ISSN 2319-5991 www.ijerst.com

Peer Reviewed, Referred & Indexed Journal

Research Paper

THE ANALYTICAL AND OPERATIONAL ASSESSMENT OF IND AS 116 IMPLEMENTATION IN THE STATE-OWNED POWER SECTOR ENTITIES OF GUJARAT

Prepared by:
CA (Dr.) Sandeep Banesinh Kagda
Accounts Officer, Gujarat Energy Transmission Corporation Ltd,Corporate Office,
Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat – 390007
Email Id: Sandeepkagda1988@gmail.com

Abstract

The financial accounting architectures of Indian public sector undertakings have undergone profound structural changes following convergence with International Financial Reporting Standards (IFRS) via the Indian Accounting Standards (Ind AS) framework. Among these regulatory transformations, the enforcement of Ind AS 116 (Leases)—which superseded the legacy risk-and-reward classification under Ind AS 17—stands out as one of the most operationally disruptive standards for capital-intensive infrastructure entities. Public power sector corporations operating under unbundled state utility structures engage in extensive asset arrangements, including office properties, land parcels, specialized grid equipment, and comprehensive vehicle hiring arrangements.

This paper provides an extensive, multi-layered empirical and conceptual assessment of Ind AS 116 implementation across the coordinated matrix of the state-owned power holding company in Gujarat and its key operational subsidiaries: the state generation subsidiary the state transmission utility, and the localized regional state distribution companies the DISCOMs, Relying on qualitative corporate financial policy dissections, auditing guidelines from the Institute of Chartered Accountants of India (ICAI), and actual multi-year internal data, this study analyzes how asset control tests, substantive substitution parameters, and component separation methodologies operate under the standard.

Special emphasis is placed on evaluating the accounting friction points involving vehicle hiring contracts (Category A dedicated leases versus Category B service arrangements) and office building lease structures. The paper details how the mandatory capitalization of right-of-use (ROU) assets and lease liabilities impacts

key financial line items, alters the presentation of Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA), changes borrowing covenant calculations, and interacts with state regulatory tariff true-up proceedings. Finally, a series of enterprise resource planning (ERP) system recommendations and policy frameworks are presented to optimize post-convergence utility governance.

1. Introduction

The socioeconomic and industrial development of emerging economies depends directly on the operational stability, financial health, and transparency of state-owned power utilities. In the state of Gujarat, the strategic modernization and restructuring of the power sector led to the functional unbundling of the historic state electricity board into an integrated corporate matrix. At the center of this matrix is a state-controlled holding company responsible for bulk power procurement, centralized commercial optimization, and strategic capital allocation. Operating under this framework are distinct, specialized corporate subsidiaries: a dedicated generation arm, a centralized extra-high-voltage transmission operator, and four regional distribution companies the DISCOMs managing localized retail power distribution.

Historically, these public utilities operated under accounting frameworks that emphasized the structural form of operating agreements over their true economic substance. Under legacy accounting standard iterations, such as Ind AS 17, lease contracts were divided into finance leases (capitalized on the balance sheet) and operating leases (kept off the balance sheet). This arbitrary binary allowed utilities to retain significant long-term financial obligations off the balance sheet by structuring agreements for land, administrative office spaces, grid equipment, and transport vehicles as operating arrangements. Consequently, actual asset utilization boundaries and long-term lease payment obligations were missing from the primary financial statements, presented only through supplementary footnote disclosures.

To remove these analytical gaps and align Indian corporate reporting with global standards, the Ministry of Corporate Affairs (MCA) mandated the roll-out of Ind AS 116 (Leases) for reporting periods beginning on or after April 1, 2019. Converged with IFRS 16, Ind AS 116 introduces a single lessee accounting model that eliminates the distinction between operating and finance leases for lessees. The standard mandates that if an arrangement conveys the right to control the use of an identified asset for a period of time in exchange for consideration, it must be recognized on the balance sheet through a dual presentation: a Right-of-Use (ROU) asset and a corresponding Lease Liability.

For the power sector companies of Gujarat, this accounting change introduces significant corporate governance challenges. These state entities manage hundreds of continuous operational arrangements, ranging from decades-long land leaseholds for transmission substations to extensive vehicle fleets hired for field engineers. Applying a principle-driven framework like Ind AS 116 to these arrangements requires detailed contract analyses, internal data gathering, and advanced financial modeling. Therefore, evaluating the quantitative impacts, auditing friction points, and presentation adjustments resulting from Ind AS 116 within the state's power utility framework is highly relevant for regulatory bodies, public finance analysts, and corporate officers.

1.1 Statement of the Problem

Public power utilities operate under rigorous multi-year tariff (MYT) mechanisms overseen by the State Electricity Regulatory Commission. Every operational expenditure, finance charge, and depreciation line item influences the ultimate cost of power calculation and subsequent consumer tariff true-up approvals. When Ind AS 116 shifts historical operating rent expenses off the operational ledger and splits them into depreciation and finance costs below the EBITDA line, it creates friction with established regulatory definitions of allowable costs.

Furthermore, determining whether hundreds of operational service contracts—such as staggered vehicle hiring setups or long-term office rentals—contain embedded leases requires significant professional judgment regarding "identified assets" and "substantive substitution rights". Misclassifying these contracts risks non-compliance with statutory accounting requirements and can distort key performance ratios, potentially triggering borrowing covenant violations with institutional lenders.

1.2 Research Objectives

This study evaluates the implementation of Ind AS 116 within the unbundled state power utilities of Gujarat through the following research objectives:

- To analyze the conceptual framework of Ind AS 116 relative to legacy lease accounting standards within the public utility infrastructure environment.
- To systematically assess the application of lease control tests—specifically regarding identified assets and substitution boundaries—to corporate transport and facility contracts.
- To model the balance sheet capitalization and income statement presentation changes across the generation , transmission , and distribution layers.

- To evaluate the auditing challenges, internal control requirements, and compliance findings raised by statutory examiners and the Comptroller and Auditor General (C&AG) of India.
- To formulate practical policy adjustments and automated ERP creation templates to streamline multi-location lease reporting within state utility structures.

2. Review of Literature

The introduction of converged lease accounting standards globally (IFRS 16) and domestically (Ind AS 116) has generated substantial empirical literature focusing on corporate financial reporting variations. Academic researchers and corporate financial experts consistently observe that while the economic fundamentals of a business remain unchanged post-adoption, the capitalization of operating commitments fundamentally reshapes the structure of financial statement presentation.

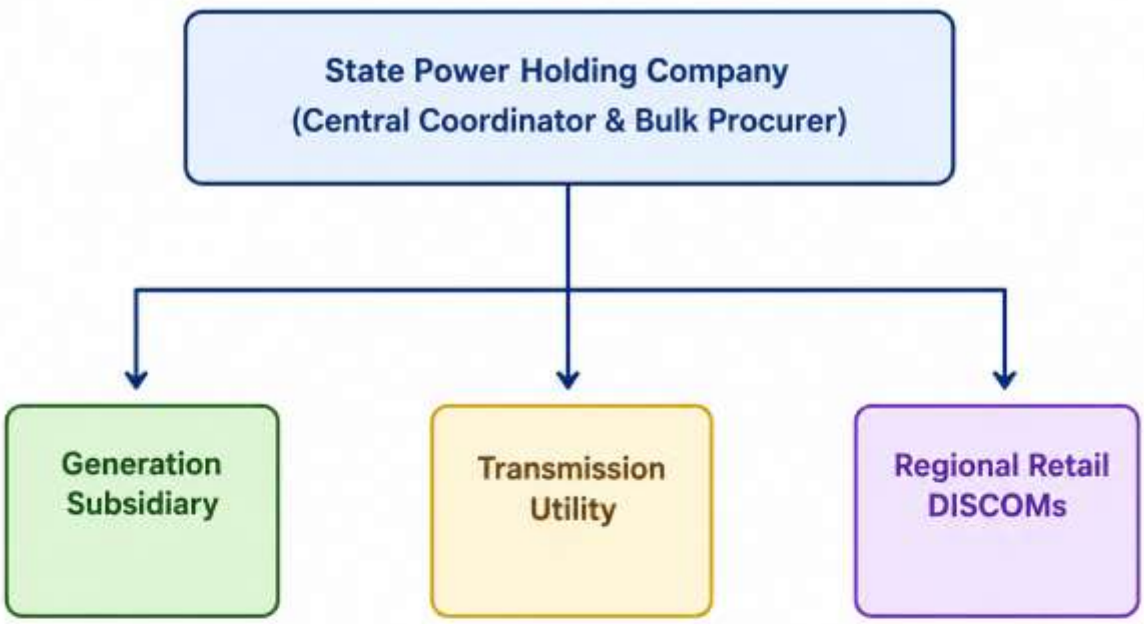
Early international panel studies tracking capital-intensive utility, aviation, and telecommunication sectors following the adoption of IFRS 16 confirm a widespread inflation of balance sheet aggregates. By bringing historical off-balance-sheet commitments into primary asset and liability metrics, companies experienced immediate expansions in reported capital employed. This structural expansion caused measurable downward revisions in key performance metrics, such as Return on Assets (ROA), due to the larger denominator base. Conversely, EBITDA measures across these sectors showed artificial improvements because standard operating rent outflows were reallocated to non-operating depreciation and finance costs.

In the Indian corporate landscape, initial empirical studies confirm that the impact of Ind AS 116 depends heavily on sector-specific asset structures. Research evaluating highly leased consumer sectors, such as commercial aviation (e.g., InterGlobe Aviation Ltd), telecommunications (e.g., Bharti Airtel Ltd), and retail entertainment (e.g., PVR INOX Ltd), shows substantial increases in total debt metrics following the inclusion of lease liabilities within financial debt definitions. Statutory auditors also note that selecting appropriate incremental borrowing rates (IBR) and evaluating renewal options present ongoing implementation challenges for corporate finance teams.

However, the existing literature remains focused on listed private entities or market-driven consumer firms, leaving a distinct gap regarding state-owned, vertically unbundled public utility structures. Public utilities do not operate under pure market pricing parameters; instead, their asset bases and allowable expenditures are heavily governed by state regulatory commissions for tariff-setting purposes. Consequently, examining how the capitalization of administrative assets, substation land leases, and vehicle hiring contracts under Ind AS 116 interacts with public finance compliance frameworks adds valuable insights to the literature on infrastructure financial accounting.

3. Institutional Architecture of the State Power Sector

To trace the financial reporting flows and lease interdependencies introduced by Ind AS 116, it is necessary to examine the unbundled corporate architecture of Gujarat's power utility network. Following the enactment of the Electricity Act of 2003, the state systematically reorganized its legacy electricity board in May 2005 into independent corporate units to improve operational efficiency, isolate commercial risks, and ensure transparency across the energy value chain.



Within this corporate architecture:

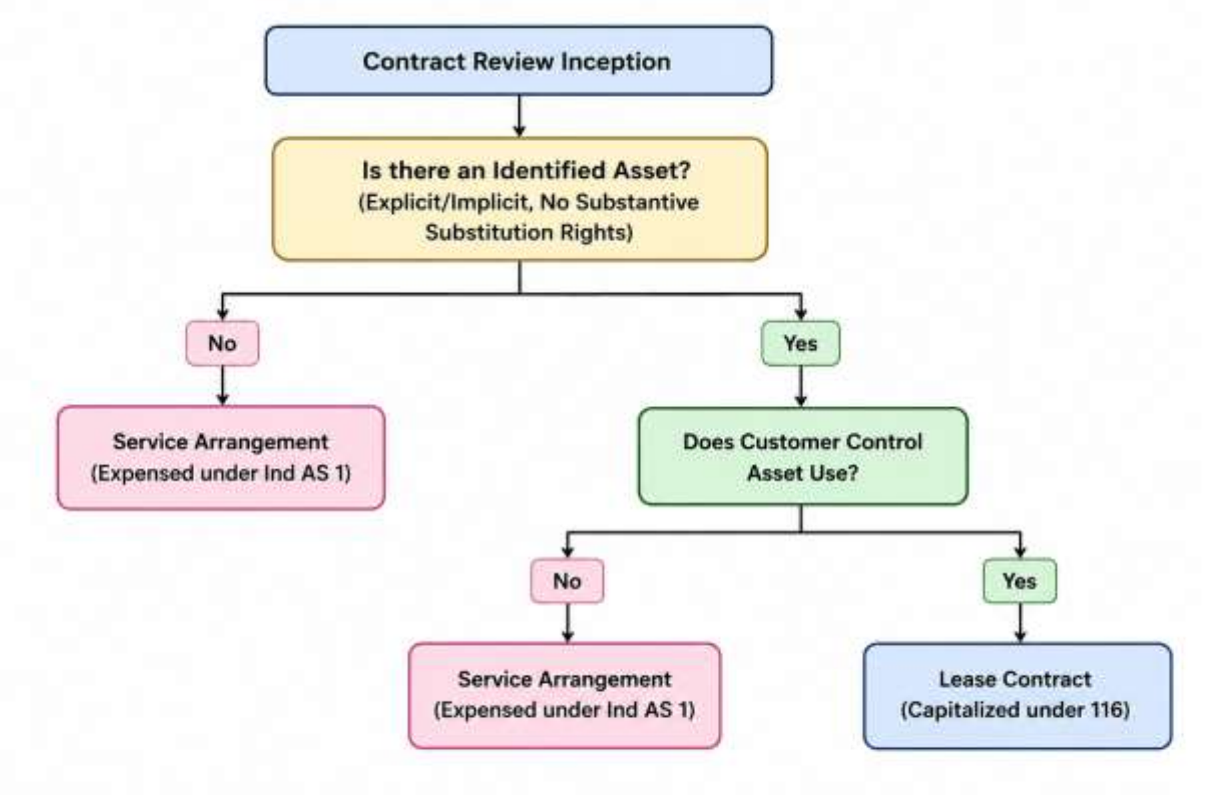
- **The State Power Holding Company :** Operates as the central coordinator, bulk power purchaser, and financial clearinghouse, managing energy allocation contracts across the state.
- **The Generation Subsidiary :** Operates thermal, hydro, and large-scale renewable energy generating stations, billing the holding company under long-term capacity and energy tariff agreements.

- **The Transmission Utility:** Manages the extensive extra-high-voltage transmission grid, wheeling power from generating facilities to regional distribution nodes under regulated network availability tariffs.
- **The Regional DISCOMs:** Manage the low-voltage retail distribution infrastructure across specific geographic zones, serving industrial, commercial, residential, and subsidized agricultural consumers.

Because these entities operate as an integrated network, their accounting treatments must align. A lease policy alteration or a contractual reclassification under Ind AS 116 implemented at the DISCOM or transmission layer modifies the underlying asset base and operational expenditure profile, which directly impacts the centralized corporate reports submitted to state regulatory bodies.

4. Conceptual Mechanics of Lease Identification Under Ind AS 116

The core framework of Ind AS 116 moves away from the traditional model of assessing risk transfer and instead focuses on who controls a specific asset. Under Paragraph 9 of the standard, a contract contains a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. For the state power sector entities, this requires testing corporate arrangements against two sequential operational criteria:



4.1 The Identified Asset Condition

An asset is identified when it is explicitly named within the contract (e.g., a specific office building or a vehicle designated by its government registration number) or implicitly specified at the time it is made available for customer use. However, Paragraph B14 states that an asset is not identified if the vendor retains a substantive right to substitute it throughout the period of use. A substitution right is substantive only if the supplier has the practical ability to swap alternative assets easily and would benefit economically from exercising that swap.

4.2 The Control of Use Framework

If an identified asset exists, the utility must verify whether it controls the asset's use throughout the contract term. Control requires two simultaneous operational parameters:

- **Economic Benefit Generation:** The utility must have the right to obtain substantially all the economic benefits from using the asset during the period (e.g., exclusive physical access to the space or equipment).
- **Direction of Use:** The utility must have the right to direct how and for what purpose the asset is utilized. This includes making key decisions regarding operational schedules, travel routes, and deployment purposes.

5. Application of Ind AS 116 to Power Sector Contracts

Power corporations manage numerous operational contracts that fall under the scope of Ind AS 116. This section evaluates how these principles apply to specific asset classes within the state utility network.

5.1 Vehicle Hiring Contracts: Category A vs. Category B

Power utilities frequently maintain large fleets of hired vehicles. These vehicle arrangements are generally structured as all-inclusive 36-month contracts with fixed monthly payments. Applying Ind AS 116 requires dividing these contracts into two separate accounting categories:

- **Category A Contracts: Dedicated Leases**
  - These arrangements identify a specific vehicle by its registration number, make, and model, dedicating it exclusively to the utility.
  - **Lease Identification:** Because a specific vehicle is named, it represents an identified asset. The utility exercises complete direction over its use.

  - **Component Accounting:** Under Paragraph 12, the utility must separate the lease component (the vehicle hull) from the non-lease service components (driver salary, fuel costs, insurance, and maintenance). Alternatively, Paragraph 15 allows a practical expedient to treat the entire combined payment as a single lease component.

- **Category B Contracts: Service Arrangements**
  - These arrangements specify only a general asset class (e.g., "one SUV or Jeep") without locking in a specific registration number.
  - **Lease Identification:** Because the vendor maintains substantive substitution rights, no identified asset exists. The arrangement is classified as an ordinary service contract, and payments are recognized directly as operational transport expenses.

5.2 Commercial Office Premises and Infrastructure Building Leases

The regional distribution utilities and the transmission utility regularly lease commercial office spaces and customer care centers. These building arrangements typically feature 60-month terms with scheduled rent escalations.

Under Ind AS 116, an office lease represents a clear right-of-use asset because the premises are physically distinct, cannot be substituted by the landlord without cause, and are controlled exclusively by the utility. The utility must calculate the present value of all future lease payments, discounting them using its incremental borrowing rate (IBR), and record this as both an ROU asset and a lease liability.

6. Financial Modeling and Journal Entry Interpretations

This section models the accounting entries for an office building lease within a regional distribution subsidiary using a 60-month operational timeline.

Table 6.1: Financial Modeling Parameters for Building Lease (DGVCL)

Parameter	Value
Division / Location	Division 401 (Kapodara Hub)
Lease Term	60 Months (5 Years)
Lease Commencement Date	01 April 2025
Lease Termination Date	31 March 2030
Monthly Lease Rental	₹1,25,000.00
Incremental Borrowing Rate (IBR)	8.75% p.a.

Initial ROU Asset	₹61,62,600.82
Initial Lease Liability	₹61,62,600.82

6.1 Initial Recognition (01 April 2025)

ROU Asset Cost = Σ Lease Payments discounted at IBR = ₹61,62,600.82

Particulars	Dr. (₹)	Cr. (₹)
Right-of-Use (ROU) Asset	61,62,600.82	
Ind AS 116 Lease Liability		61,62,600.82

6.2 Subsequent Accounting Entries (FY 2025–26)

A. Depreciation of ROU Asset

Annual Depreciation = ₹12,32,520.16

Particulars	Dr. (₹)	Cr. (₹)
Depreciation Expense	12,32,520.16	
Provision for Depreciation		12,32,520.16

B. Interest on Lease Liability

Interest Expense = ₹4,99,744.53

Particulars	Dr. (₹)	Cr. (₹)
Finance Cost – Lease Interest	4,99,744.53	
Ind AS 116 Lease Liability		4,99,744.53

C. Lease Rental Payment

Annual Lease Payment = ₹15,00,000.00

Particulars	Dr. (₹)	Cr. (₹)
Ind AS 116 Lease Liability	15,00,000.00	
Bank / Cash		15,00,000.00

7. Macro Impact Assessment on Financial Disclosures and Ratios

7.1 Financial Ratios Re-alignment Matrix

Table 7.1: Financial Ratio Behavioral Direction Post-Ind AS 116 Adoption

Financial Ratio Indicator	Mathematical Formula Structure	Post-Adoption Shift
Debt-to-Equity Leverage	(Total Borrowings + Lease Liabilities) / Shareholders' Equity	Increases
Return on Assets (ROA)	Net Profit After Tax / Total Balance Sheet Assets	Declines
EBITDA Profit Margin	(Reported EBITDA / Total Operational Revenue) × 100	Improves
Interest Coverage	Earnings Before Interest and Taxes / Gross Finance Charges	Declines

8. Compliance, Auditing Frameworks, and C&AG Perspectives

8.1 Key Auditing Focus Areas

- **Verification of Embedded Leases:** Statutory auditors review service arrangements to verify that Category B contracts genuinely meet the criteria for substantive substitution rights.
- **Incremental Borrowing Rate (IBR) Calibration:** Auditors verify that the selected IBR matches the rate at which the utility could borrow over a similar term and with similar security.
- **Treatment of Variable Lease Considerations:** For transport arrangements that charge a variable fee, auditors ensure these charges are excluded from the initial lease liability and expensed in the period incurred.

8.2 Qualitative Materiality and Governance Disclosures

Under Ind AS 1, materiality is assessed based on both quantitative and qualitative factors. Even quantitatively small balance sheet adjustments can be qualitatively material for public power utilities due to strict regulatory tariff proceedings and institutional borrowing covenants.

9. Discussion and Managerial Implications

The practical execution of Ind AS 116 across Gujarat's power corporations highlights that transitioning to converged accounting standards requires extensive updates to internal tracking procedures alongside financial policy changes. Utility finance teams must establish robust internal controls and automated tracking systems. Furthermore, utility executives must communicate proactively with regulatory bodies and lending institutions to ensure that debt covenant metrics and tariff true-up petitions are adjusted to prevent artificial technical defaults and accurately reflect allowable operating expenditures.

10. Conclusion and Policy Recommendations

The implementation of Ind AS 116 represents a significant advancement in corporate financial transparency for Gujarat's power sector. To optimize lease accounting governance, the following policy recommendations are proposed:

- **Implement Automated Lease Management Modules:** Deploy automated modules within the centralized ERP platform to auto-populate amortization schedules.
- **Establish Unified Portfolio Accounting Policies:** Leverage the portfolio approach to group similar operational asset classes, allowing the application of a single annual incremental borrowing rate.
- **Formalize Component Separation Guidelines:** Issue clear directives to accurately separate lease elements from non-lease service components.
- **Coordinate Borrowing Covenant Alignments:** Proactively engage with institutional lenders to update financial debt definitions.
- **Conduct Cross-Functional Training Workshops:** Train procurement, legal, and engineering teams on Ind AS 116 compliance to ensure contracts are structured correctly.

References

- Comptroller and Auditor General of India (C&AG). (2020). *Report on the Implementation of Indian Accounting Standards in Selected Public Sector Undertakings*. New Delhi: Government of India.
- Deloitte. (2019). *A Deep Dive into Ind AS 116: The New Era of Lease Accounting*. Mumbai: Deloitte India Publication.
- Gandhi, T. (2022). Ind AS 116 - Leases: Conceptual Mechanics, Financial Statement Comparisons, and Tax Displacements. *Taxmann Analysis*, 144(218), 1-6.

- Institute of Chartered Accountants of India (ICAI). (2019). *Educational Material on Indian Accounting Standard (Ind AS) 116: Leases*. New Delhi: ICAI Media Desk.
- Institute of Chartered Accountants of India (ICAI) ITGF. (2021). *Compendium of Clarifications on Embedded Lease Frameworks under Ind AS 116*. New Delhi: ICAI Publications.
- Mhaske, A., & Jagtap, S. (2026). Study of Impact of Ind AS 116 on Financial Position and Financial Ratios of Selected Indian Companies. *International Journal of Creative and Open Research in Engineering and Management*, 2(4), 1-4.
- Muduli, K. C. (2026). Accounting for Construction and Infrastructure Leases: A Comparative Assessment of Ind AS 17 and Ind AS 116. *Episteme: An Online Interdisciplinary Journal*, 15(2), 45-63.
- Nexdigm. (2026). *Ind AS 116 - Leases Explained: A Practical Implementation Guide for CFOs and Finance Leaders*. ThinkNext Corporate Insights.
- Pandey, I. M. (2021). *Financial Management* (12th ed.). New Delhi: Vikas Publishing House.
- Subramanyam, K. R. (2023). *Financial Statement Analysis* (13th ed.). New York: McGraw-Hill Education.