



Bhutan Power Corporation Ltd.

Launch of South Asia Distribution Utilities
Network (DUN)

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Presentation Outline

1. Overview
2. Challenges
3. Initiative taken/Flagship schemes
4. Expectations from South Asia DUN



Overview

Transmission Line Length = **1,743.79 km**
 Transmission Towers = **4,925**
 Transmission Substation Capacity = **1,910.5 MVA**

Distribution Lines = **17,179 km**
 Dist. Transformer Capacity = **1,054.205 MVA**
 Number of customers: **232,465**
 Maximum peak load= **646.17 MW**

Electricity coverage of **99.97%**

Mission

To provide affordable, adequate, reliable and quality electricity services to customers.

Vision

To be innovative and efficient power utility driving the socio-economic transformation of Bhutan.

Strategic Themes

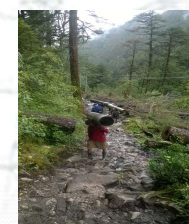
Customer Centric approach ; Operational and Resource optimization; adoption of Innovation and advanced Technology and Business Growth solutions

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Challenges

1. Difficult to reach electricity to settlements in far flung areas, construction challenges due to rugged terrain.
2. Provide reliable and quality power supply;
3. Mountainous terrain and thick vegetation causing difficulty to maintain the power system;
4. Safety of employees and public;
5. Lack of common ducts for power distribution in cities;
6. Right of Way (RoW) issues – in construction and shifting of lines and substations.





Initiative taken/Flagship schemes

Customer Services

- ✓ Awareness on safety
- ✓ Online Services Request platform (Turn around Time)
- ✓ Omni-Channel Contact Center
- ✓ Automatic Meter Reading for HV and MV customers (AMR)
- ✓ Advance Metering Infrastructure (AMI)
- ✓ Customer Centric approach
- ✓ Self Meter Reading

Process Improvement

- ✓ E-procurement
- ✓ E-Payment
- ✓ Digitalization of processes- for both internal and external
- ✓ Benchmarking SAIFI & SAIDI
- ✓ Reliability improvement & Loss reduction measures



Grid Modernization

- ✓ SMART GRID /Digitalization Road map ready
- ✓ DMS implemented in Thimphu
- ✓ Distribution feeder automation
- ✓ Asset Performance Management (DGA/Online health)
- ✓ Technology (GIS/HTLS/FPI)
- ✓ Up-gradation of old system
- ✓ N-1 contingencies

Systems/Products

- ✓ SAP-ERP
- ✓ Transformer Repair and Manufacturing
- ✓ Use of Drone Technology
- ✓ Strengthening in Engineering and Designs
- ✓ Center of Excellence



Expectations from South Asia DUN

1. DUN needs to be an active, solution-centric, informal platform for experience/best practices sharing amongst the DISOMS
2. Enable knowledge sharing among the utilities in the Region; and make possible Utility to Utility (U2U) connect
3. Technical assistance in areas like: system study and system improvement; Smart Grid solutions, Advanced metering solutions; Digitization of distribution systems- (Pilot DMS implemented by BPC)
4. Capacity Development in various aspects of distribution modernization like Smart Meters, Advanced Tariff Regime



“Meeting Bhutan’s Electricity Needs”



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