

New Hope

Industry expectations from the Revamped Distribution Sector Scheme

At the grand finale marking the culmination of “Ujjwal Bharat Ujjwal Bhavishya-Power @2047”, the prime minister virtually launched the Ministry of Power’s Revamped Distribution Sector Scheme (RDSS) to revive the ailing distribution segment. The scheme, which has an outlay of Rs 3,037.58 billion over a period of five years (2021-22 to 2025-26), aims to provide financial assistance to discoms for modernising and strengthening distribution infrastructure, and improving the quality and reliability of supply to end consumers. Industry experts share their views on the potential of the scheme to address discoms’ challenges and the likely outcome....

In your opinion, does the RDSS have the potential to finally fix discom challenges?

Sachin Gupta

The economic development of a country depends on having a robust electricity sector. While the generation and transmission segments have been self-sustaining, the power distribution segment continues to be the Achilles heel for the entire power sector. Over the past two decades, successive governments have launched various schemes in order to revive the power sector, with the most recent being Atmanirbhar Bharat, which was more of a liquidity infusion package and did not address the key issues concerning the power distribution sector. The RDSS is yet another attempt by the government to revive the ailing state power distribution utilities. The scale of the scheme is massive, which pegs the outlay at more than Rs 3 trillion, with an estimated gross budgetary support of Rs 976.31 billion from the central government. The first part of the scheme proposes metering

and strengthening distribution infrastructure works, including separation of agricultural feeders, and construction of new substations and upgradation of existing ones. The second part involves training and capacity building as well as other enabling and supporting activities. This scheme, similar to the others, has the potential to revitalise the struggling distribution sector, but unlike others, it appears to be more result-oriented, requiring discoms to first invest, then perform and finally accept assistance. So far, the scheme looks promising and, if properly carried out, should undoubtedly be advantageous to the industry.

Somesh Kumar

In 2021, the Indian government approved the Rs 3 trillion reforms-based and result-linked RDSS to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. A total of Rs 1.9 trillion has been sanctioned to 38 states so far, out of

which Rs 100 billion has been sanctioned for smart meters and Rs 920 billion for loss reduction projects.

A strategically designed and result-oriented scheme, the RDSS can prove to be a game changer for the sector by systematically addressing most of the major challenges faced by discoms. Existing schemes such as the Integrated Power Development Scheme, the Deendayal Upadhya Gram Jyoti Yojana and the Ujwal Discom Assurance Yojana (UDAY), which could not ensure a sustainable financial and operational turnaround for discoms, have been subsumed under the RDSS, attempting to bring aspirations of the erstwhile schemes along with new initiatives under a common umbrella.

Background

The Indian power sector has undergone various reforms in the past two decades and distribution remains the weakest link in the supply chain. The central government introduced several schemes that helped India achieve 100 per cent electrification in 2018. Despite stellar improvement in terms of coverage, quality and reliability of power, most of the state-owned discoms are yet to become financially sustainable.

Frequent bailouts and an increasing debt burden have had a crippling effect on these discoms, in turn affecting the service provided by them, further investment in the enhancement of their infrastructure and quality of supply, especially in rural areas. Systemic issues in metering, billing, collection and network



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continue to affect the profitability and efficiency of discoms. While some discoms have been early adopters of reforms, information technology, and technological upgradation, others lag way behind, still operating inefficiently.

Sensing that a one-size-fits-all scheme will not work for a large and diverse country like India, the government has envisaged the RDSS with a two-track system that will be governed under a uniform framework for all the states but will also provide flexibility to include state-specific features in their action plans for prioritising their investments.

Part A of the present RDSS aims to alleviate the above-mentioned enduring issues by providing conditional financial assistance for discoms to leapfrog to advanced utility infrastructure through accelerated deployment of smart metering and modernisation of the grid. The RDSS prioritises agricultural feeder segregation while mandating supervisory control and data acquisition in all urban areas. The scheme also encourages discoms to leverage technologies such as artificial intelligence (AI) for taking data-driven decisions for loss reduction, improving demand forecast and taking preventive measures.

Part B of the RDSS sets provisions for capacity building by setting up research incubation centres, training professionals, funding new research and development activities such as home-grown AI solutions, and establishing reward schemes for exemplary performance of discom employees.

Anil Rawal

The reforms-based and results-linked

RDSS was introduced by the Government of India last year to primarily address the financial and operational woes of discoms. With an outlay of Rs 3 trillion, the policy aims to support discoms with conditional financing, which will enable them to improve their infrastructure while attaining a certain performance standard.

The major focus of the scheme is the smart prepaid metering programme, which is based on the design-build-finance-own-operate-transfer model. It will go a long way in empowering consumers and improving the financial efficiency of discoms. The policy will have a tangible impact on the country's power distribution sector in terms of aggregate technical and commercial (AT&C) loss reduction, reduction of the average cost of supply (ACS) and average revenue realised (ARR) gap, development of institutional capabilities for discoms, and access to quality, reliable and affordable power supply. The RDSS will also benefit the agricultural community by providing access to reliable and continuous power supply through dedicated feeders.

A substantial futuristic impact of the RDSS, enabled by the smart metering programme and once achieved at scale, would be to equip discoms with the capability to prepare system-generated energy accounting reports and utilise solutions such as loss reduction, demand forecasting, predictive analysis, and roll-out time-of-day tariffs to create additional sources of revenue, which will further improve their financial efficiency.

Abhijeet Ray

- Trends of accelerated electricity demand riding on the resurgence of econo-

“Smart metering will go a long way in empowering consumers and improving the financial efficiency of discoms.”

Anil Rawal

“The strategically well-designed measures of the RDSS, if implemented properly, will be instrumental in fixing the financial woes of the stressed state-owned discoms.”

Somesh Kumar

mic activities, energy transition and the focus on consumer-end services will necessitate the power distribution businesses in India to ramp up their capacities and become financially viable.

- The RDSS, through its unique framework of being results-linked and reforms-based, brings a new perspective in the sector and sets itself apart from previous large-scale capex schemes, driving transparency and accountability while focusing on results. It has taken into account learnings from previous schemes.
- Financial assistance under the scheme is tied to meeting the pre-qualification requirements as well as performance levels on the agreed key performance indicators for each year. Discoms can contextualise their action plans/DPRs and accordingly their results evaluation frameworks, which would become the cornerstone for evaluation of their performance for release of budgetary support under the scheme.
- Principal bottlenecks impacting public discoms such as delayed/retrospective implementation of retail tariffs, creation of regulatory assets, increasing payables/receivables, ballooning subsidy and state government department dues, and publishing of quarterly/annual accounts have been put in the spotlight. This would also necessitate that all stakeholders including the state governments and the state electricity regulatory commissions/joint electricity regulatory commission work with the discom to achieve the outcomes.
- Initiatives planned under the scheme centre around two major components:

- Investments in infrastructure targeted towards reduction of losses, system modernisation and augmentation, implementation of information technology/operational technology solutions, use of advanced technologies including AI/machine learning. The objective is to improve power reliability and quality, reduce losses due to inefficiencies or pilferage in the network, and build a best-in-class system.
- Implementation of 100 per cent smart metering to enable end-to-end energy accounting. Apart from digitalising the utility's meter-to-cash cycle and alleviating its cash flow challenges through prepaid billing, this would also facilitate multiple use cases such as identification of pilferage pockets, better network planning, power procurement optimisation, demand response, energy transition and distributed energy resources integration.
- The scheme's overall result-driven construct, governance mechanism, comprehensive range of solutions for covering pertinent consumer- and discom-end challenges, and participative approach should be able to resolve some immediate woes around liquidity and cash flows, cost reflectiveness of tariffs, and improving reliability and quality of the network. The RDSS therefore has the potential to lay the foundation for putting the discoms on a transformational path, making them future ready.

What, according to you, are its expected outcomes?

Sachin Gupta

Unlike previous schemes such as UDAY, the RDSS is more comprehensive and aims to address many issues (regulatory, governance, state support and technology-related) in the power distribution sector apart from reduction in AT&C losses and the ACS-ARR gap. Instead of the one-size-fits-all approach, the current scheme focuses on each discom and its own unique set of difficulties, for which an action plan can be customised with a



clear demarcation of their problems and solutions. Under the scheme, the central government will release grants based on the discom achieving specified marks in the evaluation matrix, which scores the discoms on a slew of parameters related to financial sustainability, operational efficiency, policy and structural reforms, among others. The scheme, akin to its predecessor, is expected to improve the long-term viability of the distribution sector. Specifically speaking, the proposed evaluation matrix carries maximum weightage for financial sustainability, which in turn gives maximum weightage to the reduction of the ACS-ARR gap/AT&C losses, levels of outstanding subsidy payable by the state government and outstanding government department dues, in that order. Hence, it is expected that the achievement of the targets will address a few of the basic issues concerning the sector, resulting in its self-sustenance. Funds released for this scheme are expected to be backloaded, focused more on the long-term improvement measures to be taken by the discoms.

Somesh Kumar

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Abhijeet Ray

woes of the stressed state-owned discoms. The proposed activities have the potential to address key issues such as inaccurate billing, meter tampering, non-payment of dues and reduction of technical losses. The following are the key expected outcomes of the RDSS:

- Drastic reduction in AT&C losses from existing levels
- Financial stability because of improved revenue realisation
- Improvement in service quality and reliability
- Improved institutional capacity to become a world-class modern power

Abhijeet Ray

The scheme can be pivoted to drive four key outcomes:

- **Improved governance in discoms:** Through multiple digital initiatives and automated processes, specific milestones for achieving corporate governance requirements, periodic reporting of KPIs and annual appraisal for eligibility of receiving budgetary support.
- **Financial viability and sustainability:** Improved cash flows through deployment of prepaid smart meters, associated initiatives on resolving genco/transco outstanding payables, plugging of leakages through automated energy accounting, timely implementation of retail tariffs, implementation of automatic fuel surcharges adjustment pass-through, focus on ensuring cost-reflective tariffs.
- **Enhanced consumer service delivery:** Ease of managing energy consumption and spend through smart metering, system strengthening and modernisation to result in improved power reliability and quality, emerging service-led business models and convergence of industries to provide a one-stop shop to electricity consumers.
- **Enabling energy transition and opening downstream market:** Strengthened networks and technology-enabled solutions will enable the integration of renewable energy and DER, adoption of electric vehicles, faster updating of other DSM, home automation, etc. ■