

### 2013 Capital Projects

\*\*\* This information is also contained in the budget book

Proposed Projects for 2013	Amount
<b>Implementation of Systems and Tools</b>	
Outage management system (OMS) phase 3	large
Resources interconnection management system (RIMS) enhancements 2013	large
Enterprise model management systems (EMMS) phase 3	large
Improve forecasting tools (ancillary services, flexible ramping, renewables)	medium
Operational meter analysis and reporting (OMAR) new features, corrections, and automation	medium
Market validation tools phases 2 and 3	medium
Incorporate current manual workarounds into Siemens products to improve performance and support	small
Topology estimation tool	small
System operations limits management database	small
Voltage stability analysis integration into the market (closed loop)	small
<b>Total</b>	<b>\$8,100,000</b>
<b>Enhancement of Markets and Performance</b>	
Operations enhancements 2013	large
FERC VERS order compliance	large
Outage coordination (optimization)	medium
Extending the network model	medium
Bid cost recovery / renewable integration market & product review (RIMPR) phase 1	medium
Energy imbalance market proof of concept	medium
Participating intermittent resource project (PIRP) decremental bidding	medium
Subset of hours for all resources (includes updates to exceptional dispatch)	medium
Standard capacity product phase 3	small
Market services enhancements 2013	small
Develop operations situational awareness tools	small
Flexible capacity procurement	small
Replacement requirement for generation outages - phase 2 automation	small
Secured credit changes for convergence bidding	small
Administrative pricing rule	small
<b>Total</b>	<b>\$6,700,000</b>
<b>Technology Projects</b>	
Enterprise hardware and software purchases	large
eDiscovery for Legal division	small
Improve deliverability study tools	small
Compliance automation and controls governance, phase 3	small
Update FERC electronic quarterly report (EQR) software	small
<b>Total</b>	<b>\$2,500,000</b>
<b>Incorporation of Distributed Resources</b>	
Technology pilots and demonstrations (including micro grid, demand response, and energy storage)	medium
Cost-effective measurement infrastructure project	small
<b>Total</b>	<b>\$800,000</b>
<b>Other Costs</b>	
Program Office project management costs	large
Annual request for facilities costs	small
Renewable integration study work and annual flexibility assessment	small
<b>Total</b>	<b>\$1,400,000</b>
<b>Total Proposed Projects for 2013</b>	<b>\$19,500,000</b>

\* Note: The costs of the individual projects are not shown, but are categorized by size as follows: small projects under \$500k, medium projects from \$500k to \$1 million, and large projects over \$1 million. The actual projects completed during 2011 will vary, including the potential addition of projects not on this list, the deferral of projects on this list to future years, or the elimination of projects on this list if no longer necessary.