



# **Chapter 6: Individual Audit Observations on SPSEs**

## **Himachal Pradesh Power Transmission Corporation Limited (HPPTCL)**

# Non-insertion of suitable clause in the bid resulting in avoidable payment of test charges

Failure of the Company in inserting suitable clause in the bid resulted in avoidable payment of testing charges of ₹ 10 crore.

A Short Circuit withstand test<sup>1</sup> is conducted to validate the quality and design of the transformer. As per regulations<sup>2</sup> issued (August 2010) by the Central Electricity Authority (CEA), Short Circuit withstand test of each type and rating<sup>3</sup> of power transformers was required to be conducted<sup>4</sup>. The requirement for testing under the above regulations was also reiterated by the CEA in September 2014.

Himachal Pradesh Power Transmission Corporation Ltd. (Company) commissioned a sub-station<sup>5</sup> at Gumma during November 2020. The bids for this sub-station (including four 105 MVA, single phase, 400/220 KV power transformers), were invited during October 2011. As per terms of the contract<sup>6</sup>, the bidder was required to submit certificates of the Short Circuit Test on transformers if already done, on the offered / higher design and rating. In case the transformer was not short circuit tested, the bidder was to conduct short circuit test free of cost in the presence of owners' representative before supplying the same. The contract (25 October 2013) on the basis of certificate for short circuit test of 315 MVA, 400 KV three phase auto transformer, submitted by the contractor.

Audit scrutiny (December 2020) revealed that the above-mentioned regulation of CEA required the short circuit withstand test to be done or certificate to that effect furnished by the contractor for each type and rating of power transformers. However, condition (4.52 A) of the bid also allowed bidders to submit test report of higher rating of power transformer, which the selected bidder provided with the bid. In the meantime, reiterating the regulation of 2010, the CEA asked (September 2014) Government of Himachal Pradesh to advise all the utilities to ensure that the transformers being supplied by manufacturers were subjected to Short Circuit test in order to meet the requirement of regulations. The Company then decided

To ensure transformers are designed and constructed to withstand without damage the thermal and dynamic effects on external short circuits for 5 seconds under conditions specified in IS: 2026 (Part I) -1977.

Sub-regulation 10(3) (g), 37(4) (k) and 43(2) (vi) of the Regulation 2010 (Technical Standard for construction of Electrical Plants and Electric Lines).

Single phase / three phase / auto transformer / step-down / step-up (type) and capacity of the transformer (rating).

Unless such test had been conducted within last five years on transformer of same design and rating.

<sup>&</sup>lt;sup>5</sup> 400 /220 KV Gas Insulated Switchgear (GIS) substation.

<sup>6</sup> clause 4.52 (A) of Section-4 of the technical specifications.

(October 2014) that the supplier shall conduct the Short Circuit Test on one 105 MVA, single phase, 400/220 KV transformer having financial implication of ₹ 10 crore<sup>7</sup> to be borne by the Company. The test was conducted during May 2016 for which the Company made payments during October 2016 and December 2019.

As the regulations were issued in August 2010, the Company while inviting bids during October 2011 should have inserted a suitable clause, only allowing the bidders to submit the certificate regarding Short Circuit withstand test for the design and rating to be supplied *i.e.*, for 105 MVA, 400 / 220 KV transformer. Had this been ensured, the payment of test charges of ₹ 10 crore could have been avoided. It is pertinent to mention here that the Company while inviting bids for 132 KV GIS Chambi (July 2014) had inserted the suitable clause.

On the issue of short circuit test, the contractor clarified (May 2014) that if the Company wants test to be conducted, the same can be done on chargeable basis *i.e.*, for ₹ 10 crore. The Company held a meeting with the contractor on 18 October 2014 in which it was decided that in lieu of charges of short circuit test, the contractor will increase the warranty of transformer from 540 days to 1080 days. However, the extension of warranty period could not set off the charges of short circuit test as the same could have been got extended by paying two *per cent* per annum of the cost of transformers, as was done by HPPCL in the case of Sainj HEP, which in this case works out to ₹ 54.40 lakh. Thus, had the Company inserted the suitable clause in the bid and even if had gone for extension of warranty, it could have saved ₹ 9.46 crore<sup>8</sup>.

Management, in its reply, stated (October 2021) that in view of the mandatory requirement of short circuit test issued by CEA during September 2014, the test was necessary. The reply was not tenable as the requirement as issued in August, 2010 specified each type of transformer to be mandatorily tested and was hence applicable before invitation of the bids. The Company also inserted a suitable clause in case of 132 KV GIS Chambi. Thus, the Company should have inserted suitable clause regarding test report of transformer of specific design and rating instead of accepting test certificate of higher design and rating thereby avoiding payment of test charges.

Recommendation: To safeguard against avoidable payments, Company should ensure compliance of relevant regulations before awarding the works.

Rate for test quoted by the contractor at bidding stage which did not form part of the bid amount.

<sup>&</sup>lt;sup>8</sup> ₹ 10 crore minus ₹ 54.40 lakh.

# **Himachal Pradesh State Electricity Board Limited (HPSEBL)**

6.2 Audit of Contracts relating to System Strengthening under Integrated Power Development Scheme (IPDS) in Himachal Pradesh State Electricity Board Limited

Company awarded (2018-19) contracts relating to solar plants at  $\mathbb{Z}$  5.14 crore higher than the rates approved by HIMURJA. They approved extension of time, on unjustified grounds, resulting in non-levy of LD amounting to  $\mathbb{Z}$  57.60 lakh. GST payment to contractors on solar plants was made (January 2019 to December 2019) at  $18 \ per \ cent$  against the applicable rate of five  $per \ cent$  resulting in extra payment of  $\mathbb{Z}$  21.03 lakh.

Ministry of Power (MoP), Government of India (GOI) launched Integrated Power Development Scheme (IPDS) on 3 December 2014. The main objectives of IPDS were:

- Strengthening of Sub-transmission and Distribution system, including provisioning of solar panels in the urban areas;
- Metering of distribution transformers/ feeders/ consumers in the urban areas; and
- IT enablement of distribution sector and strengthening of distribution network.

There were five parts of the scheme of which System Strengthening was one major part. Twelve projects amounting to ₹ 111.15 crore in 12 Circles were sanctioned (21 March 2016) by the Power Finance Corporation (PFC) under system strengthening against which the Company awarded circle wise contracts / packages. The scheduled completion period as per guidelines of the scheme was 20 September 2018.

A summary of grant received and actual expenditure including loan and own share till 31 March 2022 in IPDS was as detailed in the **Table-6.2.1** given below:

Table-6.2.1: Receipt and expenditure of funds

(₹ in crore)

Sanctioned	Grant		Total Expenditure			
Grant	Grant received Grant utilised Company's share Loan amount					
94.49	94.13	94.13	5.60	10.79	110.52	

The audit of contracts for system strengthening was carried out during September 2021. Major audit observations noticed during audit have been discussed in the following paragraphs:

#### 1. Award of work at higher rates –

As per regulations<sup>9</sup>, Himachal Pradesh Energy Development Agency (HIMURJA) was the state nodal agency for the purpose of implementation of solar plants.

<sup>&</sup>lt;sup>9</sup> HPERC (Rooftop Solar PV Grid Interactive System based on Net Metering) Regulation, 2015 notified on dated 31st July 2015.

HIMURJA empanels vendors and fixes the rates for installation of solar plants with net metering of capacities ranging from one kilowatt (KW) power output to 500 KW. The solar plant as an item (which was not dependent on any other component) included in the packages awarded for system strengthening in nine out of 12 projects. Being an independent item, contract for the Solar plants could have been awarded separately as was done in other three (Kangra, Una and Dalhousie) circles.

The rates awarded for solar plants under consolidated contract for system strengthening in nine circles were extraordinarily higher as compared to HIMURJA approved rates. Whereas, in remaining three circles<sup>10</sup>, the solar plants was awarded separately by the Company on rates approved by the HIMURJA while the remaining works were awarded on turnkey basis. Knowing the rates for solar plants fixed by the HIMURJA the Company could have issued separate work orders for solar plants at the rates fixed by HIMURJA in all the twelve circles as was done in case of three circles *ibid*. Had the Company awarded work of solar plants separately at HIMURJA rates, it could have saved ₹ 5.14 crore. Details of excess expenditure are given in **Table-6.2.2**:

**Table-6.2.2: Details of excess payment** 

(Amount in ₹)

Name of Firm	Name of the Circle	Rates approved by HIMURJA (per KW)	Rate as per LoA (per KW)	Excess rate (per KW)	Quantity as per LoA (in KW)	Excess expenditure
M/s Shyam Indus Power Solutions	Shimla	47,000	1,29,388	82,388	98	80,74,024
M/s Shyam Indus Power Solutions	Rohru	47,000	1,27,138	80,138	64.4	51,60,887
M/s Rutu Enterprises	Solan	42,000	88,438	46,438	443	2,05,72,034
M/s UTRI	Rampur	49,700	79,198	29,498	21.2	6,25,358
M/s PK Enterprises	Mandi	49,700	1,43,217	93,517	34	31,79,578
M/s PK Enterprises	Kullu	49,700	1,31,987	82,287	42	34,56,054
M/s Ratwan Light House	Bilaspur	47,000	1,33,011	86,011	60.2	51,77,862
M/s Devraya Engineering	Hamirpur	47,000	1,01,135	54,135	73.4	39,73,509
M/s Chaudhary Associates	Nahan	49,700	96,500	46,800	24.3	11,37,240
Total						

In nine circles, the Company awarded (2018-19) contracts relating to solar plants at 117 *per cent* to 217 *per cent* higher rates in comparison to approved rates of HIMURJA for 2018-19. It was also noticed that in three (Kangra, Una and Dalhousie) circles, Company awarded (during 2018-19) the work of solar panels to the empanelled vendors at rates approved by HIMURJA.

Management in its reply stated that tenders were invited on turnkey basis and offers were accepted on the basis of overall price and not on the basis of the individual items.

Reply was not tenable as the rate of solar panels of approved vendors by HIMURJA were in the knowledge of management and Company could have saved ₹ 5.14 crore

<sup>&</sup>lt;sup>10</sup> Kangra, Una and Dalhousie.

by awarding separate contracts for solar plants as done for Kangra, Una and Dalhousie circles.

#### 2. Undue favor to the contractor –

The contract for system strengthening in Kullu circle was awarded to a contractor in May 2018. As per clause 26 of Special Conditions of contract, the contractor shall pay liquidated damages (LD), for delay in completion of works, at the rate of half *per cent* per week, subject to maximum of 10 *per cent* of the contract price.

The work was to be completed by 31 March 2019. However, the pace of work by the contractor was very slow right from the beginning and the office of Superintending Engineer (Op) Circle, Kullu and Sr. Executive Engineer (Electrical Division), Manali regularly communicated that the work was getting delayed due to the reasons attributable to the contractor. However, later as per recommendation of field office, the Chief Engineer (Op), taking plea that the material¹¹ to be supplied by the Company was delayed, approved (March 2021) extension of time up to 30.09.2020 without levy of LD, resulting in non-levy of LD amounting to ₹ 57.60 lakh. There was no evidence on record to suggest that field offices sent requisitions/indent of materials to the stores and subsequent denial by stores regarding non availability of materials. Moreover, scrutiny of stock showed that the material to be supplied by the Company was available in store of the Company during that period.

The contractor has not completed many components of the scheme upto the extension granted *i.e.*, up to 30.09.2020. This was evident from the fact that the contractor submitted erection bill in February 2021. Thus, the time extension granted without levy of any liquidated damages amounted to undue favour to the contractor.

Management in its reply (April 2022) stated that work could not be got completed due to late availability of materials to be supplied by HPSEBL and nationwide lockdown due to COVID 19. Reply of the Management was not acceptable as it was noticed that officers of the Company wrote various letters/notices to the contractor that work was getting delayed. Moreover, up to the scheduled completion period (March 2019) no requisition of the contractor was turned down due to non-availability of material. As far as nation-wide lockdown due to Covid19 is concerned, the same is not tenable for delay in completion as the lockdown was imposed on 25 March 2020 *i.e.*, after one year of scheduled date of completion.

#### 3. Overpayment of GST –

The work for supply and erection of solar panels with net metering of capacity of 162 KW<sup>12</sup> for Shimla and Rohru circles was awarded during March and April 2018. The LoA specified<sup>13</sup> that bid prices are inclusive of GST and other taxes (if any) and

Steel Tubular Poles, LT AB cables, Energy Meters etc.

<sup>12</sup> Shimla 98 KW+ Rohru: 64.4 KW.

<sup>&</sup>lt;sup>13</sup> Condition No.8.

the same shall be payable as per actual, against documentary proof only<sup>14</sup>. GST on solar power plants was reduced (to five *per cent*) in June 2017.

Audit noticed that payments for supply between January 2019 and December 2019, were made by the Company by considering GST at 18 *per cent* without any documentary evidence. This resulted in extra / overpayment of GST amounting to ₹21.03 lakh as detailed in **Table-6.2.3**.

Table-6.2.3: Detail of overpayment of GST

(Amount in ₹)

Description	Circle office	Quantity KW	Ex-works rate per KW	GST Rates paid @18%	GST payable @5%	Excess paid
1	2	3	4	5	6	7 (5-6 x 3)
Solar panels with net	Rohru	64.4	98,547	17,738	4,927	8,25,028
metering	Shimla	98	1,00,291	18,052	5,015	12,77,626
Total						21,02,654

Management in its reply stated (April 2022) that excess amount whatsoever was paid to the contractors is being recovered from the firm. However, the recovery has not been made so far (August 2022).

Audit of contract thus showed that the Company could not ensure economy by awarding the contract for solar panel separately thereby incurring extra expenditure of ₹ 5.14 crore. Similarly, it failed to safeguard its financial interests by not recovering the due liquidated damages and releasing excess GST.

Recommendation: Company may ensure execution of contracts in an economical manner.

## Shimla Jal Prabandhan Nigam Limited (SJPNL)

# 6.3 Avoidable expenditure due to non-revision of Contract Demand and Standard Voltage Supply

Failure of Shimla Jal Prabandhan Nigam Limited (SJPNL) to revise Contract Demand as per actual maximum recorded demand in three Lift Water Supply Schemes led to avoidable expenditure/ liability of Demand Charges of ₹5.67 crore. Wrongly imposed Contract Demand Violation Charges of ₹0.23 crore was paid by SJPNL. Further, the SJPNL availed energy supply at a voltage lower than the Standard Supply Voltage, resulting in avoidable expenditure of ₹5.14 crore on account of Low Voltage Supply Surcharge.

Shimla Jal Prabandhan Nigam Limited (SJPNL), incorporated (June 2018) as a jointly promoted company of Government of Himachal Pradesh and Municipal Corporation, Shimla, under Companies Act, 2013, is solely responsible for water and sewerage services in the greater Shimla area. It operates Lift Water Supply Schemes (LWSSs) through its three Sub-divisions at Gumma, Giri and Ashwini *Khad*. The water is lifted

<sup>&</sup>lt;sup>14</sup> Clause No.13 of section-II.

by operating centrifugal pumps installed at these LWSSs. Expenditure of  $\stackrel{?}{\stackrel{?}{?}} 203.09$  crore was incurred on these pumps during 2018-19 ( $\stackrel{?}{\stackrel{?}{?}} 99.64$  crore) and 2019-20 ( $\stackrel{?}{\stackrel{?}{?}} 103.45$  crore) towards energy charges paid to the Himachal Pradesh State Electricity Board Limited (HPSEBL), which works out to 70 *per cent* (approximately) of total operation and maintenance cost of the SJPNL.

State Financial Rules as applicable to the SJPNL, envisage that every officer incurring expenditure from public moneys shall be guided by high standards of financial propriety. Every officer shall also enforce strict economy and see that all relevant rules and regulations are followed.

The General conditions of tariff of HPSEBL stipulate that:

- (a) Consumers whose energy consumption is billed in ₹ / kVAh, shall in addition to the kVAh charges, be charged 'Demand Charges' at the rates<sup>15</sup> calculated on the actual maximum (in kVA) recorded demand on energy meter during any consecutive 30 minute block period of the month or at 90 *per cent* of the Contract Demand<sup>16</sup> (in kVA), whichever is higher but up to a ceiling of the Contract Demand as currently applicable. In the event, the actual Maximum Demand recorded on the energy meter exceeds the Contract Demand, the consumer shall be charged "Contract Demand Violation Charges" at the rate of three times of the Demand Charges to the extent the violation has occurred in excess of the Contract Demand.
- (b) Consumers availing electricity supply at a voltage lower than the 'Standard Supply Voltage' shall, in addition to other charges, be also charged a Low Voltage Supply Surcharge (LVSS) at the rate of two, three, and five *per cent* on the amount of energy charges billed, for 'each level of step down' from the 'standard supply voltage' to the level of actually availed supply voltage as per details given in **Table-6.3.3** under sub-paragraph (iv) below.

Scrutiny (August 2020) of records of the office of the Managing Director, SJPNL, Shimla in respect of 18 electric meters of LWSSs Gumma (14), Giri (two) and Ashwani *Khad* (two) revealed the following:

#### (i) Existing Contract Demand in excess of maximum demand recorded

During the period from June 2018 to May 2020, '90 *per cent* of Contract Demand' of four meters at Gumma (two), and Ashwani *Khad* (two) was much higher than the maximum recorded / consumed demand in the meters installed (**Appendix-6.1**) briefly indicated in **Table-6.3.1**.

Rate of Demand Charges applicable in LWSSs of SJPNL: June 2018 to June 2019 at the rate of ₹ 400 per kVA/ month and from 01 July 2019 and onwards at the rate of ₹ 300 per kVA/ month.

Contract demand is the amount of electric power that a consumer demands from utility in a specified interval (Unit used is kVA or kW) while the maximum kVA requirement over billing cycle is called as maximum demand.

Standard voltage at which electricity shall be given to the consumer through a common or dedicated or joint dedicated feeder without payment of any lower voltage supply surcharge.

Expression 'for each level of step down' as an example shall mean that in a particular case if the Standard Supply Voltage is 33 kV and the Actually Availed Supply Voltage is less than 11 kV, then the number of step down will be two and the rate of LVSS applicable shall be eight *per cent* (five *per cent* + three *per cent*).

Table-6.3.1: Details of Contract Demand and Maximum Recorded Demand

LWSS unit (period)	K.No. / meter No.	Contract Demand (kVA)	90 per cent of Contract Demand (in kVA)	Actual Maximum demand recorded (in kVAh)	Revised/Proposed Contract Demand based on recorded Demand (in kVA)
Gumma (June 2018	1112605289	4557.77	4101.99	525 to 2415.6	1500
to April 2020)	1112605290	5868.61	5281.75	2750 to 3980*	4000
Ashwani Khad	12383282	718	646.2	320 to 362.1	400**
(July 2019 to July 2020)	12249906	1470	1323	362.1 to 384.8	400**

Source: Information supplied by SJPNL.

Further, an energy and water audit conducted (2017) by Development Environergy Services Limited (DESL) had recommended to reduce Contract Demand based on historical data of actual maximum demand recorded so as to minimise energy costs. The SJPNL, however, took up the matter with HPSEBL only in June 2019, for reduction of Contract Demand of the meters at Gumma. The HPSEBL advised (December 2019) SJPNL to take up the matter with the Electrical Division concerned at Mashobra. However, SJPNL took another five months (due to shortage of technical manpower) in sending proposal for reduction of Contract Demand, to Electrical Division at Mashobra in May 2020. The HPSEBL revised (June 2020) the Contract Demand (as per actual requirement) in respect of Meters (1112605289: 1500 kVA and 1112605290: 4000 kVA) from May 2020 onwards. Audit scrutiny in August 2020 pointed out the non-revision of Contract Demand of other meter at Ashwini *Khad*, however, at Ashwini *Khad* Contract Demand had not been revised as of September 2021.

Thus, the SJPNL had not taken timely action for reduction of the Contract Demand based on actual recorded demand which resulted in avoidable expenditure of ₹ 3.70 crore on account of Demand Charges paid to HPSEBL during June 2018 to July 2020 (Appendix-6.1) as briefly indicated in Table-6.3.2.

Table-6.3.2: Avoidable payments of Demand Charges

(₹ in crore)

LWSS unit (period)	K.No./ meter No.	Period	Rates of Demand Charges (₹ kVA/month)	Demand Charges paid	Demand Charges payable* (Appendix- 6.1)	Avoidable payment of Demand Charges
		June 2018 to June 2019	400	2.13	0.78	1.35
Gumma	1112605289	July 2019 to April 2020	300	1.23	0.47	0.76
	1112605290	August 2018 to June 2019	400	2.32	1.66	0.66
		July 2019 to April 2020	300	1.58	1.14	0.45
Ashwani	12383282	July 2019 to July 2020	300	0.25	0.14	0.11
Khad	12249906	June 2019 to July 2020	300	0.52	0.14	0.37
		Total	8.03	4.33	3.70	

Source: Information supplied by SJPNL.

<sup>\*</sup>During August 2018 to April 2020 as actual demand had exceeded the Contract Demand during June and July 2018.

<sup>\*\*</sup>Probable proposed based on meter reading trends.

<sup>\*</sup>Demand Charges payable on actual recorded demand or 90 per cent of Revised/ Proposed Contract Demand.

#### (ii) Wrong imposition of Contract Demand Violation Charges

During July 2019 and May 2020, the actual maximum demand recorded at LWSS Gumma was 1663.2 kVAh against Contract Demand of 1848 kVA, however, the HPSEBL had wrongly imposed Contract Demand Violation Charges of ₹ 0.23 crore for these two months and this was paid by SJPNL. Though the SJPNL had taken up (April 2021) the matter with HPSEBL for wrong imposition of Contract Demand Violation Charges, the same had not been adjusted as of September 2021. The case was pointed out by Audit in August 2020 whereas the SJPNL took the matter with HPSEBL in April 2021 and the adjustment of this amount was pending.

Thus, failure of SJPNL to take timely action on wrong imposition of Contract Demand Violation Charges, led to avoidable payment of  $\ge 0.23$  crore.

## (iii) Demand Charges on nil consumption of electricity

Under LWSS, Gumma, SJPNL lifts water from Gumma (first stage) to Drabla (second stage) to Craignano. For pumping at Drabla, the electricity supply is being recorded in Meter (K.No. 1112605291).

It was observed that another Meter (K.No.1112605321) was also installed on standby feeder line at Drabla Pumping Station at 66 KV/ 22KV (substation at Goshu Gumma). As the electricity supply was being recorded in Meter (K.No.1112605291), the consumption of electricity in standby feeder line Meter (K.No.1112605321) was nil from June 2018 to June 2020, which needed to be uninstalled and the supply of standby feeder line could have been connected to Meter (K.No.1112605291) at Drabla.

However, the SJPNL had not taken timely action to un-install the standby feeder line Meter (K.No. 1112605321). When the SJPNL took up (August 2019) the issue with HPSEBL, HPSEBL sent a demand of ₹ 9.73 lakh for construction of four Pole structure for providing CT/ PT<sup>19</sup> unit which would club the feeder line with Meter (K.No.1112605291) at Drabla. The SJPNL had deposited ₹ 9.73 lakh (November 2019) with HPSEBL. However, the matter was not pursued further and HPSEBL had not uninstalled the standby feeder line Meter as of May 2022. Further, the HPSEBL had raised bills claiming Demand Charges of ₹ 1.97 crore (Demand Charges: ₹ 1.93 crore<sup>20</sup> at the rate of 90 *per cent* of the Contract Demand 2819 kVA and surcharge for not paying the amount by due date: ₹ 0.04 crore) of standby feeder line Meter (K.No. 1112605321) September 2018 to June 2020, though the consumption was nil. Against this amount, Demand Charges of ₹ 1.02 crore upto June 2019 had been paid and ₹ 0.95 crore (Demand Charges: ₹ 0.91 crore and surcharge for not paying the amount by due date, etc. ₹ 0.04 crore) were outstanding as of August 2020.

# (iv) Low Voltage Supply Surcharge

For availing electricity supply at a voltage lower than the 'Standard Supply Voltage' 21, the HPSEB shall charge a Low Voltage Supply Surcharge (LVSS) at the

Current transformer/ potential transformer.

September 2018 to June 2019: 2537.10 kVAhX400X10=  $\stackrel{?}{\stackrel{?}{\stackrel{?}{$}}}1,01,48,400$  and July 2019 to June 2020=2537.10 kVAhX300X12=  $\stackrel{?}{\stackrel{?}{\stackrel{?}{$}}}91,33,560$ .

Standard voltage at which electricity shall be given to the consumer through a common or dedicated or joint dedicated feeder without payment of any lower voltage supply surcharge.

rates given in **Table-6.3.3** on the amount of energy charges billed, for 'each level of step down' from the 'standard supply voltage' to the level of actually availed supply voltage.

Table-6.3.3: Rate of Low Voltage Supply Surcharge against Standard Supply Voltage

Standard Supply	Actually availed supply voltage	LVSS (per cent)
11 KV or 15 KV or 22 KV	10.23 KV or 30.415 KV or 2.2 KV	5
33 KV	11 KV or 22 KV	3
66 KV	33 KV	2
>= 132 KV	66 KV	2

Audit observed that six meters (Gumma: 04 and Giri: 02) were levied LVSS at the rate of three *per cent* or eight *per cent* (in case of actual utilised voltage is two steps below the level of Standard Supply Voltage) from June 2018 to March 2021 as detailed in **Table-6.3.4**.

Table-6.3.4: Details of Low Voltage Supply Surcharge

Sr. No.	Metre No. (K.No.)	LWSS	Connected Load (kW)*	Standard supply voltage	Actual availed voltage	Rate of LVSS (per cent)	LVSS imposed (₹ in crore)
1.	1112605289	Gumma	4102.00	33 KV	15 KV	3	0.06
2.	1112605290	Gumma	5281.70	33 KV	2.2 KV	8	1.69
3.	1112605291	Gumma	2819.67	33 KV	2.2 KV	8	1.38
4.	1112605293	Gumma	3319.12	33 KV	2.2 KV	8	0.74
5.	HPU00318	Giri	2425.00	33 KV	11 KV	3	0.64
6.	HPU00204	Giri	2816.00	33 KV	11 KV	3	0.63
	Total						5.14

Source: Information supplied by SJPNL.

The SJPNL availed energy supply at a voltage lower than the Standard Supply Voltage resulting in avoidable expenditure of ₹ 5.14 crore on account of LVSS actually paid to HPSEBL during June 2018 to March 2021 (**Appendix-6.2**).

In July 2020, SJPNL requested Executive Engineer, HPSEBL Division-Theog to waive off Lower Voltage Supply Surcharges and Violation Charges in respect of meter No. HPU00318 and HPU00204, but no action was taken as of February 2021.

Evidently, contrary to the provision of State Financial Rules *ibid*, the Management of SJPNL had failed to enforce strict economy with regard to energy cost of its LWSSs.

- The SJPNL had not taken timely action for revision of Contract Demand as per actual maximum recorded demand in energy meters which resulted in avoidable expenditure/ liability of Demand Charges of ₹ 3.70 crore.
- Due to wrong imposition of Contract Demand charges, SJPNL had to pay ₹ 0.23 crore.
- The SJPNL had not taken timely action to uninstall Standby feeder line Meter leading to liability of Demand Charges of ₹ 1.97 crore even after nil consumption.

<sup>\*</sup> Standard Supply Voltage : <=50 kW-2.2 kV or 400 Volts; 51 kW to 2000 kW- 6.6 kV, 11 kV, 15 kV or 22 kV; 2001 kW to 10000 kW- 33 kV or 66 kV and >10000 kW- >=132 kV.

• The SJPNL availed energy supply at a voltage lower than the Standard Supply Voltage resulting in avoidable expenditure of ₹ 5.14 crore on account of LVSS.

The Principal Secretary (Urban Development) stated (September 2021) that timely action for reduction of Contract Demand could not be taken due to shortage of technical manpower and proper examination of the DESL Report being a time-consuming process. Regarding Contract Demand Violation Charges, the matter for correction of Contract Demand has been taken up with HPSEBL. In the case of LVSS, the Managing Director, SJPNL stated (February 2021) that correspondence had been made with HPSEBL to resolve the issues at the earliest. The fact, however, remains that due to non-revision of the Standard Supply Voltage as per actual availed voltage of the energy meters, the SJPNL had to bear the avoidable payment of LVSS to the HPSEBL.

Recommendation: The Government may consider expediting the rationalization/revision of Contract Demand of energy meters of Lift Water Supply Schemes of SJPNL as per actual maximum recorded demand, so as to minimise the energy costs, and to avail supply at prescribed Standard Supply Voltage for Lift Water Supply Schemes of SJPNL so as to avoid recurring payment of Low Voltage Supply Surcharge.

(Chanda Madhukar Pandit)

**Principal Accountant General (Audit)** 

Himachal Pradesh

**Countersigned** 

Shimla

Dated: 03 December 2022

New Delhi (Girish Chandra Murmu)

Dated: 13 December 2022 Comptroller and Auditor General of India