



Ameren Illinois 2nd Quarter 2013 Smart Grid Test Bed Report

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Executive Summary

Ameren Illinois Company (Ameren Illinois) submits the following Smart Grid Test Bed Quarterly Report in accordance with the Energy Infrastructure Modernization Act, (EIMA) 220 ILCS 5/16-108.5 et seq. (“the Act”). This report provides updates on the steps Ameren Illinois has taken to implement its test bed plan during the second quarter of 2013. The report includes information on activities Ameren Illinois has undertaken to design and construct its “primary” test bed location, discussions with potential test bed customers, and on the testing application process.

Test Bed Cost and Construction Status

Status

The completion status for the “primary” Technology Applications Center (TAC) location is as follows:

Engineering Design = 100%
Site Survey = 100%

Site Construction = 98%
Equipment Purchases = 99%

Actual Costs

Provided below are the actual costs incurred through June 30, 2013, for the primary test bed location:

Work Order	Description	Cost
J00BM	Design and construction of substation and control building	\$2,723,336
J00LR	Design and construction of distribution feeders on “primary” TAC site	\$174,378
J022S- J0242	Acquisition of testing infrastructure tools	\$226,364
J00QT	Network Communications	\$118,247
J023B	69KV Line Extension to TAC site	\$66,919
	Total Actual Costs for 2012-2013	\$3,309,244

Estimated - Timeline/Schedule – Primary TAC location

- Site Prep & Foundations: Start - 10/10/12 Finish – 01/15/2013
- U/G Infrastructure: Start - 01/15/2013 Finish – 08/30/2013
- Overhead Infrastructure: Start - 03/01/2013 Finish – 08/30/2013
- Control Building: Start – 01/15/2013 Finish – 06/17/2013

Notes:

1. In-service date of “primary” TAC location June 17, 2013. Substation was energized on this date. Official opening of Technology Applications Center is scheduled for August 21, 2013.
2. In-service date of “secondary” TAC location was November 15, 2012.
3. Final Distribution system modifications will be completed after Ameren Illinois receives executed land-use agreement from the University of Illinois Urbana – Champaign.

Test Bed Interest

- The first formal applicant to the Ameren Illinois Technology Applications Center (major utility equipment provider) did not submit a revised application during this reporting time frame. Ameren Illinois is still awaiting the applicant’s revised application document.
- Ameren Illinois met with representatives from the University of Urbana – Champaign (UIUC) to discuss the possibility of having UIUC researchers review Ameren Illinois Conservation Voltage Reduction (CVR) Pilot test results. The result of this contact is that UIUC researchers are interested in performing data analysis work on Ameren Illinois CVR data and arrangements are being made to provide the data for UIUC analysis.

Smart Grid Test Bed Plan Success

Ameren Illinois' commitment to the successful implementation of its Smart Grid Test Bed plan is strong. However, as set forth above, Ameren Illinois reserves the right to modify, amend or alter this plan, as necessary and consistent with the law, to meet the requirements and objectives of the EIMA and other related provisions. Additionally, Ameren Illinois reserves its right to terminate this plan.