

### Connect With Us

Search

Go

Recovery.gov is the U.S. government's official website that provides easy access to data related to Recovery Act spending and allows for the reporting of potential fraud, waste, and abuse.

Advanced Data Search

Looking For ? HOME ABOUT ACCOUNTABILITY WHERE IS THE MONEY GOING? OPPORTUNITIES NEWS FAQs & RESOURCES CONTACT US SITE INDEX

Home > Where is The Money Going? > Recipient and Agency Data > RecipientProjectSummary508

Overview of Funding

Recipient and Agency Data

Projects Map

Recipient Profile Search

State / Territory Summaries

Quarterly Summary

Jobs Summary

Agency Profiles

Agency Funding by State

Non-Competitive and Non-Fixed-Price

Agency Data Map

Recovery Explorer

Map Gallery

## GRANTS - AWARD SUMMARY

### ILLINOIS INSTITUTE OF TECHNOLOGY

The Illinois Institute of Technology (IIT), in collaboration with Exelon, the Galvin Electricity Initiative (GEI), and other key partners (the team) propose to develop, demonstrate, promote, and commercialize a system and supporting technologies that will achieve "Perfect Power" at the main campus of IIT. A "Perfect Power" system, as defined by GEI, is a system that cannot fail to meet the electric needs of the individual end-user. Different types of end-users will have different needs and a Perfect Power system will have the flexibility to supply the power required by each type without fail. This Perfect Power Prototype design is replicable to campuses, complexes, developments, investor owned, and municipal electric systems. The IIT project will demonstrate a new regulatory model for improving electricity service, one where the consumer and utility work together to lower cost, improve reliability, improve energy efficiency, and lower carbon emission. IIT is fortunate to be located in a restructured electricity market where the Independent System Operator provides real time pricing, day ahead hourly markets, demand response payments, capacity payments, and access to competitive wholesale electricity markets. These new markets provide IIT with the economic incentive to invest in demand reduction and energy efficiency. In addition, IIT owns the site distribution system thereby saving money on utility distribution charges. Essentially, IIT can control and invest the distribution charge savings into site distribution system improvements. In contrast, some cities in Illinois whose residents pay full distribution system charges have not had any improvements to the local distribution systems in 50 or more years. The overall objectives of the project include:

1. The achievement of system-wide Perfect Power for IIT's electric power conditions and demonstration of its technological viability through the implementation of distributed energy (DE) and advanced sensing, switching, feeder configuration, and controls.
2. 50% peak demand reduction capability when called upon by Exelon/PJM Interconnection (PJM).
3. 20% permanent peak demand reduction from the 2007 annual peak demand.
4. Deferral of Commonwealth Edison (ComEd) planned substation upgrades due to the demand reduction achieved.
5. Demonstration of the economic value of Perfect Power, specifically the avoidance of outage costs, investment avoidance, and the introduction of significant savings and revenue from providing ancillary services in a restructured electricity market.
6. A design that can be replicated to any campus or community.
7. Promote the Perfect Power prototype. The Perfect Power Implementation plan is based on a

Share this Page

## Feedback



Provide feedback or comments on the performance and progress of awards.

Submit Feedback/Comments

## See Where the Money Is Going



» Go to the Recipient Reported Data Map

7. Promote the Perfect Power prototype. The Perfect Power implementation plan is based on a Failure Modes and Effects Analysis for the campus distribution system and the results of the Galvin Perfect Power research. The deployed Perfect Power model is capable of providing 10MW of demand reduction within 30 minutes of notification by ComEd or the PJM. This includes 5MW of firm demand reduction due to redundant distributed resource and distributed generation capability. This will allow ComEd to defer \$2,000,000 in substation upgrades per their support letter. The proposed project provides a unique opportunity to demonstrate the economic benefits of demand response by leveraging PJM's day ahead and real time markets. The proposed project reveals significant cost savings and revenue production opportunities by leveraging PJM programs. IIT with one of the few Power Engineering curriculum programs in the country and located near Chicago's Midway airport provides an ideal location for continued refinement and development of advanced grid systems and access to industry, utilities, and regulators for demonstration purposes. Through the Galvin Electricity Initiative the results, benefits, and impacts will be communicated to utilities, policy makers, and end users across the United States.

[Clarification Of Codes](#)

Choose a quarter and click "Go."

October 1 - December 31, 2012



Go

## AWARD OVERVIEW

Award Number	DE-FC26-08NT02875	Funding Agency	Department of Energy
Total Award Amount	\$5,405,583	Project Location - City	Chicago
Award Date	07/16/2009	Project Location - State	IL
Project Status	More than 50% Completed	Project Location - Zip	60616-3792
Jobs Reported	4.00	Congressional District	01
Project Location - Country	US		

## RECIPIENT INFORMATION (GRANTS)

Recipient Name	ILLINOIS INSTITUTE OF TECHNOLOGY
Recipient DUNS Number	012084124

Recipient DUNS Number	042004404
Recipient Address	3300 S FEDERAL ST RM301
Recipient City	CHICAGO
Recipient State	Illinois
Recipient Zip	60616-3732
Recipient Congressional District	01
Recipient Country	USA
Required to Report Top 5 Highly Compensated Officials	No

## PROJECTS AND JOBS INFORMATION

Project Title	The Perfect Prototype for the Illinois Institute of Technology
Project Status	More than 50% Completed
Final Project Report Submitted	No
Project Activities Description	Colleges, Universities, and Professional Schools
Quarterly Activities/Project Description	Held the Great Lakes Symposium on Smart Grid and New Energy Economy on the IIT Main Campus in Chicago. This project includes two closely related components: demonstration and research. Both components have been pursued according to the original schedules. Project Demonstration Updates 1. Installation of battery storage system completed. 2. Installation of electric vehicle charging stations completed. 3. Installation of PV panels completed. Project Research Updates 1. Working on distributed power flow. 2. Working on IPPSC Version 2. 3. Working on the integration of Zigbee sensors with the Siemens building controller.
Jobs Created	4.00
Description of Jobs Created	Four (4) full-time research scholars working on the following research tasks: 1. Develop an advanced system for sensing distribution system conditions and automatically reconfiguring the system to respond to disturbances. 2. Develop an advanced distribution fault detection and mitigation system that is sensitive and reliable. 3. Develop the Intelligent Perfect Power Control Controller (IPSC) and associated hardware.

System Controller (IPPSC), an advanced distribution controller with features for Perfect Power adapted to the specifics of the IIT campus. 4. Develop a ZigBee wireless infrastructure for the IIT campus particularly suited for demand response control.

## **PURCHASER INFORMATION (GRANTS)**

Contracting Office ID	Not Reported
Contracting Office Name	Not Available
Contracting Office Region	Not Available
TAS Major Program	89-0328

## **AWARD INFORMATION**

Award Date	07/16/2009
Award Number	DE-FC26-08NT02875
Order Number	
Award Type	Grants
Funding Agency ID	89
Funding Agency Name	Department of Energy
Funding Office Name	Not Available
Awarding Agency ID	89
Awarding Agency Name	Department of Energy
Amount of Award	\$5,405,583
Funds Invoiced/Received	\$2,963,696
Expenditure Amount	\$3,114,269
Infrastructure Expenditure Amount	\$0
Infrastructure Purpose and Rationale	Not Reported
Infrastructure Point of Contact Name	Nancy Ptak
Infrastructure Point of Contact Email	nptak@iit.edu
Infrastructure Point of Contact Phone	(312) 567-3311
Infrastructure Point of Contact Address	3300 S. Federal

Infrastructure Point of Contact City	Chicago
Infrastructure Point of Contact State	IL
Infrastructure Point of Contact Zip	60616-3792

### **PRODUCT OR SERVICE INFORMATION (GRANTS)**

Primary Activity Code	611310
Activity Description	Colleges, Universities, and Professional Schools

### **SUB-AWARDS INFORMATION**

Sub-awards to Organizations	2
Sub-award Amounts to Organizations	\$1,015,016
Sub-Awards to Individuals	0
Sub-Award Amounts to Individuals	\$0
Number of Sub-awards less than \$25,000/award	0
Amount of Sub-awards less than \$25,000/award	\$0
Number of payments to vendors greater than \$25,000	2
Total Amount of payments to vendors greater than \$25,000/award	\$1,210,039
Number of payments to vendors less than \$25,000/award	73
Total Amount of payments to vendors less than \$25,000/award	\$1,436,465

### **SUB-AWARD TRANSACTIONS**

Sub-Award SA385-0909-5712 - INTELLIGENT POWER SOLUTIONS, LLC

Sub-Award Amount	\$375,000
Sub-Award Date	08/31/2009
Sub-Awards Disbursed	\$340,963.55

Project Location - City	Northbrook
Project Location - State	IL
Project Location - Zip Code	60062-2841
Project Location - Congressional District	10
Sub-Recipient DUNS Number	831385963
Sub-Recipient Address	707 SKOKIE BLVD STE 600
Sub-Recipient City	NORTHBROOK
Sub-Recipient State	Illinois
Sub-Recipient Zip Code	60062-2841
Sub-Recipient Congressional District	10
Required To Report Top 5 Highly Compensated Officials	No

**Sub-Award SA370-0208-5712 - S & C ELECTRIC COMPANY**

Sub-Award Amount	\$640,016
Sub-Award Date	02/23/2009
Sub-Awards Disbursed	\$430,809.97
Project Location - City	Chicago
Project Location - State	IL
Project Location - Zip Code	60626-3997
Project Location - Congressional District	09
Sub-Recipient DUNS Number	005068895
Sub-Recipient Address	6601 N RIDGE BLVD
Sub-Recipient City	CHICAGO
Sub-Recipient State	Illinois
Sub-Recipient Zip Code	60626-3904
Sub-Recipient Congressional District	09
Required To Report Top 5 Highly Compensated Officials	No

**VENDOR TRANSACTIONS**

**Bulley & Andrews - Award Number DE-FC26-08NT02875 - Bulley & Andrews**

<b>Award Number</b>	<b>DE-FC26-08NT02875</b>
---------------------	--------------------------

Sub-Award Number	N/A
Vendor DUNS Number	002815017
Vendor HQ Zip Code + 4	60622-1163
Vendor Name	Bulley & Andrews
Product and Service Description	Install HDRS Loop 1 & 2 for CP09-005
Payment Amount	\$1,210,039

[S & C Electric Company - Award Number DE-FC26-08NT02875 - S & C Electric Company](#)

Award Number	DE-FC26-08NT02875
Sub-Award Number	N/A
Vendor DUNS Number	005068895
Vendor HQ Zip Code + 4	60626-3904
Vendor Name	S & C Electric Company
Product and Service Description	Communications interface
Payment Amount	\$0

**PROJECT LOCATION DETAIL**

Latitude, Longitude	41° 50' 0", -87° 37' 43"
Congressional District	01
Address 1	3300 S. Federal Street
Address 2	ECE
City	Chicago
County	Cook
State	IL
Zip	60616-3792

**RECOVERY.GOV & THE BOARD**

[Read The Recovery Act](#)

**LOOKING FOR...**

[Projects In My Neighborhood](#)

**SPECIAL FEATURES**

[Edward Tufte Lights On Map](#)

**LOOK CLOSER AT RECOVERY DATA**

[Create Charts And Graphs](#)

**ABOUT THIS SITE**

[Accessibility](#)