



PROJECT MANUAL

Bid No. PC12-800-0822

Energy Management and Control System Expansion

for

**Sacramento City Unified School District
3051 Redding Avenue
Sacramento, CA 95820**

PROJECT: Energy Management and Control System Expansion

PROJECT OWNER: Sacramento City Unified School District
Purchasing Services / Contracts Office
3051 Redding Avenue
Sacramento, CA 95820

Improvements for Sacramento City Unified School District are requested
as per specifications prepared by:

Sacramento City Unified School District

**BIDS ARE DUE Not Later Than: 2:00 p.m., Thursday, July 28, 2011
at 3051 Redding Avenue, Sacramento CA 95820**

A **mandatory** pre-bid Conference will be held at:

Sacramento City Unified School District

Golden Empire Elementary School
9045 Canberra Drive
Sacramento, CA 95826

on: **Thursday, July 7, 2011 at: 10:00 a.m.**

**(Bidders who do not arrive on time will not be allowed to sign in and will not be eligible to bid
as a Prime Contractor.)**

PROJECT DIRECTORY

OWNER/PROJECT MANAGEMENT

Sacramento City Unified School District
Capital Asset Management Services
Paul Breckenridge, Project Manager
425 First Avenue
Sacramento, CA 95818
(916) 264-4075 Phone
(916) 264-3107 Fax

CONTRACT MANAGEMENT

Sacramento City Unified School District
Administrative Services
Kimberly Teague, Contract Specialist
5735 47th Avenue
Sacramento, California
(916) 643-2464 Phone
(916) 643-2190 Fax

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(A COPY OF THE PREVAILING WAGE SCALE IS ON FILE AT THE DISTRICT OFFICE)

Sacramento City Unified School District
425 First Avenue
Sacramento, CA 95818

PUBLIC NOTICE TO CONTRACTORS

Notice is hereby given that the Board of Education of the Sacramento City Unified School District (SCUSD), will receive sealed bids at the District's Purchasing Office, 3051 Redding Avenue, Sacramento, California, 95820, during the business hours of 8:00 AM through 4:30 PM, Monday through Friday, holidays excepted, for:

Bid No. PC12-800-0822, Energy Management and Control System Expansion

according to the drawings and specifications prepared by: Sacramento City Unified School District. The estimate for this project is \$2.6 million. The contractor shall include in the bid and provide all labor, tools, and materials for a complete and working project in conformance with the intent shown on the drawings and specifications provided herein.

A mandatory pre-bid conference and site inspection will be held on **Thursday, July 7, 2011 at 10:00 a.m., at Golden Empire Elementary School**, 9045 Canberra Drive, Sacramento, CA 95826. Bidders are to meet in front of the school, near the flagpole. Bidders are required to arrive for the pre-bid conference on time and to sign an attendance list, which is used to determine if Bidders meet this requirement. From Golden Empire, the pre-bid conference will continue to James Marshall, Abraham Lincoln, and then A.M. Winn Elementary Schools.

Bids will be received on **Thursday, July 28, 2011 before 2:00 p.m.** on the clock designated by the Owner or its representative as the bid clock, after which time bids will be opened and read aloud at the Sacramento City Unified School District.

In accordance with the provisions of California Business and Professions Code section 7028.15 and Public Contract Code section 3300, SCUSD requires that the Bidder possess a **C-7, Low Voltage Systems Contractor or C-10 Electrical** classification (s) of contractor's license(s) at the time the bid is submitted. Any bidder not so licensed at the time of the bid opening will be rejected as non-responsive. Bidder shall maintain that license in good standing through project completion, and all applicable warranty periods.

In accordance with the provisions of Board of Education Resolution No. 2435, dated September 1, 2005, and as amended August 20, 2009, this project shall incorporate the terms and conditions of a Project Stabilization Agreement ("PSA") as agreed to in an Agreement To Be Bound to be signed by the successful Bidder, all listed Subcontractors, and the District signatories thereto. The full text of the PSA is available on the District website.

IMPORTANT NOTICE TO BIDDERS: Bidders must complete the "Determination of Bidder Responsibility Questionnaire" (included in Bid Form) to be determined responsible for award and to be responsive to the bid announcement. If a Bidder has completed the questionnaire in response to a District project since **January 1, 2010**, only the certification stating the previously submitted data is still true and accurate, is required.

Each bidder must submit their bid to the Board of Education on the standard forms enclosed. Bids shall be accompanied by cash, a cashier's check, a certified check or bidder's bond of ten percent (10%) of the amount of the base bid submitted, to be made payable to the Sacramento City Unified School District. Only a corporate surety duly admitted and authorized to issue bonds and undertakings by the State of California shall issue bid bonds.

Pursuant to Section 1770, and following, of the California Labor Code, Contractors shall pay not less than the prevailing rate of per diem wages and the rate for legal holidays and overtime work as

determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rates of per diem wages are available upon request at the office of the SCUSD Planning Department, 425 First Avenue, Sacramento, CA 95818. Attention is directed to Sections 1777.5 and 1777.6 of the Labor Code concerning employment of apprentices by the Contractor of a Subcontractor. The Contractor shall forfeit, as penalty to the Sacramento City Unified School District, Fifty Dollars (\$50.00) for each calendar day or portion thereof, for each workman paid less than the stipulated prevailing rates for any work done under the contract by him or by any subcontractor under him, in violation of the provisions of such Labor Code.

District, or its designee, has determined that certain materials, services, products or things designated by specific brand or trade name shall not be subject to Public Contract Code section 3400(a) in order that: a field test or experiment may be made to determine the product's suitability for future use; and/or in order to match other materials, services, products or things in use on a particular District public improvement either completed or in the course of completion; and/or in order to obtain a necessary item that is only available from one source; and/or in order to respond to an emergency declared by District. Specific materials, services, products or things are identified in the project specifications.

The successful bidder will be allowed to substitute securities or establish an escrow in lieu of retainage, pursuant to Public Contract Code Section 22300, and as described in the Instructions to Bidders.

Proposed Contract Documents may be examined at the following plan rooms:

SACRAMENTO BUILDERS EXCHG
1331 T STREET
SACRAMENTO, CA 95814

MCGRAW HILL/FW DODGE
4020 LENNANE DR STE 104
SACRAMENTO, CA 95834

EL DORADO BUILDERS EXCHG
3430 ROBIN LANE SUITE 7
CAMERON PARK, CA 95682

SACRAMENTO BUILDERS EXCHG
151 N SUNRISE AVE STE 511
ROSEVILLE CA 95661-2925

PLACER CTY CONTRACTORS ASSN
231 CHERRY AVE SUITE 101
AUBURN, CA 95603

BUILDERS EXCHNG OF STOCKTON
7500 NORTH WEST LANE
STOCKTON, CA 95210

NEVADA CTY CONTRACTORS ASSN
149 CROWN POINT CT SUITE A
GRASS VALLEY CA 95945

SAN FRANCISCO BUILDERS EXCHG
850 S. VAN NESS
SAN FRANCISCO, CA 94110

VALLEY CONTRACTORS EXCHG
951 EAST 8TH STREET
CHICO, CA 95928

CONTRA COSTA BUILDERS EXCHG
2440 STANWELL DRIVE, STE B
CONCORD, CA 94520

Bidders may secure copies of the Project Manual, including specifications, by calling SCUSD Planning & Construction at 916-264-4075, ext. 1020. If a Bidder requests a bid set to be shipped to them, shipping charges are the Bidders responsibility. Bidders may obtain Project documents at the plan rooms, however Bidder is wholly responsible for ensuring that all bid documents are complete (including addenda acknowledgments) and submitted timely. District accepts no responsibility for illegible or incomplete bids and reserves the right to reject bids that do not conform to the Instructions to Bidders and Bid Regulations.

The SCUSD and its Board of Education reserve the right to reject any or all bids or to waive any irregularities or informalities of any bids or in the bidding process. The SCUSD is an Equal Opportunity Employer.

By order of the Board of Education, Sacramento City Unified School District.

Dated: June 29, 2011

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

INSTRUCTIONS TO BIDDERS

1. BID PREPARATIONS/RESPONSIVENESS

All portions of the Bid Form must be completed before the bid is submitted. Failure to submit all required and completed documents may result in the bid being rejected as nonresponsive. Attached to and submitted with the bid form, the Bidder must provide, and sign where required, the Acknowledgment of General Conditions, the PSA Agreement To Be Bound, a completed Noncollusion Declaration, Statement of Compliance, Designation of Subcontractors, Workers' Compensation Certificate, Drug-Free Workplace Certification, Declaration Regarding Employee Fingerprinting and Criminal Background Check, an appropriate bid security, and the Determination of Bidder Responsibility Questionnaire, hereinafter referred to as "Bidding Documents."

2. SUBMISSION OF BID FORM/ORIGINAL SIGNATURES

One original Bid Form, or photocopy, in the form provided, with all items completed, shall be submitted with all required documents as the bid. The Bid Form submitted shall contain the original signature in ink (not a photocopy or stamp) by the person or persons legally authorized to bind the Bidder to a contract. The Bidder's representative shall sign and date the Declaration included in the Bid Form. Failure to submit a Bid Form with an original signature and date will cause the Bid to be rejected.

Bidders are warned against making erasures or alterations of any kind on the bid form. Bids which contain omissions, erasures, alterations, conditions, or additions not called for may be rejected. The bid shall be enclosed in a sealed envelope having the name of the Project, as it appears on the bid, and the name and address of the bidder shown thereon. When a price is quoted in both words and figures, the words shall prevail in case of a discrepancy.

3. FAILURE TO SUBMIT A BID PRICE

Failure to submit a price for the bid will result in the Bid being rejected. Failure to submit a price for any required Alternate or Unit Price of the Bid will result in the Bid being rejected.

4. BID SECURITIES / SECURITIES DEPOSIT IN LIEU OF WITHOLDING

Each Bid shall be accompanied by Bid Security in the amount of 10% of the Lump Sum Base Bid as security for the Bidder's obligation to enter into a Contract with the District on the terms stated in the Bid Form and to furnish all items required by the Bidding Documents. Bid Securities shall be cash, a Bid Bond on the form provided by the District and included herein, and signed in favor of the District, or a certified or cashier's check made payable to "Sacramento City Unified School District." When a Bond is used for a Bid Security, failure to use the District's Bid Bond form will result in rejection of the Bid. If a Bid Bond is submitted and an attorney-in-fact executes the Bid Bond on behalf of the surety, a notarized and current copy of the power of attorney shall be affixed to the Bid Bond. The surety issuing the Bid Bond shall be, on the Bid Deadline, listed in the latest published State of California, Department of Insurance, and list of "Insurers Admitted to Transact Surety Insurance in this State."

The District shall not be precluded by such cash, bond, certified check, or cashier's check from recovering from the defaulting bidder damages in excess of the amount of said cash, bond, certified check, or cashier's check incurred as a result of the failure of the successful bidder to complete, sign and return in strict compliance with these Contract Documents the required documents.

Pursuant to Section 22300 of the Public Contract Code, the successful Contractor may substitute a deposit of securities in lieu of the District withholding any monies to ensure Contractor's performance under the Contract. Alternatively, Contractors may request that the District make payment of retention earned directly to an escrow agent at the expense of Contractor. The provisions of Public Contract Code section 22300 are incorporated herein by reference as though set forth in full, and shall govern the substitution of securities and/or escrow account. Securities eligible for investment under this section shall include those listed in Section 16430 of the Government Code, and bank or savings and loan certificates of deposit.

5. PRE-BID CONFERENCES

Bidders shall attend the Pre-Bid conference, if made mandatory, at which the District reviews the requirements of the Bidding Documents, comments and questions are received from Bidders, and a project site visit is conducted. Attendees shall arrive for the Pre-Bid meeting on time and to sign an attendance list, which is used to determine if Bidders meet this requirement. Bidders who arrive late and/or do not attend the entire Pre-Bid conference will be deemed to have not complied with the requirements of the Bidding Documents and their bid will be rejected.

6. BIDDER/SUBCONTRACTOR LICENSING

At the time of submission of the Bid, the Bidder and all Subcontractors, regardless of tier, shall have the appropriate license(s) issued by the State of California Contractors' State License Board for the work to be performed and shall be skilled and regularly engaged in the general class or type of work called for. For this project, Bidders shall possess a **C-7, Low Voltage Systems or C-10, Electrical** contractor's license (s) at the time the bid is submitted. If the Bidder is a joint venture, at the time of submission of the Bid, the Bidder shall have a joint venture license appropriate for the scope of the work, and each member of the joint venture shall likewise have the appropriate license. The State of California Business and Professions Code, Division 3, Chapter 9, known as the "Contractors' License Law," establishes licensing requirements for contractors. If a bidder that is a specialty contractor, submits a bid involving three or more specialized building trades, the work of which is more than incidental and supplemental to the performance of the work for which bidder holds a specialty contractor license, Bidder must also hold either (1) a specialty contractor "C" license in each such trade, (2) a general engineering contractor "A" license, or (3) a general building contractor "B" license. This requirement is applicable whether or not Bidder lists a subcontractor for each such trade.

7. CONTRACTORS EXPERIENCE

In addition to other minimum qualifications, the successful Bidder must also demonstrate to the satisfaction of the District, a minimum of three (3) years experience to be qualified to perform the work described in the Contract Documents:

8. DESIGNATION OF SUBCONTRACTORS

In accordance with California Public Contract Code, Chapter 4 (commencing with Section 4100), Part 1, Division 2 of the Public Contract Code of the State of California (Subletting and Subcontracting Fair Practices Act), each bidder shall list in the bid form (a) all first-tier subcontractors that will perform work, labor or render services to the bidder in or about the construction of the work or improvement to be performed or a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of ½ of 1% of the bid amount, and (b) the portion of the work which will be done by each such subcontractor. The Contractor shall list only one subcontractor for each such portion as defined by

the Contractor in Contractor's bid. **NOTE:** If an A or B General Contractor is listed as a first-tier subcontractor, the bidder must identify all of the specific scopes of work to be performed by that General subcontractor. If Contractor fails to specify a subcontractor for any portion of the work to be performed under this Contract in excess of one-half of one percent (0.5%) of the bid, Contractor agrees to perform that portion himself.

The bid form contains a Designation of Subcontractor form with spaces for the following information: (1) Work Activity (Type of trade, labor or service); (2) Name and License number of Subcontractor, with Expiration Date, and; (3) Complete Address and Telephone Number. Failure to list the name and location of the business will result in the District treating the bid as if no Subcontractor was listed for the Work Activity. The Bidder thereby represents to the District that the Bidder is fully qualified to perform that portion of Work and shall perform that Work Activity.

Information requested in the Designation of Subcontractor Form for subcontractors, other than the name and location of the business, must be provided within twenty-four (24) hours of notification or the District will treat the Bid as if no Subcontractor was listed for the Work Activity and Bidder will thereby represent to the District that the Bidder agrees that it is fully qualified to perform that portion of the work and shall perform that Work Activity.

9. DISABLED VETERANS BUSINESS ENTERPRISES (DVBE)

This contract ☐ is ☒ is not subject to DVBE requirements of Education Code § 17076.11.

10. RESPONSIBILITY OF SUBCONTRACTORS

Prior to Contract award, the District will notify the Bidder in writing if the District objects to a subcontractor proposed by the Bidder. District may require financial documents, references, and evidence of experience for the subcontractor. Failure of the District to object to a proposed subcontractor prior to award of the Contract shall not preclude the District from requiring replacement of any subcontractor.

11. REPORTS/PRE-EXISTING CONDITIONS

The District may have obtained report(s) that contain facts that may materially affect bidders' bids. In addition, the District has constructed other public works projects throughout the district, and obtained reports and other information in the course of the design and construction of those other projects, which may contain facts that may materially affect bidders' bids. Bidders are strongly encouraged to inspect all of the District's reports, records and documents referred to above. Reports and documents are available upon request at District Operations for inspection and copying at bidders' sole cost and expense, during normal working hours.

12. CONTRACTORS RESPONSIBILITY TO VERIFY SUBSURFACE CONDITIONS AND OTHER CONDITIONS

Investigations of subsurface conditions or otherwise, are made for the purpose of design, and the District assumes no responsibility whatsoever with respect to the sufficiency or accuracy of the placement of underground utilities, borings, logs of test borings, or other preliminary investigations, or of the interpretation thereof. Furthermore, there is no guaranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the work, or any part of it, or that unanticipated conditions may not occur.

When reports of existing utility locations, logs of test borings, and/or other such reports are available to the Contractor or included in the Contract Documents, it is expressly understood and agreed that such reports do not constitute a part of the Contract. The reports only represent an opinion of the District as to the character of the conditions to be encountered, and are made available or included in the Contract Documents only for the convenience of the bidders. Bidders must satisfy themselves through their own investigation as to conditions to be encountered.

The submission of a bid shall be conclusive evidence that the Contractor has satisfied himself through Contractor's own investigation as to the conditions to be encountered; the character, quality, and scope of work to be performed; the materials and equipment to be furnished; and all requirements of the Contract Documents.

Investigations of subsurface conditions are made for the purpose of design, and the District assumes no responsibility whatsoever with respect to the sufficiency or accuracy of borings, the log of test borings, or other preliminary investigations, or of the interpretation thereof, and there is no guaranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the work, or any part of it, or that unanticipated conditions may not occur. Making such information available to bidders is not to be construed in any way as a waiver of the previous provisions of this section, and bidders must satisfy themselves, through their own investigations, as to conditions to be encountered.

NOTE: If the successful bidder determines that bore drilling, radar detection services, or other such subsurface investigations are necessary to confirm existing conditions, all associated costs for such investigations shall be the Contractor's responsibility and should be considered as part of the bid process.

13. ADDENDA

Addenda will be issued only by the District and only in writing. Addenda will be identified as such and will be mailed, faxed, sent electronically, or delivered to all who are known by the Contracts Office who have received a complete set of bidding documents and who have provided a street address, fax number, or electronic address, for receipt of addenda. (Copies of addenda will also be made available at designated plan rooms for inspection.) Addenda will be issued such that they should be received by prospective bidders who have provided a street address for receipt of addenda, no later than seventy-two (72) hours prior to the bid deadline. Addenda withdrawing the request for bids, postponing the bid deadline, or providing clarifications that do not materially impact the Bidders Bid, may be issued anytime prior to the bid deadline. Each bidder shall be responsible for ascertaining, prior to submitting a bid, that the bidder has received all issued addenda.

If discrepancies or apparent errors are found in the Contract Documents prior to the date of bid opening, bidders shall submit a written request for clarification, which response to said request will be given in the form of addenda to all bidders, if time permits.

The correction of any discrepancies in, or omissions from the drawings, specifications, or other Contract Documents, or any interpretation thereof, during the bidding period will be made only by an addendum issued by the District. A copy of each such addendum issued by the District will be mailed, faxed or delivered to each person receiving a set of the Contract Documents, and shall be made a part of the Contract. Any other interpretation or explanation of such documents will not be considered binding.

14. FINGERPRINTING RULES AND REGULATIONS

The Contractor and all Subcontractors are required to comply with all rules and regulations enacted by the District regarding fingerprinting. Contractor's employees and subcontractors on this project may experience limited contact with students; therefore the Contractor is referred to the General Conditions of the Contract for specific information on fingerprinting requirements for this project. (General Conditions, dated March 9, 2007, may be found on the District's website, at www.scusd.edu/contracts/GenCondConst.htm).

15. BID PROTESTS

Bid protests shall be filed in writing with Sacramento City Unified School District Contracts Office, 5735 47th Avenue, Sacramento, California, 95824 by certified or registered mail, not later than three (3) business days after the bid opening. If the protest is based on the selection of the apparent lowest responsible bidder, it shall be filed in writing not later than three (3) business days after selection of the apparent lowest responsible bidder. The protest shall specify the reasons and facts upon which the protest is based.

16. SCUSD SUSPECT MATERIALS REPORTS

Contractor acknowledges and agrees that materials listed in the Suspect Materials Reports shall be assumed to contain asbestos. Many items are assumed to be asbestos containing because of the difficulty in sampling or because historically these items have been known to be asbestos containing. The California Construction Safety Order 8 CCR § 1529(k), Communications of Hazards, requires building owners to notify of the presence of ACM (asbestos-containing materials) and PACM (presumed asbestos-containing materials).

In the Suspect Materials Report, the following headers are key to understanding if a material contains or is assumed to contain asbestos.

Sample Type:

Sampled: This material has been sampled and may or may not contain asbestos

Assumed: This material is assumed or presumed to be asbestos containing

Type of Asbestos:

Non-ASB: This material has been sampled and is non-detected for asbestos.

Serp: This material has been sampled and has a detectable level of asbestos.

Other: This material is assumed to contain asbestos. The type of asbestos is unknown.

% (Percent) Asbestos:

Any number other than 0% is asbestos containing. The **N/A** is only used for assumed and means the percent of asbestos is **Not Available**.

Copies of asbestos reports are available for inspection during regular business hours at the district office located at 425 First Avenue, Sacramento, CA 95818. Call 264-4075, ext. 0.

17. SMUD INCENTIVE PROGRAM

The District is a participant in the Sacramento Municipal Utility District (SMUD) Commercial & Industrial HVAC and Lighting Retrofit Program. Any SMUD incentives will be paid directly to the school district, not the installing contractor, and contractors should bid accordingly.

18. FIRE ALARM/INTRUSION ALARM AFFIDAVITS (Not applicable to wholly new construction)

After award of this contract, and prior to start work, the Contractor shall identify the condition of the project's complete Fire Alarm and Intrusion Alarm Systems by a visual and/or testing inspection of the control panels and a room-by-room inspection. The Contractor shall confirm that the system is without fault(s), and will sign an affidavit verifying the same. If the tests indicate any fault(s) with either system, the fault(s) will be noted on the affidavit, identifying the specific existing problems that the District will be responsible to address prior to the commencement of construction activities. The affidavit shall be signed by the Contractor, any Construction Management representative, and a District Representative and copies will be distributed to all parties. Affidavits shall serve as an instrument for repairs to any construction related damages caused throughout the course of the contract.

19. LOW VOLTAGE DATA DROPS

All District schools have been upgraded to incorporate new computer data pathway conduits for data drops. Generally, Contractors will find two drops per classroom; four/five drops in computer labs, and varying configurations in libraries. Raceways installed for combination power and data must remain and be capable of additional power outlets and data drops as may be required for future expansion. Additionally, the anchoring for data conduit runs shall include longer Unistrut to accommodate future conduits.

IMPORTANT: The hardware and cable installers the Contractor intends to use on this project **MUST** have a minimum NICET-2 Classification (NICET cards on file with SCUSD) and ACO license. These installers shall have code knowledge for existing conditions and immediately notify the District Representative if non code complying conditions are discovered when installing new conduit, cable and/or hardware.

Must pre-qualify two (2) NICET Level II Technicians designated for specific job and be on site, supervising all installation of new conduit, cable and/or hardware. None of these items shall be installed without the direct on site supervision of the NICET Level II qualified Technician.

20. LOCK SETS & KEYS

The District requires a certified locksmith to pin and key all cylinders (per approved hardware schedule). The same certified locksmith will set all cylinders and will be held responsible to ensure that all cylinders and keys work and are in the correct location.

21. REVIEW OF PLANS AND SPECIFICATIONS

Pursuant to Public Contract Code section 1104: 1) bidders shall not be required to assume responsibility for the completeness and accuracy of architectural or engineering plans and specifications, except on clearly designated design build projects; 2) however, bidders shall be required to review architectural or engineering plans and specifications prior to submission of their bids and to report any errors and omissions to the Architect or District; and 3) the review shall be confined to the bidder's capacity as a bidder and not as a licensed design professional.

22. WITHDRAWAL OF BID

A bid may be withdrawn at any time prior to the time fixed in the Public Notice to Contractors for the opening of bids by a written request of the bidder, filed with the District. The withdrawal of a bid will not prejudice the right of a bidder to file a new bid within the time prescribed.

23. TAXES

Bid prices shall include allowance for all taxes, including, but not limited to, all applicable Federal, State, and local taxes.

24. DISQUALIFICATION OF BIDDERS

More than one prime bid from any individual, firm, partnership, corporation, or association, under the same or different names, will not be considered. Reasonable grounds for believing that any bidder is interested in more than one bid for the work will cause the rejection of all bids in which such bidder is interested. If there is reason to believe that collusion exists among the bidders, none of the participants in such collusion will be considered.

25. RELIEF OF BIDDERS

Attention is directed to the provisions of Public Contract Code section 5100, and following, concerning relief of bidders, and in particular to the requirements therein, including that if the bidder claims a mistake was made in Contractor's bid, the bidder shall give the District written notice within five (5) days after opening of the bids of the alleged mistake, specifying in the notice in detail how the mistake occurred.

The District reserves the right to reject any and all bids and to waive any minor irregularity in a bid.

BID FORM

PROJECT: Bid No. PC12-800-822 Energy Management and Control System Expansion

BID TO: Board of Education
Sacramento City Unified School District
Purchasing Services Contracts Office
3051 Redding Avenue
Sacramento, CA 95820

BID FROM: _____
Name of firm submitting Bid Telephone and Fax Numbers

Address e-mail address, if available

City, State, Zip Code License No. and Classification

DATE BID SUBMITTED: _____

1. **COMPLETED BID FORMS & ATTACHMENTS**

All portions of this bid form must be completed before the bid is submitted. Failure to submit all required and completed documents may result in the bid being rejected as nonresponsive. Attached to and submitted with this bid form, the Bidder must provide, and sign where required, the Acknowledgment of General Conditions, the PSA Agreement To Be Bound, a completed Noncollusion Declaration, Statement of Compliance, Designation of Subcontractors, Workers' Compensation Certificate, Drug-Free Workplace Certification, Declaration Regarding Employee Fingerprinting and Criminal Background Check, an appropriate bid security, and the Determination of Bidder Responsibility Questionnaire. One original bid form, or photocopy, shall be filled in and submitted with all required documents as the bid.

2. **ACKNOWLEDGEMENT OF GENERAL CONDITIONS**

The General Conditions (dated March 9, 2007) and definitions therein are accessible on the SCUSD website at <http://www.scusd.edu/ContractsOffice>, and are an integral part of the Contract Documents. The Contractor shall not disclaim knowledge of the meaning and effect of any term or provision of these General Conditions, and Supplemental Conditions, if any, and agrees to strictly abide by their meaning and intent. In the event the Contractor fails to initial this acknowledgement, the District shall have the right to reject the Bid.

CONTRACTOR'S INITIALS: _____

3. **CONTRACT PERFORMANCE PERIOD**

If awarded the Contract, the bidder agrees to complete the work within **200** calendar days to substantial completion after the date of the commencement specified in the Notice to Proceed.

4. **BIDDER TO PERFORM WORK**

Bidder represents, warrants and agrees that if awarded the contract, bidder shall perform a minimum of **100%** of the total of all work with its own forces.

5. **ADDENDA ACKNOWLEDGEMENTS**

The bidder acknowledges receipt of the following Addenda:

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Special Instructions for submitting bid price and additive/deductive bid alternates bid prices:

Per the Public Notice to Contractors, bids will be received on **Thursday, July 28, 2011 before 2:00 p.m.** on the clock designated by the Owner or its representative as the bid clock. after which time bids will be opened and read aloud at the Sacramento City Unified School District.

6. BID PRICE

The Bidder, having the appropriate active license required by the State of California; having carefully read and examined the plans, specifications, and all related bidding documents; having carefully and fully examined the site of the proposed work and all information available to the Bidder, hereby offers to furnish all labor, materials, tools, transportation, services, and equipment, free of all liens and claims, necessary to complete the work of the project described herein, and to conform with all requirements of the Contract Documents, for the lump sum of:

_____ Dollars _____
(In words-printed or typed) (In figures)

Name of Firm Submitting Bid Alternates: _____

ADDITIVE / DEDUCTIVE BID ALTERNATES: In addition to the total lump sum bid, bids are also required for the following additive/deductive alternate bid items. The lowest bid shall be determined by the lowest bid price on the base bid without consideration of the prices on the additive or deductive items. Alternates, if any/all are selected, will be added / deducted from the base bid price after determination of the lowest bid. **See project specifications for complete descriptions of each additive/deductive alternate. Descriptions provided below are for reference purposes only.**

Additive Alternates 1, 2, 3, 4 – Additive Extra Costs to Base Bid Price

Alternate #1 – Add Cost – As specified for a Three (3) Year Extended Warranty. All parts and labor included (A total of four (4) years).

_____ Dollars _____
(In words-printed or typed) (In figures)

Alternate #2 – Add Cost - As specified for the supply and installation of The Metasys Control System at: James. W. Marshall Elementary School.

_____ Dollars _____
(In words-printed or typed) (In figures)

Alternate #3 – Add Cost - As specified for the supply and installation of The Metasys Control System at: Lisbon Elementary School (aka Yav Pem Suab Charter School)

(In words-printed or typed) Dollars _____
(In figures)

Alternate #4 – Add Cost - As specified for the supply and installation of The Metasys Control System at: Martin L. King, Jr. K-8 School

(In words-printed or typed) Dollars _____
(In figures)

NOTE: Mandatory Quality Assurance Documentation and References

- a) The Johnson ABCS shall have a minimum of three (3) years experience with the Johnson Metasys NAE/ADX Control System as specified. Provide with your bid a list of two (2) customer references that incorporated the Metasys Split ADX configuration, with two servers (one for web pages and one for historical data). Provide the project name, project contact, and phone number so references can be verified.
- b) Provide proof of Johnson Controls ABCS Contractor Standing for 2011

7. BID GUARANTEES & BOND/INSURANCE SUBMITTALS

The bidder agrees that it will not withdraw its bid within sixty (60) days after the bid opening. The award, if made, will be made by the District within sixty (60) days of the bid opening. If the bidder is selected as the apparent lowest responsible bidder, the bidder agrees, within ten (10) days after receipt of Notice of Selection, to sign and deliver the Contract, and to furnish the Performance Bond, the Payment Bond, Certificates of Insurance, Additional Insured Endorsements and Declarations Page, and other required items.

8. BID BOND

There is herewith enclosed cash, a bid bond for the benefit of, or a certified check or cashier's check made payable to, Sacramento City Unified School District in the amount of:

(In words-printed or typed) Dollars (\$) _____
(In figures)

The bidder agrees that if the bidder is selected as the apparent lowest responsible bidder, and the bidder fails to sign the Contract and furnish the Performance Bond, the Payment Bond, Certificates of Insurance, Additional Insured Endorsements and Declarations Page, and other required items within the time limit specified in the Contract Documents, the Sacramento City Unified School District may award the work to another bidder or call for new bids. In such event, the bidder shall be liable to the District as set forth in the bid bond.

9. BID SECURITY FORFEITURE

It is understood and agreed that should the Bidder fail or refuse to return executed copies of the Contract, worker's compensation certificate, insurance certificates, Additional Insured Endorsements and Declarations Page, and required bonds to the District in the time specified, the bid security shall be forfeited to the District and the District may otherwise proceed as allowed by law and the Contract Documents.

10. LICENSE DECLARATION

The undersigned hereby warrants that Bidder has an appropriate license, and such license entitles the Bidder to provide the work described herein. The Bidder's license shall be in full force and effect

throughout the duration of performance under this contract, and any and all subcontractors to be retained by the undersigned will have the appropriate licenses.

11. COMMUNICATIONS

Communications conveying an acceptance of the bid, requests for additional information or other correspondence should be addressed to the Bidder at the address set forth on the first page of the Bid Form.

12. IMMIGRATION REFORM AND CONTROL ACT OF 1986 (IRCA)

The bidder hereby certifies that it is, and at all times during performance of work shall be, in full compliance with the provisions of the Immigration Reform and Control Act of 1986 in the hiring of its employees. Furthermore, the Bidder shall indemnify, hold harmless and defend the District against any and all actions, proceedings, penalties or claims arising out of the Bidder's failure to comply with the IRCA.

A bidder shall not submit a bid unless the bidder's contractor's license number appears clearly on the bid, the license expiration date and class are stated, and the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid submitted by a contractor who is not licensed pursuant to Business and Professions Code section 7028.15 shall be considered nonresponsive and shall be rejected. Any bid not containing the above information, or a bid containing information which is subsequently proven false, may be considered nonresponsive and may be rejected.

NOTE: Each bid must give the full business address of the bidder and be signed by bidder with bidder's usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished upon request.

Bidder is a: (circle one): Corporation Partnership Individual Joint Venture Other _____
(Specify)

NAMES AND TITLES OF KEY MEMBERS OF FIRM: (Name of person signing the bid on behalf of the bidder and all general partners, if a partnership, must be included.)

NAME OF PRESIDENT IF A CORPORATION: _____

NAME OF SECRETARY IF A CORPORATION: _____

CALIFORNIA CONTRACTORS LICENSE(S):

Name of License(s): _____

Classification(s)

Number

Expiration Date

(For Joint Ventures, list Joint Venture's license or licenses for all Joint Venture partners.)

The following documents are submitted with and made a condition of this bid:

1. Bid security in the form of _____ (fill in type of bid security)

Corporation is organized under the laws of the State of _____.

Corporate Seal:

Name of bidder's firm: _____

Address: _____

The undersigned hereby declares that all of the representations of this Bidder are made under penalty of perjury under the laws of the State of California.

By: _____
(Signature) (Signature)

(Print or Type Name & Title) (Print or Type Name & Title)

(If signature is by other than the sole proprietor, general partner, or corporate officers, attach an original Power of Attorney.)

PROJECT STABILIZATION AGREEMENT / CONTRACTOR AGREEMENT TO BE BOUND

The undersigned, as the Prime Contractor on the Project, for and in consideration of the award of a contract to perform work on said Project, and in further consideration of the mutual promises made in the Project Stabilization Agreement (PSA), which is in full text on the District website, and acknowledged, hereby:

Accepts and agrees to be bound by the terms and conditions of the PSA, together with any and all amendments now existing thereto;

Agrees to be bound by the legally established local trust agreements as set forth in Article 16 of the PSA;

Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor;

Certifies that is has no commitments or agreements which would preclude it full and complete compliance with the terms and conditions of said PSA, and;

Agrees to secure from any Subcontractor, as defined in said PSA, which is or becomes a Subcontractor of any tier, a duly executed Agreement To Be Bound in form identical to this document.

(Firm Name)	(Signature of Contractor)

(Street Address)	(Printed Name & Title)

(City, State, Zip)	(Date)

(Phone)	(Fax)

NONCOLLUSION DECLARATION TO BE SIGNED BY BIDDER AND SUBMITTED WITH BID

Pursuant to Section 7106 of the Public Contract Code, _____

(Name)

hereby declares that he or she is _____ of _____

(Title)

(DBA)

the party making the foregoing bid; the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; the bid is genuine and not collusive or sham; the Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the Contract of anyone interested in the proposed Contract; all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive sham bid.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Signature

Place of Execution

STATEMENT OF COMPLIANCE TO BE SIGNED BY BIDDER AND SUBMITTED WITH BID

_____, (hereinafter referred to as "prospective Contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 and California Administrative Code, Title II, Division 4, Chapter 5, in matters relating to the development, implementation, and maintenance of a nondiscrimination program. Prospective Contractor agrees not to unlawfully discriminate against any employee or applicants for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, sex, sexual orientation, physical and mental disabilities, or age (over forty).

I, _____

(Name of Official)

hereby swear that I am duly authorized to legally bind the prospective Contractor to the above-described certification. I am fully aware that this certification, signed on

_____, in the County of _____,

(date)

(County)

is made under the penalty of perjury under the laws of the State of California.

Signature

Print or Type Title

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 et. seq.) and any amendments thereof, each bidder shall set forth below: (a) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the bidder (*all references to "bidder" hereinafter shall refer to the prime contractor bidding on the project*) in or about the construction of the work or improvement to be performed under this contract or to a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent of the bidder's total bid and (b) the portion of the work which will be done by each subcontractor. The bidder shall list only one subcontractor for each such portion as is defined by the bidder in this bid.

If a bidder fails to specify a subcontractor or specifies more than one subcontractor for the same portion of work to be performed under the contract in excess of one-half of one percent of the bidder's total bid, bidder shall be deemed to have agreed that bidder is fully qualified to perform that portion, and that bidder alone shall perform that portion.

No bidder whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow the work to be performed by any one other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the bidder's total bid as to which the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act. Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the bidder's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, only after a finding reduced to writing as a public record of the District awarding this contract setting forth the facts constituting the emergency or necessity.

Note: If alternate bids are called for and bidder intends to use a different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such alternate. Identify additional list of subcontractors by Alternate Bid No. (form enclosed)

DESIGNATION OF SUBCONTRACTORS (continued)

ALL COLUMNS MUST BE COMPLETED FOR EACH SUBCONTRACTOR LISTED.

A	B	C	D
Type of Trade, Labor, or Service	Subcontractor Name and License Number with Expiration Date (If Subcontractor is licensed as an A or B General, list all of the specific scopes of work they will perform.)	Complete Address and Telephone Number	Is this a DVBE certified subcontractor? Please indicate Yes or No.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**PSA “AGREEMENT TO BE BOUND” LETTER SHALL BE REQUIRED FOR EACH LISTED
SUBCONTRACTOR WITHIN 24 HOURS OF THE TIME OF THE BID OPENING.**

State Certified Disabled Veterans Business Enterprise Subcontractors. Identify subcontractors listed above who are State Certified DVBE contractors by answering Yes or No in Column D.

☐ **Check here if no subcontractors are being used on this project.**

_____ Name of Firm Submitting Bid	_____ Signature of Bidder
--------------------------------------	------------------------------

To list additional subcontractors, please photocopy this sheet and submit with your bid.

DESIGNATION OF SUBCONTRACTORS (continued)

ALTERNATE BID NO. _____ (IF APPLICABLE)

ALL COLUMNS MUST BE COMPLETED FOR EACH SUBCONTRACTOR LISTED

A	B	C	D
Type of Trade, Labor, or Service	Subcontractor Name and License Number with Expiration Date (If Subcontractor is licensed as an A or B General, list all of the specific scopes of work they will perform.)	Complete Address and Telephone Number	Is this a DVBE certified subcontractor? Please indicate Yes or No.
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

State Certified Disabled Veterans Business Enterprise Subcontractors. Identify subcontractors listed above who are State Certified DVBE contractors by answering Yes or No in Column D.

_____	_____
Name of Firm Submitting Bid	Signature of Bidder

To list additional subcontractors, please photocopy this sheet and submit with your bid.

PROJECT STABILIZATION AGREEMENT / SUBCONTRACTOR AGREEMENT TO BE BOUND

Bid No. and Project Title: PC12-800-822 Energy Management and Control System Expansion

The undersigned, as a Subcontractor on the Project, for and in consideration of the award of a subcontract to perform work on said Project, and in further consideration of the mutual promises made in the Project Stabilization Agreement (PSA), a copy of which was received and acknowledged, hereby:

Accepts and agrees to be bound by the terms and conditions of the PSA, together with any and all amendments now existing thereto;

Agrees to be bound by the legally established local trust agreements as set forth in Article 16 of the PSA;

Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor;

Certifies that is has no commitments or agreements which would preclude it full and complete compliance with the terms and conditions of said PSA, and;

Agrees to secure from any Subcontractor, as defined in said PSA, which is or becomes a Subcontractor of any tier, a duly executed Agreement To Be Bound in form identical to this document.

(Firm Name)

(Signature of Subcontractor)

(Street Address)

(Printed Name & Title)

(City, State, Zip)

(Date)

(Phone) (Fax)

WORKERS' COMPENSATION CERTIFICATE

Labor Code Section 3700.

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer or as one employer in a group of employers. Said certificate may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees,

(c) For any county, city, city and county, municipal corporation, public district, public agency or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims. Said certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702."

I am aware of the provisions of the Labor Code Section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract. I shall supply the District with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the District will receive thirty (30) days' notice of cancellation.

Name of Contractor

Signature

Print Name

Date

(In accordance with Article 5 (commencing at Section 1860, Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under the contract.)

DRUG-FREE WORKPLACE CERTIFICATION

This Drug-Free Workplace Certification is required pursuant to Government Code Sections 8350 et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract for the procurement of any property or services from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract awarded by a State agency may be subject to suspension of payments or termination of the contract and the contractor may be subject to debarment from future contracting if the state agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

- a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition;
- b) Establishing a drug-free awareness program to inform employees about all of the following:
 - 1) The dangers of drug abuse in the workplace;
 - 2) The person's or organization's policy of maintaining a drug-free workplace;
 - 3) The availability of drug counseling, rehabilitation and employee-assistance programs;
 - 4) The penalties that may be imposed upon employees for drug abuse Violations;
- c) Requiring that each employee engaged in the performance of the contract be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code Section 8355 listed above and will publish a statement notifying employees concerning (a) the prohibition of controlled substance at the workplace, (b) establishing a drug-free awareness program, and (c) requiring that each employee engaged in the performance of the contract be given a copy of the statement required by Section 8355(a) and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the DISTRICT determines that I have either (a) made a use certification herein, or (b) violated this certification by failing to carry out the requirements of Section 8355, that the contract awarded herein is subject to suspension of payments, termination, or both. I further understand that should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Section 9350 et seq,

Name of Contractor

Signature

Printed Name

DECLARATION FORM TO BE SUBMITTED WITH BID

**DECLARATION REGARDING EMPLOYEE FINGERPRINTING AND
CRIMINAL BACKGROUND CHECK**

I, _____, declare as follows:

Where the employees will have contact with pupils, the safety of the pupils will be ensured by one or more of the following:

1. The installation of a physical barrier, at the expense of the Contractor, at the work site to limit contact with pupils.
2. Continual supervision and monitoring of all employees of Contractor and Subcontractor by an employee of Contractor whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

I am a duly authorized representative of _____ for the purpose of providing this certification and declare under penalty of perjury and the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____, 20____, in _____, California.

Signature

Printed Name and Title

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we
_____, as Principal, and
_____, Surety, are held and firmly bound unto the
Sacramento City Unified School District, hereinafter called the DISTRICT, in the sum of TEN
PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal submitted to the said
DISTRICT for the work described below for the payment of which sum in lawful money of the
United States, well and truly to be made, we jointly and severally bind ourselves, our heirs,
executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted the accompanying
bid dated _____, 20____, for the following project:

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified therein
after the opening of the same, or, if no period be specified, within sixty (60) days after said
opening; and if the Principal is awarded the contract, and shall within the period specified
therefore, or, if no period be specified, within five (5) working days after the award of the contract,
enter into a written contract with the DISTRICT, in accordance with the bid as accepted and give
bonds with good and sufficient surety or sureties, as may be required for the faithful performance
and proper fulfillment of such contract and for the payment for labor and materials used for the
performance of the contract, then the above obligation shall be void and of no effect, otherwise to
remain in full force and effect. It is expressly understood and agreed that the liability of the Surety
for any and all default of the principal hereunder shall be the amount of this obligation as herein
stated.

Surety, for value received, hereby stipulates and agrees that no change, extension of time,
alterations or addition to the terms of the contract or the call for bids, or to the work to be
performed thereunder, or the specifications accompanying the same, shall in any way affect its
obligation under this bond, and it does hereby waive notice of any such change, extension of time,
alteration or addition to the terms of said contract or the call for bids, or to the work, or to the
specifications.

IN WITNESS WHEREOF, the parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and duly signed by its undersigned authorized representative.

(Corporate Seal of Principal, if Corporation)

Principal (Proper Name of Bidder)

By: _____
Signature

Printed Name & Title

(Corporate Seal of Surety)

Surety

By: _____
Print Name & Title

Address

Telephone No.

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

DETERMINATION OF BIDDER RESPONSIBILITY QUESTIONNAIRE

The Public Contract Code requires that school districts, in certain circumstances, bid and award public contracts to the lowest responsive and responsible bidder. California law establishes a very comprehensive standard concerning bidder responsibility, such that a school agency has wide discretion and broad authority to make its determination of bidder responsibility on a case-by-case basis. Such authority empowers the District to conduct its own investigation, and make an assessment of the facts and circumstances to ascertain the quality, fitness, capacity and trustworthiness of each bidder. It is the purpose of this questionnaire to assist in determining contractor responsibility, and to aid the District in selecting the lowest responsible bidder (when the District does not opt to reject all bids).

Bidders must have completed the questionnaire, truthfully and completely, at least once since **January 1, 2009** to be considered for award on this project. If you completed this questionnaire since that date, you must certify that the data previously submitted is still true and accurate. Bidders must either complete the entire questionnaire or certify the previously submitted data as still current, truthful, and accurate, to be determined responsible and responsive to the bid announcement.

Bidders must answer all questions and provide all requested information, where applicable. If the answer to any question is "none", or is not applicable, please so state in writing. The District will evaluate bidders not only on the information contained in this questionnaire, but also using any and all information available through other sources, including District records, staff or representatives, interviews, and/or reference checks. Based on a complete evaluation, the awarding authority has sole and discretionary judgment to determine if the bidder is deemed responsible and/or qualified to perform the work. Bidders discovered to have omitted required information or provided false, misleading, or substantively incorrect statements, as determined solely by the District, will be disqualified from bidding. The District reserves the right to waive minor irregularities and to make all final determinations regarding prospective bidders' responsibility, fitness, and/or qualifications.

1. Experience: Describe three (3) public works or school district projects that your firm completed within the last three years, either as a Prime or Subcontractor, where your scope of work was similar in building size, scope, contract value and complexity to the proposed project.

A. Project Name: _____

Location: _____ Date
completed: _____

Project Description (Scope of work, similarities to current advertised project):

Owner's Representative Name: _____ Ph number: _____

Construction Manager Name: _____ Ph number: _____

General Contractor Name _____ Ph number: _____

(If you were a Subcontractor):

Name of Architect: _____ Number of RFIs

Your base contract amount: \$ _____ Final contract amount : \$ _____

Explain difference from Base Contract amount, if any. _____

Initial contract time: _____ days Time extensions: _____ days

Days past contract completion date (excl. authorized time extensions): _____ days

B. Project Name: _____

Location: _____ Date
completed: _____

Project Description (Scope of work, similarities to current advertised project):

Owner's Representative Name: _____ Ph number: _____

Construction Manager Name: _____ Ph number: _____

General Contractor Name _____ Ph number: _____

(If you were a Subcontractor):

Name of Architect: _____ Number of RFIs

Your base contract amount: \$ _____ Final contract amount : \$ _____

Explain difference from Base Contract amount, if any. _____

Initial contract time: _____ days Time extensions: _____ days

Days past contract completion date (excl. authorized time extensions): _____ days

C. Project Name: _____

Location: _____ Date
completed: _____

Project Description (Scope of work, similarities to current advertised project):

Owner's Representative Name: _____ Ph number: _____

Construction Manager Name: _____ Ph number: _____

General Contractor Name _____ Ph number: _____

(If you were a Subcontractor):

Name of Architect: _____ Number of RFIs

Your base contract amount: \$ _____ Final contract amount : \$ _____

Explain difference from Base Contract amount, if any. _____

Initial contract time: _____ days Time extensions: _____ days

Days past contract completion date (excl. authorized time extensions): _____ days

2. Financial Data: Complete the table below using data from your most recent completed accounting fiscal year and most recent completed accounting fiscal quarter. (Bidder may be required to submit a financial statement upon request.).

Financial Ratios	Ratio Calculation	Previous Fiscal Year	Ratio 1	Most Recent Quarter	Ratio 2
Current Ratio	Current Assets	a	a / b	e	e / f
	Current Liabilities	b		f	
Debt Ratio	Total Debt	c	c / d	g	g / h
	Total Net Worth	d		h	

3. Licensing: Your License Number: _____ (Bidder must be a licensed contractor in California for the appropriate classification for the project being advertised.)

a. Has your license ever been revoked or suspended?

YES ☐ NO ☐ If yes, please explain (include dates, alleged misconduct, findings, and terms of the revocation or suspension).

b. Has a complaint ever been filed with the Contractor's State License Board against your company that required a formal hearing or inquiry?

YES ☐ NO ☐ If yes, provide explanation

c. Have you ever been licensed in California under a different name or license number?

YES ☐ NO ☐ If yes, provide name and/or license number.

Was that license ever revoked or suspended?

YES ☐ NO ☐ If yes, provide explanation

4. Safety: Has Cal OSHA, Federal OSHA, the EPA or any Air Quality Management District cited your firm in the past three (3) years?

YES ☐ NO ☐ If yes, attach a copy and description of each citation.

5. Arbitration and Litigation History: Has your firm had any claims, litigation, or disputes ending in mediation or arbitration, or termination for cause associated with any project (either by your company or against your company) in the past five (5) years?

YES ☐ NO ☐ If yes, attach a description of each instance including details of total claim amount, settlement amount and owner's name and phone number.

6. Prior Disqualifications, Criminal Matters, and Related Civil Suits:

- a. Has your firm ever been disqualified from performing work for the Sacramento City Unified School District?

YES ☐ NO ☐ If yes, provide the following information:

Project name: _____

Date of disqualification: _____

Duration of disqualification: _____

Reason for disqualification: _____

- b. Has your firm ever been disqualified from performing work for any contracting entity other than the Sacramento City Unified School District:

YES ☐ NO ☐ If yes, provide the following information:

Contracting Entity Name: _____

Date of disqualification: _____

Duration of disqualification: _____

Reason for disqualification: _____

- c. Has your firm or any of its owners, officers or partners ever been found liable in a civil suit or found guilty in a criminal action for making any false claim or material misrepresentation to any public agency or entity?

YES ☐ NO ☐ If "yes," explain who was involved, the name of the public agency, the date of the investigation and the grounds for the finding.

- d. Has your firm or any of its owners, officers or partners ever been convicted of a crime involving any federal, state, or local law related to construction work, fraud, theft, or other act of dishonesty?

YES ☐ NO ☐ If "yes," explain who was involved, the name of the public agency, the date of the conviction and the grounds for the conviction.

Questionnaire Certification

The undersigned declares under penalty of perjury that all information submitted in this questionnaire is current, true and accurate, and that this declaration was executed by the undersigned on:

(Date)

(Name and Title) printed or typed

(Signature)

(Firm Name)

OR

Previously Submitted Questionnaire Certification

(Questionnaires completed prior to January 1, 2010 are no longer valid)

The undersigned declares under penalty of perjury that all information previously submitted to the District remains to be complete, true, and correct, and that this declaration was executed by the undersigned on:

(Date)

(Name and Title) printed or typed

(Signature)

(Firm Name)

CONTRACT

THIS CONTRACT, made and entered into this ***INSERT DATA HERE*** day of ***INSERT DATA HERE***, 20***Insert Data Here***, between Sacramento City Unified School District, a political subdivision of the State of California, hereinafter referred to as District, and ***INSERT DATA HERE***, hereinafter referred to as Contractor;

WITNESSETH:

WHEREAS, the Governing Board of said District heretofore caused specifications and plans for the work hereinafter mentioned to be prepared, and thereafter did approve and adopt said specifications and plans; and,

WHEREAS, the Governing Board of said District did cause to be noticed for the time and in the manner required by law a Notice inviting sealed bids for the performance of said work; and,

WHEREAS, Contractor, in response to such Notice, submitted to the Governing Board of said District within the time specified in said Notice, and in the manner provided for therein, a sealed bid for the performance of the work specified in said plans and specifications, which said bid and proposal, and the other bids and proposals submitted in response to said Notice, the Governing Board of District publicly opened and canvassed in the manner provided by law; and,

WHEREAS, Contractor was the lowest responsible bidder for the performance of said work, and said Governing Board of District, as a result of the canvass of said bids, did determine and declare Contractor to be the lowest responsible bidder for the work and award to him a contract therefor.

NOW, THEREFORE, in consideration of the above, it is mutually agreed between the parties hereto as follows, to wit:

1. SCOPE OF WORK

Contractor will furnish: Construction of Bid No. ***Insert Data Here***. The Contractor shall include in his bid and provide, labor, tools, equipment, excavation sheeting, bracing and supports, plant labor and services, and materials, except as may otherwise be provided in the Contract Documents, free from any and all liens and claims from mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, freight carriers, and laborers, for a complete and working project in conformance with the intent shown on the drawings and specified herein and as provided for and set forth in said plans, specifications, and any addendum that may be issued prior to the date of bid, or in either of them, which said plans and specifications are hereby referred to by such reference, incorporated herein, and made a part of this Contract.

2. TERMS AND CONDITIONS

The complete contract includes all Contract Documents, including the Notice To Contractors, Instructions to Bidders, Bid Form, Designation of Subcontractor(s), Worker's Compensation Certificate, Faithful Performance Bond, Payment Bond, Change Orders, Shop Drawings Transmittals, all qualification forms submitted, if any, Non-Collusion Declaration, Insurance Certificates, Declarations Pages and Additional Insured Endorsements, Guaranties, Contractor's Certificate Regarding Non-Asbestos Containing Materials, if any, General Conditions, Supplemental Conditions, if any, Special Conditions, if any, Plans, Drawings and Specifications prepared by Sacramento City Unified School District, this Contract, the Project Stabilization Agreement (PSA) "Contractor Agreement To Be Bound" (Attachment A), and all Modifications, Addenda and Amendments thereto, by this reference incorporated. The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.

All of said work done under this contract shall be performed to the full satisfaction of the Board of Education of District or its representatives, who shall have the right to reject any and all materials and supplies furnished by the Contractor which do not strictly comply with said plans and specifications. The District shall further have the right to require Contractor to replace any and all work furnished by Contractor which shall not either in workmanship or material be in strict accordance with said plans and specifications. The Contractor shall be liable to the District for any damages arising as a result of a failure to fully comply with this obligation.

Additionally, the Contractor shall not be excused with respect to any failure to so comply by any act or omission of the Architect, Engineer, Inspector, Construction Manager(s), Division of State Architect, or representative of any of them, unless such act or omission actually prevents the Contractor from fully complying with the requirements of the Contract documents. If so alleged, the Contractor must protest at the time of such alleged prevention that the act or omission is preventing Contractor from fully complying with the Contract Documents. Such protests shall not be effective unless reduced to writing and filed with the District within three (3) working days from the date of occurrence of the act or omission preventing the Contractor from fully complying with the Contract Documents.

The General Conditions (dated March 9, 2007) and definitions therein may be accessed at the District's website at <http://www.scusd.edu/ContractsOffice>. These General Conditions and the definitions are an integral part of the Contract Documents. In addition to signing the Contract, Contractor shall initial this paragraph immediately below acknowledging that the General Conditions, and Supplemental Conditions, if any, and the definitions have been read, understood and accepted by Contractor. Contractor shall not disclaim knowledge of the meaning and effect of any term or provision of these General Conditions, and Supplemental Conditions, if any, and agrees to strictly abide by their meaning and intent. **If the Contractor fails to initial below, the District shall have the right to declare the Contract unexecuted and to terminate the Contract in accordance with California Public Contract Code Section 5106.**

CONTRACTOR'S INITIALS: _____

Upon condition the Contractor faithfully performs its obligations herein, District agrees to authorize and request payment to Contractor (subject to the terms and conditions of the Contract Documents) the sum of ***INSERT DATA HERE*** (\$***INSERT DATA HERE***).

3. CLASSIFICATION OF CONTRACTOR'S LICENSE

Contractor shall hold a valid C-7, Low Voltage Systems or C-10, Electrical Contractor's License issued by the Contractor's State License Board.

4. DATE FOR COMPLETION OF CONSTRUCTION

Contractor shall commence work on the Project on the date specified as the Project start date in the Notice to Proceed and complete the Project within 200 calendar days, including any schedule limitations as noted in project specifications. Any variation, extension, or conflict regarding these timelines shall be requested in writing to the District through the Architect or Construction Manager, if there is a construction manager, in advance of the requested schedule variance.

5. LIQUIDATED DAMAGES

Time is of the essence. If the work is not completed in accordance with Article 4 above, it is understood that District will suffer damage. It being impractical and infeasible to determine the amount of actual damage, in accordance with Government Code section 53069.85, it is agreed that

Contractor shall pay to District as fixed and liquidated damages, and not as a penalty, the sum of \$1,500.00 for each calendar day of delay until work is completed and accepted. This amount shall be deducted from any payments due or to become due to Contractor. Contractor and Contractor Surety shall be liable for the amount thereof. Time extension may be granted by the District as provided in the General Conditions. If the District accepts any work or makes any payment under this Contract after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Contract provisions regarding time of completion and liquidated damages.

6. OTHER PROVISIONS OF LAW

Each and every provision of law and clause required by law to be inserted shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein. If through mistake or otherwise any such provision is not inserted, or is not currently inserted, then upon application of either party, the Contract shall forthwith be physically amended to make such insertion or correction.

7. INDEMNIFICATION AND INSURANCE

The Contractor will defend, indemnify and hold harmless the District, its governing board, officers, agents, trustees, and employees against and from any and all liability for damages on account of injury to or death of persons or damage to property or delay or damage to another contractor resulting from or arising out of or in any way connected with the performance by the Contractor of this Contract and reimburse the District for all costs, attorney's fees, expenses and loss incurred by it in consequence of any claims, demands, and causes of action which may be brought against it arising out of the performance by the Contractor of this Contract. This indemnification shall be in addition to the other indemnification provisions contained in the Contract Documents.

Contractor shall provide the insurance set forth in the General Conditions. The amount of general liability insurance shall be \$1,000,000.00 per occurrence for bodily injury, personal injury and property damage and the amount of automobile liability insurance shall be \$1,000,000.00 per accident for bodily injury and property damage combined single limit.

8. ENTIRE AGREEMENT

The Contract Documents constitute the entire agreement between the parties, and supersedes any prior or contemporaneous agreement between the parties, oral or written, including the District's award of the Project to Contractor, unless such agreement is expressly incorporated herein. The District makes no representations or warranties, express or implied, not specified in the Contract Documents. The Contract Documents are intended as the complete and exclusive statement of the parties' agreement pursuant to Code of Civil Procedure section 1856.

9. EXECUTION IN COUNTERPARTS

This Contract may be executed in counterparts such that the signatures may appear on separate signature pages. A copy, or an original, with all signatures appended together, shall be deemed a fully executed Contract.

10. BINDING EFFECT

Contractor, by execution of this Contract, acknowledges that Contractor has read this Contract and the other Contract Documents, understands them, and agrees to be bound by their terms and conditions. The Contract Documents shall inure to the benefit of and shall be binding upon the Contractor and the District and their respective successors and assigns.

11. SEVERABILITY

If any provision of the Contract Documents shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof. The Contract Documents shall be governed by the laws of the State of California and venue shall be in the appropriate Superior Court in Sacramento County, California.

12. AMENDMENTS/CHANGE ORDERS

The terms of the Contract Documents shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement, signed by the parties and approved or ratified by the Governing Board.

13. ASSIGNMENT OF CONTRACT DOCUMENTS

The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on the payment bond, the surety on the performance bond and the District.

14. WRITTEN NOTICE (LEGAL)

Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered, certified, or overnight mail to the last business address known to the person who gives the notice.

District/Owner	Contractor
Sacramento City Unified School District Barry Evpak, Director Facilities Maintenance 425 First Avenue Sacramento, California 95818	***INSERT DATA HERE***

NOTE: Contractor must give the full business address of the Contractor and sign with Contractor's usual signature. Partnerships must furnish the full name of all partners and the Agreement must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Corporations must sign with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished upon request.

IN WITNESS WHEREOF, District and Contractor have caused this Contract to be signed as of the day and year first above written.

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
Administrative Services, Contracts Office
5735 47th Avenue
Sacramento Ca 95824

By: _____ Date: _____
 Patricia A. Hagemeyer
 Chief Business Officer

Next page for Contractor signature.

Contractor is a: (circle one): Corporation Partnership Individual Joint Venture

Other _____

NAMES AND TITLES OF KEY MEMBERS OF FIRM: (Name of person signing on behalf of the Contractor and all general partners, if a partnership, must be included.)

NAME OF PRESIDENT IF A CORPORATION: _____

NAME OF SECRETARY IF A CORPORATION: _____

(For Joint Ventures, list Joint Venture's license or licenses for all Joint Venture partners.)

Corporation is organized under the laws of the State of _____.

Corporate Seal:

Name of Contractor's firm: _____

Address: _____

By: _____
(Signature) (Signature)

(Print or Type Name & Title) (Print or Type Name & Title)

(If signature is by other than the sole proprietor, general partner, or corporate officers, attach an original Power of Attorney.)

Bond Number:
Premium:

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WHEREAS, the Governing Board of the Sacramento City Unified School District, State of California, hereinafter designated as the "Obligee," has on _____, 200__, awarded to

_____ hereinafter designated as "Principal,"
a contract for the construction of

located at (address) _____
(Contract No.) _____, and said contract and all the Contract Documents are hereby referred to and made a part hereof;

WHEREAS, said Principal is required to furnish a bond in connection and with said contract, providing that if said Principal, or any of his or its subcontractors, or the heirs, executors, administrators, successors, or assigns of any, all, or either of them, shall fail to pay for any materials, provisions, or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety on this bond will pay the same to the extent hereinafter set forth:

NOW, THEREFORE, We, the Principal, and _____
as Surety, are held and firmly bound unto all laborers, material men, and other persons referred to in Civil Code Section 3248, subdivision (b) and the Obligee in the penal sum of _____ Dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, or any of his or its subcontractors, shall fail to pay any of the persons named in Section 3181 of the Civil Code of the State of California, or any of the amounts due as specified in Civil Code Section 3248, subdivision (b), to pay for any materials, provisions, provender or other supplies, or teams, used in, upon, for, or about the performance of the work contracted to be done, that said Surety will pay the same in an amount not exceeding the amount, hereinabove set forth, and also will pay, in case suit is brought upon this bond, reasonable attorneys' fees to such claimant and to the Obligee as shall be fixed by the Court.

This bond is issued pursuant to Civil Code Sections 3247 through 3252, inclusive, of the State of California, and shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work to be performed thereunder, or the specifications accompanying the same shall, in any way, affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract, or to the work or to the specifications. Said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

IN WITNESS WHEREOF, the above-bounden parties have signed this instrument under their seals this _____ day of _____, 200__, the name and corporate seal of

each corporate party being hereto affixed, and these presents duly signed by its undersigned representatives, pursuant to authority of its governing body.

(SEAL)

Principal: _____
(Name of Firm)

By: _____
(Signature)

(Printed Name)

(Title)

(SEAL)

Surety: _____
(Name of Firm)

Address for Notices:

By: _____
(Signature)

(Printed Name)

(Title)

(This bond must be submitted in sets of two, each bearing original signatures. The signature of the Attorney-In-Fact for the Surety must be acknowledged by a Notary Public. These bonds must be accompanied by a current Power of Attorney appointing such Attorney-In-Fact.)

Bond Number:
Premium:

FAITHFUL PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WHEREAS, the Governing Board of the Sacramento City Unified School District, State of California, hereinafter designated as the "Obligee," has on _____, 200____, awarded to

_____ hereinafter designated as "Principal," a contract for the construction of

located at (address) _____
(Contract No.) _____, and said contract and all the Contract Documents are hereby referred to and made a part hereof;

WHEREAS said Principal is required, under the terms of the Contract, to furnish a bond for the faithful performance of said Contract:

NOW, THEREFORE, We, the Principal, and _____
as Surety, are held and firmly bound unto the Obligee in the penal sum of _____ Dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that, if the above bounden Principal, his or its heirs, executors, administrators, successors, or assigns shall in all things stand to and abide by, and well and truly keep and faithfully perform the covenants, conditions, and agreement in the said Contract, and any alterations made as therein provided, including but not limited to, on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Obligee, its officers and agents as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation in said amount shall hold good during the original term of said Contract and any extensions thereof that may be granted by the Owner, with or without notice to the Surety, and during the life of any guaranty or warranty required under the Contract, during which time if the above bounden Principal, his or its heirs, executors, administrators, successors, or assigns shall fail to make full, complete, and satisfactory repair and replacements or totally protect the said Obligee from loss or damage made evident during said period, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the above obligation in the said sum shall remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligation of the Surety hereunder shall continue so long as any obligation of the Principal remains.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work to be performed thereunder, or the specifications accompanying the same, shall, in any way, affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract, or to the work or to the specifications. Said Surety hereby waives the provisions of Section 2819 and 2845 of the Civil Code of the State of California.

IN WITNESS WHEREOF, the above bounden parties have signed this instrument under their seals this _____ day of _____, 200____, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(SEAL)

Principal: _____
(Name of Firm)

By: _____
(Signature)

(Printed Name)

(Title)

(SEAL)

Surety: _____
(Name of Firm)

Address for Notices:

By: _____
(Signature)

(Printed Name)

(Title)

(The signature of the Attorney-In-Fact for the Surety must be acknowledged by a Notary Public, and this bond must be accompanied by a current Power of Attorney appointing such Attorney-In-Fact. This bond must be submitted in sets of two, each bearing original signatures.)



Project Specifications

Energy Management and Control System
Expansion

For

Sacramento City Unified School District
3051 Redding Avenue
Sacramento, CA 95820

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Section 01010

Summary of Work

Energy Management and Control System
Expansion

For

Sacramento City Unified School District
3051 Redding Avenue
Sacramento, CA 95820

Section 01010 - Summary of Work

Expanding the Existing Sacramento City Unified School District (EMCS)

General Overview

1. The Sacramento City Unified School District intends to expand the existing the Johnson Metasys Control System. Currently, 34 Schools are controlled and monitored by the Johnson Metasys Control System. Refer to the Architecture Diagram that is included in the bid documents, for details.
2. The expanded Metasys Control System will provide a complete integrated Digital Control System for equipment supervision, alarm management, energy management, and historical data collection and archiving.
3. 24 additional schools will be added as detailed in the Architecture Diagram.
4. The objective is to provide a fully integrated 58 School Johnson Metasys Control System that seamlessly interfaces the 34 existing schools with the 24 new schools. No alternates or substitutions to this specification will be accepted.
5. The new Metasys Controls for the 24 additional schools will interface with the 2 existing Sacramento City Unified School District - Johnson Controls Servers (Meta1 and Meta2) located at the District IT Server Room. Refer to the specification for the hardware and software requirements.
6. Program all new Web Based Color Graphics for the HVAC Systems for all 58 Schools. (Both existing schools and new schools) as part of this project.
7. Program the 2 Metasys Servers so that the password protected graphics are available from any PC connected to the District wide intranet .
8. The various HVAC Systems in the 24 new schools to be added in this bid, will be controlled by standalone MS-FEC2621-0 controllers networked via a new RS485 BACnet data bus to be installed in each school. The Johnson NAE5510 and FEC2621 Controllers are the only 2 approved products to be used to expand the existing Johnson Metasys System. Refer to the Control Drawings for additional details. No substitutions will be permitted.
9. Program custom Metasys energy conservation programs into each of the new NAE5510 Controllers to match the district standards, refer to the specification for details.
10. The contractor will verify the type and quantity of existing Metasys NCM Master Controllers and N2 controllers located in each of the 34 existing schools. Include in the base bid all hardware and software upgrade costs to interface the 34 existing Johnson Metasys Controllers into the new ADX Web Server. Provide, install and program new Metasys NAE5510 hardware and software as required in each school. Provide new ADX color graphics for the existing AC Units in each existing Metasys School.

11. Provide custom KW Monitoring software for each FEC2621 that measures and calculates the KWH for each fan and dx compressor. Totalize the KWH daily, weekly, monthly and yearly for each AC Unit. Program a custom weekly, monthly and annual report.
12. As built control drawings will be provided as specified for 58 schools.
13. Provide Factory Training for 2 District Staff (Airfare, hotels, meals, transportation are all included) on the new control system.

Provide 3 Laptop Computers, Bluetooth Adapters and SCT/CCT Software for the District Staff to use for on-going maintenance of the new controls.

Mandatory Quality Assurance References (Refer to Bid Form)

1. The Johnson ABCS shall have a minimum of 3 years experience with the Johnson Metasys NAE/ADX Control System as specified. Provide with your bid a list of 2 customer references that incorporated the Metasys Split ADX Configuration, with 2 Servers. (One for Web Pages and one for Historical Data). Provide the ADX Split Server project name, project contact and phone number so references can be verified. Failure to provide this information will make the contractors bid - non compliant. In addition, the contractor will have a minimum of 6 Metasys Control System Programmers on staff
2. Provide a letter from Johnson Controls, as proof of Johnson Controls ABCS Contractor Standing for at least 4 years. (2008, 2009, 2010, 2011).

SMUD Smart Grid Investment Grant - Reporting Requirements

1. The successful contractor must meet all of the SMUD Smart Grid Investment Grant energy reporting and project execution reporting requirements. For more details, refer to the SMUD documentation that is part of the bid package.

Base Bid and Additive Alternate Pricing (Refer to Bid Form)

1. Provide a total base bid cost for all 58 Schools, including NAE5510 Master Controllers and FEC 2621 Field Controllers, installation labor, engineering, hardware, software, owner training and 1 year standard parts and labor warranty.
2. Provide additive alternate breakout pricing for 3 additional years of warranty and breakout pricing for James Marshall, Lisbon and Martin Luther King Schools.



Section 15950

Energy Management and Control System Expansion

For

Sacramento City Unified School District
3051 Redding Avenue
Sacramento, CA 95820

Section 15950 Energy Management and Control System

Expanding the Existing Sacramento City Unified School District (EMCS)

1. Part 1 - General

1.1 Quality Assurance

General

1. The Sacramento City Unified School District intends to expand the existing the Johnson Metasys Control System from 34 schools to 58 schools. The controls for the 24 new schools will communicate with the 2 existing Johnson Controls Servers (Meta1 and Meta2) located at the District IT Server Room. No substitutions or alternates will be accepted. Program Web Based Graphics for all 58 schools (both new and existing HVAC Systems). Program the 2 Web Servers so the password protected graphics are available from any PC connected to the District wide intranet connection. Upgrade the existing Metasys software to the most current version of Metasys Web Server Software (MS-ADXSWO-0)
2. New Package AC Units will be controlled by standalone MS-FEC 2621 Controllers networked via a new RS485 data bus to be installed in each school. Each school will have a new MS-NAE5510-1 Master Controller. Refer to the EMCS points lists for additional details. Alternates or substitutions for these controllers will not be accepted.
3. The Johnson (ABCS) Factory Authorized - Facility Management System Contractor (FMSC) will install it as a complete package. The System will include all wiring, piping, installation supervision, calibration, adjustments, and checkout necessary for a complete and fully operational system.
4. The Johnson ABCS Contractor shall have a local office within a 30-mile radius of the job site. Emergency service shall be available with-in 2 hours on a 24-hour, 7-day-a-week basis.

B. Experience Record / Quality Control - Mandatory Bid Requirement

1. Provide with the bid documents, proof the Johnson ABCS has a minimum of 3 years experience with the Johnson Metasys Controllers currently installed at the School District. Provide with your bid, a list of 2 customer references that incorporated the Metasys Split ADX Configuration, with 2 Servers. (One for Web Pages and one for Historical Data) Provide the project name, project contact and phone number so references can be verified.
2. Provide a letter from Johnson Controls, as proof of Johnson Controls ABCS Contractor Standing for at least 4 years. (2008, 2009, 2010, 2011).

C. Governing Code Compliance

1. The FMSC shall comply with all current governing codes ordinances and regulations, including DSA, UL, NFPA, the local Building Code, NEC, and Title 24.

D. District Standard For Energy Efficient System Operation

1. The FMS Contractor shall program each HVAC System to meet or exceed Title 24 standards for energy efficiency. The following energy conservation programs will be programmed in the MS-NAE5510-1 Master Controller.
 - The HVAC Control System must meet the Title 24 standards for energy efficiency. The following energy conservation programs will be programmed in the MS-NAE5510-1 Master Controller. For this program to be effective all Master Controllers must be networked thru the existing district wide Ethernet.
 - Program all thermostats to maintain the District Standard for heating and cooling set points. Example: 70F Heating and 74F Cooling.
 - Global Calendar Scheduling: - Setup all schools to shutdown for scheduled holidays and vacation breaks. Program the local thermostat push button to return the package unit to day mode for one hour if the teacher wants to work during the vacation breaks.
 - Special Event Calendar Scheduling: Program in special event schedules that only turn on specific fans for the special event and then automatically delete themselves after the event has been executed.
 - Load Rolling - Program the MS-NAE5510-1 Master Controller to automatically switch 25% of the buildings loads to the unoccupied mode every 15 minutes. The load-rolling program will automatically shed 25% of the total electrical load every 15 minutes. Push button over-ride will be disabled during load rolling.
 - Optimal Start - Compare interior space temperature to outside air temperature and adjust morning start time to achieve the morning occupancy room set point. Enable thermostat pushbutton for one-hour override.
 - Optimal Stop - Compare the interior space temperature to the outside air temperature and optimal shutdown default time and shutdown the package units 15 to 45 minutes before the classes end each day. Enable thermostat pushbutton for 30-minute override.
 - Winter Morning Warm-Up (Free Heating Mode - Close All Dampers to quickly warm up building. Compare interior temperature to outside air temperature to maximize free heating savings)
 - Summer Night Purge (Free Cooling Mode - Compare the interior temperature to outside air temperature and start fans to pre-cool building with 100% Fresh Air.)
 - Critical Alarm Reporting - If any room temperature exceeds the alarm set-points, automatically call the on call maintenance cell phone and leave a detailed voice message with the time, date, school and system in alarm. At

the same time send an email to the maintenance department to document the time and date of the critical alarm.

- Filter Alarm Reporting - Monitor the outside air filters for differential pressure drop. When the pressure drop exceeds the alarm Setpoint automatically send an email to the maintenance department to document the time and date of the critical alarm.
- KW usage per AC unit. Totalize the Kwh used in each AC Unit. Program custom software in each FEC to calculate the daily electrical consumption.
- Energy Conservation Software Testing and Fine Tuning: At the end of the warranty year, access each AHU or Package AC unit and test that all energy efficient hardware and software still functions as originally installed.

1.2 Submittals

A Shop Drawings, Product Data, and Samples

1. The FMS Contractor shall submit within 10 days after award installation wiring drawings and control strategies for review.

2 Part 2 - Products

2.1 System Architecture

A First Tier Network - MS-NAE5510-1 Master Controllers

1. The first tier network shall involve connecting MS-NAE5510-1 Master Controllers into the existing campus wide Secure Intranet.

B Second Tier Network - MS-FEC 2621-0 Field Equipment Controllers

1. Second tier networks shall connect into new BACnet Network created for this building.
2. DDC System Controllers MS-FEC 2621-0 Controllers shall reside on the BACnet Network.

2.2 Operator Interface - Platform

1. The FMS Contractor shall connect to the existing Sacramento City Unified School District Servers Meta1 and Meta2 located at the district maintenance office. The existing Servers provide command entry, information management, network alarm management, and database management functions for the new building. All real-time control functions, including scheduling, history collection and alarming, shall be resident in the FMS controllers to facilitate greater fault tolerance and reliability.
2. The FMS Contractor shall provide new real-time graphic screens at the workstation. All screens shall have transfer buttons to penetrate to all other

screens. At a minimum, the following screens with all associated control and monitoring points shall be programmed:

- a. Building plan
 - b. Major systems showing all as built equipment and air and water paths
 - c. Floor plans clearly depicting all zone boundaries and zone temperatures
 - d. Graphics for Package AC Units, Heat Pumps and Boilers / Chillers
3. The FMS Contractor shall provide text mode screens depicting all control and monitoring points. The screens shall group points into logical systems and subsystems. The operator shall be able to switch between text mode and graphic mode viewing of the facility.
 4. The FMS Contractor shall install all controller configuration software tools on the workstation. The operator shall have the capability of programming, downloading and commissioning any controller from the ADX using these tools without any additional hardware or software. All current controller databases shall be maintained at the workstation.
 5. Alarms
 - a. Each NAE55 shall receive and process alarms sent to it by the control system. The alarm management portion of the ADX Spit Server software shall, at the minimum, provide the following functions:
 - ☐ Log date and time of alarm occurrence.
 - ☐ Generate a "Pop-Up" window informing an operator that an alarm has been received.
 - ☐ Allow an operator, with the appropriate security level, to acknowledge, delete, or disable an alarm.
 - ☐ Provide an audit trail for alarms by recording operator acknowledgment, deletion, or disabling of an alarm. The audit trail shall include the name of the operator, the alarm, the action taken on the alarm, and a time/date stamp.
 - ☐ Record all alarms received to the dedicated ADX Split Alarm Server hard drive.
 - ☐ Allow the operators to view/manage the alarm data archived to hard disk. Selection of a single menu item or tool bar button shall allow the user to acknowledge, disable, delete, or print the selected alarm.
 - b. Alarms shall be generated by the NAE55 for any controller that is "Off-Line" and is not communicating, or that does not have an active control program loaded.
 6. Password
 - a. Multiple-level password access protection shall be provided to allow the user/manager to limit workstation control, display, and database manipulation capabilities as he or she deems appropriate for each user, based on an assigned password.

- b. Levels of access shall be supported as follows:
 - ☐ Data Access and Display
 - ☐ Operator Overrides
 - ☐ Database Modification ☐ Database Generation
 - ☐ All privileges, including Password Add/Modify
 - c. A minimum of 100 unique passwords, including user initials, shall be supported.
 - 7. Historical trending and data collection
 - a. Each MS- NAE 5510 Controller shall store trend and point history data for all analog and digital inputs and outputs, as follows: Any point, physical or calculated, may be designated for trending. Three methods of collection shall be allowed: Defined time interval. Upon a change of value. Whenever a value is out of range.
 - b. Trend and change of value data shall be stored within the controller and then uploaded to the trend database(s) in the ADX. Uploads shall occur based upon one of the following: user-defined interval, manual command, or when the trend buffers are full.

23 Network Controllers

- A. First Tier - MS-NAE5510-1 Network Automation Engine (NAE)
 - 1. The Network Controller shall be a fully user-programmable, supervisory controller. The Network Controller shall monitor the network of distributed FEC 2621-0 controllers, provide global strategy and direction, and communicate on a peer-to-peer basis with other Network Controllers.
 - 2. First Tier Network - The Network Controller shall reside on the existing campus wide Ethernet Network. Each NAE shall support a sub-network of a minimum of 200 controllers on the second tier network.
 - 3. BACnet - Each controller shall have the ability to connect to third-party control systems by way of BACnet, as specified or as shown on the design drawings.

24 Field Equipment Controllers

- A. Second Tier Network - MS-FEC 2621 Field Equipment Controllers
 - 1. MS-FEC2621 Controllers shall support custom algorithms to enable full standalone control of Package AC Units, kWh monitoring, as specified.

2. MS-FEC2621 Controllers shall support all the necessary point inputs and outputs to perform the specified control sequences in a totally standalone fashion, and allow spare points for future expansion.
3. MS-FEC2621 controllers shall have a library of control routines and program logic to perform the sequence of operation as specified in the Execution portion of this specification and as shown on plans.
4. MS-FEC2621 controllers shall fail to "on" mode if the central system were to fail.
5. Each MS-FEC2621 controller shall have built in graphic display panel to permit readout and adjustment of set points and temperatures.
6. MS-FEC2621 controller room sensor NS-BTB7003-0 shall have a pushbutton over-ride of the set back schedule. Connect each controller to a local room thermostat. Each Thermostat will have a heating/cooling set point adjustment. Provide custom labels on each thermostat for the maximum and minimum heat / cool set points.
7. Alarm Management: Each MS-FEC2621 Controller shall perform its own limit and status monitoring and analysis to maximize performance.

25 Input Devices

A. General Requirements

1. Installation, testing, and calibration of all sensors, transmitters, and other input devices shall be provided to meet the system requirements.

B. Temperature Sensors

1. General Requirements:
 - a. Sensors and transmitters shall be provided, as outlined in the input/output summary and sequence of operations.
2. Room Temperature Sensor - NS-BTB7003-0.
 - a. Room sensors shall be constructed for either surface or wallbox mounting.
 - b. Room sensors shall have the following options when specified:
 - ☐ Setpoint adjustment providing a +3 degree (adjustable) range.
 - ☐ Provide custom labels on each thermostat indicating the maximum and minimum heat / cool set points.
 - ☐ A momentary override request push button for activation of after-hours operation.
 - ☐ Digital Display of the room temperature and setpoint.
3. Outside Air Sensors

- a. Outside air sensors shall be designed to withstand the environmental conditions to which they will be exposed. They shall also be provided with a solar shield.
 - b. Sensors exposed to wind velocity pressures shall be shielded by a perforated plate that surrounds the sensor element.
 - c. Temperature transmitters shall be of NEMA 3R construction and rated for ambient temperatures.
- 4. Duct Mount Sensors
 - a. Duct mount sensors shall mount in an electrical box through a hole in the duct, and be positioned so as to be easily accessible for repair or replacement.
 - b. Duct sensors shall be insertion type and constructed as a complete assembly, including lock nut and mounting plate.
 - c. For outdoor air duct applications, a weatherproof mounting box with weatherproof cover and gasket shall be used.
- 5. Averaging Sensors
 - a. For ductwork greater in any dimension than 48 inches and/or where air temperature stratification exists, an averaging sensor with multiple sensing points shall be used.
 - b. For plenum applications, such as mixed air temperature measurements, a string of sensors mounted across the plenum shall be used to account for stratification and/or air turbulence. The averaging string shall have a minimum of 4 sensing points per 12-foot long segment.
- C. Differential Pressure Transmitters
 - 1. General Air and Water Pressure Transmitter Requirements:
 - a. Pressure transmitters shall be constructed to withstand 100% pressure over-range without damage, and to hold calibrated accuracy when subject to a momentary 40% over-range input.
 - b. Pressure transmitters shall transmit a 0 to 5 VDC, 0 to 10 VDC, or 4 to 20 mA output signal.
 - c. Differential pressure transmitters used for flow measurement shall be sized to the flow sensing device, and shall be supplied with Tee fittings and shut-off valves in the high and low sensing pick-up lines to allow the balancing Contractor and Owner permanent, easy-to-use connection.
- D. Status and Safety Switches
 - 1. General Requirements
 - a. Switches shall be provided to monitor equipment status, safety conditions, and generate alarms at the FMS when a failure or abnormal condition occurs. Safety switches shall be provided with two sets of

contacts and shall be interlock wired to shut down respective equipment.

2. Current Sensing Transmitters

- a. The current sensing switch shall be self-powered with solid-state circuitry and 0-5vdc analog output.
- b. Current sensing transmitters shall be used for kWh calculations for fans, pumps, and other miscellaneous motor loads.
- c. Current sensing transmitter shall be calibrated to show a positive run status only when the motor is operating under load. A motor running with a broken belt or coupling shall indicate a negative run status.

3. Air Filter Status Switches

- a. Differential pressure switches used to monitor air filter status shall be 0-10vdc analog output type.
- b. A complete installation kit shall be provided, including: static pressure tops, tubing, fittings, and air filters.
- c. Provide appropriate scale range and differential adjustment for intended service.

4. Air Flow Switches

- a. Differential pressure flow switches shall be bellows actuated mercury switches or snap acting micro-switches with appropriate scale range and differential adjustment for intended service.

5. Air Pressure Safety Switches

- a. Air pressure safety switches shall be of the manual reset type with SPDT contacts rated for 2 amps at 120VAC.
- b. Pressure range shall be adjustable with appropriate scale range and differential adjustment for intended service.

6. Water Flow Switches

- a. Water flow switches shall be equal to the Johnson Controls P74.

7. Low Temperature Limit Switches

- a. The low temperature limit switch shall be of the manual reset type with Double Pole/Single Throw snap acting contacts rated for 16 amps at 120VAC.
- b. The sensing element shall be a minimum of 15 feet in length and shall react to the coldest 18-inch section. Element shall be mounted horizontally across duct in accordance with manufacturers recommended installation procedures.
- c. For large duct areas where the sensing element does not provide full coverage of the air stream, additional switches shall be provided as required to provide full protection of the air stream.
- d. The low temperature limit switch shall be equal to Johnson Controls A70.

26 Output Devices

A. Actuators

1. General Requirements

- a. Damper and valve actuators shall be electronic and/or pneumatic, as specified in the System Description section.

2. Electronic Damper Actuators

- a. Electronic damper actuators shall be direct shaft mount, as manufactured by Johnson Controls and Belimo.
- b. Modulating and two-position actuators shall be provided as required by the sequence of operations. Damper sections shall be sized based on actuator manufacturer's recommendations for face velocity, differential pressure and damper type. The actuator mounting arrangement and spring return feature shall permit normally open or normally closed positions of the dampers, as required. All actuators (except terminal units) shall be furnished with mechanical spring return unless otherwise specified in the sequences of operations. All actuators shall have external adjustable stops to limit the travel in either direction, and a gear release to allow manual positioning.
- c. Modulating actuators shall accept 24 VAC or VDC power supply, consume no more than 15 VA, and be UL listed. The control signal shall be 2-10 VDC or 4-20 mA, and the actuator shall provide a clamp position feedback signal of 2-10 VDC. The feedback signal shall be independent of the input signal and may be used to parallel other actuators and provide true position indication. The feedback signal of one damper actuator for each separately controlled damper shall be wired back to a terminal strip in the control panel for trouble-shooting purposes.

3. Electronic Valve Actuators

- a. Electronic valve actuators shall be manufactured by the valve manufacturer or Belimo Air Controls. Each actuator shall have current limiting circuitry incorporated in its design to prevent damage to the actuator.

B. Control Relays

1. Control Pilot Relays

- a. Control pilot relays shall be of a modular plug-in design with retaining springs or clips.
- b. Mounting bases shall be snap-mount.
- c. DPDT, 3PDT, or 4PDT relays shall be provided, as appropriate for application.

- d. Contacts shall be rated for 10 amps at 120VAC.
- e. Relays shall have an integral indicator light and check button.

2. Lighting Control Relays

- a. Lighting control relays shall be latching with integral status contacts.
- b. Contacts shall be rated for 20 amps at 277 VAC.
- c. The coil shall be a split low-voltage coil that moves the line voltage contact armature to the ON or OFF latched position.
- d. The relay shall be designed so that power outages do not result in a change-of-state, and so that multiple same state commands will simply maintain the commanded state. Example: Multiple OFF command pulses shall simply keep the contacts in the OFF position.

C. Control Valves

1. All automatic control valves shall be fully proportioning and provide near linear heat transfer control. The valves shall be quiet in operation and fail-safe open, closed, or in their last position. All valves shall operate in sequence with another valve when required by the sequence of operations.
All control valves shall be sized by the control manufacturer, and shall be guaranteed to meet the heating and cooling loads, as specified. All control valves shall be suitable for the system flow conditions and close against the differential pressures involved. Body pressure rating and connection type (sweat, screwed, or flanged) shall conform to the pipe schedule elsewhere in this Specification.
2. Chilled water control valves shall be modulating plug, ball, and/or butterfly, as required by the specific application. Modulating water valves shall be sized per manufacturer's recommendations for the given application. In general, valves (2 or 3-way) serving **variable** flow air handling unit coils shall be sized for a pressure drop equal to the actual coil pressure drop, but no less than 5 PSI. Valves (3-way) serving **constant** flow air handling unit coils with secondary circuit pumps shall be sized for a pressure drop equal to 25% the actual coil pressure drop, but no less than 2 PSI. Mixing valves (3-way) serving secondary water circuits shall be sized for a pressure drop of no less than 5 PSI. Valves for terminal reheat coils shall be sized for a 2 PSIG pressure drop, but no more than a 5-PSI drop.
3. Modulating plug water valves of the single-seat type with equal percentage flow characteristics shall be used for all hot and chilled water applications, except those described hereinafter. The valve discs shall be composition type. Valve stems shall be stainless steel.
4. Ball valves shall be acceptable for water terminal reheat coils, radiant panels, unit heaters, package air conditioning units, and fan coil units.
5. Butterfly valves shall be acceptable for modulating large flow applications greater than modulating plug valves, and for all two-position, open/close applications. In-line and/or three-way butterfly valves shall be heavy-duty

pattern with a body rating comparable to the pipe rating, replaceable lining suitable for temperature of system, and a stainless steel vane. Valves for modulating service shall be sized and travel limited to 50 degrees of full open. Valves for isolation service shall be the same as the pipe. Valves in the closed position shall be bubble-tight.

D. Electronic/Pneumatic Transducers

1. Electronic to Pneumatic transducers shall provide:
 - a. Output: 3-15 PSIG.
 - b. Input: 4-20 mA or 0-10 VDC.
 - c. Manual output adjustment.
 - d. Pressure gauge.

3. Part 3 - Execution

3.1 Installation and Asbestos Handling

1. All wiring will be installed as per the current Electrical Code. All exposed wiring in Mechanical Room on exterior walls or on Roofs will be in ridged conduit.
2. The contractor is responsible for all asbestos abatement as may be required as a result of installed new controls. Refer to the district standard for asbestos handling.

3.2 Training

1. A total of 32 hours of training will be provided. The training will include:
2. Provide 16 hours of training on the MS-FEC2621 and NAE55 graphic programming. The controls contractor shall provide 3 new laptop computers for the maintenance department technicians loaded with 3 copies of MS-FEC2621 programming software MS-SCTSWO-0.
3. Provide 16 hours of on-site orientation by a field engineer who is fully knowledgeable of the specific installation details of the project.
4. This orientation shall, at a minimum, consist of a review of the project as-built drawings, the control system software layout and naming conventions, and a walk through of the facility to identify panel and device locations.
5. Provide factory training for 2 people on the new Metasys NAE System in Milwaukee.

3.3 Extended Warranty

1. Provide as separate price for a 3-year extended warranty to cover all parts and labor. (One year warranty will be in the base bid. Provide a price for 3 additional years of warranty for a total of 4 years all parts and labor included.)

3.4 Existing Servers (Meta1 and Meta2)

1. Replace the existing Meta1 and Meta2 Metasys PMI Software with the most current version of Metasys ADX Software (MS-ADXSWO-0) and install on the 2 New Upgraded Servers. Server Meta1 is the Web Page Server, Server Meta2 provides alarm and trend log historical data storage. Upgrade the hardware on the 2 existing Servers Meta1 and Meta2. Provide 2 - HP Z800 Servers with 1 Quad-core CPU and 2 1000Mb Hard-drives plus 8 Meg of Ram, in each. (Refer to attached HP Data Sheet for additional details)

3.5 34 Existing Schools - ADX Interface

1. The contractor will verify the type and quantity of existing Metasys Master Controllers and N2 controllers located in each of the 34 existing schools. Include in the base bid all hardware and software upgrade costs to interface the 34 existing Johnson Metasys Controllers into the new ADX Web Server. Provide, install and program all new NAE5510 hardware and software as required in each school. Provide new ADX color graphics for the existing AC Units in each existing Metasys School.

3.6 Custom KW Monitoring Software

1. Provide custom KW Monitoring software for each FEC2621 that measures and calculates the KWH for each fan and dx compressor.
2. Totalize the KWH daily, weekly, monthly and yearly for each AC Unit. 3. Program a custom weekly, monthly and annual report.

3.7 Color Graphics, Floor Plans, Site Maps for All 58 Schools

Include the labor cost to program new dynamic color graphics for the 34 existing schools and 24 new schools. (58 schools in total). Provide:

- a. Building plan
- b. Major systems showing all as built equipment and air and water paths
- c. Floor plans clearly depicting all zone boundaries and zone temperatures
- d. Graphics for Package AC Units, Heat Pumps and Boilers / Chillers

3.8 Commissioning

1. Commissioning the Facility Management System is a mandatory.
2. The selected FMSC will provide a detailed hardware commissioning procedure for all of the control systems in the 58 schools.
3. Provide a separate Graphic Commissioning Procedure for all 58 schools.
4. Provide a separate Energy Conservation Software Commissioning Procedure for all 58 schools.
5. Commissioning shall include verification of proper installation practices by the FMSC and subcontractors under the FMSC, point verification and calibration, system/sequence of operation verification with respect to specified operation, and network/server verification.
6. Commissioning documentation shall be updated upon completion of each commissioning step and final completion to ensure proper operation of the Facility Management System.

End of Section

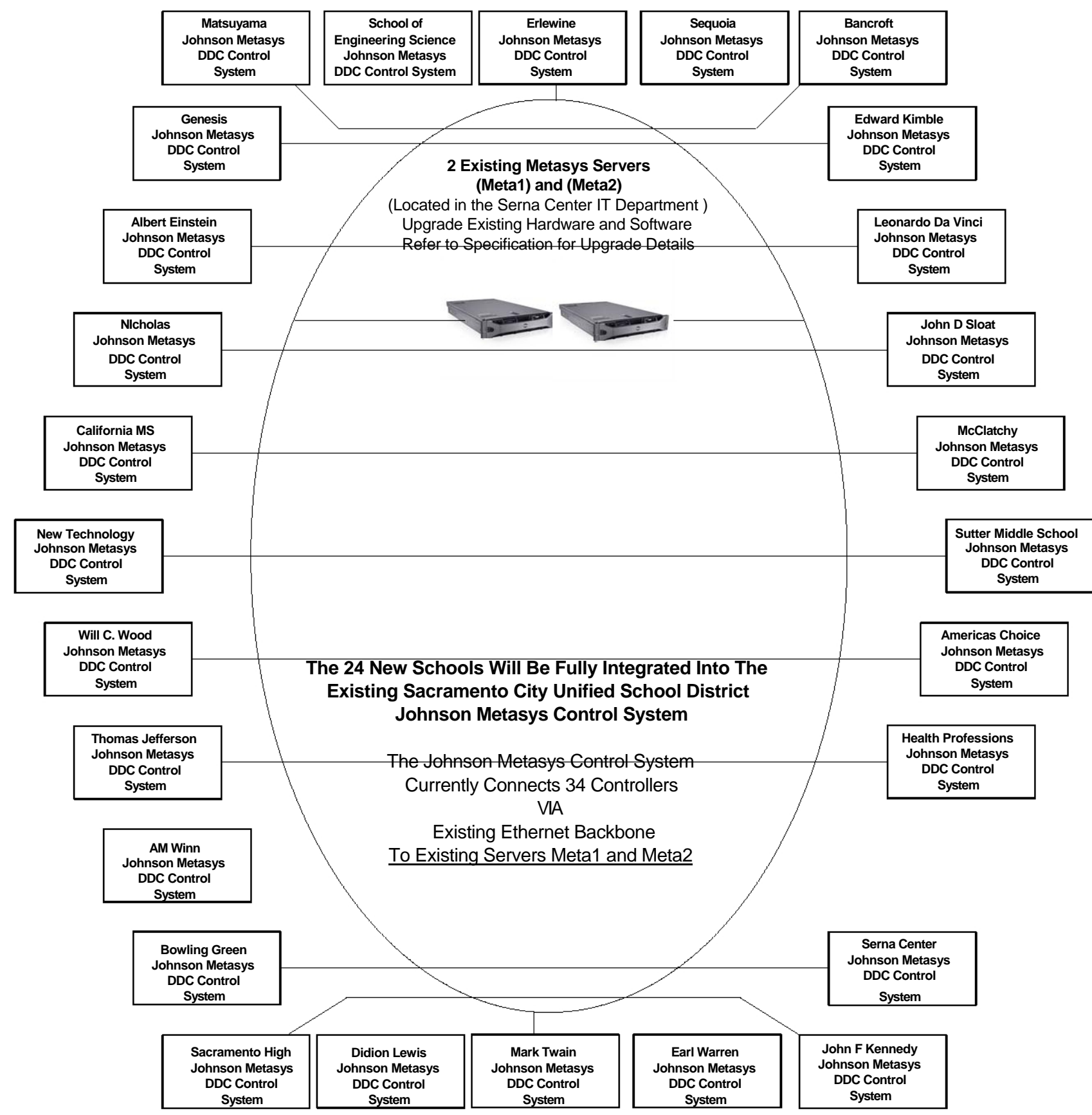


Exhibit Point Summary And System Architecture

Energy Management and Control System
Expansion

For

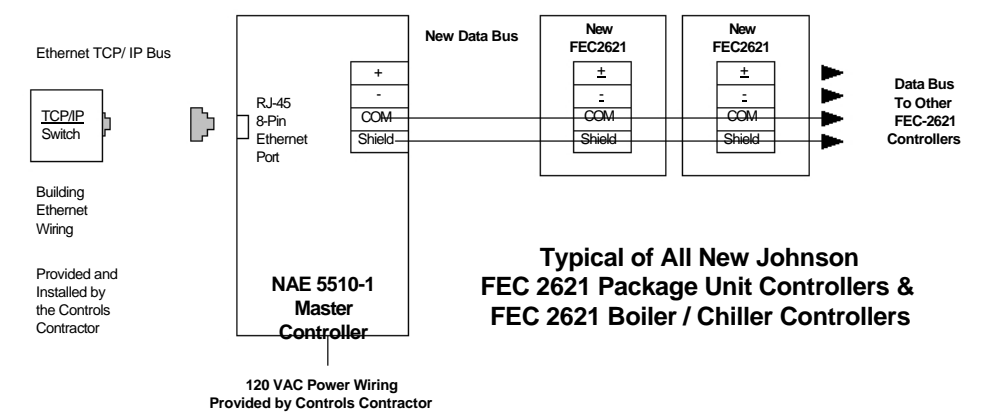
Sacramento City Unified School District
3051 Redding Avenue
Sacramento, CA 95820



New Schools To Be Added To The Existing Johnson Metasys System

	Site Name	Scope of Work		
1	Abraham Lincoln	Install	New MS-NAE5510-1 and	FEC Controls
2	Camelia Basic	Install	New MS-NAE5510-1 and	FEC Controls
3	Cesar Chavez	Install	New MS-NAE5510-1 and	FEC Controls
4	David Lubin	Install	New MS-NAE5510-1 and	FEC Controls
5	Golden Empire	Install	New MS-NAE5510-1 and	FEC Controls
6	James W. Marshall	Install	New MS-NAE5510-1 and	FEC Controls
7	Lisbon	Install	New MS-NAE5510-1 and	FEC Controls
8	Marian Anderson	Install	New MS-NAE5510-1 and	FEC Controls
9	Tahoe	Install	New MS-NAE5510-1 and	FEC Controls
10	Washington	Install	New MS-NAE5510-1 and	FEC Controls
11	Martin Luther King	Install	New MS-NAE5510-1 and	FEC Controls
12	Bowling Green Annex	Install	New MS-NAE5510-1 and	FEC Controls
13	Bret Harte	Install	New MS-NAE5510-1 and	FEC Controls
14	William Land	Install	New MS-NAE5510-1 and	FEC Controls
15	Kit Carson	Install	New MS-NAE5510-1 and	FEC Controls
16	Sam Brannan	Install	New MS-NAE5510-1 and	FEC Controls
17	A. Warren McClaskey	Install	New MS-NAE5510-1 and	FEC Controls
18	Florin Tech 24th&Florin	Install	New MS-NAE5510-1 and	FEC Controls
19	Fremont	Install	New MS-NAE5510-1 and	FEC Controls
21	Genevieve Didion	Install	New MS-NAE5510-1 and	FEC Controls
22	American Legion	Install	New MS-NAE5510-1 and	FEC Controls
23	John Muir	Install	New MS-NAE5510-1 and	FEC Controls
24	John Morse	Install	New MS-NAE5510-1 and	FEC Controls

New - Johnson Metasys Controls To Be Installed in Each School



Architectural Layout - Expanding the Existing Johnson Controls Metasys - (EMCS) Energy Management and Control System

Site Name	Type of Equipment	Quantity	Wall Hung Heat Pumps	Wall Hung DX +Gas Heat	Rooftop Package Units Gas	Rooftop Package Heat Pump	DX Split Systems Gas Heat	Air Compressor	Boiler System	Chiller System	Pneumatic AHU	MZ AHU	UV
Abraham Lincoln	Wall Hung Heat Pumps	5	5										
	Wall Hung DX+Gas Heat	7		7									
	Rooftop Package Units Gas	1			1								
	Rooftop Package Heat Pump	12				12							
Camelia Basic	Rooftop Package Units Gas	17			17								
	Wall Hung Heat Pumps	12	12										
	DX Split Systems Gas Heat	1					1						
Cesar Chavez	Wall Hung DX+Gas Heat	27		27									
David Lubin	Split Systems Gas Heat	20					20						
	Rooftop Package Units Gas	8			8								
	Furnace Only W/Window A/C	2					2						
	Wall Hung Heat Pumps	7	7										
Golden Empire	MAU Natural gas	1			1								
	Package Heat Pump	1				1							
	Package Natural Gas	5			5								
	Wall Hung Heat Pumps	3	3										
	Wall Hung DX+Gas Heat	14		14									
	Split System Heat Strips	1					1						
	Package Heat Strips	8			8								
Isador Cohen	Central Plant Compressor	1						1					
Excluded from Bid	Boiler	1							1				
	Chiller	1								1			
	Pneumatically Controlled AHU	18									18		
	Wall Hung Heat Pumps	8	8										
James W. Marshall	Wall Hung DX+Gas Heat	36		36									
	Package Natural Gas	1			1								
	Split Systems Gas Heat	1					1						
Lisbon	Wall Hung Heat Pumps	30	30										
	Package Natural Gas	6			6								
	MAU Natural gas	1			1								
Marian Anderson	Central Plant Compressor	1						1					
	Chiller	1								1			
	AHU c/w Chilled Water + 5 Reheats	10										10	
	Wall Hung Heat Pumps	5	5										
	Wall Hung DX+Gas Heat	5		5									
Tahoe	Wall Hung DX+Gas Heat	5		5									
	Wall Hung Heat Pumps	6	6										
	Package Natural Gas	11			11								
	Split Systems Gas Heat	7					7						
Kit Carson	Central Plant Compressor	1						1					
	Chillers	2								2			
	Boilers	2											
	Pneumatically Controlled UV	46											46
	Wall Hung Heat Pumps	6	6										
	Furnace Only W/Window A/C	1					1						
A. Warren McClaskey	Wall Hung Heat Pumps	1	1										
Eldorado	Package Heat Pump	3				3							
	Split Systems Gas Heat	5					5						
	Furnace Only W/Window A/C	6					6						
	2 steam boilers												
Fremont	Boiler	2							2				
	Rooftop Package Units Gas	3			3								
	Furnace Only W/Window A/C	2					2						
Totals		387	83	94	62	16	46	3	5	4			

**Sacramento City Unified School District
Energy Management System Upgrade Equipment Summary**

Site Name	Type of Equipment	Quantity	Wall Hung Heat Pumps	Wall Hung DX +Gas Heat	Rooftop Package Units Gas	Rooftop Package Heat Pump	DX Split Systems Gas Heat	Air Compressor	Boiler System	Chiller System	Pneumatic AHU	MZ AHU	UV
Bowling Green Annex Annex and West Wing	Wall Hung Heat Pumps	3	3										
	Wall Hung DX+Gas Heat	31		31									
Martin Luther King	Wall Hung Heat Pumps	33	33										
	Rooftop Package Units Gas	6			6								
	MAU Natural gas	1			1								
Bret Harte	Split Systems Gas Heat	21					21						
	Rooftop Package Units Gas	12			12								
	Wall Hung Heat Pumps	5	5										
William Land	Wall Hung Heat Pumps	3	3										
	Split Systems Gas Heat	22					22						
	Furnace Only W/Window A/C	1					1						
Sam Brannan	Split Systems Gas Heat	13					13						
	Rooftop Package Units Gas	35			35								
	Heat Only Rooftop	2			2								
Met/Leland Stanford Excluded from Bid	Boiler	1							1				
	Scholar Heat Pump	5				5							
	Package Heat Pump	1				1							
Florin Tech 24th&Florin	Rooftop Package Units Gas	6			6								
	Package Heat Pump	3				3							
	Wall Hung Heat Pumps	12	12										
	Evaporative Cooler	4				4							
Genevieve Didion	Wall Hung Heat Pumps	26	26										
	Rooftop Package Units Gas	4			4								
	Split Systems Gas Heat	2					2						
American Legion	Compressor	1						1					
	Chiller	1								1			
	AHU c/w Chilled Water + 5 Reheats	4										4	
	Furnace Only W/Window A/C	4					4						
	Split Systems Gas Heat	3					3						
	Wall Hung Heat Pumps	3	3										
John Muir	Wall Hung Heat Pumps	2	2										
	Furnace Only W/Window A/C	10					10						
	Split Systems Gas Heat	1					1						
	Package Heat Pump	2				2							
John Morse	Boiler	1							1				
	Furnace Only W/Window A/C	2					2						
	Wall Hung Heat Pumps	4	4										
	Unit Ventilators Hot Water	6											6
	Package Heat Pump	3				3							
	Package Unit Gas	2			2								
Washington	Central Plant Compressor	1						1					
	Chillers	2								2			
	AHU c/w Chilled Water + 5 Reheats	10										10	
	Wall Hung Heat Pumps	5	5										
Old Marshall Excluded from Bid	Scholar Heat Pumps	4				4							
	Air Compressor	1						1					
	Air Handler/Hot Water/Central Air	1									1		
	Split Systems Gas Heat	3					3						
16th and N	Evaporative Cooler	2			2								
	Chiller	1								1			
	Boiler	1							1				
	Central Plant Compressor	1						1					
Totals	Package Unit Gas	2			2								30
	Fan Coil Units	30											
Totals		365	96	31	72	22	82	4	3	4	1	14	36

Sacramento City Unified School District

Energy Management and Control System (EMCS) Point Summary

Typical Wall Hung HVAC System Heat Pump c/w (1 Heat, 1 Cool, Economizer)

Qty to be Upgraded - 179

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Supply Air Temperature
 Outside Air Temperature (1 per site)
 Cooling Command Heating
 Command
 Reversing Valves Command
 Mixed Air Temperature 8 ft average
 Economizer Damper Control
 Fan on / off Control
 Compressor Run Current Draw
 Fan Run Current Draw
 24 VAC Transformer
 Hoffman Nema 3R Weatherproof Enclosure (16wx16hx6d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

MS-FEC2621-0
 NS-BTB7003-0
 TE-6311P
 TE-6313P
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 TE-6315P-1
 Belimo
 Idec Relay RH2B-UL-AC24
 Veris H922
 Veris H922
 Y 65
 A16R16-6HCR

Typical Wall Hung HVAC System DX Cool, Gas Heat c/w (1 Heat, 1 Cool, Economizer)

Qty to be Upgraded - 125

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Supply Air Temperature
 Outside Air Temperature (1 per site)
 Cooling Command Heating
 Command
 Mixed Air Temperature 8 ft average
 Economizer Damper Control
 Fan on / off Control
 Compressor Run Current Draw
 Fan Run Current Draw
 24 VAC Transformer
 Hoffman Nema 3R Weatherproof Enclosure (16wx16hx6d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

MS-FEC2621-0
 NS-BTB7003-0
 TE-6311P
 TE-6313P
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 TE-6315P-1
 Belimo
 Idec Relay RH2B-UL-AC24
 Veris H922
 Veris H922
 Y 65
 A16R16-6HCR

Typical Rooftop HVAC System Heat Pump c/w (1 Heat, 1 Cool, Economizer)

Qty to be Upgraded - 134

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Supply Air Temperature
 Outside Air Temperature (1 per site)
 Cooling Command Heating
 Command
 Reversing Valves Command
 Mixed Air Temperature 8 ft average
 Economizer Damper Control
 Fan on / off Control
 Compressor Run Current Draw
 Fan Run Current Draw
 24 VAC Transformer
 Hoffman Nema 3R Weatherproof Enclosure (16wx16hx6d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

MS-FEC2621-0
 NS-BTB7003-0
 TE-6311P
 TE-6313P
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 TE-6315P-1
 Belimo
 Idec Relay RH2B-UL-AC24
 Veris H922
 Veris H922
 Y 65
 A16R16-6HCR

Sacramento City Unified School District Energy Management and Control System (EMCS) Point Summary

Typical Rooftop HVAC System DX Cool, Gas Heat c/w (1 Heat, 1 Cool, Economizer)

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
Supply Air Temperature
Outside Air Temperature (1 per site)
Cooling Command Heating
Command
Mixed Air Temperature 8 ft average
Economizer Damper Control
Fan on / off Control
Compressor Run Current Draw
Fan Run Current Draw
24 VAC Transformer
Hoffman Nema 3R Weatherproof Enclosure (16wx16hx6d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

Qty to be Upgraded - 38

MS-FEC2621-0
NS-BTB7003-0
TE-6311P
TE-6313P
Idec Relay RH2B-UL-AC24
Idec Relay RH2B-UL-AC24
TE-6315P-1
Belimo
Idec Relay RH2B-UL-AC24
Veris H922
Veris H922
Y 65
A16R16-6HCR

Typical Split HVAC System DX Cool, Gas Heat c/w (1 Heat, 1 Cool, Economizer)

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
Supply Air Temperature
Outside Air Temperature (1 per site)
Cooling Command Heating
Command
Mixed Air Temperature 8 ft average
Economizer Damper Control
Fan on / off Control
Compressor Run Current Draw
Fan Run Current Draw
24 VAC Transformer
Hoffman Nema 3R Weatherproof Enclosure (16wx16hx6d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

Qty to be Upgraded - 128

MS-FEC2621-0
NS-BTB7003-0
TE-6311P
TE-6313P
Idec Relay RH2B-UL-AC24
Idec Relay RH2B-UL-AC24
TE-6315P-1
Belimo
Idec Relay RH2B-UL-AC24
Veris H922
Veris H922
Y 65
A16R16-6HCR

Typical Boiler System c/w (2 Hot Water Pumps)

Johnson Controller - c/w Built in Display Panel for Maintenance
Supply Water Temperature Return
Water Temperature
Outside Air Temperature (1 per site)
Pump #1 On / Off Control Pump
#2 On / Off Control
Boiler Set Point Adjustment
Pump #1 On / Off Current Draw Pump
#2 On / Off Current Draw
24 VAC Transformer
Hoffman Nema 3R Weatherproof Enclosure (30wx24hx8d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

Qty to be Upgraded - 8

MS-FEC2621-0
TE-631AP-1
TE-631AP-1
TE-6313P
RIB24P
RIB24P
Wire to AO
Veris H922
Veris H922
Y 65
A30R24-8HCR

Sacramento City Unified School District Energy Management and Control System (EMCS) Point Summary

Typical Chiller System c/w (2 Chilled Water Pumps, 2 Condensor Water Pumps)

Qty to be Upgraded - 8

Johnson Controller - c/w Built in Display Panel for Maintenance
 Supply Water Temperature Return
 Water Temperature
 Outside Air Temperature (1 per site)
 Pump #1 On / Off Control Pump
 #2 On / Off Control
 Boiler Set Point Adjustment
 Pump #1 On / Off Current Draw Pump
 #2 On / Off Current Draw
 Condensor Water Supply Temperature
 Condensor Water Return Temperature
 Cooling Tower Fan on/off Control
 Condensor Water Pump #1 On / Off Current Draw
 Condensor Water Pump #2 On / Off Current Draw
 24 VAC Transformer
 Hoffman Nema 3R Weatherproof Enclosure (30wx24hx8d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

MS-FEC2621-0
 TE-631AP-1
 TE-631AP-1
 TE-6313P
 RIB24P
 RIB24P
 Wire to AO
 Veris H922
 Veris H922
 TE-631AP-1
 TE-631AP-1
 RIB24P
 Veris H922
 Veris H922
 Y 65
 A30R24-8HCR

Typical Pneumatic Air Compressor Controls

Qty to be Upgraded - 7

Add to FEC Controlling the Boiler or Chiller System
 Pneumatic Pressure 0 -20 PSI
 Air Compressor On / Off Control

MS-FEC2621-0
 Mamac
 RIB24P

Typical Rooftop HVAC System - Replace All Pneumatic Controls with DDC

Qty to be Upgraded - 19

Johnson Controller -c/w Built in Display Panel for Maintenance
 Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Supply Air Temperature
 Outside Air Temperature (1 per site)
 Modulate New Belimo Cooling Valve 0-10VDC
 Modulate New Belimo Heating Valve 0-10VDC
 Mixed Air Temperature 8 ft average
 Modulate New Economizer Damper Control
 Supply Fan on / off Control Return
 Fan on / off Control
 Return Fan Run Current Draw Supply
 Fan Run Current Draw
 24 VAC Transformer
 Hoffman Nema 3R Weatherproof Enclosure (30wx24hx8d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

MS-FEC2621-0
 NS-BTB7003-0
 TE-6311P
 TE-6313P
 Belimo Valve
 Belimo Valve
 TE-6315P-1
 Belimo
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 Veris H922
 Veris H922
 Y 65
 A30R24-8HCR

Sacramento City Unified School District

Energy Management and Control System (EMCS) Point Summary

Typical Constant Volume Rooftop HVAC System - With 5 Zones of Electric Reheat

(Convert from Pneumatic to DDC Controls)

Johnson Controller - c/w Built in Display Panel for Maintenance
 Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Supply Air Temperature
 Outside Air Temperature (1 per site)
 Modulate New Belimo Cooling Valve 0-10VDC
 Mixed Air Temperature 8 ft average
 Modulate New Economizer Damper Control
 Supply Fan on / off Control Return
 Fan on / off Control
 Return Fan Run Current Draw Supply
 Fan Run Current Draw
 24 VAC Transformer

Qty to be Upgraded - 24

MS-FEC2621-0
 NS-BTB7003-0
 TE-6311P
 TE-6313P
 Belimo Valve
 TE-6315P-1
 Belimo
 Idec Relay RH2B-UL-AC24
 Idec Relay RH2B-UL-AC24
 Veris H922
 Veris H922
 Y 65

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room 1 Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Room 1 Reheat Control

MS-FEC2621-0
 NS-BTB7003-0
 RIB24P

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room 2 Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Room 2 Reheat Control

MS-FEC2621-0
 NS-BTB7003-0
 RIB24P

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room 3 Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Room 3 Reheat Control

MS-FEC2621-0
 NS-BTB7003-0
 RIB24P

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room 4 Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Room 4 Reheat Control

MS-FEC2621-0
 NS-BTB7003-0
 RIB24P

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room 5 Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Room 5 Reheat Control

MS-FEC2621-0
 NS-BTB7003-0
 RIB24P

Hoffman Nema 3R Weatherproof Enclosure (30wx24hx8d) Mount on Exterior of Unit. All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

A30R24-8HCR

Typical Unit Ventilator System - With Pneumatic Hot and Chilled Water Valve, Econo.

(Convert from Pneumatic to DDC Controls)

Johnson BACnet Controller - c/w Built in Display Panel for Maintenance
 Room Sensor c/w Temperature Display, Adjustable Setpoint and Override Push Button
 Supply Air Temperature
 Outside Air Temperature (1 per site)
 Modulate New Belimo Cooling Valve 0-10VDC
 Modulate New Belimo Heating Valve 0-10VDC
 Economizer Damper Control open/close
 Supply Fan on / off Control
 Supply Fan Run Current Draw
 24 VAC Transformer

Qty to be Upgraded - 82

MS-FEC2621-0
 NS-BTB7003-0
 TE-6311P
 TE-6313P
 Belimo Valve
 Belimo Valve
 Belimo
 Idec Relay RH2B-UL-AC24
 Veris H922
 Y 65

All data bus conduits mounted on roof or exterior walls must be 3/4 " Rigid - Not EMT.

**Sacramento City Unified School District
Energy Management and Control System (EMCS) Point Summary**

Typical Existing School - Replace NCM350 with New NAE-5510-0 Master Controller

Qty to be Upgraded - 34

Refer to System Architecture Diagram for Locations of the existing schools.
Exact quantities of existing Metasys UNT's and DX9100 Controller to be verified on site. Program
all existing controllers into the new NAE and provide new graphics as specified.



HP Shopping Cart

Please review your order below. To change the quantity of an item, enter a new number in the quantity box, then click recalculate to adjust the total. To remove an item, click the remove button to the right of the item.

[Call for availability](#)

[Online Security Information](#)

[Recalculate >>](#)

[Save Cart >>](#)

[Empty Cart >>](#)

[Continue Shopping >>](#)

[Checkout >>](#)

Item	Unit cost	Quantity	Total price	
-Configurable- HP Z800 Workstation Microsoft® Windows® Server Edition	\$4,293.00	<input type="text" value="1"/>	\$4,293.00	Remove >>
HP Z800 Workstation		Update >>		Reconfigure >>
With No Software Installed				Call for availability.
32-bit				
HP Z800 1110W 89% Efficient Chassis				
HP Z800 Localization Kit				
Intel® Xeon® E5507 2.26 4MB/800 QC CPU-1(LOWPWR)				
Intel® Xeon® E5507 2.26 4MB/800 QC CPU-2 (LOWPWR)(Must be same speed as Processor 1.)				
HP Air Cooling Solution (When choosing this option, a Technical AV - Heatsink MUST be selected)				
HP 2xStandard Heatsink Thermal Kit (This module is required if AIRCOOL is selected. 1st and 2nd Processor must be low power. ESTAR=DP)				
ATI FirePro V3700 256MB Graphics				
No Item Selected				
No Item Selected				
HP 8GB (4x2GB) DDR3-1333 ECC 1-CPU RAM (Supported only with Single Processor. ESTAR=SP)				
HP 1000GB SATA 7200 1st HDD				
HP 1000GB SATA 7200 2nd HDD (Primary drive must be SATA)				
No Item Selected				
No Item Selected				
No Item Selected				
No Item Selected				
HP 16X DVD+-RW SuperMulti SATA 1st Drive				
No Item Selected				
HP RAID 1 (Mirrored Array) Configuration (All HDDs must be the same size/speed/type. Must have 2 HDDs)				
No Item Selected				
No Floppy Disk Kit				
HP PS/2 Standard Keyboard				
HP PS/2 Optical Scroll Mouse				

April 27, 2011

NAME

ADDRESS

SACRAMENTO, CA 95XXX

**SMART GRID INVESTMENT GRANT – (name of subawardee) SUBAWARDEE
CONTRACT NO.**

The Sacramento Municipal Utility District (SMUD), submitted a grant application to the Department of Energy (DOE), grant program administrator for the Smart Sacramento – Smart Grid Investment Grant (the “Grant”). SMUD’s application has been selected to receive American Recovery and Reinvestment Act (ARRA) grant funds from the DOE. The XXXX (Subawardee) and SMUD are partners in implementing the Grant, and Subawardee has sole responsibility for performance of one or more discrete project(s).

The Grant is being funded by a DOE Assistance Agreement No. DE-OE0000214 for the agreement term from April 23, 2010 through April 22, 2015. A copy of the DOE Assistance Agreement is attached hereto as Exhibit A.

SMUD, as prime recipient/awardee of the ARRA grant funds from the DOE Assistance Agreement, is subject to certain terms and conditions as set forth in the DOE Assistance Agreement. Subawardee will be a subawardee of the ARRA Funds as is further set forth in this Agreement and on the terms and conditions set forth in this Agreement. Therefore, terms and conditions as identified in the DOE Assistance Agreement and other federal rules and regulations relevant to the Subawardee are incorporated herein, as applicable.

This Agreement between SMUD and Subawardee sets forth the terms and conditions under which the Subawardee will perform its portion of the Grant work described herein. Subawardee is supporting the Grant by implementing a discrete project(s) at its facilities, and is not providing goods or services to SMUD.

SMUD and the Subawardee, which are at times referred to individually as a “Party” and collectively as the “Parties,” agree that each and all of the above Recitals are true and correct and now hereby agree as follows:

I. GRANT PURPOSE

- A. Scope of Work (SOW). The Subawardee agrees to perform work to support the performance of the Grant and meet all deliverables, applicable to Subawardee, as provided in the SOW, incorporated herein as Exhibit B. The SOW identifies discrete

work Subawardee will perform specific to its own facilities. SMUD and Subawardee have worked cooperatively to prepare the SOW. The Parties warrant that the SOW accurately reflects the work to be performed under the Grant and accurately identifies the project the Subawardee is responsible for implementing.

While Subawardee will be solely responsible for implementation of its SOW, SMUD has overall accountability to the DOE for the timely and accurate completion of Subawardee's discrete project. Subawardee agrees to share with SMUD detailed scopes of work and anticipated project schedules of Subawardee's contractors/vendors to perform work associated with the Grant. Prior to Subawardee's contractors/vendors commencing work, Subawardee shall obtain approval from SMUD Contract Manager of the Subawardee's contractor's/vendors scope(s) of work and anticipated project schedules. In the event of a proposed change to a Subawardee contractor/vendor scope of work(s) and/or project schedule(s), Subawardee shall obtain approval of the proposed change from the SMUD Contract Manager and work with SMUD on the appropriate mitigation strategy. In the event the DOE requires changes to Grant work, SMUD and Subawardee will work cooperatively and in good faith to mutually agree to changes to the SOW as required by the DOE.

The manner and method Subawardee employs to accomplish the results to be achieved by Subawardee shall conform with all laws, rules and/or regulations applicable to the performance of such work, including but not limited to DOE and other federal requirements applicable to Subawardee's performance whether or not such DOE or federal requirements are specifically identified in this Agreement.

Pursuant to the Grant's scope of objectives, Subawardee's project must be completed and operational by the end of the term of the Agreement. I

- B. Budget and Schedule of Deliverables. The Subawardee agrees to perform its Grant work according to the Budget information contained in Exhibit C, which is hereby incorporated into this Agreement. Subawardee agrees to meet all deliverables contained in the Schedule of Deliverables, which is hereby incorporated into this Agreement as Exhibit D.

II. FUNDING

Funding for this Agreement is dependent upon the DOE Assistance Agreement and sustained grant funding by the DOE. Subawardee's award share is \$_____ and Subawardee's match share is \$_____. It is mutually agreed that Subawardee's award share is subject to the following provisions:

- A. Any additional restrictions, limitations, or conditions enacted by Congress or any statute enacted by Congress that may affect the funding of this Agreement.
- B. If Congress does not appropriate sufficient funds for the Grant, this Agreement shall be amended to reflect any reduction in funds.
- C. Continued funding by the DOE. If the DOE does not continue to fund Subawardee's project(s) throughout the term of this Agreement, SMUD may terminate this Agreement upon thirty (30) days written notice.

The DOE funds Subawardee's award share through reimbursement invoicing, as described in Section VIII of this Agreement. The DOE reimbursement funds flow through SMUD to Subawardee and SMUD's obligation to provide reimbursement funds to Subawardee is subject to receipt of funding from DOE.

Subawardee specifically acknowledges that its cost share is 50.0% of allowable project costs and is subject to a reimbursement rate established by DOE (currently 50%) of Subawardee's total allowable incurred costs of the project up to the amount identified in the DOE Assistance Agreement. All work and/or the expenditure of funds (reimbursable through contract and/or cost share) must occur within the approved time period as specified in the DOE Assistance Agreement.

III. TERM OF AGREEMENT

The term of this Agreement shall be from date of execution to April 22, 2015.

IV. APPLICABLE CODE OF FEDERAL REGULATIONS

For purposes of the work performed under this Agreement, 10 Code of Federal Regulations (C.F.R.), 600. 200 *et seq.*, (Subpart C -Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments) contains the applicable statutory or regulatory provisions. The pertinent Subpart of 10 C.F.R., 600 *et seq.*, as stated in the preceding sentence, is applicable to Subawardee, depending on the scope of the work awarded, the costs paid for the work, the type of entity performing work, the level or tier of contracting, and other factors.

V. REPORTING:

A. DOE Reporting Requirements. Under the DOE Assistance Agreement, SMUD is required to report information on the Grant to the DOE. As such, Subawardee is required to report the following information to SMUD to facilitate the reporting requirements to the DOE:

1. Quarterly Jobs Report – to be provided by 5th business day of the following month.

The Subawardee will provide the data required via a mutually agreed upon format and media.

a) Subawardee will report the cumulative number of jobs directly created or retained by project and activity or contract. Subawardee will be required to report these direct jobs numbers by labor categories, as provided below:

- Managers
- Engineers
- Computer-related Occupations
- Environmental and Social Scientists

- Construction, Electrical and Other Trades
 - Analysts
 - Business Occupations
 - Recording, Scheduling, Computer Operator Occupations
- b) A job created is a new position created and filled or an existing unfilled position that is filled as a result of the Recovery Act; a job retained is an existing position that would not have been continued to be filled were it not for Recovery Act funding. A job cannot be counted as both created and retained. Also, only compensated employment in the United State or outlying areas should be counted.
- c) The estimate of the number of jobs required by the Recovery Act should be expressed as “full-time equivalents” (FTE), which is calculated as total hours worked in jobs created or retained divided by the number of hours in a full-time schedule, defined here as 2,080 hours per calendar year. The FTE estimates must be reported cumulatively each calendar quarter.
- d) The requirement for reporting jobs is based on a simple calculation used to avoid overstating the number of other than full-time, permanent jobs. This calculation converts part-time or temporary jobs into FTE jobs. To perform the calculation, a sub-recipient will need the total number of hours worked that are funded by the Recovery Act by category and the total number of hours worked for the entire project by labor category. The number of hours in a full-time schedule for a month will equal 173.33 (one-twelfth of 2,080).

2. Monthly Progress Report – to be provided by the 15th calendar day of the following month.

The Subawardee must report data specified in this section monthly via a mutually agreed upon format and media. The Progress Report must provide a concise narrative assessment of the status of work and include the following information.

- a) Date of report and period covered by the report.
- b) A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why the established goals were not met.
- c) A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, 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 the report advising the reader to contact the Project Director for further information.
- d) Any changes in approach or aims and reasons for change. Remember significant changes to the objectives and scope require prior approval by the contracting officer.
- e) Actual or anticipated problems or delays and actions taken or planned to resolve them.
- f) Any absence or changes of key personnel or changes in consortium/teaming arrangement.

g) A description of any product produced or technology transfer activities accomplished during this reporting period, such as:

- (1) Publications (list journal name, volume, issue); conference papers; or other public releases of results.
- (2) Web site or other internet sites that reflect the results of this project.
- (3) Networks or collaborations fostered.
- (4) Technologies/Techniques.
- (5) Inventions/Patent Applications
- (6) Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.

3. Project Execution Data Report – to be provided by the 15th calendar day of the following month.

The Subawardee will provide monthly project execution data in a mutually agreed upon format and media. It is expected that the dataset provided will have gone through the necessary quality assurance processes internal to the Subawardee in order to ensure the data is accurate and complete.

a) Project Value Management System (PVMS) Reporting – The input of PVMS data described below will be required. PVMS reporting will be at the Project Activity Level.

Data Field Definition/Metrics

ACWP - Actual Cost of Work Performed. The cost actually incurred for the work accomplished during the month.

BCWP – Budgeted Cost of Work Performed. Sum of all budgets for all completed work and the completed portions of ongoing work. Total budget for the scope that was actually accomplished during the month.

BCWS – Budgeted Cost of Work Scheduled. Planned accomplishment established in performance measurement baseline.

ETC – Estimate to Complete. Current estimate for the remaining project scope. This is the estimate for all remaining work excluding contingencies.

BAC – Budget at Completion. Sum of all budgets allocated to a project excluding management reserve.

b) Risk Management Data Reporting – Subawardee will submit updates of the Risk Management Plan in the event of changes to the risk profile data required as part of the Project Execution Plan.

4. Financial Report – to be provided by the 15th calendar day of the following month.

Subawardee must complete the federal Standard Form 425 (*available at http://www.whitehouse.gov/omb/grants/grants_forms.aspx*).

5. Metrics and Benefits Report – to be provided by the 15th calendar day of the following quarter.

The Subawardee is required to report Build Metrics and Impact Metrics and Benefits on a quarterly basis. Baseline data will be provided as specified within the Metrics and Benefits Reporting Plan. The Subawardee will provide this information in a mutually agreed upon format and media.

6. Special Status Report – to be provided via e-mail as soon as possible after events occur.

The Subawardee must report the following events by e-mail as soon as possible after they occur:

- a) Developments that have a significant favorable impact on the project.
- b) Problems, delays, or adverse conditions which materially impair the Subawardee's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The Subawardee must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:
 - (1) Any single fatality or injuries requiring hospitalization of five or more individuals.
 - (2) Any significant environmental permit violation.
 - (3) Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes.
 - (4) Any incident which causes a significant process or hazard control system failure.
 - (5) Any event which is anticipated to cause a significant schedule slippage or cost increase.
 - (6) Any damage to Government-owned equipment in excess of \$50,000.
 - (7) Any other incident that has the potential for high visibility in the media.

7. Annual Inventory of Federally Owned Property

Requirement: If at any time during the award the Subawardee is provided Government-furnished property or acquires property with project funds and the award specifies that the property vests in the Federal Government (i.e. federally owned property), the Subawardee must submit an annual inventory of this property no later than October 15th of each federal calendar year, to cover an annual reporting period ending on the preceding September 30th.

Content of Inventory: The inventory must include a description of the property, tag number, acquisition date, location of property, and acquisition cost, if purchased with project funds. The report must list all federally owned property, including property located at subcontractor's facilities or other locations.

- B. Quarterly Office of Management and Budget (OMB) Reporting. As Subawardee to an ARRA grant, you are required by section 1512 of ARRA to report on your grant each

quarter until your project is complete. Because OMB reporting is required to be submitted by the prime recipient SMUD by the 10th day of the month following the quarter reported on, SMUD must receive Subawardee information prior to this date. All subawardee OMB reports will be submitted to SMUD by the 5th day of the month following the quarter reported on. In the event that financial data cannot be reported due to closure of the organizations books, Subawardees will be allowed to revise their initial report by the 15th day of the month following the quarter reported on. The information to be included in the Subawardee's OMB report is listed as an Appendix to this Agreement and by this reference is made a part hereof.

- C. Weekly Davis Bacon Act Reporting. As this Grant project is funded by ARRA, the federal Davis Bacon Act is applicable to construction, alteration, and/or repair work performed by Subawardee and any Subawardee's lower-tier contractors/vendors. In the event specific work under this Agreement is subject to Davis Bacon Act requirements, the Subawardee shall comply with the following:
- a. Submit a copy of all weekly payrolls to SMUD accompanied by a signed "Statement of Compliance" certifying that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper federal or California prevailing wage rate, whichever is higher, for the work performed. See 29 C.F.R. § 5.5(a)(3)(ii). The due date for each certified payroll to be submitted to SMUD is no later than one week after each weekly pay date.
 - b. The weekly certified payroll submission must minimally contain the following information: the name and individual identifying number (e.g., the last four digits of the employee's social security number) of each covered worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents), daily and weekly number of hours worked, deductions made and actual wages paid. See 29 C.F.R. § 5.5(a)(3)(i). The required specifications for the Statement of Compliance are provided in 29 Code of Federal Regulations Section 5.5(a)(3)(ii)(B)(1)-(3).
 - c. To satisfy the requirement to submit weekly certified payrolls accompanied by a signed Statement of Compliance, Subawardee may use the weekly certified payroll form prepared by the United States Department of Labor (DOL), Form WH-347, which is available at <http://www.dol.gov/whd/forms/wh347instr.htm>. Use of Form WH-347 is optional.
 - d. The Statement of Compliance must be signed by a principal of the firm (Subawardee or lower tier contractor/vendors business) who has authority to direct the payment of wages and benefits to the workers, i.e., owner or an officer such as president, treasurer, or payroll administrator. The Statement of Compliance must be submitted with an original, handwritten signature or proper electronic signature. Copies of the "Statement of Compliance" are not acceptable; SMUD must receive actual signed wet copy.
 - e. All weekly certified payrolls must be current prior to SMUD approving the monthly invoices for payment under the resulting agreement.
 - f. If Subawardee determines that the applicable work is covered by California's Prevailing Wage, California's rate(s) must be paid if higher than the federal rate;

however, Subwardee must still comply with this subsection C requirement. California does not have a prevailing wage reporting requirement.

VI. EXAMINATION, REVIEW, AND AUDIT OF RECORDS

- A. Documents and Records. Subawardee will comply with all requirements in the DOE Assistance Agreement, applicable laws or regulations, with respect to access to all pertinent ledgers, payroll data, books, records, correspondence, written instructions, receipts, vouchers, and other documents (“Documents and Records”) related to this Agreement. Subawardee shall maintain its Documents and Records in accordance with applicable OMB circulars and federal regulations and agrees that examination, inspection, and/or audit may be used as the basis to assess project performance and for settlement of charges under this Agreement.
1. Subawardee shall retain all Documents and Records for the duration of this Agreement and for a period of three (3) years thereafter.
 2. SMUD shall have the right upon reasonable notice, during the Subawardee’s normal business hours, to conduct an examination, review, and/or audit for the sole purpose of determining compliance with the Grant requirements and this Agreement. Such audits shall be performed either by SMUD personnel or by an independent third party whom SMUD may employ for the purpose of making such audits. SMUD and the Subawardee shall establish procedures for performing such examination, inspection, or audit and shall preserve the confidential and proprietary status of audited documents and information.
 3. As described in 10 C.F.R. 600.242, as applicable, the DOE or any of their duly authorized representatives, shall have the right upon reasonable notice, to audit the Documents and Records during Subawardee’s normal business hours.
 4. In accordance with ARRA Sections 902, 1514 and 1515, the Subawardee agrees that it shall permit the United States Comptroller General or his representative, or the appropriate Inspector General appointed under Section 3 or 8G of the United States Inspector General Act of 1978 or his representative to: (1) examine any records that directly pertain to, and involve transactions relating to, this Agreement; and (2) interview any officer or employee of the Subawardee or any of its contractors/vendors regarding the activities funded with funds appropriated or otherwise made available by ARRA.
 5. Subawardee shall include appropriate provisions in each its lower-tier agreements to secure adequate backup documentation to verify all contractor/vendor services and expenses invoiced for reimbursement payment under this Agreement.
- B. Return of DOE Funds. If after an examination, review, and/or audit of Subawardee’s Documents and Records, the DOE seeks reimbursement of grant funds from SMUD based on Subawardee’s performance, failure to perform, or disqualification of costs under this Agreement, Subawardee shall reimburse SMUD for any payment to the DOE. Such

payment shall not be construed as an admission by Subawardee of the validity of DOE's determination and Subawardee shall retain all legal rights to dispute the DOE determination.

VII. ACCOUNTING SYSTEM

Subawardee shall have and maintain an established accounting system which complies with the cost principles of the applicable sections of subpart 10 C.F.R. 600.200 *et seq.* Subawardee shall further ensure that appropriate arrangements have been made for receiving, distributing and accounting for all funds received and used by Subawardee under the Agreement.

The Subawardee shall retain backup source documentation for audit purposes, and make the documentation available to SMUD upon request. In accordance with 10 C.F.R. 600.200 *et seq.*, the Subawardee's accounting records must be supported by such source documentation as cancelled checks, paid bills, payrolls, time and attendance records, and contract and subgrant award documents.

All cost sharing or matching contributions, including cash and third-party in-kind, shall satisfy all criteria of 10 C.F.R. 600.224, as applicable, including but not limited to the following:

- A. Are verifiable from Subawardee's records.
- B. Are not included as contributions for any other federally assisted project or program.
- C. Are necessary and reasonable for proper and efficient accomplishment of the project or program objectives.
- D. Are allowable under the applicable cost principles.
- E. Are not paid by the Federal Government under another award, except where authorized by Federal statute to be used for cost sharing or matching.
- F. Are provided for in the approved budget when required by the Federal awarding agency.

VIII. INVOICES

- A. Schedule. Subawardee shall submit invoices for reimbursement to SMUD on a monthly basis, due on the 10th business day following the month for which the invoice applies. The date of "invoice receipt" shall be the date SMUD receives the invoice. SMUD will process and record invoice in the month received. SMUD will include Subawardee invoice in its billing to the DOE in the following month. The DOE approving official will approve the invoice as soon as practicable, but not later than 30 days after the reimbursement request is received, unless the billing is improper. The DOE will transfer Subawardee's reimbursement funds to SMUD. SMUD shall make payment to Subawardee within 5 business days after receipt of reimbursement funds from the DOE. In the event the DOE does not approve of Subawardee's invoice and does not transfer

Subawardee's reimbursement funds to SMUD, SMUD has no obligation to reimburse Subawardee for expenses incurred in the performance of the Work.

Subawardee shall invoice using the DOE Invoice Form, as provided as an Appendix to this Agreement and by this reference is made a part hereof.

B. Expenditure Detail. Subawardee shall provide expenditure detail for both monthly and cumulative amounts by task and segregated by cost element such as labor, material, outside services, and equipment for the tasks as outlined in the SOW in accordance with the following directives, as applicable:

- **2 CFR. Part 220**, Cost Principles for Educational Institutions
 - **2 CFR. Part 225**, Cost Principles for State, Local and Indian Tribal Governments
 - **OMB Circular A-102**, Grants and Cooperative Agreements With State and Local Governments
 - **OMB Circular A-110**, Uniform Administrative Requirements for Grants and Other Agreements with Institutions of Higher Education, Hospitals and Other Non-Profit Organizations
1. Subawardee shall provide such expenditure detail for both Subawardee and any contractors/vendors of Subawardee.
 2. Subawardee shall provide copies of invoices and/or backup for charges included in the invoice.
 3. Subawardee shall provide any additional expenditure detail on invoices as requested by SMUD and/or the DOE.
 4. Subawardee shall provide a final invoice within sixty (60) days from either:
 - a) Completion of the project,
 - b) Completion of all assigned tasks, or
 - c) Termination of Subawardee in accordance with Section titled "Termination for Breach or Non Performance."

C. Submission. In accordance with the instructions on this Agreement, all invoices shall be submitted for reimbursement payment processing in duplicate to:

Accounting Department, Mail Stop B302
Attn: Kathy Ketchum
Sacramento Municipal Utility District
6201 S Street, P. O. Box 15830
Sacramento, CA 95852-1830

All Grant work invoices and related records should be retained in accordance with Federal Retention guidelines as outlined in the applicable Subpart of 10 C.F.R. 600 *et seq.*

IX. SUBAWARD AND/OR CONTRACT TO FEDERAL AGENCY

Subawardee shall not sub-award or sub-contract any part of the approved Agreement to any Federal Department, Agency or Instrumentality, without the prior written approval of the DOE and SMUD.

X. ADMINISTRATIVE DATA

The following administrative data pertains to this Agreement:

SMUD Contract Manager: Jeff Molander (916) 732- 6350

Subawardee Contract Manager: XXXXX (916) XXXX

XI. CHANGES

- A. Changes by Parties. SMUD and Subawardee agree that either Party may propose to the other Party and give due consideration to any changes to the work and obligations required of Subawardee under this Agreement. In addition, SMUD and Subawardee agree any proposed changes to the work and/or obligations shall be discussed by the Parties and shall not become a part of this Agreement unless mutually agreed to in writing by the Parties.
- B. Changes by DOE. The Parties acknowledge the DOE may require changes to the DOE Assistance Agreement, reporting requirements, SOW, or special terms and conditions and flowdown provisions, during the term of this Agreement. To the extent that any DOE mandated change impacts Subawardee, the Parties agree to work cooperatively and in good faith to mutually agree to amend this Agreement in writing to reflect the DOE mandated changes.
- C. Equitable Adjustment. Changes which affect performance, schedule, warranties, or other significant items will be equitably adjusted by mutual agreement prior to the implementation of the change. Any changes to this Agreement shall be made in accordance with Section titled "Entire Agreement."

XII. INDEMNITY

The Parties shall defend, indemnify and hold harmless one another and each of its affiliates, officers, directors, employees, or other representatives from and against any and all liability, loss, expense, attorneys fees or claims of injury or death or damages arising out of the performance or activities of the other Party under this Agreement, and excepting only such loss, expense, attorney fees or claims of injury or damage as may be caused by the intentional acts or negligence of the other Party.

It is the intent of the Parties that, where negligence is determined to be contributory, principles of comparative negligence will be followed and each Party shall bear the proportionate cost of any loss, damage, expense and liability attributable to that Party's negligence.

XIII. LIMITATION OF LIABILITY

In no event shall either Party be liable to the other for any incidental, special, or consequential damages related to or arising from the performance of this Agreement.

XIV. ASSIGNMENT

Neither Party shall assign or delegate its rights, obligations, or monies due under this Agreement without the prior written consent of the other Party.

XV. FORCE MAJEURE

Neither party hereto shall be considered in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by any cause, existing or future, which is beyond the reasonable control of the affected party.

XVI. TERMINATION FOR BREACH OR NONPERFORMANCE

SMUD reserves the right to terminate this Agreement for cause, without liability to SMUD. As used in the preceding sentence, "cause" may include, but is not necessarily be limited to, Subawardee's material default or breach of any provision of this Agreement and the Subawardee fails to cure or make reasonable progress toward curing the default/breach within 30 days of written notice by SMUD describing the default/breach.

Should Subawardee fail to cure the default/breach within 30 days of the written notice, SMUD may provide written notice to the Subawardee indicating the reason for termination and the effective termination date.

Upon notice of termination on the effective date, Subawardee shall immediately cease work under this Agreement and shall take all steps reasonably necessary to mitigate any costs or expenses for which SMUD or Subawardee may be liable hereunder. Subawardee may invoice for reimbursement by the DOE for costs and recoverable expenses up until the effective date of termination. Notwithstanding anything to the contrary contained herein, SMUD shall not be liable for any cost or expense incurred by Subawardee after termination of this Agreement.

XVII. CONFIDENTIAL INFORMATION

To complete the SOW required, the Subawardee may be required to review and analyze certain confidential information provided by SMUD to Subawardee. In addition, the Subawardee may be required to provide to SMUD certain work products and deliverables which, by their character, content, and/or purpose are confidential information of Subawardee. The Parties will treat such confidential information in accordance with the terms hereof:

- A. Confidential Information. "Confidential Information" shall mean all confidential, proprietary, and trade secret information, ideas and materials of or about a Party or its affiliates, employees or customers that is furnished by a Party (the "Disclosing Party") to the other Party (the "Receiving Party") after the Effective Date, and labeled "confidential" or "proprietary" (or, if presented orally, is stated at the time to be

confidential or is identified as being “confidential” or “proprietary” in a letter sent to the Receiving Party no later than five (5) days after the disclosure). If labeled or identified as such, Confidential Information includes, without limitation: (i) information, ideas or materials of a technical nature such as research and development results, designs and specifications and other materials and concepts relating to the products and processes of the Disclosing Party and its affiliates, (ii) information, ideas or materials of a business nature such as non-public financial information; information regarding costs, profits, products, marketing, customers, suppliers, employees, and salaries; marketing and sale plans and forecasts; business and financial plans and forecasts; and power project development plans and opportunities; and (iii) the content of discussions concerning the Proposed Transaction, to the extent identified as confidential in the manner as described above.

“Proposed Transaction” shall mean the putting forward for consideration, discussion, or adoption an exchange of Confidential Information.

“Person” shall be broadly interpreted to include, without limitation, any corporation, company, partnership, other entity or individual.

“Representatives” shall mean as to any Party, its directors, officers, employees, agents and advisors (including, without limitation, financial advisors, attorneys and accountants).

B. Confidentiality and Non-Use. In consideration of each Party's providing Confidential Information, the Parties agree as follows:

The Receiving Party shall hold confidential and not disclose to any Person, without the prior written consent of the Disclosing Party, all Confidential Information; provided, however, that the Receiving Party may disclose such Confidential Information to its Representatives who are actively and directly participating in its evaluation of the Proposed Transaction or who otherwise need to know the Confidential Information for the purpose of evaluating the Proposed Transaction;

The Receiving Party shall cause all its Representatives to observe the terms of this Agreement and shall be responsible for any breach of the terms of this Agreement by it or its Representatives; and

The Receiving Party shall return or destroy all Confidential Information (including all copies thereof) within 30 days of receipt of a written request therefor.

C. Exceptions to the Confidentiality and Non-Use Obligations. The obligations imposed by this Section hereof shall not apply, or shall cease to apply, to any Confidential Information if or when, but only to the extent that, such Confidential Information:

1. was known to the Receiving Party prior to the receipt of the Confidential Information;
or

2. was, or becomes through no breach of the Receiving Party's obligations hereunder, known to the public; or
 3. becomes known to the Receiving Party from sources other than the Disclosing Party under circumstances not involving any breach of any confidentiality obligation; or
 4. is independently developed by the Receiving Party, as evidenced by the written records thereof; or
 5. is required to be disclosed by law, including without limitation, the California Public Records Act, Brown Act or any other California or federal statute, court rule, or legal authority.
- D. Disclosures Required by Law. In the event that the Receiving Party or any of its Representatives becomes subject to a disclosure under the Public Records Act or other legal authority, the Receiving Party agrees to give the Disclosing Party earliest possible notice of the existence, terms, and circumstances surrounding such request so that the Disclosing Party may, in its sole judgment either:
1. seek an appropriate protective order or other remedy at its sole cost and expense; or
 2. consult with the Receiving Party concerning steps to resist or narrow the scope of such request.
- E. Non-Disclosure. Unless otherwise required by law or applicable legal process, neither Party shall in any way or in any form disclose, publicize or advertise in any manner any Confidential Information or any information about the Proposed Transaction, or the terms or conditions or any other facts relating thereto, including, without limitation, the content of the discussions or negotiations related to the Proposed Transaction, except as expressly permitted under this Agreement, or without the prior written consent of the other Party.

XVIII. INTELLECTUAL PROPERTY

If intellectual property will be developed under this Agreement, the following provisions apply:

- A. DOE Rights.
1. Attachment C to the DOE Assistance Agreement contains the intellectual property rights between SMUD and the DOE.
 2. The Subawardee grants to DOE for all copyrightable work a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use the work for Federal purposes, and to authorize others to do so.
 3. The Subawardee acknowledges and agrees that DOE has the right to:
 - a) Obtain, reproduce, publish or otherwise use the data first produced under the Agreement; and
 - b) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

- B. Lower Tier Contracts. The Subawardee shall obtain the same rights as stated above for the DOE from all contractors/vendors and others who produce copyrightable material, data, works of art, or subject inventions under this Agreement. Subawardee shall incorporate these paragraphs modified appropriately into its agreements with its contractors/vendors.
- C. Subawardee Rights.
1. SMUD and Subawardee each shall own the copyright to their own copyrightable works, including software, developed and delivered under the Agreement. Copyrightable works which are co-authored by employees of SMUD and employees of Subawardee shall be jointly owned by SMUD and Subawardee without an obligation to account to the other Party. A Party shall mark any copyrightable works of such Party with an appropriate copyright notice as prescribed under Title 17 of the United States Code. Copyrightable works owned solely by a Party may be used internally by the other Party for purposes of performance under this Agreement. The copyright owning Party shall deliver to the other Party, one copy of each copyrighted work developed in whole or in part under the Agreement.
 2. Per applicable Subpart of 10 C.F.R. 600 *et seq.*, Subawardee is subject to regulations governing copyrights, patents and inventions, including government-wide regulations issued by the Department of Commerce at 37 C.F.R. Part 401.

XIX. DISPUTES

- A. Discussion. Any dispute arising between the Parties under this Agreement shall first be attempted to be resolved through discussions between the Parties, with the assistance of the DOE Contracting Officer, or other DOE representative, if necessary. Both Parties hereby agree to make themselves immediately available to discuss in good faith a remedy to the alleged dispute. In the event that the dispute is not resolved in a resolution acceptable to both Parties, the Parties shall resort to mediation.
- B. Mediation. In the event the dispute is not resolved under Section A, the dispute shall be attempted to be resolved by good faith mediation between the Parties, with each Party designating a high level officer with full authority to resolve the dispute, before a mediator mutually agreed to by the Parties. The Parties shall each be responsible for payment of one-half of the mediator's fee. In the event the dispute is not resolved through mediation, either Party may seek redress in any court of competent jurisdiction.
- C. Continuing Performance Obligations. While a dispute, controversy or claim is pending, each Party will continue to perform its respective obligations under the Agreement, unless such Party is otherwise entitled to suspend its performance hereunder or terminate the Agreement in accordance with the terms hereof.

XX. EQUAL EMPLOYMENT OPPORTUNITY

The Subawardee shall not discriminate against any employee or applicant for employment contrary to the provisions of applicable State and/or Federal antidiscrimination laws. Contractor shall ensure that this requirement is applied to applicants and employees in actions including, but not limited to employment, upgrading, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeships.

XXI. ASBESTOS NOTIFICATION

Numerous SMUD buildings were constructed with some asbestos-containing components. An asbestos information sheet is provided as the Asbestos Notification Appendix to this Agreement, which shall be provided to all of Contractor's employees and to any subcontractor performing work within such SMUD buildings.

XXII. REPRESENTATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

Subawardee represents to the best of its knowledge and belief, obtained after appropriate due diligence, that Contractor and its subcontractors or suppliers under this Agreement comply with the provisions of the Assurance of Compliance form included as an Appendix to this Agreement and by this reference is made a part hereof.

The Certification Form is included as an Appendix to this Agreement and by this reference is made a part hereof.

XXIII. ASSURANCE OF COMPLIANCE REGARDING NONDISCRIMINATION IN FEDERALLY ASSISTED PROGRAM

Subawardee represents to the best of its knowledge and belief, obtained after appropriate due diligence, that Subawardee and its subcontractors or suppliers under this Agreement comply with the provisions of the Assurance of Compliance form included as an Appendix to this Agreement and by this reference is made a part hereof.

Subawardee will immediately notify SMUD in the event any violation of the conditions recited within the Assurance of Compliance occurs during the period of Contractor's performance under this Agreement.

XXIV. CERTIFICATIONS

- A. Buy American Act Certification. By signing this Agreement, Subawardee certifies that materials/products purchased in connection with the grant project comply with Section 1605 of ARRA, as applicable. Subawardee also certifies that any materials/products purchased by their lower-tier contractors/vendors are in compliance with Section 1605 of ARRA. During the term of this Agreement, upon request by SMUD and/or the DOE, Subawardee will provide SMUD and/or the DOE with any additional certifications

required to show compliance with Section 1605 of ARRA. If non-compliance with section 1605 of ARRA occurs, the DOE award official can require the removal and replacement of the unauthorized material, retain the unauthorized material and reduce the amount of the award by the cost of the unauthorized material, and/or withhold cash payments pending correction, suspend or terminate the entity, bar the violating entity from further awards or contracts, and refer the matter to the appropriate officer for a criminal investigation. In the event of noncompliance by Subawardee, or by any of Subawardee's lower-tier contractors/vendors, Subawardee shall be responsible for all costs and expenses associated with non-compliance.

- B. Prevailing Wage Certifications (Davis-Bacon Act and California Prevailing Wage). By signing this Agreement, Subawardee certifies that Subawardee is in compliance with the Davis-Bacon Act and California Prevailing Wage requirements, as applicable. Subawardee also certifies that their lower-tier contractors are in compliance with Davis-Bacon Act and California Prevailing Wage. During the term of this Agreement, upon request by SMUD and/or the DOE, Subawardee will provide SMUD and/or the DOE with any additional certifications required to show compliance with prevailing wage laws. In the event of noncompliance by Subawardee, or by any of Subawardee's lower-tier contractors, Subawardee shall be responsible for all costs and expenses associated with non-compliance.

XXV. COMPLIANCE WITH MANDATORY PROCUREMENT PROVISIONS

Subawardee shall comply with, and provide any required certifications evidencing compliance with the provisions of 10 C.F.R. 600.236, as applicable.

XXVI. SUBAWARD AND/OR CONTRACT TO FEDERAL AGENCY

Subawardee shall not sub-award or sub-contract any part of the approved Agreement to any Federal Department, Agency or Instrumentality, without the prior written approval of the DOE and SMUD.

XXVII. INCORPORATION OF CERTAIN PROVISIONS

Subawardee is bound by the terms of the Agreement including all the clauses that are in place at that time or any changes that are required by law.

Without limiting the generality of the foregoing, Subawardee agrees to fulfill any other requirements recited in the references set forth below, each of which is incorporated herein by reference, with the same force and effect as if they were given in full text:

- A. All portions of the DOE Assistance Regulations set forth in the applicable Subpart of 10 C.F.R. 600 *et seq.*
- B. All portions of the Contract Cost Principles and Procedures set forth in the applicable Subpart of 48 C.F.R. 31 *et seq.*

Subawardee further agrees to incorporate these provisions, suitably modified, in any agreement, or other legally binding lower-tier relationship established by Subawardee as an element of the efforts identified herein, as applicable.

XXVIII. INCORPORATION OF PROVISIONS OF THE DOE ASSISTANCE AGREEMENT

Subawardee acknowledges that as a Party providing support for the performance of the Grant, Subawardee is obligated to comply with all provisions of the DOE Assistance Agreement, applicable to the work that Subawardee is to perform under this Agreement. The DOE Assistance Agreement (and its attachments) is attached and incorporated hereto as Exhibit B.

Notwithstanding anything to the contrary in this Agreement, Subawardee agrees: (a) to cooperate fully with SMUD in complying with, and performing its obligations under, the DOE Assistance Agreement, (b) to cooperate fully with SMUD in satisfying any conditions that the DOE Assistance Agreement sets forth for SMUD to satisfy or that SMUD elects to satisfy under or pursuant to the DOE Assistance Agreement, and (c) not to take or omit any act if doing so would cause SMUD to be in breach of the DOE Assistance Agreement or to fail to satisfy any condition that SMUD is required or elects to satisfy under the DOE Assistance Agreement. In addition, notwithstanding anything to the contrary herein, Subawardee agrees to perform all work that Subawardee undertakes under or pursuant to this agreement or otherwise in connection with the Grant in full compliance with and satisfaction of any and all of the terms, provisions, and conditions of the DOE Assistance Agreement that are applicable to SMUD and all such terms, provisions, and conditions are hereby incorporated herein for the sole purpose of making them applicable to Subawardee in accordance with this paragraph. Notwithstanding anything to the contrary in this paragraph or elsewhere herein, however, nothing in this paragraph or elsewhere herein shall be deemed to give Subawardee any rights under the DOE Assistance Agreement or to assign the DOE Assistance Agreement to Subawardee or to make Subawardee a prime recipient/awardee of the ARRA Funds under the DOE Assistance Agreement or to require Subawardee to comply with any DOE special terms and conditions or additional federal flow down provisions which, by their nature and text, are clearly inapplicable to Subawardee due to exempting circumstances or which, by the language thereof, are self deleting.

XXIX. ORDER OF PRECEDENCE

In the event of any ambiguity, inconsistency, or conflict arising under this Agreement, the following order of precedence shall apply:

- A. The provisions set forth in this Agreement
- B. The SOW
- C. DOE Assistance Agreement
- D. Federal Regulations and Statutes

XXX. ENTIRE AGREEMENT

This Agreement, together with any and all appendices, exhibits and/or attachments attached hereto and any amendments, modifications, change orders, addendum and/or any other documents attached hereto and incorporated herein constitutes the entire agreement between the Parties and no changes, alterations, or modifications hereof shall be effective unless made in writing and signed by duly authorized representatives of both Parties to this Agreement.

ACCEPTED FOR

ACCEPTED FOR THE
SACRAMENTO MUNICIPAL UTILITY
DISTRICT

By: _____ By: _____

Name: _____ Name: _____
(Type or Print)

Title: _____ Title: _____

Date: _____ Date: _____

Appendices/Attachments

Appendix Federal OMB Reporting

Appendix DOE Invoice Form

Appendix Asbestos Notification

Appendix Certifications Regarding Lobbying, Debarment, Suspension and other Responsibility Matters; and Drug Free Workplace Requirements.

Appendix Assurance of Compliance - Nondiscrimination in Federally Assisted Programs

Exhibit A DOE Assistance Agreement

Exhibit B SOW

Federal OMB Reporting by Subawardee

For specific information on OMB reporting, refer to OMB Memorandum M-10-08, dated December 18, 2009 or latest guidance published by the OMB. The Subawardee report will include, but not be limited to:

Field	Comment
Award Number	As provided in this Agreement
Subrecipient Legal Name	As registered in CCR or D&B
Sub recipient DUNS No.	Subawardee must maintain current registrations in the Central Contractor Registration (http://www.ccr.gov) at all times during which it has an active award funded with ARRA funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (http://www.dnb.com) is one of the requirements for registration in the Central Contractor Registration.
Subrecipient DBA Name	The Doing-Business-As (DBA) name for the Subrecipient as defined in the CCR or D&B
Subrecipient Address	Zip code must be zip+4. Zip codes will be validated against the congressional district.
Subrecipient Congressional District	This can be looked up at: https://writerep.house.gov/writerep/welcome.shtml
Subrecipient Type	Drop down box of the Subrecipient's type of business
Amount of Subaward	Cumulative amount by report date
Sub award Number	As provided in this agreement
Subaward Date	The execution date of the agreement or most recent amendment date
Project Activity Location	Primary Place of Performance; Zip code must be zip+4. If +4 suffix is unknown, zeros or nines can be entered. Look to the "Additional PoP Addresses" instructions in the next section for more details.
Project Status	<p>A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why if the established goals were not met.</p> <p>A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, 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 the report advising the reader to contact the Principal Investigator or the Project Director for further information.</p>
Percentage Completion of Project	Report one of the four options: Not started; Less than 50% completed; Completed 50% or more; Fully Completed
Subrecipient Indication of Reporting Applicability	If this is answered "Yes", the top 5 names and compensation fields must be completed

Subrecipient Highly Compensated Compensation/Names	Names and total compensation of five most highly compensated officers for the calendar year in which the agreement is awarded if, In the Contractor's preceding fiscal year, the Contractor received-- 80 percent or more of its annual gross revenues from federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and \$25,000,000 or more in annual gross revenues from federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements
Subrecipient Number of Jobs Created	<p>A job created is a new position created and filled, or an existing unfilled position that is filled, that is funded by the Recovery Act. Subawardees must estimate the total number of jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid for or will be reimbursed with Recovery Act funding.</p> <p>Enter zero if no jobs have been created. Direct jobs created (i.e., new positions created and filled or unfilled positions that are filled). Only include jobs that are directly funded by ARRA funds. The number shall be expressed as "full-time equivalent" (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule.</p>
Subrecipient Number of Jobs Retained	<p>A job retained is an existing position that is now funded by the Recovery Act. Subawardees must estimate the total number of jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid for or will be reimbursed with Recovery Act funding.</p> <p>The number shall be expressed as "full-time equivalent" (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule. Report only on hours directly billed to the project.</p>
Employment Impact of Jobs Created/Retained	Subawardees are asked to provide a narrative description of the employment impact. The narrative should include a brief description of the types of jobs created or retained. This description may rely on job titles, broader labor categories, or the subawardee's existing practice for describing jobs as long as the terms used are widely understood and describe the general nature of the work.
Subrecipient Description of Jobs Created	Description of jobs created. Provide a brief description of impact on the Contractor's workforce and include the types of jobs created and retained.
Vendor Data Elements (all purchases)	<ul style="list-style-type: none"> - DUNS or name. - Zip code of Headquarters. - Description of the product and/or service provided by the vendor. - The amount invoiced from the vendor (aggregated)

	<p>that will be paid with ARRA funds.</p> <ul style="list-style-type: none">- Number of jobs created- Description of jobs created (job title)- Number of jobs retained- Description of jobs retained (job title)-Provide narrative description of employment impact
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DOE Invoice Form

DOE Invoice Form is available at <https://www.smudlink.org/grants-administration/sgig/default.aspx>. Contact SMUD Grant Administration at grantadmin@smud.org to request registration login and password.

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ASBESTOS NOTIFICATION - 2011

Sacramento Municipal Utility District (SMUD) is required to give notice to employees and contractors working at any District facility that has asbestos-containing construction materials, pursuant to the Asbestos Notification Law (California Health & Safety Code 25915 et seq. and in particular 25915.1). **Be aware that this list only includes material tested and found to contain asbestos material. Material not tested may contain asbestos. Asbestos inspection and testing is required prior to performing demolition, renovation, retrofit or remodeling in any facility constructed prior to 1981.**

LOCATION OF ASBESTOSHeadquarters Building:

- * Above the ceiling of the first floor (auditorium) and throughout the remainder of the building as troweled-on fireproofing material on decking and structural members;
- * Floor tiles (various sizes; 9-inchx9-inch; 12-inch x12-inch), and mastics;
- * Mechanical/electrical equipment;
- * Throughout the building (behind the walls, in equipment rooms and auditorium ceiling) in tank and pipe insulation;
- * Insulation on electrical wire;
- * Materials inside door frames;
- * Caulking on HVAC ducts; and
- * HVAC and piping insulation.

Corporation Yard:

- * HVAC and piping insulation within the D/S Building;
- * Hot water piping insulation in Building F - Transportation Shop;
- * Floor tile and mastic Building F - Transportation Shop - Break Room;
- * Mastic under floor tile - second floor of Building I - Warehouse; and
- * Pre-Fab Shop linoleum on restroom floor.

Energy Management Center

- * Arc chutes on some circuit-breakers.

Substations:

- * Rancho Seco switchyard building in floor tile and mastic
- * Arc chutes on some breakers - potentially all sub-stations
- * Elverta and Hurley in floor tile and adhesive and presumed asbestos containing materials (PACM) in all sub-stations;
- * Elverta ceiling tile and mastic and PACM in all sub-stations;
- * Mid-city sub in pipe insulation and PACM in all sub-stations;
- * Hedge sub station floor tile and mastic and PACM in all sub-stations
- * Manholes, switchboards, control and protection panels - Wire insulation in all sub-stations;
- * Some bus bar filler material in all sub-stations;
- * North city - transite on roof and inside walls and PACM in all sub-stations;
- * Outer point cover on oil filled pipe from North City to Station A.

Fresh Pond:

- * Floor tiles and mastic

Camp Far West

- * Pipe insulation on cooling water pipe;
- * Pipe insulation on mezzanine level behind battery room insulation

Union Valley

- * Pipe insulation
- * Bus bar bolt filler material
- * Fire-stop sealant on electrical cables
- * White material in PCB500

Loon Lake

- * Diesel generator exhaust piping
- * Insulation on HVAC duct
- * Black & White pipe wrap material
- * Firestop sealant on electrical cables

Jaybird

- * Wiring insulation
- * Pipe insulation
- * Fire-stop sealant on electrical cables

***CERTIFICATIONS REGARDING LOBBYING;
DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS;
AND DRUG FREE WORKPLACE REQUIREMENTS***

Subawardees should refer to the regulations cited below to determine the certification to which they are required to attest. Subawardees should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 10 CFR Part 600 *et seq.* The certifications shall be treated as a material representation of fact upon which Sacramento Municipal Utility District (SMUD) will rely.

1. LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subawardees shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. ADDITIONAL LOBBYING REPRESENTATION

Subawardee organizations which are described in section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995, are not eligible for the receipt of Federal funds constituting an award, grant, or loan.

As set forth in section 3 of the Lobbying Disclosure Act of 1995 as amended, (2 U.S.C. 1602), lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive Branch and Congress with regard to Federal legislative, regulatory, and program administrative matters.

Check the appropriate block:

The subawardee is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986? ☐ Yes ☐ No

If you checked "Yes" above, check the appropriate block:

The applicant represents that after December 31, 1995 it ☐ has ☐ has not engaged in any lobbying activities as defined in the Lobbying Disclosure Act of 1995, as amended.

3. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

- (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery; falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

4. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub.L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

ALTERNATE I (GRANTEES OTHER THAN INDIVIDUALS)

- (1) The grantee certifies that it will or will continue to provide a drug-free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - (b) Establishing an ongoing drug-free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace not later than five calendar days after such conviction;
 - (e) Notifying the agency, in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
 - (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;

- (g) Making a good faith effort to continue to maintain a drug- free workplace through implementation of paragraphs (a),(b),(c),(d),(e), and (f).
- (2) The subawardee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance: (Street address, city, , state, zip code)

☐ Check if there are workplaces on file that are not identified here.

ALTERNATE II (SUBAWARDEES WHO ARE INDIVIDUALS)

- (1) The subawardee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant.
- (2) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to every grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

5. SIGNATURE

As the duly authorized representative of the applicant, I hereby certify that the subawardee will comply with the above certifications.

Name of Applicant: _____

Printed Name and Title of
Authorized Representative: _____

SIGNATURE

DATE

Assurance of Compliance
Nondiscrimination in Federally Assisted Programs

OMB Burden Disclosure Statement

(Hereinafter called the "Applicant")

HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L.88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub.L.93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub.L.93-438), Title IX of the Education Amendments of 1972, as amended (Pub.L.92-318, Pub.L.93-568, and Pub.L.94-482), Section 504 of the Rehabilitation Act of 1973 (Pub.L.93-112), the Age Discrimination Act of 1975 (Pub.L.94-135), Title VIII of the Civil Rights Act of 1968 (Pub.L.90-284), the Department of Energy Organization Act of 1977 (Pub.L.95-91), and the Energy Conservation and Production Act of 1976, as amended (Pub.L.94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

Applicability and Period of Obligation

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

Employment Practices

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

Subrecipient Assurance

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws cited above. To this end, the subrecipient shall be required to sign a written assurance form, however, the obligation of both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

Data Collection and Access to Records

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to, the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, age, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age, and disability, in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to its obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy, Facilities of the Applicant (including the physical plants, building, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours on request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereto, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representation and agreements made in this assurance and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signature appears below and who are authorized to sign this assurance on behalf of the Applicant.

Applicant Certification

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable requirements of 10 C.F.R. §§ 1040 *et seq.*

Designated Responsible Employee

Name and Title (Printed to Typed)

Telephone Number

Signature

Date

Applicant's Name

() -
Telephone Number

Address:

Date

Authorized Official:
President, Chief Executive Officer
or Authorized Designee

Name and Title (Printed to Typed)

() -
Telephone Number

Signature

Date

Attachments A – B (placeholder)

To be included in final signed contract

DRAFT



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT

The Power To Do More.®

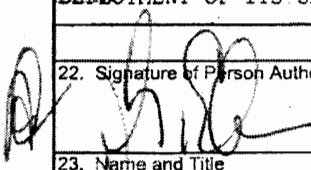
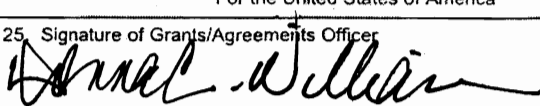
P.O. Box 15830, Sacramento, CA 95852-1830; 1-888-742-SMUD (7683)

Exhibit A

DOE Assistance Agreement

FOR OFFICIAL USE ONLY

ASSISTANCE AGREEMENT

1. Award No. DE-OE0000214		2. Modification No. 002		3. Effective Date 04/23/2010		4. CFDA No. 81.122	
5. Awarded To SACRAMENTO MUNICIPAL UTILITY DISTRICT Attn: JENNIFER RESTIVO P.O. BOX 15830 SACRAMENTO CA 958520830				6. Sponsoring Office Elec. Delivery & Reliability (FORS) U.S. Department of Energy Office of Elec. Delivery & Energy Reliability Forrestal Building 1000 Independence Avenue, SW Washington DC 20585		7. Period of Performance 12/24/2009 through 12/24/2014	
8. Type of Agreement <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other		9. Authority 31 USC 6304		10. Purchase Request or Funding Document No.			
11. Remittance Address SACRAMENTO MUNICIPAL UTILITY DISTRICT Attn: JENNIFER RESTIVO P.O. BOX 15830 SACRAMENTO CA 958520830				12. Total Amount Govt. Share: \$127,506,261.00 Cost Share : \$180,230,823.00 Total : \$307,737,084.00		13. Funds Obligated This action: \$0.00 Total : \$127,506,261.00	
14. Principal Investigator		15. Program Manager Donald W. MacDonald Phone: 202-586-3583		16. Administrator Office of HQ PS (HQ) U.S. Department of Energy Office of Headquarters Procurement MA-64 1000 Independence Ave., S.W. Washington DC 20585			
17. Submit Payment Requests To OR for HQ U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4937 Oak Ridge TN 37831		18. Paying Office OR for HQ U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4937 Oak Ridge TN 37831		19. Submit Reports To See Attachment B			
20. Accounting and Appropriation Data See Schedule							
21. Research Title and/or Description of Project SGIG UNDER THE INTEGRATED AND/OR CROSSCUTTING SYSTEMS TOPIC AREA TO EXPAND AND ACCELERATE THE DEPLOYMENT OF ITS SMARTSACRAMENTO PROJECT							
For the Recipient				For the United States of America			
22. Signature of Person Authorized to Sign 				25. Signature of Grants/Agreements Officer 			
23. Name and Title John DiStasio, General Manager & CEO		24. Date Signed 4/21/2010		26. Name of Officer Donna C. Williams		27. Date Signed 4-23-10	

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CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

DE-OE0000214/002

PAGE OF

2

2

NAME OF OFFEROR OR CONTRACTOR

SACRAMENTO MUNICIPAL UTILITY DISTRICT

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DUNS Number: 009235342</p> <p>The purpose of this amendment is to definitize the Limited Authority Agreement dated December 24, 2009. As such the special terms and conditions of December 24, 2009 are deleted in their entirety and replaced in their entirety with the Special Terms and Conditions attached hereto.</p> <p>The Project Description for this Grant, as contained in the Application submitted in response to Funding Opportunity Announcement Number DE-FOA-0000058, is Incorporated by Reference together with the following attachments:</p> <p>Attachment A, SF-424A - Budget Information for Non-Construction Programs</p> <p>Attachment B, DOE F 4600.2 - Federal Assistance Reporting Checklist</p> <p>Attachment C, Intellectual Property Provisions (NRD-1003) Nonresearch and Development</p> <p>Attachment D, National Policy Assurances to be Incorporated as Award Terms</p> <p>Attachment E, Statement of Project Objectives</p> <p>ASAP: NO Extent Competed: COMPETED Davis-Bacon Act: NO</p>				

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JULY 2004

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1. RESOLUTION OF CONFLICTING CONDITIONS

Any apparent inconsistency between Federal statutes and regulations and the terms and conditions contained in this award must be referred to the DOE Award Administrator for guidance.

2. AWARD PROJECT PERIOD AND BUDGET PERIOD

The Period of Performance for this Award is sixty (60) months from the effective date. The project start date will be April 23, 2010. Project implementation shall not exceed thirty-six (36) months. The balance of the Period of Performance will be for data collection activities.

3. PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)

- a. Method of Payment. Payment will be made by reimbursement through ACH.
- b. Requesting Reimbursement. Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at <https://finweb.oro.doe.gov/vipers.htm>. Detailed instructions on how to enroll are provided on the web site.

You must submit a Standard Form (SF) 270, "Request for Advance or Reimbursement" at <https://finweb.oro.doe.gov/vipers.htm> and attach a file containing appropriate supporting documentation. The file attachment must show the total federal share claimed on the SF 270, the non-federal share claimed for the billing period, and cumulative expenditures to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs

- c. Timing of submittals. Submittal of the SF 270 should coincide with your normal billing pattern, but not more frequently than every two weeks. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the federal share of direct project costs and the proportionate share of any allowable indirect costs incurred during that billing period.
- d. Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE.
- e. Payments. The DOE approving official will approve the invoice as soon as practicable but not later than 30 days after your request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. You may check the status of your payments at the VIPER web site. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

4. MAXIMUM OBLIGATION

The maximum obligation of the DOE is limited to the amount shown on the Agreement Face Page. You are not obligated to continue performance of the project beyond the total amount obligated and your pro rata share of the project costs.

5. COST SHARING FFRDC'S NOT INVOLVED

a. Total Estimated Project Cost is the sum of the Government share and Recipient share of the estimated project costs. The Recipient's cost share must come from non-Federal sources unless otherwise allowed by law. By accepting federal funds under this award, you agree that you are liable for your percentage share of total allowable project costs, even if the project is terminated early or is not funded to its completion. This cost is shared as follows:

Government Share \$ / %	Recipient Share \$ / %	Total Estimated Cost
\$127,506,261 /41%	\$180,230,823 /59%	\$307,737,084

b. If you discover that you may be unable to provide cost sharing of at least the amount identified in paragraph a of this article, you should immediately provide written notification to the DOE Award Administrator indicating whether you will continue or phase out the project. If you plan to continue the project, the notification must describe how replacement cost sharing will be secured.

c. You must maintain records of all project costs that you claim as cost sharing, including in-kind costs, as well as records of costs to be paid by DOE. Such records are subject to audit.

d. Failure to provide the cost sharing required by this Clause may result in the subsequent recovery by DOE of some or all the funds provided under the award.

6. REBUDGETING AND RECOVERY OF INDIRECT COSTS - REIMBURSABLE INDIRECT COSTS AND FRINGE BENEFITS

a. If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.

b. Recipients are expected to manage their indirect costs. DOE will not amend an award to provide additional funds for changes in indirect cost rates. DOE recognizes that the inability to obtain full reimbursement for indirect costs means the Recipient must absorb the under-recovery. Such under-recovery may be allocated as part of the organization's required cost sharing.

7. PRE-AWARD COSTS (As Applicable)

Any work performed prior to the effective date of award stated on the Agreement Face Page is done at the recipient's risk. You are able to recoup costs incurred on or after August 6, 2009, that are otherwise allowable. All pre-award costs must be in accordance with the applicable Federal Cost principles referenced in 10 C.F.R. 600.

8. USE OF PROGRAM INCOME - COST SHARING

If you earn program income during the project period as a result of this award, you may use the program income to meet your cost sharing requirement.

9. STATEMENT OF FEDERAL STEWARDSHIP

DOE will exercise Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.

10. SITE VISITS

DOE's authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. You must provide, and must require your subawardees to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

The DOE will be provided reasonable access to Recipient facilities to verify the installation, configuration, and operational status of the components, devices, facilities, and systems being installed under this award. The DOE shall request access reasonably in advance and shall be accompanied by representative(s) of the Recipient.

11. REPORTING REQUIREMENTS

The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to this award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the award. Noncompliance may result in withholding of future payments, suspension, or termination of the current award. A willful failure to perform, a history of failure to perform, or unsatisfactory performance may also result in a debarment action to preclude future awards by Federal agencies.

12. PUBLICATIONS

If you publish or otherwise make publicly available the results of the work conducted under the award, an acknowledgment of Federal support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: "This material is based upon work supported by the Department of Energy under Award Number(s) [*Enter the award number(s)*]."

Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

13. FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS

You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

14. LOBBYING RESTRICTIONS

By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

15. NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND

PRODUCTS -- SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

16. PROPERTY

Real property and equipment acquired by the Recipient shall be subject to the rules set forth in 10 CFR 600.321.

Consistent with the goals and objectives of this project, the Recipient may continue to use real property and equipment purchased in whole or in part with Federal funds under this award for its authorized purpose beyond the Period of Performance without obligation to make payment to DOE to extinguish DOE's interest to such property as described in 10 CFR 600.321, subject to the following: (a) the Recipient continues to utilize such property for the objectives of the project as set forth in the Statement of Project Objectives; (b) DOE retains the right to periodically ask for, and the Recipient agrees to provide, reasonable information concerning the use and condition of the property; and (c) the Recipient follows the property disposition rules set forth in 10 CFR 600.321 if the property is no longer used by the Recipient for the objectives of the project, and the fair market value of property exceeds \$5,000.

Once the per unit fair market value of the property is less than \$5,000, pursuant to 10 CFR 600.321(f)(1)(i), DOE's interest in the property shall be extinguished and Recipient shall have no further obligation to the DOE with respect to the property.

Consistent with the 10 C.F.R. §§ 600.132(a), 600.134(c), and 600.321(b)(2), a recipient may request that the DOE contracting officer consider approving encumbrance of real property and equipment purchased in whole or in part with Federal funds under the award.

17. INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP

a. You shall immediately notify the DOE of the occurrence of any of the following events: (i) you or your parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act; (ii) your consent to the institution of an involuntary case under the Bankruptcy Act against you or your parent; (iii) the filing of any similar proceeding for or against you or your parent, or its consent to, the dissolution, winding-up or readjustment of your debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over you, under any other applicable state or federal law; or (iv) your insolvency due to your inability to pay your debts generally as they become due.

b. Such notification shall be in writing and shall: (i) specifically set out the details of the occurrence of an event referenced in paragraph a; (ii) provide the facts surrounding that event; and (iii) provide the impact such event will have on the project being funded by this award.

c. Upon the occurrence of any of the four events described in the first paragraph, DOE reserves the right to conduct a review of your award to determine your compliance with the required elements of the award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the DOE review determines that there are significant deficiencies or concerns with your performance under the award, DOE reserves the right to impose additional requirements, as needed to institute payment controls.

d. Failure of the Recipient to comply with this provision may be considered a material noncompliance of this financial assistance award by the Contracting Officer.

18. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

The project proposed and approved by DOE as detailed in this award is categorically excluded from National Environmental Policy Act (NEPA) requirements. However, if the project changes or is

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supplemented your work associated with the new activity is restricted from taking any action using Federal funds, which would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE providing either a NEPA clearance or a final NEPA decision regarding this project.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

19. FINAL INCURRED COST AUDIT

In accordance with 10 CFR 600, DOE reserves the right to initiate a final incurred cost audit on this award. If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

20. SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (MAR 2009)

Preamble

The American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act) was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases. Recipients shall use grant funds in a manner that maximizes job creation and economic benefit.

The Recipient shall comply with all terms and conditions in the Recovery Act relating generally to governance, accountability, transparency, data collection and resources as specified in Act itself and as discussed below.

Recipients should begin planning activities for their first tier subrecipients, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related guidance. For projects funded by sources other than the Recovery Act, Contractors must keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning specific procedural requirements for the new reporting requirements. The Recipient will be provided these details as they become available. The Recipient must comply with all requirements of the Act. If the Recipient believes there is any inconsistency between ARRA requirements and current award terms and conditions, the issues will be referred to the Contracting Officer for reconciliation.

Definitions

For purposes of this clause, Covered Funds means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as Recovery Act funds in the grant, cooperative agreement or TIA and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30,

2015.

Non-Federal employer means any employer with respect to covered funds -- the contractor, subcontractor, grantee, or Recipient, as the case may be, if the contractor, subcontractor, grantee, or Recipient is an employer; and any professional membership organization, certification of other professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving covered funds; or with respect to covered funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local government; and does not mean any department, agency, or other entity of the federal government.

Recipient means any entity that receives Recovery Act funds directly from the Federal government (including Recovery Act funds received through grant, loan, or contract) other than an individual and includes a State that receives Recovery Act Funds.

Special Provisions

A. Flow Down Requirement

Recipients must include these special terms and conditions in any subaward.

B. Segregation of Costs

Recipients must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects.

C. Prohibition on Use of Funds

None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be used by any State or local government, or any private entity, for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

D. Access to Records

With respect to each financial assistance agreement awarded utilizing at least some of the funds appropriated or otherwise made available by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, any representative of an appropriate inspector general appointed under section 3 or 8G of the Inspector General Act of 1988 (5 U.S.C. App.) or of the Comptroller General is authorized --

(1) to examine any records of the contractor or grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract that pertain to, and involve transactions that relate to, the subcontract, subcontract, grant, or subgrant; and

(2) to interview any officer or employee of the contractor, grantee, subgrantee, or agency regarding such transactions.

E. Publication

An application may contain technical data and other data, including trade secrets and/or privileged or confidential information, which the applicant does not want disclosed to the public or used by the Government for any purpose other than the application. To protect such data, the applicant should specifically identify each page including each line or paragraph thereof containing the data to be protected and mark the cover sheet of the application with the following Notice as well as referring to the Notice on each page to which the Notice applies:

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Notice of Restriction on Disclosure and Use of Data

The data contained in pages ---- of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data here to the extent provided in the award. This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant.

Information about this agreement will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board. The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552a of title 5, United States Code.

F. Protecting State and Local Government and Contractor Whistleblowers.

The requirements of Section 1553 of the Act are summarized below. They include, but are not limited to:

Prohibition on Reprisals: An employee of any non-Federal employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing, including a disclosure made in the ordinary course of an employee's duties, to the Accountability and Transparency Board, an inspector general, the Comptroller General, a member of Congress, a State or Federal regulatory or law enforcement agency, a person with supervisory authority over the employee (or other person working for the employer who has the authority to investigate, discover or terminate misconduct), a court or grand jury, the head of a Federal agency, or their representatives information that the employee believes is evidence of:

- gross mismanagement of an agency contract or grant relating to covered funds;
- a gross waste of covered funds;
- a substantial and specific danger to public health or safety related to the implementation or use of covered funds;
- an abuse of authority related to the implementation or use of covered funds; or
- as violation of law, rule, or regulation related to an agency contract (including the competition for or negotiation of a contract) or grant, awarded or issued relating to covered funds.

Agency Action: Not later than 30 days after receiving an inspector general report of an alleged reprisal, the head of the agency shall determine whether there is sufficient basis to conclude that the non-Federal employer has subjected the employee to a prohibited reprisal. The agency shall either issue an order denying relief in whole or in part or shall take one or more of the following actions:

- Order the employer to take affirmative action to abate the reprisal.
- Order the employer to reinstate the person to the position that the person held before the reprisal, together with compensation including back pay, compensatory damages, employment benefits, and other terms and conditions of employment that would apply to the person in that position if the reprisal had not been taken.
- Order the employer to pay the employee an amount equal to the aggregate amount of all costs and expenses (including attorneys' fees and expert witnesses' fees) that were reasonably incurred by the employee for or in connection with, bringing the complaint regarding the reprisal, as determined by the head of a court of competent jurisdiction.

Nonenforceability of Certain Provisions Waiving Rights and Remedies or Requiring Arbitration: Except as provided in a collective bargaining agreement, the rights and remedies provided to aggrieved employees by this section may not be waived by any agreement, policy, form, or condition of employment, including any predispute arbitration agreement. No predispute arbitration agreement shall be valid or enforceable if it requires arbitration of a dispute arising out of this section.

Requirement to Post Notice of Rights and Remedies: Any employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, shall post notice of the rights and

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remedies as required therein. (Refer to section 1553 of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, www.Recovery.gov, for specific requirements of this section and prescribed language for the notices.).

G. "RESERVED"

H. False Claims Act

Recipient and sub-recipients shall promptly refer to the DOE or other appropriate Inspector General any credible evidence that a principal, employee, agent, contractor, sub-grantee, subcontractor or other person has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity or similar misconduct involving those funds.

I. Information in Support of Recovery Act Reporting

Recipient may be required to submit backup documentation for expenditures of funds under the Recovery Act including such items as timecards and invoices. Recipient shall provide copies of backup documentation at the request of the Contracting Officer or designee.

J. Availability of Funds

Funds appropriated under the Recovery Act and obligated to this award are available for reimbursement of costs until September 30, 2015.

K. Additional Funding Distribution and Assurance of Appropriate Use of Funds (As Applicable)

Certification by Governor -- Not later than April 3, 2009, for funds provided to any State or agency thereof by the American Reinvestment and Recovery Act of 2009, Pub. L. 111-5, the Governor of the State shall certify that: 1) the state will request and use funds provided by the Act; and 2) the funds will be used to create jobs and promote economic growth.

Acceptance by State Legislature -- If funds provided to any State in any division of the Act are not accepted for use by the Governor, then acceptance by the State legislature, by means of the adoption of a concurrent resolution, shall be sufficient to provide funding to such State.

Distribution -- After adoption of a State legislature's concurrent resolution, funding to the State will be for distribution to local governments, councils of government, public entities, and public-private entities within the State either by formula or at the State's discretion.

L. Certifications (As Applicable)

With respect to funds made available to State or local governments for infrastructure investments under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, the Governor, mayor, or other chief executive, as appropriate, certified by acceptance of this award that the infrastructure investment has received the full review and vetting required by law and that the chief executive accepts responsibility that the infrastructure investment is an appropriate use of taxpayer dollars. Recipient shall provide an additional certification that includes a description of the investment, the estimated total cost, and the amount of covered funds to be used for posting on the Internet. A State or local agency may not receive infrastructure investment funding from funds made available by the Act unless this certification is made and posted.

21. REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE RECOVERY ACT

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- (a) This award requires the recipient to complete projects or activities which are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act) and to report on use of Recovery Act funds provided through this award. Information from these reports will be made available to the public.
- (b) The reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act.
- (c) Recipients and their first-tier sub-recipients must maintain current registrations in the Central Contractor Registration (<http://www.ccr.gov>) at all times during which they have active federal awards funded with Recovery Act funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (<http://www.dnb.com>) is one of the requirements for registration in the Central Contractor Registration.
- (d) The recipient shall report the information described in section 1512(c) of the Recovery Act using the reporting instructions and data elements that will be provided online at <http://www.FederalReporting.gov> and ensure that any information that is pre-filled is corrected or updated as needed.

**22. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS --
SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**

(a) Definitions. As used in this award term and condition--

(1) Manufactured good means a good brought to the construction site for incorporation into the building or work that has been--

(i) Processed into a specific form and shape; or

(ii) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

(2) Public building and public work means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

(3) Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

(b) Domestic preference. (1) This award term and condition implements Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act) (Pub. L. 111--5), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States except as provided in paragraph (b)(3) and (b)(4) of this section and condition.

(2) This requirement does not apply to the material listed by the Federal Government as follows: "NONE"

(3) The award official may add other iron, steel, and/or manufactured goods to the list in paragraph (b)(2) of this section and condition if the Federal Government determines that--

(i) The cost of the domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the cost of the overall project by more than 25 percent;

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(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.

(c) Request for determination of inapplicability of Section 1605 of the Recovery Act . (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(3) of this section shall include adequate information for Federal Government evaluation of the request, including--

(A) A description of the foreign and domestic iron, steel, and/or manufactured goods;

(B) Unit of measure;

(C) Quantity;

(D) Cost;

(E) Time of delivery or availability;

(F) Location of the project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(3) of this section.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.

(iii) The cost of iron, steel, and/or manufactured goods material shall include all delivery costs to the construction site and any applicable duty.

(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.

(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds by at least the differential established in 2 CFR 176.110(a).

(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods is noncompliant with section 1605 of the American Recovery and Reinvestment Act.

(d) Data. To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the Recipient shall include the following information and any applicable supporting data based on the survey of suppliers:

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Foreign and Domestic Items Cost Comparison

Description	Unit of measure	Quantity	Cost (dollars)*
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Item 1:

Foreign steel, iron, or manufactured good	_____	_____	_____
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Domestic steel, iron, or manufactured good	_____	_____	_____
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Item 2:

Foreign steel, iron, or manufactured good	_____	_____	_____
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Domestic steel, iron, or manufactured good	_____	_____	_____
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[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[*Include all delivery costs to the construction site.]

23. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS)--SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) Definitions. As used in this award term and condition--

Designated country --(1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom;

(2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Mexico, Morocco, Nicaragua, Oman, Peru, or Singapore); or

(3) A United States-European Communities Exchange of Letters (May 15, 1995) country: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and United Kingdom.

Designated country iron, steel, and/or manufactured goods --(1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a manufactured good that consist in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different manufactured good distinct from the materials from which it was transformed.

Domestic iron, steel, and/or manufactured good --(1) Is wholly the growth, product, or manufacture of the United States; or

(2) In the case of a manufactured good that consists in whole or in part of materials from another country, has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed. There is no requirement with regard to the origin of components or subcomponents in manufactured goods or products, as long as the manufacture of the goods occurs in the United States.

Foreign iron, steel, and/or manufactured good means iron, steel and/or manufactured good that is not domestic or designated country iron, steel, and/or manufactured good.

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Manufactured good means a good brought to the construction site for incorporation into the building or work that has been--

- (1) Processed into a specific form and shape; or
- (2) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

Public building and public work means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

(b) Iron, steel, and manufactured goods. (1) The award term and condition described in this section implements--

(i) Section 1605(a) of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111--5) (Recovery Act), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States; and

(ii) Section 1605(d), which requires application of the Buy American requirement in a manner consistent with U.S. obligations under international agreements. The restrictions of section 1605 of the Recovery Act do not apply to designated country iron, steel, and/or manufactured goods. The Buy American requirement in section 1605 shall not be applied where the iron, steel or manufactured goods used in the project are from a Party to an international agreement that obligates the recipient to treat the goods and services of that Party the same as domestic goods and services. This obligation shall only apply to projects with an estimated value of \$7,443,000 or more.

(2) The recipient shall use only domestic or designated country iron, steel, and manufactured goods in performing the work funded in whole or part with this award, except as provided in paragraphs (b)(3) and (b)(4) of this section.

(3) The requirement in paragraph (b)(2) of this section does not apply to the iron, steel, and manufactured goods listed by the Federal Government as follows:

None

(4) The award official may add other iron, steel, and manufactured goods to the list in paragraph (b)(3) of this section if the Federal Government determines that--

(i) The cost of domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, and/or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the overall cost of the project by more than 25 percent;

(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or

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(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.

(c) Request for determination of inapplicability of section 1605 of the Recovery Act or the Buy American Act. (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(4) of this section shall include adequate information for Federal Government evaluation of the request, including--

(A) A description of the foreign and domestic iron, steel, and/or manufactured goods;

(B) Unit of measure;

(C) Quantity;

(D) Cost;

(E) Time of delivery or availability;

(F) Location of the project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(4) of this section.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.

(iii) The cost of iron, steel, or manufactured goods shall include all delivery costs to the construction site and any applicable duty.

(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.

(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other appropriate actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods.. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds, as appropriate, by at least the differential established in 2 CFR 176.110(a).

(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods other than designated country iron, steel, and/or manufactured goods is noncompliant with the applicable Act.

(d) Data. To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the applicant shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison

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Description (dollars)*	Unit of measure	Quantity	Cost
Item 1:			
Foreign steel, iron, or manufactured good			
Domestic steel, iron, or manufactured good			
Item 2:			
Foreign steel, iron, or manufactured good			
Domestic steel, iron, or manufactured good			

[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[*Include all delivery costs to the construction site.]

24. WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT (As Applicable)

(a) Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the Recovery Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 U.S.C. 3145, the Department of Labor has issued regulations at 29 CFR parts 1, 3, and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 CFR 5.5 instruct agencies concerning application of the standard Davis-Bacon contract clauses set forth in that section. Federal agencies providing grants, cooperative agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 CFR 5.5(a) are incorporated in any resultant covered contracts that are in excess of \$2,000 for construction, alteration or repair (including painting and decorating).

(b) For additional guidance on the wage rate requirements of section 1606, contact your awarding agency. Recipients of grants, cooperative agreements and loans should direct their initial inquiries concerning the application of Davis-Bacon requirements to a particular federally assisted project to the Federal agency funding the project. The Secretary of Labor retains final coverage authority under Reorganization Plan Number 14.

25. RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS

(a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Pub. L. 111--5) (Recovery Act) as required by Congress and in accordance with 2 CFR 215.21 "Uniform Administrative Requirements for Grants and Agreements" and OMB Circular A--102 Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds. OMB Circular A--102 is available at <http://www.whitehouse.gov/omb/circulars/a102/a102.html>.

(b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A--133, "Audits of States, Local Governments, and Non-Profit Organizations," recipients agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF--SAC) required by OMB Circular A--133. OMB Circular A--133 is available at <http://www.whitehouse.gov/omb/circulars/a133/a133.html>. This shall be accomplished by identifying expenditures for Federal awards made under the Recovery Act separately

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on the SEFA, and as separate rows under Item 9 of Part III on the SF--SAC by CFDA number, and inclusion of the prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF--SAC.

(c) Recipients agree to separately identify to each subrecipient, and document at the time of subaward and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information furnished to subrecipients shall distinguish the subawards of incremental Recovery Act funds from regular subawards under the existing program.

(d) Recipients agree to require their subrecipients to include on their SEFA information to specifically identify Recovery Act funding similar to the requirements for the Recipient SEFA described above. This information is needed to allow the Recipient to properly monitor subrecipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

26. DAVIS BACON ACT AND CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (NOV 2009) (If Applicable)

Definitions: For purposes of this clause, Clause 27, Davis Bacon Act and Contract Work Hours and Safety Standards Act, the following definitions are applicable:

(1) "Award" means any grant, cooperative agreement or technology investment agreement made with Recovery Act funds by the Department of Energy (DOE) to a Recipient. Such Award must require compliance with the labor standards clauses and wage rate requirements of the Davis-Bacon Act (DBA) for work performed by all laborers and mechanics employed by Recipients (other than a unit of State or local government whose own employees perform the construction) Subrecipients, Contractors, and subcontractors.

(2) "Contractor" means an entity that enters into a Contract. For purposes of these clauses, Contractor shall include (as applicable) prime contractors, Recipients, Subrecipients, and Recipients' or Subrecipients' contractors, subcontractors, and lower-tier subcontractors. "Contractor" does not mean a unit of State or local government where construction is performed by its own employees."

(3) "Contract" means a contract executed by a Recipient, Subrecipient, prime contractor, or any tier subcontractor for construction, alteration, or repair. It may also mean (as applicable) (i) financial assistance instruments such as grants, cooperative agreements, technology investment agreements, and loans; and, (ii) Sub awards, contracts and subcontracts issued under financial assistance agreements. "Contract" does not mean a financial assistance instrument with a unit of State or local government where construction is performed by its own employees.

(4) "Contracting Officer" means the DOE official authorized to execute an Award on behalf of DOE and who is responsible for the business management and non-program aspects of the financial assistance process.

(5) "Recipient" means any entity other than an individual that receives an Award of Federal funds in the form of a grant, cooperative agreement, or technology investment agreement directly from the Federal Government and is financially accountable for the use of any DOE funds or property, and is legally responsible for carrying out the terms and conditions of the program and Award.

(6) "Subaward" means an award of financial assistance in the form of money, or property in lieu of money, made under an award by a Recipient to an eligible Subrecipient or by a Subrecipient to a lower-tier subrecipient. The term includes financial assistance when provided by any legal

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agreement, even if the agreement is called a contract, but does not include the Recipient's procurement of goods and services to carry out the program nor does it include any form of assistance which is excluded from the definition of "Award" above.

(7) "Subrecipient" means a non-Federal entity that expends Federal funds received from a Recipient to carry out a Federal program, but does not include an individual that is a beneficiary of such a program.

(a) Davis Bacon Act

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and, without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, *provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe

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benefits where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The Department of Energy or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the Contract, the Department of Energy, Recipient, or Subrecipient, may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of

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wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) The Contractor shall submit weekly for each week in which any Contract work is performed a copy of all payrolls to the Department of Energy if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit the payrolls to the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner, as the case may be, for transmission to the Department of Energy. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Department of Energy if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit them to the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner, as the case may be, for transmission to the Department of Energy, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that

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no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 3729 of title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Department of Energy or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees—

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that

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determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this Contract.

(6) Contracts and Subcontracts. The Recipient, Subrecipient, the Recipient's, and Subrecipient's contractors and subcontractor shall insert in any Contracts the clauses contained herein in(a)(1) through (10) and such other clauses as the Department of Energy may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of the paragraphs in this clause.

(7) Contract termination: debarment. A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this Contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Recipient, Subrecipient, the Contractor (or any of its subcontractors), and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

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(10) Certification of eligibility.

(i) By entering into this Contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The Department of Energy or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Contracts and Subcontracts. The Recipient, Subrecipient, and Recipient's and Subrecipient's contractor or subcontractor shall insert in any Contracts, the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(5) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records to be maintained under this paragraph shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Department of Energy and the Department of Labor, and the

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Contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(c) Recipient Functions (Only if applicable).

- (1) On behalf of the Department of Energy (DOE), Recipient shall perform the following functions:
- (a) Obtain, maintain, and monitor all DBA certified payroll records submitted by the Subrecipients and Contractors at any tier under this Award;
 - (b) Review all DBA certified payroll records for compliance with DBA requirements, including applicable DOL wage determinations;
 - (c) Notify DOE of any non-compliance with DBA requirements by Subrecipients or Contractors at any tier, including any non-compliances identified as the result of reviews performed pursuant to paragraph (b) above;
 - (d) Address any Subrecipient and any Contractor DBA non-compliance issues; if DBA non-compliance issues cannot be resolved in a timely manner, forward complaints, summary of investigations and all relevant information to DOE;
 - (e) Provide DOE with detailed information regarding the resolution of any DBA non-compliance issues;
 - (f) Perform services in support of DOE investigations of complaints filed regarding noncompliance by Subrecipients and Contractors with DBA requirements;
 - (g) Perform audit services as necessary to ensure compliance by Subrecipients and Contractors with DBA requirements and as requested by the Contracting Officer; and
 - (h) Provide copies of all records upon request by DOE or DOL in a timely manner.
- (2) All records maintained on behalf of the DOE in accordance with paragraph (1) above are federal government (DOE) owned records. DOE or an authorized representative shall be granted access to the records at all times.
- (3) In the event of, and in response to any Freedom of Information Act, 5 U.S.C. 552, requests submitted to DOE, Recipient shall provide such records to DOE within 5 business days of receipt of a request from DOE.

27. GOVERNMENT INSIGHT

DOE and the Recipient are bound to each other by a duty of good faith and best effort to achieve the goals of the Project. DOE and the Recipient agree to provide early notification to each other of problems or issues which may arise in the performance of this Project, and to work collaboratively to resolve problems.

The Recipient is responsible for the overall Project, including execution, technical and project management, reporting, financial and administrative matters.

In recognition of the significance of this Project to the nation's energy infrastructure and energy agenda the Recipient agrees to provide additional access to project related information. The DOE Program Manager or their designee will be provided access, on a non-interference basis, to technical and project status meetings or tests via telephone or in person to better understand the progress and challenges of the Project. DOE may participate in meetings, reviews, and tests and may provide input and comment but has no right of approval or direction. The Recipient shall notify the DOE Program Manager of meetings, reviews, or tests and

provide related documents reasonably in advance to permit insight. The Recipient is not expected to delay any aspect of performance to accommodate DOE insight.

DOE federal employees are subject to the provisions of the Trade Secrets Act. If DOE contractor support personnel participate they shall be subject to appropriate obligations of confidentiality to DOE.

28. NO COST EXTENSION – REQUIREMENT FOR TIMELY DELIVERABLES

In recognition of the significance of this Project to the nation's energy infrastructure and energy agenda the DOE requests any extension to the Project period be coordinated in advance, in writing, with the cognizant DOE Contracting Officer. The Recipient is requested to provide a proposed end date, the reason for the extension, an explanation how the Project will be completed by the proposed end date, a positive statement that the available funding on the award is adequate to complete the Project, and a positive statement that all Project costs will be submitted to DOE in sufficient time to allow for payment no later than September 30, 2015.

If DOE agrees with the need for an extension and the request is fully supported the Contracting Officer shall issue a modification to the award with the revised project period.

The Recipient does have the right to unilaterally extend the award one time for up to one year. However, any one-time, no cost extension will not change the requirements for deliverables or milestone dates unless agreed to in writing by DOE.

29. FAILURE TO RECEIVE OR RECISSION OF REGULATORY AND OTHER REQUIRED PROJECT APPROVALS

In the event the project fails to secure required approval(s) from a Public Utility Commission or similar regulatory or other body required to grant approvals for the project to proceed, or prior approvals are rescinded, the Recipient shall immediately notify the DOE Contracting Officer and Technical Project Officer. In addition, the Recipient shall immediately halt project work on the portion of the project that was subject to required approval(s). Within three working days of the notification of such event, the DOE Contracting Officer and Technical Project Officer shall initiate an examination, with the Recipient, of the impact of the withheld or withdrawn approvals on the project's objectives. This review shall include, but is not limited too, the Recipient's continued ability to provide their cost share; the ability to meet the project's technical objectives; the ability of the project to complete data and metrics objectives, including agreed to consumer behavior studies; the ability of the project to complete work on schedule. Upon completion of the examination of the impact, the Contracting Officer will issue direction as to whether the project shall proceed as planned, proceed in a modified form or be terminated. If the project is modified or terminated, the recipient will not be liable for repayment of DOE funds received and reimbursed. Further, if the project is modified or terminated, DOE shall maintain its responsibility to pay its share of all allowable project costs incurred by the recipient but not yet submitted for reimbursement to DOE through the date of termination. The DOE will have the unilateral right to deobligate any federal funds over and above those required to meet our reduced obligation.

30. PROJECT DELIVERABLES

A. CYBER SECURITY PLAN

The Recipient is required to submit to the DOE Technical Project Officer, a plan for how it will address cyber security requirements. Failure to submit an acceptable cyber security plan within a reasonable time frame may result in termination of the award. In addition, failure to effectively implement the DOE approved cyber security plan may result in termination of the award.

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The cyber security plan shall describe the Recipient's approach to detect, prevent, communicate with regard to, respond to, or recover from system security incidents. The plan shall address the following areas from both a technical and a management (organizational) perspective:

- Risk Assessment (focusing on vulnerabilities and impact);
- Risk Mitigation (focusing on vulnerabilities and impact);
- Standards;
- Quality Assurance;
- Impact on Overall Grid Security.

This plan shall be consistent with the cyber security approach provided in the proposal, modified or enhanced as necessary to address any issues identified by DOE during negotiations. The plan is to be submitted within 30 calendar days of the date the Contracting Officer signs the award agreement. Thereafter, the Contracting Officer will provide approval or non-approval with comments. If the Recipient is required to resubmit its plan, the revised plan is due within 15 working days of receipt of DOE's comments.

B. PROJECT EXECUTION PLAN

The Recipient is required to submit to the DOE Technical Project Officer a draft Project Execution Plan (PEP) within 30 calendar days of the date the Contracting Officer signs the award agreement and a final PEP within 60 days of the date the Contracting Officer signs the award agreement in the format outlined below. The elements of the Project Execution Plan should be consistent with the Management Plan, Project Schedule, and Risk Management discussions contained in the Recipient's proposal in the application submitted in response to Funding Opportunity Announcement Number DE-FOA-0000058 and with the detailed budget submission.

The intent of the Project Execution Plan is to provide the DOE with appropriate understanding and insight into the approach and methodology the Recipient will use to manage the project to successful completion. The Recipient is expected to use a set of tailored project management tools and techniques in the management of their projects. It will also provide the baseline against which the Recipient will provide status of progress on project execution. This clause is not intended to limit or restrict the Recipient's ability to implement any management systems or controls deemed necessary for the management of the project, except as otherwise provided by law or this agreement.

The PEP provided to DOE will contain the following items:

- A description of the project including the end product or end result being accomplished
- Work Breakdown Structure (WBS) to Level 2, with dictionary
- Integrated Schedule
- Performance Measurement Baseline (PMB)
- A Listing of Major Project Milestones tied to the WBS and PMB
- The Project Responsibility Assignment Matrix for the WBS
- Project Risk Management Plan

The methodology and approach used to meet the various requirements listed in the PEP should be tailored appropriately in consideration of the complexity, cost, and risks of each project. Requirements must be addressed to the extent necessary and practical for managing the project. Tailoring may involve consolidation of decisions, documentation, substituting equivalent documents, or concurrency of processes. Tailoring does not imply the omission of essential elements.

All of the PEP elements or an equivalent will be required for all projects, but their initial character/attributes and subsequent implementation can vary based on project size.

A common structure for reporting the current status of SGIG projects will be used to deliver project status and assessment information to DOE. SGIG projects will provide the following data. These data will be

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compiled into status reports to assist DOE in its reporting requirements under the Recovery Act.

The Recipient shall use the following template to submit the Project Execution Plan Template;

Section 1 – Cover and Signature Pages

1.1 Cover Page

The cover page should include the title of the document, document control number, project name, project number, site name, document date, restrictions or classification (as applicable), and any appropriate disclaimers.

1.2 Revisions Page

All revision numbers and associated dates should be captured along with the date the document was approved.

1.3 Signature Page

The signature page (only one page in length) is the second page and should contain the following:

- *Project name and number*
- *Site name*
- *Date*
- *Restrictions or classification*
- *Approval authority*
- *Signature block for the primary author*

1.4 Table of Contents

The document table of contents should include lists of tables and figures.

1.5 Acronyms List

The list should include acronyms used in the document and their definitions.

Section 2 – Main Body

2.1 Introduction

In this section, the awardee should briefly describe the PEP and the major participants involved in the project. Example text is provided below.

This document is the Project Execution Plan (PEP) for the name of SGIG Project. It sets forth roles and responsibilities, project baselines, and project risks.

This PEP will be updated as required and reviewed at least annually until the project is complete.

2.2 Project Description

Provide a summary-level description of the project, including:

- *Project objectives*
- *Major system components and their functions*
- *Major project assumptions and uncertainties*

2.3 Management Structure

The project organization should be described, including an organization chart that identifies the various participants, their roles and responsibilities, interfaces and reporting relationships. If certain

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vendors or contractors have not yet been chosen, identify their roles in a generic fashion.

Section 3 – Tailoring Strategy

This section should document how the PEP requirements will be met through a tailored application of project management and project controls.

Tailoring is a flexible approach that allows appropriate levels of effort or analytical rigor to be used in fulfilling all requirements. Tailoring does not mean waiving requirements, nor does it imply the omission of essential elements in the acquisition process.

Section 4 – Project Baseline

4.1 Performance Management Baseline (PMB)

The PMB is a time-phased budget plan for accomplishing work, against which performance is measured. It includes the budgets assigned to scheduled control accounts and the applicable indirect budgets. The PMB should represent the monetized value of all work expected to be accomplished under the project. It represents the Budgeted Cost of Work Scheduled (BCWS) element in the online web-based Project Management Reporting System.

Technical performance parameters and deliverables should define key features of the project and how it/they will perform when completed at Project Close Out including characteristics (quantity, size, etc.), functions, requirements, or the design basis that, if changed, would have a major impact on system or facility performance. It includes all costs for both Federal and recipient.

4.1.1 Work Breakdown Structure (WBS) and WBS Dictionary

The WBS is the product-oriented grouping of project elements that organize and define the total scope of the project. A WBS Dictionary is a listing of WBS elements with a short description of the work scope content in each element. The Dictionary helps ensure consistent understanding and use of the WBS elements among all of the WBS users.

Provide WBS Level 2 and WBS Dictionary listing of work breakdown structure elements with a short description of the work scope content in each element. For the purposes of the PEP due to DOE, WBS Level 1 should be the project that the SGIG grant is funding, e.g., Smart Grid West Virginia.

4.1.2 Integrated Schedule

The integrated schedule should display duration and linkages of the various tasks required to accomplish the project and should display the project's critical path. Preferentially the integrated schedule will be provided as a Gantt chart with the task identified and planned start and completion dates listed.

4.2 List of Major Project Milestones

Provide a list of the major project milestones. Examples of the types of major milestones could be the completion of design for communications architecture, initiation of Phase I meter installation, and receipt of state Public Utilities Commission (PUC) approval. The list should describe the milestone and the planned milestone date. If using an early start/late start milestone planning approach, identify which date.

4.3 Project Responsibility Assignment Matrix

The Project Responsibility Assignment Matrix allocates responsibility for accomplishment of the outcome of a specific element identified in the WBS to a specific individual.

Section 5 – Project Risk Management/Oversight

5.1. Risk Management

A Risk Management Plan (RMP) should be prepared to identify and manage those events that could threaten the project's success. The RMP should describe the policies and practices for managing risk and a summary of the results of your risk analysis. The identification, evaluation, associated handling strategy or action, and the ultimate disposition of each risk should be documented.

To the extent that it covers these factors, the risk management section of your proposal can be used as the RMP.

At a minimum, the RMP should comprise a table that provides the following risk event information.

Event ID No.	Event Title	Event Description	Likelihood of Occurrence	Event Consequence	Handling Strategy	Cost/Schedule Impact	Comments
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C. METRICS AND BENEFITS REPORTING PLAN

The Recipient is required to develop and implement a plan for the collection and reporting of project-related metrics and benefits, as stated in the Smart Grid Investment Grant (SGIG) Funding Opportunity Announcement (DE-FOA-000058). This information will be used by DOE to assess the impact of smart grid technology deployed by the SGIG program. More information on the types of metrics and benefits DOE is interested in examining are provided in the "Guidebook for ARRA Smart Grid Program Metrics and Benefits" (Guidebook), dated December 7, 2009. The Recipient is encouraged to work collaboratively with DOE to seek guidance and clarification regarding questions in completing its Metrics and Benefits Reporting Plan.

1. Plan Outline

The Recipient shall be responsible for developing and submitting a Metrics and Benefits Plan that is consistent with its SGIG proposal and provides a sufficiently detailed description of how metrics information will be developed and reported to DOE. The Metrics and Benefits Plan shall include at a minimum the following information:

- Discussion of Project Metrics and Benefits:
 - An identification with pertinent descriptions of the specific build and impact metrics that will be reported to DOE. The metrics will apply to the total project supported both by DOE and cost-shared funds. These metrics are described in more detail in Appendix A of the Guidebook.
 - Sufficient information so that build metrics can be correlated with numbers and types of customers (i.e., 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). Build metrics will include the numbers and types of jobs created.
 - A description of the types of data, including their characteristics (e.g., frequency of measurement, units), and the calculations used to derive impact metrics. Assumptions or ranges of input values used should be provided.
 - A description of how impact metrics would lead to benefits with recommendations for how benefits would be quantitatively estimated.
 - Baseline values for each build and impact metric, including the basis and methods applied for calculating baseline information (e.g., application of normalization, averaging or forecasting approaches).

- Implementation:
 - Provide a schedule showing how the reporting of build and impact metrics coincides with the deployment of smart grid technology and key decision milestones (e.g., implementation of approved dynamic pricing tariffs).
 - Present approaches for collaboration between DOE and the Recipient (including representative organizations) to discuss key issues and share valuable information derived from the project.
- Reporting:
 - Present the schedule for reporting build and impact metrics and benefits, as specified in Attachment B, Federal Assistance Reporting Checklist and Instructions.

2. Consistency and Data Quality

DOE expects to work collaboratively with the Recipient to develop consistency and quality in the methods used to calculate metrics and develop appropriate baselines. It is the Recipient's responsibility to collect and assemble data required to produce the metrics and benefits. In addition, the Recipient shall be available to answer questions DOE may have regarding how the metrics were developed.

3. Plan Development and Submittal

Within 60 days following the award of a grant, the Recipient is required to submit to DOE a draft Metrics and Benefits Reporting Plan. The Recipient is encouraged to work collaboratively with DOE to seek guidance and clarification regarding questions in completing the Metrics and Benefits Reporting Plan. The Recipient shall submit a draft final Metrics and Benefits Reporting Plan within 30 days following the receipt of written comments from DOE. The draft final plan will be considered final once approved by DOE.

D. CONSUMER BEHAVIOR STUDY PLAN

Special Note: This clause only applies to recipients who proposed in their application submitted in response to the Funding Opportunity Announcement Number DE-FOA-0000058 to conduct a consumer behavior study with control and randomized treatment groups. Recipients may opt out of this program after discussion with their Technical Project Officer.

Recipients who proposed conducting a consumer behavior study with control and randomized treatment groups, as stated in the Smart Grid Investment Grant (SGIG) Funding Opportunity Announcement (DE-FOA-000058) are required to develop and implement a plan to carefully evaluate the behavior of consumers with respect to the dynamic pricing of electricity rates. More information on the approach recommended for these studies, including the types of data that would be made available, is provided in Appendix D of the "Guidebook for ARRA Smart Grid Program Metrics and Benefits" (Guidebook), dated December 7, 2009, as amended from time to time.

Within 90 days following the award of a grant, the Recipient is required to submit to DOE a Consumer Behavior Study Plan. In addition, the Recipient is required to submit interim and final Evaluation Reports (Attachment B, Federal Assistance Reporting Checklist and Instructions). The Recipient is encouraged to work closely with DOE in developing this plan, as well as throughout the study period. DOE expects that final submitted Consumer Behavior Study Plan shall be consistent with the requirements of the SGIG FOA, and adhere to well-established and theoretically appropriate methods.

1. Plan Outline

The Recipient is responsible for developing and submitting a Consumer Behavior Study Plan consistent with its SGIG proposal and provide a more detailed description of how the dynamic pricing with randomization component of its project will be designed, implemented, evaluated, and reported to DOE. The Consumer Behavior Study Plan shall include at a minimum the following:

- Project Design:
 - Identify key research questions to be addressed in the project;
 - Describe how the project will be marketed to customers and how customers will participate (e.g., opt-in, opt-out, randomly assigned);
 - Describe the target population and sample and how it will be stratified and developed;
 - Describe control and treatment groups that will be represented (e.g., pricing, technology, education) and how customers will be assigned to each group (e.g., opt-in, opt-out, randomly assigned) based on desired levels of confidence and precision within the analysis;
 - Describe the specific rate design(s) that will be tested and controlled for, as well as what price levels will be used;
 - Describe specific enabling technologies, if any, that will be tested and controlled for;
 - Describe the specific feedback information approaches and/or methods, if any, that will be tested and controlled for;
 - Describe customer characteristic information that will be collected from each participant (see Appendix D of the Guidebook for minimum requirements) and methods that will be used to collect this information (e.g., field survey, utility customer database). Stipulate if this information will be reported to DOE at the customer level or the customer-cohort level. If results are reported at the customer-cohort level, the Recipient shall ensure that cohort level data has at least three customers in each "cell."
- Implementation:
 - Provide a milestone schedule for the implementation phase of the project, including expected dates for obtaining regulatory approval and for submitting the draft Evaluation Report, as specified in Attachment B, Federal Assistance Reporting Checklist and Instructions;
 - Describe how the target sample will be maintained throughout the duration of the project;
 - Describe the data collection process that will be required for the evaluation.
- Evaluation:
 - Describe methodology that will be used to evaluate the key research questions;
 - Describe data requirements to complete the evaluation;
 - Describe what kinds of information will be reported as an output from the evaluation.
- Data Reporting:
 - Describe the frequency of reporting with respect to the Consumer Behavior Study Plan, Interim and Final Evaluation Reports, and data, as specified in Attachment B, Federal Assistance Reporting Checklist and Instructions.

2. Regulatory Approval Process

Where required, the Recipient shall seek approval from the applicable regulatory authority and/or oversight body to implement the dynamic pricing with randomization project.

If the Recipient receives approval from the applicable regulatory body and/or oversight board for the dynamic pricing with randomization project consistent with what is specified in the approved Consumer Behavior Study Plan, the study may proceed under current funding levels.

31. ADVANCE UNDERSTANDING FOR FEDERAL INCOME TAX TREATMENT

The Recipient and the Department of Energy (DOE) understand that the Recipient's project scope, budget and project execution plan are based on the assumption that the Smart Grid Investment Grant (SGIG) funds provided by DOE will be considered nontaxable income under Internal Revenue Code (IRC) 118(a). As of the date of this Agreement, the Internal Revenue Service ("IRS") has not yet issued guidance or otherwise made a determination regarding the applicability of IRC 118(a) under the SGIG program. For this reason and so that the Recipient is not prejudiced by an IRS determination following the execution of this Agreement, the process set out below will be followed in the circumstances described:

(A) In the event the IRS declines to issue guidance by May 1, 2010 providing that some or all of SGIG grant funds may be treated as nontaxable income under IRC 118(a) under the terms and conditions of this Agreement, Recipient may elect to reopen this Agreement for negotiation as provided for below.

(B) In the event IRS determines that terms and conditions which differ from those contained in this Agreement would permit all or some of the SGIG funds to be treated as nontaxable income and in the event DOE offers to modify the standard terms and conditions for other SGIG recipients in order to cause all or some portion of the SGIG grant funds to be treated by IRS as nontaxable capital contributions, the DOE Contracting Officer shall notify the Recipient of the proposed modification(s).

(C) Within the earliest of (i) thirty calendar days after delivery of a notification by DOE that the IRS has advised that the IRS has declined to issue guidance providing that some or all of SGIG grant funds may be treated as nontaxable income under IRC 118(a); (ii) fourteen calendar days after the date of notice from the Contracting Officer of a modification of the Agreement provided for in (B) above to support treatment as nontaxable capital contributions; or (iii) by May 14, 2010 if IRS has failed to issue guidance by May 1, 2010, the Recipient shall notify the DOE Contracting Officer and Technical Project Officer as to whether the Recipient elects (1) to proceed with the project as planned, or (2) to reopen this Agreement (including the scope of the project) for negotiation to reflect impacts to the project. If Recipient elects to reopen this Agreement for negotiations, DOE and Recipient shall dedicate authorized representatives to negotiate in good faith.

(D) If the parties have not satisfactorily concluded negotiations after a period of sixty calendar days: (i) DOE may elect to terminate such negotiations; (ii) Recipient may elect to terminate such negotiations and may, but shall not be required to, terminate this Agreement in its entirety in accordance with 10 C.F.R. § 600.351(a) (3). If the project is modified or terminated pursuant to this Provision of the Agreement, allowable costs will not include costs incurred after the effective date of the termination and the Recipient authorizes DOE to deobligate amounts in excess of the amounts incurred at the effective date of the termination. In the event of modification of the project scope or termination of the Agreement pursuant to this Provision, DOE shall have no liability for any termination costs. If the project is modified or terminated pursuant to this Section 31, Recipient shall not be liable for repayment of DOE funds received that are otherwise allowable through the date of such modification or termination.

Applicant Name: SMUD

Award Number: DE-OE0000214

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.				\$127,506,261	\$180,230,823	\$307,737,084
2.						\$0
3.						\$0
4.						\$0
5. Totals		\$0	\$0	\$127,506,261	\$180,230,823	\$307,737,084
Section B - Budget Categories						
6. Object Class Categories		Grant Program, Function or Activity				Total (5)
		(1)	(2)	(3)	(4)	
a. Personnel		\$29,663,283				\$29,663,283
b. Fringe Benefits		\$20,276,241				\$20,276,241
c. Travel		\$39,290				\$39,290
d. Equipment		\$122,243,891				\$122,243,891
e. Supplies		\$26,805				\$26,805
f. Contractual		\$41,520,952				\$41,520,952
g. Construction		\$43,485,388				\$43,485,388
h. Other		\$4,023,087				\$4,023,087
i. Total Direct Charges (sum of 6a-6h)		\$261,278,937	\$0	\$0	\$0	\$261,278,937
j. Indirect Charges		\$46,458,147				\$46,458,147
k. Totals (sum of 6i-6j)		\$307,737,083	\$0	\$0	\$0	\$307,737,083
7. Program Income						\$0

SF-424A (Rev. 4-92)

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Prescribed by OMB Circular A-102

Attachment B
U.S. Department of Energy
FEDERAL ASSISTANCE REPORTING CHECKLIST
AND INSTRUCTIONS

1. Identification Number: DE-OE0000214	2. Program/Project Title: Smart Grid Investment Grant under the Integrated and/or Crosscutting Systems topic area to expand and accelerate the deployment of its SmartSacramento project																	
3. Recipient: Sacramento Municipal Utility District																		
4. Reporting Requirements: A. MANAGEMENT REPORTING <input checked="" type="checkbox"/> Progress Report <input checked="" type="checkbox"/> Special Status Report B. SCIENTIFIC/TECHNICAL REPORTING (Reports/Products must be submitted with appropriate DOE F 241. The 241 forms are available at www.osti.gov/elink .) <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">Report/Product</td> <td style="width: 15%;">Form</td> <td style="width: 50%;"></td> </tr> <tr> <td><input type="checkbox"/> Final Scientific/Technical Report</td> <td>DOE F 241.3</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Conference papers/proceedings*</td> <td>DOE F 241.3</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Software/Manual</td> <td>DOE F 241.4</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other (see special instructions)</td> <td>DOE F 241.3</td> <td></td> </tr> </table> * Scientific and technical conferences only C. FINANCIAL REPORTING <input checked="" type="checkbox"/> SF-425 Federal Financial Report D. CLOSEOUT REPORTING <input type="checkbox"/> Patent Certification <input checked="" type="checkbox"/> Property Certification <input type="checkbox"/> Other E. OTHER REPORTING <input type="checkbox"/> Annual Indirect Cost Proposal <input checked="" type="checkbox"/> Annual Inventory of Federally Owned Property, if any <input checked="" type="checkbox"/> Other – Recovery Act	Report/Product	Form		<input type="checkbox"/> Final Scientific/Technical Report	DOE F 241.3		<input type="checkbox"/> Conference papers/proceedings*	DOE F 241.3		<input type="checkbox"/> Software/Manual	DOE F 241.4		<input type="checkbox"/> Other (see special instructions)	DOE F 241.3		Frequency	No. of Copies	Addressees
Report/Product	Form																	
<input type="checkbox"/> Final Scientific/Technical Report	DOE F 241.3																	
<input type="checkbox"/> Conference papers/proceedings*	DOE F 241.3																	
<input type="checkbox"/> Software/Manual	DOE F 241.4																	
<input type="checkbox"/> Other (see special instructions)	DOE F 241.3																	
	M/Q	1	http://www.smartgrid.gov/teams/home Carrie N. Brown/ donald.macdonald@nuclear.energy.gov															
	A	1	donald.macdonald@nuclear.energy.gov http://www.osti.gov/elink-2413 http://www.osti.gov/estsc/241-4pre.jsp															
	Not Applicable																	
	Q	1	Carrie N. Brown/ donald.macdonald@nuclear.energy.gov															
	F	1	Carrie N. Brown/ donald.macdonald@nuclear.energy.gov															
	Y Q, S, A	1 1	Carrie N. Brown/ donald.macdonald@nuclear.energy.gov http://www.smartgrid.gov/teams/home															
FREQUENCY CODES AND DUE DATES: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">A - Within 5 calendar days after events or as specified.</td> <td style="width: 50%;">M - Monthly</td> </tr> <tr> <td>F - Final; 90 calendar days after expiration or termination of the award.</td> <td></td> </tr> <tr> <td>Y - Yearly; 90 days after the end of the reporting period.</td> <td></td> </tr> <tr> <td>S - Semiannually; within 30 days after end of reporting period.</td> <td></td> </tr> <tr> <td>Q - Quarterly; within 30 days after end of the reporting period.</td> <td></td> </tr> </table>				A - Within 5 calendar days after events or as specified.	M - Monthly	F - Final; 90 calendar days after expiration or termination of the award.		Y - Yearly; 90 days after the end of the reporting period.		S - Semiannually; within 30 days after end of reporting period.		Q - Quarterly; within 30 days after end of the reporting period.						
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Q - Quarterly; within 30 days after end of the reporting period.																		

*All submissions to DOE shall be by e-mail.

5. Special Instructions:

Other Reporting:

Details regarding the data elements set forth below are provided in the "Guidebook for ARRA Smart Grid Program Metrics and Benefits", or *Guidebook*, dated December 7, 2009, provided separately.

A. Reporting of Cumulative Jobs Created/Retained

- The Recipient must report the data specified in this section on a quarterly basis beginning with the quarter of the effective date of the award.
- Recipient will provide the data required in this section via <http://www.smartgrid.gov/teams/home>.
- Recipients will report the cumulative number of jobs directly created or retained by project and activity or contract. Recipients will be required to report these direct jobs numbers by labor categories, as provided below:
 - Managers
 - Engineers
 - Computer-related Occupations
 - Environmental and Social Scientists
 - Construction, Electrical and Other Trades
 - Analysts,
 - Business Occupations
 - Recording, Scheduling, Computer Operator Occupations
- A job created is a new position created and filled or an existing unfilled position that is filled as a result of the Recovery Act; a job retained is an existing position that would not have been continued to be filled were it not for Recovery Act funding. A job cannot be counted as both created and retained. Also, only compensated employment in the United States or outlying areas should be counted. See 74 FR 14824 for definitions.
- The estimate of the number of jobs required by the Recovery Act should be expressed as "full-time equivalents" (FTE), which is calculated as total hours worked in jobs created or retained divided by the number of hours in a full-time schedule, defined here as 2,080 hours per calendar year. The FTE estimates must be reported cumulatively each calendar quarter.
- Prime recipients of these grants must include in the aggregate number an estimate of jobs created and retained on projects and activities managed by their funding sub-recipients (including prime and sub-prime contractors).
- Recipients will have the option to report on the employment impact on materials and equipment suppliers and central service providers (so-called "indirect" jobs). Employees who are not directly charged to Recovery Act supported projects/activities, who, nonetheless, provide critical indirect support are considered indirect jobs created/retained. Recipients will not be required to report on the employment impact on the local community ("induced" jobs).
- The requirement for reporting jobs is based on a simple calculation used to avoid overstating the number of other than full-time, permanent jobs. This calculation converts part-time or temporary jobs into "full-time equivalent" (FTE) jobs. In order to perform the calculation, a recipient will need the total number of hours worked that are funded by the Recovery Act by category and the total number of hours worked for the entire project by labor category. The number of hours in a full-time schedule for a quarter will equal 520 (one-quarter of 2,080).

The two formulas for reporting Cumulative Jobs Created/Retained are represented as:

"Cumulative Recovery Act Funded Hours Worked (qtr 1...n)" divided by

"cumulative hours in a full-time schedule"

"Cumulative Total Project Hours Worked (qtr 1...n)" divided by

"cumulative hours in a full-time schedule"

B. Reporting Requirements for Metrics and Benefits

The recipient is required to report Build Metrics on a quarterly basis and Impact Metrics and Benefits on a semi-annual basis following the award date. Baseline data will be provided as specified within the Metrics and Benefits Reporting Plan. Recipient will provide the data required in this section via <http://www.smartgrid.gov/teams/home>.

C. Reporting Requirements for Consumer Behavior Studies

Special Note: This section only applies to recipients who proposed in their application submitted in response to the Funding Opportunity Announcement Number DE-FOA-0000058 to conduct a consumer behavior study with control and randomized treatment groups

C.1 Evaluation Reports

Participating recipients shall submit a comprehensive interim Evaluation Report, within 360 days following commencement of the Consumer Behavior Study, and a final Evaluation report at completion of the study, as specified in the Consumer Behavior Study Plan. Participating recipients shall submit a draft of both the interim and final Evaluation Reports to DOE and make a good faith effort to address issues raised by DOE in the final version of the Evaluation Reports. The Evaluation Reports shall include at a minimum:

1. Overview of the project, including its goals;
2. Description of how the project was designed and implemented to achieve these goals;
3. Synopsis of the evaluation framework and methodology; and
4. Summary of the results and lessons learned.

The Final Evaluation Report will be made available to the public; confidential information should not be included.

C.2 Provision of Project Data

The recipient shall be responsible for submitting comprehensive data that was used, or served as the foundation, for the analysis of the dynamic pricing with randomization project, as defined within the Consumer Behavior Study Plan. Please refer to Appendix D of the Guidebook. The recipient will provide customer-level data in a mutually agreed upon format and media to DOE, or an entity designated by DOE (e.g. a national laboratory). It is expected that the data provided to DOE shall have gone through the necessary quality assurance processes internal to the recipient in order to ensure the data is accurate and complete. This data shall be consistent with requirements outlined in the final submitted Consumer Behavior Study Plan.

The data will be publicly available for subsequent analysis and evaluation for those interested in assessing and better understanding the impacts that dynamic pricing enabled by the smart grid can have on customer behavior. The identity of specific customers shall not be included with the data. To protect customer confidentiality, masked customer identifiers shall be provided for individual customers.

It is expected that the data will include at a minimum the following data elements for each customer: 1) hourly interval data for electric consumption, tariff pricing (i.e., retail rate level in effect), and weather; 2) customer characteristics (as described in Appendix D of the Guidebook); and 3) hourly electricity usage data for 12-18 months prior to the dynamic pricing project.

Federal Assistance Reporting Instructions (2/09)

A. MANAGEMENT REPORTING

Progress Report

The Progress Report must provide a concise narrative assessment of the status of work and include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist. The Recipient must report data specified in this section monthly for the first six months of the award and quarterly thereafter unless the monthly frequency is approved by the Office of Management and Budget. The Recipient will provide the data required in the Progress Report via <http://www.smartgrid.gov/teams/home>.

1. The DOE award number and name of the recipient.
2. The project title and name of the project director/principal investigator.
3. Date of report and period covered by the report.
4. A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why the established goals were not met.
5. A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, 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 the report advising the reader to contact the Principal Investigator or the Project Director for further information.
6. Any changes in approach or aims and reasons for change. Remember significant changes to the objectives and scope require prior approval by the contracting officer.
7. Actual or anticipated problems or delays and actions taken or planned to resolve them.
8. Any absence or changes of key personnel or changes in consortium/teaming arrangement.
9. A description of any product produced or technology transfer activities accomplished during this reporting period, such as:
 - A. Publications (list journal name, volume, issue); conference papers; or other public releases of results.
 - B. Web site or other Internet sites that reflect the results of this project.
 - C. Networks or collaborations fostered.

10. The recipient will provide monthly project execution data in a mutually agreed upon format and media to DOE. It is expected that the dataset provided to DOE shall have gone through the necessary quality assurance processes internal to the recipient in order to ensure the data is accurate and complete.

A. Project Value Management System (PVMS) Reporting -- The input of PVMS data described below will be required. PVMS reporting will be at the Project Level.

Field		Definition/Metrics	Field Type
ACWP	Actual Cost of Work Performed	The cost actually incurred for the work accomplished during the month.	Input
BCWP	Budgeted Cost of Work Performed	Sum of all budgets for all completed work and the completed portions of ongoing work. Total budget for the scope that was actually accomplished during the month	Input
BCWS	Budgeted Cost of Work Scheduled	Planned accomplishment established in performance measurement baseline.	Input
ETC	Estimate to Complete	Current estimate for the remaining project scope. This is the estimate for all remaining work excluding contingencies.	Input
BAC	Budget at Completion	Sum of all budgets allocated to a project excluding management reserve	Input

B. Risk Management Data Reporting – Recipients will submit updates of the Risk Management Plan (RMP) to DOE in the event of changes to the risk profile data required as part of the Project Execution Plan (PEP).

Special Status Report

The recipient must report the following events by e-mail as soon as possible after they occur:

1. Developments that have a significant favorable impact on the project.
2. Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:
 - a. Any single fatality or injuries requiring hospitalization of five or more individuals.
 - b. Any significant environmental permit violation.
 - c. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes.
 - d. Any incident which causes a significant process or hazard control system failure.

- e. Any event which is anticipated to cause a significant schedule slippage or cost increase.
- f. Any damage to Government-owned equipment in excess of \$50,000.
- g. Any other incident that has the potential for high visibility in the media.

B. SCIENTIFIC/TECHNICAL REPORTS – Not applicable to this award.

Final Scientific/Technical Report

Content. The final scientific/technical report must include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. Identify the DOE award number; name of recipient; project title; name of project director/principal investigator; and consortium/teaming members.
2. Display prominently on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data. Reports delivered without such notices may be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports.
3. Provide an executive summary, which includes a discussion of 1) how the research adds to the understanding of the area investigated; 2) the technical effectiveness and economic feasibility of the methods or techniques investigated or demonstrated; or 3) how the project is otherwise of benefit to the public. The discussion should be a minimum of one paragraph and written in terms understandable by an educated layman.
4. Provide a comparison of the actual accomplishments with the goals and objectives of the project.
5. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, problems encountered and departure from planned methodology, and an assessment of their impact on the project results. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the conclusions.
6. Identify products developed under the award and technology transfer activities, such as:
 - a. Publications (list journal name, volume, issue), conference papers, or other public releases of results.
 - b. Web site or other Internet sites that reflect the results of this project;
 - c. Networks or collaborations fostered;
 - d. Technologies/Techniques;
 - e. Inventions/Patent Applications, licensing agreements; and

- f. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.
7. For projects involving computer modeling, provide the following information with the final report:
- a. Model description, key assumptions, version, source and intended use;
 - b. Performance criteria for the model related to the intended use;
 - c. Test results to demonstrate the model performance criteria were met (e.g., code verification/validation, sensitivity analyses, history matching with lab or field data, as appropriate);
 - d. Theory behind the model, expressed in non-mathematical terms;
 - e. Mathematics to be used, including formulas and calculation methods;
 - f. Whether or not the theory and mathematical algorithms were peer reviewed, and, if so, include a summary of theoretical strengths and weaknesses;
 - g. Hardware requirements; and
 - h. Documentation (e.g., users guide, model code).

Electronic Submission. The final scientific/technical report must be submitted electronically-via the DOE Energy Link System (E-Link) accessed at <http://www.osti.gov/elink-2413>.

Electronic Format. Reports must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts.

Submittal Form. The report must be accompanied by a completed electronic version of DOE Form 241.3, "U.S. Department of Energy (DOE), Announcement of Scientific and Technical Information (STI)." You can complete, upload, and submit the DOE F 241.3 online via E-Link. You are encouraged not to submit patentable material or protected data in these reports, but if there is such material or data in the report, you must: (1) clearly identify patentable or protected data on each page of the report; (2) identify such material on the cover of the report; and (3) mark the appropriate block in Section K of the DOE F 241.3. Reports must not contain any limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release. Protected data is specific technical data, first produced in the performance of the award that is protected from public release for a period of time by the terms of the award agreement.

Protected Personally Identifiable Information (PII). Management Reports must not contain any *Protected PII*. PII is any information about an individual which can be used to distinguish or trace an individual's identity. Some information that is considered to be PII is available in public sources such as telephone books, public websites, university listings, etc. This type of information is considered to be Public PII and includes, for example, first and last name, address, work telephone number, e-mail address, home telephone number, and general educational credentials. In contrast,

Protected PII is defined as an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts, etc.

Conference Papers/Proceedings

Content: The recipient must submit a copy of any conference papers/proceedings, with the following information: (1) Name of conference; (2) Location of conference; (3) Date of conference; and (4) Conference sponsor.

Electronic Submission. Scientific/technical conference paper/proceedings must be submitted electronically-via the DOE Energy Link System (E-Link) at <http://www.osti.gov/mlink-2413>. Non-scientific/technical conference papers/proceedings must be sent to the URL listed on the Reporting Checklist.

Electronic Format. Conference papers/proceedings must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts.

Submittal Form. Scientific/technical conference papers/proceedings must be accompanied by a completed DOE Form 241.3. The form and instructions are available on E-Link at <http://www.osti.gov/mlink-2413>. This form is not required for non-scientific or non-technical conference papers or proceedings.

Software/Manual _ Not applicable to this award.

Content. Unless otherwise specified in the award, the following must be delivered: source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the software and to be able to modify the software in subsequent development efforts.

Electronic Submission. Submissions may be submitted electronically-via the DOE Energy Link System (E-Link) at <http://www.osti.gov/estsc/241-4pre.jsp>. They may also be submitted via regular mail to:

Energy Science and Technology Software Center
P.O. Box 1020
Oak Ridge, TN 37831

Submittal Form. Each software deliverable and its manual must be accompanied by a completed DOE Form 241.4 "Announcement of U.S. Department of Energy Computer Software." The form and instructions are available on E-Link at <http://www.osti.gov/estsc/241-4pre.jsp>.

C. FINANCIAL REPORTING

Recipients must complete the SF-425 as identified on the Reporting Checklist in accordance with the report instructions. A fillable version of the form is available at http://www.whitehouse.gov/omb/grants/grants_forms.aspx.

D. CLOSEOUT REPORTS

Final Invention and Patent Report – Not applicable to this award.

The recipient must provide a DOE Form 2050.11, "PATENT CERTIFICATION." This form is available at <http://www.directives.doe.gov/pdfs/forms/2050-11.pdf> and http://management.energy.gov/business_doe/business_forms.htm.

Property Certification

The recipient must provide the Property Certification, including the required inventories of non-exempt property, located at http://management.energy.gov/business_doe/business_forms.htm.

E. OTHER REPORTING

Annual Indirect Cost Proposal and Reconciliation

Requirement. In accordance with the applicable cost principles, the recipient must submit an annual indirect cost proposal, reconciled to its financial statements, within six months after the close of the fiscal year, unless the award is based on a predetermined or fixed indirect rate(s), or a fixed amount for indirect or facilities and administration (F&A) costs.

Cognizant Agency. The recipient must submit its annual indirect cost proposal directly to the cognizant agency for negotiating and approving indirect costs.

Annual Inventory of Federally Owned Property

Requirement. If at any time during the award the recipient is provided Government-furnished property or acquires property with project funds and the award specifies that the property vests in the Federal Government (i.e. federally owned property), the recipient must submit an annual inventory of this property no later than October 30th of each calendar year, to cover an annual reporting period ending on the preceding September 30th.

Content of Inventory. The inventory must include a description of the property, tag number, acquisition date, location of property, and acquisition cost, if purchased with project funds. The report must list all federally owned property, including property located at subcontractor's facilities or other locations.

Intellectual Property Provisions Nonresearch and Development

For all recipient organizations, the following intellectual property provisions shall apply:

- (a) Recipients may copyright any work that is subject to copyright and was developed under an award. DOE reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use the work for Federal purposes and to authorize others to do so.
- (b) The DOE has the right to: (1) obtain, reproduce, publish or otherwise use the data first produced under an award; and (2) authorize others to receive, reproduce, publish or otherwise use such data for Federal purposes.

Nonprofit organizations are additionally subject to the intellectual property requirements set forth at 10 CFR 600.136(d).

For certain “impact metrics” data which Recipients are required to report pursuant to Attachment B, Federal Assistance Reporting Checklist, Section 5.B (Special Instructions - Other Reporting, Reporting Requirements for Metrics and Benefits), Recipients may mark such data, as set forth below, as “Commercially Valuable Smart Grid Data”, and shall deliver such data to the National Renewable Energy Laboratory (NREL), and not to DOE.

COMMERCIALLY VALUABLE SMART GRID DATA

Recipient agrees to deliver to the National Renewable Energy Laboratory (NREL) all “impact metrics” data as described in the Guidebook for ARRA Smart Grid Program Metrics and Benefits, dated Dec. 7, 2009, as amended from time to time, to be submitted by the Recipient in accordance with its Metrics and Benefits Reporting Plan as required pursuant to Attachment B, Federal Assistance Reporting Checklist, Section 5.B (Special Instructions - Other Reporting, Reporting Requirements for Metrics and Benefits), of this agreement.

Based on information identified above that has been and will be provided by Recipient, the parties agree that the data required to be delivered to NREL under this clause has commercial value and its disclosure would cause competitive harm to the commercial value or use of the data.

In accordance with 10 C.F.R. 1004.3(e), Recipient shall mark any such data to be delivered to NREL with the following legend:

“Commercially Valuable Smart Grid Technical Data and Information. Withhold from Disclosure under 10 C.F.R. 1004.3(e). The use of this data by NREL is governed by the provisions of the DOE grant. Unless compelled by a court of competent jurisdiction, there may be no public release of this data to the public without the written consent of the Recipient and DOE. Aggregate data that does not identify company-specific impact metric information may be released as set forth in the grant.”

Other information required to be delivered, but not covered under this Commercially Valuable Smart Grid Data clause, shall be delivered in accordance with Attachment B, Federal Assistance Reporting Checklist and Instructions, to this agreement.

**Intellectual Property Provisions
Nonresearch and Development**

For all recipient organizations, the following intellectual property provisions shall apply:

- (a) Recipients may copyright any work that is subject to copyright and was developed under an award. DOE reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use the work for Federal purposes and to authorize others to do so.
- (b) The DOE has the right to: (1) obtain, reproduce, publish or otherwise use the data first produced under an award; and (2) authorize others to receive, reproduce, publish or otherwise use such data for Federal purposes.

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Other information required to be delivered, but not covered under this Commercially Valuable Smart Grid Data clause, shall be delivered in accordance with Attachment B, Federal Assistance Reporting Checklist and Instructions, to this agreement.

NATIONAL POLICY ASSURANCES TO BE INCORPORATED AS AWARD TERMS
(August 2008)

To the extent that a term does not apply to a particular type of activity or award, it is self-deleting.

I. Nondiscrimination Policies

You must comply with applicable provisions of the following national policies prohibiting discrimination:

- 1 On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), as implemented by DOE regulations at 10 CFR part 1040;
- 2 On the basis of sex or blindness, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681 et seq.), as implemented by DOE regulations at 10 CFR parts 1041 and 1042;
- 3 On the basis of age, in the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR part 90 and DOE regulations at 10 CFR part 1040;
- 4 On the basis of disability, in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR part 41 and DOE regulations at 10 CFR part 1041;
- 5 On the basis of race, color, national origin, religion, disability, familial status, and sex under Title VIII of the Civil Rights Act (42 U.S.C. 3601 et seq.) as implemented by the Department of Housing and Urban Development at 24 CFR part 100; and
- 6 On the basis of disability in the Architectural Barriers Act of 1968 (42 U.S.C. 4151 et seq.) for the design, construction, and alteration of buildings and facilities financed with Federal funds.

II. Environmental Policies

You must:

- 1 Comply with applicable provisions of the Clean Air Act (42 U.S.C. 7401, et. seq.) and Clean Water Act (33 U.S.C. 1251, et. seq.), as implemented by Executive Order 11738 [3 CFR, 1971-1975 Comp., p. 799] and Environmental Protection Agency rules at 40 CFR part 32, Subpart J.
- 2 Immediately identify to us, as the awarding agency, any potential impact that you find this award may have on:
 - a. The quality of the human environment, including wetlands, and provide any help we may need to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321 et. seq.) and assist us to prepare Environmental Impact Statements or other environmental documentation. In such cases, you may take no action that will have an adverse environmental impact (e.g., physical disturbance of a site such as breaking of ground) or limit the choice of reasonable alternatives until we provide written notification of Federal compliance with NEPA, as implemented by DOE at 10 CFR part 1021.

- b. Flood-prone areas, and provide any help we may need to comply with the National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973 (42 U.S.C. 4001 et. seq.), which require flood insurance, when available, for Federally assisted construction or acquisition in flood-prone areas, as implemented by DOE at 10 CFR part 1022.
 - c. Use of land and water resources of coastal zones, and provide any help we may need to comply with the Coastal Zone Management Act of 1972(16 U.S.C. 1451, et. seq.).
 - d. Coastal barriers along the Atlantic and Gulf coasts and Great Lakes' shores, and provide help we may need to comply with the Coastal Barriers Resource Act (16 U.S.C. 3501 et. seq.), concerning preservation of barrier resources.
 - e. Any existing or proposed component of the National Wild and Scenic Rivers system, and provide any help we may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.).
 - f. Underground sources of drinking water in areas that have an aquifer that is the sole or principal drinking water source, and provide any help we may need to comply with the Safe Drinking Water Act(42 U.S.C. 300h-3).
- 3 Comply with applicable provisions of the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), as implemented by the Department of Housing and Urban Development at 24 CFR part 35. The requirements concern lead-based paint in housing owned by the Federal Government or receiving Federal assistance.
- 4 Comply with section 6002 of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6962), and implementing regulations of the Environmental Protection Agency, 40 CFR Part 247, which require the purchase of recycled products by States or political subdivision of States.

III. Live Organisms

1 **Human research subjects.** You must protect the rights and welfare of individuals that participate as human subjects in research under this award in accordance with the Common Federal Policy for the Protection of Human Subjects (45 CFR part 46), as implemented by DOE at 10 CFR part 745.

2 Animals and plants.

a. You must comply with applicable provisions of Department of Agriculture rules at 9 CFR parts 1-4 that implement the Laboratory Animal Welfare Act of 1966 (7 U.S.C. 2131-2156) and provide for humane transportation, handling, care, and treatment of animals used in research, experimentation, or testing under this award.

b. You must follow the guidelines in the National Academy of Sciences(NAS) Publication "Guide for the Care and Use of Laboratory Animals"(1996, which may be found currently at <http://www.nap.edu/readingroom/books/labrats/>) and comply with the Public Health Service Policy and Government principles Regarding the Care and use of animals (included as Appendix D to the NAS Guide).

c. You must immediately identify to us, as the awarding agency, any potential impact that you find this award may have on endangered species, as defined by the Endangered Species Act of 1973, as amended ("the Act," 16 U.S.C. 1531-1543), and implementing regulations of the Departments of the Interior (50 CFR parts 10-24) and Commerce (50 CFR parts 217-227). You also must provide any help we may need to comply with 16 U.S.C. 1536(a)(2). This is not in lieu of responsibilities you have to comply with provisions of the Act that apply directly to you as a U.S. entity, independent of receiving this award.

IV. Other National Policies

1 **Debarment and suspension.** You must comply with requirements regarding debarment and suspension in Subpart C of 2 CFR parts 180 and 901.

2 **Drug-free workplace.** You must comply with drug-free workplace requirements in Subpart B of 10 CFR part 607, which implements sec. 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701, et seq.).

3 **Lobbying.**

a. You must comply with the restrictions on lobbying in 31 U.S.C. 1352, as implemented by DOE at 10 CFR part 601, and submit all disclosures required by that statute and regulation.

b. If you are a nonprofit organization described in section 501(c)(4) of title 26, United States Code (the Internal Revenue Code of 1968), you may not engage in lobbying activities as defined in the Lobbying Disclosure Act of 1995 (2 U.S.C., Chapter 26). If we determine that you have engaged in lobbying activities, we will cease all payments to you under this and other awards and terminate the awards unilaterally for material failure to comply with the award terms and conditions. By submitting an application and accepting funds under this agreement, you assure that you are not an organization described in section 501(c)(4) that has engaged in any lobbying activities described in the Lobbying Disclosure Act of 1995 (2 U.S.C. 1611).

c. You must comply with the prohibition in 18 U.S.C. 1913 on the use of Federal funds, absent express Congressional authorization, to pay directly or indirectly for any service, advertisement or other written matter, telephone communication, or other device intended to influence at any time a Member of Congress or official of any government concerning any legislation, law, policy, appropriation, or ratification.

4. **Officials not to benefit.** You must comply with the requirement that no member of Congress shall be admitted to any share or part of this agreement, or to any benefit arising from it, in accordance with 41 U.S.C. 22.

5 **Hatch Act.** If applicable, you must comply with the provisions of the Hatch Act (5 U.S.C. 1501-1508 and 7324-7326), as implemented by the Office of Personnel Management at 5 CFR part 151, which limits political activity of employees or officers of State or local governments whose employment is connected to an activity financed in whole or part with Federal funds.

6 **Native American graves protection and repatriation.** If you control or possess Native American remains and associated funerary objects, you must comply with the requirements of 43 CFR part 10, the Department of the Interior implementation of the Native

American Graves Protection and Repatriation Act of 1990 (25 U.S.C., chapter 32).

7 **Fly America Act.** You must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118), commonly referred to as the "Fly America Act," and implementing regulations at 41 CFR 301-10.131 through 301-10.143. The law and regulations require air transport of people or property to, from, between or within a country other than the United States, the cost of which is supported under this award, to be performed by or under a cost-sharing arrangement with a U.S. flag carrier, if service is available.

8. **Use of United States-flag vessels.**

a. Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)), at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds under this award, and which may be transported by ocean vessel, must be transported on privately owned United States-flag commercial vessels, if available.

b. Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 9.a of this section shall be furnished to both our award administrator (through you in the case of your contractor's bill-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

9 **Research misconduct.** You must comply with the government-wide policy on research misconduct issued by the Office of Science and Technology Policy (available in the Federal Register at 65 FR 76260, December 6, 2000, or on the Internet at www.ostp.gov), as implemented by DOE at 10 CFR part 733 and 10 CFR 600.31.

10 **Requirements for an Institution of Higher Education Concerning Military recruiters and Reserve Officers Training Corps (ROTC).**

a. As a condition for receiving funds under an award by the National Nuclear Security Administration of the Department of Energy, you agree that you are not an institution of higher education that has a policy or practice placing any of the restrictions specified in 10 U.S.C. 983. as implemented by 32 CFR part 216, on:

i. Maintenance, establishment, or operation of Senior ROTC units, or student participation in those units; or

ii. Military recruiters' access to campuses, students on campuses, or information about students.

b. If you are determined, using the procedures in 32 CFR part 216, to be such an institution of higher education during the period of performance of this award, we:

i. Will cease all payments to you of funds under this award and all other awards subject to the requirements in 32 CFR part 216; and

ii. May suspend or terminate those awards unilaterally for material failure to comply with the award terms and conditions.

11. Historic preservation. You must identify to us any:

a. Any property listed or eligible for listing on the National Register of Historic Places that will be affected by this award, and provide any help we may need, with respect to this award, to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as implemented by the Advisory Council on Historic Preservation regulations at 36 CFR part 800 and Executive Order 11593, "Identification and Protection of Historic Properties," [3 CFR, 1971-1975 Comp., p. 559].

b. Potential under this award for irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data, and provide any help we may need, with respect to this award, to comply with the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1, et seq.).

12 Relocation and real property acquisition. You must comply with applicable provisions of 49 CFR part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601, et seq.) and provides for fair and equitable treatment of persons displaced by federally assisted programs or persons whose property is acquired as a result of such programs.

13 Confidentiality of patient records. You must keep confidential any records that you maintain of the identity, diagnosis, prognosis, or treatment of any patient in connection with any program or activity relating to substance abuse education, prevention, training, treatment, or rehabilitation that is assisted directly or indirectly under this award, in accordance with 42 U.S.C. 290dd-2.

14 Constitution Day. You must comply with Public Law 108-447, Div. J, Title I, Sec. 111 (36 U.S.C. 106 note), which requires each educational institution receiving Federal funds in a Federal fiscal year to hold an educational program on the United States Constitution on September 17th during that year for the students served by the educational institution.

15 Trafficking in Persons

a. Provisions applicable to a recipient that is a private entity.

1. You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—

i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;

ii. Procure a commercial sex act during the period of time that the award is in effect;
or

iii. Use forced labor in the performance of the award or subawards under the award.

2. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity –

i. Is determined to have violated a prohibition in paragraph a.1 of this award term;
or

ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—

A. Associated with performance under this award; or

B. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 901.

b. Provision applicable to a recipient other than a private entity. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—

1. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or

2. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—

i. Associated with performance under this award; or

ii. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 901.

c. Provisions applicable to any recipient.

1. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.

2. Our right to terminate unilaterally that is described in paragraph a.2 or b. of this section:

i. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and

ii. Is in addition to all other remedies for noncompliance that are available to us under this award.

3. You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

d. Definitions. For purposes of this award term:

1. "Employee" means either:

- i. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
- ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

2. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

3. "Private entity":

- i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

- ii. Includes:

- A. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

- B. A for-profit organization.

4. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

V. National Policy Requirements for Subawards.

Recipient responsibility. You must include in any subaward you make under this award the requirements of the national policy requirements in Sections I through IV of this document that apply, based on the type of subawardee organization and situation.

Statement Of Project Objectives (SOPO):

Smart Grid Investment Grant under the Integrated and/or Crosscutting Systems topic area to expand and accelerate the deployment of its SmartSacramento project

A. Project Objectives

The objective of this project is to support the goal of the Smart Grid Investment Grant Funding Opportunity Announcement which is to accelerate the modernization of the nation's electric transmission, distribution, and delivery systems, and promote investments in smart grid technologies which increase flexibility, functionality, interoperability, cyber security, situational awareness and operational efficiency. An additional goal is to collect information from customers, distributors, and generators to understand how smart grid technologies may lead to reductions in demands and costs, increases energy efficiency, optimally allocates and matches demand and resources to meet that demand, and increases the reliability of the grid. The social benefits of a smart grid and energy storage technologies are reduced emissions, lower costs, increased reliability, greater security and flexibility to accommodate new energy technologies, including renewable, intermittent and distributed sources.

B. Project Scope (Scope of Work)

The Scope of Work is in accordance with the Recipient's application submitted in response to the Smart Grid Investment Grant Program Funding Opportunity Announcement.

C. Tasks to be Performed

Tasks to be performed under this agreement are comprised of the actions and activities described in the Recipients proposal and the deliverables and reports defined elsewhere in the agreement