THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Petition No. 2413 of 2026

QUORUM

Hon'ble Shri Arvind Kumar, Chairman

Hon'ble Shri Sanjay Kumar Singh, Member

Hon'ble Shri Griesh Kumar Vaish, Member (Law)

IN THE MATTER OF

Petition filed on behalf of UPSLDC Limited under Section 86(1)(k) of the Electricity Act, 2003 read with Regulations 5.2, 7.4, and 7.5 of the Uttar Pradesh Electricity Regulatory Commission (Power System Development Fund) Regulations, 2023 with Regulation 15 of the UPERC (Conduct of Business) Regulations, 2019 seeking approval of the Hon'ble Commission for disbursal of funds from the PSDF account for implementation of the "OASIS" (Open Access Scheduling and Integrated Settlement System) project at UPSLDC for the purpose of secured grid operation, scheduling, integrated energy settlement, and integrating with existing application such as SCADA, SAMAST/AMR, UPPCL, NOAR, NRLDC, etc.

AND

IN THE MATTER OF

Uttar Pradesh State Load Despatch Centre
Through its Superintending Engineer (Establishment & HR)

UPSLDC Complex, Vibhuti Khand, Gomti Nagar

Lucknow, Uttar Pradesh-226010 **..... Petitioner**

THE FOLLOWING WAS PRESENT

1. Sh. Divyanshu Bhatt, Advocate, UPSLDC
2. Sh. Vishal Kumar, Advocate, UPSLDC
3. Sh. Sarvesh Kumar, SE, UPSLDC
4. Sh. Nitish Kumar Mishra, SE (IT), UPSLDC

5. Sh. Vikki Goond, EE (IT), UPSLDC

ORDER

(DATE OF HEARING: 08.10.2026)

1. The Petitioner has submitted that the present Petition has been filed on behalf of UPSLDC under Section 86(1)(k) of the Electricity Act, 2003 read with Regulations 5.2, 7.4, and 7.5 of the Uttar Pradesh Electricity Regulatory Commission (Power System Development Fund) Regulations, 2023 with Regulation 15 of the UPERC (Conduct of Business) Regulations, 2019 seeking approval of the Commission for disbursal of funds from the PSDF account for implementation of the "OASIS" (Open Access Scheduling and Integrated Settlement System) project at UPSLDC for the purpose of secured grid operation, scheduling, integrated energy settlement, and integrating with existing application such as SCADA, SAMAST/AMR, UPPCL, NOAR, NRLDC, etc.

2. The prayers under the instant Petition are as follows:

   (a) Admit the present petition for consideration;

   (b) Approve the project proposal for implementation of the Open Access Scheduling and Integrated Settlement System (OASIS) at UPSLDC for an overall project cost of ₹14.75 Crore (inclusive of 18% GST);

   (c) Sanction and disburse funding amounting to ₹9.85 Crore (inclusive of GST) towards the CAPEX/Development portion of the OASIS project from the State PSDF account;

   (d) Allow UPSLDC to meet the 5-Year ATS / OPEX cost of ₹4.90 Crore (inclusive of GST) through its Annual Revenue Requirement (ARR); and

   (e) Pass such further order or directions as the Hon'ble Commission may deem fit in the facts and circumstances of the case.

Background and Existing EASS Platform

3. The Petitioner, UPSLDC Limited, submitted that it has been discharging its statutory functions relating to scheduling, energy accounting, settlement and open access operations through the Energy Accounting and Settlement System (EASS) software platform. The EASS application constitutes a core operational software system of the State Load Despatch Centre and supports critical functions such as preparation of schedules, processing of open access transactions, energy accounting, settlement of transactions, generation of

operational reports, maintenance of historical operational data and coordination with various stakeholders, including generating companies, transmission licensees, distribution licensees, the Regional Load Despatch Centre (RLDC), the National Load Despatch Centre (NLDC) and open access participants.

4. It was further submitted that the EASS platform has remained in operation for several years and has served as the principal software infrastructure supporting the scheduling and settlement operations of UPSLDC. Through the said platform, UPSLDC has been performing essential functions relating to intra-State scheduling, energy accounting, settlement processing and management of open access transactions in accordance with the applicable regulatory framework.

5. The Petitioner has contended that, owing to the rapid evolution of the electricity sector and increasing digitization of power system operations, the existing EASS platform has become technologically outdated and is no longer capable of adequately supporting the present and future operational requirements of the State Load Despatch Centre. According to the Petitioner, the software architecture of EASS is based on legacy technology and lacks the flexibility, scalability, interoperability, automation capability and cyber-security preparedness required for modern power system management.

6. The Petitioner also contended that there has been substantial transformation in power sector over the years, including the significant increase in the volume and complexity of open access transactions, expansion of participation in power markets and exchange-based transactions, integration of renewable energy, increasingly dynamic scheduling requirements and evolution of regulatory reporting and settlement mechanisms. These developments, it was submitted, require a software platform capable of handling large volumes of real-time data, seamless integration with multiple external systems, automated workflow management, enhanced cyber security and future scalability.

7. The Petitioner has highlighted several limitations of the existing EASS platform, including limited scalability for increasing transaction volumes, restricted integration capability with modern grid applications and market platforms, inadequate support for advanced scheduling functionalities, dependence on legacy software architecture, reduced automation in open access processing

and settlement workflows and increasing cyber-security vulnerability associated with ageing software systems. It was also stated that the existing platform lacks the flexibility necessary for integration with emerging digital power sector initiatives and advanced grid management applications.

8. Apart from the technological limitations, emphasis was placed on the contractual and lifecycle constraints associated with continued use of EASS. In this regard, the Petitioner submitted that the Annual Technical Support arrangement for the existing EASS application has already been extended up to 31.03.2028 and the present contractual framework has reached its permissible extension limit. The said extension has been granted only to ensure continuity of essential operational functions until a replacement system is implemented. Continued reliance on EASS beyond its approved lifecycle, according to the Petitioner, would expose UPSLDC to increasing operational risks, maintenance challenges, software obsolescence, vendor dependency and cyber-security concerns.

9. It was further submitted that EASS presently forms a critical part of the operational infrastructure of UPSLDC and any disruption, failure or inability of the system to support evolving regulatory and operational requirements may adversely affect scheduling accuracy, settlement operations, open access processing and overall grid management functions of the State Load Despatch Centre. It has therefore become imperative to replace the existing legacy platform with a modern, integrated and future-ready software system capable of supporting the long-term operational requirements of the State power sector.

10. Against the aforesaid background, UPSLDC has proposed implementation of a new integrated software platform, namely the Open Access Scheduling and Integrated Settlement System (OASIS). The proposed OASIS platform has been conceptualized as a secure, scalable, interoperable and future-ready digital platform designed to support modern scheduling, open access management, market integration, energy accounting and settlement operations of the State Load Despatch Centre.

11. The Petitioner has submitted that OASIS is intended to provide a unified and integrated digital ecosystem covering the entire operational workflow of scheduling and settlement functions. The proposed platform is designed to

facilitate automated open access processing, integrated scheduling, energy accounting, settlement management, market interfaces, regulatory compliance, cyber-security enhancement, workflow automation, audit trail management, real-time monitoring, advanced reporting, data analytics and future integration with emerging power market and grid management applications. The proposed system would also provide enhanced interoperability with external agencies and modern software platforms used in the electricity sector, thereby improving coordination between UPSLDC and other power sector stakeholders.

12. According to the Petitioner, implementation of OASIS would enhance the operational capability of UPSLDC by providing a modern software architecture capable of supporting increasing transaction volumes, improved automation, higher accuracy in scheduling and settlement operations, enhanced transparency and auditability, stronger cyber-security controls and better compliance with evolving regulatory requirements. The proposed platform is also expected to reduce operational risks associated with the existing legacy system and provide a sustainable technological framework for future digital transformation initiatives within UPSLDC.

Need for the Project

13. The Petitioner emphasized that the proposed project is not merely a replacement of an existing software application, but a comprehensive infrastructure modernization initiative intended to strengthen the scheduling, open access, energy accounting and settlement infrastructure of the State of Uttar Pradesh.

Technical Evaluation and Vetting

14. Considering the critical nature of the proposed software platform and its direct impact on the scheduling, open access, energy accounting and settlement functions of the State Load Despatch Centre, the Petitioner submitted that UPSLDC undertook a detailed technical assessment of the proposed implementation of OASIS. The assessment covered the functional scope of the proposed system, software architecture, integration requirements, implementation methodology, scalability, cyber-security framework and long-term sustainability of the platform.

15. During the course of the technical assessment, UPSLDC examined the capability of the proposed OASIS platform to support the evolving operational requirements of the State power sector, including enhanced scheduling functionalities, automation of open access processes, integrated settlement mechanisms, real-time data processing, interoperability with external power sector applications and future expansion of digital grid management systems. Particular emphasis was placed on providing a scalable and modular architecture capable of accommodating future regulatory changes, increased transaction volumes, renewable energy integration and emerging market-based scheduling mechanisms.

16. To ensure independent technical scrutiny and expert validation, the technical proposal and related project documents were referred to IIT Kanpur for technical vetting and review. IIT Kanpur examined the proposed scope of work, software architecture, functional requirements, implementation approach, integration framework and cyber-security aspects of the OASIS platform. The observations and recommendations received during the vetting process were duly considered by UPSLDC while finalizing the project proposal.

17. The Petitioner further stated that detailed correspondence was exchanged between UPSLDC and IIT Kanpur concerning various technical and functional aspects of the project. The review process enabled refinement of the project scope and validation of the proposed implementation methodology, thereby strengthening the overall technical robustness of the project.

18. Based on the aforesaid exercise, the proposed implementation has been structured to ensure technical robustness, future compatibility, interoperability with contemporary utility software platforms, enhanced cyber-security preparedness and compliance with modern software engineering and power sector operational standards. According to the Petitioner, the independent vetting undertaken by IIT Kanpur provides a sound technical foundation for implementation of OASIS as a critical infrastructure modernization project for UPSLDC.

Internal Approvals

19. The Petitioner has submitted that the proposal for replacement of EASS with OASIS was processed through the prescribed administrative and financial approval mechanism of UPSLDC Limited. Upon completion of the technical

assessment and evaluation process, the proposal was placed before the competent authorities for consideration of the technical necessity of the project, its operational benefits, estimated financial implications, procurement methodology and importance for modernization of the scheduling and settlement infrastructure of the State Load Despatch Centre.

20. After examination of the proposal and the recommendations arising from the technical evaluation process, Financial and Administrative Approval was accorded for implementation of the OASIS project at an estimated cost of ₹ 14.75 Crore (Rupees Fourteen Crore Seventy-Five Lakh only), inclusive of GST, through the Quality and Cost Based Selection (QCBS) procurement route. According to the Petitioner, the approval reflects that the project was subjected to financial scrutiny and administrative examination and that the estimated cost, implementation approach and procurement methodology were found to be appropriate and justified.

21. Thereafter, in accordance with the governance framework of UPSLDC Limited, the matter was placed before its Board of Directors. The Board examined the limitations of the existing EASS platform, the necessity of implementing OASIS, the technical and financial implications of the project, the proposed mode of procurement and the proposal for seeking funding through PSDF. After due deliberation, the Board approved implementation of the OASIS project and authorized UPSLDC to undertake the necessary steps for execution of the project and for obtaining approval from the Commission for release of PSDF funds.

22. Pursuant to the approvals granted by the competent authority and the Board of Directors, the proposal was placed before the Monitoring Committee constituted for matters relating to PSDF. In its meeting held on 06.07.2026, the Monitoring Committee considered the proposal for replacement of EASS with OASIS, the estimated project cost, the technical vetting undertaken by IIT Kanpur and the approvals already accorded by UPSLDC. After detailed deliberation, the Monitoring Committee approved the proposal and resolved that the same be forwarded to the Commission for obtaining regulatory approval and release/disbursal of funds under PSDF.

Scope of Work

23. The Petitioner submitted that UPSLDC, being the State Load Despatch Centre and the apex body responsible for ensuring integrated operation of the power system in the State of Uttar Pradesh under Section 32 of the Electricity Act, 2003, has defined the scope of work for implementation of OASIS.

24. Elaborating upon the scope of the project, it was submitted that OASIS envisages design, development, implementation, testing, commissioning, integration and maintenance of the platform together with its associated web portal, databases, interfaces and cyber-security components. The scope also includes integration with existing UPSLDC systems, including SCADA and other operational applications, migration of legacy data, user management through role-based access control, application programming interface-based connectivity with stakeholders, training of personnel, documentation, warranty and post-implementation support.

Project Cost and Funding

25. The Petitioner has submitted that, upon completion of the technical evaluation, market assessment, financial appraisal and internal approval process, the total estimated cost for implementation of OASIS has been assessed at ₹ 14.75 Crore, inclusive of GST at the rate of 18%. The estimate covers software development and customization, system integration, migration of existing data, testing and validation, deployment, training of personnel, documentation, project management and implementation support.

26. The Petitioner further submitted that the approved project cost of ₹ 14.75 Crore, inclusive of GST, is equivalent to ₹ 12.50 Crore exclusive of GST and comprises the following components:

Table 1 : Cost Components and Source of Funding

Component	Amount	Source of Funding
Development/CAPEX	₹ 8.35 Crore excluding GST; ₹ 9.85 Crore including GST	Proposed through PSDF
Five-year ATS/OPEX	₹ 4.15 Crore excluding GST; ₹ 4.90 Crore including GST	ARR/internal resources of UPSLDC
Total	₹ 12.50 Crore excluding GST; ₹ 14.75 Crore including GST	PSDF+ARR

27. Thus, while the Development/CAPEX component amounting to ₹ 9.85 Crore inclusive of GST is proposed to be financed through PSDF, the Five-Year Annual

Technical Support/OPEX component amounting to ₹ 4.90 Crore inclusive of GST is proposed to be met through the Annual Revenue Requirement/internal resources of UPSLDC.

28. The Petitioner additionally submitted that, as part of the project formulation process, UPSLDC undertook a market assessment and obtained budgetary quotations/indicative proposals from various reputed firms engaged in the development and implementation of utility software solutions relating to power system operations, scheduling, settlement and digital infrastructure. The quotations were obtained to assess prevailing market rates, evaluate the technical capabilities and domain expertise of potential implementation agencies, compare the proposed scope of work and implementation methodologies and arrive at a realistic and prudent project estimate.

Project Duration and Implementation Schedule

29. The Petitioner has submitted that the OASIS project has been planned with a well-defined implementation schedule to ensure systematic execution while maintaining continuity of UPSLDC's critical scheduling, open access, energy accounting and settlement operations. The timeline has been prepared keeping in view the complexity of software development, system integration, migration of data from the existing EASS platform, testing and validation, user training and commissioning of the new system.

30. The Petitioner further submitted that the project is proposed to be implemented through the QCBS procurement methodology. The implementation period has been fixed at twelve months from the Zero Date/date of award of contract up to successful Go-Live of OASIS. The term "Zero Date" refers to the date of award of the tender and execution of the contract agreement with the successful bidder, from which the contractual obligations and implementation activities shall commence. During this period, the selected implementation agency shall undertake software development and customization, system integration, migration of existing data, testing, validation, user acceptance testing, training of personnel and deployment of the OASIS platform.

31. Upon successful completion of the implementation and commissioning activities, OASIS shall achieve Go-Live and become fully operational for actual scheduling, open access management, energy accounting, integrated settlement and other operational functions of the State Load Despatch Centre.

The project is expected to commence from the date of tender award/execution of the contract agreement and reach Go-Live within twelve months from the Zero Date.

32. After Go-Live, the selected implementation agency shall provide a warranty period of twelve months, during which it shall remain responsible for rectification of defects, bug fixes, performance optimization and ensuring stable and uninterrupted functioning of the platform without additional maintenance charges. Upon completion of the warranty period, Annual Technical Support shall be provided for five years in accordance with the contract, including software maintenance, updates, security patches, technical assistance and operational support. The implementation schedule may accordingly be summarized as follows:

Table 2 : Timeline for Implementation of Project/Scheme

Duration of the Project (in Months)	12 months from zero date/ Contract award up to Go-Live, followed by 12 months Warranty and 5 Years ATS
Likely Start Date	Tender Award/ Contract agreement
Likely Completion Date	12 months from Zero Date for Go-live; Warranty and ATS asper contract

Additional Affidavit submitted by the Petitioner on 22.09.2026

33. The Petitioner has submitted that, subsequent to filing of the Petition, the cyber-security requirements of the OASIS platform were reviewed in light of the Government of India's report on the "Quantum-Safe Ecosystem in India", which addresses the need for progressive preparedness of critical digital systems towards quantum-safe and crypto-agile security requirements in view of emerging risks associated with advances in quantum computing.

34. In this context, the Petitioner stated that it is presently examining the technical implications of incorporating appropriate quantum-safe, Post-Quantum Cryptography (PQC) readiness and crypto-agility measures within OASIS. According to the Petitioner, the ongoing exercise includes assessment of strengthening the security architecture, enabling future cryptographic migration and undertaking the associated testing, validation and implementation activities that may be considered technically necessary.

35. It was further submitted that the detailed technical scope, implementation architecture and corresponding financial implications arising out of the aforesaid assessment are presently under evaluation. Consequently, the Petitioner is not presently in a position to reliably quantify any incremental financial requirement that may arise on account of such additional cyber-security measures.

36. The Petitioner has stated that, depending upon the outcome of the technical assessment and cost estimation exercise, an additional financial requirement over and above the amount presently covered under present Petition may arise. However, it was clarified that no additional amount is being claimed or sought through the present Additional Affidavit.

Hearing dated. 08.10.2026

37. Sh. Divyanshu Bhatt, Learned Counsel appearing on behalf of the Petitioner, submitted that the present Petition has been filed seeking approval for implementation of the Open Access Scheduling and Integrated Settlement System (OASIS) in place of the existing Energy Accounting and Settlement System (EASS). He further submitted that all requisite administrative, financial and other necessary approvals for the proposed project have already been obtained.

38. Upon a query from the Commission regarding whether any financial assistance had been obtained from any source other than the State PSDF, including the Central PSDF, the learned Counsel clarified that no funding has been received from any such source. The Commission further sought clarification regarding the necessity for replacement/upgradation of the existing EASS platform with OASIS. In response, Sh. Nitish Kumar Mishra, SE (IT), UPSLDC, submitted that the EASS platform has been in operation since 2018 and its existing support arrangement is valid up to the year 2028. He further explained that, considering the age of the existing system and evolving operational requirements, implementation of OASIS has been proposed as a replacement for the existing platform.

39. The Commission also observed that the cost relating to the cyber-security component of the project has not yet been finalized. In response, Sh. Divyanshu Bhatt submitted that the final cost of the cyber-security module cannot presently be determined as certain modifications and enhancements in

the scope of cyber-security requirements are under consideration as part of the OASIS implementation. Consequently, the overall cost may undergo revision. He further submitted that UPSLDC proposes to undertake procurement through an open tender process and, therefore, the project cost presently indicated is only an estimate and may vary based on the outcome of the bidding process. It was also submitted that the current estimate does not fully account for revised cyber-security costs, as the available benchmark rates are based on earlier estimates and are presently under review.

Commission's View

40. The Commission has considered the submissions made by the Petitioner, the documents placed on record, and the Additional Affidavit filed by UPSLDC. UPSLDC, being the Nodal Agency under Regulation 5 of the Uttar Pradesh Electricity Regulatory Commission (Power System Development Fund) Regulations, 2023, has approached the Commission under Regulations 7.4 and 7.5 of the said Regulations with a complete proposal for the implementation of the Open Access Scheduling and Integrated Settlement System (OASIS) at UPSLDC, together with the recommendations of the Monitoring Committee, seeking release of funds from the State PSDF.

41. The Commission further notes that the proposal specifies that OASIS is envisaged as a next-generation integrated digital platform. It is intended to replace the existing Energy Accounting and Settlement System (EASS) and to modernise, automate and streamline the core functions of UPSLDC. The project seeks to establish a robust, secure, scalable and interoperable system for scheduling, open access management, energy accounting, settlement, power market operations, system operation, stakeholder services and regulatory reporting, with seamless integration with existing and external systems.

42. It is observed that to ensure the technical soundness and cybersecurity compliance of the proposed projects, the Detailed Project Report (DPR) for establishment of the Security Operations Centre (SOC) and Network Operations Centre (NOC), along with the Scope of Work (SoW) for the proposed (OASIS) Software, was referred by UPSLDC to the Indian Institute of Technology (IIT), Kanpur for independent technical vetting. IIT Kanpur examined the DPR for the SOC/NOC and the OASIS Scope of Work in two technical vetting reports.

43. The Commission further notes that the observations of IIT Kanpur were stated to have been considered by UPSLDC, and the necessary modifications are stated to have been incorporated in the project design and implementation framework.

44. The Commission further notes that the proposal has been accorded financial and administrative approval by the competent authority and has been approved by the Board of Directors of UPSLDC. UP-PSDF Monitoring Committee, in its meeting held on 06.07.2026, considered the proposal and recommended the same for obtaining final approval of the Commission and release of funds under the PSDF framework. It has been also stated that the project cost has been estimated at ₹9.85 Crore (inclusive of GST) towards Development/CAPEX is proposed to be funded through PSDF and ₹4.90 Crore towards Five-Year Annual Technical Support/OPEX (after warranty period) is proposed to be borne by UPSLDC through ARR/Internal Resources.

45. The Petitioner has clarified that an assessment of post-quantum cryptography (PQC) readiness and crypto-agility is under way. The technical scope, cost estimate and financial implications of these measures are yet to be finalised. The detailed proposal will be prepared after this assessment, considered by the UP PSDF Monitoring Committee and approved by the competent authority. The clarification is taken on record. The Petitioner shall then place the finalised proposal before the Commission, with technical and financial justification and the requisite recommendations and approvals, in accordance with the applicable Regulations.

46. The project cost is at present only an estimate and has yet to be discovered through competitive bidding. Having regard to the objectives, scope and necessity of the OASIS project, the approvals placed on record (including the Monitoring Committee's recommendation), and Regulations 7.4 and 7.5 of the UPERC (Power System Development Fund) Regulations, 2023, the Commission is satisfied that the project qualifies for assistance for Capex part under the said Regulations. **In-principle approval is accordingly accorded for implementation of the OASIS project** at an estimated cost of ₹9.85 crore towards CAPEX, to be funded from PSDF, and ₹4.90 crore towards five-year ATS/OPEX, both inclusive of 18% GST.

47. If the cost discovered through bidding significantly differs from the estimated cost, UPSLDC shall obtain the recommendation of the PSDF Monitoring Committee on the revised cost and approach the Commission for its approval. The ATS/OPEX of ₹4.90 crore shall not be funded from PSDF and shall be borne by UPSLDC through its Annual Revenue Requirement, subject to the UPERC (Fees and Charges of State Load Despatch Centre and Related Matters) Regulations, 2025. Any variation in the ATS/OPEX cost arising from the bidding process or due to any other reason shall be considered in accordance with the said Regulations at the time of truing up and shall be subject to prudence check by the Commission in the appropriate proceedings.

48. While according the aforesaid in-principle approval, UPSLDC is directed to:
    (a) implement the project in a time-bound manner, in accordance with the approved DPR and timeline;
    (b) submit periodic progress reports, and a completion report on commissioning;
    (c) maintain a separate head of account for PSDF funds and show it distinctly in its audited financial statements; and
    (d) place any future proposal for quantum-safe/PQC enhancements requiring additional assistance before the Commission, after the requisite approvals of the PSDF Monitoring Committee and the Board

49. The Petition is disposed of accordingly.

(Griesh Kumar Vaish)
Member (Law)

(Sanjay Kumar Singh)
Member

(Arvind Kumar)
Chairman

Place: Lucknow
Dated: 27 .10.2026