

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
5thFloor, Metro Plaza, Bittan Market, E-5, Arera Colony, Bhopal - 462016



Petition No. 23/2023

PRESENT:

S. P. S. Parihar, Chairman
Gopal Srivastava, Member (Law)
Prashant Chaturvedi, Member

IN THE MATTER OF:

In the matter of SLDC's petition regarding in-principle Approval of project for "Replacement / Upgradation of SCADA / EMS at SLDC Jabalpur, backup SLDC Bhopal & sub SLDC Indore".

State Load Despatch Centre (SLDC), MPPTCL, Jabalpur

- Petitioner

V/s

- 1. M.P. PoorvKshetra Vidyut Vitaran Co. Ltd. Jabalpur**
- 2. M.P. Madhya Kshetra Vidyut Vitaran Co. Ltd. Bhopal**
- 3. M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd. Indore**
- 4. M.P. Power Management Co. Ltd. Jabalpur**
- 5. M.P. Power Transmission Co. Ltd. Jabalpur**
- 6. M.P. Power Generating Co. Ltd. Jabalpur**
- 7. M.P Industrial Development Corporation Ltd. Indore**
- 8. West Central Railways, Jabalpur**
- 9. Satpura Transco Pvt Ltd, Mumbai**
- 10. Narmada Hydro-Electric Development Corp. Bhopal**
- 11. Narmada Valley Development Authority, Bhopal**
- 12. BLA Power Private Ltd., Mumbai**
- 13. Jaiprakash Power Ventures Ltd. Noida**

- Respondents

ORDER
(Passed on this day of 29th September,2023)

1. This order relates to petition No. 23 of 2023 filed by the State Load Despatch Centre, MPPTCL Jabalpur (hereinafter referred to as "SLDC") vide its letter No. 07-05 /E&T/602 dated 11/05/2023 for in-principle approval of project for "Replacement / Upgradation of SCADA / EMS at SLDC Jabalpur, backup SLDC Bhopal & sub SLDC Indore before Madhya Pradesh Electricity Regulatory Commission (hereinafter referred to as "the Commission").

The petitioner has broadly submitted as under:

SLDC, is the apex body for scheduling and system operation in the State of MP incorporated under Section 31 of Electricity Act 2003. In exercise of the Powers conferred under Section 31(1) of Electricity Act-2003 (Central Act 36 of 2003), the Government of MP vide order No 2489/13/04 dated 17-05-2004 has notified the State Load Despatch Centre, Jabalpur as apex body to ensure integrated operation of the power system in the state, to be operated by the State Transmission Utility(hereinafter referred to as STU).

2. *SLDC is equipped with SCADA/EMS system having main control center at Jabalpur, Backup SLDC at Bhopal and Sub-LDC at Indore. The existing SCADA/EMS System at SLDC and Backup SLDC/Sub-LDC at Bhopal and Indore was commissioned in the month of July, 2016 under the project of Unified Replacement/Upgradation of SCADA/EMS installed at WRLDC and SLDCs of WR States executed by PGCIL. The existing SCADA/EMS system need to be replaced due to completion of system life, problem in maintenance due to non-availability of spare and support, limitation in integration of new RTU/SAS and for adaptation of new technologies, increased cyber security requirement, necessity to incorporate latest protocols etc.*
4. *As per Regulation 12.4 of MPERC (Levy & Collection of SLDC Fee and charges by SLDC) Regulation 2004, the five-year Capex plan of SLDC & Sub-LDCs is submitted along with the SLDC fee & charges petition for approval of Honorable commission. Presently, the five-year capital plan of SLDC for the period 2021-22 to 2025-26 has been approved by honorable commission vide order dated 06-12-2021. The updated status of Capex plan has been submitted along with the fees and charges petition for year 2023-24 and approved vide order No. MPERC/Sec/2023/433 dated 28-02-2023.*
5. *The project "replacement/upgradation of SCADA/EMS system of SLDC Jabalpur, Backup SLDC Bhopal & Sub-LDC Indore was included in the five-year Capex plan for the period 2021-22 to 2025-26. However, at the time of filing of petition of*

SLDC Capex plan, the scope of work, technical requirement, BOQ, etc. of the project were not finalized and the project cost for replacement of SCADA/EMS project was tentative without any market survey.

6. *Implementation of existing SCADA/EMS project at RLDC, SLDC Jabalpur, SLDC GETCO, SLDC, CSPTCL, SLDC Goa SLDC has been carried out through POWERGRID in unified manner. Accordingly, the proposed replacement project is also planned in similar manner and, an agreement for replacement/upgradation of SCADA/EMS system at SLDC MP was signed with POSOCO (Now Grid-India) on dated 12-01-2021. As per the signed agreement, the implementation strategy shall be as given below: -*

(i) The upgradation would be carried out in ULDC mode for all the SLDCs and concern RLDC in a region.

(ii) Detailed technical specification shall be prepared by a Committee comprising of members from each participating SLDC, RLDC and Grid-India.

(iii) The tendering for complete project of SCADA/EMS system shall be done by Grid-India after considering the requirement of each State. The tender shall have separate package for each participating SLDC and WRLDC.

(iv) Grid-India shall evaluate the tender and finalize the successful bidder. Each participating SLDC and WRLDC shall award contract to the successful bidder for installation & commissioning of SCADA/EMS separately and shall have the responsibility for execution of contract and payment obligations by arranging funds from their own resources.

(v) The WRLDC will act as a Nodal Agency for implementation of project in coordinated and integrated manner.

7. *The technical specification & system architecture of the project has been finalised by the committee comprising of Grid-India, WRLDC and all Western Region States. Based on the finalised architecture & specifications, the BOQ is also finalised by the states as per requirement of individual states. The NIT for the implementation of the replacement/Upgradation of SCADA/EMS system of WRLDC and WR states is also issued by Grid-India in April 2023. A brief description of the project is given hereunder: -*

7.1 *System Architecture:- The SCADA/EMS system for grid management of Indian system is hierarchical in nature having integrated system with data flow from Sub-LDC to SLDC, RLDC and NLDC. The Bill of Quantity indicates various servers, Networking equipment's, peripherals etc proposed under the project for SLDC Jabalpur, Backup SLDC Bhopal & Sub-LDC Indore.*

- 7.2 *Salient Feature:- The salient feature of the proposed system & its architecture are as given hereunder:-*
- (i) *The proposed SCADA/EMS system shall have main control centre at Jabalpur and Backup Control Centre at Bhopal. Sub-LDC Indore shall have work stations and Video Projection System for grid monitoring.*
 - (ii) *The data from all EHV SUB Stations/Power Stations/IPP shall be routed to both main and backup Control centre and in case of failure of Main control centre, backup SLDC shall takeover all functions of main SLDC.*
 - (iii) *The architecture shall have state of the art technology using network segmentation, redundancy of functionalities having main and standby configurations.*
 - (iv) *The system shall have additional EMS functionalities like Short Circuit Analysis & Security Enhancement Applications along with the Automatic Generation Control (AGC).*
 - (v) *The system shall have following advanced cyber security solutions as recommended by CERT for such type of system architecture:-*
 - (a)*Security Incident & Event Management (SIEM),*
 - (b)*Host based Intrusion Prevention System (HIPS)*
 - (c)*Vulnerability Assessment & Penetration Testing (VAPT) tool*
 - (d)*End Point Security Solution with centralized management*
 - (e)*Aadvanced Persistent Threat (APT) detection solution.*
 - (vi) *The system is proposed with system sizing considering present and future requirement of integration of EHV Sub Stations/Power Stations/IPP etc and with 100 % expansion probability.*
 - (vii) *The data storage of the proposed system is worked out considering 7 years system life cycle data and 10 years historical data of existing system.*
 - (viii) *Latest protocols like Secure ICCP, IEC 60870-5-101/104, OPC & ODBC etc are envisaged in the project for connectivity with Control Centres and RTUs.*
 - (ix) *SCADA/EMS system is proposed along with 60 KVA redundant UPS & 250 KVA DG set for SLDC Jabalpur & 200 KVA DG set for Backup LDC Bhopal.*
 - (x) *The proposed system shall have enhanced Visualisation facility by large Video Projection System (VPS).*

- 7.3 *Scope of Work:-The scope of work under project includes overall Project Management having Survey, Planning, Design, Engineering, Documentation, Integration, Supply, Delivery to site, Unloading, Insurance, Storing, Handling, transportation to final locations, Installation, Termination, Testing, Demonstration for acceptance, Training to owner officers and Commissioning of SCADA/EMS system & Auxiliary Power Supply system . The Scope of work covers Integration of telemetry of existing and New Sub Stations/Power Stations with Main and Back up Control Centre System & Integration of Main and Back up Control Centres with existing Control Centres/Systems like RLDC, MPPTCL SCADA, URTDSM, REMC, ABT,OA & MIS system.*

The Scope of work also covers dismantling of existing system (RLDC/SLDC) after successful shifting of Operation to New SCADA/EMS system.

The Scope of Work also includes Comprehensive Maintenance of the supplied system as per specification including future ICCP & RTU/SAS/Terminal server/DCPC Integrations, Database configurations, Maintaining Spare inventory, Cyber Security Audit etc. for seven years after taking over of system.

- 7.4 *Project Implementation Schedule: - The successful bidder are required to complete the project within twenty months from date of issue of contract.*
- 7.5 *Buy Back: - The existing system after dismantling shall be taken away (buy-back) by the contractor. The contractor shall quote the buyback price for the dismantled system or this factor shall be taken into consideration while quoting the price bid.*
- 7.6 *AMC: - The system shall be provided with one year Defect Liability Period (DLP) & Six years Comprehensive Annual Maintenance Contract (AMC) Services. During AMC & DLP period, the contractor shall require to ensure the system availability of 99.99 % for which necessary spare support, manpower support, training, cyber security audit, Integration of new grid elements, new systems shall be the responsibility of the contractor.*
- 7.7 *Cost Estimate: -Grid-India vide email dtd. 18.02.23 has provided cost estimate from 2 different vendors i.e. M/s Siemens Ltd. having estimated cost of Rs. 102 Crore & M/s GE T&D India Ltd. having estimated cost of Rs. 180 Crore. Considering lowest of the two estimates provided by GRID-India, the capital cost and AMC cost is worked out separately & given hereunder: -*

Sl. No.	Particulars	Amount (in Rs. Crore)
a.	Capital Cost component of Project	64.00
b.	Overhead on Capital Cost	3.20
c.	Interest During Construction (IDC)	2.75
d.	Total Capital Cost (a+b+c)=d	69.95
	Total Capital Cost (Rounded) d	70.00
e.	AMC cost (One Year Guarantee Period + 6 Year AMC)	38.00
	Total Project Cost (d+e)	Rs. 108.00

It is submitted that actual cost of project may vary as per response of tender and award of contract.

8. **Funding of the Project:-** The award of contract and payment obligations for replacement/Upgradation of System at SLDC, Backup SLDC & Sub-LDC is to be arranged by MP SLDC. The approved five year rolling Capex plan of SLDC has been modified to include the proposed project cost and modified CP-1 considering Rs. 70.00 crore project cost for SCADA/EMS replacement project and year wise payment obligations as per the project schedule provided by Grid-India. The year wise availability of Capex fund and planed capital expenditure is given hereunder: -

Year wise proposed requirement as well as availability of fund in Rs. Lakhs								
S.No	Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	TOTAL
1	Availability of fund for Capex (Approved/Projected)	340	125	133	146	161	177	1082
2	Previous year Balance	1902	2194	2278	1648	-1210	-4696	1902
3	Interest on Capex Fund (Gross)	19	50	100	11	0	0	180
4	Total Capex Available (1+2+3)	2261	2369	2511	1805	-1049	-4519	3164
5	Capex Requirement	67	91	863	3015	3647	25	7708
6	Cumulative Surplus (4-5)	2194	2278	1648	-1210	-4696	-4544	-4544

- 8.1 It is evident from above; sufficient fund is not available with SLDC for implementation of the replacement of SCADA/EMS system project hence funding from other resources was asked. In order to avail PSDF grant, the Detailed Project Report (DPR) was submitted to

- NLDC. However, the proposal was declined with comments that “ It has been decided that SR & WR projects will be executed by Grid-India through the respective LDC funding and ER & NR by POWERGRID through tariff mode. No support of PSDF is envisaged. Therefore, the present DPR of SLDC MPPTCL is considered as Deemed Returned”.*
- 8.2 *Loan: The financial institute like PFC/REC/any other suitable institute shall be approached for availing loan for implementation of project “Replacement/Upgradation of SCADA/EMS system of SLDC Jabalpur, Backup SLDC and Sub-LDC Indore”. The proposed loan shall be availed considering 70% loan and 30% equity.*
- 8.3 *Repayment of Loan:- The repayment schedule has been worked out. As per repayment schedule considering interest @ 9.00% for 2 plus 5 years (including two years towards moratorium period), total interest cost has been works out Rs 13.23 Crore and Yearly Repayment of Loan is Rs 9.80 Crore p.a, for 5 years. The interest cost may vary depending on project cost, rate of interest and period of repayment.*
- 8.4 *Depreciation: The Depreciation has been worked out as per MPERC regulation @ 15% as per straight line method considering life of assets as 7 years.The per year depreciation works out as Rs 10.50 Crore for six years and Rs 7.00 crore for seventh year.*
- 8.5 *It is submitted that after completion of the project, the finance charges of Rs 13.23 Crore and Depreciation Rs 10.50 Crore (p.a.) for six years and Rs 7.00 crore for seventh year shall was sought in SLDC Fee & Charges Petitions for subsequent years wherein these charges shall be claimed. It is submitted that the payment towards the project shall be through 70% loan and 30% equity. The commission is requested to allow use of available Capex fund of SLDC as equity for Project.*
9. *The replacement of SCADA/EMS system of SLDC, Backup SLDC and Sub-LDC is essential for ensuring round the clock monitoring of the grid.The replacement of SCADA/EMS system in unified mode with RLDC is necessary to ensure uniform systems and practices to avoid interface & interoperability related issues and to avail benefits of economy of scales. The replacement of SCADA/EMS system shall enable proper monitoring of the grid and consequently shall provide intangible benefits like minimisation of grid disturbance, facilitating optimal shutdown and restoration of grid elements, optimal scheduling and despatch of energy, proper utilisation of Power Network, analysis of grid events for avoiding in future, providing data for planning of power sector , training of grid operators through simulation studies etc.*
10. With the above contention, the petitioner prayed as under:
- i. Approve project “Replacement of SCADA/EMS system of SLDC Jabalpur, Backup SLDC Bhopal and Sub-LDC Indore” in a unified manner with GRID-India at a total estimated project cost of Rs 108.00 Crore having capital cost of Rs. 70.00 Crore& funding through loan from financial institutes.

- ii. Pass any other relief which The Commission may deem fit and proper and necessary in the facts and circumstances of the case.

Procedural history:

11. Motion hearing in the matter was held on 13th June 2023. The petitioner was heard and the petition was admitted. The petitioner was directed to serve a copy of the petition on respondents within a week and the respondents were directed to submit their reply within two weeks' thereafter. In compliance thereof, SLDC vide its letter no. 183 dated 26/06/2023 submitted that it had served hard and soft copy of the petition on respondents vide its letter no. 168 dated 16/06/2023.
12. SLDC vide letter no. 190 dated 03/07/2023 sought seven days' time extension to submit reply to the information gaps / additional information sought by the Commission vide letter no. 1442 dated 23/06/2023. Subsequently, SLDC vide its letter no. 1264 dated 11/07/2023, submitted reply on the issues raised by the Commission. The pointwise details of the issue and the reply are as under:

Issue:

- i. At paragraph no. 30 of the Order dated 06/12/2021 in petition No. 28/2021, the Commission has granted in-principle approval to 5 year Capex plan of SLDC for FY 2021-22 to FY 2025-26 subject to fulfillment of terms and conditions mentioned therein. Sr. No. B(1) therein mentioned about replacement of SCADA / EMS system with total cost of Rs 15.00 Cr.
- In the present petition, SLDC has submitted Annexure CP-1 for FY 2022-23 to FY 2026-27 including replacement of SCADA / EMS at cost of Rs 70 Crore between FY 2023-24 to FY 2025-26.
- If the cost escalates from Rs 15 Crore to Rs 70 Crore, the other principles of ARR remain the same. Therefore, SLDC was asked to submit details about fulfillment of aforementioned terms and conditions mentioned in the Order dated 06/12/2021.

SLDC's reply:

- (a) *SLDC is maintaining proper record of Capex fund. It is submitted that Finance section of MPPTCL has already deposited Rs 1311.91 Lakhs (up to FY 2018-19) into SLDC Capex Bank Account maintained with Union Bank of India and Interest earned on Capex Fund Bank Account is Rs 56.97 Lakhs for FY 2021-22 & FY 2022-23. SLDC has computed Capex Fund as on 31st March 2023 and as per SLDC records Capex Fund is Rs 2342.98 Lakhs. The Details of Balance is enclosed herewith as Annex-I.*
- (b) *The works are completed in the best manner and within the approved financial resources.*
- (c) *SLDC is making all the possible effort to completed the work with approve project cost.*

- (d) *The purchase of items, instruments, spares, installation and commissioning works etc. are processed through issue of enquiry/open tender, e-tender/Gem Portal or through OEM in case proprietary item. Thus, the work is carried out in good quality and in line with the lowest possible prevailing market price.*
- (e) *The updated physical and financial progress of each work has been filed with SLDC Fee and Charges petition each year.*

It is here to mention that the project cost of Rs. 15 Crore mentioned in Capital Expenditure plan of SLDC in FY 2021 is on the basis of past project order placed in 2012-23 by PGCIL. Further at the time of filing of Capex plan for FY 2021-22 to 2025-26, the scope of work for SCADA/EMS replacement project, technical specifications, etc. is not finalized. The Grid-India in association of WRLDC and SLDC of WR has finalized the project scope, BOQ and technical specifications of the project which is having several additional features/functionalities, some of which is given hereunder: -

- *EMS functionalities in the proposed system shall also have Automatic Generation Control (AGC) functionality.*
- *The new system is proposed with Enhanced system visualization and situational awareness tools. The new system is proposed with Video Projection System of 8*3 matrix (each of 70") at SLDC Jabalpur & 3*3 matrix at Backup LDC Bhopal & 2*2 matrix at Sub LDC Indore.*
- *The new system is proposed with Comprehensive and agile cyber security systems (SIEM, HIPS & VAPT tool, Anti APT) to ensure robust & secures system.*
- *The new system is proposed with enhanced system sizing considering present requirement as well as future expandability. The hardware and software are designed considering enhanced sizing.*
- *The data base sizing and historian of the system is proposed considering enhanced system sizing and storage period for 14 years.*
- *The new system is proposed with latest protocols like Secure ICCP, IEC 60870-5-101/104, OPC & ODBC for connectivity between SCADA to field equipment's and between Control Centres to Control Centres.*
- *The 60 KVA redundant UPS & 250 KVA DG set for SLDC Jabalpur and 200KV DG set for Backup SLDC Bhopal is included in the project scope.*
- *The architecture & specifications has been designed considering latest norms & standards for cyber security, communication & software.*

The estimated project cost of Rs. 70 Crore for new SCADA/EMS system are worked out considering the revised project scope, technological requirement, interest during construction, overhead charges for contingency, miscellaneous requirement etc. SLDC has complied to terms and conditions mentioned in para no. 30 of The Commission order dated 06/12/2021 for all its capital works except for SCADA /EMS replacement project. The SCADA/EMS project is interstate project got delayed due to signing of agreement between Grid-India and other states and due to delay in finalization of technical specification by Grid India. Further, the cost of the project got escalated due to revised scope of work, technological advancements, market dynamics etc. This petition for the implementation of project of replacement of SCADA/EMS system at SLDC Jabalpur,

Backup SLDC Bhopal & Sub-LDC Indore is filed by SLDC due to delay in implementation of SCADA/EMS project and cost escalation. The commission is requested to kindly approve the project for Replacement of SCADA/EMS system which is necessary for safe and secure grid operation.

Issue:

- ii. Paragraph 7.8 of the subject petition mentions that “Considering lowest of the two estimates provided by GRID-India, the capital cost and AMC cost is worked out by SLDC. The actual cost of project may vary as per response of tender and award of contract”. In view of the above, SLDC was asked to submit how the approval process may be undertaken when the petitioner is itself not sure about the costs.

SLDC's reply:

*The instant petition is for the **in-principle approval** for project “replacement of SCADA/EMS system at SLDC Jabalpur, Backup SLDC Bhopal & Sub-LDC Indore”. The approval is proposed for estimated cost worked out on the basis of budgetary offers obtained by Grid-India. The necessary provisions for variation in price, miscellaneous expenditure/contingency is also considered as overhead charges. However, order shall be placed on the Lowest bidder finalized by Grid-India on the basis of open tender. The recovery of project cost in fees and charges petition of SLDC for subsequent years shall be made on the basis of actual project cost finalized by Grid-India.*

Issue:

- iii. Since FY 2021-22 and FY 2022-23 are over, SLDC was asked to submit actual achievement / status of Capex plan as on 31/03/2023.
Since proposed replacement of SCADA / EMS is due in FY 2023-24 to FY 2025-26 only, so the revised Annexure CP – 1 was sought covering 5 year period from FY 2021-22 to FY 2025-26.

SLDC's reply:

The details of actual achievement of Capex Plan during FY 2021-22 & FY 2022-23 vis-à-vis Capex plan approved by the Commission for FY 2021-22 & FY 2022-23 is enclosed. The Revised CP-I covers 5 years period from FY 2021-22 to FY 2025-26.

Issue:

- iv. Some works like replacement of battery back-up, AGC, SCED system, firewall, etc. approved in the previous plan may also undergo some changes. So SLDC was asked to have a holistic planning of its Capex plan and submit all modifications accordingly.

SLDC's reply:

The revised Capex plan is submitted along with the petition in the form of revised CP-1. It is here to mention that as per the scope of work finalized by Grid-India, Automatic Generation Control (AGC) is part of project "replacement of SCADA/EMS system at SLDC Jabalpur, Backup SLDC Bhopal & Sub-LDC Indore SCADA/EMS ". Accordingly, the project AGC is not considered separately in revised Capex plan sheet of SLDC and amount for the AGC project is mentioned as Zero. Further, the project "Implementation of Security Constraint Economic Despatcher system at MP SLDC" is not part of SCADA/EMS replacement project and shall be implemented separately, after availability of suitable regulation in the matter. In the SCADA/EMS replacement project the UPS along with battery sets for only SLDC Jabalpur is considered while replacement of battery sets for existing UPS of Bhopal/Indore is not part of project. Therefore, replacement of battery sets for UPS of Bhopal/Indore as well as for DC power supply system for Indore/Bhopal/Jabalpur shall be required to be arranged separately. The procurement of next generation firewall mentioned in capital expenditure plan of SLDC is for cyber security of IT systems and separate internal/external firewalls for various Network segments in SCADA/EMS system shall be required as per cyber security guidelines of CEA/CERT.

In view of the above, it is to submit that the revised CP-1 submitted with petition for SCADA/EMS replacement project is prepared considering all modifications required in Capex plan of SLDC, due to SCADA/EMS replacement project.

Issue:

- v. The petition mentions Capital cost component of project as Rs 64 Cr. However, overhead of Rs 3.20 Crore, IDC of Rs 2.75 Crore and AMC cost of Rs 38 Crore have also been mentioned. Analysis and justification of these cost components was sought.

SLDC's reply:

As mentioned in the petition, the total project cost of Rs. 108 Crore are comprising of Rs.70 Crore as capital cost and Rs. 38 Crore as AMC cost for Seven years. The justification of these costs is as given hereunder: -

- a. *The 5% of the project cost is considered as overhead cost. The overhead cost of Rs. 3.2 Crore is considered to meet out contingency, miscellaneous requirement during project implementation or cost escalation etc.*
- b. *As sufficient Capex fund is not available with SLDC, the project is proposed to be implemented using available Capex fund as equity and availing loan for balance fund requirement. Considering loan requirement for 49 Crore, the Interest During Construction, is calculated considering the two-year moratorium period. The tender for the project is issued by Grid-India for installation, commissioning and Annual Maintenance Contract (One Year Guarantee Period + 6 Year AMC period). The Annual Maintenance Charges of Rs. 38 Crore for seven years is considered as per the*

estimates provided by Grid-India. The lowest bidder for the project shall be finalized by Grid-India on the basis of total project cost (Supply, Installation, commissioning, Guarantee Period, AMC charges). The actual AMC charges as finalized by Grid-India, on the basis of open tender shall be claimed by SLDC in the petition for fees and charges for SLDC in the R&M charges head. The cost of project of Rs 64 Crore towards capital cost and Rs 38 Crore has been considered on the basis of estimated provided by Grid-India vide email dated 18.02.2023 and SLDC has considered lowest estimate given by M/s GE T&D India Ltd.

Issue:

- vi. At paragraph no. 7 of methodology in the petition No. 73/2022 for ARR for FY 2023-24, SLDC has mentioned as under “*As per GoMP notification No. 292 dated 12th June 2008 regarding final opening balance sheet of MPPGCL, MPPTCL, Discoms and residual MPSEB, the assets of SLDC (Rs. 242.80 as on 1st June 2005) are included in the assets of MPPTCL and no separate balance sheet is notified for SLDC. As per order passed by MPERC for SLDC fee & Charges for FY 2007-08, the expenses towards Depreciation, Interest on Loan, Return on Equity (ROE) & Income tax shall be payable based on actual equity employed by SLDC/allocated to SLDC. The provisions for Depreciation, ROE & Income Tax were not allowed for FY 2008-09. Accordingly, no provisions are made for ROE, Depreciation & Income Tax in the ARR for FY 2023-24*”.

The status of SLDC's Assets remains the same now. So SLDC was asked to discuss the issue with MPPTCL and comprehensive reply in the matter was sought.

SLDC's reply:

The matter has been discussed with MPPTCL and vide UO Note No 276 dated 04.07.2023 the following reply is submitted by MPPTCL:

“It is submitted that the assets of SLDC (Rs. 242.80 lakhs as on 1st June 2005) are included in the assets of MPPTCL as no separate balance sheet is notified for SLDC as per GoMP notification No. 292 dated 12th June 2008. However, all the Assets of SLDC procured from inception i.e., 01.06.2005 including assets received in opening balance sheet are accounted and shown separately in the trial balance of SLDC and separate financial statement of SLDC also prepares each financial year for submission of The commission. Therefore, it is appropriate that the commission may be requested to allow the expenses towards Depreciation, Interest on Loan, Return on Equity (ROE) & Income tax payable for SLDC in SLDC tariff order henceforth and MPPTCL may not claim SLDC portion of Expenses as well as Return of Equity (ROE). If the commission considered the request of SLDC then MPPTCL will remove the Assets base of SLDC for filling of tariff/true up petition and will transfer amount of ROE along with deemed Equity/Loan portion to SLDC trial balance”

Issue:

- vii. Since Assets of SLDC are included in the assets of MPPTCL, so SLDC shall discuss the funding requirements and use of internal resources with MPPTCL and submit a detailed plan of funding.

SLDC's reply:

The reply submitted by MPPTCL is reproduced as below:-

"It is to submit that to fulfill the requirement of funding for the Replacement / Upgradation of SCADA / EMS at SLDC Jabalpur, backup SLDC Bhopal & sub SLDC Indore, The MPPTCL will assist the SLDC and arrangement the funding from financial institution/Banks for the Loan portion of the project the rest of the amount shall be funded from SLDC Capex funds/retained earnings of the SLDC. However, the Asset, Loan, Equity, Interest on Loan and Depreciation of Asset procure shall be accounted for in SLDC trial balance and in SLDC will be claim the same in their tariff/true up petition."

Therefore, as proposed in petition and also as per MPPTCL reply, the project is proposed to be implemented using SLDC Capex as Equity & availing 70% of Project cost of Loan from Financial institutions.

Issue:

- viii. SLDC has not been claiming Depreciation, Interest & Finance charges, Return on Equity, etc in its ARR upto FY 2023-24. The same may be continued in future also. SLDC was asked to submit pros & cons of continuing with the present practice and also provide details of practice adopted at other SLDCs.

SLDC's reply:

SLDC has not been claiming depreciation, Interest & Finance Charges, return on equity in ARR upto 2023-24 as the same is claimed by MPPTCL. The matter is discussed with officers of other SLDCs of WR i.e. Chhattisgarh, & Gujrat. It is gathered that SLDC of Chhattisgarh, & Gujrat are claiming depreciation, Interest & Finance Charges and ROE in their ARRs.

As per Electricity Act 2003 under section 31(2), the State Load Despatch Centre shall be operated by a Government company or any authority or corporation established or constituted by or under any State Act, as may be notified by the State Government: Provided that until a Government company or any authority or corporation is notified by the State Government, the State Transmission Utility shall operate the State Load Despatch Centre. Therefore, in future, if SLDC is separated from MPPTCL than SLDC was asked to bifurcated the assets and liability from MPPTCL. Therefore claiming of depreciation, Interest & Finance Charges, return on equity shall be help in preparation of SLDC for future separation. Further, if SLDC is allowed to claim separately (depreciation, Interest & Finance Charges, return on equity) than fund flow of SLDC will improve.

However, for claiming the depreciation, Interest & Finance Charges, return on equity by SLDC, the separate accounts/auditing shall be required for which additional manpower and expertise shall be required at SLDC.

Issue:

- ix. Detailed justification of the investment in light of existing operating conditions such as the life of present equipment, introduction of new and advanced technology, etc. was sought.

SLDC's reply:

The uninterrupted round the clock functionality of SCADA/EMS system of SLDC, Backup SLDC and Sub-LDC is essential for safe, secure operation and round the clock monitoring of the grid. The existing SCADA EMS/system has completed its life and required to be replaced due to system obsolescence, non-availability of spares/expiry of software license, limitation in system sizing to integrate more grid elements/sub stations, degradation in system performance etc. The proposed new system will help to ascertain system reliability and improvement of grid security by providing the operator with real-time information and various analysis functions.

Issue:

- x. Short term and long-term benefits was sought in respect of the proposal along-with appropriate analysis.

SLDC's reply:

The replacement of SCADA/EMS system shall enable proper monitoring of the grid and consequently shall provide several intangible benefits detailed hereunder: -

- *The SCADA/EMS will help in improvement of grid security by real time observability of grid and analysis functions and reports. The system will help in reducing cascade tripping and minimisation of grid disturbance.*
- *The system will help in facilitating optimal shutdown and restoration of grid elements,*
- *The SCADA/EMS system will help in optimal utilisation of network, avoiding congestion in grid, optimal interstate and inter regional exchanges by monitoring in real time.*
- *The system provides sequence of events and grid event analysis reports for analysis and planning for avoiding such events in future.*
- *The system helps in optimal scheduling and despatch of energy,*
- *The system helps in training of grid operators through simulation studies etc.*
- *The system helps in planning of transmission outages in case of contingency in grid.*
- *The system helps in reducing transmission losses by performing system studies in EMS solution of SCADA/EMS system.*
- *The system helps in real time calculation of Available Transfer Capability (ATC) & Total Transfer Capability (TTC) of the MP state network.*

- *The system helps in observability & integration of Renewable Energy Generator in the grid.*
- *The system helps in planning the schedule of conventional sources of energy over non-conventional sources of energy.*
- *Various types of reports including the MIS reports, POC reports etc. required for system studies & planning are generated through the SCADA/EMS system.*
- *The system helps in minimizing the deviation charges for inter state & intra state system.*
- *The real time monitoring of Generation & DISCOM schedule/drawal by MPPGCL & DISCOMs is possible through Remote Visual Display Units provided under SCADA/EMS system.*
- *The system helps in minimizing the grid disturbance and avoiding grid black out. The SCADA/EMS system is declared Critical IT Infrastructure by Gazette Notification of Government of Madhya Pradesh. The non-functioning/non availability of this Critical IT Infrastructure may have following devastating effects on public life :-*
 - * *Substantial revenue loss that industries may suffer due to power interruption.*
 - * *Social unrest, interruption in Railway & Hospital services.*
 - * *Unreliable power supply will result in discouragement of foreign investment.*

Therefore, replacement of SCADA/EMS system is essential for safe & secure operation of grid and for ensuring reliable & uninterrupted quality supply to consumers, in both short and long term.

Issue:

- xi. SLDC claims 50% of the revenue earned from Operation & Scheduling charges as other income to be reduced from ARR and balance 50% is retained for Capex fund, in accordance with Regulation 10.3 of the MPERC (levy & collection of fee & charges by SLDC) Regulations, 2004. It has been observed that till now the Capex fund balance has been sufficient for the Capex requirements. Now if this project is to be implemented, SLDC shall need more Capex funds. If SLDC desires to retain 100% of these charges as Capex fund, then it may put up such proposal appropriately in future ARR petitions. SLDC may also seek the balance Capex funds due from MPPTCL for managing funds for this project. SLDC & MPPTCL are required to analyze this issue and make detailed submission.

SLDC's reply:

The matter was taken with MPPTCL and reply is reproduced as below:-

“It is to mention that presently SLDC claims 50% of the revenue earned from Operation & Scheduling charges as other income to be reduced from ARR and balance 50% is retained for Capex fund. As per our view if commission allow 100% amount to retain for Capex fund, then it is beneficial for SLDC as SLDC allow more tariff to the extent 50% of STOA charges. However, SLDC may further analyse any harmfulness in term of any other provision of regulation/tariff. The MPPTCL already transferred the major portion

in SLDC Capex fund and balance fund will also be transfer in due course of time for funding from Capex fund portion of the assets to be procured SCADA / EMS.”

It is submitted that due to revision of Scheduling & Operation Charges from Rs 3000 per day per transaction to Rs. 1000 per day per transaction, the yearly Rs.2.83 crore and 50% of the same i.e. Rs. 1.41 crore per year will be available for Capex fund. Even, if, 100% of Scheduling & operating Charges is retained for Capex Fund than Rs. 2.83 crore per year will be available and same shall not be sufficient for funding of SCADA replacement project for which capital requirement is around Rs.70 Crore. It is to mention here that in future, SLDC may require to execute other projects likes replacement of ABT, OA & MIS systems, Establishment of Security Operation Centre, Replacement of Phaser Data Concentrator installed under URTDSM Project etc. If, SLDC is directed by The Commission to retain 100% of Scheduling & Operation Charges as Capex Fund. The same will be helpful in execution of Capex projects in future.

As mentioned in Petition, the project is proposed to be implemented using 30% of Capex Fund available as Equity and balance 70% to be arrange by availing loan through financial institution. The 30% fund requirement is approximately Rs 21 crore. Total Capex Fund of SLDC is available as on 31.03.2023 is Rs 23.00 crore (available in SLDC Capex Bank Account Rs 13.63 crore and balance will be transferred by MPPTCL Rs 9.74). The SLDC has taken up the matter to transfer balance Capex fund to SLDC Capex Bank Account. The MPPTCL vide UO No 276 dated 04.07.2023 informed that balance Capex fund shall be transferred for funding of SCADA/EMS project.

Issue:

- xii. Draft public notice in Hindi & English on the gist of the petition.

SLDC's reply:

SLDC submitted draft public notice in Hindi and English was submitted for approval of the Commission.

13. Further the copy of Commission's letter dated 23/06/2023 addressed to SLDC was also sent to MPPTCL for their response on the issues related with them. MPPTCL vide its letter no. 2412 dated 13/07/2023 submitted that the response on the observations pertaining to MPPTCL (Respondent No. 5) have already been included by the SLDC's in its reply dated 11/07/2023.
14. Hearing in the matter was held on 18/07/2023 during which the petitioner and Respondent No. 5 (MPPTCL) reiterated that they have already submitted their reply to the issues mentioned by the Commission and the petitioner also stated that they have also submitted draft of the public notice in the matter for vetting and approval of the

Commission. The Commission ordered that the petition shall be listed for public hearing as per the public notice to be approved by the Commission separately.

15. SLDC vide its letter no. 1107 dated 21/08/2023 informed that the public notice no. 1809 dated 10/08/2023, approved by the Commission were published in following newspapers on 12/08/2023:
- i. Hindi newspapers - Dainik Bhaskar, Jabalpur & Nai Duniya, Indore
 - ii. English newspaper – The Times of India, Bhopal

The public notice along with the petition and annexures were uploaded on the Commission's website. SLDC also uploaded the petition along with annexures and documents on its website.

16. SLDC vide letter No. 1194 dated 31/08/2023 submitted reply on the issues raised by Commission's letter No. 1809 dated 10/08/2023. The details of the issue and the reply are as under:

(a) **Issue:**

SLDC is a part of MPPTCL and has not been claiming Depreciation, RoE, Interest & finance charges in its ARR. In view of the above, SLDC was asked to submit a holistic report in consultation with MPPTCL regarding accounting treatment of the proposed SCADA / EMS assets.

SLDC's response:

As directed by The Commission, CRA cell, MPPTCL and Finance cell, MPPTCL was requested to provide comment/reply on this matter. In this regard, MPPTCL has informed their comments/reply vide UO Note No. 381 dated 31.08.2023.

CFO MPPTCL has informed that the Assets of SLDC (Rs 242.80 Lakh as on 1st June 2005) are included in the assets of MPPTCL as in separate balance sheet is notified for SLDC as per GoMP notification No. 292 dated 12th June 2008. However, all the assets of SLDC procured from inception i.e. 01.06.2005 including assets received in opening balance sheet are accounted and shown separately in the trial balance of SLDC and separate financial statement of SLDC also prepared at the end of the each financial year for submission to the Commission.

Further, it is proposed by MPPTCL that, if MPERC allow, the SCADA/EMS assets shall be funded through SLDC (30% from SLDC Capex Fund and 70% through Loan). The Assets created will be vested with SLDC and Depreciation, ROE (30% of SCADA/EMS cost), Interest & Finance charges etc. thereon shall be claimed by the SLDC in their Annual Revenue Requirement (ARR). It is therefore, requested that The Commission may kindly allowed the expenses towards Depreciation, Interest on Loan, Return on Equity (ROE) & Income Tax payable by the SLDC in SLDC ARR and henceforth MPPTCL shall not claimed the same in their tariff.

The accounting treatment for the proposed SCADA/EMS Assets and proposed Balance Sheet and Profit & Loss Account.

(b) Issue:

SLDC was asked to expedite collection of the balance Capex fund of Rs 9.74 Crore mentioned at point no. (xi) of the SLDC's letter under reference. SLDC is further required to submit a proposal on measures to increase Capex fund which can be utilized for the said works.

SLDC's response:

It is submitted that SLDC has already requested to finance cell, MPPTCL to transfer the balance amount of Rs 9.74 Crore to SLDC Capex Bank Account vide this office UO Note No. 245 dated 14.08.2023.

A. Proposal on measure to increase capex fund of SLDC:-

At present, as per regulation 10.3 of MPERC regulation (Levy & Collection of Fee and Charges by SLDC), 2006, SLDC has retained 50% of Scheduling & Operation Charges towards Capex Fund and 50% towards revenue expenditure. Further, in order to increase the Capex Fund of SLDC, The SLDC has worked out the following scenario to increase SLDC Capex Fund, the summary of the same is given below:-

(Rs in lakhs)

<i>S.No.</i>	<i>Scenario</i>	<i>Amount of Capex Fund retained during (FY 2023-24 to FY 2026-27)</i>
<i>1</i>	<i>Consider Present practice (50% of Scheduling & Operation Charges)</i>	<i>617.26</i>
<i>2</i>	<i>If consider (100% of Scheduling & Operation Charges)</i>	<i>1234.51</i>
<i>3</i>	<i>If consider (100% of Open Access Charges collected from Open Access customers towards Scheduling & Operation Charges, Application Processing Fee & Connection Fee)</i>	<i>1662.16</i>

SLDC has considered assumption that Scheduling & Operation charges will be increase @ 10% every year and Application Processing Fee and Connection Fee will be increase @ 5% every year.

Further, it is submitted that the above proposal to enhance Capex fund by considering 100% of Open Access Charges collected from Open Access customers towards Scheduling & Operation Charges, Application Processing Fee & Connection Fee, in line with clause no. 28 of chapter -7 of Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulation, 2019.

It is requested to The Commission may be allowed SLDC to retain 100% of Open Access Charges collected from Open Access customers towards Scheduling & Operation Charges, Application Processing Fee & Connection Fee towards SLDC Capex Fund. The same will be helpful in execution of Capex projects in future.

(B) Submission of SLDC regarding fund arrangement for the project

The CERC has notified the Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2019 on 28th August, 2019. As per Section-3 of above Regulation, the CERC has constituted Power System Development Fund. Section-3.1 (c), (d) & (f) of above regulation is reproduced below-

“(c) Deviation Settlement Charges standing to the credit of the “Regional Deviation Pool Account Fund” after final settlement of claims in accordance with Deviation Settlement Mechanism Regulations;

(d) Reactive Energy Charges standing to the credit of “Reactive Energy Charges Account” in accordance with the Grid Code;

(f) Such other charges as may be notified by the Commission from time to time;”

Section-3.2 is reproduced below-

“3.2 The agencies authorized to collect the amounts under sub-clauses (a) to (f) of clause (1) above shall transfer these funds to the credit of the PSDF, in accordance with the guidelines, on monthly basis or as per the periodicity decided by the Central Government”.

Section-4 (3) regarding utilization of PSDF is reproduced below-

“(3) PSDF shall be utilized for funding of projects or schemes for creation of necessary infrastructure for the following purposes:

- (a) Creating necessary transmission systems of strategic importance based on operational feedback by Load Despatch Centers for relieving congestion in inter-State transmission system and intra-State Systems which are incidental to the ISTS;*
- (b) Installation of shunt capacitors, series compensators and other reactive energy generators for improvement of voltage profile in the Grid;*
- (c) Installation of standard and special protection schemes, pilot and demonstrative projects and for setting right the discrepancies identified in the protection audits on regional basis;*
- (d) Renovation and Modernization of transmission and distribution systems for relieving congestion; and*
- (e) Any other project in furtherance of the above objectives such as conducting technical studies and capacity building.”*

The State Commission has not issued any regulation for utilization of balance amount if any, in the DSM accounts, in line with the Central Commission.

In the Para No. 8.2 regarding “Loans” of the petition, SLDC has proposed to avail 70% of capital cost of the project from the financial institutions. This amount comes out to be Rs. 49 Crore. This amount along with interest shall be recovered from the Distribution Licensees of the State Grid through SLDC Fee & Charges from the subsequent years. It would cause the huge financial burden on the Distribution Licensees which are already facing financial crunch.

Presently the State DSM Pool Account maintained & operated by the SLDC is having Rs. 28.68 Crore towards RE DSM Charges and Rs. 21.86 Crore towards interest credited to SLDC by the Bank on the DSM balance amount since September, 2018. The total of these amounts comes out to be Rs. 50.54 Crore. SLDC proposes to utilize Rs. 49 Crore from the above amount balance in State DSM Pool Account.

The balance amount available in the DSM Pool Account could only be utilized on the directives / instructions of the State Commission, else this amount would remain idle in the DSM Pool Account and would cause financial burden on the Distribution Licensees of the State of MP.

In view of the above, it is submitted that The State Commission may grant permission to MP SLDC in line with the Central Commission, to utilize Rs. 49 Crore from the balance amount in the State DSM Pool Account in place of amount proposed to be availed as loan from the financial institutions.

17. SLDC vide letter dated 31/08/2023 submitted that no comment/objection/suggestion was received from the public/person(s) in the matter. Public hearing in the matter was held on **5thSeptember, 2023** through Video Conferencing. Only the representatives of SLDC appeared in the public hearing. The Commission reserved the case for Order.
18. SLDC vide letter No. 1216 dated 05/09/2023 broadly submitted as under:
 - (i) *The State Commission in Section-7 “Settlement of Deviation Charges” in the First amendment to the MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar generating stations) Regulations-2018, has defined Settlement of Deviation Charges for Wind and Solar Generators. In Section-6 of the said regulation, procedure for computation of Deviation Charges is also given. It is to submit that computation of Deviation Charges for RE Generators is entirely different from the procedure for computation of Deviation Charges for Conventional Generators. Adhering to the Section-6 & 7 of the RE Regulation-2018 of the Commission, SLDC has been computing the Deviation Charges for RE Generators. Since the Pool Balancing Mechanism as being done for settlement of Deviation Charges for Conventional Generators, is not possible for settlement of Deviation Charges for RE Generators. Further, the State Commission has also not mentioned about Pool Balancing*

Mechanism in the RE Regulation-2018. Thus, the left over amount during weekly settlement of RE Deviation Charges is transferred to State RE Pool Account.

This left over amount in RE Pool Account has accumulated to Rs. 28.68 Crore up to 31st August, 2023. This amount cannot be utilized by SLDC or other State Grid entity without prior permission of The State Commission. There is no claimant of RE Deviation Charges amount accumulated in RE DSM Pool Account and only State Commission can decide utilization of this fund as per existing regulatory provisions in this regard.

- (ii) *SLDC has been issuing weekly RE DSM Account, DSM Account and Reactive Energy Account. All the outstanding dues have been cleared within the stipulated guidelines contained in Balancing & Settlement Code, 2015.*

Since all the payments have been made regularly & timely by the SLDC to the receiving entities and Regional Pool Accounts from the State Pool Account and thus none of the State Grid Entity and Regional Pool Account have any outstanding amount against SLDC. No representation for claiming amount from State DSM Pool Account is pending with SLDC.

It is to submit that SLDC vide letter No. 07-05/SG-9/821 dtd. 26.06.2023 had submitted comments on First amendment to the MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar generating stations) Regulations-2018.

SLDC has proposed to add a new clause after 10 of Annexure-I as –

“A new clause was asked to be added after clause 10 of Annexure-I of MPERC (FSDSM) Regulations 2018 regarding utilizations of fund collected in RE DSM Pool Account in line with CERC PSDF Regulations”.

- (iii) *SLDC proposes that the State Commission may kindly allow it to utilize funds available in RE DSM Pool Account for SCADA / EMS Replacement Project in accordance with power conferred to the State Commission in Section-11 of First amendment to the MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar generating stations) Regulations-2018.*

Further, SLDC also proposes to utilize the interest accrued on balance amount in State DSM Pool Account, for the SCADA / EMS Replacement Project. As on 31st August, 2023 the amount of interest accrued is Rs. 21.86Crore. There is no claimant of this amount and is only on disposal of The State Commission.

The State Commission may permit SLDC to utilize amount accrued towards interest in State DSM Pool Account as per powers conferred in Section-13 of Balancing & Settlement Code, 2015.

19. SLDC vide its letter No. 1254 dated 18/09/2023 broadly submitted as under:
- i. *There are two Deviation Settlement Mechanisms given in Madhya Pradesh Electricity Balancing & Settlement Code-2015 hereinafter called BSC-2015 and MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar Generating Stations) Regulations, 2018 hereinafter called FSdsm-2018.*
 - ii. *The SLDC (MPPTCL) has opened Bank Account in the name of "MPPTCL SLDC DSM Pool A/c" (herein after called as State DSM Pool Account) for settlement of Deviation Charges. Separate books of account have been made for settlement of each type of Deviation Charges. The State Pool Account has been maintained and operated by SLDC as per provisions contained in Regulation 7(11) of BSC' 2015.*
 - iii. *Deviation Settlement Mechanism for imbalance settlement of active energy Conventional Generator, Distribution Licensees, Open Access Customers etc. is given in BSC' 2015.*
 - iv. *SLDC had started Pool Balancing with net zero leftover w.e.f. 1st January 2019. Prior to this date, the amount of about Rs. 105 Crore was in the DSM Pool Account. This amount was in the Bank of India, Jabalpur in the Flexi Fixed Deposit Account facility with Current Account, as there was no claimant for this amount because payments of all the receivable entities from the DSM Pool Account had already been made by the SLDC.*
 - v. *The State Commission has defined separate DSM computation mechanism for Wind and Solar Generators in MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar Generating Stations) Regulations, 2018. It is to state that receivable and payable to the RE Pool Account never matches. Thus, some amount is left in the RE Pool Account in every week after settlement of payments amongst all the Wind and Solar Generators. Since the payment settlement of all the receivable entities is being settled by the SLDC within the timeline of State Commission, thus no claimant is for the amount balance in the RE Pool Account. The balance in RE Pool Account has become Rs. 28.67 Crore as on 31st August, 2023.*
 - vi. *The interest accrued on amount of Rs. 105 Crore of State DSM Pool Account and amount of State RE Pool Account due to Flexi Fixed Deposit Account is Rs. 21.86 Crore and there is no claimant of this amount as the interest amount accrued on balance amount in the State Pool Account. It is further to mention that the interest amount received in the State DSM Pool Account due to late payments from the payable entities is only disbursed to the receivable entities for delay in payment, as per the regulatory provisions. Therefore, question of claiming amount from the interest accrued on pool amount by any of the State entities does not arise. Therefore, SLDC has proposed to utilize fund of Rs. 21.86 Crore accrued as interest on the balance amount in the State DSM Pool Accounts and amount balance in the RE Pool Account.*

- vii. *The payment to the Regional Pool Account is to be cleared within the timeline of the Central Commission, else simple interest is to be paid for delay in payment. There is no regulatory provision for claiming interest paid to the Regional Pool Account for delay in payment from the State Grid entities. Thus, the amount of Rs. 105 Crore balance in DSM Pool Account is being utilized for clearing the Regional Pool Accounts in time. Subsequently, payments made to the Regional Pool Account have been recovered from the State Grid entities through State DSM Accounts. Thus, the balance in State DSM Pool Account remains the same. The timely payment of DSM Charges from the MPPMCL on behalf of Discoms is not ensured, thus keeping adequate reserve amount is necessary for clearing the Regional dues timely.*
- viii. *The Commission may kindly issue directives to SLDC for utilization of balance amount in State DSM Pool Account in the sub-heads of interest accrued and RE DSM Charges i.e. in total Rs. 50.53 Crore, according to powers conferred in Clause-11 "Power to Relax" and Clause-12 "Power to Issue Directions" as per MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind and Solar Generating Stations) Regulations, 2018 and Clause-13 "Power to Amend" of BSC-2015.*

Commission's Analysis:

20. Vide Commission's Order dated 6th December, 2021 in Petition No. 28/2021, the Commission already granted in-principle approval to SLDC's Capital expenditure plan of Rs 22.31 Crore for 5-year period from FY 2021-22 to FY 2025-26, which included Rs. 15.00 Crore for replacement of SCADA / EMS system on certain terms and conditions mentioned in that Order.
21. The brief description and chronology of events in the subject petition is summarized as below:
- i. SLDC filed the subject petition based on the cost estimate provided to it by Grid-India on 18.02.2023. SLDC has submitted that actual cost of project may vary as per response of tender and award of contract.
 - ii. SLDC had initially submitted that project will be financed through Equity and Loan and so issues like Interest during Construction and ARR items like Return of Equity, Interest & Finance charges, Depreciation may be claimed by SLDC. MPPTCL has also submitted that SLDC may claim these amount in its ARR.
 - iii. However, during the course of the petition, the SLDC has changed its proposal. SLDC vide letter dated 31.08.2023 has submitted that the Capex fund can be enhanced, if the Commission allows SLDC to retain 100% of Open Access Charges collected from Open Access customers towards Scheduling and Operation Charges, Application Processing Fee & Collection Fee.
 - iv. Vide letter dated 05.09.2023, SLDC has explored one more option for Capex fund requirement and submitted that it may be managed from the surplus amount in state DSM pool account and interest in DSM pool account. This amount would be sufficient to finance the project.

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- v. SLDC also submitted that the balance amount available in the DSM Pool Account could only be utilized on the directives / instructions of the State Commission, else this amount would remain idle in the DSM Pool Account and upon utilization of such amount there will be no financial burden on the Discoms of MP.
- vi. SLDC has requested the Commission to grant permission, in line with the provisions of the Regulation 3 of the Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2019 to utilize fund from the balance amount in the State DSM Pool Account.
- vii. SLDC while submission of its comments on First amendment to the MPERC (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters of Wind & Solar generating stations) Regulations, 2018, has requested the Commission to add a new clause for utilization of the fund in line with CERC PSDF Regulations.
22. The Commission observes that the subject scheme is a pan India scheme for which tenders are invited by Grid India. SLDC is required to maintain technological compatibility with the NLDC / RLDC / other SLDCs across India for Grid safety and efficient Grid operations and to carry out the functions of LDCs under the Electricity Act, 2003. The tenders are yet to be finalized and the final project cost is yet to emerge. SLDC is seeking in-principle approval to estimated capital expenditure of Rs. 70 Crore, which would also require AMC of Rs. 38 Crores for 6 years.
23. The Commission has observed that there is a need for replacement/ upgradation of SCADA/EMS across SLDCs of different States. All SLDCs of western region and WRLDC are going to replace/upgrade SCADA/EMS in unified manner. The similar exercise will be taken up at other regions as well. The technical specification and system architecture of the project has been finalised by the Committee comprising of Grid-India WRLDC and all Western Region States.
24. The Commission has also observed that the capital cost estimate is based on inputs received from Grid-India on the basis of estimates provided by the vendors. It is understood that the actual cost of project may vary on finalization of tender.
25. The estimated cost of proposed replacement/upgradation is Rs. 70 Crore only, whereas the SLDC is maintaining amount of Rs. 105 Crore in DSM pool account and the interest earned in State RE Pool account due to flexi-fixed deposit is Rs. 21.86 Crore. SLDC is seeking some relaxations to utilise this amount. However, at this stage, SLDC has prayed only in- principle approval to the capital expenditure and the cost is also not finalized. The Commission has not dealt with the scrutiny of the capital cost. Moreover, looking to the availability of funds as submitted by SLDC, exact funding pattern would be dealt with, after finalization of cost and cash outflow requirements needed thereafter.

26. Recognizing the need of an upgraded SCADA/EMS in the times of energy transition, the Commission hereby accords “in- principle approval” to the proposal of SLDC for capital expenditure towards “Replacement/ upgradation of SCADA/EMS at SLDC Jabalpur, Back up SLDC, Bhopal & sub SLDC, Indore”. After the discovery of total cost and finalization of tender/ award of contract to the successful bidder for the subject work, the SLDC has liberty to approach the Commission along with cash outflow requirements and detailed proposal for adjustment/utilization of capex fund and DSM pool fund available with SLDC at that time.
27. In view of the observations made above, the Commission grants in-principle approval to the subject project with the following terms and conditions:
- (a) SLDC may conduct its own analysis as and when the tender and bids are finalized.
 - (b) The relevant Rules / Regulations/ procedures laid down by the appropriate Government/CERC/MPERC/Authority/ concerned Agencies shall be followed and complied by the SLDC.
 - (c) Before proposing final capital costs to the Commission, SLDC shall undertake prudence checks and perform due diligence at its end.
 - (d) While proposing utilization of Capex/DSM funds, SLDC shall propose legally permissible and specific relaxations, wherever needed.
 - (e) SLDC shall maintain proper account of Capex and DSM pool funds and shall also account for the bank interest earned thereupon. The details of such funds/accounts shall be made available to the Commission.
 - (f) The SLDC shall file updated status of the proposed work as an annexure with the petition to be filed by the SLDC for determination of fees and charges.

Ordered Accordingly.

(Prashant Chaturvedi)
Member

(Gopal Srivastava)
Member (Law)

(S.P.S. Parihar)
Chairman

Place:-Bhopal

Dated:- 29th September,2023