



CASE STUDY

**Fastest Advanced Metering Infrastructure Roll-Out in
2020 for APDCL**



Kimbāl[®]
Efficient Energy Everywhere

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1. EXECUTIVE SUMMARY

We offered an Integrated Advanced Metering Infrastructure (AMI) solution to Assam and completed the project in record time.

TABLE OF CONTENTS

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1. **Executive Summary**
 2. **Introduction**
 3. **Key Challenges Tackled**
 4. **How We Helped**
 5. **Set The Record**
 6. **Outcome**
 7. **AMI is a necessity, not a want anymore**
 8. **Connect With Us**

2. INTRODUCTION

Assam Power Distribution Company Limited (APDCL) clocked 25.5% AT&C losses in 2019-20. They needed to control and cut this ever-increasing loss. The organization aimed to completely overhaul its operations, service delivery, and governance by leveraging sophisticated technological solutions. They aspired to serve their customers in the most efficient and resourceful ways while increasing their revenue and curtailing AT&C losses.

Therefore,

APDCL is adopting Advanced Metering Infrastructure Roll-out in a phased manner, intending to cover the entire state eventually.



3. KEY CHALLENGES TACKLED

- Rising AT&C losses
- Affordability
- Grid losses
- Peak time purchases
- Inadequate tariff hike
- Outdated technology
- Aging and stranded assets
- Poor operational governance
- Billing inefficiency
- Rising customer dissatisfaction



4. HOW WE HELPED

We offered Integrated Advanced Metering Infrastructure to APDCL, including smart meters, RF-Mesh communication infrastructure, and Head-End-System.

Following are the reasons Integrated AMI solution is helpful:

- Reliable Products
- Complete Accountability
- Unconditional Support and Swift Decision-Making
- Speedier Work Completion
- Cost Competitiveness
- Unbeatable Quality



5. SET THE RECORD

Successfully installed 63,000 single-phase and 7,000 three-phase smart meters in a record *18 months.

*27 months is the expected timeline for AMI implementation as per the standard bidding document. Kimbal Technologies completed the project 9 months early, registering this implementation as the fastest-ever AMI roll-out. Until May 2023, we have installed a total of 4.3 lakh smart meters in the Indian state of Assam.

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6. OUTCOME

- Contributed to the reduction of AT&C losses from 23.39% in 2019-20 to 18.09% 2022-23.
- Improved operational governance
- Access to high-quality data for better planning
- Increased customer satisfaction due to improved communication
- APDCL Received the 'Adoption of Emerging Technology by a Utility' award in March 2021

7. AMI IS A NECESSITY, NOT A WANT ANYMORE

"You can't solve today's problems with yesterday's solutions." ~ Albert Einstein



How AMI helps
Utilities With
Their Top Lines...

AUTOMATED

- Meter Reading
- Billing/Accounting/Collection
- Connection/disconnection
- Detection of dead meters
- Energy auditing
- Faster outage detection and restoration
- Load profiling
- Power quality measurement
- Identification of phase imbalance
- Triggers for faster/delayed capacity enhancement

REDUCED

- Time taken for Bill Generation
- Aggregate Technical & Commercial (AT&C) losses
- Human errors in meter reading and billing
- Manual visits and Use of Vehicle
- Peak power purchase cost
- Load on call centers, customer care centers, and billing centers
- Distribution transformer (DT) failure rate
- Under/over utilization of equipment
- Carbon Footprint

[Learn More About Our Integrated AMI Solution](#)



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