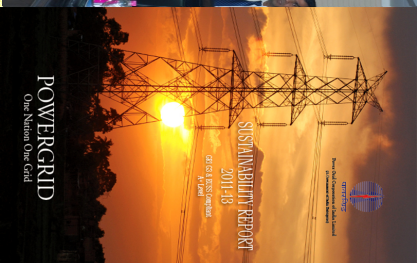


# IMPLEMENTATION OF USE OF COUNTRY SAFEGUARD SYSTEMS IN POWERGRID (A CASE STUDY)



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**ENVIRONMENT AND SOCIAL MANAGEMENT  
POWER GRID CORPORATION OF INDIA LTD.**

( A GOVERNMENT OF INDIA ENTERPRISE )



## POWERGRID Overview

### About POWERGRID :

- Incorporated on 23<sup>rd</sup> October, 1989;
- Commercial operation in 1992-93;
- Central Transmission Utility (CTU) since 1998;
- Accredited “Navratna Status” in 2008;
- Listed on BSE & NSE
  - ✓ Present Shareholding: Govt-57.90% & Public: 42.10%;
- Consistently rated “Excellent” since Company signed its first MoU in 1993-94.



# POWERGRID Overview

## Areas of Operation :

### Transmission



- Owns and operates ~90% of India's inter-state, inter-regional and transmission links
- Transmission systems for UMPPs, CGS, IPPs
- Grid strengthening
- High Capacity Transmission Corridors
- Development of 1,200KV UHV-AC

### Grid Management (through 100% subsidiary, POSOCO)



- Real-time grid operation
- Optimum scheduling and dispatch
- Energy accounting and settlements
- Provides non-discriminatory short term open access
- Administering green energy certificates mechanisms

### Telecom



- Leverages POWERGRID's nationwide transmission infrastructure
- Owns and operates more than 36,500 km. of telecom network
- Implements GOI's strategic initiatives:
  - National Knowledge Network ("NKN")
  - National Optic Fiber Network ("NOFN")

### Consultancy



- Leverages in house expertise for providing services in areas of transmission, distribution, E & S Safeguards and telecom
- Provides services to:
  - State power utilities, private sector and government utilities domestically and internationally including in Asia, Africa and other SAARC countries



# POWERGRID Overview

## POWERGRID Today:

### Physical

Transmission Lines

1031 Nos.

129,354 ckm

### Parameters

(as on 31.03.16)

Substations

207 Nos.

255,348 MVA

### Financial

### Parameters

(FY15-16)

Gross Fixed Assets

Rs. 150,052 Cr. (25 billion \$)

Turnover

Rs. 21,281 Cr. (3.5 billion \$)

Profit After Tax

Rs. 6,027 Cr. (1billion \$)

Transmission System Availability (FY15-16): 99.72%



## Use of Country Systems(UCS)?

“Country (or ‘Borrower’) Systems” refers to :

- Borrower’s policies, laws, regulations, and formal procedures (“equivalence”) and;
- Its institutional capacity, processes and performance (“acceptability”) in implementing its laws, regulations and procedures.

## Objectives/Usefulness of UCS

- Empower borrower safeguard systems;
- Enhance borrower capacity to implement own systems;
- Facilitate donor harmonization of safeguards around borrower safeguard systems;
- Simplify lending by eliminating necessity for prior bank approval of Environmental and Social Assessment Reports.



## Why POWERGRID a Strong Candidate for UCS?

❑ Transmission Projects - Environmentally clean and non Polluting;

Yet

- ❑ POWERGRID is the first PSU in Power Sector to develop Environmental and Social Policy & Procedures (ESPP) in 1998; Upgraded it in 2005 & 2009 in line with changes in social and environmental governance in the country, field experiences and International best practices to pre-empt all possible Environment & Social issues.
- ❑ ESPP benchmarked to GoI law, Funding Agencies (WB, ADB, JBIC) safeguards and is based on broad stakeholders participation;
- ❑ ESPP applies to all POWERGRID projects irrespective of source of funding;
- ❑ First Power Utility in World accredited with a Publicly Available Specification (PAS), 2006 based Integrated Management System (IMS) by British Standards Institution (BSI) on
  - ISO: 14001 for Environment Management;
  - ISO: 9001 for Quality Management;
  - OHSAS: 18001 for Occupational Health & Safety and
  - Social Accountability : 8000-2008



## Why POWERGRID a Strong Candidate for UCS?

- ❑ ESPP also been reviewed by an independent committee comprising eminent environmentalists / Social scientists of international repute and representatives nominated by multilateral funding agencies;
- ❑ POWERGRID committed to the goal of sustainable development and conservation of nature through continually improving its management system and introducing state of the art and internationally proven technologies;
- ❑ Recipient of “Green Award” from World Bank Environment Sector Board 2006 for leadership towards sustainability in South-East Asia;
- ❑ Proven institutional capabilities and firm support of top management for implementation of sustainable management tools designed in ESPP.



## Process of Integration of UCS by World Bank

- The World Bank started Use of Country (borrower's) Systems (UCS) to address Environment & Social safeguard issues as per Operational Policy 4.00 in **March'05**;
- POWERGRID's ESPP selected as the 1st candidate for UCS in India by the Bank as it is quite comprehensive and provides a sound basis for traditional Bank lending to the extent that it is "consistent" with the World Bank safeguard systems as well as Gol law. – **Oct'07**;
- The World Bank completed three major requirement of UCS like Equivalence, Acceptability and Gap Analysis exercise after desk review, interaction with POWERGRID, and site visit and issued a Safeguard Diagnostic Review (SDR) –**Sept'08**
- Public/Stakeholder Consultation on SDR – Nov'08;
- Draft ESPP incorporating SDR observations –**Jan'09**
- UCS compliant Final draft ESPP and its disclosure- **Feb'09**
- Review by Independent ESPP Review Committee- **April'09**
- Approval by POWERGRID Board of Directors – **June'09**.





# Major Requirement under UCS

## A. ENVIRONMENT & SOCIAL ASSESSMENT:

- ❖ E & S Assessment must for all its project irrespective of source of funding (Multilateral or Domestic). Accordingly following IEE/IEE/ESA Report Prepared:

### In 2014-15 :

- ✓ IEAR (10 Nos.) for Project covered under NERPSIP (WB);
- ✓ IEER for Project covered under Inter - Regional System Strengthening Scheme in WR-NR -Part-B (ADB);
- ✓ IEER for Project covered under Green Energy Corridors & Grid Strengthening Project (ADB)
- ✓ IEE for Eastern Region System Strengthening-V (Domestic

### In 2015-16 :

- ✓ IEAR (7 Nos.) for project covered under NERPSIP (WB)
- ✓ ESA Report (2 Nos.) for Project covered under Green Energy Corridor Part-A & Part C (KfW, Germany);
- ✓ IEER for ± 320kV HVDC Bipole link between Pugalur-North Thrissur





## Major Requirement under UCS

- ❖ **Final Environment Assessment Report (FEAR)- Prepared for following World Bank funded projects during 2014-16;**
  - ✓ System Strengthening- XIII in Southern Regional Grid;
  - ✓ System Strengthening- XVII in Southern Regional Grid;
  - ✓ Northern Region System Strengthening Scheme-XXIV;
  - ✓ System Strengthening in Northern Region for Sasan and Mundra UMPP;
  - ✓ System Strengthening in Southern & Western Region for Krishnapattam UMPP;
  - ✓ Northern Region System Strengthening Scheme-XXVI.
  
- ❖ **Social Assessment and preparation of Rehabilitation Action Plan (RAP) for following Substations were also undertaken:**
  - In 2014-15:**
    - ✓ Satna (765 kV) (Domestic)
    - ✓ Tamnar (765 kV) (Domestic)
    - ✓ Imphal (400/220kV)
    - ✓ Nellore (765 kV) (Domestic)
    - ✓ Gwalior (765 kV) (Domestic)
    - ✓ Madhugiri (765 kV) (WB)
    - ✓ Bareilly (765 kV) (Domestic)
    - ✓ Wagoora (765 kV) (Domestic)