

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A MADHYA MARG, CHANDIGARH

Petition No. 03 of 2020
Date of Order: 20.03.2020

Petition under Section 23 of the Electricity Act, 2003 seeking regulatory guidance for measures to be taken in case of exigencies leading to power cuts for the Year 2020-21.

AND

In the matter of: Punjab State Power Corporation Limited (PSPCL), The Mall, Patiala.

Present: Ms. Kusumjit Sidhu, Chairperson
Sh. S.S. Sarna, Member
Ms. Anjali Chandra, Member

ORDER

PSPCL has filed this petition under Section 23 of the Electricity Act, 2003 seeking regulatory guidance and concurrence of the Commission for the measures to be taken by it for load regulation and imposing power cuts in case of exigencies and system operational requirements.

2. The submissions made by PSPCL in the Petition are summarized as under:

- i) The endeavor of PSPCL as a distribution licensee is to ensure uninterrupted power supply to all of its consumers and regulate the supply only in case of unavoidable exigencies.
- ii) In currently applicable deviation settlement mechanism, violations beyond specified limits attract severe penalties

against overdrawal from the system in real time operation. Also after applicability of the new DSM regulations 2018, the frequency band has become 49.85 to 50.05 Hz. And, with the linking of market clearing price of exchange with DSM rate, operation of power system on day to day basis has become more rigid and in case of sudden outage of power system elements, the safety of the grid is the priority of power regulation.

- iii) There would be a surplus availability of electricity to PSPCL during FY 2020-21 and it is expected that the requirement to regulate supply to consumers and imposing power cuts would be minimal, only to take care of unexpected events and circumstances. However, even in case of surplus scenario, eventualities mentioned below cannot be ruled out in the power system which may require regulation of load and supply:
- a) The forced outage of the generating units especially of larger capacity IPPs in the State for longer duration.
 - b) Any downward revision in the Central Sector schedule due to longer duration on account of forced outage of Central Sector Generating Units, in which the State has a major stake.
 - c) In the event of any reduction/restriction of internal generation due to forced outage/unforeseen reasons and limitation of the transmission/ sub transmission network.
 - d) Any reduction in internal generation due to forced outage may require the emergent imposition of the

power regulatory measures to keep the system running within the limitation of grid code.

- e) Any restrictions due to overloading of inter-regional lines may also necessitate load shedding within the state
 - f) Any other contingency, where available power is not able to meet the demand.
- iv) In the scenarios and circumstances as mentioned above, PSPCL may be required to bridge the demand / supply gap within Punjab control area on real time basis by imposing various regulatory measures. Under the Electricity Act, 2003 while the management of load is to be taken care of by the licensees, a provision in Section 23 enables the Commission to decide the principles and basis on which the regulation in power can be done, to the extent possible in case of exigencies and circumstances that may arise.
- v) PSPCL proposes the following regulatory measures to be taken in case it becomes imperative to impose power regulatory measures and impose power cuts:
- a) To regulate the supply by imposing power cut on feeders controlling supply to the 24 hours UPS/Urban-Industrial Cat-1/Main cities / District Head Quarters.
 - b) To impose weekly off day(s) on LS & MS category of industrial consumers fed from category 2 & 3 industrial feeders.
 - c) To restrict the drawal of the LS & MS category consumers (fed from category 2&3 feeders) to the extent required for keeping the system running within the grid code limitations during peak load hours as well

as off-peak hours.

- d) To restrict the drawal of power by continuous process (category 4) consumers to the extent of their continuous process load allowed to them during peak/ off peak load hours, as per the policy approved by the Commission.
- e) To regulate power supply to AP consumers.
- f) Any other additional regulatory measures to the left out category of consumers in case of exigencies of outage of own / central sector generating units or transmission/ sub-transmission network of ISTS/ STU or any of the major grid elements ICTs etc.
- g) The priority order of imposing power cuts/regulatory measures generally be followed as:
 1. **AP Feeders:** Power Cut (opening of Breakers from the Grid Substations for certain period in rotation depending on the requirement in real time) for safeguard of grid. Thereafter, all possible efforts will be made to compensate the AP supply within 24 Hrs.
 2. **UPS/Category-1 High Loss Feeders:** Power Cut (opening of Breakers from the Grid Substations for certain period in rotation depending on the requirement in real time)
 3. **Kandi feeders / UPS Feeders:** Power Cut (opening of Breakers from the Grid Substations for certain period in rotation depending on the requirement in real time)

4. **Category-1 feeders:** Power Cut (opening of Breakers from the Grid Substations for certain period in rotation depending on the requirement in real time)
 5. **Category-2 feeders:** Restricting the drawal of the LS & MS category consumers to the extent required for keeping the system running within grid code limitations / Imposing Weekly-Off Day on LS & MS Category consumers.
 6. **Category-3 feeders:** Restricting the drawal of the LS & MS category consumers to the extent required for keeping the system running within grid code limitations /Imposing Weekly-Off Day on LS & MS Category consumers.
 7. **Category-4 feeders feeding continuous status process industrial consumers:** To restrict the drawl of power by Continuous process consumers to the extent of their continuous process load allowed to them during peak/off-peak load hours.
- vi) PSPCL further stated that in FY 2020-21, the regulatory measures shall be imposed on the real time basis depending upon the real time gap in the demand and supply of power and other system constraints.
- vii) PSPCL shall however make its best endeavor not to impose any regulatory measures and shall on its part:
- a) Impose minimum Scheduled Power Regulatory Measures / Scheduled Power cuts for which the consumers will be informed in advance about the

schedule of power cuts and regulatory measures in case of outages/exigencies for long durations without any scope of alternate arrangement of power.

- b) Unscheduled load shedding, if any, shall only be imposed during sudden outage of generating units or exigencies in the grid. Duration of such load shedding shall be kept to be as minimum as possible
- viii) The Commission had for the year 2019-20 passed orders dated 19.06.2019 against Petition No. 05 of 2019 dealing with the regulatory measures to be taken when situation arises. The said order dated 19.06.2019 is effective for the period till 31.03.2020.
- ix) The petitioner has prayed to:
 - a) Admit and take on record the present petition filed by PSPCL on the regulatory measures proposed to be taken for the purpose of maintaining equitable distribution of power supply throughout the State of Punjab and to operate the grid in a most economical and efficient manner in compliance to the IEGC/State Grid Code provisions.
 - b) Provide guidance on the regulatory measures proposed by PSPCL as detailed hereinabove and make such modifications in the proposal of PSPCL as the Commission may deem just.
 - c) Pass such Order(s) as the Commission may deem just in facts of the present case.

3. The Commission vide Order dated 28.02.2020 admitted the Petition, and directed PSPCL to issue the public notice inviting

objections from general public/stakeholders, as required under Regulation 67 of the Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005. The petition was fixed for hearing as well as public hearing on 19.03.2020 at 11.00 A.M.

4. PSPCL issued the public notice for inviting comments/objections/suggestions from general public and stake holders, which was published on 29.02.2020 in the leading newspapers namely, 'Punjab Kesari', 'The Tribune' 'Ajit' and 'Spokesman'. The last date for submission of objections/ comments was fixed as 15 days from the publication of the notice.

5. In response to the public notice issued by PSPCL, suggestions/ comments were received from the following objectors:

- i) Siel Chemical Complex, Rajpura, Punjab.
- ii) M/s Mandi Gobindgarh Induction Furnace Association, Mandi Gobindgarh, Punjab

6. The suggestions/comments received from objectors relating to the petition, have been summarized as under:

I) Siel Chemical Complex and Mandi Gobindgarh Induction Furnace Association:

- 1) Power Intensive Continuous process industry should be last category to be asked to give relief through regulatory measures.
- 2) The assumptions taken for calculations of Annexure-A and actual power cuts imposed during 2018-19 & 2019-20 have not been made available for information of the stake holders due to which projected availability

and anticipated demands worked out by PSPCL cannot be understood.

- 3) The data of energy requirement needs to be reconciled as PSPCL is giving different figure in every submission including ARR Petition, additional submission and Annexure-A of this petition.
- 4) General introduction of process of manufacturing as continuous in nature. Being a project with the initiative of GoP, SIEL chemicals should be out of perspective of imposing power cuts.
- 5) There is surplus scenario in all the 12 months of the year and still PSPCL is seeking regulatory guidance on proposals to meet emergent shortages. PSPCL has to focus on the 5 months i.e. Oct., Nov., Dec., Jan. & Feb. for reducing its idle capacity. PSPCL and the Commission need to provide incentive to maximise usage, low tariff for seasonal industry, fast tracking of release of connections, revival of sick and temporarily disconnected industries.
- 6) There should not be any pre planned power regulatory measures because of surplus in energy during the FY 2020-21. If at all required, these shall only be on real time shortages.
- 7) Merit Order of the categories/services for imposing regulatory measures needs to be strictly followed as detailed in the petition.
- 8) The energy and peak power requirement has increased during FY 2020-21, banking availability has

decreased. PSPCL has not indicated how it proposes to meet the peak demand. The Commission may direct PSPCL to not to impose any regulatory measure on LS industries of the Objector's category fed from category 4 feeders.

- 9) The industry be exempted from imposition of all the regulatory measures and restrictions including peak load ToD restrictions.
- 10) In case PSPCL still seeks permission to impose regulatory measures on the industry, then payment of Fixed Charges also need to be regulated i.e. reduced in proportion to the twice the duration of regulatory measures to compensate the consumers.

II) M/s Mandi Gobindgarh Induction Furnace Association:

- 1) PSERC has introduced Special night Rebate for LS industry opting to consume power exclusively during night rebate. Many of our members have opted for the same to optimize the production costs and are also helping PSPCL to flatten its load curve particularly during winter/ non paddy months when PSPCL consumption drastically reduces. As power for such consumers is available only for 12 hours, any power cut on such consumers will hit them financially and may make their option totally unviable. As per the commercial circulars issued by PSPCL, such consumers can opt for the special night tariff with one month notice but cannot exit before the close of the

financial year. Therefore such consumers need to be exempted from any regulatory measure.

- 2) It is submitted that as there is sufficient power and energy with PSPCL as per Annexure-A of the petition, category -3 feeders be either exempted from the power cut/ regularly measures or else only 8 hour weekly off days before or after the four hours of peak load period be imposed so that they can plan deployment of labour accordingly and do not suffer any loss.
- 3) Steel industry in Punjab is still passing through a critical time and have to run the industry sometimes at part or even at a loss just to sustain itself. Under these circumstances, any power cut/ weekly off will turn the industry into red.

7. PSPCL submitted its replies to the objections as under:

I) Siel Chemical Complex and M/s Mandi Gobindgarh Induction Furnace Association:

- 1) Chronological order for power regulations generally followed by PSPCL has already been submitted in the instant petition. The continuous process status industry is already placed last. The regulation of load shall only be carried out depending upon the real time shortages and the nature of fault in the power system equipment.
- 2) Availability is calculated by taking generating targets of different plants/sources. Demand is calculated by CAGR method. The power cuts are imposed on real time basis subject to bridging the gap between availability & demand in case of exigencies, in the

interest of grid security. In addition to this, no notified power cuts have been required/ imposed by PSPCL on any category of consumers of PSPCL during the last three years.

- 3) The difference in energy requirement is due to the T&D losses approved by the Commission after the ARR Petition was filed.
- 4) The Consumers have already been exempted from observing weekly off days/power regulatory measures as per PR Circular 06/2010.
- 5) PSPCL has anticipated surplus scenario throughout the year but unexpected fault in the power system or some other exigencies cannot be ruled out leading to mismatch between demand & supply and thus necessitating the imposition of power cuts / regulatory measures on to the consumers. Moreover, the power system is managed in an optimum way by keeping costly powers surrendered. PSPCL always opts out best option to operate the idle capacity remaining unutilized during winter months where the consumer's demand is less, by way of banking arrangements with other states so that the same can be used during summer period/Sale power.
- 6) PSPCL always exercises the best options to meet the gap in the demand and availability but there may be instances to regulate the power to the consumers in case of exigencies.
- 7) PSPCL proposes to impose Power Regulatory

Measures to impose in an equitable manner by following the order of priority as detailed in the petition.

- 8) For the year 2020-21, initially enough arrangements under banking of power had not matured as various utilities in the country were not able to finalize their availability. However PSPCL is likely to be successful in making banking arrangements with Uttrakhand, Madhya Pradesh and HP. It is anticipated that PSPCL will be importing around 4200 MUs this summer under banking arrangement. Hence, PSPCL has been able to arrange sufficient availability and will meet peak demand successful.
- 9) Present petition has been filed for obtaining guidance of the Commission for regulation of power in case of exigencies as the probability of fault in the power system cannot be ruled out. Thus, PSPCL has no other option left out but to regulate the power to bring the grid in healthy state till some alternate arrangement is made. Thus, while applying the regulatory measures, the nature as well as the type of fault will be important on which the duration of outage of grid element may be assessed in the real time situation.
- 10) The power regulation will be done only in case of exigencies as explained in the petition. Moreover, occurrences of such type of exigencies are unforeseen and may not directly be under the control of PSPCL. The Commission has implemented two part tariff w.e.f. 01.01.2018, which is a breakup of the

existing single part tariff structure/including MMC into Two Part Tariff comprising of fixed (Load/Demand) charges & Energy charges in order to ensure predictable recovery of fixed costs commitment of the Utility, which are to be incurred to meet the demand of its consumers on one hand, and to reduce the marginal cost of energy charges to the consumers, on other hand. Only a small part of fixed cost is being recovered through fixed charges and that too on 80% of sanctioned contract demand or actual whichever is higher. Therefore, the payment of fixed charges need not be regulated. However, PSPCL will try its best to minimize the duration of regulation of power at its minimum by applying rotational power cuts on other categories till some alternate arrangement is made.

II) M/s Mandi Gobindgarh Induction Furnace Association:

- 1 & 2) The power cuts are proposed to be imposed in case of exigencies only as per priority order at para 11 of the petition. The Arc/ Induction furnace industry is already placed at second last in the above order. In recent years, no notified power cuts have been required/ imposed by PSPCL on any category of industrial consumers of PSPCL.
- 3) Present Petition has been filed for obtaining guidance of the Commission for regulation of power in case of exigencies since the probability of fault in the power system can't be ruled out. Thus, PSPCL has no other option left out but to regulate the power to bring the

grid in healthy state till some alternate arrangement is made.

8. Commission's Observations and Findings

The Petition was taken up on hearing on 19.03.2020 at 11.00 A.M. Only one objector (Siel Chemical Complex) and representatives of PSPCL attended the public hearing. After considering the submissions made by the PSPCL, objections/comments raised/made by the consumers/organizations and reply of PSPCL thereon, the Commission observes and decides as under:

- a) The Commission is of the view that since PSPCL is having surplus power capacity, as such no power cut /regulatory measures are required to be imposed. However, unexpected events and circumstances resulting in imbalance in power, cannot be ruled out and may require to impose regulatory measures to maintain grid security. Since these are imposed for minimum necessitated periods/short periods on feeders/ consumers scattered across the State, the demand for waiving off/ regulating the fixed charges during the closure of a unit due to imposition of power regulation does not appear to be feasible.**
- b) The Commission, therefore, authorizes PSPCL to impose regulatory measures including rotational power cuts so as to bridge the gap between demand and supply, in case of exigencies & system requirements only. The approval of the Commission in this respect is subject to the following:**

- i) In view of surplus power available with PSPCL, routine power cuts and compulsory weekly off day(s) will not be imposed in Punjab, on any category of consumers.**
- ii) However, if regulatory measures for maintaining Grid are necessitated in case of any exigency; PSPCL may take Regulatory Measures/ impose rotational Power cuts for which, information will be given to the concerned consumers through SMS/E-Mail (including written intimation, wherever possible) and same shall also be uploaded on its website.**
- iii) Unscheduled load shedding, if any, shall only be imposed during sudden outage of generating units or exigencies in the grid. The duration of such load shedding shall be kept to be as minimum as possible.**
- iv) The Commission shall be informed regarding emergency situations and resultant system constraints, reasons thereof and details of power cuts imposed feeder wise along with duration and its impact on PSPCL revenue at the earliest.**

The petition is disposed of accordingly.

Sd/-

(Anjuli Chandra)
Member

Sd/-

(S.S. Sarna)
Member

Sd/-

(Kusumjit Sidhu)
Chairperson

Chandigarh
Date: 20.03.2020