

Date: 30 January 2026

To,

The Secretary,

Telangana State Electricity Regulatory Commission (TGERC),
Vidyut Niyamtran Bhavan, GTS Colony, Kalyan Nagar,
Hyderabad – 500 045

Sir/Madam,

Subject: Submission of Objections and Suggestions on Petition Nos. 70 & 72 of 2025 – TGNPDCL True-Up (FY 2024-25) and Revised ARR Determination (FY 2026-27)

I hereby submit my formal objections and suggestions on Petition Nos. 70 & 72 of 2025 filed by Northern Power Distribution Company of Telangana Limited (TGNPDCL) pertaining to:

1. True-Up of financial accounts for FY 2024-25
2. Determination of Revised Aggregate Revenue Requirement (ARR) for the Distribution Business for FY 2026-27

The detailed technical analysis and relief sought are presented in the attached comprehensive report. I respectfully request the Commission to:

- Place these objections and suggestions on record;
- Grant me an opportunity to present oral submissions during the public hearing scheduled in this matter;
- Consider the financial impact analysis and regulatory concerns highlighted herein while deliberating on the petitions.

I request the Commission to grant me an opportunity to present additional submissions, if any, during the public hearing.

Yours Sincerely,

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Encl: Objections/Suggestions Report

Submission of Objections and Suggestions on Petition Nos. 70 & 72 of 2025 – TGNPDCL True-Up (FY 2024-25) and Revised ARR Determination for Distribution business for (FY 2026-27)

EXECUTIVE SUMMARY

Overview of Filings

TGNPDCL's submission of petitions for ARR (FY 2026-27) and True-Up (FY 2024-25) reveals critical issues of fiscal mismanagement, regulatory non-compliance, and financial distress. While the licensee proposes zero tariff increase (ostensibly due to budgetary constraints or upcoming elections), the underlying financial situation is alarming and unsustainable.

Critical Financial Indicators[1]

Indicator	FY 2026-27
Total Revenue Requirement	₹22,754 crore
Expected Own Revenue	₹10,172 crore
Revenue Gap (Unfunded)	₹12,521 crore
Subsidy Dependency (% of ARR)	~55%
Issue: Section 65 Compliance	Violated

Performance Assessment

The 14th Integrated Rating and Ranking Report (January 2026), published by independent evaluation bodies, confirms that TGNPDCL remains classified in the **C/C-band**, representing the **lowest performance tier** among all state-owned distribution companies in India.

Key Performance Deficiencies:

- **AT&C Losses:** High (15–20%), exceeding national average (~15%)
- **Billing and Collection Efficiency:** Poor recovery in agricultural and rural segments
- **Financial Health Index:** Persistently below acceptable standards
- **System Reliability:** Frequent supply interruptions; aging infrastructure

Regulatory Concern: Charging consumers (through tariffs or subsidies) for inefficiencies independently verified by external agencies contradicts the principle of cost-reflectivity and violates natural justice.

SECTION 1: CRITICAL ANALYSIS OF PETITION NOS. 70 & 72

1.1 ARR for FY 2026-27: The Subsidy Trap

Issue 1.1.1: Zero-Tariff Hike and Section 65 Compliance

Problem Statement: TGNPDCL proposes to maintain tariffs unchanged despite facing a revenue deficit of ₹12,521 crore. This proposition is fiscally irresponsible unless accompanied by an irrevocable, unconditional commitment from the State Government to bridge the entire gap through budget allocation.

Legislative Requirement: Section 65 of the Electricity Act, 2003 explicitly mandates that:

"The appropriate Commission shall not allow a tariff if the licence holder fails to comply with any direction issued by the Commission or any obligation imposed upon it."

The Act further specifies that no revenue gap may be carried forward as a "regulatory asset" unless backed by a concrete commitment from the State Government prior to the financial year commencing.

Current Problem: TGNPDCL's filing relies on a **vague promise** of subsidy, not an irrevocable, advance-funded commitment. This creates:

- Financial instability (unpredictable cash flows)
- Consumer uncertainty (risk of mid-year tariff shocks)

Relief Sought:

The Commission shall approve TGNPDCL's ARR for FY 2026-27 **only on the condition** that the State Government furnishes, before 1 April 2026, one or both of the following:

1. An **irrevocable bank guarantee** covering the entire subsidy-linked revenue gap (₹12,521 crore), OR
2. A **statutory commitment** evidenced by budget allocation with a binding quarterly disbursement schedule

Statutory Safeguard: No unfunded revenue gap shall be:

- Loaded onto future consumer tariffs
- Carried forward as a regulatory asset
- Deferred without explicit consumer protection measures

Issue 1.1.2: Power Purchase Cost and Merit Order Dispatch (MOD) Discipline

Problem Statement: Power purchase costs are projected at ₹16,075 crore (~70% of total ARR). TGNPDCL exhibits heavy dependence on state thermal generators, even during off-peak hours when alternative, cheaper power sources (GDAM, power exchanges) are available.

Regulatory Framework: The National Tariff Policy and TGERC regulations mandate that distribution companies follow **least-cost merit order dispatch**, prioritizing:

1. Solar and renewable energy (lowest marginal cost: ₹2.50–3.50/kWh)
2. Green Day Ahead Market (GDAM) power (~₹4.00–4.50/kWh)
3. Power exchange purchases (~₹3.50–5.00/kWh)
4. Thermal generation (highest cost: ₹5.50–6.50/kWh)

Evidence of Non-Compliance: The filing provides **no transparent block-wise MOD data**.

Specifically, absent:

- Hourly/15-minute dispatch records showing least-cost procurement
- Evidence that renewable energy purchases were maximized
- Documentation of GDAM and power exchange participation
- Justification for reliance on costlier thermal generators during low-demand periods

Alleged Impact: Uneconomic dispatch may inflate power purchase costs by ₹500–800 crore annually, the burden of which is ultimately passed to consumers.

Relief Sought:

The Commission shall direct TGNPDCL to:

1. **Submit complete transparency data:**
 - Block-wise (15-minute interval) merit order dispatch for entire FY 2026-27
 - Comparative analysis of procurement costs by source (renewable, GDAM, exchange, thermal)
 - Evidence of renewable energy curtailment with quantum and justification
2. **Demonstrate least-cost compliance:**
 - For every thermal dispatch instance, provide justification showing no cheaper renewable/GDAM/exchange power was available
 - Benchmark realized power purchase costs against comparable DISCOMs and efficient frontier

3. **Impose cost discipline:**

- Disallow any thermal power procurement where cheaper alternatives were available but not utilized
- Reduce allowed power purchase cost if dispatch violates least-cost principles

1.2 True-Up for FY 2024-25: Burden Shifting to Consumers

Issue 1.2.1: Late Filing and Accrued Carrying Costs

Problem Statement: Statutory regulations require ARR and True-Up petitions to be filed by **30 November** of the preceding financial year. TGNPDCL filed in **January 2026**, approximately **2 months late**.

Consequence: The delay accrues carrying cost (interest) estimated at **₹400 crore**, which TGNPDCL now seeks to recover from consumers through tariff adjustments.

Principle of Consumer Protection: Consumers cannot be held liable for regulatory non-compliance or administrative delays caused by the utility. This violates:

- The principle of cost-reflectivity (consumers should bear only costs they cause)
- Natural justice (penalizing consumers for utility's failures)
- Regulatory incentive alignment (rewarding delay with carrying cost recovery encourages future non-compliance)

Relief Sought:

1. **Disallow carrying cost accrued during the delay period** (30 November 2025 to actual filing date in January 2026)
2. **Record this decision as precedent** to deter future delays
3. **If deemed absolutely necessary**, allow underlying True-Up claim **without carrying cost** to avoid pushing TGNPDCL into insolvency, but with explicit warning that future non-compliance will result in **full disallowance**.

Issue 1.2.2: Use of Unaudited Data and Financial Risk

Problem Statement: If the FY 2024-25 True-Up is based on **provisional, unaudited financial accounts** rather than CAG-audited or statutory audit reports, the credibility and finality of the claims is questionable.

Historical Pattern: In previous True-Up years, TGNPDCL submitted provisional data showing apparent deficits. Upon receipt of audited accounts, actual deficits were often **significantly higher**, requiring supplementary carrying-cost claims. This pattern creates:

- Risk of under-reported financial needs

- Cascading carry-forward claims with accumulated interest
- Consumer uncertainty regarding final tariff impact
- Opportunity for data manipulation through assumptions

Relief Sought:

1. **True-Up for FY 2024-25 shall be finally determined only on the basis of audited financial statements (CAG or statutory audit)**
2. **Any provisional claims submitted without audited backing** shall be:
 - Held strictly provisional without carrying cost
 - Subject to retrospective true-down once audited accounts are available
 - Not used to support tariff revisions or regulatory asset creation

Issue 1.2.3: Non-Use of Fuel Surcharge Adjustment (FSA) and Retrospective Recovery Problem

Critical Issue: TGNPDCL has failed to utilize the **Fuel Surcharge Adjustment (FSA) mechanism** explicitly permitted under TGERC Regulation No. 2 of 2023 and the FY 2025-26 Tariff Order. Instead, the company now claims the entire **unrecovered fuel and power purchase cost (₹2,500 crore)** in the annual True-Up petition, accompanied by carrying cost of approximately **₹400 crore**.

What is FSA and Why It Matters:

FSA is a **standing, automatic mechanism** that allows distribution companies to pass through **incremental fuel and power purchase cost variations** to consumers on a **monthly or periodic basis** (within regulatory caps: typically 20–30 paise/kWh). The mechanism serves four purposes:

1. **Timely Cost Recovery:** DISCOMs recover actual fuel costs without waiting for annual tariff revision
2. **Consumer Transparency:** Charges appear monthly in bills, enabling real-time cost visibility
3. **Tariff Stability:** Prevents accumulation of large deferrals that create year-end tariff shocks
4. **Regulatory Discipline:** Creates automatic incentive for DISCOMs to minimize inefficiency (no incentive to delay claims)

Regulatory Framework – FSA is Mandatory:

TGERC Regulation No. 2 of 2023 explicitly states:

"Distribution companies **shall** file FSA petitions periodically to recover incremental fuel and power purchase cost variations."

The word "**shall**" denotes a **mandatory obligation**, not optional discretion.

Evidence of TGNPDCL's Non-Compliance:

- **No FSA petitions filed** during FY 2024-25, despite clear availability of the mechanism
- **No FSA revenue collected** from consumers during the year, despite significant fuel cost variations
- **Entire unrecovered component** (₹2,500 crore) now brought forward in True-Up petition
- **Carrying cost** (₹400 crore at 8–12% p.a. over 18 months) claimed as additional consumer burden

Best Practice Evidence:

Multiple studies by Forum of Regulators and independent analysts (Prayas et al., 2019–2021) demonstrate that:

- Delayed FSA filings should **not** be rewarded with carrying cost
- Any fuel cost variance brought forward in True-Up without timely FSA should be treated as a **controllable lapse** of the licensee
- True-Up is intended to correct **genuine estimation errors** or **unforeseen events**, not to **warehouse deferred costs** that utilities chose not to recover in time

Moral Hazard Created by Allowing Carrying Cost:

Permitting carrying cost on delayed FSA creates a **perverse incentive structure**:

- DISCOMs are financially better off **not filing FSA** (avoiding consumer protests and regulatory scrutiny)
- Instead, they **defer recovery to annual True-Up**, where carrying cost inflates claims
- Result: Large retrospective surcharges 18–24 months after actual consumption, violating consumer protection principles

Quantification of Consumer Harm:

Component	Amount (₹ crore)
Under-recovered fuel cost	2,500
Carrying cost @ 10% p.a. over 18 months	400

Total Consumer Burden	2,900
Unjustified Carrying Cost Component	400

Relief Sought:

Objection 1 – Disallow Carrying Cost on Delayed FSA:

The Commission shall **explicitly disallow carrying cost** on any fuel or power purchase cost variation that satisfies all three criteria:

1. Could have been recovered through FSA under the FY 2024-25 tariff order
2. Was NOT recovered through timely FSA filing due to TGNPDCL's inaction (not regulatory barriers)
3. Is now brought forward in True-Up

Treatment of Underlying Fuel Cost: To avoid pushing TGNPDCL into insolvency:

- Allow the legitimate underlying fuel cost variation in True-Up
- **Without any carrying cost or interest component**
- **With explicit warning** that future FSA non-compliance will result in **partial or full disallowance** of deferred fuel cost claims

Objection 2 – Penalize Delayed Filing of True-Up Petition:

If the FY 2024-25 True-Up petition was filed after the statutory deadline of 30 November 2025 (which it was, filed in January 2026):

- **Disallow carrying cost accrued during the delay period** (30 November 2025 to actual filing date)
- This incentivizes timely regulatory compliance
- Prevents utilities from exploiting administrative delays

Objection 3 – Mandatory FSA Compliance Directive for FY 2025-26 Onwards:

For all future financial years, the Commission shall issue a **standing directive to TGNPDCL:**

1. **Automatic FSA filing is mandatory** on monthly or quarterly basis as specified in the tariff order
2. **Failure to file FSA** when fuel costs vary by $\pm 10\%$ or more from assumed base constitutes **regulatory non-compliance**, resulting in:
 - Disallowance of carrying cost on any deferred fuel cost claims in subsequent True-Up

- Possible adjustment to future Cost of Capital allowances
 - Mandatory Commission reporting on reasons for non-filing
3. **Any fuel cost variation brought forward in True-Up without evidence of timely FSA filing shall be presumed a controllable lapse and allowed without carrying cost**

1.3 Deviations from FY 2025-26 Tariff Order Directives

The following table documents departures from explicit directives in the FY 2025-26 Tariff Order:

Directive	Requirement	TGNPDCL Compliance	Impact
Timely Filing	File ARR/True-Up by 30 November 2025	Filed January 2026 (2 months late)	Carrying cost accrued; not recovered by deadline; burden shifted to consumers
Agricultural DTR Metering	100% metering mandated for agricultural feeders	Compliance <40%; majority remain unmetered	Unmetered consumption masked as "free agriculture"; inflates AT&C losses
Subsidy Payment	Advance payment from State Budget before 1 April	₹20,000+ crore cumulative arrears	Financial stress; irregular cash flow; unplanned cost deferrals
Cost of Supply Alignment	Tariffs converge toward ACS±20% range	Remain heavily cross-subsidized; no convergence progress	Industrial/commercial consumers subsidize agriculture; inequitable distribution

Regulatory Implication: Repeated non-compliance with tariff order directives undermines regulatory credibility. Commission shall strengthen monitoring and impose consequences (disallowance of costs, penalty adjustments) for future non-compliance.

SECTION 2: PERFORMANCE ASSESSMENT AND INTEGRATED RATING IMPLICATIONS

2.1 14th Integrated Rating and Ranking Report (January 2026)

The independent 14th Integrated Rating Report confirms that TGNPDCL is classified in the **C/C– band**, the **lowest performance tier** among all state DISCOMs. This rating reflects:

Performance Metric	TGNPDCL Status	All-India Average	Top Performer
AT&C Losses (%)	15–20%	~15%	<10%
Collection Efficiency (%)	Low (rural/agri segment)	~90%	>95%
Financial Health Index	Below acceptable	Acceptable	Excellent
System Reliability (SAIFI)	High interruptions	Lower	Best-in-class

2.2 Regulatory Concern: Cost Assignment and Natural Justice

Principle: Tariffs and cost allocations should reflect the **principle of cost-reflectivity**: consumers pay for costs they cause; no consumer should be charged for inefficiencies they do not cause.

Problem: TGNPDCL's C/C– rating confirms systemic inefficiencies. Assessing consumers for these inefficiencies violates:

1. **Cost-Reflectivity:** Consumers did not cause TGNPDCL's AT&C losses, billing delays, or poor financial management
2. **Natural Justice:** Independent third-party evaluation confirms inefficiency; forcing consumers to fund corrective measures is inequitable
3. **Regulatory Principle:** Licensees should bear consequences of their performance; inefficiency should not be rewarded with cost recovery

Relief Sought:

1. Commission shall **not allow tariff recovery** of costs directly attributable to identified inefficiencies in the Integrated Rating Report
2. Commission shall **mandate corrective action plans** with measurable targets and timelines for AT&C loss reduction, billing improvements, and financial stabilization
3. Commission shall **condition tariff increases** on demonstrated progress toward improved Integrated Rating

SECTION 3: DEEP-DIVE ANALYSIS BY MAJOR COST HEAD

3.1 Power Purchase Cost – Least-Cost Dispatch and MOD Compliance

Issue: Power purchase cost (₹16,075 crore, ~70% of ARR) relies heavily on state thermal generators. TGNPDCL provides no evidence that least-cost merit order dispatch was followed.

Analysis:

- **No block-wise MOD data provided** in filing
- **No justification** for costlier thermal dispatch when cheaper GDAM/exchange power available
- **No renewable energy curtailment detail** (quantum, reasons)
- **Potential cost inflation:** Estimated ₹500–800 crore annually from uneconomic dispatch

Relief Sought:

1. Direct TGNPDCL to submit complete block-wise (15-minute interval) MOD data
2. Require demonstration of least-cost dispatch across all fuel sources
3. Disallow avoidable power purchase costs where dispatch violates regulatory principles

3.2 Capital Expenditure, Capitalization, and Cost of Capital

Critical Issue: Historical execution shows severe shortfall between approved and actual capex.

FY 2023-24 Performance (Audited):

Parameter	Approved (₹ Cr)	Actual (₹ Cr)	Shortfall (%)
Capital Expenditure	2,104	723	-65%
Capitalization	1,794	552	-69%

Consumer Impact: Consumers paid interest and depreciation on ₹2,104 crore approved capex, even though only ₹723 crore of assets were actually created. Excess cost recovery estimated at ₹150–200 crore annually.

Relief Sought:

1. **Reconcile approved vs. actual capex and capitalization** for all preceding years
2. **True-down RoCE and depreciation** on assets not commissioned or inadequately capitalized
3. **Link future RoCE allowance to actual capitalization only**, not projected capex
4. **Require specific, verifiable project timelines** with non-achievement penalties

3.3 Depreciation Recovery and Asset Replacement

Issue: TGNPDCL recovers full depreciation from consumers via tariff, but many life-expired assets remain unreplaced.

Problem Cycle:

1. Utility recovers depreciation from consumers (intended for asset replacement)
2. Instead of replacing life-expired assets, utility continues operating them
3. Old assets fail frequently, requiring expensive repairs
4. Repair cycle becomes uneconomical (repair > replacement)
5. System reliability deteriorates; interruption costs borne by consumers

Example – Transformer Repair Cycle:

A 100 kVA distribution transformer after completing its 25-year useful life:

- **Repair option:** ₹30,000–35,000 per unit; 6-month warranty; fails within 1 year; high energy loss
- **Replace option:** ₹80,000–135,000 per unit; 5-year warranty; modern efficiency; net cost ₹53,000 after salvage
- **Payback period of replacement:** <1.5 years through energy savings and avoided repairs

Current Practice: TGNPDCL repairs life-expired transformers, incurring ₹13.5 crore annually on 5,000 failed units, despite full depreciation recovery from consumers. This is **financial mismanagement**.

Relief Sought:

1. **Direct TGNPDCL to submit asset-age profile** with age distribution of critical assets (transformers, conductors, poles, switchgear)
2. **Require scrap-and-replace policy** for life-expired assets using salvage value to offset replacement cost
3. **Implement phased mandatory replacement:**
 - FY 2026-27: 25% of annual failure batch (1,250 units)
 - FY 2027-28: 50% of batch (2,500 units)
 - FY 2028-29: 75% of batch (3,750 units)
 - FY 2029-30 onwards: 100% scrap-and-replace
4. **Disallow 50% of claimed repair & maintenance expenses** (estimated ₹45 crore) as penalty for continuing inefficient repair cycle

3.4 Operations & Maintenance and Employee Costs

Issue: Employee costs proposed at 12–15% increase. TGNPDCL has 2,000+ vacant posts (linemen, assistant engineers), yet budgets as if all filled.

Problem: While sanctioned strength remains unfilled, cost is budgeted at full level, disadvantaging consumers through:

- Inflated employee cost allowances
- Reduced field service quality (vacancies not filled)
- Increased electrical safety incidents

Relief Sought:

1. **Allow employee costs only for actual staff on roll**, not sanctioned/unfilled positions
2. **Treat vacancy savings as consumer benefit**
3. **Cap A&G expenses at efficient benchmarks** per independent DISCOM comparison
4. **Disallow avoidable legal and consultancy expenditure** with detailed justification

3.5 AT&C Losses and Demand Forecasting

Issue: TGNPDCL claims AT&C loss reduction to ~15%, but driven by inflated estimates of unmetered agricultural consumption rather than metered data.

Tariff Order 2025-26 Directive: 100% agricultural DTR metering mandated. **Actual compliance: NIL**

Consequence: Unmetered consumption masks actual commercial losses; loss figures lack credibility.

Demand Forecast Problem:

- Projected growth: 8–9%
- Actual historical growth: 4–5%
- Risk: Stranded capacity charges if overestimation leads to excess PPAs

Relief Sought:

1. **Accept AT&C loss levels only to extent supported by feeder/DTR metering and energy-audit data**

2. **Mandate time-bound metering targets** with quarterly compliance reporting and financial penalties for non-achievement
3. **Require realistic demand forecasts** with mid-term corrections and adjustment mechanisms
4. **Ring-fence stranded-capacity costs** to prevent consumer liability for forecasting errors

SECTION 4: DEMAND-SIDE MANAGEMENT AND LOSS-REDUCTION OPPORTUNITIES

TGNPDCL filings give insufficient weight to cost-effective Demand-Side Management (DSM) and technical loss-reduction measures that could significantly reduce ARR and subsidy requirements.

4.1 Capacitor Banks Installation (Reactive Power Management)

Problem: Agricultural pumps (induction motors) operate at low power factor (0.70–0.75), drawing excess reactive current, causing voltage drops and line losses.

Solution: Install LT capacitor banks (20–25 kVAR) at every agricultural distribution transformer.

Economics:

Parameter	Value
Agricultural DTRs	~150,000
Cost per capacitor bank	₹15,000
Total investment	₹225 crore
Energy savings (5–8% loss reduction)	500 MU/year
Monetary value @ ₹4.50/unit	₹2,250 crore/year
Payback period	1.2 months

Conclusion: TGNPDCL loses ₹2,000+ crore annually by refusing a ₹225 crore one-time investment. This constitutes gross financial mismanagement.

4.2 Energy Efficient Pump Replacement Program

Problem: Farmers use inefficient pumps (20–25% efficiency); BEE 5-Star rated pumps (40–50% efficiency) deliver significant energy savings.

Proposal: Replace inefficient 5 HP pumps with BEE 5-Star units at no cost to farmers (subsidized by DISCOM).

Pilot Scope: 1 lakh pumps

Economics:

Parameter	Value
Capital investment	₹400 crore
Annual energy savings	230 MU
Value @ ₹7.00/unit	₹161 crore/year
Payback period	2.5 years

Strategic Advantages:

1. Converts recurring revenue subsidy (unmetered agricultural supply) into one-time capital investment
2. Delivers permanent energy savings beyond payback
3. Qualifies as DSM measure under Section 61(c), Electricity Act, 2003
4. Post-payback savings accrue to consumers via reduced subsidy and tariff moderation

Scaling Potential: If extended to all 14 lakh agricultural connections, annual savings could reach **₹2,200 crore**.

4.3 Distribution Transformer De-loading and High Voltage Distribution System (HVDS)

Problem: Overloaded distribution transformers (120%+ during peak season) exhibit high copper losses and frequent failures.

Solution: De-load transformers and implement High Voltage Distribution System (HVDS), where low-load feeders are converted to 11 kV supply (instead of 415V), reducing current and losses.

Technical Basis: Losses are proportional to current squared (I^2R losses). Voltage step-up reduces loss by factor of 100.

Benefits:

Benefit	Quantification
Technical loss reduction factor	~100x
DTR failure rate reduction	12–15% → <5%
Annual O&M savings (avoided replacements)	₹25 crore

4.4 Scrap-and-Replace Program for Life-Expired Distribution Transformers

Current Problem: TGNPDCL spends ₹13.5 crore annually repairing 5,000 failed distribution transformers. This repair-and-replace cycle is economically unviable.

Proposed Solution: Scrap transformers >15 years old with >25% no-load current; replace with new amorphous-core transformers (70% lower no-load losses).

Single Transformer Cost-Benefit (100 kVA unit):

Parameter	Repair (Status Quo)	Replace (New Strategy)
Unit cost	₹30,000	₹80,000
Gross expenditure	₹30,000	₹80,000
Less: Scrap recovery	(₹3,000)	(₹50,000)
Net cost	₹27,000	₹30,000
Warranty	6 months	5 years
Annual energy loss	2,452 Units	700 Units
Loss value @ ₹10/unit	₹24,520/year	₹7,000/year
Annual loss savings	—	₹17,520/year
Avoided future repairs	—	₹27,000 (over 5 years)
Total 5-year benefit	—	₹117,600

Annual Batch of 5,000 Failed Transformers:

Parameter	Repair	Replace	Incremental
Gross expenditure	₹15 crore	₹40 crore	+₹25 crore
Scrap recovery	(₹1.5 crore)	(₹15 crore)	—
Net annual outflow	₹13.5 crore	₹25 crore	+₹11.5 crore
Annual energy savings	—	₹2.17 crore	+₹2.17 crore
Avoided repairs (annual equivalent)	—	₹2.25 crore	+₹2.25 crore

Total annual net benefit	—	—	+₹4.42 crore/year
Payback period of incremental investment	—	—	~9 months

Implementation Timeline:

- FY 2026-27: Replace 25% of annual failure batch (1,250 units)
- FY 2027-28: 50% of batch (2,500 units)
- FY 2028-29: 75% of batch (3,750 units)
- FY 2029-30 onwards: 100% of failed units replaced

4.5 Summary – DSM Cost-Benefit Analysis

Measure	Investment (₹ Cr)	Annual Savings (₹ Cr)	ROI Timeline
Capacitor banks	225	2,250	1.2 months
EE pump replacement	400	161	2.5 years
DTR de-loading & HVDS	67.5	25	2.7 years
Replacement of life-expired DTRs	67.5	24.7	1.62 years
DTR scrap-and-replace (annual batch)	11.5	17.92	9 months
TOTAL	₹771.5 crore	₹2,478.62 crore/year	~4 months average

Key Insight: TGNPDCL refuses investments <₹800 crore generating >₹2,400 crore annual recurring savings with average payback <4 months. This is **gross financial mismanagement**, not prudent utility operations.

Relief Sought:

1. **Institutionalize structured DSM and loss-reduction programs** with mandatory targets and timelines
2. **Include performance-based monitoring** with quarterly reporting to the Commission

3. **Condition future cost-of-capital allowances** on demonstrated DSM implementation and outcomes
4. **Mandate immediate implementation** of capacitor bank installation on all agricultural DTRs (highest ROI; lowest risk)

SECTION 5: AGRICULTURAL CONSUMPTION ASSESSMENT

5.1 Context and Concern

Agricultural consumption accounts for **more than 40% of total energy sales** in TGNPDCL, with most services supplied **free of charge** through government subsidy. However:

- **Majority of agricultural feeders remain unmetered** (Tariff Order 2025-26 mandated 100% metering; actual compliance <40%)
- **No robust energy audit conducted** (relies on estimated/assessed consumption)
- **Significant methodology gaps** in assessment procedures

5.2 Precedent from Other States

Independent studies in Maharashtra (at the behest of the State Electricity Regulatory Commission) revealed that:

- Utility-reported agricultural sales were **overstated by 20–30%** in some years
- Subsequent revision downward had **major implications** for subsidy requirement and AT&C loss calculations
- Suggests TGNPDCL's agricultural sales figures may also be inflated

5.3 Relief Sought

The Commission is respectfully requested to:

1. **Commission an independent, third-party study** to accurately assess agricultural consumption in TGNPDCL's license area
2. **Quantify potential energy and financial savings** achievable through DSM interventions and efficiency measures in the agricultural sector
3. **Base future tariff orders on verified agricultural consumption**, not estimated figures lacking empirical foundation

SECTION 6: STRATEGIC RECOMMENDATIONS

6.1 Direct Benefit Transfer (DBT) for Agriculture

Concept: Meter all agricultural connections; transfer subsidy as cash directly to farmers. Farmers keep savings if they reduce consumption.

Advantages:

- Eliminates unmetered consumption as loss sink
- Aligns farmer incentives with conservation
- Eliminates utility-side loss figure manipulation
- Transparent, auditable subsidy transfer

6.2 Solarization of Distribution Feeders

Concept: Install small solar plants (1–2 MW) at substations serving agricultural/low-income areas.

Economics:

- Solar generation cost: ₹3.50/kWh
- Grid power cost: ₹5.50–6.50/kWh
- Reduces transmission losses (on-site generation)
- Improves financial performance and integrated rating

6.3 Automatic Fuel Surcharge Adjustment Implementation

Concept: Monthly automatic pass-through of fuel cost variations (capped at 20–30 paise/kWh).

Advantages:

- Prevents massive year-end True-Up shocks
- Smooths tariff volatility
- Reduces regulatory uncertainty
- Prevents large deferred-cost accumulations

6.4 Management Accountability and Performance Incentives

Proposal: Link TGNPDCL senior management salaries and performance bonuses to **Integrated Rating improvements** and **DSM outcomes**.

- No performance bonus if integrated rating remains C or below
- Bonus structure incentivizes actual operational improvements, not just accounting adjustments

SECTION 7: FORMAL RELIEF SOUGHT FROM THE COMMISSION

In view of the comprehensive analysis and evidence presented above, the following specific reliefs are respectfully prayed for:

7.1 Section 65 Compliance and Subsidy Assurance

Relief: Make approval of TGNPDCL's ARR for FY 2026-27 **conditional upon** State Government furnishing, **before 1 April 2026**, one or both of:

1. Irrevocable bank guarantee covering entire subsidy-linked deficit (₹12,521 crore),
OR
2. Statutory commitment via budget allocation with quarterly disbursement schedule

Effect: No unfunded revenue gap shall be carried forward as regulatory asset or recovered from consumers absent such advance commitment.

7.2 Disallow Delay-Related Carrying Costs

Relief:

1. Disallow carrying cost for periods attributable to delayed filing of True-Up/ARR petitions
2. Require consistent treatment of surplus/deficit years (no selective carrying cost application)
3. Reject or hold strictly provisional any True-Up claim based on unaudited data, **without carrying cost** until audited accounts submitted

7.3 Disallow Carrying Cost on Delayed Fuel Surcharge Adjustment

Relief: Explicitly disallow carrying cost on fuel/power purchase cost variations that:

- Could have been recovered through FSA under FY 2024-25 tariff order
- Were NOT recovered through timely FSA filing due to TGNPDCL's inaction
- Are now brought forward in True-Up

Proviso: Allow underlying legitimate fuel cost in True-Up **without carrying cost** as one-time concession; warn that future FSA non-compliance will result in **partial or full disallowance**.

7.4 Power Purchase Cost Rationalization

Relief:

1. Direct TGNPDCL to submit complete block-wise Merit Order Dispatch data for entire control period

2. Require demonstration of least-cost dispatch (renewable > GDAM > exchange > thermal)
3. Disallow avoidable power purchase costs where dispatch violates regulatory principles

7.5 Correct Capital Expenditure, RoCE, and Depreciation

Relief:

1. Order thorough reconciliation of approved vs. actual capex/capitalization
2. True-down RoCE and depreciation on assets not commissioned or inadequately capitalized
3. Exclude assets funded by consumer contributions/grants from depreciable base

7.6 Rationalize Operations & Maintenance and Employee Costs

Relief:

1. Allow employee costs **only for actual employees on roll**, not sanctioned/unfilled posts
2. Treat vacancy savings as consumer benefit
3. Cap A&G expenses at efficient benchmarks; disallow avoidable legal/consultancy expenditure

7.7 Tighten Loss-Reduction and Demand-Forecast Conditions

Relief:

1. Mandate time-bound feeder/DTR metering targets for agricultural and high-loss areas
2. Require realistic demand forecasts with mid-term adjustment mechanisms
3. Ring-fence stranded-capacity costs

7.8 Institutionalize Demand-Side Management Programs

Relief: Approve and mandate structured programs:

- Capacitor banks on agricultural DTRs
- High Voltage Distribution System (HVDS) and DTR de-loading
- Efficient pump replacement
- Scrap-and-replace of life-expired transformers

Include performance-based monitoring and conditional cost recovery.

7.9 Commission Independent Agricultural Consumption Study

Relief: Order independent, third-party study to:

1. Accurately assess agricultural consumption in TGNPDCL license area
2. Quantify energy and financial savings achievable through DSM
3. Base future tariff orders on verified data

7.10 Mandatory DTR Scrap-and-Replace Program

Relief:

1. Disallow 50% of claimed repair & maintenance expenses (₹45 crore penalty) for continuing inefficient repair cycle
2. Direct TGNPDCL to cease repairing copper-wound DTRs beyond 15 years age
3. Mandate phased scrap-and-replace using salvage value to offset replacement cost
4. Commission third-party technical and financial audit of DTR repair centers

7.11 Mandatory Fuel Surcharge Adjustment Compliance for FY 2025-26 Onwards

Relief: Issue standing directive to TGNPDCL:

1. Automatic FSA filing is **mandatory** monthly/quarterly as per tariff order
2. Failure to file FSA when fuel costs vary $\pm 10\%$ is **non-compliance** resulting in disallowance of carrying cost in subsequent True-Up
3. Any fuel cost variation in True-Up without evidence of timely FSA filing shall be presumed controllable and allowed **without carrying cost**

7.12 Link Management Performance Incentives to Integrated Rating

Relief: Direct that performance bonuses for TGNPDCL senior management be expressly contingent on:

1. Improvements in integrated rating
2. Reduction in AT&C losses
3. DSM program outcomes
4. Regulatory compliance

SECTION 8: CONCLUSION

TGNPDCL's petitions for ARR and True-Up reflect a utility in severe financial distress, heavily reliant on State subsidy (55% of ARR), exhibiting systemic inefficiencies

confirmed by independent integrated rating reports (C/C- band), and demonstrating repeated non-compliance with regulatory directives.

The Commission's fundamental role is to ensure:

1. **Only prudent and efficient costs allowed** – not every expense recoverable from consumers or subsidies
2. **Consumers not burdened for DISCOM delays** – disallow carrying costs on late filings and unaudited claims
3. **Regulatory discipline enforced** – past directives on metering, subsidy timelines, and cost-of-supply convergence monitored with consequences
4. **High-return DSM mandated** – DISCOM cannot ignore ₹2,400+ crore annual savings opportunities
5. **Management accountability** – incentives aligned with performance rating and operational outcomes

Charging consumers for inefficiencies independently verified by external evaluators contradicts cost-reflectivity principles and violates natural justice.

Respectfully Requested Relief

The Commission is respectfully requested to:

1. **Reject carrying cost** on delayed filings and unaudited True-Up components
2. **Withhold ARR approval** until State Government provides irrevocable, bank-guaranteed subsidy commitment
3. **Impose time-bound metering, DSM, and loss-reduction conditions** with quarterly monitoring and non-achievement penalties
4. **Disallow inefficient repair-cycle costs**; mandate scrap-and-replace for life-expired transformers
5. **Link management incentives** to integrated rating improvements and DSM outcomes
6. **Commission independent agricultural consumption study** to verify figures used in tariff calculations

ANNEXURE 1: FORECASTING ERRORS AND CAPEX SHORTFALLS (FY 2023-24 AUDITED DATA)

Parameter	Approved (₹ Cr)	Actual Audited (₹ Cr)	Deviation (₹ Cr)	Error %
Capital Expenditure	2,104	723	(-1,381)	-65%
Capitalization	1,794	552	(-1,242)	-69%
A&G Expenses	142	178	(+36)	+25%
Employee Cost	2,750	2,382	(-368)	-13%

Key Findings:

- While capex and capitalization fell short by 65–69%, A&G expenses rose 25%, indicating bloated overheads despite declining field activity
- Consumers paid interest/depreciation on ₹2,104 crore approved capex; only ₹723 crore of assets created
- Estimated excess cost recovery: ₹150–200 crore annually

ANNEXURE 2: COST-BENEFIT ANALYSIS – SCRAP-AND-REPLACE VS. REPAIR FOR 5,000 ANNUAL FAILED DISTRIBUTION TRANSFORMERS

Context

Annually, approximately **5,000 distribution transformers** from a total population of ~20,000 units fail. TGNPDCL currently repairs failed units instead of replacing them. This analysis compares the economics of the two strategies.

Annual Batch Comparison (5,000 Transformers)

Parameter	Repair Strategy	Replace Strategy	Incremental Cost
Unit cost per transformer	₹30,000	₹80,000	+₹50,000
Gross annual expenditure	₹15.0 crore	₹40.0 crore	+₹25.0 crore
Less: Scrap recovery	(₹1.5 crore)	(₹15.0 crore)	—
Net annual outflow	₹13.5 crore	₹25.0 crore	+₹11.5 crore

Annual Benefits of Replacement Strategy

Energy Loss Reduction:

- Conservative loss reduction: ~50 watts per transformer
- Annual energy savings per unit: $0.05 \text{ kW} \times 24 \text{ hours} \times 365 \text{ days} = 438 \text{ units}$
- Cost value @ ₹10/unit: ₹4,380 per transformer per year
- **Total annual energy savings (5,000 units):** $5,000 \times ₹4,380 = ₹2.19 \text{ crore/year}$

Avoided Future Repairs (Warranty Advantage):

- Repaired transformers: High probability of repeat failure (conservative estimate: 15% fail again within 1 year)
- Estimated repeat failures: ~750 units/year
- Repair cost per repeat unit: ₹30,000
- **Annual repair avoidance:** $750 \times ₹30,000 = ₹2.25 \text{ crore/year}$

Payback Analysis

- **Incremental capital investment:** ₹11.5 crore
- **Annual benefits:** ₹2.19 crore (energy) + ₹2.25 crore (avoided repairs) = **₹4.44 crore/year**
- **Payback period:** $₹11.5 \text{ crore} \div ₹4.44 \text{ crore/year} = 2.6 \text{ years}$

(Alternative shorter payback if using only avoided repair savings: $₹11.5 \div ₹2.25 = \sim 5.1$ years; if including energy savings: ~2.6 years)

Additional Non-Financial Benefits

1. **Capacity Release:** Replacement of 5,000 transformers releases ~50,000 HP of usable capacity for new connections and load regularization
2. **Asset Modernization:** Within 4 years, entire population of unreliable copper-wound transformers replaced with efficient, standardized assets
3. **Reliability Improvement:** New transformers with 5-year warranty; significantly lower failure rates
4. **Efficiency Gains:** Amorphous-core transformers provide 70% lower no-load losses

Recommendation

Adopt "**Stop-Repair and Scrap-and-Replace**" policy for failed transformers. Initial incremental investment of ₹11.5 crore yields permanent operational and financial benefits with payback within 2.6 years and sustained savings thereafter.