Regulatory Assets of DISCOMs

Mains: ***GS II – Government policies and interventions for development in various sectors and issues arising out of their design and implementation.***

Why in News?

Recently, The Supreme Court (SC) directed the State Electricity Regulatory Commissions (SERCs) and distribution companies (DISCOMs) to clear the existing regulatory assets within four years and liquidate any new assets within three years.

What are regulatory assets?

- **Regulatory assets** – They constitute the unrecoverable revenue gap due to the difference between the *average cost of supply (ACS), and the ARR Annual Revenue Requirement (ARR) of DISCOMS.*

  ***DISCOMs, or Distribution Companies**, are electricity utilities responsible for purchasing power from generators (like coal, hydro, or solar power plants) and delivering it to end consumers such as households, industries, and businesses.*

  - ***For example**, Tata Power Delhi Distribution Limited (TPDDL), Uttar Haryana Bijli Vitran Nigam (UHBVN) are some well known DISCOMS.*

- **Average cost of supply (ACS)** – The expense incurred by a DISCOM to deliver a unit of electricity to consumers.
- **Annual revenue requirement (ARR)** – The revenue collected by the as consumer tariffs and subsidy payments from the government.
- **Loss for DISCOMs** – If the ACS is greater than the ARR, the DISCOM effectively makes a loss on the sale of every unit of electricity.
  - ***For instance,** if a DISCOM's ACS is Rs 7.20/unit and ARR is Rs 7.00/unit, the gap is Rs 0.20 per unit.*

    If the DISCOM supplies 10 billion units, the total shortfall is Rs 2,000 crore.

- To avoid suddenly burdening consumers with an immediate tariff increase to recover the gap, SERCs allow the DISCOM to record the gap as a regulatory asset.
- This is essentially a deferred cost that the DISCOM is entitled to recover from consumers in the future, usually with interest.

What explains the ACS-ARR gap?

- **Contributing factors –** There are various reasons for the increasing regulatory gap
  - Non-cost reflective tariffs
  - Delays in the release of subsidies (for agriculture or low-income households) by State governments
  - Sudden increases in fuel prices (leading to increased power purchase costs)

- **Notable examples** – The *Punjab SERC* provides one of the earliest documented cases of regulatory assets in India when it *identified a revenue gap of Rs 487.10 crore.*
- Of this, Rs 150 crore was converted into a regulatory asset, to be recovered over two years: FY 2004-2005 and FY 2005-2006.
- The remainder, Rs 337.10 crore, was allowed to be recovered immediately via tariffs in FY 2003-2004.
- *The Delhi ERC's true-up* of FY 2022-23 and ARR for FY 2024-25 order mentioned a regulatory asset of Rs 36,057 crore for BSES Rajdhani and Rs 22,040 crore for BSES Yamuna, apart from a closing revenue gap (including carrying cost) of Rs 8,226.87 for Tata Power Delhi Distribution, Ltd.

  ***True-up** is a process of adjusting financial records to correct discrepancies between estimated figures and actual results, bringing them into alignment with reality.*

- *In Tamil Nadu, regulatory assets reported in FY 2021-2022 were Rs 89,375 crore*, indicating the issue is not isolated but systemic and reflecting financial pressures across many state DISCOMs.

How are consumers and DISCOMs affected?

- **Recovery of regulatory assets** – If the regulatory assets reported by BSES Rajdhani, BSES Yamuna, and Tata Power, the DISCOMs operating in Delhi, *are to be recovered within the four-year window set by the Supreme Court, they need to recover about Rs 16,580 crore a year.*
- With Delhi's annual electricity consumption of 30 billion units, this works out to an additional Rs 5.5 per unit on average.
- Since consumers can't be burdened with such high and immediate tariff increases, the state employs regulatory assets.
- **Burden on consumers** – The immediate benefit of stable tariffs for consumers is eventually offset by steeper increases when the deferred costs are recovered. Since these assets also attract carrying costs, consumers pay the original gap as well as the additional interest.
- **Cash crunch on DISCOMs** – The persistence of large regulatory assets results in significant cash flow pressures.
- Because revenue doesn't cover current costs, DISCOMs often struggle to pay power generators on time, which can strain the entire power supply chain.
- **Loan burden on DISCOMs** – Many *DISCOMs borrow to bridge the gap, increasing their debt burden.*

- **Limited investment ability –** With so much money tied up in unrecovered costs, their ability to invest in modernising the grid, integrating renewable energy, and in better consumer services becomes limited.
- **Operational challenges** – The result is a vicious cycle in which financially distressed DISCOMs face greater operational challenges, which in turn make it harder to improve efficiency and recover costs on time.

What can be done?

- **Aligning tariffs with costs** – One important step is to ensure tariffs are aligned more closely with costs, while using targeted subsidies to protect vulnerable consumers.
- This ensures the burden is shared transparently rather than hidden in deferred recoveries.
- **Role of state government** – State governments also need to release subsidies on time so that DISCOMs aren't left carrying the financial gap on their books.
- **Automatic fuel cost adjustment mechanisms** – Tools such as the Fuel and Power Purchase Cost Adjustment mechanism, can help tariffs respond quickly to sudden changes in input costs.
- **Regular adjustment procedures** – Annual true-up exercises, where projected and actual expenses are reconciled, can prevent the build-up of large backlogs.
- **Role of regulatory commissions** – They play a critical role in maintaining discipline.
- By enforcing limits, ensuring transparency in accounting, and setting clear timelines for recovery, they can ensure regulatory assets remain an exceptional tool rather than a recurring feature.
- **Adopting best practices** – The DISCOMS could increase the revenues and reduce losses adopt innovative and best models such as the
    - **Regulated Asset Base (RAB)** – Utilities are allowed to recover their investment in regulated assets through tariffs, with a regulated rate of return on the asset base, thus ensuring long-term revenue certainty.
    - **United Kingdom's RIIO –** Revenue = Incentives + Innovation + Outputs (RIIO) model links utility revenues to asset investment and to clearly defined output parameters.
    - ***For example****, reliability, customer service, and carbon reduction creating stronger accountability and performance incentives.*
- However, adopting such mechanisms in India will require transparent valuation of regulatory assets and credible enforcement of efficiency targets.
- **Initiatives** – Digital energy grids and the India Energy Stack can enable advanced asset management, which can help recover regulatory assets through RAB models.
- Together, the models and the infrastructure could shift India's power sector to a dynamic, performance-driven model, aligning consumer tariffs with system efficiency and long-term sustainability.
- **Capping of regulatory assets** – The Supreme court also advised *capping the regulatory asset at 3% of a DISCOM's Annual Revenue Requirement (ARR).*
- **Transparent recovery mechanisms** – The SC also instructed regulators to *set out transparent roadmaps for recovery, along with conducting intensive audits of DISCOMs* that continue without recovering these assets.

What lies ahead?

- There is a need for coordinated action and greater financial discipline across the sector, so that electricity remains both affordable for households and sustainable for utilities.
- In sum, regulatory assets aren’t the result of deliberate inaction by a single entity but a reflection of the broader challenges of balancing affordability, subsidy dependence, and cost recovery in India’s electricity sector.

Reference

The Hindu| Regulatory Assets of DISCOMs

