



**JAMMU & KASHMIR
STATE ELECTRICITY REGULATORY COMMISSION**

Draft
(Distribution Code)
REGULATIONS, 2012.

**Jammu & Kashmir
State Electricity Regulatory Commission**

Notification

No.JKSERC/DC/_____

Dated: _____

WHEREAS under Section 71 of the Jammu & Kashmir Electricity Act, 2010 (Act No. XIII of 2010), the Jammu & Kashmir State Electricity Regulatory Commission shall, among others, specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

AND WHEREAS under Section 40 of the said Act, the State Electricity Regulatory Commission may, by regulations, authorize a distribution licensee to charge from a person requiring a supply of electricity any expenses reasonably incurred in providing any electric line or electrical plant used for the purpose of giving that supply;

NOW, THEREFORE in exercise of the powers conferred by the said Sections and all other powers enabling it in this behalf and after previous publication, the Jammu & Kashmir State Electricity Regulatory Commission, hereby, specifies the following Code, namely:

Chapter 1: Preliminary

1. (1) Short title and commencement

- I. This Code may be called the "Jammu & Kashmir State Electricity Distribution Code"
- II. The provisions of this Code shall come into effect on the date of its publication in the Government Gazette

2. Definitions

(1) In this Code, unless the context otherwise requires:

- (a) **“Act”** means The Jammu & Kashmir Electricity Act, 2010 (Act XIII of 2010);
- (b) **“Agreement”** means with its grammatical variations and cognate expressions an agreement entered into by the Licensee and the consumer;
- (c) **“Apparatus”** means electrical apparatus and includes all machines, fittings, accessories and appliances in which conductors are used;
- (d) **“Area of supply”** means the area within which a Licensee is for the time being authorized by his/her licence to supply electrical energy;
- (e) **“Code”** means the Jammu & Kashmir State Electricity Distribution Code;
- (f) **“Commission”** means the Jammu & Kashmir State Electricity Regulatory Commission;
- (g) **“Conductor”** means any wire, cable, bar, tube, rail or plate used for conducting electric energy and so arranged as to be electrically connected to a system;
- (h) **“Connected Load”** shall mean the sum of the rated capacities in KW/HP of all energy consuming including portable apparatus duly wired and connected to the power supply system in the consumer’s premises. However, this shall not include the load of extension plug sockets, stand-by or spare energy consuming apparatus, installed through change over switch, which cannot be operated simultaneously and any other load exclusively meant for fire fighting purposes.

In case of domestic consumers, load of geysers plus heaters or of air conditioners without heaters, whichever is higher, is to be considered.

Any equipment which is under installation and not connected electrically, equipment stored in warehouse/showrooms either as spare or for sale is not to be considered as part of the connected load.

Explanation: Where the rating is in terms of kVA, it shall be converted to KW by multiplying it by a power factor of 0.9 and where the rating is in terms of HP, it shall be converted to KW by multiplying it by a factor of 0.746.

- (i) **“Connection Point”** means the point at which the Consumer’s plant or apparatus is connected to the Licensee’s supply system.
- (j) **“Contracted Load” or “Contract Demand”** means the maximum demand (in kW, kVA or BHP units) contracted by the consumer in Agreement with the Licensee. The contract demand cannot be reduced to less than 60% of the sanctioned connected demand.
- (k) **“Consumer’s installation”** means any composite portable or stationary electrical unit including electric wires, fittings, motors and apparatus erected and wired by or on behalf of the consumer at the consumer’s premises starting from the point of supply and includes apparatus that is available on his premises for being connected or envisaged to be connected to the installation, but is for the time being not connected.
- (l) **“Consumer’s premises”** means the area served by a service connection;
- (m) **“Control Person”** means a person identified as having responsibility for cross boundary safety;

(n) **Demand**

- a. **"Average Demand"** for the month means the ratio of the total kilowatt-hours consumed in the month to the total hours in the month.
 - b. **"Maximum Demand"** means the highest load measured in kVA or kW at the point of supply of a consumer during consecutive period of 30 (thirty) minutes or as specified by the Commission, during the billing period;
 - c. **"Permitted Demand,"** means the demand permitted by the Licensee taking into account the constraints in the transmission and distribution network.
 - d. **"Sanctioned Demand"** means the load in kW, kVA or BHP, which the Licensee has agreed to supply from time to time subject to the governing terms and conditions. The total Connected Load is required to be sanctioned by the competent authority..
- (o) **"Designated Authority of the Licensee"** means an authority who has been notified as such by the Licensee in the manner prescribed by the Commission to exercise powers under specific provisions of this Code;
- (p) **"Emergency"** means a situation arising out of threat to security of State, public order or a natural calamity or such other situation arising in the public interest which is likely to disrupt supply of electricity:
- (q) **"Engineer"** means an engineer, by whatever name designated, employed by the distribution licensee and is in charge of the local area of supply and includes any other person duly authorized by him or his superiors, to exercise any power of an engineer under this Code.

- (r) **“Extra High Tension (EHT) consumer”** means a consumer who obtains supply from the Licensee at Extra High Voltage.
- (s) **“High Tension (HT) consumer”** means a consumer who obtains supply from the Licensee at High Voltage.
- (t) **“Low Tension (LT) consumer”** means a consumer who obtains supply from the Licensee at Low or Medium Voltage:
- (u) **“Load”** means connected load or sanctioned load, as the case may be;
- (v) **“Load Factor”** means the ratio of the Average Demand for the month in terms of Kilowatts to the Maximum Demand for the month in terms of Kilowatts. The ‘Load Factor’ shall be calculated to three decimal places and rounded off to two decimal places
- (w) **“Month”** “unless the context otherwise requires, shall mean a month reckoned according to the British Calendar. With reference to billing and payment, it shall mean the period between the date of meter reading in a particular month and the corresponding date of meter reading of the immediately succeeding or preceding month, as the context requires.
- (x) **“Occupier”** means the person in occupation (whether as owner or otherwise) of the premises where electricity is used or intended to be used.
- (y) **“Operational boundary”** means the boundary between the equipment and apparatus operated by the Licensee and those operated by the Consumer.
- (z) **“Power Factor”** means the ratio of the real power to the apparent power and average power factor means the ratio of the Kilowatt-hours to the Kilovolt-ampere-hours consumed during the billing month.
 - (aa) **“SSLDC”** means State’s Sub Load Dispatch Center for local control at various places in Jammu & Kashmir.

(bb) “**SLDC**” means State Load Dispatch Center at Jammu.

(cc) ” **Voltage** “

- “**Low Voltage**” where the voltage does not exceed 250 volts under normal conditions, subject, however, to the percentage variation allowed by rules.
- “**Medium Voltage**” where the voltage is higher than 250 volts and does not exceed 650 volts under normal conditions, subject, however, to variation allowed by rules.
- “**High Voltage**” where the voltage is more than 650 volts and does not exceed 33,000 volts under normal conditions subject, however, to variation allowed by rules.
- “ **Extra High Voltage**” where the voltage exceeds 33,000 volts under normal conditions, subject, however, to variation allowed by rules.

(dd) “**Year**” means a year commencing on the first day of April.

Words and expressions used in this Code but not defined either in this Code or the Act shall have the same meanings as understood in engineering and commercial circles.

This Code shall be interpreted and implemented in accordance with and not at variance with the provisions of the Act read with the Jammu & Kashmir Electricity Rules, 1978 and Regulations in this regard issued by the Commission.

Chapter 2: Entities pertaining to Distribution

3. Entities involved in distribution and their respective roles:

The following are the entities involved in the distribution of electricity and their respective roles, -

(1) **State Load Dispatch Center (SLDC):** It is the apex body to ensure integrated operation of the power system in the State. Its functions as assigned to it under the Act are:-

- a. be responsible for optimum scheduling and despatch of electricity within the State, in accordance with the contracts entered into with the Licensees or the Generating Companies operating in the state;
- b. monitor grid operations;
- c. keep accounts of the quantity of electricity transmitted through the State Grid.
- d. exercise supervision and control over the intra-State transmission system and
- e. be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the state grid in accordance with the grid standards and State Grid Code.

SLDC may levy and collect such fee and charges from the Generating Companies and Licensees engaged in intra state transmission of electricity, which may be specified by the Commission.

In addition to the above, it shall also keep accounts of the consumers/licensees/persons engaged in generation and traders involved in open access transactions.

(2) **State Sub Load Dispatch Center (SSLDC):** It is a body subordinate to SLDC to perform, under the supervision, control and direction of the State Load Dispatch Center, its functions in any specified area in the State. It shall also collect necessary data relevant to the SLDC, make operational analysis and report to SLDC.

- (3) **State Transmission Utility (STU):** Its functions are to-
- (a) undertake transmission of electricity through intra-State transmission system (ISTS);
 - (b) discharge all functions of planning and coordination of ISTS with Central Transmission Utility, other State Government, Generating Companies, Regional Power Committees, CEA, Licensees and any other person notified by the Government in this behalf;
 - (c) ensure development of an efficient coordinated and economical system of Intra State transmission lines for smooth flow of electricity from Generating Stations/HV Sub-Stations to the Load Centers;
 - (d) provide non-discriminatory open access to its Transmission systems for use by:-
 - (i) any Licensee or Generating Company on payment of the transmission charges; or
 - (ii) any consumer on payment of the transmission charges and a surcharge thereon, as may be specified by the Commission.
 - (e) implement the Code with respect to the Distribution Licensees and oversee for prudent practices and grid discipline;
 - (f) facilitate review and recommend amendments to the Code to Commission without prejudice to the provisions in clause 51 of this code
 - (g) recommend for issue of distribution licenses;
 - (h) supervise, direct and control the works of construction, operation and maintenance of any ISTS and ;

- (i) take measures for resolution of issues arising due to non-compliance of operational / commercial provisions of the Code by the respective entities.

(4) Distribution Licensees :

The duties of the Distribution Licensee are

- i. To develop and maintain an efficient coordinated and economical distribution system in his/her area of supply and to supply electricity in accordance with the provisions contained in the Act.
- ii. To implement the code with respect to the requirements from the consumers and oversee for prudent practices and code discipline.
- iii. To facilitate review and recommend to the Commission amendments to the code without prejudice to the provisions in clause 51 of this code.
- iv. To ensure that the consumer installations comply with the requirements of the code at the time of effecting service connection.
- v. To take measures for resolution of issues arising due to non-compliance of operational/commercial/technical regulations of the code by the various sections of consumers in their jurisdiction.
- vi. To allow the Distribution lines to be used as common carrier the Commission having introduced non-discriminatory open access to any of the consumer in his/her area to get supply from other Licensees/ Generating Companies outside his/her area.

(5) **Jammu & Kashmir State Electricity Regulatory Commission (JKSERC):**

The functions of Commission as set out in the Act and Regulations made there under are in particular, to,-

- i) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk, and retail as the case may be within the State;
- ii) introduce non-discriminatory open access as per the provisions contained in the Act and in phases. Where open access has been provided to a category of consumer, the Commission shall determine the wheeling charges and surcharge thereon;
- iii) Regulate electricity purchase and procurement process of distribution licensees including the price at which the electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State
- iv) facilitate intra state transmission and wheeling of electricity;
- v) specify and enforce standards with respect to quality, continuity and reliability of service by Licensees

Chapter 3 : Distribution System Planning

4. Distribution System Planning

- (1) The main Objectives for the distribution system planning are to ,-
- a. plan, design and develop the distribution system so that it may be operated in an economical, safe and reliable manner conforming to the relevant Act and Rules/Regulation there under,

- b. specify technical conditions, which enable the licensee and consumers to meet set standards for efficient operation of the electrical interface between them.
 - c. define the procedure for the exchange of data on system planning between the Licensee and consumers of the distribution system.
 - d. provide sufficient information for a consumer to access opportunities for connection.
 - e. establish methods through which the Licensee shall coordinate with the STU, which includes furnishing of data required by the Commission/ or the Authority.
- (2) These guidelines of planning cover the individual sub-stations, system planning, analysis and the techno economic aspects in the field of Distribution systems. It applies to all the consumers already connected or awaiting or seeking connection to the distribution system, Distribution Licensees and State Transmission Utility (STU), wherever it is applicable.

5. Distribution Planning Framework

- (1) The main areas, which require a careful network planning, and analysis are:
- (a) Networking extension planning – newly built networks or extension of already existing network or configuration of the existing network to meet the changed load or feeder situation or operational existence.
 - (b) Network component design.
 - (c) Providing solutions for operational problems like low voltage, inadequate short circuit withstand capability, power swings and protection selectivity errors.
- (2) Networks are generally extended over several stages. The operational conditions are then simulated for this future load

forecast. This step will facilitate the fulfilling of all the operational conditions after commissioning of the new extension stage. A careful network analysis provides the decision aids for selecting the most reliable and cost effective solution from among several configurations. To dimension the individual components like transformer, cables and switchgear and to provide an optimal solution for the total system, an extensive analysis of the network is often necessary.

The system-planning wing,

- (a) examines the operational behaviour of electrical systems both in normal operation and under fault condition
 - (b) proposes remedial measures, if the operational conditions do not conform to the requirements for quality supply.
 - (c) promotes the development of components by examining operational conditions and equipment requirements,
 - (d) advises in system configuration, system structuring and component design questions and,
 - (e) plans the extension of already existing systems as well as the new construction of supply systems within the framework of the total system.
- (3) Intensive sessions are required to be held to clarify the task situation and it may be processed in direct contact with the direct customer as defined in Sub-Regulation (XVI) of regulation 2(i) of the Jammu & Kashmir State Electricity Regulatory Commission – Open Access in Intra State Transmission and Distribution Regulations 2006. Distribution network are cost intensive and hence they require long term planning. The location and nature of the connected loads on the quality and reliability of the power requirement determine the structure of the distribution network.

- (4) The system planning is also necessary in the cases that include
- Network modernization and upgrading.
 - Changes in operational and protection philosophy or neutral grounding.

The tasks, problems and activities related to Network Expansion planning, component design and operational problems are brought out as follows.

S.No.	Description	Tasks and Problems	Activities
1	Expansion planning	Load increase New transformer/substations Integration of peripheral networks Cable relaying Modernization of substations Network coupling Power station extension Upgrading the voltage level	Network documentation Graphic Information System Network calculations for load flow and short-circuit. Dynamic network Calculations.
2	Component design	Circuit-breaker stress Cable cross section Transformer size Neutral earthing resistor	Stability study Fault analysis Relay coordination studies
3	Operational problems	Substation faults Voltage quality Harmonics Earthing problems Motor starting Power swings Frequency of occurrence of faults Fault tripping Overloads Over voltages	Harmonics analysis Harmonics filter design Earthing measurement Network configuration Substation design Economic analysis Relay selection provision of effective earthing Insulation coordination

- (5) Stages involved in network expansion planning

- (a) Defining the task
- (b) Commencing the planning task which consists of:
 - i) Recording of the status of the existing distribution network and analysis of its operational situation
 - ii) Load forecast and analysis – Compilation of data on the characteristic features of the loads that will be incident in the near future and that of the existing loads;
 - iii) Estimation of load development
 - iv) Examination of the alternative options
 - v) Checking the issues involved in the above options and also the feasibility of introducing a new transformer, enhancement of existing transformer capacity etc.
 - vi) Establishment of site location and new substation design.
 - vii) Modification/Redesign of sub-transmission and distribution networks and its protective arrangement including protective relay setting and coordination.
 - viii) Study on alternatives for least cost investment.
 - ix) Assessment of operational advantages and disadvantages and anticipated supply reliability levels of various options
 - x) Investment planning
 - xi) Procurement of the required network components

6. Planning process:

The system planning considerations are -,

(1) Load Forecast

It commences with a forecast of the anticipated load requirements (both demand and energy). The Licensee shall forecast the demand for power within the area of supply, annually or more frequently, if required by the Commission, in each of the succeeding five years.

The Licensee shall prepare a demand forecast and generally follow the procedures set out herein. The licensee shall create a database of loads for each consumer category and for each distribution substation and update it annually.

(2) Load Research:

The Licensee shall develop a load research program with the objective of obtaining customer load profile data that provides the usage characteristics of specific appliances, consumers and group of consumers. This load research will also facilitate,

- (a) Demand status according to end use at the hour of system peak, daily, monthly, seasonally or annually
- (b) Hourly end use demand for the day of the system peak, monthly, seasonally or annually
- (c) Hourly end use demand for the average day of the system peak, monthly, seasonal or annually.
- (d) Category wise diverse or coincidence factors and load factors
- (e) Total energy consumption for each category of consumer by month, season or year.
- (f) Category wise non-coincident peak demands.

(3) Load Data:

From the metering data collected at each connection point with the transmission system, the Licensee shall develop load curves for the area fed and also the system load curve for the area of supply in point by applying a suitable diversity factor. By reconciling the figure for actual energy sales with the drawal based on the metering data compiled, approximate losses in the system may be arrived at for any period. This data shall be furnished to the STU and the Commission annually. All the consumers with a demand of

1 MW and above seeking connection shall furnish their load data to the Licensee, as detailed in Annexure I. The Licensee shall exercise special care in monitoring the actual development of loads in respect of consumers who desire to contract for loads of 1 MW and above at any single point. On demand by the consumer seeking connection, the Licensee shall furnish relevant system data as detailed in Annexure – II. The Licensee shall update the system data at least once in every six months.

(4) Forecast Methodology:

The Licensee shall formulate the long-term demand forecast taking into account the previous financial year ending March 31st as the Base Year and projecting the demand over the succeeding five years.

(a) Energy Sales per tariff class shall be projected in the forecast period over the corresponding figures relating to the Base Year by adopting a suitable methodology, such as considering the trend for the previous five years.

(b) The projections shall take into account assumed normal growth for non-specific loads, specific and identified loads of 1 MW and above and also the effects if any, of **Demand Side Management and Loss Reduction Measures.**

(c) The Licensee shall compare the aggregate energy requirement at each of the connection points with the transmission system after accounting for system losses. The future peak load in each of the years in the forecast period may be derived using an Annual Load Factor.

(d) The Licensee shall take into consideration any authenticated report on demand forecast or Power survey carried out by agencies like Advisory Board on Energy, Planning

Commission, Central Electricity Authority, STU, Commission, CERC and Government of Jammu & Kashmir. The Licensee shall forward the long term demand forecast for the area of supply on an annual basis to the STU and the Commission, along with the details as indicated below.

- i.) Data.
- ii.) Methodology
- iii.) Assumptions

The Licensee under the conditions of the licence shall co-operate with the STU in the preparation of demand forecasts for the State of Jammu & Kashmir. The format for the demand and energy forecasts shall be specified by the STU.

(5) Planning Criteria and performance bases :

The planning criteria for the distribution system as specified by the Commission shall form the basis. The performance bases to be considered in the system planning are as follows:

- a) The Distribution performances established herein shall be implemented in a manner so as to ensure that no entities are forced to achieve goals beyond the capability and limitations of the current system in the immediate future while continuing to strive for the higher standards by improving their system in the long term. As for the existing arrangements, the implementation can be in stages and shall be determined by the Commission.
- b) The capacity of step down transformers used in the distribution system and the layout of bus bars, switchgear, transformers, capacitors, earthing system, surge arrestors, control panels, station battery, fire extinguishers and other accessories required for the

protection and safe operation of the substations shall as far as possible be standardized by the Licensees and shall conform to the guidelines and principles contained in the Code. The Commission, in specific cases and to ensure uniform adoption, can however specify the standards to be adopted.

- c) While planning the distribution system, the Licensee shall examine the cost effectiveness of loss reduction measures without compromising on the security standards. The Licensee shall take measures to reduce the length of low tension bare conductor, overhead lines, wherever cost effective and these shall include but not limited to the following:
 - i) Achievement of HT: LT ratio to the level of 1 to 1.5
 - ii) Laying of underground cables
 - iii) Increasing the number of low loss distribution transformers.

- d) Substation Design Criteria: HV substations, Sub transmission, primary and secondary distribution shall be designed taking into account the following factors:
 - i) Safety of Operating Personnel
 - ii) Adequate cross section of Busbar to meet the electrical and mechanical requirements.
 - iii) Mechanical and electrical interlocks to prevent inadvertent operation of equipments including switches .
 - iii) Adequate Protection System with proper insulation co-ordination

- iv) Adequate Flexibility in operation and maintenance.
- v) Operation and Maintenance needs.
- vi) Space for future expansion

Substation layouts shall comply with the safety measures specified by the Authority under section 47 of the Act.

- e) Distribution Line Clearances: Overhead lines shall comply with the safety measures specified by the Authority under section 47 of the Act.
- f) Earthing : The distribution system shall be effectively earthed in accordance with the Indian Standards in force, substation earth mat shall be designed to have a low overall impedance/resistance and to have a minimum transient ground potential rise (TGPR) during fault, giving rise to only permissible safe touch and step potential. All individual earth electrodes, earthing pits and interconnection arrangements shall be correctly installed and maintained. The bodies, cases, trucks and enclosures of all equipment shall be properly earthed in accordance with the system requirements and equipment ratings. Metallic line supports of overhead lines, cable sheaths and shields shall also be earthed in a proper manner. Connections may be compressed using crimping tool, welded, braced, or bolted using suitable lock washers/ locknuts. Bolts should not be used for buried connections.

Chapter 4 : Connectivity Conditions

7. Connectivity Conditions: The Connectivity Conditions specify the minimum technical and design criteria, which shall be complied by any agency connected to, or seeking connection to the Distribution System. The Licensee shall ensure compliance of the above criteria

by any agency as a pre-requisite for the establishment of an agreed connection. The terms and conditions of supply under Chapter 6 of this code shall be read in conjunction with this chapter. The connectivity conditions shall fulfill the requirement stipulated in section 44 and 47 of the Act. The Connectivity Conditions are provided to ensure that:

- (a) The basic rules for connections are complied by all agencies. This will help to treat all agencies in a non-discriminatory manner.
- (b) Any new or modified connection, when established, shall not suffer unacceptable effects due to its connection to the Distribution System nor produce unacceptable effects on the system or any other connected agency.
- (c) The ownership and responsibility for all the equipments, shall be clearly specified in a schedule (site responsibility schedule) for every site, where a connection is made.

8. Distribution System Interface with Small Generators-The electricity generated by the private developers pertaining to power projects based on renewable energy sources of wind, biomass etc or captive power plants shall be evacuated by interfacing with the distribution system or intra-state grid. The voltage levels, connection points and connectivity conditions, safety etc., for such interfacing shall comply with the conditions laid down under Jammu & Kashmir Electricity Grid Code Regulation-2007.

9. Distribution Systems protection arrangement:

- (1) Protection of the distribution system and the consumer's system shall be well coordinated. Individual protection schemes shall have adequate selectivity, sensitivity and reliability and speed of operation to disconnect the faulty equipment/circuit from the healthy system. No item of

electrical equipment shall be allowed to remain connected to the distribution system unless it is covered by appropriate protection scheme.

- (2) In the distribution system protection for lines/U.G cables, transformers and other equipments shall be followed by the Licensee, and by the consumers of the distribution system as well in accordance with the provisions made in Grid Code. The distribution system relay setting shall be coordinated with that of STU and it shall be endorsed by STU and SLDC.
- (3) Every consumer within the area of supply of the Licensee who are availing/desire to avail of supply at 66kV, 132 kV, 220 kV level shall furnish the details of their equipment protection schemes to the Licensee and get them approved before the connection is effected. On demand, the Licensee shall provide similar protection data relating to their Transmission/distribution systems to any consumer seeking the above connection.
- (4) The Licensee and the EHT consumers of the distribution system shall attend the protection co-ordination meetings as and when called upon to do so by the STU/SLDC to discuss all related issues and take remedial measures as discussed and agreed to in such meetings.

10. Operational Labeling: - The Licensee and the consumers shall be responsible for the provision and maintenance of clear, unambiguous signs and labels indicating the numbering and/or name of the equipment/apparatus and circuit at the substations and connection sites.

11. Metering: - The minimum requirement of metering for substations in distribution system, Generating station and higher voltage

consumer shall conform to the requirement stipulated in Jammu & Kashmir State Electricity Grid Code.

12. Communication: Reliable communication links shall be established for the exchange of data, information and operating instructions between the Licensees, consumers with demand of 1 MW and above, the load control centers of the Distribution Licensee and the SLDC / SSLDC, as the case may be.

13. The Licensee shall monitor the voltage, frequency and power factor in the distribution system at different points, during the peak and off peak hours and take all reasonable measures for the improvement of the same, if it falls below the prescribed level continuously.

(1) Voltage: The variation in the voltage levels in the distribution system may depend upon the available VAR generation, system loads and configuration of the transmission system and distribution system. Under normal operating conditions, the Licensee shall exercise proper voltage monitoring and control in the distribution system beyond the point of interconnection so as to maintain voltage at all levels in accordance with the Standards of Performance specified by the Commission. The means adopted shall include.

- a. Use of transformers equipped with tap changers (on load /Off Load).
- b. Balancing of loads between phases of the LT network.
- c. Limiting kVA- km loading of the circuits
- d. Reduction of load from overloaded transformers by planning and installing additional distribution transformers.

- e. By installing the required regulating transformers (Boosters) and Synchronous Condensers at appropriate locations.
 - f. Installation of shunt capacitors/Capacitor banks at optimum locations depending upon the requirement of VAR compensation in the network
 - g. Provision of switched/fixed capacitor, as the case may be, on the (secondary) LV side of Distribution Transformers.
- (2) **Frequency:** The Licensee shall abide by the instructions issued by the SLDC on load frequency control for maintaining the supply frequency within the statutory limits either by resorting to load shedding or by rolling blackouts.
- (3) **Power Factor:** The Licensee shall maintain the system power factor at the level of minimum of 0.9 (Lag) at the interface/s and carry out system improvement measures at strategic points in the distribution system by undertaking useful system studies and installing the required VAR compensation equipment to meet the situation. The Licensee shall also counsel and advise the consumers on the ways and means to improve the power factor in their respective systems to the required level. It shall be obligatory on the part of the consumers to improve the power factor of their connected loads to the required level in accordance with the provisions made in this code. Every consumer with a power factor less than the stipulated level may be suitably advised to rectify the situation by installing appropriate power factor correction equipment, without prejudice to the levy of compensation charges as per the orders of the Commission from time to time.

(4) Special Conditions: Special conditions shall be incorporated in the connection agreement for loads with high harmonic content, low power factor and unacceptable supply voltage and frequency fluctuations, so that the consumer shall be forced to install appropriate correction equipments to meet the requirements of this Code.

14 Demand Side Management: The Licensee shall make suitable provisions in the Service Connection Agreements to make it mandatory on the part of selected categories of consumers with a contracted Demand over and above a specified kVA limit (to be specified by the Commission) to carry out an Energy Audit at their establishment for in-plant load management and for carrying out end use energy efficiency/conservation measures. On their part, the Licensee shall provide such consumers with relevant information relating to energy audits and its methodologies and the financial incentives offered by recognized financial institutions, banks and other government organizations.

Chapter 5: Operation Guidelines for Distribution System

15. The procedures and practices to be followed by the Licensees and consumers whose electric lines and electrical plants are connected to the Licensee's distribution system for safe and efficient operation of their respective systems are -,

(1) **Demand Estimation:** The Licensee shall provide to the SLDC/SSLDC, its projection of demand on a year ahead, month ahead and day ahead basis. The time frames for such submission, as set out in the Jammu & Kashmir State Electricity Grid Code shall be adhered to by the Licensee. The

SLDC or SSLDC shall be the agency to receive the details from the licensees or issue directions to the Licensees as the case may be in line with the requirements prescribed in this chapter on Operational Guidelines and as per the provisions of the relevant Code. On demand, the consumers concerned shall furnish these data to the Licensees. The Licensee shall estimate its hourly and daily demand on the basis of relevant load curves drawn on a day ahead basis, subject to modification depending upon information received from any specific consumer or caused by any untoward incident/contingency.

- (2) Scheduled Shutdown Programs: The Licensee shall furnish the proposed (planned) outage (scheduled shutdown) programs to the STU/SLDC as specified in Jammu & Kashmir State Electricity Grid Code. Planned outage programs shall furnish clearly the details of the electric lines/cables and the equipments of the distribution system that will be taken out of service, and other details of the planned interruption namely the date, duration and quantum of load that may be limited/restricted at any interconnection during this planned interruption.
- (3) Contingency Planning: The contingencies in the distribution system are mainly due to:
 - a. Total or partial blackout of intra transmission or inter transmission network. (Loss of generating sources)
 - b. Failure of network components like Breakers, Power Transformers, Current Transformers, Potential Transformers and lines in the transmission system.
 - c. Breakdown of components like Distribution Transformers, lines, etc. in the distribution system.

The procedure to be followed during such contingencies for the restoration of supply is detailed in the sections to follow

- (4) **Intra/Inter Transmission System outage:** In regard to the restoration of supply during the total black out at any point of interconnection, the Licensee shall abide by the black start procedures framed by the STU/SLDC. Likewise, the Licensee shall follow the guidelines provided by the STU during the outage of the apparatus or lines/cables in the above networks. The licensees may also follow an approved Demand Side Management, Load shedding, rolling blackouts and other measures.
- (5) **Distribution System Outage:** The interruption of the power supply to any part of the distribution system lasting more than an hour, due to the breakdown of any part of the distribution system/its components, may be termed as distribution system failure and the Licensee shall evolve a suitable supply restoration procedure for such distribution system failures under intimation to the Commission.
- (6) **Demand Management/Load Shedding:** On getting directions from the SLDC rolling blackouts for short duration shall be carried out by the Licensees to maintain the load generation balance and security of the network. This may also be necessary due to the loss of any circuit, equipment or any other operational contingency that may occur in their Distribution Networks also. The Licensee shall estimate the loads that may be shed in discrete blocks at each interconnection point after consultation with the consumers if possible and submit the same to the SLDC. The consumers shall cooperate with the Licensee in this regard. The Licensee shall work out the modalities of the load shedding. A detailed

procedure shall also be furnished to the SLDC and other officials in charge of the downstream substations of the Licensee, where such load shedding/rolling blackout are to be carried out. When provisions are available for the automatic load shedding with the aid of under frequency relays, the circuits involved and the quantum of load to be shed shall be intimated to the SLDC and officials in charge of downstream substations of the Licensee. The settings adopted for the UF relays shall also be furnished. If any constraint or bottleneck in the transmission system and/or distribution system, warrants rotational load shedding then it shall be resorted to by the Licensees in their distribution system. On such occasions, the public shall be promptly informed of such arrangements through the media. Consumers with contracted demand of 1 MW and above and essential services such as hospital, public water works etc. shall be notified through telephone/fax/e-mail or any other communication systems.

16. Safety Aspects: -

(1) Provisions with respect to safety and electricity supply is dealt in detail under section 47 of the Electricity Act, which reads as:

“ (1) The Authority may in consultation with the State Government, specify suitable measures for –

(a) Protecting the public (including the persons engaged in the generation, transmission or distribution or trading) from dangers arising from the generation, transmission or distribution or trading of electricity, or use of electricity supplied or installation, maintenance or use of any electric line or electrical plant;

- (b) Eliminating or reducing the risks of personal injury to any person, or damage to property of any person or interference with use of such property;
 - (c) Prohibiting the supply or transmission of electricity except by means of a system which conforms to the specification as may be specified;
 - (d) Giving notice in the specified form to the Appropriate Commission and the Electrical Inspector, of accidents and failures of supplies or transmissions of electricity;
 - (e) Keeping by a generating company or licensee the maps, plans and sections relating to supply or transmission of electricity;
 - (f) Inspection of maps, plans and sections by any person authorized by it or by Electrical Inspector or by any person on payment of specified fee;
 - (g) Specifying action to be taken in relation to any electric line or electrical plant, or any electrical appliance under the control of a consumer for the purpose of eliminating or reducing a risk of personal injury or damage to property or interference with its use;”
- (2) The measures specified by the Authority, in accordance with the above provision shall form the basis for safety. Primary focus should be laid on safety in all the works related to the location, erection, installation, operation and maintenance of the equipments, devices and other network components at the consumer’s mains/premises. Safety of the end users, operating personnel and public shall be given focused attention. Adequate training will be imparted to the operating personnel with the adoption of relevant operating techniques and safety procedures/ precautions necessary for satisfactory operation of the system and
-

its equipments which include cross boundary connections and interface points as applicable.

(3) Safety co-ordination: The salient aspects involved in safety co-ordination are:

- a. The Licensee and the consumers of the distribution system shall observe safety rules, practices and precautions when work is to be carried out on any apparatus or circuits in any part of the distribution system or in any part of the consumer system.
- b. The objective of this safety co-ordination is to enforce the principles of safety as prescribed in the measures specified under section 47 of the Act and practices for their implementation.
- c. There shall be proper co-ordination between operating personnel of the Licensee and the consumers, between two distribution licensees across common control boundaries, for carrying out work on any apparatus, switchgear, or circuits belonging to each party at the point of interconnection or interface.
- d. The Licensee shall follow the provisions of the Jammu & Kashmir Electricity Grid Code for cross boundary operations in co-ordination with the STU
- e. The Licensee, all consumers and any other distribution Licensee having common electrical interface with the Licensee shall designate suitable persons to be responsible for safety co-ordination. These persons shall be referred to as control persons. The list of control persons, their designation and telephone numbers shall be exchanged between all persons

- concerned. Any change in the list shall be notified promptly to all concerned.
- f. The disconnecting device/or devices shall be provided at each electrical interface, which shall be capable of effectively disconnecting the system of the Licensee and other consumers and grounding the respective system at the common boundary. These devices shall be identified and marked by the Licensee and respective consumer and shall be maintained in good condition at all times. Such disconnecting devices shall be provided with interlocks to prevent inadvertent switching operations by unauthorized persons.
- g. Permission in writing shall be issued by the appropriate control person at the electrical interface to his/her counterpart responsible for carrying out work on any apparatus, switchgear or circuits beyond the electrical interface. Such permissions shall be termed as Line Clear Permits (LCP). The format of the LCP shall be standardized by the Licensee and shall be used by all concerned. Detailed rules framed by the Licensee pertaining to such works and Line Clear Permits (LCPs) shall be circulated to its personnel as part of its internal administration.
- h. A list containing the names and other details of the Officers/staff who are authorized to issue/get LCPs on the apparatus, lines and cables may be displayed at an apt location in the substation.
- i. The Licensee shall formulate a checklist of operations to be carried out before the issue and return of LCPs and procedures for safety co-ordination for each electrical interface. Such procedures and checklist shall be issued to all concerned, by the Licensee, for implementation.

- j. The Licensee shall prepare a safety manual incorporating all operating procedures in addition to safety rules and safety precautions applicable to its distribution system and the Consumer's system and circulate the same among all staff concerned and Consumers for strict adherence.
 - k. The Licensee shall devise and maintain uniform operating procedure for switching, isolation, and restoration, live line working and test charge of defective lines/apparatus duly incorporating the safety aspects.
- 17.** Protective clauses as applicable to Railways, Highways, Airport, telegraphic signaling line etc., are as follows:
- (1) Protection of Railways, Highways, Airport, etc.** as set out in section 121 of the Act reads as:
"No person shall, in the generation, transmission, distribution, supply or use of electricity, in any way injure any railway, highway, airports, tramway, canal or water-way or pier vested in or controlled by a local authority, or obstruct or interfere with the traffic on any railway, airway, tramway, canal or water-way."
 - (2) Protection of telegraphic, telephonic and electric signaling lines** as set out in section 122 of the Act reads as:
"
 - (1) Every person generating, transmitting, distributing, supplying or using electricity (hereinafter in this section referred to as the "operator") shall take all reasonable precautions in constructing, laying down and placing his electric lines, electrical plant and other works and in working his system, so as not injuriously to affect, whether by induction or otherwise, the working of any wire or line used for the purpose of telegraphic,

telephone or electric signaling communication, or the currents in such wire or line.

- (2) Where any difference or dispute arises between the operator, and the telegraph authority as to whether the operator has constructed, laid down or placed his electric lines, electrical plant or other works, or worked his system, in contravention of sub-section (1), or as to whether the working of any wire, line or current is or is not injuriously affected thereby, the matter shall be referred to the Government and the Government, unless it is of opinion that the wire or line has been placed in unreasonable proximity to the electric lines, electrical plant or works of the operator after the construction of such lines, plant or works, may direct the operator to make such alterations in, or additions to, his system as may be necessary in order to comply with the provisions of this section, and the operator shall make such alterations or additions accordingly:

Provided that nothing in this sub-section shall apply to the repair, renewal or amendment of any electric line or electrical plant so long as the course of the electric line or electrical plant and the amount and nature of the electricity transmitted thereby are not altered.

- (3) Where the operator makes default in complying with the requirements of this section, he shall make full compensation for any loss or damage incurred by reason thereof, and, where any difference or dispute arises as to the amount of such compensation, the matter shall be determined by arbitration.

Explanation. - For the purposes of this section, a telegraph line shall be deemed to be injuriously affected if telegraphic, telephonic or electric signaling communication by means of such line is, whether through induction or otherwise, prejudicially interfered with by an electric line, electrical plant or other work or by any use made thereof."

18. Accident Reporting: Notice of accidents and inquiries as set out in section 123 of the Act reads as:

"

- (1) If any accident occurs in connection with the generation, transmission, distribution, supply or use of electricity in or in connection with, any part of the electric lines or electrical plant of any person and the accident results or is likely to have resulted in loss of human or animal life or in any injury to a human being or an animal, such person shall give notice of the occurrence and of any such loss or injury actually caused by the accident, in such form and within such time as may be prescribed, to the Electrical Inspector or such other person as aforesaid and to such other authorities as the Appropriate Government may by general or special order, direct.
- (2) The Appropriate Government may, if it thinks fit, require any Electrical Inspector, or any other person appointed by it in this behalf, to inquire and report-
 - (a) As to the cause of any accident affecting the safety of the public, which may have been occasioned by or in connection with, the generation, transmission, distribution, supply or use of electricity, or
 - (b) As to the manner in, and extent to, which the provisions of this Act or rules and regulations made hereunder or

of any licence, so far as those provisions affect the safety of any person, have been complied with.

- (3) Every Electrical Inspector or other person holding an inquiry under sub-section (2) shall have all the powers of a civil court under the Code of Civil Procedure, 1908 (5 Of 1908) for the purpose of enforcing the attendance of witnesses and compelling the production of documents and material objects, and every person required by an Electrical Inspector be legally bound to do so within the meaning of section 176 of the Indian Penal Code (45 of 1860).

19. Major Incident Reporting: -

- (1) The reporting on major incidents shall conform to the provisions under section 47 and 122 of the Act. Among the incidents that would affect the distribution systems are:
- i. Aberrations/deviations in system voltage and frequency level. (Both for HV and LV networks exceeding the set tolerance levels).
 - ii. Major breakdowns in the distribution system.
 - iii. Major deviations of load drawal from any interconnection relative to the day ahead estimation of demand furnished by the Licensee to the STU / SLDC.
 - iv. Any other incident which the Licensee or consumer may consider worth reporting with regard to safe and reliable operation of the distribution system.
 - v. The Licensee and the consumers shall establish a hierarchy for reporting incidents and a procedure for the exchange of information. The consumers shall promptly furnish

information to the Licensee regarding any major incident occurring in their system to the Licensee.

- vi. The adverse impact of Harmonics in the system.
- vii. The adverse impact of the operation of shunt capacitor banks on other equipments/devices in the network and at the consumer's premises as well.

Explanation: The basic characteristics of the incident, which constitute a major break down, shall be determined by the concerned Licensee/Consumer and reported.

(2) Prescribed time frame for the reporting by the Licensees in respect of major incidents.

- a. Deviations in the system voltage or frequency
Exceeding the set tolerance levels – monthly
- b. Major deviation in load drawals -- monthly
- c. Major breakdowns of lines/cables/equipments
(Including any loss of capacity of 5 MVA and above)
 - Preliminary report followed by a detailed report -- Within 24 Hours
Indicating status, nature of break down,
total break down period, restoration
period, and estimate of losses/ repairs,
loss to persons /property, number
of consumers affected etc
- (d) Any other incident referred to in the Code - Monthly

20. Condition based monitoring/Preventive Maintenance programmes shall be designed as follows:

- i. The Licensee shall prepare pre-monsoon/pre-winter inspection and other preventive maintenance schedules for lines and equipment and ensure its compliance at all levels. Necessary advance intimation shall be given to the consumers likely to be affected.

- ii. The level of maintenance shall be appropriate to meet the manufacturers maintenance recommendations and the performance standards of the Licensee.
 - iii. All the bottom line, all the HV lines in the control area of the Licensee shall be inspected twice annually.
 - iv. Periodical testing and maintenance of transformers, switchgear and protective equipments and earthing in the distribution system shall be carried out by the Licensee in line with the manufacturers recommendations/standard practices for ensuring their smooth operation, serviceability, safety, reliability and efficiency.
 - v. The Consumers also shall maintain their apparatus, switchgear, electric lines, metering equipment and cables including their generator sets in good operating condition and conforming to the measures specified under section 47 of the Act and keep them suitable for connecting to the distribution system in a safe and reliable manner. Consumers shall ensure proper interlock facility provided for their generator sets to prevent parallel operation with the Distribution System of the Licensee provided such generators are not interfaced with the Licensee's network for supply of power.
 - vi. Licensee shall set up a Consumer Complaint Center and lay down suitable procedures.
 - vii. The Licensee shall have provisions for sealing the meter, checking the quality of new meters, periodical calibration of customer meters, repair of defective meters and other related works.
- 21. Tools, plants and Spares:** The Licensee shall ensure availability of proper tools and plants and keep the work places in good condition for carrying out the required repairs/maintenance.
-

- Serviceability of tools and plants must be checked periodically and certified for their healthiness. The Licensee shall maintain an inventory of replacement spares required for maintenance purposes at suitable locations. A clear policy may be laid down by the Licensee in this regard and submitted to the Commission for reference.
- 22. Training:** The Licensee shall set up Training centers (or in coordination with the established Training centers) to impart proper and adequate training to its workmen and supervising staff in modern distribution practice, maintenance techniques and safety procedures. A syllabus suitable for the intended purpose shall be followed by them. The syllabus shall be submitted to the Commission for its perusal and approval.
- 23. Research and Development :** The STU shall, in consultation and approval of the Commission, carry out R&D to analyze and solve common operational and other problems related to distribution. Also they will be responsible for carrying out improvement and updation studies. The study results shall be properly communicated to all the distribution licensees for adoption. The expenditure towards the R&D work shall be met from a common fund for which the Commission shall prescribe the rate of contribution from each Licensee

Chapter 6 : Terms and Conditions for supply of Electricity

- 24 Terms and conditions for supply of Electricity:** The terms and conditions for supply of electricity is meant to govern the supply of electricity and procedures thereof, including the powers, functions and obligations of the Licensee and the rights and obligations of the consumers and matters connected therewith and incidental thereto.

The terms and conditions are not exhaustive as to the requirements to be complied with by Users connected or seeking connection to the Licensee's distribution system.

25. System of Supply: The Licensee's declared voltage of supply will be generally as follows :

a. **Low Tension Supply**

- i. Single phase 230 volts, 50 Hz A.C between phase and neutral.
- ii. Three-phase 400 volts 50 Hz A.C between phases.

b. **High Tension Supply**

Three-phase 50 Hz A.C, 11,000 volts, 22,000 volts and 33,000 volts between phases whichever is available.

c. **Extra High Tension Supply**

Alternating current - 50 Hertz Three- phase 66,000 volts, 132,000 volts, 220,000 and 400,000 volts between phases whichever is available.

For larger loads, the Licensee reserves the right to supply at higher voltages according to the convenience of the Licensee.

26. Categories of Supply: Supply of electricity shall be made available to the consumer under the following categories :

- a. Single-phase 2 wire 230 volts between phase and neutral for supply to a total connected load not exceeding 5000 watts (including power loads).
- b. Three-phase 4 wire 400 volts between phases and 230 volts between a phase and neutral for supply to a total connected load exceeding 5000 watts but not exceeding a demand of 100 KW. A consumer may elect to avail supply under any one of the above categories where the connected load does not exceed 5000 watts.

- c. Three-phase 3 wire, 11,000 volts and above between phases for power installation exceeding a demand of 100 KW.
- d. The consumer shall avail supply at 33 kV and above when the demand is 1MVA and above

27. Requisitions for Supply of Energy:

- (1) The provision regarding the duty of Licensee as detailed in section 37 of the Act to supply electricity on request is reproduced below:

"(1) Save as otherwise provided in this Act, every distribution licensee shall, on an application by the owner or occupier of any premises, give supply of electricity to such premises, within one month after receipt of the application requiring such supply :

Provided that where such supply requires extension of distribution mains, or Commissioning of new sub-stations, the distribution licensee shall supply the electricity to such premises immediately after such extension or Commissioning or within such period as may be specified by the Commission.

Provided further that in case of a village or hamlet or area wherein no provision for supply of electricity exists, the Commission may extend the said period as it may consider necessary for electrification of such village or hamlet or area.

Explanation:- For the purposes of this sub-section, "application" means the application complete in all respects in the appropriate form, as required by the distribution licensee, along with documents showing payment of necessary charges and other compliances.

- (2) It shall be the duty of every distribution licensee to provide, if required, electric plant or electric line for giving electric supply to the premises specified in sub-section (1) :

Provided that no person shall be entitled to demand, or to continue to receive, from a licensee a supply of electricity for any premises having a separate supply unless he has agreed with the licensee to pay to him such price as determined by the Commission from time to time.

(3) If a distribution licensee fails to supply the electricity within the period specified in sub-section (1), he shall be liable to a penalty which may extend to one thousand rupees for each day of default."

Note:- The licensee will refuse to supply electricity to an intending consumer who has defaulted payment of dues to the licensee in respect of any other service connection in his name till clearance of such dues.

(2) Where the intending consumer's premises has no frontage on a street and the supply line from the Licensee's mains has to go upon, over or under the adjoining premises of any other person (whether or not the adjoining premises is owned jointly by the intending consumer and such other person), the intending consumer shall arrange at his/her own expense for any necessary way leave, licence or sanction before the supply is effected. Even when the frontage is available, but objections are raised for laying lines/cables/poles through a route proposed by the Licensee involving minimum cost and in accordance with the technical norms, to extend supply to the intending consumer, the intending consumer shall arrange at his/her own expense necessary way leave , licence or sanction before the supply is effected. .Any extra expense to be incurred by the Licensee in placing the supply line in accordance with the terms of the way leave, licence or sanction shall be borne by the intending consumer. In the event of way-

- leave, licence or sanction being cancelled or withdrawn, the intending consumer shall at his/her own cost arrange for any diversion of the service line or the provision of any new service line thus rendered necessary.
- (3) It shall not be incumbent on the Licensee to ascertain the validity or adequacy of way-leave, licence or permission obtained by the intending consumer. The consumer is liable for damages, if any, claimed by the person giving way-leave, licence or permission.
- (4) In case of LT three phase supply, the Licensee shall ensure the following:
- (i) For all LT services, the meter in the service shall have the maximum demand indicating facility.
 - (ii) For HT/EHT services, the meter in service shall be 3 phase Tri-vector meter with MDI, having facility of TOD metering and storage of at least 90 days.
- (5) Notwithstanding anything contained in this clause, the Licensee will refuse to supply electricity to an intending consumer for any industry, including welding purpose in any predominantly residential area , if in the opinion of the Engineer, such supply will cause voltage fluctuations in the supply to the area and consequent inconvenience in that area. The decision of the Engineer as to whether there will be voltage fluctuations in the said area shall be final and binding on the intending consumer. "Residential" area means area recognized as such by Municipal Corporations, Municipalities, Townships, Panchayats or such other local authorities constituted under any law for the time being in force. If however, the area under consideration is declared as a residential cum industrial area by the competent bodies, the above provision shall not apply.

- (6) Where more than one person or more than one establishment is in occupation of a premises, more than one service connection may be given only if there is a permanent physical segregation of areas for which different service connections are applied for.
- (7) In case of flat system and shopping complexes where more than one flat or shops are located with permanent physical segregation, more than one service may be given.
- (8) In case of non compliance by the Licensee, of the provisions as above, the intending consumer can approach the Consumer Grievance Redressal Forum established under section 36(5) of the Act.
- (9) Additional terms of supply as stipulated in section 42 of the Act reads as :

“A distribution licensee may require any person who requires a supply of electricity in pursuance of section 37 to accept -

 - (a) any restrictions, which may be imposed for the purpose of enabling the distribution licensee to comply with regulations made under section 47;
 - (b) any terms restricting any liability of the distribution licensee for economic loss resulting from negligence of the person to whom the electricity is supplied.”
- (10) Service Lines:-
 - (1) Upon receipt of an application for supply of electricity, a notice will be sent to the intending consumer that he or his/her authorized representative to meet the Engineer to agree on the position of the point of supply, cutout or circuit-breaker and meter. The Licensee will in no case fix its meter, cut-out etc., nor allow the same to remain in any position which will entail entry by its employees into certain restrictive areas which are socially well defined. In case of service

- connection from OH line, the service mains shall be visible and accessible up to metering point for inspection.
- (2) The consumer shall provide free of cost to the Licensee adequate land/space in his/her premises, as may be considered necessary by the Engineer and afford all reasonable facilities for bringing in not only cables or overhead lines from the Licensee's system for servicing the consumer but also cables or overhead lines connecting other consumers. The land/space should be at a location near the entrance to the premises and should be easily accessible to Licensee's officials for inspection.
 - (3) The Consumer shall permit the Licensee to install all requisite equipments such as Transformers, switchgears, meters etc., and to lay necessary cables or overhead lines and to provide connections thereto on the consumer's premises and shall also permit the Licensee to extend supply to other consumers through the cables, lines and equipments installed in the consumer's premises, provided that supply to the consumer in the opinion of the Engineer is not thereby unduly affected.
 - (4) The Service Line once laid shall not be transferred, interfered with or shifted from one place to another except with the permission of the Engineer.
 - (5) For housing the switchgears and meter cubicles of the Licensee, the High Tension Consumer shall provide and maintain at his/her own expense locked, weatherproof and fireproof enclosure of agreed design and location. The enclosure should preferably be in a building separate from the Consumer's substation and installation. Where this is not feasible, the equipments of the Licensee shall be completely

- segregated from the Consumer's equipments by fireproof walls.
- (6) The consumer shall permit the Licensee, free of cost, the use of any land belonging to the consumer which may be required for erecting the posts, lines, structures, cables and other equipments necessary for the supply of electricity and shall give access at all time to the Engineer and/or his/her agents, employees, sub-ordinates and workmen with or without tools to inspect and/or work on the posts, lines, structures, cables and other equipments and the consumer shall have no claim whatsoever on account of any damage to his/her property by reason of such erection of or any other work on the posts, transmission lines, structures, cables and other equipments.
- (7) In multi-storied buildings, irrespective of the number of floors, service connections (whether through overhead wires or through under-ground cables) will be provided normally at the ground floor. Service connections will also be provided, at the request of the consumer, at the basement of such building, provided the place where the Licensee's meters, cut-outs etc., are installed has direct and independent access from outside, is well ventilated, has sufficient headroom and the doors provided for the service room have adequate fire resistance property and is water proof and free from water logging.
- (8) An approach road of adequate width shall be provided from the public road to the electrical room/open space earmarked for installation of distribution transformer, associated switchgear, sub station /switching station.
- (9) For High Tension service connections:-

- (a) For indoor metering, an electrical room having adequate space as or relevant rules with locking facility, exhaust fan and adequate size of cable duct shall be provided at the ground/basement floor for installing the Licensee's equipments, etc. This room shall be fireproof and weatherproof.
- (b) For outdoor metering, an enclosure of adequate space as per relevant rules shall be provided.

This enclosure shall be at the periphery of the building and shall be cut off from other portions of the premises by fire resistance walls. These areas shall be specifically shown in the plan. Before the plan is sent to the competent authority for approval, it shall be sent to the Engineer and got approved. The point of supply shall be within 30 meters from the main gate easily accessible and visible and satisfactory with regards to security aspects. Failure to comply with the above requirements will result in denial of supply.

Provided that an authorized Officer, not less than in the rank of a Superintending Engineer may approve the point of supply at a place beyond 30 meters from the main gate, if he is satisfied that such place is –

- (a) easily accessible and visible to the officials of the licensee;
 - (b) is safe and secure; and
 - (c) is not susceptible to malpractice. Also there shall be no compromise on technical grounds, while relaxing the distance criteria.
- (10) With medium voltage supply i.e. above 230 volts and up to 650 volts, the Licensee's meter and service cutouts shall be enclosed in a strong vermin proof and water proof box

suitably ventilated and provided with suitable locking arrangements at the consumer's cost at the location convenient to licensee for meter reading etc. All wires shall be made inaccessible to unauthorized persons. A 'caution' board shall be fixed thereto.

- (11) Having agreed on the position of point of supply , the Engineer will render to the intending consumer an estimate for the cost of laying the service line. Any work of laying the service line will be taken up only after the intending consumer pays the estimated amount in advance in full. The charges payable by the intending consumer for service line shall be as estimated by the Licensee from time to time.
- (12) The entire service line will be the property of the Licensee and the Licensee will maintain it at his/her cost.
- (13) The Licensee will also have the right to use the service line for supply of electricity to any other person

30. CONSUMER'S INSTALLATION:

- (1) The consumer's installation should invariably comply with the statutory provisions contained under section 47 of the Act relating to wiring and equipment. The responsibility with regard to maintenance or testing of equipments and wiring on consumer's premises shall lie upon the consumer.
- (2) No cutout, link or switch (other than a linked switch arranged to operate simultaneously on the earthed neutral conductor and live conductors) shall be inserted or remain inserted in the earthed neutral conductor of the system.
- (3) If any alteration is carried out either in equipment or in wiring , the same shall be intimated to the Licensee for updating the Test Report.

- (4) The consumer must in all cases provide quick-break linked switches and a main fuse/MCB on each live conductor except the earthed neutral. The linked switch must be erected within a metre of the Licensee's meter board or in such other position as may be required/approved by the Engineer. Where a conductor forming part of the consumer's system is to be connected to the Licensee's earthed neutral conductor, an indication of a permanent nature shall be provided by the consumer at the point where such connection is to be made to enable the conductor to be distinguished from any live conductor. The consumer shall provide a cable loop of at least one metre for each connection to the Licensee's meter board in the same room. In the case of High Tension supplies, suitable circuit breakers must be installed on the low-tension side of the transformer or on each of the individual low-tension feeder.
- (5) All electric motor used in all new Low Tension service connections shall be of ISI marked with manufacturers name plate indicating rating and capacity permanently affixed on it.
- (6) If at the time of effecting service connections it is found that the connected load is in excess of the sanctioned load, the Engineer will connect installation wither after removal of excess load or after the sanction of the excess load.
- (7) All transformers, switchgears, control equipments and other electrical equipments belonging to the consumer and connected to the mains of the Licensee shall be maintained to the reasonable satisfaction of the Engineer of the Licensee and shall be in conformity with the applicable Acts, Codes, Rules and regulations etc.,
- (8) Before any wiring or fitting of motor or any other electrical equipment is connected to the system, the same shall be subject to

- the inspection of the Engineer of the Licensee. However, this condition will not apply to Low Tension Service Connections under the Tariffs for Domestic, Commercial categories.
- (9) All High Tension installations and their associated medium voltage and low voltage installations will have to comply with the applicable safety and security rules prescribed by Authority/Government/Commission.
- (10) If the supply to any installation is 3 phase, 4 wire at 400 volts the installation shall be wired on the group system, separate neutral wires being brought back in each case to the point of supply. Each circuit shall have a distinct control switch. The lamps, fans and other equipments in the installations shall be so grouped that under normal conditions the current will be balanced and no current will flow in the neutral wire.
- (11) A caution Board printed in Urdu, Hindi & English shall be affixed by the Licensee on the meter board of each service.
- (12) In order to save the expenses of a long underground service connection on private property, consumer may, with the Engineer's approval, erect a pillar on that portion of his/her property which will be the metering point nearest to the Licensee's supply mains into which the service shall be laid and from which the consumer shall run overhead lines/UG cables to his/her premises. These overhead mains shall constitute portion of his/her installation. and shall be laid in compliance with the applicable Safety Rules. An efficient lightning arrester may be fixed at the commencement of the overhead line at the consumer's cost, should he desire the same, as an additional protection for his/her installation.
- (13) Gas and water pipes shall on no account be used for earthing purposes. All wiring shall be kept as far as possible away from gas and water pipes.

- (14) All wall plugs shall be of the three-pin type, the third pin connected to earth. All plugs shall be provided with switches on the live wire and not on the neutral.
- (15) Motors shall be provided with control gear so that the maximum current demand of the consumer's installation does not in any case exceed the limit given in the following schedule.

Nature of supply	Size of installation	Limit of maximum current demand
Single Phase	Up to 6.5 H.P	Full load current x 6
Three Phase	i. Up to 6.5 HP	Full load current x 6
	ii. Above 6.5 HP and up to 15 HP	Full load current x 2
	iii. Above 15 HP and up to 100 HP	Full load current x 1.5
	iv. Above 100 HP	Full load current x 1.25

Note :

1. Providing of automatic switching facilities to the three phase motors with a direct on line starter is prohibited.
 2. The use of phase shifters (to operate the three phase motors during two phasing by the Licensee) in respect of Agricultural services by the consumers is prohibited. Failure to restrict within these limits and also to comply with the above requirements will render the service connection liable for disconnection.
- (16) Three-phase motor circuits shall be controlled by triple-pole switch with no-volt release and fuse protection. It is important that the release should be maintained in working order. Functionally equivalent controls shall also be acceptable. Wiring for such motors shall be run with all wires bunched in a conduit, which shall be

efficiently earthed through and connected to the frame of motor from which two separate and distinct earth wires shall be run. The earth wire shall be preferably of copper.

- (17) In the case of temporary supply, the consumer shall provide current limiting switch of appropriate capacity and capacitor, if any required.

31 INSPECTIONS, TESTING AND EFFECTING SUPPLY:

- (1) After completion of the wiring, notice must be sent to the Engineer by the intending consumer (upon printed test report form obtainable free of cost from the offices of the Licensee) that the installation has been completed and tested and that the same is complete and ready for inspection and test by the Engineer. Notice of the Engineer's intention to inspect and test the installation will be sent to the intending consumer who must be present or his/her competent representative at the time fixed to give information that may be necessary concerning the installation. Upon executing/ signing of the test report, a copy of the test report shall be given to the consumer.
- (2) The intending consumer shall avail himself of the supply within three months in case of HT and one month in case of LT from the date of issue of notice in writing, informing him that supply is available.
- (3) If the intending consumer fails to avail the supply within the above period, a further three months notice in case of HT and one-month notice in case of LT will be sent to the intending consumer to avail the supply. If he does not avail himself the supply during this notice period, the application will be treated as lapsed and cancelled in the case of Low Tension supply and the application shall be treated as

- cancelled, terminating the agreement, in the case of High Tension supply. The service connection charges and the Security Deposit/development charges, etc. except Meter Caution Deposit will be forfeited. In case the intending consumer could not avail the supply under force-majored conditions, the Security Deposit/development charges and meter caution deposit shall be refunded to the intending consumer.
- (4) However, Licensees of the Distribution are delegated with powers to condone the delay on specific request from them if received before expiry of second notice period and to accord approval to effect supply any day after the date of expiry of second notice of availability of supply without forfeiture of development and other charges and cancellation of application subject to his/her consent to pay monthly minimum fixed demand charges up to the date of availing supply.
- (5) If the intending consumer avails supply during the notice period of availability of supply he shall pay the monthly minimum fixed demand charges at the notified tariff rate for the period from the date of issue of first notice of supply availability till the date of availing supply.
- (6) Requisition for supply or additional supply of electricity should be made in the prescribed form obtainable from the local office of the Licensee sufficiently in advance of the date of requirement of supply. Such Forms can also be made available in downloadable mode in the Licensee's website or allowed to be printed by others and made available in open market. The requisition should be made by the owner, or occupier, of the premises for which supply is required, and should indicate his/her full name and address. Any assistance or information required in filling up the form has to be given to the intending consumer at the local offices of the Licensee.
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32. LICENSEE'S SUPPLY MAINS AND EQUIPMENTS:

- (1) The Licensee may provide in Low Tension service connections its own meter, board, cut-out and other equipments and for High Tension Service connections, its own circuit breaker, High Tension fuses and other equipments and these will remain the property of the Licensee and must on no account be operated, handled or removed by anyone, who is not an employee of the Licensee, unless authorized by the Licensee. If the consumer elects to purchase a meter, it shall be tested, installed, operated, maintained and sealed by the licensee. The consumer shall claim the meter purchased by him as his asset only after it is permanently removed from the system of the licensee.
- (2) The Licensee will have the right to use its supply lines and equipments provided under the conditions above and to lay cables under, across, or through the consumer's premises for supply to other premises in the neighborhood.
- (3) The consumer shall not interfere in any manner with the property of the Licensee and shall be fully responsible for the safety of the property of the Licensee in the consumer's premises. In the event of any loss or damage caused to Licensee's property by any act, neglect or default of the consumer, his/her servants or persons employed by him or due to any reason other than force majeure conditions the consumer shall compensate the Licensee for the cost of necessary repairs or replacements as may be indicated by the Engineer, within thirty days of issue of the bill in this behalf. Non-payment of such bill by the consumer shall entail disconnection of supply under section 50 of the Act.

33 AGREEMENTS:

- (1) All intending consumers shall execute an agreement governing the supply of electricity in the form prescribed at the time of paying the Security Deposit and the service connection charges. The work of extension of supply will be taken up for execution only after the agreement is executed and the Security Deposit and the service connection charges, etc. are paid.
- (2) Every agreement is for a specific purpose and a specified location. The Engineer may at his/her discretion permit a consumer to change the point of supply from one place to another on such terms as may be prescribed by the Licensee including payment of charges incidental to such change.
- (3) The agreement can be terminated by the consumer at any time by giving one month's notice in writing to the Licensee expressing his/her intention to do so.
- (4) The Licensee can terminate the agreement of a consumer at any time by giving one month's notice if the consumer has violated the terms of the agreement or the terms and conditions of this Code or the provisions of any law relating to the agreement including the applicable and Rules/Regulations under the Act and other orders from time to time. The Licensee shall inform the consumer regarding the grounds for such termination. It is obligatory on the part of the Licensee to inform the consumer regarding the grounds for such termination.
- (5) In the case of termination of the agreement either by the consumer under sub – regulation (3) or by the licensee under sub – regulation (4), as the case may be, the licensee shall recover the dues if any due from the consumer after making such adjustment of the dues, due to him by the consumer as may be necessary to clear the dues from the consumer against the security deposit or additional

security deposit or any other deposit made by the consumer and after making such adjustment, refund the balance deposit, if any, to the consumer within three months from the date of termination of the agreement.

34. EARNEST MONEY DEPOSIT:

- (1) The applicants required to pay Earnest Money Deposit will be asked to pay Earnest Money Deposit along with registration fee for registration of application.
- (2) This Earnest Money Deposit will be adjusted against the quantum of initial Security Deposit payable by the applicant before availing supply and balance amount if any shall be collected.
- (3) In respect of High Tension applicant the Earnest Money Deposit payable will be equal to the quantum of initial Security Deposit.
- (4) If the applicant backs out after registration and payment of E.M.D. but before payment of Development charges, Service Connection charges and Meter Caution Deposit, then the application shall be cancelled and E.M.D. forfeited.
- (5) If the applicant backs out after payment of all charges and execution of agreement, the application shall be cancelled and agreement terminated forfeiting all amount remitted except meter caution deposit in the case of both High Tension and Low Tension.
- (6) If the H.T. applicant who prefers to back out partially against the sanctioned demand before availing supply, then the above forfeiture rule may be applied proportionate to the demand backed out.
- (7) The Earnest Money Deposit paid does not bear any interest until the date of service connection.

35. SECURITY DEPOSIT:

- (1) All applicants for supply of electricity shall pay initial Security Deposit, before availing of the supply, as per J&K SERC (Security Deposit) Regulations, 2008 with upto date amendments.
- (2) The following categories of service connections may be exempted from payment of Security Deposit:

Service connections in the name of the State Government/Central Government Local Bodies Departments

- (3) If the consumer is prepared to take supply through pre payment meter such consumer is not required to pay security deposit.

36. ACCESS TO PREMISES, INSTALLATIONS AND EQUIPMENTS:

The access to premises , installations and equipments is subject to the provisions envisaged under sections 125 of the Act, which reads as : " (1) A licensee or any person duly authorized by a licence may, at any reasonable time, and on informing the occupier of his intention, enter any premises to which electricity is, or has been, supplied by him, of any premises or land, under, over, along, across, in or upon which the electric supply-lines or other works have been lawfully placed by him for the purpose of –

- (a) inspecting, testing, repairing or altering the electric supply lines, meters, fittings, works and apparatus for the supply of electricity belonging to the licensee; or
 - (b) ascertaining the amount of electricity supplied or the electrical quantity contained in the supply; or
 - (c) removing where a supply of electricity is no longer required, or where the licensee is authorized to take away and cut off such supply, any electric supply-lines, meters, fittings, works or apparatus belonging to the licensee.
- (2) A licensee or any person authorized as aforesaid may also, in pursuance of a special order in this behalf made by an Executive

Magistrate and after giving not less than twenty-four hours notice in writing to the occupier, -

- (a) enter any premises or land referred to in sub-section (1) for any of the purposes mentioned therein;
 - (b) enter any premises to which electricity is to be supplied by him, for the purpose of examining and testing the electric wires, fittings, works and apparatus for the use of electricity belonging to the consumer.
- (3) Where a consumer refuses to allow a licensee or any person authorized as aforesaid to enter his premises or land in pursuance of the provisions of sub-section (1) or, sub-section (2), when such licensee or person has so entered, refuses to allow him to perform any act which he is authorized by those sub-sections to perform, or fails to give reasonable facilities for such entry or performance, the licensee may, after the expiry of twenty-four hours from the service of a notice in writing on the consumer, cut off the supply to the consumer for so long as such refusal or failure continues, but for no longer."

37. SHIFTING OF SERVICE CONNECTION: The cost of shifting a new service connection for which line is laid but service connection is yet to be effected shall be borne by the intending consumer. The intending consumer shall pay the above charges in advance in full. The shifting work will be taken up only after the payment is made. The estimate will cover the following: -

- (a) Charges for dismantling at the old site.
- (b) Charges for transport from the old site to the new site.
- (c) Charges for re-erection at the new site.
- (d) Depreciated value of retrievable materials, if any, not used at the site should be credited to the consumer.
- (e) Cost of new materials including transport, if required

- (f) Cost of irretrievable materials at depreciated value.
- (g) Overhead charges.

With regard to shifting of existing service connection, the consumer shall pay all the arrears due to the Licensee, apart from the above shifting charges.

38. RESTRICTIONS ON USE OF ELECTRICITY: The consumer shall curtail, stagger, restrict, regulate or altogether cease to use electricity when so directed by the Licensee, if the power position or any other emergency in the Licensee's power system or as per the directives of SLDC/SSLDC warrants such a course of action. The Licensee shall not be responsible for any loss or inconvenience caused to the consumer as a result of such curtailment, staggering, restriction, regulation or cessation of use of electricity. Notwithstanding anything contained in any agreement/undertaking executed by a consumer with the Licensee or in the tariff applicable to him, the consumer shall restrict the use of electricity in terms of his/her maximum demand and/or energy consumption in the manner and for the period as may be specified in any order that may be made by the Licensee on the instructions of State Government or the Commission.

39. TEMPORARY SUPPLY: Temporary supply of electricity to any premises will be considered by the Licensee on special terms and conditions as below:-

(1) The Licensee shall extend temporary supply on application from intending consumer with required charges and on receipt of deposit.

(2) The deposit for temporary supply shall be calculated as below:

Total value of materials to be used on the extension and Service connection	A
Less: Value of meters / meter board / cut out	B
Net value of materials to be recovered from	

the consumer	A – B
Add: Labour charges to be incurred	C
Add: Overhead 15% on A – B + C	D
Probable consumption charges	
Advance current consumption (CC) charges	E
Total deposit to be obtained	F
(A – B + C + D + E)	

(3) On completion of temporary supply works, the following charges shall be adjusted against the deposit.

1. 10% cost of the retrieved materials
2. 10% cost of meter devoluted
3. 100% cost of materials not retrieved
4. original erection charges, dismantling charges and transport charges
5. Overhead at 15% on the total cost of materials plus labour charges (including cost of meter)

(4) The Licensee shall refund the balance deposit if any after the temporary supply period is over within a period to be specified by the Commission.

40. ENERGY CONSERVATION: Promoting efficient use of energy including energy audit towards this end and energy conservation by all the consumers and the Licensee shall be mandatory as per the provisions contained in the J&K Energy Conservation Act 2011 subject to the condition that such stipulations are not inconsistent with the J&K Electricity Act 2010.

41. SERVICE OF NOTICE: All letters, bills and notices including those under statutory requirements will be sent by the Licensee to the consumer by ordinary post or by messenger. Documents of notices so dispatched shall be presumed to have been duly received by the consumer on the date on which he could be reasonably expected to

receive the same. The Licensee may, if it chooses, adopt any other mode of service of documents and notices to the consumer.

42. Knowledge of Acts, Rules, Regulations, Orders, etc.: The consumer will be deemed to have full knowledge of the provisions of 'applicable, Rules and all Regulations and Notifications' made under the Act, and shall act in due conformity with all the applicable Acts, Rules and all Regulations and Notifications .

43. INTERPRETATION: These terms and conditions shall be read and construed as being subject in all respects to the provisions of the Act, Rules, and regulations in force and as amended from time to time.

Chapter 7: Recovery Charges

44. The Licensees are entitled to collect the charges from a person requiring supply of electricity any expenses reasonably incurred in providing any electrical line or electrical plant used for the purpose of giving that supply. These charges have also to be reviewed either periodically or at times of an urgent need for a revision. The consumers are liable to pay such charges as applicable and at the rates specified by the Commission from time to time through separate orders/ notifications. The various charges to be collected are furnished in the following clauses.

45. Service Connection Charges:

(i) For connecting up an installation, the Licensee shall be entitled to charge the consumer the actual cost of materials upto meter board, labour, transport plus overhead charges.

(ii) Extension, improvement or alteration to service lines to meet any additional demand will be charged on the same basis. In each case, the consumer will be furnished with an estimate of

the cost of the work and this amount is payable in advance. On completion of the work, a bill for the actual amount payable will be forwarded to the consumer and any difference shall be paid by the consumer or will be refunded by the Licensee as the case may be.

- (iii) The estimate for service connection charges may also include the service connection charges for metering referred to in regulation 45(2). The licensee shall give due credit for the materials if any supplied by the consumers.
- (2) Service connection charges for metering. The licensee is authorized to collect service connection charges for metering.

46. Meter Security Deposit: The Licensee is authorized to collect security for the price of meter from LT/HT consumers at the rates specified by the Commission from time to time and enter into an agreement for hiring of the meter. The Licensee may permit the consumer to install his/her own meter. However, it shall be calibrated by the Licensee.

Note : -

- 1. The above rate shall also apply to L.T.Temporary Supply.
- 2. The deposit shall be refunded after termination of service agreement, as per rules.
- 3. If a consumer elects to purchase his own meter, he is not required to pay Meter Security Deposit.

47. Development Charges: The Licensee is authorized to collect development charges from LT/HT consumers at the rates specified by the Commission from time to time.

Note:

- (1) The above development charges (one time payment) shall be collected from all applicants both for new and additional loads.

- (2) For additional loads applied in the existing service the same rates are applicable.
- (3) In case of conversions from Single Phase to Three Phase the difference in the development charges shall be collected provided the initial development charges were paid while availing Single Phase Service.
- (4) One fourth of the development charges shall be applied to temporary supplies.

48. Earnest Money Deposit (EMD): The Licensee is authorized to collect Earnest Money Deposit from all applicants for HT and LT industrial applicants at the rates specified by the Commission from time to time. This will be adjusted against the quantum of initial Security Deposit payable by the applicants before availing supply.

49. Security Deposit: The Licensee is authorized to collect initial security deposit as per J&K SERC (Security Deposits) Regulation 2008. Wherever Earned Money Deposit has been adjusted against the initial security deposit the balance if any will be collected from the applicants before giving supply.

50. Code to be read along with Supply Code, J&K Electricity Act 2010 and amendments etc.,

- (1) This Code shall be read along with the J&K State Electricity Supply Code, the J&K SERC Electricity Grid Code and other relevant provisions of the Act, along with amendments thereon, Rules and Regulations made there under.
- (2) Where any of the provisions of this Code is found to be inconsistent with those of the Act, Rules or Regulations made hereunder, notwithstanding such inconsistency, the remaining provisions of this Code shall remain operative.

- (3) Where any dispute arises as to the application or interpretation of any provision of this Code, it shall be referred to the Commission whose decision shall be final and binding on the parties concerned.
- (4) Wherever extracts of the J&K Electricity Act 2010 are reproduced, any changes/amendments to the original Act shall automatically be deemed to be effective under this Code also.

Chapter 8 : Code Review Panel

51. Appointment of Code Review Panel etc.,

- (1) The Commission may appoint a Code Review Panel (hereafter in this Chapter referred to as "Panel") consisting of -
 - (a) A Chairman who is a member of the Commission.
 - (b) A Member Secretary, who is not below the rank of Chief Engineer of STU.
 - (c) One Member from the SLDC who is not below the rank of Chief Engineer.
 - (d) One representative from each of the distribution Licensees who is not below the rank of Chief Engineer.
 - (e) Two representatives from domestic consumer sector, one from LT industry sector and one from agricultural consumer sector.
 - (f) One Member representing the EHT/HT consumers.
 - (g) One member representing captive/non-conventional energy source.
- (2) The panel may, from time to time, and in any case, at least once in three months and shall, when so required by the Commission, meet to consider changes or modifications to the Code as may be warranted. The Member Secretary shall arrange for the panel meeting in consultation with the Chairman of the Code Review Panel. The tenure of the members mentioned under clauses (e),(f)&

- (g) of sub-regulation (1) shall be three years. The Commission shall have powers to re-nominate any member on expiry of his/her term.
- (3) The functions of the panel are-
- (a) to review the working of various provisions of this Code, the Jammu & Kashmir State Electricity Grid Code and Jammu & Kashmir State Electricity Supply Code.;
 - (b) to consider the suggestions received from Licensees, consumers and other interested persons;
 - (c) to consider and offer its views on any specific matter as may be referred to it by the Commission.
- (4) Manner of reviewing the Code –
- (i) Any licensee, consumer or other interested persons desiring any change in this Code shall send the proposal in writing to the Panel specifying the reasons for such change. For this purpose, the licensee may hold meetings with the consumer or group of consumers if it is considered that the Code may require changes to meet the individual requirements of the consumer or group of consumers.
 - (ii) The Panel shall, upon receipt of such proposal or where the Commission has made a reference, forward the same to the STU for its consideration and written comments.
 - (iii) The Panel shall convene a meeting of its members to consider the comments of the STU, and if necessary at its discretion, invite and hear the person who made the suggestions for change and other interested persons and also the local authorities and telecommunication companies.
 - (iv) The Panel may, in considering the suggestion and the comments of the STU thereon, set up sub committees to study the related issues.

- (v) The Panel after finalizing its views on the modifications to the Code, forward the same to the Commission:

Provided that the Panel may supplement its own procedure in addition to the procedure laid down herein for conducting its meetings and in carrying out its functions.

- (5) The Commission may approve the changes with or without modification as it may deem fit and cause the publication of the same in such manner as may be necessary.

ANNEXURE I
LOAD DATA FOR DEMANDS OF 1 MW AND ABOVE
(Refer clause 6(3))

1. Type of Load
2. Minimum Demand (kVA)
3. Year/Years by which full/part supply is required
4. Load location details
5. Rated Voltage and Frequency
6. Expected load curve
7. Withstand level of equipments/devices for the fluctuations, surges, swells, flickers and spikes
8. Characteristics of the loads
(State whether the loads are steel melting furnace Arc/induction furnace and rolling mills, traction, containing welding sets in large numbers, software park etc)
(Furnish location map to scale, indicate details of nearest consumer and category/capacity)
 - i. Motors (with a specific focus on variable speed motors; soft start motors; fans; Blowers etc.)
(State purpose and number of Installations, voltage and KW rating, starting current, type of Motors, types of drives and control arrangements.)
 - ii. Heating
(Type and KW rating)
 - iii. Furnace
(Type, Furnace Transformer Capacity and voltage ratio)
 - Iv. Computer, Inverters, UPS and other switched mode supply unit
 - v. Electrolysis
(Purpose, kVA capacity)
 - vi. Lighting (types of lighting used)

- (Low loss energy conservation lamps,
fluorescent Lamps, M.V Lamps, Sodium Vapour lamps)
demand in kVA
- vii. P.F improvement capacitors/Capacitor Banks
(Nos , Capacity in MVAR)
 - viii. Air conditioning/Chilling plant
 - ix. Electronic Regulator for fan
 - x. Phase unbalance imposed on system
 - (a) Maximum (%)
 - (b) Average (%)
9. Maximum harmonic content imposed on the supply system on the end consumer level in percentage of fundamental voltage/current.
10. Details of any loads, which may cause demand fluctuations of greater than 10 MW at the point of connection, including Voltage Dips (percentage) lasting for 5 seconds and more
MVAR/KV
MW/Hz
MVAR/Hz
(Furnish details of devices included in system for the suppression of harmonics i.e. the details of harmonic filter in use.)
11. Details of Captive Power Plants:

ANNEXURE II
SYSTEM DATA TO BE PROVIDED TO THE INTENDING CONSUMER WITH A
CONTRACTED DEMAND OF 1 MW OR MORE
(Refer clause 6(3))

1. A topographical map indicating the area of the licensee's supply network in the State of Jammu & Kashmir.
2. Single line diagram of distribution system (OH lines/ UG cables -length and conductor sizes) Primary and secondary substation capacity in KVA, capacitor bank sizes, fault level etc. to be indicated. (restricted area of concern for the prospective consumers)
3. Protective relaying and metering arrangements at substations.
4. Details of the substation and its main equipments (Transmission/Sub Transmission) along with a single line diagram of the SS.

Furnish the details of Auto/Power Transformer

Capacity in MVA

Voltage rating

Primary kV

Secondary kV

Current rating

Primary Amps

Secondary Amps

Tap changing

off load/on load

Range

- % to +.....%

Percentage impedance

..... percent

Vector group

.....

Impulse level (BIL)

..... kV(P)

Fault level of the system

..... MVA

Earthing system

solidly earthed or not

Power frequency voltage

..... kV for one minute

withstand

Circuit breakers

Type: Vacuum/SF6/Oil (OMCB, OCB)

Current rating

Voltage rating

Rupturing capacity in (kA)

Symmetrical

	Asymmetrical
	Impulse withstand level ... kV(P)
	Operating mechanism
Surge arrester	(Gapless) – MCOV
	Surge current rating
	(Gapped) - rated voltage
	Surge current rating
Provision of spiked Mats for the Power/Auto Transformer	
	Ground wire for the station
	Line entrance Arrester
	Earth mat
Current Transformer	Type
	Rated voltage
	Current ratio
Potential Transformer	Type
	Rated voltage
	Burden
Capacitor Bank	MVAR/Bank
	Voltage rating ...kV
	Current rating ... Amp
Fire fighting equipment (Details)	Type – Nos

Abbreviations

1.	AC	- Alternating Current
2	CERC	- Central Electricity Regulatory Commission
3	CMDA	- Chennai Metropolitan Development Authority
4	DC	- Direct Current
5	FMB	- Field Measurement Book
6	HP	- Horse Power
7	HV	- High Voltage
8	HZ	- Hertz
9	kVA	- Kilo Volts Ampere
10	kV(P)	- Kilo Volt Peak
11	KW	- Kilo Watt
12	LV	- Low Voltage
13	MCOV	- Maximum Continuous Operating Voltage
14	MV	- Medium Voltage
15	MVA	- Mega Volt Ampere
16	MVAR	- Mega Volt Ampere Reactive
17	MW	- Mega Watt
18	OCB	- Oil Circuit Breaker
19	OMCB	- Oil Minimum Circuit Breaker
20	OH	- Overhead
21	R & C	- Restriction and Control
22	RCC	- Reinforced Cement Concrete
23	R & D	- Research and Development
24	SC	- Service Connection
25	SLDC	- State Load Dispatch Centre
26	SS	- Sub-station
27	UG	- Underground
28	UF	- Under Frequency
29	UPS	- Uninterrupted Power Supply
30	VAR	- Volt Ampere Reactive