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- This document speaks as of 31 Mar 2013. Neither the delivery of this document nor any further discussions of the Company with any of the recipients shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since that date.

- Annual Accounts for FY2012-13 are yet to be approved by the shareholders.

- Conversion rate of 1US$= ₹ 60 has been used throughout the presentation, unless otherwise stated.
Corporate Overview

Power Sector Overview & Investment Plan

Diversifications

New Initiatives

Sustainable Development
Corporate Overview

**Vision**

*World Class, Integrated, Global Transmission Company With Dominant Leadership in Emerging Power Markets*

*Ensuring Reliability, Safety and Economy*

Existing Businesses
- Transmission
- Grid Management
- Consultancy
- Telecom
- International Business

New Business Opportunities
- Intra-State Transmission
- Green Energy Corridors
- Smart Grid/City
- Energy Efficiency
- Distribution (Wire Business)

**CREDIT RATINGS**

- **CRISIL**
  - AAA
  - Stable
- **ICRA**
  - AAA
  - Stable
- **CARE**
  - AAA
- **S&P**
  - BBB (-)
  - Negative Outlook
- **Fitch**
  - BBB (-)
  - Stable Outlook

*One Nation, One Grid*
Corporate Overview

Government of India 69.42%

Institutions 21.87%

Non-Institutions 8.70%

Joint Ventures
- Bihar Grid Company Ltd. 50%
- Teesta Valley Power Transmission Ltd. 26%
- North Eastern Transmission Co. 26%
- National High Power Test Laboratory 20%
- Energy Efficiency Services Ltd. 25%
- Cross Border Power Transmission Co. Ltd. 26%

Kalinga Bidyut Prasaran Nigam Pvt. Ltd. 50%
- Powerlinks Transmission Ltd. 49%
- Torrent Power Grid Ltd. 26%
- Parbati Koldam Transmission Co. 26%
- Jaypee Powergrid Ltd. 26%
- Power Transmission Co. Nepal Ltd. (POWERGRID's 1st Intl JV) 26%

Subsidiaries
- POSOCO (Grid Management) 100%
- POWERGRID NM Transmission Ltd. 100%
- POWERGRID Vemagiri Transmission System Ltd. 100%

Investment
- PTC India Ltd. 4.1%

Operational JVs

* Note: Shareholding pattern as of 31st March 2013
Business Overview

Transmission (~92%)
- Associated TS for CGS, UMPPs & IPPs incl. HCTC
- System Strengthening Schemes
- Inter-State, Inter-Regional and Transnational links

Grid Management
- Real Time Grid Operation
- Optimum Scheduling & Despatch
- Energy Accounting including settlements
- Administering RECs

Consultancy (~2%)
- Domestic Market
- Emerging Markets & SAARC
- Africa

Telecom (~2%)
- OPGW on Tr. Lines
- ~ 29,000 km Network
- Partnering GoI in Strategic Projects (NKN, NOFN)

1- carried out through 100% subsidiary, POSOCO

One Nation, One Grid
Physical & Financial Overview

**Tr. Lines**
- 100,107 ckm
  - 809 lines
- Inter-Regional capacity
  - 29,750MW

**S/S & MVA**
- 168 Nos.
  - incl. 7 GIS
- 164,763 MVA

**Operating Parameters**
- Availability: 99.90%
- Reliability: 0.58 trippings/line

**Telecom**
- > 29,000 km fiber optic network
- NKN NOFN

**Grid Mgt**
- Increasing Grid Stability (URSTD)
- Also administering REC Mechanism

**Innovations**
- Technology (1200kV)
- Mobile Sub-station

**Financials for FY12-13**

- **Gross Fixed Assets**: USD 13433 mn.
- **Income**: USD 2221 mn
- **Profit After Tax**: USD 706 mn
- **EPS**: USD 0.15
- **Dividend**: USD 0.05 per share

*Data as on 31 Mar 2013/ for the period FY12-13*
Growth over past two decades

<table>
<thead>
<tr>
<th>Physical</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tr. Line (ckm)</td>
<td>FY92-93: 22228</td>
</tr>
<tr>
<td>X-formation Capacity (MVA)</td>
<td>FY92-93: 12201</td>
</tr>
<tr>
<td>Turnover</td>
<td>FY92-93: 106</td>
</tr>
<tr>
<td>Net Profit</td>
<td>FY92-93: 39</td>
</tr>
<tr>
<td>Gross Fixed Assets</td>
<td>FY92-93: 587</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Growth over past two decades</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4x 13x 21x 18x 23x</td>
</tr>
</tbody>
</table>

Manpower 1.5x
# Stable Financial Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>2012-13</th>
<th>2011-12</th>
<th>2010-11</th>
<th>2009-10</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission Charges</td>
<td>2035</td>
<td>1591</td>
<td>1,317</td>
<td>1,117</td>
<td>887</td>
</tr>
<tr>
<td>Consultancy</td>
<td>53</td>
<td>48</td>
<td>50</td>
<td>45</td>
<td>36</td>
</tr>
<tr>
<td>Telecom</td>
<td>39</td>
<td>34</td>
<td>31</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Other Income</td>
<td>95</td>
<td>125</td>
<td>118</td>
<td>63</td>
<td>75</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>2221</strong></td>
<td><strong>1798</strong></td>
<td><strong>1517</strong></td>
<td><strong>1251</strong></td>
<td><strong>1023</strong></td>
</tr>
<tr>
<td>Profit After Tax (PAT)</td>
<td>706</td>
<td>543</td>
<td>450</td>
<td>340</td>
<td>282</td>
</tr>
<tr>
<td>Earnings per Share (USD)</td>
<td>0.15</td>
<td>0.12</td>
<td>0.1</td>
<td>0.08</td>
<td>0.07</td>
</tr>
<tr>
<td>Book Value per Share (USD)</td>
<td>0.94</td>
<td>0.85</td>
<td>0.77</td>
<td>0.63</td>
<td>0.58</td>
</tr>
<tr>
<td>Gross Fixed Assets</td>
<td>13,433</td>
<td>10,565</td>
<td>8,392</td>
<td>7,200</td>
<td>6,720</td>
</tr>
<tr>
<td>Debt – Foreign Loans</td>
<td>3,682</td>
<td>2,545</td>
<td>2,037</td>
<td>1,855</td>
<td>1,708</td>
</tr>
<tr>
<td>Debt – Domestic</td>
<td>7,350</td>
<td>6,356</td>
<td>4,777</td>
<td>3,881</td>
<td>3,036</td>
</tr>
<tr>
<td>Net Worth</td>
<td>4,369</td>
<td>3,915</td>
<td>3,559</td>
<td>2,652</td>
<td>2,436</td>
</tr>
<tr>
<td>Return on Net Worth</td>
<td>16.15%</td>
<td>13.86%</td>
<td>12.63%</td>
<td>12.83%</td>
<td>11.57%</td>
</tr>
<tr>
<td>Capitalisation of Assets</td>
<td>2,869</td>
<td>2,174</td>
<td>1,190</td>
<td>602</td>
<td>622</td>
</tr>
</tbody>
</table>
Operations

43 Sub-stations operated remotely
6 Un-manned sub-stations

Developed Repair Capabilities
• In-House repair facility for Transformer & Reactor established at Hyderabad
• On-Site Repair capability developed

Upcoming Initiatives
• Aerial patrolling of transmission lines
• ‘National Transmission Asset Management Centre (NTAMC) for operation and control of sub-station at central place and through Maintenance Service Hubs
• Project RUPANTAR (ERP)
• Robots for condition monitoring of conductor/ earthwire/ hardware
R&D Initiatives

**World’s highest voltage**

1200kV UHV AC

- Test Station at Bina, MP
- Field tests presently under progress
- Developed indigenously through PPP with 35 Indian manufacturers in open collaboration.

**Other R&D initiatives**

- High Temperature Superconducting Cable
- Pilot Project for 400kV Phase Shifting X-former
- Use of Synthetic Oil as X-former Oil

One Nation, One Grid
Power Sector Overview

- **Installed Capacity (incl. RES)**: 223 GW (Mar-13)
- **Renewable Capacity**: 27.5 GW (Mar-13)
- **Peak Deficit**: 9.0% (FY13)
- **Energy Deficit**: 8.7% (FY13)

**XII Plan**
- Peak Demand: 198 GW
- Capacity Addition: 88 GW
- Capacity Addition RE: 30 GW

**Transmission**
- Fund Reqt.: ₹ USD 30000 mn
- ckm addition: 109,440
- MVA addition: 270,000
  - inter-State (incl. Pvt): USD 20800 mn
  - intra-State: USD 9200 mn

**Distribution**
- Fund Reqt.: USD 51040 mn (incl. USD 1580 mn for Smart Grid)
- ckm addition (33kV & below): 13,05,000
- MVA capacity addition (33/11kV S/S): 138,000 MVA

Source: CEA, Report of XII Plan Working Group on Power
Development of National Grid

- Large pit-head stations under central as well as private sector
- Hydro projects in NER, Himachal Pradesh, J&K
- Large import coal based power projects along the sea coast
- Few load centre based generation projects
- Need for strong pan India Transmission Network

Paradigm Shift
(‘Self sufficiency at Regional level’ concept to ‘National level’)

<table>
<thead>
<tr>
<th>IX Plan</th>
<th>X Plan</th>
<th>XI Plan</th>
<th>Today</th>
<th>end of XII Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,100MW</td>
<td>14,100 MW</td>
<td>27,750 MW</td>
<td>31,850MW</td>
<td>65,550MW</td>
</tr>
</tbody>
</table>
Development of High Capacity Transmission Corridors (HCPTC)

- Independent Power Producers (IPPs) setting up power generation plants, mainly in resource rich areas
- Estimated cost of corridors: ~ USD 12.5 bn
  - POWERGRID Scope: ~ USD 11.0 bn
- 11 nos. of HCPTC being developed in phases
- IPPs have
  - Signed BPTA/ TSA with condition that if some of IPPs fail/delay to execute their projects, balance IPPs shall share transmission charges
  - Provided bank guarantee towards their commitment to LTA
- Regulatory approval from CERC obtained
Projects/ Schemes (USD 16.7 bn.)

- **IPPs:** USD 8.0 bn
- **CS Gen:** USD 4.2 bn
- **Grid Strengthening:** USD 3.0 bn
- **UMPP & Others:** USD 1.5 bn

**Capital Outlay (USD 16.7 bn.)**

- **Investment Approved:** Rs. 90,500 cr
- **Contracts Awarded for Project Cost:** Rs. 80,000 cr

**Funding Requirement**

- FY13: USD 3.3 bn
- FY14: USD 3.3 bn
- FY15: USD 3.3 bn
- FY16: USD 3.4 bn
- FY17: USD 3.4 bn

Debt & Equity in the ratio 70:30
USD 5.8 bn Debt already tied up

**Source of Funds:**

- Equity: Internal Accruals
- Debt: Domestic & Intl Borrowings

(* Domestic: Bonds & Loans; Intl – Loans from WB, ADB, Suppliers’ Credit; ECB (Bonds & Loans)
Corporate Overview

Power Sector Overview & Investment Plan

Diversifications

New Initiatives

Sustainable Development
Consultancy (Domestic)

Areas of Consultancy

- Tr. Line & S/S incl. GIS
- Communication Infrastructure (ULDC, OPGW)
- Rural Electrification
- Operation & Maintenance
- Project Management
- System Studies
- Design & Drawings
- Others (HR, Contracts, DPR, Smart Grid)

Under execution

- 124 assignments

Clientele

- State Utilities (Govt.)
- Govt. Institutions (Railways, Navy, NPTI etc.)
- CPSUs (Power & Metal Sectors)
- Private Sector (Utilities, IPPs & Corporates)
International Business

UTILITY TURNED CONSULTANT - AREAS OF CONSULTANCY

System Engg & Feasibilities

Design & Engg.

Project Mgt & Const. Supervision

Owner's & Lender's Engineer

- Environment & Social Impact Assessment
- Asset Mgt. & JV/ Acquisitions
- EPC
- Others (Capacity Building, ULDC, OPGW etc.)

Expanding Footprints
- 11 Countries

Under Execution
- 17 Assignments

Asia

Africa

Commonwealth of Independent States (CIS)

Nepal  Bhutan  Bangladesh  Afganistan  Sri Lanka  Myanmar  UAE  Nigeria  Kenya  Ethiopia  Tajikistan

One Nation, One Grid
**Telecom**

### Increasing Reach
- Fiber Optic Network: 29,279km
- Points of Presence: 290
- 26 New towns added (FY13)

### Building partnerships
- Leasing of Optic Fiber
- RoW on T&D lines
- Co-location
- Infrastructure sharing

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**New Initiative: MPLS**

**Under implementation**

**To also run NTAMC & ERP applications**

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**NKN**
- National Knowledge Network
  - Project Size: USD 1000 mn
  - POWERGRID Share: USD 150 mn

**NOFN**
- National Optic Fiber Network
  - Project Size: USD 3333 mn
  - POWERGRID Share: ~ USD 667 mn

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**One Nation, One Grid**
New Initiatives

**JVs for Intra-State Transmission**
- **JV with Bihar formed**
  - Project Cost: USD 1050 mn
  - Trans. License approved by BERC
- **JV with Odisha formed**
  - Project Cost: USD 417 mn
  - Petition submitted for Trans. License

**Distribution (Wire Business)**
- **Petition submitted for license in Odisha**
- **Hearing held. Order awaited.**
New Initiatives

**Smart Grid/ Smart City**
- Pilot Project in Puducherry under Implementation
- Control Center Operational
- Establishment of Smart Grid in Dholera (Guj) (Special Investment Region under DMIC)

**Green Energy Corridors**
- USD 7167 mn investment envisaged – USD 3433 mn (Intra-State) & USD 3733 mn (Inter-State)
- Being prioritized
- Indo-German Co-op
  - Concessional loans of upto EUR 1 bn by KfW

**Energy Efficiency**
- Energy Audit for external establishments (*) commenced
- Implementation of Recommendations being taken up
- Strategic Business Alliances being formed

(*) Utility Sub-stations, Steel Rolling Mills, Electrical establishments of Steel Plants, Lattice Structure Manufacturers, Cable, Conductor & Wire Drawing Industries
Towards New Business Opportunity

Integration of Power from Deserts

Desert Power India - 2050

• Study on “Desert Power India-2050”
  ✓ Assessment of renewable potential in deserts
  ✓ Rajasthan, Gujarat, Himachal Pradesh and J&K
  ✓ Identification of technology as well as infrastructure developmental requirements like Transmission System for evacuation of RE, in addition to Water, roads etc.
Corporate Overview
Power Sector Overview & Investment Plan
Diversifications
New Initiatives
Sustainable Development
Sustainability

Environment and Social Policy & Procedure (ESPP)
- Principles of Avoidance, Minimization and Mitigation
- Certified to Social Accountability Standard (SA-8001: 2008)

1st company in Asia to have a well defined Environment & Social Policy & Procedure

1st company in India and 2nd in the world to be certified with a PAS based Integrated Management Section

Waste Paper Recycling Plant set up in Haryana

Waste paper generated

Paper Recycling Plant
Corporate Social Responsibility

- As per policy, 1% of previous year Profit After Tax earmarked for CSR

- Thrust Areas:
  - Education
  - Health
  - Infrastructure
  - Livelihood
  - Tree Plantation
  - Ecology
  - Environment
  - Natural Calamities

2nd Sustainability Report released
Thank You