Analysts & Press Meet

30-May-12
A Company Consistent to its Commitments
Not a single MW bottled up due to transmission availability
XI Plan targets achieved
POWERGRID – One Nation, One Grid
POWERGRID Today

A NAVRATNA ENTERPRISE
CENTRAL TRANSMISSION UTILITY
LISTED COMPANY
DIVIDEND PAYING SINCE 1993-94
CONSISTENTLY RATED ‘EXCELLENT’ BY GoI

Vision
World Class, Integrated, Global Transmission Company With Dominant Leadership in Emerging Power Markets Ensuring Reliability, Safety and Economy

Existing Business
- Transmission
- Grid Management
- Consultancy
- Telecom

New Business Opportunities
- Intra-State Trans.
- Renewable Energy Integration
- Smart Grid/Smart City
- Acquisition, Asset Mgt & EPC in Intl. Business
- R-APDRP & RGGVY
- Backward Integration
POWERGRID Today

- **Tr. Lines**: 93,000 ckm
- **Sub-stations**: 151
- **X-formation Capacity**: 125,000 MVA
- **Availability**: 99.94%
  - Reliability: 0.59 trippings/line

**POWERGRID’s Sphere of Influence**

- **Inter-Regional Capacity**: 28,000 MW
- **Carries**: 50% of total power generated in India
- **Telecom Network**: 25,000 km
- **Innovation Technology (1200kV)**
  - Market Design

1- Highest transmission voltage level in the world
Ownership Structure

POWERGRID – One Nation, One Grid

Government of India 69.42%
Institutions 20.77%
Non-Institutions 9.81%

POWERGRID

Joint Ventures
Teesta Valley Power Transmission Ltd. 26%
North Eastern Transmission Co. 26%
National High Power Test Laboratory 20%
Energy Efficiency Services Ltd. 25%

Powerlinks Transmission Ltd. 49%
Torrent Power Grid Ltd. 26%
Parbati Koldam Transmission Co. 26%
Jaypee Powergrid Ltd. 26%

Subsidiaries
POSOCO
Grid Mgt 100%

NMTCL
1st project secured under TBCB

VTSL
2nd project secured under TBCB

Investment
PTC India Ltd. 4.1%
Power Sector Overview
Despite constraints of Fuel, RoW, Land Acquisition, Environmental Concerns, Law & Order Problems, the Power Sector performed well.

- **Installed Capacity**: 142%
- **Energy Generated**: 133%
- **Transmission Network**: 35%
- **Renewables**: about 3x
- **Reduction in Peak/ Energy Deficit**:
- **Reduction in AT&C Losses**:

**Capacity Addition**

<table>
<thead>
<tr>
<th></th>
<th>End of X Plan</th>
<th>End of XI Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed Capacity (GW)</td>
<td>132</td>
<td>200</td>
</tr>
<tr>
<td>Tr. Line ('000 ckm)</td>
<td>198</td>
<td>269</td>
</tr>
<tr>
<td>Energy Generated (BU)</td>
<td>659</td>
<td>877</td>
</tr>
</tbody>
</table>

**Thrust on Renewables**

<table>
<thead>
<tr>
<th></th>
<th>End of X Plan</th>
<th>End of XI Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE Capacity (GW)</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Captive Capacity (GW)</td>
<td>25</td>
<td>33</td>
</tr>
</tbody>
</table>

**Performance Improvements**

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>End of X Plan</th>
<th>End of XI Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Avg. PLF (Th.)</td>
<td>74.02%</td>
<td>76.34%</td>
</tr>
<tr>
<td>AT&amp;C Losses</td>
<td>30.62%</td>
<td>23.31% (*)</td>
</tr>
<tr>
<td>Peak Deficit</td>
<td>13.80%</td>
<td>10.60%</td>
</tr>
<tr>
<td>Energy Deficit</td>
<td>9.60%</td>
<td>8.50%</td>
</tr>
</tbody>
</table>

Source: CEA Draft Report, (*) Estimated as per Working Group on Power for XII Plan
POWERGRID: XI Plan Highlights
IPO: Listed on BSE & NSE

Turnover crosses ₹10,000 crore

POSOICO incorporated

Turnover: ₹5,000 crore

Implementation of High Capacity Corridors commences

First ±800kV, 6000 MW HVDC project undertaken

Follow on Public offer

Secured projects through competitive bidding

Partners GoI for NKN Project

Adoption of PoC mechanism

Partners GoI for NOFN Project

765kV AC GIS introduced

REC Trading commenced

1200kV line test charged

Major Events
Growth: Physical

**Transmission Lines (ckm)**

- X Plan addition: 19,000 ckm
- XI Plan addition: 34,000 ckm
- 1.8 times ckm addition over X Plan

**Transformation Capacity (MVA)**

- X Plan addition: 25,000 MVA
- XI Plan addition: 66,000 MVA
- 2.6 times MVA addition over X Plan
- 46 Sub-Stations in XI Plan (36 in X Plan)
Growth: Financial

Capex
- Increases ~3 times of X Plan
- Only PSU in Power Sector to achieve target

Asset Growth
- Increases ~2.3 times of X Plan

Financials
- Revenue & PAT in FY12 grow > 2.5 times that of FY07

Dividend
- FY12 Dividend (*) to increase to ₹ 977 crore from ₹369 crore in FY07

Ranked 5th in terms of Gross Block
Ranked 10th in terms of Net Profit

(\textsuperscript{*}) Subject to approval by shareholders

PSE Survey Report 2010-11 by DPE
Growth: Employee Efficiency

Physical Parameters/Employee

- ckm/Employee grows 1.7 times
- MVA/Employee grows 2.6 times

Financial Parameters/Employee

- Revenue/Employee grows ~3.2 times
- Profit After Tax/Employee grows 3.4 times

POWERGRID ranked No.7 in terms of PAT/Employee

1-Source: BW Real 500 Ranking of Businessworld magazine (Issue: October 2011)
Highlights- FY 12
Project Execution

Transmission Line (ckm)

- FY11
- FY12

- Q1: 2078
- Q2: 1371
- Q3: 7064
- Q4: 10592

- FY11
- FY12

- Q1: 945
- Q2: 630
- Q3: 9648
- Q4: 31475

Sub-Station Addition

- 15 in FY12
- (11 in FY11)

Inter-Regional Capacity Addition

- 5600MW in FY12
- (1600MW in FY11)

Transmission Systems of Major Projects Commissioned

<table>
<thead>
<tr>
<th>UMPP</th>
<th>CGS</th>
<th>Inter-Regional</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mundra</td>
<td>• Mauda</td>
<td>• Sasaram-Fatehpur</td>
</tr>
<tr>
<td>• Sasan (Partly)</td>
<td>• DVC &amp; Maithon</td>
<td>• Gaya-Balia</td>
</tr>
<tr>
<td></td>
<td>• Uri-II</td>
<td>• Rourkela-Raipur</td>
</tr>
<tr>
<td></td>
<td>• Chamera-III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Koteshwara</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Kundankulam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Kalapakkam</td>
<td></td>
</tr>
</tbody>
</table>

POWERGRID – One Nation, One Grid
**Project Execution**

**Capex**
- FY11: 1452, 1943, 17814
- FY12: 12077, 802, 7313

**Commissioning**
- FY11: 1156, 18,000
- FY12: 802, 21,000

**Increase in:**
- Capex: 48%
- Commissioning: 93%
- Contracts Approved: 39%
- Investment Approval: 86%
Theme ‘Commissioning/ Capitalization’

- **Commissioning/ Capitalisation**
- **Capex**

<table>
<thead>
<tr>
<th>Year</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (₹ in '000 crore)</td>
<td>3.6</td>
<td>7.3</td>
<td>14.1</td>
</tr>
<tr>
<td>Increase in IR generation</td>
<td>10.6</td>
<td>12.0</td>
<td>17.8</td>
</tr>
</tbody>
</table>

- **Capex**

<table>
<thead>
<tr>
<th>Year</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (₹ in '000 crore)</td>
<td>34%</td>
<td>61%</td>
<td>79%</td>
</tr>
</tbody>
</table>

- **CWIP**

<table>
<thead>
<tr>
<th>Year</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (₹ in '000 crore)</td>
<td>3.6</td>
<td>7.3</td>
<td>14.1</td>
</tr>
<tr>
<td>Capitalization/CWIP</td>
<td>27%</td>
<td>27%</td>
<td>42%</td>
</tr>
</tbody>
</table>

**Resulting in…**

- **Growth in Asset Base**
- **Increased Revenues**
- **Increase in IR generation**
**Operation**

<table>
<thead>
<tr>
<th></th>
<th>FY 11</th>
<th>FY 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Availability (%)</strong></td>
<td>99.80</td>
<td>99.94</td>
</tr>
<tr>
<td><strong>System Reliability (No. of Trippings/ line)</strong></td>
<td>1.27</td>
<td>0.59</td>
</tr>
</tbody>
</table>

**International Benchmarking**

- Positioned in High Performance Quadrant in most O&M activities
- Comparison with 28 International Power Transmission Companies

**NTAMC**

- Implementation started
- Maintenance Service Hubs established

**Developed Repair Capabilities**

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

**Sub-stations operated remotely**

- 32

**Un-manned sub-stations**

- 6
International Business

19 Assignments for Projects worth ₹ 10,500 crore under execution

Focus Geographies
• SAARC
• Africa
• Gulf countries

Focus Businesses
• Consultancy
• Asset Management
• EPC
• JV/ Acquisition

Footprints in 11 countries

New Assignments

<table>
<thead>
<tr>
<th></th>
<th>FY 11</th>
<th>FY 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Orders</td>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

• 4 New Countries Added
  • Myanmar
  • Kenya
  • Ethiopia
  • Tajikistan

• 4 new customers added
  • M/s MEPE, Myanmar
  • M/s KETRACO, Kenya,
  • M/s Tetra Tech, USA
  • EEPCO, Ethiopia

Existing Footprints
Footprints in 11 countries

- Nigeria
- Ethiopia
- Kenya
- Sri Lanka
- Bangladesh
- UAE
- Afghanistan
- Bhutan
- Nepal
- Afghanistan
- Myanmar
- Tajikistan
- UAE
- Ethiopia
- Kenya
- Sri Lanka
- Bangladesh
Domestic Consultancy

116 Assignments for Projects worth ₹ 19,000 crore under execution

- 59 new assignments (including 15 Nos. repeat orders)
- Major Projects
  - Jharkhand Sub-transmission
  - Smart Grid in Haryana & Chattisgarh
  - OPGW network in J&K
- 16 new Clients of Private Sector added

Major Clients include:
- Utilities in States/ UTs
- Central PSUs
- Central Govt. Organizations (Indian Navy, Railways)
- Private Utilities
- Companies in Private Sector

<table>
<thead>
<tr>
<th>New Assignments</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Orders</td>
<td>45</td>
<td>59</td>
</tr>
</tbody>
</table>
Telecom

- Order Book increased to ₹ 1050 crore in FY12 compared to ₹ 650 crore in FY11
- 11 new clients added including 1 International client
- 7 new cities added to the existing presence at more than 200 locations
- Backbone availability 99.97%
- International connectivity to Bhutan facilitated

Multi Protocol Label Switch (MPLS)-Virtual Private Network (VPN)

- Pan India Implementation in progress:
- To enhance customer base
- Shall provide High Speed Communication links for NTAMC/ ERP etc. (covering ~ 400 locations of POWERGRID across India)
Growth: Grid Management (POSOCO)

**Inter-Regional Exchange (BUs)**
- X Plan: 139
- XI Plan: 257

**STOA Exchanges**
- Transactions ('000)
  - X Plan: 11
  - XI Plan: 63
- Energy (BUs)
  - X Plan: 87
  - XI Plan: 222

- Transactions Grown to: 8 times
- Energy Grown to: 3.5 times

- IR Exchange Grown to: 1.9 times
Grid Management - POSOCO

Inter-Regional Exchanges (BU)

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43</td>
<td>46</td>
<td>52</td>
<td>57</td>
<td>59</td>
</tr>
</tbody>
</table>

Optimal utilization of resources through STOA & IR Exchanges

STOA Exchanges

- CAGR - 24%
- CAGR - 22%

Transactions (,000 Nos.)

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>15</td>
<td>18</td>
<td>20</td>
<td>24</td>
</tr>
</tbody>
</table>

Energy (BU)

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30</td>
<td>31</td>
<td>39</td>
<td>55</td>
<td>67</td>
</tr>
</tbody>
</table>

leading to reduction in per unit energy charges
Renewable Energy Certificate (REC) Mechanism

- More than 10 lakh RECs issued
- >95% redeemed through power exchanges
- RECs traded: ₹ 286 crore till Mar-12
- 1334 RE generators signed up since inception

About 2900 MW RE accredited

Registered Capacity Surpasses CERC estimate of most optimistic scenario
Grid Management: Evolution & Maturity of Power Markets

2004: Open Access
2008: Power Exchange
2009: Trading License
2009: Congestion Management
2009: Imbalance (UI)
2009: Grant of Connectivity, LTA and MTOA
2009: Trading License
2010: Power Market, REC
2011: Transmission Pricing (POC)

FUTURE ...
- Ancillary Market
- Capacity Market
- Peaking Power

POWERGRID – One Nation, One Grid
FINANCIAL HIGHLIGHTS FY 2011-12
## Financial Performance - Q4 FY11-12

- **Profit After Tax** increased by 37% i.e. ₹1032 crore in Qtr-4 from ₹751 crore in Qtr-4 (FY2010-11).

- **Total Income** increased by 32% i.e. ₹3409 crore in Qtr-4 from ₹2580 crore in Qtr-4 (FY2010-11).

- **EBITDA** increase by 34% i.e. ₹2911 crores in Qtr-4 from ₹2177 crores in Qtr-4 (2010-11)

- Projects worth ₹7736 crore commissioned during Qtr-4 (FY 2011-12) as against ₹486 crore in corresponding quarter of previous year i.e. FY 2010-11

- **Final Dividend** of 13.1% has been proposed for the FY 2011-12 as against 12.5% declared for FY 2010-11

<table>
<thead>
<tr>
<th></th>
<th>Q4-FY11</th>
<th>Q4-FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit After Tax</td>
<td>751</td>
<td>1032</td>
</tr>
<tr>
<td>Total Income</td>
<td>2580</td>
<td>3416</td>
</tr>
</tbody>
</table>

**Graph: Total Income and Profit After Tax**

- **Total Income** (Q4): 2580, 3416 (Q4-FY11, Q4-FY12)
- **Profit After Tax** (Q4): 751, 1032 (Q4-FY11, Q4-FY12)

**Graph Annotations:**
- 32% increase
- 37% increase
## Financial Performance (₹ in crore)

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2011-12</th>
<th>FY 2010-11</th>
<th>%age Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Transmission Charges</td>
<td>9,544</td>
<td>7,903</td>
<td>20.8%</td>
</tr>
<tr>
<td>• Consultancy</td>
<td>290</td>
<td>299</td>
<td>(3.0%)</td>
</tr>
<tr>
<td>• Telecom</td>
<td>201</td>
<td>187</td>
<td>7.5%</td>
</tr>
<tr>
<td>• Other Income</td>
<td>750</td>
<td>710</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>10,785</td>
<td>9,099</td>
<td>18.5%</td>
</tr>
<tr>
<td>EBITDA</td>
<td>9,132</td>
<td>7,654</td>
<td>19.3%</td>
</tr>
<tr>
<td>Profit After Tax (PAT)</td>
<td>3,255</td>
<td>2,697</td>
<td>20.7%</td>
</tr>
<tr>
<td>Earnings per Share (₹)</td>
<td>7.03</td>
<td>6.19</td>
<td>13.6%</td>
</tr>
<tr>
<td>Book Value per Share (₹)</td>
<td>50.73</td>
<td>46.12</td>
<td>10.0%</td>
</tr>
<tr>
<td>Gross Fixed Assets</td>
<td>63,387</td>
<td>50,352</td>
<td>25.9%</td>
</tr>
<tr>
<td>Debt</td>
<td>53,402</td>
<td>40,883</td>
<td>30.6%</td>
</tr>
<tr>
<td>Net Worth</td>
<td>23,487</td>
<td>21,351</td>
<td>10.0%</td>
</tr>
<tr>
<td>Return on Net Worth</td>
<td>13.86%</td>
<td>12.63%</td>
<td></td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>69:31</td>
<td>65:35</td>
<td></td>
</tr>
</tbody>
</table>
Revenue Collection Efficiency
Revenue Realization

Monthly Billing vs Realization

Provisional Tariff orders of Rs. 2152 crores issued by CERC in July & Aug 2011 out of which Rs. 1897 Crores was realized during the current year.
## Revenue Collection Efficiency

<table>
<thead>
<tr>
<th>Billing</th>
<th>Outstanding as on date</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 11</td>
<td>FY 12</td>
</tr>
<tr>
<td>7367</td>
<td>11379</td>
</tr>
<tr>
<td>Increased by 54%</td>
<td>415</td>
</tr>
</tbody>
</table>

Outstanding beyond 60 days:

- **Outstanding as on date**: includes ₹ 250 crore installments
- **Balance Outstanding**: Equivalent < 6 days’ billing (Monthly billing: ₹ 900 crore)

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### Realization of Transmission Revenue considered very critical by all Authorities viz. CERC/GOI

CERC Open Access Regulations, 2009 (Amendment) Notification dated 20-May-2009 states:

> “25A. When so directed by the Commission, the National Load Despatch Centre or the Regional Load Despatch Centre, as the case may be, shall not grant short-term open access to the entities and associates of such entities, who consistently and willfully default in payment of Unscheduled Interchange charges, transmission charges…….”
Revenue Collection Efficiency

CERC Order dated 26-Dec-2011 against Petition No.213/2011

“This Commission which has been vested with the function to regulate the inter-State transmission of electricity has the mandate of the Parliament to ensure that inter-State transmission is regulated in a smooth and efficient manner and is not crippled on account of non-payment or partial payment of transmission charges. We direct all DICs to make timely payment of transmission charges and other charges to the petitioner in accordance with the bills raised by the CTU...........”

CERC Order dated 25-Jan-2012 regarding Non-payment of Dues

“......... we direct the staff to process the case for non-compliance of directions of the Commission by the defaulting DICs on account of non-payment of transmission charges and other charges.”

Thereafter, CERC issued notices to the CEOs of the defaulting utilities on 8.5.2012 and directed them to appear before the Commission on 12.06.2012. The order states “......... We direct the second respondent (i.e. CMD) to explain as to why he would not be held personally liable for non-compliance with the orders of the Commission”

POWERGRID – One Nation, One Grid
Transmission is a public service and of strategic importance. Uncertainty in demand growth/fuel supplies and high impact low probability events in the system further necessitate creation of a robust transmission system.

- Recognizing this aspect, CERC has granted regulatory approval for nine High Capacity Transmission Corridors:
  - For timely implementation even in case of delay in IPP commissioning, to avoid pronounced Right of Way challenges in future;
  - Utilization of PSDF Fund, for relieving burden of beneficiaries from impact of enhancement in tariff for servicing new transmission asset

CERC Staff Paper dated 7-May-2012 regarding utilization of PSDF Fund emphasizes:
Towards New Business Opportunities
Smart Grid/ City

PUDUCHERRY
• MoU signed with Electricity Dept, Govt. of Puducherry

• 56 organizations joined hands for implementation

Pre-Feasibility Studies
• Firozabad (UP)
• Katra (J&K)
• Chitradurga (Karnataka)
• District/cities of Tripura Chhatisgarh, Haryana, Punjab
Grid Integration of Renewable Energy

RENEWABLE GENERATION (XII PLAN)

- Planning of intra-State/inter-State Transmission requirements
- Provide Mechanism to address Wind/Solar generation uncertainty
  - Forecasting of generation
  - Provision of flexible generations, reserves
  - Demand side Management
  - Energy Storage
  - Policy and Regulatory Framework

Transmission Relieving Load on Other Infrastructures!!

₹ 42,000 crore investment in transmission for 40 GW
Business Opportunities

Backward Integration

Joint venture companies contemplated for manufacturing of material and equipment

JVs with States for intra-State Transmission

Discussions under way with

- Bihar, Odisha, Jharkhand, Chhatisgarh, Manipur, UP, MP, Tamil Nadu, Karantaka

R&M of T&D activities of CPSUs

- T&D activities: a non-core area for most CPSUs
- Dialogue initiated with CPSUs in Coal/Steel/Mining Sector
- Future Opportunities in Fertilizer & Petroleum Sectors, both for R&M and Project Consultancy for Sub-Stations
XII Plan
Power Sector Overview – XII & XIII Plans

### XII Plan

<table>
<thead>
<tr>
<th></th>
<th>Peak Demand</th>
<th>Capacity Addition</th>
<th>Capacity Addition RE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>198GW</td>
<td>76 GW</td>
<td>30 GW</td>
</tr>
</tbody>
</table>

**Transmission**

- **Fund Reqtd.**
  - ₹ 180,000 crore
  - *inter-State (incl. Pvt)*: ₹125,000 crore
  - *intra-State*: ₹55,000 crore
- **ckm addition**: 109,440
- **MVA addition**: 270,000

### XIII Plan

<table>
<thead>
<tr>
<th></th>
<th>Peak Demand</th>
<th>Capacity Addition</th>
<th>Capacity Addition RE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>283GW</td>
<td>79 GW</td>
<td>31 GW</td>
</tr>
</tbody>
</table>

**Transmission**

- **Fund Reqtd.**
  - ₹ 230,000 crore
  - *inter-State*: ₹135,000 crore
  - *intra-State*: ₹95,000 crore
- **ckm addition**: 130,000
- **MVA addition**: 300,000

### Distribution

<table>
<thead>
<tr>
<th></th>
<th>Fund Reqtd.</th>
<th>ckm addition</th>
<th>MVA capacity addition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>₹ 306,235 crore</td>
<td>(33kV &amp; below) 13,05,000</td>
<td>(33/11kV S/S) 88,000 MVA</td>
</tr>
</tbody>
</table>

- **Total Fund Reqtd.**
  - ₹254,000 crore
- **Fund Reqtd. for Smart Grid**
  - ₹230,000 crore
- **Fund Reqtd. for Smart City**
  - ₹24,000 crore

Investment Programme

<table>
<thead>
<tr>
<th>Projects/ Schemes</th>
<th>Capital Outlay (₹ in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Sector Generation</td>
<td>22,500</td>
</tr>
<tr>
<td>UMPP</td>
<td>14,000</td>
</tr>
<tr>
<td>IPP</td>
<td>52,000</td>
</tr>
<tr>
<td>Grid Strengthening</td>
<td>11,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100,000</strong></td>
</tr>
</tbody>
</table>

**Capital Outlay**

![Capital Outlay Chart]

- **Investment Approved** - ₹ 76,000 crore
- **Contracts Approved** - ₹ 67,000 crore

**Additional Projects**

1. Tariff Based Competitive Bidding
2. Nomination Basis by GoI
3. Consultancy assignments/ Sub-Transmission Projects

POWERGRID – *One Nation, One Grid*
Funding Requirement

Investment planned in Debt-Equity ratio of 70:30

Equity
- ₹ 30,000 crore
  - Internal Accruals
  - FPO proceeds

Debt
- ₹ 14,000 crore tied up
  - The World Bank
  - ADB
  - Supplier’s Credit
  - ECB
- ₹ 4,000 crore tied up through Line of Credit from SBI
- ₹ 52,000 crore to be raised
  - As per Annual Investment Plan
  - ECB/ Domestic Debt Markets
FY13: Project Execution

Expected Generation for FY13

<table>
<thead>
<tr>
<th>Sector</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>6200</td>
</tr>
<tr>
<td>IPP</td>
<td>3800</td>
</tr>
<tr>
<td>UMPP</td>
<td>1600</td>
</tr>
</tbody>
</table>

Will meet evacuation requirements

Transmission System in advance stage

- Trans. Lines: over 11,000 ckm
- MVA: over 45,000 MVA
- Sub-stations: over 20 sub-stations

Assets Commissioned (₹ in crore)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>FY10-11</th>
<th>FY11-12</th>
<th>FY12-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>1,156</td>
<td>802</td>
<td>&gt; 2500 (by end May-12)</td>
</tr>
<tr>
<td>Q2</td>
<td>3,932</td>
<td>3,255</td>
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</tr>
<tr>
<td>Q3</td>
<td>1,739</td>
<td>2,228</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>486</td>
<td>7,815</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7,313</td>
<td>14,100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Planning Commission
Thank You