Outline for Metrics and Benefits Reporting Plans

Smart Grid Demonstration Program (SGDP) and Renewable and Distributed Systems Integration (RDSI) Program

March 30, 2010

Smart Grid Investment Grant Program

Outline for SGIG Metrics and Benefits Reporting Plans

1.0 Introduction

The Introduction should provide an overview of the Smart Grid Investment Grant (SGIG) project. It should contain:

- A statement of the type of project that is being pursued (i.e., AMI, Customer Systems, Electric Distribution System, Electric Transmission System, Integrated-Crosscutting, or Equipment Manufacturing); and
- An explanation of the main objectives of the project and how the assets planned to be installed will help meet those objectives
- A description of the benefits expected from the project.

2.0 Key Asset Deployment Schedule

Identify and characterize key deployment milestones for the Smart Grid assets that are part of the project. This should include:

- Key asset deployment milestones;
- The periods during which 1) baseline data will be gathered and analyzed and 2) post-deployment data will be gathered and analyzed; and
- Milestones that relate to key decisions (e.g., approval by the Public Utility Commission or Board).

3.0 Metrics and Benefits

Identify each of the Build and Impact metrics that will be reported. The metrics will apply to the total project supported both by DOE and by cost-shared funds. This section should also contain explanations of the data collection, aggregation and analytical methods that will be used to determine these metrics and the associated benefits achieved by the project. Provide a sufficiently detailed description for how metrics information will be developed. Details should include:

- A clear indication of all Build and Impact metrics that will be reported at both the project- and system-level;
- A description of the types of data and their frequency, as well as a description of the calculations, used to derive build and impact metrics;
- Sufficient information so that Build metrics can be correlated to the numbers and types of customers (e.g., residential, commercial, industrial), the extent of service area covered, and how funding is allocated against equipment, as well as with other related Build metrics (e.g., type of dynamic pricing program correlated with metering features);
- An accounting of the monetary investments with respect to assets being deployed[1];
- A description of the number and types of jobs created by the project;[2]

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This information will be reported quarterly with the build metrics through the SmartGrid.gov website, and is 1 separate from the invoices and cost information that will be provided as part of ARRA reporting. Monetary 1 investments reported as part of the build metrics should be consistent with those submitted elsewhere. 1

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- How metrics are related to the benefits that the project will demonstrate and report; and
- Recommended approaches for benefits quantification, and to what extent the recipient will develop benefits estimates.

4.0 Baseline Data

Explain how baseline information for each of the metrics described in Section 3.0 will be developed, including sources of data and relevant calculations or analysis. This includes a discussion of how the value of each metric is to be estimated at project commencement, and how the baseline or forecasted value of each metric, had no SGIG award been made, is to be estimated. The discussion should explain how the baseline data for each relevant Build and Impact metric will be determined, including the basis and methods that will be used to determine the values over time (e.g. application of normalization, averaging, or forecasting approaches).

5.0 Market Place Innovation Reporting

Explain how marketplace innovation that results from the project will be determined, documented and reported.

6.0 Collaboration and Interaction

Present approaches for collaboration between DOE and the Recipient (including representative organizations) to discuss key issues and share valuable information derived from the project.

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[2] Jobs created and retained as a result of SGIG funding (including Federal funds and non-federal cost-shared funds) r should be reported quarterly as full time equivalents (FTEs) with build metrics to the SmartGrid.gov website. Job reporting categories include: Managers; Engineers; Computer-related Occupations; Environmental and Social r Scientists; Construction, Electrical, and Other Trades; Analysts; Business Occupations; Recording, Scheduling, and r Computer Operator Occupations. Integrated-Crosscutting projects should report jobs by category and by smart r grid project category (i.e., Customer systems, AMr, Electric Distribution, Electric Transmission, and Equipment r Manufacturing). Jobs reporting for ARRA purposes will be done separately. Total FTEs reported with the Build r metrics should be consistent with the job data reported elsewhere. r