarding the restricted governor mode of operation and free governor mode of operation may be introduced;
- iii) all other generating units including hydro having the pondage upto 3 hours, Gas turbine/Combined Cycle Power Plants, wind, solar generators and nuclear power station shall be exempted from the provisions of clauses (i) and (ii) of this para as well as of sub-paras 5.3.7, 5.3.8 and 5.3.9 till the commission review the situation:

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.";

- (II) for the existing sub-para 5.3.7 of para 5.3, the following shall be substituted, namely:-
  - "5.3.7 Facilities available with/in load limiters, Automatic Turbine Run-up System (ATRS), Turbine supervisory control, coordinated control system, etc., shall not be used to suppress the normal governor action in

any manner. No dead bands and/ or time delays shall be deliberately introduced:

Provided that periodic checkups by third party should be conducted at regular intervals at least once in two years through independent agencies selected by SLDC. The cost of such tests shall be recovered by the SLDC from the Generators. If deemed necessary by SLDC, the test may be conducted more than once in two years.";

- (III) for the existing sub-para 5.3.8 of para 5.3, the following shall be substituted, namely:-
  - **\***5.3.8 All thermal generating units of 200 MW and above and all hydro units of 25MW and above operating at or up to 100% of their Maximum Continuous Rating (MCR) 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 grid) only after obtaining the permission of SLDC. For the purpose of ensuring primary response, 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 (VWO) 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 SLDC for scheduling in due consideration of prevailing ambient conditions of the 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:

Provided further that the VWO margin shall not be used by SLDC to schedule Ancillary Services.";

- (IV) for the existing sub-para 5.3.9 of para 5.3, the following shall be substituted, namely:-
  - "5.3.9 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) percent per minute or as per manufacturer's limits.";
- (V) in the existing sub-para 5.3.10 of para 5.3, the following shall be substituted, namely:-
  - "5.3.10 Except under an emergency, or to prevent an imminent damage to a costly equipment, no User shall suddenly reduce his generating unit output by more than 20% of installed capacity or 10MW whichever is less without prior intimation to and consent of the SLDC. Similarly, no User shall cause a sudden variation in its load by more than 20% or 10MW whichever is less without prior intimation to and consent of the SLDC. All users shall ensure that temporary over voltage due to sudden load rejection and the maximum permissible values of voltage unbalance shall remain within limits specified under Central Electricity Authority (Grid Standards) Regulations, 2010.";
- (VI) for the existing sub-para 5.3.12 of para 5.3, the following shall be substituted, namely:-
  - "5.3.12 Provision of protections and relay settings shall be coordinated periodically throughout the State Power Grid, as per the plan to be separately finalized by the STU in coordination with all Users and the RPC and/or SPC, wherever required. The STU shall also prepare islanding schemes and ensure its implementation in accordance with Central Electricity Authority (Grid Standards) Regulations, 2010. All users shall ensure that installation and operation of protection system shall comply with the provisions of Central Electricity Authority (Grid Standards) Regulations, 2010.";
- (VII) for the existing sub-para 5.3.13 of para 5.3, the following shall be substituted, namely:-
  - "5.3.13 All Users and SLDC, shall take all possible measures to ensure that the grid frequency always remains within the 49.90 –50.05 Hz band or as may be specified in IEGC from time to time.";

- (VIII) for the existing sub-para 5.3.19 of para 5.3, the following shall be substituted, namely:-
  - "5.3.19 All Users shall make all possible efforts to ensure that the grid voltage always remains within the following operating range:

Voltage-(kv rms)

Nominal	Maximum	Minimum
400	420	380
220	245	198
132	145	122
66	72	60
33	36	30

(IX) for the existing sub-para 5.5.2 of para 5.5, the following shall be substituted, namely:-

# "5.5.2 Demand Management Process

- (a) All users /SLDC shall initiate action to restrict the drawal of their respective control area, from the grid, within the net drawal schedule;
- (b) All users /SLDC shall ensure that requisite load shedding is carried out in its control area so that there is no overdrawl;
- (c) Each User/STU/SLDC shall formulate contingency procedures and make arrangements that will enable demand disconnection to take place, as instructed by the SLDC, under normal and/or contingent conditions. These contingency procedures and arrangements shall regularly be/updated by User/STU and monitored by SLDC. SLDC may direct any User/STU to modify the above procedures/arrangement, if required, in the interest of grid security and the concerned User/STU shall abide by these directions;
- (d) The SLDC shall also, through the distribution licensee, formulate and implement state-of-the-art demand management schemes for automatic demand management like rotational load shedding, demand response (which may include lower tariff for interruptible loads) etc., to reduce overdrawl in order to comply with items (a) and (b) of this sub-para 5.5.2. A Report detailing the scheme and periodic reports on progress of implementation of the schemes shall be sent to the State/Central Commission by the concerned SLDC;
- (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 RPC 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, if the RLDC directs SLDC /distribution licensee or Open Access Consumers connected to the ISTS to decrease drawal of its control area by a certain quantum, such directions shall immediately be acted upon. SLDC shall send compliance report immediately after compliance of these directions to RLDC;

- (f) To comply with the direction of RLDC, SLDC may direct any distribution licensee/Open Access Consumers connected to the STU to curtail drawal from grid. SLDC shall monitor the action taken by the concerned entity and ensure the reduction of drawal from the grid as directed by RLDC;
- 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 bulk consumer/Open Access Consumer, State Utility/ SSGS/ Intrastate Entity/Injecting Utility at different overdrawal/ under-drawal/over-injection/underinjection conditions depending upon the severity. The Intrastate entities shall ensure immediate compliance with these directions of SLDC and send a compliance report to the SLDC. In case of severe contingencies and/or threat to the system security, the SLDC may issue suitable instructions, under intimation to the concerned State Entity, directly to any generating stations or bulk consumer who does not fall under the definition of user but is otherwise connected to State Power Grid and in such an event, such concerned generating station /bulk consumer shall comply with such instructions and shall send a compliance report to the SLDC;
- (h) All State Entities /Users shall comply with direction of SLDC and carry out requisite load shedding or backing down of generation in case of congestion in transmission system to ensure safety and reliability of the system. The procedure for application of measures to relieve congestion in real time as well as provisions of withdrawl of congestion shall be in accordance with Central Electricity Regulatory Commission (Measures to relieve congestion in real time operation) Regulations, 2009. The measures taken by the Users, SLDC /distribution licensee or bulk consumer/Open Access Consumers shall not be withdrawn as long as the frequency remains at a level lower than the limits specified in para 5.3 or congestion continues, unless specifically permitted by the SLDC.";

- (X) in sub-para 5.6.1 of para 5.6, for the existing items (d) and (e), the following shall be substituted, namely:-
  - "(d) Transmission Constraints;
  - (e) Instances of persistent / significant non-compliance of HPEGC;
  - (f) Instances of congestion in transmission system;
  - (g) Instances of inordinate delays in restoration of transmission elements and generating units; and
  - (h)Non compliance of instructions of SLDC by distribution licensees/ bulk consumers/Open Access Consumers, to curtail drawal resulting in non-compliance of HPEGC.";
- (XI) after sub-para 5.6.1 of para 5.6, the following new sub-para shall be added, namely:-
  - "5.6.1A A daily report covering the performance of the State Power Grid shall be prepared by SLDC based on the inputs received from Users and shall be put on its website. This report shall also cover the wind and solar power generation and injection into the grid.";
- (XII) in sub-para 5.7.2 of para 5.7, after clause (a)(ii), the following new clause shall be added, namely:-
  - "(iii) All operational instructions given by SLDC shall have unique codes which shall be recorded and maintained as per Central Electricity Authority (Grid Standards) Regulations, 2010.";
- (XIII) in para 5.9(b), at same para, the following shall be added, namely:"Diesel Generator sets for black start would be tested on weekly basis and test report shall be sent to SLDC on quarterly basis."; and
- (XIV) in sub-para 5.10.5 of para 5.10, after item (viii), the following new clause shall be added, namely:-
  - "(ix) Sudden load rejection by any User".

## 7. In Chapter - 6 of the said Code -

- (I) for the existing clause (d) of sub-para 6.1.1 of para 6.1, the following shall be substituted, namely:-
  - "(d) Complementary commercial mechanisms (in Annexure-1).";
- (II) for the existing para 6.2, the following shall be substituted, namely: -
  - "6.2 The objective of this Code is to specify the procedures to be adopted for scheduling of despatches from the SSGS and imports from

ISGS and BBMB Generating Stations or any other person and net drawals by the beneficiaries on a daily basis and also the modality of the flow of information between the SLDC, RLDC, SSGS and the beneficiaries of the State. The procedure for submission of capability declaration by each SSGS and submission of drawal schedule by each beneficiary is intended to enable SLDC to prepare the despatch schedule for each SSGS and drawal schedule for each beneficiary. It also provides methodology of issuing real time despatch/drawal instructions and rescheduling, if required, to SSGS and beneficiaries along with the commercial arrangement for the deviations from schedules, as well as, mechanism for reactive power pricing. This code also provides that suitable energy meters shall be provided for accounting of charges for deviation under Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, Telemetry/ communication system and Data Acquisition system shall also be provided for transfer of information to the ALDC and SLDC. The provisions contained in this chapter are without prejudice to the powers conferred on SLDC under section 32 and 33 of the Electricity Act, 2003.";

(III) after para 6.3, the following new para shall be added, namely:-

### "6.3 A Definitions

- (a) **"Collective Transaction"** means a set of transactions discovered in power exchange through anonymous, simultaneous competitive bidding by buyers and sellers.
- "State Entity" means such person who is in the SLDC control area (b) and whose metering and energy accounting is done at the state level. **Explanation:** The sellers selling power to a person forming State Entity, including distribution licensee, on regular basis shall not be considered as separate State Entity in relation to such sale of power under regular arrangement and the availability of power from the such sources shall be accounted for by the State Entity purchasing such power for all intents and purposes. However, in case only a part of the total energy sales by a seller is being sold under regular arrangement and balance part is sold to any other person, not forming a State Entity of the State, such seller shall be considered as a separate State Entity in relation to sale of such balance portion. Accordingly the generating stations selling the entire saleable energy to the distribution licensee shall not be treated as State Entities for the purpose of scheduling and despatching etc."

- (c) "State Sector Generating Stations (SSGS)" means generating stations connected with the State Power Grid. However, for the purpose of scheduling / dispatching such generating stations as are selling entire saleable energy to the distribution licensee or, any other State Entity and are not considered as separate State Entities, shall not be considered as SSGS. Such generating stations shall submit their projections/estimates and other online and offline data as may be required by ALDC so as to enable the ALDC to prepare consolidated schedule of the distribution licensee and also to keep SLDC updated on the information relating to the distribution licensee, including such generating stations.";
- (d) "State Periphery or HP Periphery" means, except in situations which may warrant any other treatment in specific cases, the interconnection point of the transmission system of STU with the transmission system of CTU; or with any other inter State transmission system not owned by any State Entity; or with the generation bus-bar of the joint sector projects from where power is supplied to the distribution licensee through the STU system;
- (e) **"STU Periphery"** means the interconnection point between the transmission system of STU with the distribution system of distribution licensee.
- (IV) in the existing sub-para 6.4.1 of para 6.4, for the existing clause (g), the following shall be substituted, namely:-
  - "(g) Implementation of Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018;
  - (h) Free governor operation at generating stations wherever possible; and
  - (i) Regulating the net drawal of their control area from the regional grid in accordance with the respective regulations.";
- (V) for the existing sub-para 6.4.2 of para 6.4, the following shall be substituted, namely:-
  - "6.4.2 (a) The system of each intra State Entity shall be treated and operated as notional control area. The injection/drawal schedules of the State Entities, other than distribution licensee, shall be prepared with reference to their respective injection/drawal points in the State and shall, for the purposes like preparation of consolidated schedule for the State as

whole, accounting, computation and recovery of various charges under Himachal Pradesh Electricity Regulatory Commission(Deviation Settlement Mechanism and related matters )Regulations,2018 etc., be projected to the State periphery by loading applicable transmission and distributed losses of STU and distribution licensee, as applicable:

Provided that in cases involving sale of energy by the generating stations directly connected to distribution system of distribution licensee to the retail consumers of distribution licensee procuring power from such generating stations through intra-state open access without involving STU system under the normal scheme of flows, the transmission losses of STU shall not be loaded to their respective injection/drawal schedules for projecting the same to the State periphery:

Provided further that the distribution licensee shall give its net schedule w.r.to the STU periphery which shall be projected to State periphery by loading the transmission losses of STU:

Provided further that all the charges specified in these regulations shall be levied based on the data at State periphery.

- (b) The State Entities shall regulate their generation and/or load so as to maintain their actual drawal/injection from/into the grid close to the above schedule. Maximum inadvertent deviation allowed during a time block shall not exceed the limits specified in the Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations,2018. Such deviations should not cause system parameters to deteriorate beyond permissible limits and should not lead to unacceptable line loadings. Inadvertent deviations, if any, from net drawal schedule shall be priced through the Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018. Every State Entity shall ensure reversal of sign of deviation from schedule at least one after every twelve time block.
- (c) The SLDC shall always restrict the net drawal of the state from the grid within the drawal schedules and keeping the deviations from the schedule within the limits specified in the relevant regulations. The concerned distribution licensee/User and SLDC shall ensure that the automatic demand management scheme mentioned in clause 5.5.2 acts to ensure that there is no over-drawal. If the automatic demand management scheme has not yet been commissioned, then action shall be taken as per manual demand management scheme to restrict the net drawal form grid

- to within schedules and all actions for early implementation of Automatic Demand Management Scheme (ADMS) shall be initiated.";
- (VI) for the existing sub-para 6.4.5 of para 6.4, the following shall be substituted, namely:-
  - "6.4.5 The SSGS is normally expected to generate power according to the daily schedules advised to them barring any inadvertent deviations. Maximum deviation allowed during a time block shall not exceed the limits specified in the Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018. Such deviations should not cause system parameters to deteriorate beyond permissible limits and should not lead to unacceptable line loadings. Inadvertent deviations, if any, from the ex-power plant generation schedules shall be appropriately priced in accordance with Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018.";
- (VII) for the existing sub-para 6.4.9 of para 6.4, the following shall be substituted, namely:-
  - "6.4.9 All the Users are required to abide by the concept of frequency linked load dispatch and pricing of deviations from schedule as per the provisions of Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018. All SSGS shall normally be operated according to the standing frequency linked load dispatch guidelines issued by the SLDC to the extent possible, unless otherwise advised by the SLDC.";
- (VIII) after the sub-para 6.4.13 of para 6.4, the following new sub- para 6.4.14 shall be added, namely:-
  - "6.4.14 The treatment of injection of infirm power by generating stations during testing shall be in accordance with the Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018.";
  - (IX) for the existing para 6.5, the words, figures and brackets '[to be read with HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2007]' shall be omitted.;

(X) At the end of the sub-para 6.5.5 of para 6.5, the sign (.) shall be substituted with sign(:) and the following proviso shall be inserted, namely:-

"Provided that in cases where, the NRLDC schedules the collective transactions at the respective periphery of the regional entities, after prior coordination with the SLDC, the SLDC shall schedule the individual transactions for the state entities. In such cases the power exchanges shall send the detailed break up of each point of injection and each point of drawal within the State to respective SLDCs after receipt of acceptance from NLDC. Power Exchange(s) shall ensure necessary coordination with SLDCs for scheduling of the transactions.";

- (XI) for the existing sub-para 6.5.7 of para 6.5, the following shall be substituted, namely:-
  - "6.5.7 By 6.00 PM each day, the SLDC shall receive the "net drawal schedule" for the State in MW from RLDC for each time block, for the next day.";
- (XII) for the existing sub-para 6.5.8 of para 6.5, the following shall be substituted, namely:-
  - "6.5.8 SLDC shall apportion the net drawl schedule for the State received from RLDC among the beneficiaries based on their entitlements as approved by GoHP in the ISGS and BBMB generating stations and bilateral trades. SLDC shall also revise the dispatch schedule of each of the SSGS (if necessary) in the light of net drawl schedule communicated by RLDC. SLDC shall convey by 7.00 PM each day, the following:-
    - (i) the ex-power plant "dispatch schedule" to each of the SSGS in MW for each time block, for the next day;
    - (ii) the "net drawl schedule" from SSGS, ISGS and BBMB generating stations and bilateral trades to each of the beneficiary in MW for each time block, for the next day.";
- (XIII) for the existing sub-para 6.5.19 of para 6.5, the following shall be substituted, namely:-

"Revision of declared capability by the ISGS and BBMB generating stations and requisition by beneficiary (ies) during any time block shall also be permitted on intimation from RLDC. Revised schedules/ declared capability in such cases shall become effective from the 4th time block, counting the time block in which the request for revision has been received in the RLDC to be the first one. SLDC shall intimate all the concerned State Entities

about such modifications in the drawal/despatch schedules and advise them to effect corresponding change in their drawal schedules.";

- (XIV) for the existing sub-para 6.5.27 of para 6.5, the following shall be substituted, namely:-
  - "6.5.27 While availability declaration by SSGS may have a resolution of one decimal (0.1) MW and one decimal (0.1) MWh, all entitlements, requisitions and schedules shall be rounded off to the nearest two decimals at each control area boundary for each of the transaction, to have a resolution of 0.01 MW.
  - 6.5.28 Such generating stations as are selling entire saleable energy to the distribution licensee and are not considered as separate State Entities in view of explanation under clause (b) of para 6.3A, shall submit their projections/estimates and other online and offline data as may be required by ALDC so as to enable the ALDC to prepare consolidated schedule of the distribution licensee and also to keep SLDC updated on the information relating to the distribution licensee, including the same for such generating stations."; and
- (XV) after sub-para 6.6.7 of para 6.6, the following new sub-para shall be added, namely:-
  - "6.6.8 In case of the energy consumed by the open access consumer is metered in kVAh, the conversion into kWh shall be made by using the power factor applicable for respective time blocks, so as to automatically take care of aspects of reactive power compensation. However, the provisions of 6.6.1 to 6.6.7 which are basically meant for cases where metering is done on kWh basis, shall not be applicable in such cases."

#### 8. In 'Annexure-1' of the said Code -

- (I) the words, brackets and sign "(Applicable w.e.f. such date as may be decided by the Commission for introduction of Intra State ABT)" appearing before para 1 of this Annexure, shall be omitted.;
- (II) for the word "beneficiaries" wherever appearing in this Annexure shall be substituted with the words and sign "beneficiaries / State Entity".;
- (III) for the existing para 2, the following shall be substituted, namely:-
  - "2. The sum of the above two charges from all State Entities shall fully reimburse the SSGS for the generation tariff according to the given dispatch schedule. In case of a deviation from the dispatch schedule, the settlement for the under injection/ over injection as the case may be, shall be carried out as per the Himachal Pradesh Electricity

Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018.";

- (IV) for the existing para 3, the following shall be substituted, namely:-
  - "3. The summation of station wise ex-power plant dispatch schedules from each generating station and any bilaterally agreed interchanges of each beneficiary shall be adjusted for transmission and distribution losses, and the net drawl schedule so calculated shall be compared with the actual net drawl of the concerned State Entity. The excess or under drawl if any, shall be settled as per Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018.";
- (V) for the existing para 5, the following shall be substituted, namely:-
  - "5. The SLDC shall prepare the State Energy Accounts on monthly basis and on weekly basis the statements of deviation charges, Reactive Energy Charges and any other relevant details. The SLDC shall provide such statements to all the State Entities, for each period of the seven days ending on the previous Sunday mid-night, within 3 days of issuance of bills/accounts by NRPC for that period of seven days.";
- (VI) for the existing para 6, the following shall be substituted, namely:-
  - "6. The deviation charges billed for entire SLDC control area by NRPC under relevant regulations of CERC as well as the bills for URS procured by SLDC in order to maintain Grid security shall be allocated by SLDC to the State Entities based on the State Energy Accounts prepared by the SLDC within 3 days from the receipt of the weekly bill from NRPC. The amount of such consolidated bills for the SLDC control area as well as the amounts payable/receivables by the State Entities on the basis of weekly statements prepared by SLDC shall be settled as per the provisions of Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018."; and
- (VII) after para 11, the following new para shall be inserted, namely:-
  - "12. The provisions of Himachal Pradesh Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2018 shall be applicable for the various aspects covered in para 1 to 6 and (11) of this annexure."

#### 9. In 'Annexure-2' of the said Code -

- (I) for the existing para 15, the following shall be substituted, namely:-
  - "15. Only functional requirement from regulatory perspective are given in this code. Detailed specifications for the meters, their accessories and testing as well as the procedures for collecting their weekly readings shall be finalized by the STU in consultation with SLDC and concerned State Entities duly keeping in view the latest requirements under the practices being followed, the provisions in the various regulations scope in various schemes like SAMAST etc.";
- (II) for the word "beneficiaries" wherever appearing in this Annexure shall be substituted with the words and sign "beneficiaries/State Entity".

#### 10. In 'Annexure-3' of the said Code -

for the word "beneficiaries" wherever appearing in this Annexure shall be substituted with the words and sign "beneficiaries/State Entity".

By order of the Commission

Sd/-

Secretary