FILED
February 14, 2012
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

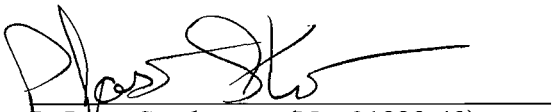
INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS POWER & LIGHT COMPANY REQUESTING THE INDIANA UTILITY REGULATORY COMMISSION TO APPROVE AN ALTERNATIVE REGULATORY PLAN PURSUANT TO IND. CODE § 8-1-2.5-1, *ET SEQ.*, FOR THE OFFERING OF ENERGY EFFICIENCY CONSERVATION, DEMAND RESPONSE AND DEMAND-SIDE MANAGEMENT PROGRAMS AND ASSOCIATED RATE TREATMENT INCLUDING INCENTIVES IN ACCORDANCE WITH IND. CODE §§ 8-1-2.5-1 *ET SEQ.* AND 8-1-2-42(a); AUTHORITY TO DEFER PROGRAM COSTS ASSOCIATED WITH ITS ENERGY EFFICIENCY PORTFOLIO PROGRAMS; AUTHORITY TO IMPLEMENT NEW AND ENHANCED ENERGY PROGRAMS AND APPROVAL OF MODIFICATION OF THE FUEL ADJUSTMENT CLAUSE EARNINGS AND EXPENSE TESTS.	)	**CAUSE NO. 43623** **PHASE II**

SUBMISSION OF FOURTH SEMI-ANNUAL REPORT

The February 10, 2010 Order (p. 39) issued by the Indiana Utility Regulatory Commission in this Cause directed Indianapolis Power & Light Company to file a report semi-annually during the Phase I and II deployment periods and then annually after deployment has been completed. In compliance with the foregoing, IPL's Semi-Annual Report – Smart Energy Project for the period July 1, 2011 through December 31, 2011 is attached hereto.

Respectfully submitted,



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Attorney for Indianapolis Power & Light Company

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on February 14, 2012, a copy of the foregoing was served by email transmission to:

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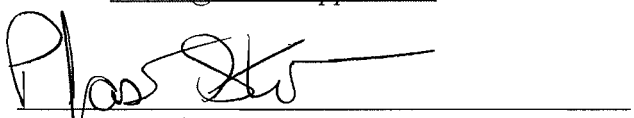

P. Jason Stephenson

Indianapolis Power & Light Company
Semi-Annual Report – Smart Energy Project

IPL submits this fourth semi-annual report related to its *Smart Energy Project* which is partially funded by the US Department of Energy ("DOE") through a Smart Grid Investment Grant ("SGIG"). IPL anticipates its next semi-annual report will be filed in August 2012.

IPL's *Smart Energy Project* is on schedule and within budget. IPL is in compliance with DOE reporting requirements. A summary of expenditures is shown below. DOE has reimbursed IPL for all of the requested funds to date.

	For Period 7/1/11 through 12/31/11	**For Period 2/10/11 through 12/31/11**
Expenditures	$8.2 M	$33.8 M
Reimbursement Requested	$3.3 M	$13.8 M
Manhours Expended	40,925	115,960

IPL is in the process of scheduling a meeting with the OUCC to provide an update of its *Smart Energy Project.*

Monthly DOE status reports and the Q3 and Q4 2011 federal American Reinvestment and Recovery Act reports are attached.

Monthly Progress Report

1. DOE Award Number and Recipient Name

DOE Award Number: DE-OE000273
Recipient Name: Indianapolis Power & Light Company

2. Project Title and Project Director / Principal Investigator

Project Director / Principal Investigator: Joan M. Soller
Telephone: 317.261.5403

E-mail: joan.soller@aes.com

3. Date of Report and Reporting Period

Date of Report: August 8, 2011
Period Covered: July 1 through July 31, 2011

4. Major Accomplishments

A discussion of major accomplishments during the reporting period, including major activities, significant results, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in this report advising the reader to contact the Project Director for further information.

Accomplishment	Major Activities / Results / Findings / Conclusions / Outcomes
Project Reporting Milestones	Submitted sixth set of PVMS data in SIPRIS using the new Excel spreadsheet.
IPL Cyber Security Plan	Risk Assessment complete.
Meter Data Management System (MDMS)	Integration of AMI and other systems continues.
Recloser Installation	126 (or 71%) of the work orders have been issued and 100 (or 56%) are installed and in-service.
Feeder Relay Replacements	149 Feeder relays have been replaced with new SEL relays. This is 60% of our 2-year goal.
Central Business District SCADA Implementation	177 Network relays have been replaced (~56%) and installation of communication cables (45% of fiber, 41% of inner duct, and 41% of twisted pair) is well under way. Further CBD work has been delayed due to other private and public funded work in the downtown area related to preparations for Super Bowl 2012.
AMI Communication Infrastructure	Optimization of the communication infrastructure continues. Thirty five (35) of the 35 Access Points (AP's) for the AMI meter extraction points, all of the data relays have been installed and 35 of the 47 E-Bridge masters (DA extraction points) have been installed.
AMI Energy Only Meters	3,764 or (~99% of planned replacements) total energy only meters have been installed. IPL will use the balance of the AMI meters for electric vehicle sites and replacements.
AMI Demand Meters	6,014 or (~99 % of planned replacements) demand meters have been installed. IPL will replace about 100 remaining specialized installations in the coming months and use the balance of the AMI meters for replacements.

Electric Vehicle Supply Equipment	Forty (40) chargers are available for electric vehicle charging in fleet and home locations. Four public charging stations have been installed and are active for use.
Customer Energy Management	Vendor negotiations continue for implementation of energy only customers later this year. Large demand customers will be implemented in the Spring of 2012.
Distribution Management System	Negotiations with preferred vendor selection have begun.
Capacitor Bank Control Replacements	Six hundred forty two (642) of the 1350 (~48%) of the new capacitor controls using the AMI communication infrastructure are in service. A total of 1,030 (~76%) have been programmed.
Fiber Communication Backbone	Three fiber cable route work orders have been issued. Construction is under way on the first work order. Replacement of fiber communication OC3 cards with OC48 cards were upgraded on all existing 21 nodes during March 2011.
Substation Security	IPL has installed 9 security cameras at 6 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

5. Changes in approach

Changes in approach or aims and reasons for change. Significant changes to the objectives or scope require prior approval of Contracting Officer.

Change in Approach	Previous Approach	Reasons for Change	Approved by Contracting Officer?	Date of Approval
Home and Business Energy Management Systems	Planned to install 1,900 systems as part of IPL's demand side management (DSM) program.	IPL included HEMS/BEMS, the customer web portal and EV programs in its DSM case filed with the Indiana Utility Regulatory Commissions (IURC). Initially these were not supported by the Office of Utility Consumer Counselor (OUCC). IPL subsequently negotiated a settlement agreement with the OUCC to include the web portal and EV programs but eliminate the HEMS/BEMS program. IPL is in the process of evaluating alternatives that fit within the project scope to best utilize the budgeted dollars.	No	

6. Actual or anticipated problems or delays and actions taken or planned to resolve them

Issue	Action to resolve	Completed or Planned?
Customer Energy Management Tools delay until Fall 2011	IPL understands the software functionality has been further delayed to Q4 for energy only customers and Q3 2012 for demand metered customers. The project team is evaluating options to expedite this program offering.	Planned
Distribution Management System (DMS) delay due to significantly higher than expected capital and on-going costs.	IPL is reviewing the DMS scope and considering three options: • Full implementation and integrations • Stand alone DMS with only essential integration points • Modify existing systems to get many of the proposed DMS functionality	Planned
CBD SCADA has experience delays in 2011.	Resources have been consumed with infrastructure improvements for the Super Bowl in 2012. Work has been put on hold but will be completed within the grant period.	Planned

7. Changes in Consortium / Team Members

Report changes in consortium / teaming arrangements.

N/A

Monthly Progress Report

1. DOE Award Number and Recipient Name

DOE Award Number: DE-OE000273
Recipient Name: Indianapolis Power & Light Company

2. Project Title and Project Director / Principal Investigator

Project Director / Principal Investigator: Joan M. Soller
Telephone: 317.261.5403

E-mail: joan.soller@aes.com

3. Date of Report and Reporting Period

Date of Report: September 9, 2011
Period Covered: August 1 through August 31, 2011

4. Major Accomplishments

A discussion of major accomplishments during the reporting period, including major activities, significant results, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in this report advising the reader to contact the Project Director for further information.

Accomplishment	Major Activities / Results / Findings / Conclusions / Outcomes
Project Reporting Milestones	Submitted seventh set of PVMS data in SIPRIS using the Excel spreadsheet.
IPL Cyber Security Plan	Participated in DOE Cyber Security Information Exchange in Chicago, IL.
Meter Data Management System (MDMS)	Integration of AMI and other systems continues.
Recloser Installation	131 (or 74%) of the work orders have been issued and 112 (or 63%) are installed and in-service.
Feeder Relay Replacements	156 Feeder relays have been replaced with new SEL relays. This is 62% of our 2-year goal.
Central Business District SCADA Implementation	183 Network relays have been replaced (~58%) and installation of communication cables (45% of fiber, 41% of inner duct, and 41% of twisted pair) is well under way. Further CBD work has been delayed due to other private and public funded work in the downtown area related to preparations for Super Bowl 2012.
AMI Communication Infrastructure	Optimization of the communication infrastructure continues. Thirty five (35) of the 35 Access Points (AP's) for the AMI meter extraction points, all of the data relays have been installed and 38 of the 47 E-Bridge masters (DA extraction points) have been installed.
AMI Energy Only Meters	3,764 or (~99% of planned replacements) total energy only meters have been installed. IPL will use the balance of the AMI meters for electric vehicle sites and replacements.
AMI Demand Meters	6,014 or (~99 % of planned replacements) demand meters have been installed. IPL will replace about 100 remaining specialized installations in the coming months and use the balance of the AMI meters for replacements.

Electric Vehicle Supply Equipment	Forty (40) chargers are available for electric vehicle charging in fleet and home locations. Four public charging stations have been installed and are active for use. Participated in public ride and drive event with Nissan at the Indianapolis Motor Speedway with several hundred participants to market TOU rate program.
Customer Energy Management	Vendor negotiations continue for implementation of energy only customers later this year. Large demand customers will be implemented in the Spring of 2012.
Distribution Management System	Negotiations with preferred vendor selection have begun with a proposed revised project scope.
Capacitor Bank Control Replacements	Eight hundred thirty six (836) of the 1350 (~62%) of the new capacitor controls using the AMI communication infrastructure are in service. A total of 1,030 (~76%) have been programmed.
Fiber Communication Backbone	Three fiber cable route work orders have been issued. Construction is under way on all three work orders. Replacement of fiber communication OC3 cards with OC48 cards were upgraded on all existing 21 nodes during March 2011.
Substation Security	IPL has installed 9 security cameras at 6 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

5. Changes in approach

Changes in approach or aims and reasons for change. Significant changes to the objectives or scope require prior approval of Contracting Officer.

Change in Approach	Previous Approach	Reasons for Change	Approved by Contracting Officer?	Date of Approval
Home and Business Energy Management Systems	Planned to install 1,900 systems as part of IPL's demand side management (DSM) program.	IPL included HEMS/BEMS, the customer web portal and EV programs in its DSM case filed with the Indiana Utility Regulatory Commissions (IURC). Initially these were not supported by the Office of Utility Consumer Counselor (OUCC). IPL subsequently negotiated a settlement agreement with the OUCC to include the web portal and EV programs but eliminate the HEMS/BEMS program. IPL is in the process of evaluating alternatives that fit within the project scope to best utilize the budgeted dollars.	No	
Cyber Security	Completed Risk Assessment	IPL is reviewing resource requirements to accomplish implementation of vulnerability assessments and mitigation measures and considering revised project budget amounts.	No	

6. Actual or anticipated problems or delays and actions taken or planned to resolve them

Issue	Action to resolve	Completed or Planned?
Customer Energy Management Tools delay until Fall 2011	IPL understands the software functionality has been further delayed to Q4 for energy only customers and Q3 2012 for demand metered customers. The project team is evaluating options to expedite this program offering.	Planned
Distribution Management System (DMS) delay due to significantly higher than expected capital and on-going costs.	IPL is reviewing the DMS scope and considering three options: • Full implementation and integrations • Stand alone DMS with only essential integration points • Modify existing systems to get many of the proposed DMS functionality	Planned
CBD SCADA has experience delays in 2011.	Resources have been consumed with infrastructure improvements for the Super Bowl in 2012. Work has been put on hold but will be completed within the grant period.	Planned

7. Changes in Consortium / Team Members

Report changes in consortium / teaming arrangements.

N/A

Monthly Progress Report

1. DOE Award Number and Recipient Name

DOE Award Number: DE-OE000273
Recipient Name: Indianapolis Power & Light Company

2. Project Title and Project Director / Principal Investigator

Project Director / Principal Investigator: Joan M. Soller
Telephone: 317.261.5403

E-mail: joan.soller@aes.com

3. Date of Report and Reporting Period

Date of Report: October 10, 2011
Period Covered: September 1 through September 30, 2011

4. Major Accomplishments

A discussion of major accomplishments during the reporting period, including major activities, significant results, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in this report advising the reader to contact the Project Director for further information.

Accomplishment	Major Activities / Results / Findings / Conclusions / Outcomes
Project Reporting Milestones	Submitted eighth set of PVMS data in SIPRIS using the Excel spreadsheet.
IPL Cyber Security Plan	Participated in DOE Cyber Security webinar
Meter Data Management System (MDMS)	Integration of AMI and other systems continues.
Recloser Installation	141 (or 79%) of the work orders have been issued and 123 (or 69%) are installed and in-service.
Feeder Relay Replacements	166 Feeder relays have been replaced with new SEL relays. This is 62% of our 2-year goal.
Central Business District SCADA Implementation	190 Network relays have been replaced (~60%) and installation of communication cables (45% of fiber, 41% of inner duct, and 41% of twisted pair) is well under way. Further CBD work has been delayed due to other private and public funded work in the downtown area related to preparations for Super Bowl 2012.
AMI Communication Infrastructure	Optimization of the communication infrastructure continues. Thirty five (35) of the 35 Access Points (AP's) for the AMI meter extraction points, all of the data relays have been installed and 38 of the 47 E-Bridge masters (DA extraction points) have been installed. Network Optimization continues and is expected to be complete by December 31, 2011.
AMI Energy Only Meters	3,764 or (~94% of planned replacements) total energy only meters have been installed. IPL will use the balance of the AMI meters for electric vehicle sites and replacements.
AMI Demand Meters	6,014 or (~94 % of planned replacements) demand meters have been installed. IPL will replace about 100 remaining specialized installations in the coming months and

	use the balance of the AMI meters for replacements.
Electric Vehicle Supply Equipment	Forty (40) chargers are available for electric vehicle charging in fleet and home locations. Six public charging stations have been installed and four are active for use.
Customer Energy Management	Vendor negotiations continue for implementation of energy only customers later this year. Large demand customers will be implemented in the Spring of 2012.
Customer Engagement Tools	A contract was signed with Ektron to provide IPL's Internet WCMS.
Distribution Management System	Negotiations with preferred vendor selection have begun with a proposed revised project scope.
Capacitor Bank Control Replacements	Nine hundred forty two (942) of the 1350 (~70%) of the new capacitor controls using the AMI communication infrastructure are in service. A total of 1,030 (~76%) have been programmed.
Fiber Communication Backbone	Six fiber cable route work orders have been issued. Construction is under way on three work orders. Replacement of fiber communication OC3 cards with OC48 cards were upgraded on all existing 21 nodes during March 2011.
Substation Security	IPL has installed 9 security cameras at 6 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

5. Changes in approach

Changes in approach or aims and reasons for change. Significant changes to the objectives or scope require prior approval of Contracting Officer.

Change in Approach	Previous Approach	Reasons for Change	Approved by Contracting Officer?	Date of Approval
Home and Business Energy Management Systems	Planned to install 1,900 systems as part of IPL's demand side management (DSM) program.	IPL included HEMS/BEMS, the customer web portal and EV programs in its DSM case filed with the Indiana Utility Regulatory Commissions (IURC). Initially these were not supported by the Office of Utility Consumer Counselor (OUCC). IPL subsequently negotiated a settlement agreement with the OUCC to include the web portal and EV programs but eliminate the HEMS/BEMS program. IPL is in the process of evaluating alternatives that fit within the project scope to best utilize the budgeted dollars.	No	
Cyber Security	Completed Risk Assessment	IPL is reviewing resource requirements to accomplish implementation of vulnerability assessments and mitigation measures and considering revised project budget amounts.	No	

6. Actual or anticipated problems or delays and actions taken or planned to resolve them

Issue	Action to resolve	Completed or Planned?
Customer Energy Management Tools delay until Fall 2011	IPL understands the software functionality has been further delayed to Q4 for energy only customers and Q3 2012 for demand metered customers. The project team is evaluating options to expedite this program offering.	Planned
Distribution Management System (DMS) delay due to significantly higher than expected capital and on-going costs.	IPL is reviewing the DMS scope and considering three options: • Full implementation and integrations • Stand alone DMS with only essential integration points • Modify existing systems to get many of the proposed DMS functionality	Planned
CBD SCADA has experience delays in 2011.	Resources have been consumed with infrastructure improvements for the Super Bowl in 2012. Work has been put on hold but will be completed within the grant period.	Planned

7. Changes in Consortium / Team Members

Report changes in consortium / teaming arrangements.

N/A

Monthly Progress Report

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DOE Award Number: DE-OE000273
Recipient Name: Indianapolis Power & Light Company

2. Project Title and Project Director / Principal Investigator

Project Director / Principal Investigator: Joan M. Soller
Telephone: 317.261.5403

E-mail: joan.soller@aes.com

3. Date of Report and Reporting Period

Date of Report: November 10, 2011
Period Covered: October 1 through October 31, 2011

4. Major Accomplishments

A discussion of major accomplishments during the reporting period, including major activities, significant results, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in this report advising the reader to contact the Project Director for further information.

Accomplishment	Major Activities / Results / Findings / Conclusions / Outcomes
Project Reporting Milestones	Submitted ninth set of PVMS data in SIPRIS using the Excel spreadsheet.
IPL Cyber Security Plan	Continue to update cyber security risk assessments
Meter Data Management System (MDMS)	Integration of AMI and other systems continues.
Recloser Installation	149 (or 84%) of the work orders have been issued and 123 (or 69%) are installed and in-service.
Feeder Relay Replacements	175 Feeder relays have been replaced with new SEL relays. This is 70% of our 2-year goal.
Central Business District SCADA Implementation	190 Network relays have been replaced (~60%) and installation of communication cables (45% of fiber, 41% of inner duct, and 41% of twisted pair) is well under way. Further CBD work has been delayed due to other private and public funded work in the downtown area related to preparations for Super Bowl 2012.
AMI Communication Infrastructure	Thirty five (35) of the 35 Access Points (AP's) for the AMI meter extraction points, all of the data relays have been installed and 40 of the 47 E-Bridge masters (DA extraction points) have been installed. Network Optimization continues and is expected to be complete by December 31, 2011.
AMI Energy Only Meters	3,764 or (~94% of planned replacements) total energy only meters have been installed. IPL will use the balance of the AMI meters for electric vehicle sites and replacements.
AMI Demand Meters	6,014 or (~94 % of planned replacements) demand meters have been installed. IPL will replace about 100 remaining specialized installations in the coming months and use the balance of the AMI meters for replacements.

Electric Vehicle Supply Equipment	Forty-seven(47) chargers are available for electric vehicle charging in fleet and home locations. Six public charging stations have been installed and are active for use.
Customer Energy Management	Vendor negotiations continue for implementation of energy only customers in the first quarter of 2012. Large demand customers will be implemented in the second quarter of 2012.
Customer Engagement Tools	A contract was signed with Ektron to provide IPL's Internet Web Content Management System (WCMS).
Distribution Management System	Negotiations with preferred vendor selection have begun with a proposed revised project scope.
Capacitor Bank Control Replacements	Nine hundred eighty (980) of the 1350 (~73%) of the new capacitor controls using the AMI communication infrastructure are in service. A total of 1,346 (~99%) have been programmed.
Load Tap Changers (LTC)	Installed 36 of 90 planned load tap changer controls to regulate voltage
Fiber Communication Backbone	Six fiber cable route work orders have been issued. Construction is under way on three work orders. Replacement of fiber communication OC3 cards with OC48 cards were upgraded on all existing 21 nodes during March 2011.
Substation Security	IPL has installed 9 security cameras at 6 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

5. Changes in approach

Changes in approach or aims and reasons for change. Significant changes to the objectives or scope require prior approval of Contracting Officer.

Change in Approach	Previous Approach	Reasons for Change	Approved by Contracting Officer?	Date of Approval
Home and Business Energy Management Systems	Planned to install 1,900 systems as part of IPL's demand side management (DSM) program.	IPL included HEMS/BEMS, the customer web portal and EV programs in its DSM case filed with the Indiana Utility Regulatory Commissions (IURC). Initially these were not supported by the Office of Utility Consumer Counselor (OUCC). IPL subsequently negotiated a settlement agreement with the OUCC to include the web portal and EV programs but eliminate the HEMS/BEMS program. IPL is in the process of evaluating alternatives that fit within the project scope to best utilize the budgeted dollars.	No	
Cyber Security	Completed Risk Assessment	IPL is reviewing resource requirements to accomplish implementation of vulnerability assessments and mitigation measures and considering revised project budget amounts.	No	

6. Actual or anticipated problems or delays and actions taken or planned to resolve them

Issue	Action to resolve	Completed or Planned?
Customer Energy Management Tools delay until Fall 2011	IPL understands the software functionality has been further delayed to Q1 in 2012 for energy only customers and Q2 2012 for demand metered customers. The project team is evaluating options to expedite this program offering.	Planned
Distribution Management System (DMS) delay due to significantly higher than expected capital and on-going costs.	IPL is reviewing the DMS scope and considering three options: • Full implementation and integrations • Stand-alone DMS with only essential integration points • Modify existing systems to get many of the proposed DMS functionality	Planned
CBD SCADA has experienced delays in 2011.	Resources have been consumed with infrastructure improvements for the Super Bowl in 2012. Work has been put on hold but will be completed within the grant period.	Planned

7. Changes in Consortium / Team Members

Report changes in consortium / teaming arrangements.

N/A

Monthly Progress Report

1. DOE Award Number and Recipient Name

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Recipient Name: Indianapolis Power & Light Company

2. Project Title and Project Director / Principal Investigator

Project Director / Principal Investigator: Joan M. Soller
Telephone: 317.261.5403

E-mail: joan.soller@aes.com

3. Date of Report and Reporting Period

Date of Report: December 10, 2011
Period Covered: November 1 through November 30, 2011

4. Major Accomplishments

A discussion of major accomplishments during the reporting period, including major activities, significant results, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in this report advising the reader to contact the Project Director for further information.

Accomplishment	Major Activities / Results / Findings / Conclusions / Outcomes
Project Reporting Milestones	Submitted tenth set of PVMS data in SIPRIS using the Excel spreadsheet.
IPL Cyber Security Plan	Continue to update cyber security risk assessments
Meter Data Management System (MDMS)	Integration of AMI and other systems continues.
Recloser Installation	155 (or 87%) of the work orders have been issued and 131 (or 74%) are installed and in-service.
Feeder Relay Replacements	186 Feeder relays have been replaced with new SEL relays. This is 74% of our 2-year goal.
Central Business District SCADA Implementation	190 Network relays have been replaced (~60%) and installation of communication cables (45% of fiber, 41% of inner duct, and 41% of twisted pair) is well under way. Further CBD work has been delayed due to other private and public funded work in the downtown area related to preparations for Super Bowl 2012.
AMI Communication Infrastructure	Thirty five (35) of the 35 Access Points (AP's) for the AMI meter extraction points, all of the data relays have been installed and 47 of the 47 E-Bridge masters (DA extraction points) have been installed. Network Optimization continues and is expected to be complete by December 31, 2011.
AMI Energy Only Meters	3,764 or (~94% of planned replacements) total energy only meters have been installed. IPL will use the balance of the AMI meters for electric vehicle sites and replacements.
AMI Demand Meters	6,014 or (~94 % of planned replacements) demand meters have been installed. IPL will replace about 100 remaining specialized installations in the coming months and use the balance of the AMI meters for replacements.

Electric Vehicle Supply Equipment	Forty-seven (47) chargers are available for electric vehicle charging in fleet and home locations. Eighteen (18) public charging stations have been installed and 14 of them are active for use.
Customer Energy Management	Vendor negotiations continue for implementation of energy only customers in the first quarter of 2012. Large demand customers will be implemented in the second quarter of 2012.
Customer Engagement Tools	IPL is on schedule to launch the first phase of its new website in December 2011. Phase II will include the customer enrollment functionality through Q1 and Q2 2011.
Distribution Management System	Negotiations with preferred vendor have begun with a proposed revised project scope.
Capacitor Bank Control Replacements	One thousand sixty seven (1,067) of the 1350 (~79%) of the new capacitor controls using the AMI communication infrastructure are in service. A total of 1,346 (~99%) have been programmed.
Load Tap Changers (LTC)	Installed 44 of 90 planned load tap changer controls to regulate voltage
Fiber Communication Backbone	Six fiber cable route work orders have been issued. Construction is under way on three work orders. Replacement of fiber communication OC3 cards with OC48 cards were upgraded on all existing 21 nodes during March 2011.
Substation Security	IPL has installed 9 security cameras at 6 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

5. Changes in approach

Changes in approach or aims and reasons for change. Significant changes to the objectives or scope require prior approval of Contracting Officer.

Change in Approach	Previous Approach	Reasons for Change	Approved by Contracting Officer?	Date of Approval
Home and Business Energy Management Systems	Planned to install 1,900 systems as part of IPL's demand side management (DSM) program.	IPL included HEMS/BEMS, the customer web portal and EV programs in its DSM case filed with the Indiana Utility Regulatory Commissions (IURC). Initially these were not supported by the Office of Utility Consumer Counselor (OUCC). IPL subsequently negotiated a settlement agreement with the OUCC to include the web portal and EV programs but eliminate the HEMS/BEMS program. IPL is in the process of evaluating alternatives that fit within the project scope to best utilize the budgeted dollars.	No	
Cyber Security	Completed Risk Assessment	IPL is reviewing resource requirements to accomplish implementation of vulnerability assessments and mitigation measures and considering revised project budget amounts.	No	

6. Actual or anticipated problems or delays and actions taken or planned to resolve them

Issue	Action to resolve	Completed or Planned?
Customer Energy Management Tools delay until Fall 2011	IPL understands the software functionality has been further delayed to Q1 in 2012 for energy only customers and Q2 2012 for demand metered customers. The project team is evaluating options to expedite this program offering.	Planned
Distribution Management System (DMS) delay due to significantly higher than expected capital and on-going costs.	IPL reviewed the DMS scope and is planning on a stand-alone DMS with only essential integration points. The plan is to have this functional at the end of the first quarter in 2012.	Planned
CBD SCADA has experienced delays in 2011.	Resources have been consumed with infrastructure improvements for the Super Bowl in 2012. Work has been put on hold but will be completed within the grant period.	Planned

7. Changes in Consortium / Team Members

Report changes in consortium / teaming arrangements.

N/A

Monthly Progress Report

1. DOE Award Number and Recipient Name

DOE Award Number: DE-OE000273
Recipient Name: Indianapolis Power & Light Company

2. Project Title and Project Director / Principal Investigator

Project Director / Principal Investigator: Joan M. Soller
Telephone: 317.261.5403

E-mail: joan.soller@aes.com

3. Date of Report and Reporting Period

Date of Report: January 10, 2012
Period Covered: December 1 through December 31, 2011

4. Major Accomplishments

A discussion of major accomplishments during the reporting period, including major activities, significant results, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in this report advising the reader to contact the Project Director for further information.

Accomplishment	Major Activities / Results / Findings / Conclusions / Outcomes
Project Reporting Milestones	Submitted eleventh set of PVMS data in SIPRIS using the Excel spreadsheet.
IPL Cyber Security Plan	Continue to update cyber security risk assessments
Meter Data Management System (MDMS)	Integration of AMI and other systems continues.
Recloser Installation	163 (or 92%) of the work orders have been issued and 138 (or 78%) are installed and in-service.
Feeder Relay Replacements	178 Feeder relays have been replaced with new SEL relays. This is 71% of our 2-year goal.
Central Business District SCADA Implementation	190 Network relays have been replaced (~60%) and installation of communication cables (45% of fiber, 41% of inner duct, and 41% of twisted pair) is well under way. Further CBD work has been delayed due to other private and public funded work in the downtown area related to preparations for Super Bowl 2012.
AMI Communication Infrastructure	Thirty five (35) of the 35 Access Points (AP's) for the AMI meter extraction points, all of the data relays have been installed and 47 of the 47 E-Bridge masters (DA extraction points) have been installed. Network Optimization continues and large scale remediation is complete.
AMI Energy Only Meters	3,764 or (~94% of planned replacements) total energy only meters have been installed. IPL will use the balance of the AMI meters for electric vehicle sites and replacements.
AMI Demand Meters	6,014 or (~94 % of planned replacements) demand meters have been installed. IPL will replace about 100 remaining specialized installations in the coming months and use the balance of the AMI meters for replacements.

Electric Vehicle Supply Equipment	Forty-seven (47) chargers are available for electric vehicle charging in fleet and home locations. Eighteen (18) public charging stations have been installed and 14 of them are active for use.
Customer Energy Management	Vendor negotiations continue for implementation of energy only customers in the first quarter of 2012. Large demand customers will be implemented in the second quarter of 2012.
Customer Engagement Tools	IPL launched the first phase of its new website in December 2011. Phase II will include the customer enrollment functionality through Q1 and Q2 2011.
Distribution Management System	Negotiations with preferred vendor have begun with a proposed revised project scope. Some software and hardware was delivered in December.
Capacitor Bank Control Replacements	One thousand sixty seven (1,200) of the 1350 (~89%) of the new capacitor controls using the AMI communication infrastructure are in service. A total of 1,346 (~99%) have been programmed.
Load Tap Changers (LTC)	Installed 42 of 90 planned load tap changer controls to regulate voltage
Fiber Communication Backbone	Seven fiber cable route work orders have been issued. Construction is under way on three work orders. Replacement of fiber communication OC3 cards with OC48 cards were upgraded on all existing 21 nodes during March 2011.
Substation Security	IPL has installed 21 security cameras at 10 substations.

5. Changes in approach

Changes in approach or aims and reasons for change. Significant changes to the objectives or scope require prior approval of Contracting Officer.

Change in Approach	Previous Approach	Reasons for Change	Approved by Contracting Officer?	Date of Approval
Home and Business Energy Management Systems	Planned to install 1,900 systems as part of IPL's demand side management (DSM) program.	IPL included HEMS/BEMS, the customer web portal and EV programs in its DSM case filed with the Indiana Utility Regulatory Commissions (IURC). Initially these were not supported by the Office of Utility Consumer Counselor (OUCC). IPL subsequently negotiated a settlement agreement with the OUCC to include the web portal and EV programs but eliminate the HEMS/BEMS program. IPL is in the process of evaluating alternatives that fit within the project scope to best utilize the budgeted dollars.	No	
Cyber Security	Completed Risk Assessment	IPL is reviewing resource requirements to accomplish implementation of vulnerability assessments and mitigation measures and considering revised project budget amounts.	No	

6. Actual or anticipated problems or delays and actions taken or planned to resolve them

Issue	Action to resolve	Completed or Planned?
Customer Energy Management Tools delay until Fall 2011	IPL understands the software functionality has been further delayed to Q1 in 2012 for energy only customers and Q2 2012 for demand metered customers. The project team is evaluating options to expedite this program offering.	Planned
Distribution Management System (DMS) delay due to significantly higher than expected capital and on-going costs.	IPL reviewed the DMS scope and is planning on a stand-alone DMS with only essential integration points. The plan is to have this functional during the second quarter of 2012.	Planned
CBD SCADA has experienced delays in 2011.	Resources have been consumed with infrastructure improvements for the Super Bowl in 2012. Work has been put on hold but will be completed within the grant period.	Planned

7. Changes in Consortium / Team Members

Report changes in consortium / teaming arrangements.

N/A

Recipient Report: Grant or Loan **Version: 1.6**

Prime Recipient

Reporting Information

Award Type*	Award Number*	Final Report*
Grant	OE0000273	N

Award Recipient Information

Recipient DUNS Number*	Recipient Account Number	Recipient Congressional District*
006938310		07

Award Information

Funding Agency Code*	Awarding Agency Code*	Award Date*
8900	8900	04/26/2010
Amount of Award*	**CFDA Number***	
$20,000,000.00	81.122	
Program Source (TAS)*	**Sub Account Number for Program Source (TAS)**	
89-0328		
Total Number of Sub Awards to Individuals*	**Total Amount of Sub Awards to Individuals***	
0.00	$0.00	
Total Number of Payments to Vendors less than $25,000/award*	**Total Amount of Payments to Vendors less than $25,000/award***	
95.00	$194,274.20	
Total Number of Sub Awards less than $25,000/award*	**Total Amount of Sub Awards less than $25,000/award***	
0.00	$0.00	

Award Description*

IPL Smart Energy Project includes Advanced Metering Infrastructure, Customer Systems, and Electric Distribution System Improvements to enable new ways for customers and IPL to save energy and reduce peak electrical demand, improve service reliability and improve efficiencies from remote access to equipment and reduced field visits. The AMI portion of the project will include approximately 6,400 demand meters, 4,000 energy-only meters and a new Meter Data Management System. The Customer Systems will include piloting electric vehicle charging to support about 200 vehicles, web-based customer energy management tools and customer engagement tools for customers to enroll in smart energy programs and "smart" rate analysis tools. Electric Distribution System upgrades focus on distribution automation and system monitoring including new Central Business District SCADA and Distribution Management Software systems to support the following devices with approximate quantities: Network Protectors (320), Feeder Fault Indicators (85), Feeder Relay Replacements (330), Recloser Installations (180), Capacitor Bank Control Replacements (1350), Load Tap Changer Control Replacements (100), RTU Replacements (8), Transformer On-line Monitoring (16).

Number of characters entered: 1351

Need Help Finding Award Information?

Browse the Full Listings by using the drop-down lists.

Agency Drop-Down List:	1200 - Department of Agriculture
Program Source (TAS) Drop-Down List:	12-0111 - USDA-Office of the Secretary of Agriculture-Agriculture Buildings and Facilities and Rental Payments

Know the code and want to check the name? Search by Code

Enter Agency Code:	1201
Agency Name:	Office of the Secretary of Agriculture
Enter Program Source (TAS) Code:	12-0111
Program Source (TAS) Name:	USDA-Office of the Secretary of Agriculture-Agriculture Buildings and Facilities and Rental Payments

Know the name and want to find the code? Search by Name

Enter Agency Name:	Department of Agriculture
Agency Code:	1200
Enter Program Source (TAS) Name:	USDA-Office of the Secretary of Agriculture-Agriculture Buildings and Facilities and Rental Payments
Program Source (TAS) Code:	12-0111

Project Information

Project Name or Project/Program Title*	Project Status*	Total Federal Amount ARRA Funds Received/Invoiced*
Smart Energy Project	Completed 50% or more	$11,774,273.00
Number of Jobs*	**Description of Jobs Created***	
16.76	Direct IPL and vendor manhours are reported in the following areas: Business Occupations, Computer-related Occupations, Construction, Electrical, and other Trades, Engineers Number of characters entered: 174	

Quarterly Activities/Project Description*

Q3 2011: AMI Communication equipment installation is 91 % complete with 35 of 35 meter data extraction access points, all 150 data relays and 38 of 47 distribution data extraction point E-bridge masters have been installed. AMI Demand Meters - 6,014 of the 6,400 (~94 %) demand meters were installed. AMI Energy Only Meters- 3,764 of the 4,000 (~94%) total energy only meters were installed. Forty (40) charging units are in service in fleet and home locations in Indianapolis. Four (4) public charging stations were installed. Recloser Installation - 141 or 79% of the work orders have been issued and 123 or 69% are installed. Feeder Relay Replacements - 166 Feeder relays have been replaced with new SEL relays which is 62 % of our 2 year goal. Capacitor Bank Control Replacements - 942 of the 1350 (~70%) new capacitor controls using the AMI communication infrastructure are in service. A total of 1030 have been programmed. Six fiber cable route work orders have been completed and construction has begun on three of them. IPL has installed 9 substation security cameras at 6 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

Number of characters entered: 1201

Activity Code (NAICS or NTEE-NPC)*

1	237130	2	
3		4	
5		6	
7		8	
9		10	

Total Federal Amount of ARRA Expenditure*	Total Federal ARRA Infrastructure Expenditure	Infrastructure Contact Name
$11,774,273.00	$11,774,273.00	Joan Soller, PE
Infrastructure Contact Email	**Infrastructure Contact Phone**	**Infrastructure Contact Phone Ext**
joan.soller@aes.com	(317) 261-5403	
Infrastructure Contact Street Address 1	**Infrastructure Contact Street Address 2**	**Infrastructure Contact Street Address 3**
One Monument Circle		
Infrastructure City	**Infrastructure State**	**Infrastructure ZIP Code+4**
Indianapolis	IN	462061595

Infrastructure Purpose and Rationale

Electrical distribution system improvements will support smart grid functionality including increased automation, service reliability improvements, enabling time varying rates and providing customer energy management tools.

Number of characters entered: 224

Need Help Finding an Activity, State, or Country Code?

Browse the Full Listing by using the drop-down list.

Activity Code Drop-Down List:	Z99 - NTEE - Unknown
State Drop-Down List:	AK - Alaska
Country Drop-Down List:	US - United States

Know the code and want to check the name? Search by Code

Enter Activity Code:	111110
Activity Name:	Soybean Farming
Enter State Code:	CA
State Name:	California
Enter Country Code:	US
Country Name:	United States

Know the name and want to find the code? Search by Name

Enter Activity Name:	Other Vegetable (except Potato) and Melon Farming
Activity Code:	111219
Enter State Name:	California
State Code:	CA
Enter Country Name:	United States
Country Code:	US

Primary Place of Performance

Street Address 1	Street Address 2	City*
One Monument Circle		Indianapolis
State*	**ZIP Code+4***	**Congressional District***
IN	462042936	07
Country*		
US		

Recipient Highly Compensated Officers

Prime Recipient Indication of Reporting Applicability*	#	Officer Name	Officer Compensation
No	1		
	2		
	3		
	4		
	5		

Recipient Report: Grant or Loan — **Version: 1.6**

Vendors

Reporting Information

Award Number*

OE0000273

No.	Subaward Number(*)	Vendor DUNS Number(*)	Vendor Name(*)	Vendor HQ ZIP Code+4(*)	Product and Service Description	Payment Amount
1			AEROVIRONMENT INC	910168406	Electric vehicle supply equipment and support	$102,957.30
2			BECKWITH ELECTRIC CO INC	337800276	Electrical equipment	$1,146,880.08
3			BROWNSTOWN ELECTRIC SUPPLY CO INC	472200312	Electrical services	$61,758.69
4			DEWPOINT INC	489115348	Electrical services	$364,547.38
5			DYONYX LP	772401027	Cyber security consulting	$16,991.48
6			ECOLOGIC ANALYTICS LLC	554251631	Meter data mangement software	$802,612.61
7			EKTRON INC	030631016	Web engagement sofware	$31,492.84
6			EMC CORP	017482209	Electrical equipment and services	$119,777.44
9			FEENEY WIRELESS LLC	974022982	communications support	$13,560.47
10			GE ENERGY SERVICES	303398402	Electrical equipment and services	$1,153,334.56
11			LANDIS+GYR INC	785572508	Meter vendor	$475,945.34
12			LOGICALIS INC	482671723	Electrical equipment and services	$25,786.30
13			MEADE ELECTRIC COMPANY INC	605253640	Electrical services	$32,365.69
14			MILLER-EADS CO INC	462052842	Electrical services	$54,975.45
15			RADIO CONTROL CENTRAL STATIONS INC	021847049	Software for capacitor controls	$24,130.88
16			RED HAWK	608033044	security equipment	$44,582.32
17			SCHWEITZER ENGINEERING LABS	991635603	security equipment	$170,508.37
18			SILVER SPRING NETWORKS INC	940633134	Advanced Metering Infrastructure equipment, software and services	$1,785,806.21
19			TESSCO	303682885	Electrical equipment and services	$112,633.48
20			UTILITIES INTERNATIONAL INC	606013327	Software and services	$177,235.68

Recipient Report: Grant or Loan **Version: 1.6**

Prime Recipient

Reporting Information		
Award Type*	**Award Number***	**Final Report***
Grant	OE0000273	N

Award Recipient Information		
Recipient DUNS Number*	**Recipient Account Number**	**Recipient Congressional District***
006938310		07

Award Information		
Funding Agency Code*	**Awarding Agency Code***	**Award Date***
8900	8900	04/26/2010
Amount of Award*	**CFDA Number***	
$20,000,000.00	81.122	
Program Source (TAS)*	**Sub Account Number for Program Source (TAS)**	
89-0328		
Total Number of Sub Awards to Individuals*	**Total Amount of Sub Awards to Individuals***	
0.00	$0.00	
Total Number of Payments to Vendors less than $25,000/award*	**Total Amount of Payments to Vendors less than $25,000/award***	
101.00	$202,637.48	
Total Number of Sub Awards less than $25,000/award*	**Total Amount of Sub Awards less than $25,000/award***	
0.00	$0.00	

Award Description*

IPL Smart Energy Project includes Advanced Metering Infrastructure, Customer Systems, and Electric Distribution System Improvements to enable new ways for customers and IPL to save energy and reduce peak electrical demand, improve service reliability and improve efficiencies from remote access to equipment and reduced field visits. The AMI portion of the project will include approximately 6,400 demand meters, 4,000 energy-only meters and a new Meter Data Management System. The Customer Systems will include piloting electric vehicle charging to support about 200 vehicles, web-based customer energy management tools and customer engagement tools for customers to enroll in smart energy programs and "smart" rate analysis tools. Electric Distribution System upgrades focus on distribution automation and system monitoring including new Central Business District SCADA and Distribution Management Software systems to support the following devices with approximate quantities: Network Protectors (320), Feeder Fault Indicators (85), Feeder Relay Replacements (330), Recloser Installations (180), Capacitor Bank Control Replacements (1350), Load Tap Changer Control Replacements (100), RTU Replacem

Number of characters entered: 1351

Need Help Finding Award Information?

Browse the Full Listings by using the drop-down lists.

Agency Drop-Down List:	1200 - Department of Agriculture
Program Source (TAS) Drop-Down List:	12-0111-USDA-Office of the Secretary of Agriculture-Agriculture Buildings and Facilities and Rental Payments

Know the code and want to check the name? Search by Code

Enter Agency Code:	1201
Agency Name:	Office of the Secretary of Agriculture
Enter Program Source (TAS) Code:	12-0111
Program Source (TAS) Name:	USDA-Office of the Secretary of Agriculture-Agriculture Buildings and Facilities and Rental Payments

Know the name and want to find the code? Search by Name

Enter Agency Name:	Department of Agriculture
Agency Code:	1200
Enter Program Source (TAS) Name:	USDA-Office of the Secretary of Agriculture-Agriculture Buildings and Facilities and Rental Payments
Program Source (TAS) Code:	12-0111

Project Information		
Project Name or Project/Program Title*	**Project Status***	**Total Federal Amount ARRA Funds Received/Invoiced***
Smart Energy Project	*Completed 50% or more*	$13,049,342.00
Number of Jobs*	**Description of Jobs Created***	
19.55	Direct IPL and vendor manhours are reported in the following areas: Business Occupations, Computer-related Occupations, Construction, Electrical, and other Trades, Engineers Number of characters entered: 174	

Quarterly Activities/Project Description*

Q4 2011: AMI Communication equipment installation is 100 % complete with all 35 meter data extraction access points, all 150 date relays and all 47 distribution data extraction point E-bridge masters installed. AMI Demand Meters - 8,014 of the 6,400 (~94 %) demand meters were installed. AMI Energy Only Meters- 3,764 of the 4,000 (~94%) total energy only meters were installed. Forty-seven (47) charging units are in service in fleet and home locations in Indianapolis. Fourteen (14) public charging stations are installed and operational. Recloser Installation - 183 or 92% of the work orders have been issued and 138 or 78% are installed. Feeder Relay Replacements - 178 Feeder relays have been replaced with new SEL relays which is 71 % of our 2 year goal. Capacitor Bank Control Replacements - 1200 of the 1350 (~89%) new capacitor controls using the AMI communication infrastructure are in service. A total of 1346 have been programmed. Seven fiber cable route work orders have been completed and construction has begun on three of them. IPL has installed 21 substation security cameras at 10 substations. These are monitored and controlled remotely at the 24 hour manned IPL Security Operation Center.

Number of characters entered: 1220

Activity Code (NAICS or NTEE-NPC)*

1	237130	2	
3		4	
5		6	
7		8	
9		10	

Total Federal Amount of ARRA Expenditure*	Total Federal ARRA Infrastructure Expenditure	Infrastructure Contact Name
$13,049,342.00	$13,049,342.00	Joan Soller, PE
Infrastructure Contact Email	**Infrastructure Contact Phone**	**Infrastructure Contact Phone Ext**
joan.soller@aes.com	(317) 261-5403	
Infrastructure Contact Street Address 1	**Infrastructure Contact Street Address 2**	**Infrastructure Contact Street Address 3**
One Monument Circle		
Infrastructure City	**Infrastructure State**	**Infrastructure ZIP Code+4**
Indianapolis	IN	462061595

Infrastructure Purpose and Rationale

Electrical distribution system improvements will support smart grid functionality including increased automation, service reliability improvements, enabling time varying rates and providing customer energy management tools.

Number of characters entered: 224

Need Help Finding an Activity, State, or Country Code?

Browse the Full Listing by using the drop-down list.

Activity Code Drop-Down List:	Z99 - NTEE - Unknown
State Drop-Down List:	AK - Alaska
Country Drop-Down List:	US - United States

Know the code and want to check the name? Search by Code

Enter Activity Code:	111110
Activity Name:	Soybean Farming
Enter State Code:	CA
State Name:	California
Enter Country Code:	US
Country Name:	United States

Know the name and want to find the code? Search by Name

Enter Activity Name:	Other Vegetable (except Potato) and Melon Farming
Activity Code:	111219
Enter State Name:	California
State Code:	CA
Enter Country Name:	United States
Country Code:	US

Primary Place of Performance

Street Address 1	Street Address 2	City*
One Monument Circle		Indianapolis
State*	**ZIP Code+4***	**Congressional District***
IN	462042936	07
Country*		
US		

Recipient Highly Compensated Officers

Prime Recipient Indication of Reporting Applicability*	#	Officer Name	Officer Compensation
No	1		
	2		
	3		
	4		
	5		

Recipient Report: Grant or Loan	Version: 1.6

Vendors

Reporting Information
Award Number*
OE0000273

No.	Subaward Number(*)	Vendor DUNS Number(*)	Vendor Name(*)	Vendor HQ ZIP Code+4(*)	Product and Service Description	Payment Amount
1			AEROVIRONMENT INC	910168406	Electric vehicle supply equipment and support	$102,957.30
2			BECKWITH ELECTRIC CO INC	337800276	Electrical equipment	$1,146,880.08
3			BROWNSTOWN ELECTRIC SUPPLY CO INC	472200312	Electrical services	$61,758.69
4			DEWPOINT INC	489115348	Electrical services	$364,547.38
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6			ECOLOGIC ANALYTICS LLC	554251631	Meter data mangement software	$802,612.61
7			EKTRON INC	030631016	Web engagement sofware	$31,492.84
8			EMC CORP	017482209	Electrical equipment and services	$119,777.44
9			FEENEY WIRELESS LLC	974022982	communications support	$13,560.47
10			GE ENERGY SERVICES	303398402	Electrical equipment and services	$1,153,334.56
11			LANDIS+GYR INC	785572508	Meter vendor	$475,945.34
12			LOGICALIS INC	482671723	Electrical equipment and services	$25,786.30
13			MEADE ELECTRIC COMPANY INC	605253640	Electrical services	$32,365.69
14			MILLER-EADS CO INC	462052842	Electrical services	$54,975.45
15			RADIO CONTROL CENTRAL STATIONS INC	021847049	Software for capacitor controls	$24,130.88
16			RED HAWK	608033044	security equipment	$44,582.32
17			SCHWEITZER ENGINEERING LABS	991635603	security equipment	$170,508.37
18			SILVER SPRING NETWORKS INC	940633134	Advanced Metering Infrastructure equipment , software and services	$1,785,806.21
19			TESSCO	303682885	Electrical equipment and services	$112,633.48
20			UTILITIES INTERNATIONAL INC	606013327	Software and services	$177,235.68