

Attachment C

Exhibit A Statement of Work

DG Integrated Data System Operation and Support
(Contractor)
Contract Number (xxxxx)

Definitions

Contractor

Contractor's Name and Address

CDH Energy

CDH Energy Corporation
2695 Bingley Road
Cazenovia, NY 13035
(315) 655-1063

DG Integrated Data System

The DG system performance data acceptance, analysis and presentation system developed by CDH Energy under NYSERDA Agreement 8621 providing automated data submission from the DG Sites on a daily basis, automated data quality checking, database storage of submitted data, automated data analysis, public website presentation of performance data and results of analyses, public access to the performance data including tools for manipulation of data, and public access to reports and Fact Sheets related to the DG Sites, or as modified by the Contractor under the direction of NYSERDA's project manager.

DG Site

A location or facility where a NYSERDA funded distributed generation or combined heat and power or battery electric storage project is being undertaken.

Site Owner

The owner or operator of a DG site.

System Developer

An entity contracted by a Site Owner to oversee the design and installation of the DG system at a DG Site.

Data Collector

The entity responsible for the installation and operation of a monitoring and data collection system for a DG system at a DG Site, which may be either the Site Owner, System Developer or a third party contracted by either the Site Owner or

System Developer.

Software

Computer programs written in a computer language designed to perform an action.

Software Environment

The collection of publicly available Software required to support the DG Integrated Data System, consisting of commercially available proprietary Software or open source Software, or both.

Hardware Environment

The collection of computer hardware, computer services, digital communication hardware and digital communication services required to support the Software Environment and the DG Integrated Data System.

DG Integrated Data System Software

Software developed and/or modified by the Contractor to perform the functions of the DG Integrated Data System either under Agreement 8621 or this work.

DG Integrated Data System Files

All files used to support the DG Integrated Data System, including, but not limited to, DG Integrated Data System Software, Database Files, and log files, but excluding files which are part of the Software Environment.

Performance Data

Data related to the performance of a DG System, including, but not limited to, 15 minute interval data as defined by the Monitoring Plan, DG Site information, fact sheets, and performance analysis reports.

Database Files

Computer files containing data managed by database software, including, but not limited to, Performance Data.

Full-data Site (Electric & Thermal)

A DG Site where thermal performance data is to be collected as well as electric performance data in order to determine the overall efficiency of the DG system.

Partial-data Site (Electric Only)

A DG Site where thermal performance data will not be collected and only the electric performance of the system will be determined.

New York Generation Attributes Tracking System (NYGATS)

An online certificate-tracking system that records information about electricity generated, imported, and consumed within New York State. Using unique serial numbers, it can issue, track, and manage energy attribute certificates and renewable energy credits (RECs).

DG Integrated Data System Specification

The Contractor shall maintain, further develop and operate a web-based system to acquire, store, analyze, and present Performance Data and results from NYSERDA's distributed generation, combined heat and power, and battery electric storage projects that, at a minimum, shall meet the following specifications:

- Provide an automated means for receipt, processing and storage of 15 minute interval data from data collection systems at DG Sites, either directly or through Data Collectors;
- Allow Site Owners/Data Collectors to enter DG Site specific project characterization data and information using an easy to use, ADA compliant, password protected, web-based interface over the internet;
- Provide automated data validity checking and flagging of questionable data;
- Provide adequate security to protect against unauthorized access to the web server, database server or database;
- Provide automatically generated DG system performance reports as web pages;
- Website design shall comply with NYSERDA and New York State Office For Technology (NYS-OFT) standards with a look and feel consistent with NYSERDA's home website;
- Website domain name shall be owned by NYSERDA and approved by NYSERDA's Project Manager;
- Provide a system that maximizes technology transfer benefits;
- Provide public access to all non-confidential results identified by NYSERDA's Project Manager;
- Data acquisition and analysis conforming to industry standards;
- Data acquisition from DG Sites as identified by NYSERDA's Project Manager;
- Provide online documentation and help features to assist users;
- Fully document all software and procedures developed under this work. Software documentation shall comply with standard industry practices as approved by NYSERDA's Project Manager;
- Provide telephone and e-mail user support for DG Site Owners/Data Collectors;
- Further develop and maintain the website, data acquisition, database and analysis software in such a way as to permit easy conversion to NYSERDA's standard web server/database server environment as identified by NYSERDA's Project Manager;
- The web and database server(s) shall be hosted, for the period of this Agreement, at secure location(s) with redundant power supplies and redundant Internet access. The database server shall utilize a RAID (Redundant Array of Inexpensive Disks) hard drive system for automatic, real-time data backup (RAID

5 or 6), with automatic notification of a drive failure, and with at least one live stand-by drive for automatic reconstruction of the RAID in the event of a drive failure.

- The Contractor shall develop and implement an automated backup system which shall, at a minimum, provide for, daily incremental backups of Database Files, weekly full backups of Database Files, monthly full backups of all DG Integrated Data System files, and the automated storage of all backup files in at least two (2) different physical locations.
- The Contractor shall send a copy of the most recent full backup of the DG Integrated Data System Files to NYSERDA's project manager at least once every three (3) months, starting with the first such backup, in a format approved by NYSERDA's Project Manager.
- Since data collected, analyzed and presented by the DG Integrated Data System may be used as the basis of production payments for many of the DG projects, the Contractor shall implement a data quality assurance/quality control (QA/QC) protocol. This protocol shall include: the automated and manual inspection of received data and data posted to the database and website for completeness and reasonableness; procedures for contacting appropriate persons and/or entities to inform them of identified problem(s); and follow-up procedures to verify timely resolution.
- The Contractor shall maintain a change-log or version control system to record and track all changes and modifications to the DG Integrated Data System Software. The Contractor shall also record all changes to the Software Environment and maintain an up-to-date list of the current version of each software package or program used in the Software Environment. The Contractor shall make such records available to NYSERDA's Project Manager upon request.
- The Contractor shall maintain the security and performance of the Software Environment by installing updates and patches in a timely fashion. The Contractor shall also fix bugs in the DG Integrated Data System in a timely fashion.
- The Contractor shall make minor modifications to the DG Integrated Data System at the direction of NYSERDA's Project Manager.
- The Contractor shall make improvements to the Hardware and Software Environments as required to accommodate growth in data storage needs and DG Integrated Data System user loads.
- The Contractor shall not be responsible for providing hosting of the web or database server(s) beyond the term of this Agreement or modifications to this Agreement.
- Any web-based information and applications development, or programming delivered pursuant to the contract or procurement, will comply with New York State Enterprise IT Policy NYS-P08-005, Accessibility of Web-Based Information and Applications as such policy may be amended, modified or superseded, which requires that state agency web-based information and applications are accessible to persons with disabilities. Web-based information and applications must conform to New York State Enterprise IT Policy NYS-P08-005 as determined by quality assurance testing. Such quality assurance testing will be

conducted by NYSERDA and the results of such testing must be satisfactory to NYSERDA before web-based information and applications will be considered a qualified deliverable under the contract or procurement.

Project Tasks

Task 1: Project Management/Reporting

The Contractor shall be responsible for: ensuring that the overall project goals are met and appropriate resources are allocated to tasks; controlling the project budget and adhering to the project schedule; scheduling and conducting periodic review meetings with NYSERDA's Project Manager; and providing all project reporting to NYSERDA. Regardless of subcontracting arrangements, the Contractor is solely responsible for the completion of the work and the successful outcome of the project.

Monthly Activity Reports - The Contractor shall submit monthly Activity Reports to NYSERDA's Project Manager within two (2) weeks following the end of each month. Activity Reports shall be in a letter format, may be submitted via e-mail, and shall include the following information in the order indicated, with appropriate explanation and discussion:

- Title of project;
- Reporting period;
- Number of active DG Sites monitored throughout the month, by funding code;
- Number of new active DG Sites added during the month, by funding code;
- Number of DG Sites that have become inactive during the month, by funding code;
- A list of all DG Sites active at the end of the month, indicating funding code for each;
- List of QA/QC problems identified and corrected;
- List of QA/QC problems identified and not yet corrected;
- List of any changes made to the Hardware Environment, Software Environment or DG Integrated Data System Software, indicating the reasons for the change;
- Progress made towards major changes to the DG Integrated Data System, if any; and
- The number of visitors and pages supplied during the month.

The Contractor shall immediately notify NYSERDA's Project Manager of any significant problems. The Contractor shall periodically provide information to assist NYSERDA's Project Manager in documenting project impacts relative to the project's original technology transfer goals.

Meetings – In addition to any meetings specified below, the Contractor, at a minimum, shall attend the following meetings to be held at NYSERDA's Albany offices, or at a location approved by NYSERDA's project manager: Kickoff Meeting, Draft Data Monitoring Specification review meeting, DG Integrated Data System upgrade meeting, and a Wrap-up Meeting.

Deliverable: Monthly Activity Reports

Transition and Startup Tasks 2 and 3

Task 2: Transition Plan

The Contractor shall work with CDH Energy to develop a plan (the Transition Plan) for moving the DG Integrated Data System from CDH Energy's servers to the Contractor's servers, modifying the data acquisition systems used by the DG Sites so that the automated daily transfers are redirected to the Contractor's servers in an orderly fashion, and synchronizing databases so that both the Contractor's version of the DG Integrated Data System and CDH Energy's version of the DG Integrated Data System report similar results to user requests during the transition. The Contractor shall submit the Transition Plan to NYSERDA's Project Manager for review and comment.

Deliverable: Transition Plan

Task 3: Transition and Startup

The Contractor shall obtain all necessary computer hardware, software and/or computer services, and communication services required to support the Software Environment and the DG Integrated Data System. The Contractor shall work with CDH Energy to implement the Transition Plan developed under Task 2 so that the Contractor has a fully functioning DG Integrated Data System with all DG Sites reporting daily Performance Data. The Contractor shall modify the DG Integrated Data System to support the following new features:

**** modifications to the DG Integrated Data System proposed by the Contractor in its proposal will be included here****

Transition and Startup Reporting: During the Transition and Startup period, the Contractor shall submit to NYSERDA's Project Manager weekly Transition and Startup Reports which shall include the current status of the transition, the status of all software changes to the DG Integrated Data System, the number of DG Sites currently providing data to the Contractor, and any problems that have developed and suggestions on how to resolve them.

Deliverables: Weekly Transition and Startup Reports

Fully Functioning DG Integrated Data System including new features

NOTE: The Contractor shall NOT allow its version of the DG Integrated Data System to be available to the public at large ("public roll-out") without prior approval of NYSERDA's Project Manager.

Documentation and System Improvement Tasks 4 and 5

Task 4: Update Monitoring and Data Collection Standard

The Contractor shall update the Monitoring and Data Collection Standard previously developed by CDH Energy Corp. under Agreement 8621 to reflect changes in industry standard data collection techniques and best practices. The Contractor shall submit a draft of the updated Monitoring and Data Collection Standard to NYSERDA's Project Manager for review and comment. The Contractor shall then prepare a final Monitoring and Data Collection Standard incorporating such comments. Copies of the final updated Monitoring and Data Collection Standard shall be submitted to NYSERDA's Project Manager and incorporated into the DG Integrated Data System for public access in digital formats approved by NYSERDA's Project Manager.

Deliverables:

- Draft updated Monitoring and Data Collection Standard
- Final updated Monitoring and Data Collection Standard

Task 5: Upgrading and Improving the DG Integrated Data System

The Contractor shall perform an analysis of the current DG Integrated Data System and identify areas of possible upgrade and improvement with a goal of improving the system's functionality and usefulness. Based on this analysis, or as otherwise directed by NYSERDA's Project Manager, the Contractor shall develop a draft DG Integrated Data System upgrade plan including an estimate for the time and cost of such upgrades and improvements. The Contractor shall present the proposed upgrade plan to NYSERDA staff at a DG Integrated Data System Upgrade Meeting to be held at a time and place approved by NYSERDA's project manager. Based on comments made at the DG Integrated Data System Upgrade Meeting, the Contractor shall prepare, and submit to NYSERDA's Project Manager for approval, a detailed final upgrade plan identifying all DG Integrated Data System changes to be made and the cost of such changes. Upon receipt of a written notice to proceed from NYSERDA's Project Manager, the Contractor shall implement the approved upgrade plan.

Deliverables:

- Draft upgrade plan
- Final upgrade plan
- Upgraded DG Integrated Data System

DG Integrated Data System Operation Tasks 6 and 7

Task 6: System Operation and Maintenance

The Contractor shall operate the DG Integrated Data System throughout the term of this Agreement during which time the Contractor shall provide all user support, data validity checking and verification as per the QA/QC protocol, system maintenance and upgrades, and data backups as required. The Contractor shall modify the system as directed by NYSERDA's Project Manager to provide compliance with industry standards for DG data collection, analysis and reporting, and to maximize usability and technology transfer benefits. The Contractor shall maintain the database content for accuracy and

shall provide timely database updates. The Contractor shall assure to the best of its ability the quality and validity of the data received and presented.

Task 7: Adding New Project Sites

For each new Full-data Site, the Contractor shall assist the Data Collector to develop a DG site/project specific monitoring plan that meets the data collection requirements specified in the Monitoring and Data Collection Standard developed by CDH Energy and as updated under Task 4, or as modified by NYSERDA's Project Manager, and the Contractor shall notify NYSERDA's Project Manager when such monitoring plan has been developed. The Contractor shall work with the Data Collector to implement a system to automatically transfer DG Site operational data to the DG Integrated Data System daily in a consistent format. The Contractor shall **NOT** be responsible for the installation or maintenance of hardware installed by others or obtaining communications services at the DG Site. The Contractor shall work with the Site Owner and/or System Developer to develop a Fact Sheet for the DG system which shall describe the DG Site and the DG system, including at least one photograph of the DG Site and one photograph or drawing of the DG system, and provide summary cost and performance information. The Contractor shall incorporate the DG Site information and Fact Sheet into the DG Integrated Data System and assure that the data transfer, analysis and presentation are operating properly.

For each new Partial-data Site, the Contractor shall work with the Data Collector to implement a system to automatically transfer DG Site operational data to the DG Integrated Data System daily in a consistent format. The Contractor shall **NOT** be responsible for the installation or maintenance of hardware installed by others or obtaining communications services at the DG Site. The Contractor shall work with the Site Owner and/or System Developer to incorporate the DG Site information into the DG Integrated Data System and assure that the data transfer, analysis and presentation are operating properly.

Other Support

Task 8: Other Program Support Activities

NYSERDA's Project Manager may request that the Contractor provide technical support to the Program related to, but not included in the Tasks above. Tasks such as development, installation, and service of data collection and monitoring systems to support the DG systems described herein may be included in this task. Services provided under this Task will be defined by written Task Work Orders (TWO). The procedure for all TWO's shall be as follows:

(a) NYSERDA identifies each project and service.

(b) NYSERDA's Project Manager shall issue a request to the Contractor to submit a proposed Task Work Order Plan (TWOP) to accomplish a specific effort in support of the Program. NYSERDA's request shall include a date by which the Contractor is required to submit a proposed TWOP to NYSERDA.

(c) In response to NYSERDA's request, the Contractor shall prepare a written proposed TWOP, which shall describe and define, as appropriate, the following:

- A description of the project, activity or service.
- The approach that will be taken outlined by tasks.
- Any relevant background information.
- Defined deliverables.
- The time frame within which the project, activity or service will be completed.
- The names and titles of individuals designated by the Contractor to work on the project.
- The estimated cost, including a breakout by task and by title, hourly rate, and hours. Such labor costs shall be in accordance with the Project Personnel and Rates shown in the Budget section of this Exhibit A.

(d) NYSERDA shall review the Contractor's proposed TWOP and, if acceptable, NYSERDA's Project Manager may issue a Notice-to-Proceed incorporating the terms of the TWOP, or

(e) If not acceptable, NYSERDA may request that the Contractor make changes to the TWOP and resubmit. When NYSERDA finds the terms of the proposed TWOP acceptable and has issued a Notice to Proceed, the Contractor shall carry out the Work pursuant to the requirements of such TWO. The specific Work set forth in the TWO shall constitute Work to be performed by the Contractor under this Agreement.

(f) If NYSERDA finds that it is necessary to modify a TWO, NYSERDA may issue a TWO modification request. The Contractor shall then prepare a modification to the TWO. If the Contractor's modified TWO is acceptable to NYSERDA, then NYSERDA's Project Manager may issue a TWO Modification incorporating the terms of the Contractor's modified TWO.

(g) NYSERDA will review and approve any finalized project to ensure that all items included in the TWO are satisfactorily completed and within the prescribed time frame. The Contractor shall not be accountable for delays caused by NYSERDA.

Deliverables:

- A specific TWOP for each project to be conducted.
- All reports and/or materials described in each approved TWO.

Transition and Shutdown Tasks 9 and 10

Task 9: System Description/Documentation

The Contractor shall, upon request of NYSERDA's Project Manager, prepare a DG Integrated Data System Description Report that describes the DG Integrated Data System in sufficient detail that a qualified software application developer could ascertain the level of skill and effort required to effectively operate, maintain and manage the DG

Integrated Data System. The Description Report shall include a narrative describing the operation of the DG Integrated Data System, including hardware and software used, how data is checked for consistency, and how data is supplied and imported to the DG Integrated Data System. In addition, the Description Report shall include the following:

Operation:

- Number of sites in the database
- Number of sites with operational data
- Number of sites currently supplying data
- Number of page hits per month for the previous 12 months
- Number of unique visitors per month for the previous 12 months
- Total size in MB of the DG Integrated Data System including all software (excluding backup copies)
- Number and total size in KB of all files created in support of the DG Integrated Data System
- Total size in MB of the database
- Number and total size in KB of all informational reports associated with sites
- Size in KB of a database record or records covering one day for a typical site
- Size in KB of a database records covering one month for a typical site
- Size range in KB of daily data uploads from the various sites

Hardware:

- Number of servers used to support the DG Integrated Data System
- For each server, the CPU manufacturer model and speed, memory size in MB, and the sizes of all hard drives in GB
- An infrastructure diagram showing all servers; the major role of, and software on, each server; firewalls, internet and phone gateways; and how the servers interrelate

Software:

- Name and version for the operating system(s) and all applications used to support the DG Integrated Data System
- Source and contact information for any non-publicly available software used to support the DG Integrated Data System not developed by the Contractor or its Subcontractors during the performance of this Statement of Work
- Name, type and description of each file created or customized by the Contractor or its Subcontractors in support of the DG Integrated Data System (excluding site specific informational reports)
- A database data dictionary showing, for each field in each table, the field name, type, size, and description
- A software diagram showing the major software components and how they interrelate

The Contractor shall submit the DG Integrated Data System Description Report to NYSERDA's Project Manager for approval.

Deliverable:

DG Integrated Data System Description Report

Task 10: Transition Support

If NYSERDA elects to employ a New Contractor to continue operation of the DG Integrated Data System after the initial two-year term or the scheduled end of this Agreement, the Contractor shall assist NYSERDA and the New Contractor in the transfer of the DG Integrated Data System to the New Contractor and to provide technical support to NYSERDA and the New Contractor during an orderly transition period. The Contractor shall perform a final full backup of the DG Integrated Data System Files upon completion of the transition to the New Contractor, and submit a copy of such backup to NYSERDA's Project Manager using the format previously approved.

Transition Coordination Meeting: The Contractor shall meet with the New Contractor and NYSERDA's Project Manager at a mutually agreeable time and place to identify issues and approaches related to the transfer of the DG Integrated Data System to the New Contractor including, but not limited to, transfer of software, redirecting automatic daily data uploads by the reporting sites, parallel operation during the transition, and data integrity and synchronization during the transition. In addition, contact lists, and roles and responsibilities shall also be discussed. The Contractor shall prepare a draft Transition Plan based on the results of the Transition Coordination Meeting that shall be shared with all meeting attendees for comment. A final Transition Plan shall be submitted to NYSERDA's Project Manager for approval.

Transition Reporting: During the transition period, the Contractor shall submit to NYSERDA's Project Manager weekly Transition Reports which shall include the current status of the transition, the number of sites currently providing data to the New Contractor and the Contractor, any problems that have developed and suggestions on how to overcome them, and the number of hours and amount of funds expended during the week and to date on transition-related activities in total and by individual.

Deliverables:

Transition Plan

Weekly Transition Reports