



# Preliminary 2012 Project Budget

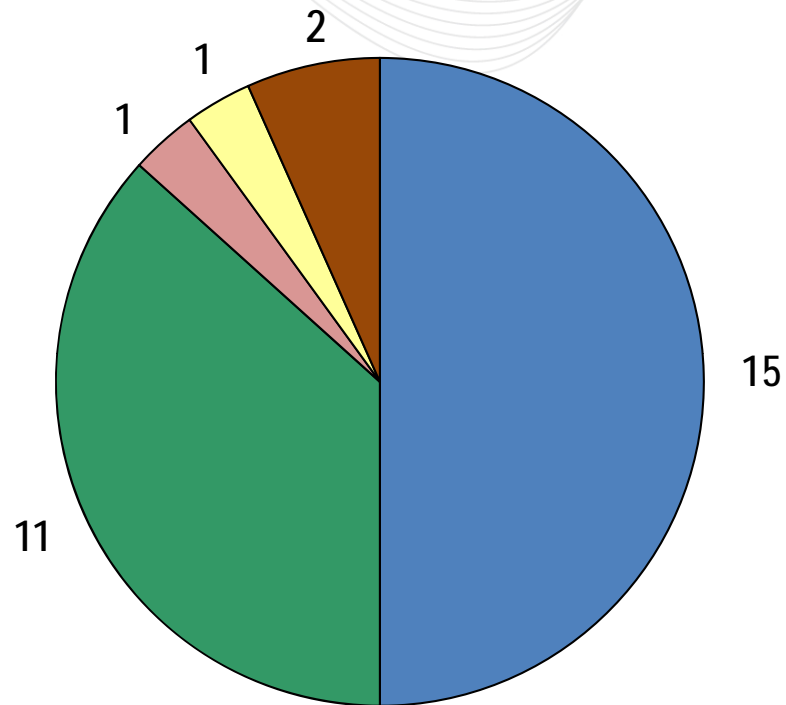
Operating Committee Meeting  
August 16, 2011



# Preliminary 2012 Project Summary

<i>(\$ in millions)</i>	Capital	Expense	Total
Application Replacements/Retrofit	1	0	1
Current Applications & System Reliability	15	5	20
Facilities and Technology Infrastructure	11	2	13
Interregional Coordination	1	0	1
New Products & Services	2	1	3
<b>Total</b>	<b>30</b>	<b>8</b>	<b>38</b>

Total = \$30 million



- Current Applications & Systems Reliability
- Facilities and Technology Infrastructure
- Application Replacements
- Interregional Coordination
- New Products/Services



## Application Replacements/Retrofit

<i>(dollars in millions, except rates)</i>	2011	2012	2013
Capital	2	1	0
Expense	0	0	0

**Identity Management** – This project will improve the reliability and efficiency of PJM’s processes for authorization and provisioning of access to IT systems. It will also demonstrate NERC CIP/SSAE-16 compliance, increase operational efficiencies, and increase the overall security posture.



# Current Applications & Systems Reliability

<i>(dollars in millions, except rates)</i>	2011	2012	2013
Capital	2	15	1
Expense	1	5	0

**Markets Applications** - Updates and enhancements to applications and systems, including Market Settlements, Reliability Pricing Model (RPM), Demand Side Response (DSR), and Financial Transmission Rights (FTR).

**Operations Applications** - Updates and enhancements to applications, including eDart, Perfect Dispatch, Intelligent Event Processor (IEP), and other operator and dispatcher tools. Some of the updates will include upgrades of database software necessary to maintain security and reliability.

**Generation Control Applications Enhancements** – This project will analyze the current economic dispatch function, identify opportunities to improve the use of the Security Constrained Economic Dispatch (SCED) application and identify manual interactions by dispatchers.

**Compliance and Cyber Security Enhancements** – Enhancements to meet NERC Critical Infrastructure Protection (CIP) reliability standards as well as network security control and monitoring.

**SynchroPhasor Stimulus Grant** – This project is part of the DOE’s Smart Grid Investment Grant (SGIG). PJM and twelve Transmission Owners will develop a production quality network of Phasor Measurements Units (PMUs) and Phasor Data Concentrators (PDCs) throughout the PJM footprint.



## Facilities and Technology Infrastructure

<i>(dollars in millions, except rates)</i>	2011	2012	2013
Capital	9	11	0
Expense	1	2	0

**Valley Forge Facilities Plan** – This project will consolidate PJM’s leased space, fit-out space to meet needs and to bring the building up to today’s code requirements, and increase the physical security of the Valley Forge control center.



# Interregional Coordination

<i>(dollars in millions, except rates)</i>	2011	2012	2013
Capital	1	1	0
Expense	0	0	0
<b><u>Joint and Common Market</u></b> – This project will implement FERC requirements for components of a joint and common market between PJM and MISO, including any recommendations from the market-to-market Baseline Review.			



## New Products and Services

<i>(dollars in millions, except rates)</i>	2011	2012	2013
Capital	2	2	0
Expense	1	1	0

**Wind Integration Study** – This project will complete a detailed wind study throughout the PJM control area to determine what is required to integrate wind into the system. This study will help to demonstrate where wind should be built as well as where to connect it into the system and lay out the details of those requirements as well.

**Price Responsive Demand** – This project will develop a process to assist customers to adjust their usage based upon a price signal.

**Shortage Pricing** – This project will ensure the mechanism for price information during an operating reserve shortage and achieves the goals of FERC Order 719 of “maintaining reliability, eliminating barriers to the comparable treatment of demand response and allocate energy during a shortage to those who value it most.”

Date	Group	Topics
August 16	Operating Committee	<ul style="list-style-type: none"> <li>• Preliminary 2012 Projects</li> </ul>
August 17	Markets and Reliability Committee	<ul style="list-style-type: none"> <li>• Preliminary 2012 Projects</li> </ul>
August 24	Finance Committee	<ul style="list-style-type: none"> <li>• Preliminary 2012 Budget</li> <li>• Preliminary 2012 Projects</li> <li>• Five-Year Projections</li> </ul>
September 8	Planning Committee	<ul style="list-style-type: none"> <li>• Preliminary 2012 Projects</li> </ul>
September 22	Finance Committee	<ul style="list-style-type: none"> <li>• Proposed 2012 Budget Recommendations</li> </ul>
October 19	Board of Managers	<ul style="list-style-type: none"> <li>• Consideration of Proposed 2012 Budget</li> </ul>