PROFESSIONAL CONSULTANT SERVICES AGREEMENT

Switchgear Upgrade Project

SCHNEIDER ELECTRIC USA, INC.

THIS PROFESSIONAL CONSULTANT	SERVICES AGREEMENT ("Agreement") is	
made and entered into this day of	,20("Effective Date"), by an	d
between the CITY OF RIVERSIDE ("City"), a C	alifornia charter city and municipal corporation	n
and SCHNEIDER ELECTRIC USA, INC., a Del	laware corporation authorized to do business i	n
California ("Consultant").		

- 1. Scope of Services. City agrees to retain and does hereby retain Consultant and Consultant agrees to provide the services more particularly described in Exhibit "A," "Scope of Services" ("Services"), attached hereto and incorporated herein by reference, in conjunction with Switchgear Upgrade Project ("Project").
- 2. Term. This Agreement shall be effective on the date first written above and shall remain in effect for eighteen (18) months, unless otherwise terminated pursuant to the provisions herein.
- 3. Compensation/Payment. Consultant shall perform the Services under this Agreement for the total sum not to exceed Four Million Three Hundred Forty-Nine Thousand Seven Hundred Forty Dollars (\$4,349,740) payable in accordance with the terms set forth in Exhibit "B." Said payment shall be made in accordance with City's usual accounting procedures upon receipt and approval of an itemized invoice setting forth the services performed. The invoices shall be delivered to City at the address set forth in Section 4 hereof.
- 4. Notices. Any notices required to be given, hereunder shall be in writing and shall be personally served or given by mail. Any notice given by mail shall be deemed given when deposited in the United States Mail, certified and postage prepaid, addressed to the party to be served as follows:

To City

To Consultant

Public Utilities Department City of Riverside Attn: Francisco Fuentes 3750 University Ave, 3rd Floor Riverside, CA 92501

Schneider Electric USA, Inc. Attn: Ross King 10805 Thornmint Road, Suite 140 San Diego, CA 92127

5. Prevailing Wage. If applicable, Consultant and all subcontractors are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. The Director's determination is available on-line at

www.dir.ca.gov/dlsr/DPreWageDetermination.htm and is referred to and made a part hereof; the wage rates therein ascertained, determined, and specified are referred to and made a part hereof as though fully set forth herein.

- 6. Contract Administration. A designee of the City will be appointed in writing by the City Manager or Department Director to administer this Agreement on behalf of City and shall be referred to herein as Contract Administrator.
- 7. Standard of Performance. While performing the Services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Metropolitan Southern California Area, and shall use reasonable diligence and best judgment while exercising its professional skill and expertise.
- 8. Personnel. Consultant shall furnish all personnel necessary to perform the Services and shall be responsible for their performance and compensation. Consultant recognizes that the qualifications and experience of the personnel to be used are vital to professional and timely completion of the Services. The key personnel listed in Exhibit "C" attached hereto and incorporated herein by this reference and assigned to perform portions of the Services shall remain assigned through completion of the Services, unless otherwise mutually agreed by the parties in writing, or caused by hardship or resignation in which case substitutes shall be subject to City approval.
- 9. Assignment and Subcontracting. Neither party shall assign any right, interest, or obligation in or under this Agreement to any other entity without prior written consent of the other party. In any event, no assignment shall be made unless the assignee expressly assumes the obligations of assignor under this Agreement, in a writing satisfactory to the parties. Consultant acknowledges that any assignment may, at the City's sole discretion, require City Manager and/or City Council approval. Consultant shall not subcontract any portion of the work required by this Agreement without prior written approval by the responsible City Contract Administrator. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including without limitation, the insurance obligations set forth in Section 12. The Consultant acknowledges and agrees that the City is an intended beneficiary of any work performed by any subcontractor for purposes of establishing a duty of care between any subcontractor and the City.
- 10. Independent Contractor. In the performance of this Agreement, Consultant, and Consultant's employees, subcontractors and agents, shall act in an independent capacity as independent contractors, and not as officers or employees of the City of Riverside. Consultant acknowledges and agrees that the City has no obligation to pay or withhold state or federal taxes or to provide workers' compensation or unemployment insurance to Consultant, or to Consultant's employees, subcontractors and agents. Consultant, as an independent contractor, shall be responsible for any and all taxes that apply to Consultant as an employer.

11. Indemnification.

11.1. **Design Professional Defined**. For purposes of this Agreement, "Design Professional" shall be:

- A. An individual licensed as an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, and a business entity offering architectural services in accordance with that chapter.
- B. An individual registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, and a business entity offering professional engineering services in accordance with that chapter.
- 11.2. Defense Obligation for Design Professional Liability. Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims asserted by third parties, directly relating to or arising from injury to persons or tangible personal or real property damage, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.
- 11.3. Indemnity for Design Professional Liability. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, Consultant shall indemnify, protect and hold harmless the City and the City's employees, officers, managers, agents, and Council Members ("Indemnified Parties") from and against any and all claim asserted by third parties, directly relating to or arising from injury to persons or tangible personal or real property damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including reasonable counsel and expert fees), judgment, civil fines and penalties, liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services.
- 11.4. Defense Obligation for Other than Design Professional Liability. Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims asserted by third parties, directly relating to or arising from injury to persons or tangible personal or real property damage, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent arising out of, or relating to, or are in any way connected with the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant. This duty to

defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

11.5. Indemnity for Other than Design Professional Liability. Except as to the negligence or willful misconduct of the City, Consultant agrees to indemnify, protect and hold harmless the Indemnified Parties from and against any claim asserted by third parties, directly relating to or arising from injury to persons or tangible personal or real property damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including reasonable counsel and expert fees), judgment, civil fine and penalties, liabilities or losses of any kind or nature whatsoever whether actual, threatened or alleged, to the extent they arise out of, pertain to, or relate to, or are a consequence of, or are attributable to, or are in any manner connected with the negligent performance of the Services, work, activities, operations or duties of the Consultant, or anyone employed by or working under the Consultant or for services rendered to Consultant in the performance of this Agreement, notwithstanding that the City may have benefited from its work or services. This indemnification provision shall apply to any acts, omissions, negligence, recklessness, or willful misconduct, whether active or passive, on the part of the Consultant or anyone employed or working under the Consultant.

12. Insurance.

- 12.1. General Provisions. Prior to the City's execution of this Agreement, Consultant shall provide satisfactory evidence of, and shall thereafter maintain during the term of this Agreement, such insurance policies and coverages in the types, limits, forms and ratings required herein. The rating and required insurance policies and coverages may be modified in writing by the City's Risk Manager or City Attorney, or a designee, unless such modification is prohibited by law.
- 12.1.1. Limitations. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, EXCEPT WITH RESPECT TO CLAIMS FOR PROPERTY DAMAGE OR PERSONAL INJURY OR WITH RESPECT TO THIRD PARTY INDEMNIFICATION CLAIMS, TO THE EXTENT BASED ON CONSULTANT'S GROSS NEGLIGENCE, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR CONSEQUENTIAL, INDIRECT, SPECIAL, INCIDENTAL OR PUNITIVE DAMAGES (INCLUDING LOST TIME, PROFITS, REVENUE OR DATA) OF ANY KIND RELATED IN ANY MANNER WITH THIS CONTRACT. REGARDLESS OF THE FORM OF ACTION, OR THE THEORY OF RECOVERY EVEN IF CONSULTANT HAS BEEN APPRISED OF THE POSSIBILITY OF SUCH DAMAGES, THE REMEDIES OF THE CITY SET FORTH HEREIN ARE EXCLUSIVE, AND THE TOTAL CUMULATIVE LIABILITY OF CONSULTANT, ITS SUBCONTRACTORS AND SUPPLIERS OF ANY TIER WITH RESPECT TO THIS CONTRACT OR ANYTHING DONE IN CONNECTION THEREWITH, WHETHER IN CONTRACT, IN TORT (EXCLUDING CONSULTANT'S GROSS NEGLIGENCE OR WILFUL MISCONDUCT) OR OTHERWISE, SHALL NOT EXCEED THE PRICE OF THE PRODUCT, PART OR SERVICE ON WHICH SUCH LIABILITY IS BASED.

- 12.1.2. Ratings. Any insurance policy or coverage provided by Consultant or subcontractors as required by this Agreement shall be deemed inadequate and a material breach of this Agreement, unless such policy or coverage is issued by insurance companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class of VII or higher.
- 12.1.3. Cancellation. The policies shall not be canceled unless thirty (30) days prior written notification of intended cancellation has been given to City.
- 12.1.4. Adequacy. The City, its officers, employees and agents make no representation that the types or limits of insurance specified to be carried by Consultant pursuant to this Agreement are adequate to protect Consultant. If Consultant believes that any required insurance coverage is inadequate, Consultant will obtain such additional insurance coverage as Consultant deems adequate, at Consultant's sole expense.
- 12.2. Workers' Compensation Insurance. By executing this Agreement, Consultant certifies that Consultant is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation, or to undertake self-insurance before commencing any of the work. Consultant shall carry the insurance or provide for self-insurance required by California law to protect said Consultant from claims under the Workers' Compensation Act. Prior to City's execution of this Agreement, Consultant shall file with City either 1) a certificate of insurance showing that such insurance is in effect, or that Consultant is self-insured for such coverage, or 2) a certified statement that Consultant has no employees, and acknowledging that if Consultant does employ any person, the necessary certificate of insurance will immediately be filed with City. Consultant shall provide that City will be given ten (10) days written notice before reduction of coverage or cancellation thereof.
- 12.3. Commercial General Liability and Automobile Insurance. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, commercial general liability insurance and automobile liability insurance as required to insure Consultant against damages for personal injury, including accidental death, as well as from claims for tangible, personal or real property damage, which may arise from or which may concern operations by anyone directly or indirectly employed by, connected with, or acting for or on behalf of Consultant. The City, and its officers, employees and agents, shall be named as additional insureds under the Consultant's General Liability and Auto Liability insurance policies, but only with respect to liability arising out of operations performed by Consultant on behalf of the City, where required by written contract.
- 12.3.1. Consultant's commercial general liability insurance policy shall cover both bodily injury (including death) and property damage (including, but not limited to, premises operations liability, products-completed operations liability, independent contractor's liability, personal injury liability, and contractual liability) in an amount not less than \$1,000,000 per occurrence and a general aggregate limit in the amount of not less than \$2,000,000.

12.3.2. Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, non-Consultant owned vehicles and hired vehicles.

12.3.3. Prior to City's execution of this Agreement, copies of insurance certificates along with additional insured endorsements evidencing the coverage required by this Agreement, for both commercial general and automobile liability insurance, shall be filed with City and shall include the City and its officers, employees and agents, as additional insureds. Said policies shall be in the usual form of commercial general and automobile liability insurance policies, but shall include the following provisions:

It is agreed that the City of Riverside, and its officers, employees and agents, are added as additional insureds under General Liability and Auto Liability policies, solely for work done by and on behalf of the named insured for the City of Riverside.

provisions:

12.3.4. The insurance policy or policies shall also comply with the following

- A. The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers and agents for services performed under this Agreement.
- B. If the policy is written on a claims made basis, the certificate should so specify and the policy must continue in force for one year after completion of the services. The retroactive date of coverage must also be listed.
- C. The policy shall specify that the insurance provided by Consultant will be considered primary and not contributory to any other insurance available to the City and Endorsement No. CG 20010413 shall be provided to the City.
- 12.4. Errors and Omissions Insurance. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, errors and omissions professional liability insurance in the minimum amount of \$1,000,000 to protect the City from claims resulting from the Consultant's activities.
- 12.5. Subcontractors' Insurance. Consultant shall require all of its subcontractors to carry insurance, in an amount sufficient to cover the risk of injury, damage or loss that may be caused by the subcontractors' scope of work and activities provided in furtherance of this Agreement, including, but without limitation, the following coverages: Workers Compensation, Commercial General Liability, Errors and Omissions, and Automobile liability. Upon City's request, Consultant shall provide City with satisfactory evidence that Subcontractors have obtained insurance policies and coverages required by this section.

- 13. Business Tax. Consultant understands that the Services performed under this Agreement constitutes doing business in the City of Riverside, and Consultant agrees that Consultant will register for and pay a business tax pursuant to Chapter 5.04 of the Riverside Municipal Code and keep such tax certificate current during the term of this Agreement.
 - 14. Time. Time is of the essence for each and every provision of this Agreement.
- 15. City's Right to Employ Other Consultants. City reserves the right to employ other Consultants in connection with the Project. If the City is required to employ another consultant to complete Consultant's work, due to the failure of the Consultant to perform, or due to the breach of any of the provisions of this Agreement, the City reserves the right to seek reimbursement from Consultant.
- 16. Accounting Records. Consultant shall maintain complete and accurate records with respect to costs incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.
- 17. Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other materials either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant, except as otherwise directed by City's Contract Administrator. Nothing furnished to Consultant which is otherwise known to the Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production, website, or other similar medium without the prior written consent of the City.
- 18. Ownership of Documents. The City shall own all drawings, manuals, and other such materials provided by Consultant in the course of this Agreement, subject to Consultant's retention of all intellectual property rights. Notwithstanding the foregoing, the City shall own the copyright in any report produced for it by Consultant and may copy, use and distribute it for any internal purpose. Consultant retains all rights to its processes, know-how, techniques, technologies, software, and methodologies.
- 19. Copyrights. To the extent that an invention, patent, discovery, technology, trade secret, know-how, development, improvement, idea, or other intellectual property (collectively, "Intellectual Property") is (i) conceived, discovered, invented, created, developed and/or reduced to practice exclusively by the City; (ii) created in connection with the work for the City pursuant to this Agreement and that will only work exclusively with the proprietary system(s) of the City, or (iii) under a specific agreement for the joint development of Intellectual Property, such Intellectual Property will be owned exclusively by the City.

Except for Intellectual Property owned by the City proved above, the City acknowledges that Consultant is the exclusive owner of all right, title and interest in any other deliverables produced and or provided under this Agreement, including without limitation, its intellectual property, including patents, trademarks, trade secrets, and copyrights, methodologies and methods of analysis, ideas, concepts, expressions, know how, methods, techniques, skills, knowledge and experience (collectively, the "Consultant's Intellectual Property") possessed by Consultant prior to, or acquired by Consultant during the performance of this Agreement and the same shall not be deemed to be work product or "work made for hire" and Consultant shall not be restricted in anyway with respect thereto. Consultant shall also grant to the City a perpetual, paid-up, worldwide license to use Consultant's copyrighted materials, including software, that relate in any way to the operation, maintenance, and improvement of any Work product delivered under this Agreement.

- 20. Conflict of Interest. Consultant, for itself and on behalf of the individuals listed in Exhibit "C", represents and warrants that by the execution of this Agreement, they have no interest, present or contemplated, in the Project affected by the above-described Services. Consultant further warrants that neither Consultant, nor the individuals listed in Exhibit "C" have any real property, business interests or income interests that will be affected by this project or, alternatively, that Consultant will file with the City an affidavit disclosing any such interest.
- 21. Solicitation. Consultant warrants that Consultant has not employed or retained any person or agency to solicit or secure this Agreement, nor has it entered into any agreement or understanding for a commission, percentage, brokerage, or contingent fee to be paid to secure this Agreement. For breach of this warranty, City shall have the right to terminate this Agreement without liability and pay Consultant only for the value of work Consultant has actually performed, or, in its sole discretion, to deduct from the Agreement price or otherwise recover from Consultant the full amount of such commission, percentage, brokerage or commission fee. The remedies specified in this section shall be in addition to and not in lieu of those remedies otherwise specified in this Agreement.
- 22. General Compliance with Laws. Consultant shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Consultant, or in any way affect the performance of services by Consultant pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. Consultant represents and warrants that Consultant has obtained all necessary licenses to perform the Scope of Services and that such licenses are in good standing. Consultant further represents and warrants that the services provided herein shall conform to all ordinances, policies and practices of the City of Riverside.
- 23. Waiver. No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute approval of or acquiescence in any breach thereunder, except as may be specifically, provided in this Agreement or as may be otherwise agreed in writing.
- 24. Amendments. This Agreement may be modified or amended only by a written agreement and/or change order executed by the Consultant and City.

- 25. **Termination**. City, by notifying Consultant in writing, shall have the right to terminate any or all of Consultant's services and work covered by this Agreement at any time. In the event of such termination, Consultant may submit Consultant's final written statement of the amount of Consultant's services as of the date of such termination based upon the ratio that the work completed bears to the total work required to make the report complete, subject to the City's rights under Sections 15 and 25 hereof. In ascertaining the work actually rendered through the termination date, City shall consider completed work, work in progress and complete and incomplete reports and other documents only after delivered to City.
- 25.1. Other than as stated below, City shall give Consultant thirty (30) days prior written notice prior to termination.
- 25.2. City may terminate this Agreement upon fifteen (15) days written notice to Consultant, in the event:
- 25.2.1. Consultant substantially fails to perform or materially breaches the Agreement; or
 - 25.2.2. City decides to abandon or postpone the Project.
- 26. Offsets. Consultant acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which Consultant owes or may owe to the City, City reserves the right to withhold and offset said amounts from payments or refunds or reimbursements owed by City to Consultant. Notice of such withholding and offset, shall promptly be given to Consultant by City in writing. In the event of a dispute as to the amount owed or whether such amount is owed to the City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.
- 27. Successors and Assigns. This Agreement shall be binding upon City and its successors and assigns, and upon Consultant and its permitted successors and assigns, and shall not be assigned by Consultant, either in whole or in part, except as otherwise provided in paragraph 9 of this Agreement.
- 28. Venue and Attorneys' Fees. Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in a court of competent jurisdiction in the County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party shall bear their own attorneys' fees.
- 29. Severability. Each provision, term, condition, covenant and/or restriction, in whole and in part, of this Agreement shall be considered severable. In the event any provision, term, condition, covenant and/or restriction, in whole and/or in part, of this Agreement is declared invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this

Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement, and the remainder of the Agreement shall continue in full force and effect.

- 30. Authority. The individuals executing this Agreement and the instruments referenced herein on behalf of Consultant each represent and warrant that they have the legal power, right and actual authority to bind Consultant to the terms and conditions hereof and thereof.
- 31. Entire Agreement. This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements of the parties. Neither party has been induced to enter into this Agreement by and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.
- 32. Interpretation. City and Consultant acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.
- 32.1. Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of the Agreement or any of its terms. Reference to section numbers, are to sections in the Agreement unless expressly stated otherwise.
- 32.2. This Agreement shall be governed by and construed in accordance with the laws of the State of California in effect at the time of the execution of this Agreement.
- 32.3. In the event of a conflict between the body of this Agreement and Exhibit "A," Scope of Services hereto, the terms contained in Exhibit "A" shall be controlling.
- 33. Additional terms and conditions are contained in the Contractor's proposal dated February 16, 2016, attached hereto as Exhibit "A" and incorporated herein by this reference. In the event of any conflict between the terms of this agreement and the terms of the attached proposal, the terms of this agreement shall govern.
- 34. **Exhibits.** The following exhibits attached hereto are incorporated herein to this Agreement by this reference:

Exhibit "A" - Scope of Services
Exhibit "B" - Compensation
Exhibit "C" - Key Personnel

(Signatures on Following Page)

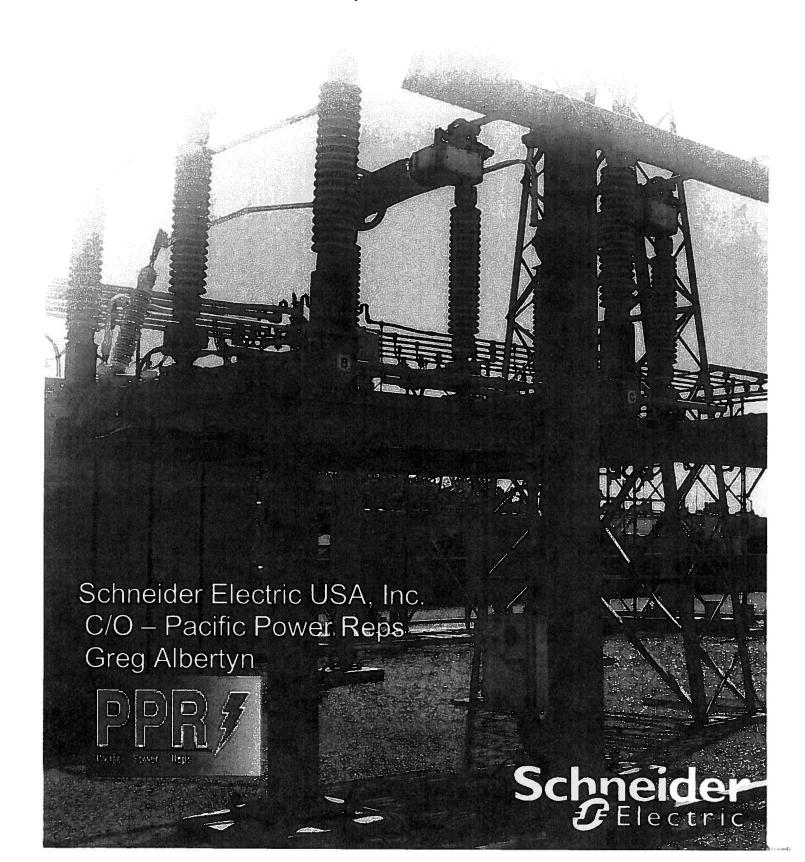
IN WITNESS WHEREOF, City and Consultant have caused this Agreement to be duly executed the day and year first above written.

CITY OF RIVERSIDE, a California charter city and municipal	SCHNEIDER ELECTRIC USA, INC., a Delaware corporation authorized to do business in California
By:City Manager	By: Michael Wallace [Printed Name]
Attest: City Clerk	Vice President [Title]
Approved as to Form:	By: Mary Kibble
By: Susan Webser Assistant City Attorney	[Printed Name] Assistant Secretary [Title]

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EXHIBIT "A" SCOPE OF SERVICES

RFP No.1564 City of Riverside Switchgear Upgrade Project Schneider Electric Proposal # 37660590





February 16, 2016
Proposal for MV Switchgear Upgrade Project
City of Riverside: Purchasing Department
Attn: Art Torres (RFP No. 1564)
3900 Main Street
Riverside CA 92522

Dear Art,

It is with great pleasure, on behalf of Schneider Electric Services, that we submit our proposal for your RFP No. 1564, Medium Voltage Switchgear Upgrades Project,

Schneider Electric is a \$30 billion global specialist in energy management. Schneider Electric is both a product manufacturer and system integrator. Switchgear Modernization is the core of our services offering. As such, we are pleased to offer our knowledge and experience with Electric Utilities to assist in delivering your state-of-the-art facility.

Our experience with high profile, mission-critical projects makes us a trusted resource for flexible, dependable, and secure environments. At Schneider Electric we believe our greatest strength, in addition to our products and technology is our commitment to providing our customers with a fully customizable, scalable, integrated system solution that is second to none.

The Schneider Electric project team assigned to the Medium Voltage Switchgear Upgrade Project is comprised of key personnel that typically include: project managers, engineers, field personnel with significant experience in switchgear modernization projects.

Along with our experienced team in house, for this project we have partnered with a California local electrical sub-contractor, Pacific Industrial Electric (P.I.E) who also specializes in industrial modernization. Pacific Industrial Electric is one of only a few contractors in California who meet our strict contractor screening prequalification's which are managed through PICS auditing services (www.picsauditing.com/). PICS Auditing helps ensure our contractors meet the most stringent requirements for OSHA Statistics, Health & Safety Logs, (CA DIR) and Insurance Requirements. This partnership allows us to be confident we are providing our customers with the highest-level of efficiency and overall risk reduction.

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We are committed to:

- Ensuring the delivery of a world-class solution that is built upon "best-inclass" technology.
- Providing you with the highest level of professional project management, engineering, system installation, startup, and training throughout your project.
- Providing an optimized solution that meets the project timeline, budget and provides the best overall value.
- Providing the safest working environment for our customers, subcontractors and employees.

Schneider Electric's proposal for Medium Voltage Switchgear Upgrade of Mt. View, Freeman, and Springs Substation is valid for 90 days from the date of this proposal. Please direct any communications to me, Ross King.

We are confident that Schneider Electric will provide the best overall approach to the project.

Sincerely,

Ross King Schneider Electric USA, Inc. 10805 Thornmint Road, Suite 140 San Diego, CA 92127 Phone: 619-415-2700

Ross.King@Schneider-Electric.com

California Contractors License #777355 C-10 Electrical
California DIR#1000000670

City of Riverside BusinessTax License #1240206

C/O – Schneider Electric Utility Sales Representative Pacific Power Reps
27762 Antonio Parkway L1-545
Ladera Ranch, CA 92694
Greg Albertyn
Phone: 949-394-4990
Greg@PPReps.com

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Schneider Electric is very familiar with scope of work that needs to be completed as we specialize in switchgear modernization. Although there are many risks involved with a project of this magnitude, we have faced them all before in the past and we are confident we have the resources in place to ensure we complete the project on time and within budget. One of the major risks involved would be having the need to extend the outage window due to issues encountered during the installation. We are confident we have mitigated this risk as we already have pre-engineering and tested solutions for the switchgear modernization needed at Mountain View, Freeman and Springs substations. Most of the other risk can be mitigated by taking several outages before the work begins to take detailed measurements and examine the condition of the existing switchgear. Some of things we will be looking at will be the condition of the existing insulation on all of the bus. We are anticipating some of the insulation may need to be replaced and we will provide an optional cost for this in our proposal.

The field labor needed to complete this work will be provided by Schneider Electric Field Services and our electrical subcontractor, Pacific Industrial Electric. Project management, electrical and physical design, as-built drawings, procurement, installation of equipment, devices and cables, modification of the switchgear bus or cubicle as needed, and commissioning the upgraded switchgear will be managed in house by Schneider Electric.

Starting with the Mountain View Substation, the first step would be to schedule our engineering site visits. During the first 2-day outage, we will be gathering all of the final details and measurements to complete our design. Our field personnel would be accompanied by Factory Engineers, Power System Engineers and our in-house Substation Automation team.

After the first site visit is complete, engineering will provide a submittal package to COR for review and approval. Once returned, the complete BOM will be released for fabrication. Following the release to fabrication, the first outage schedule will be presented to the COR for review and approval.

The scope of work for Mt. View substation includes upgrading three (3) walk-in switchgear (SWGR 3, SWGR 4 and SWGR 6). The scope will include replacing all electromechanical protective and control relays with SEL relays as noted in Table 1 for SWGR 3, SWGR 4 and SWGR 5. Replace all 15kV circuit breakers and cells for SWGR 3 and SWGR 4 as noted in Table 1. Replace all disconnects in SWGR 3 and SWGR 4 with a 1200A new non-load interrupting disconnect switches. Add new Substation Automation (SAS) for SWGR 3 and SWGR 5 per the requirement of section 4.2.6.

Below is high-level draft of the sequence of events that will occur after the complete BOM is shipped and received:

1. Inventory Review with engineering, project management and our contractor. We

will spend several days reviewing the shipped BOM to ensure everything matches the drawings and all materials have been shipped complete. BOM will be sorted into complete assemblies per switchgear cell and staged in shipping containers at the job site prior to the first scheduled outage.

2. Prior to the first outage, our lead FSRs will schedule a safety review meeting with the COR substation department to discuss site safety, MOP, LOTO and any

other additional details related to performing the scope of work.

3. The first major stage of construction will be the demolition of the existing SWGR 3, 4 & 6. We would then handle complete removal and disposal of the existing paying special attention to any equipment known or suspected to contain asbestos. This portion will be supervised by Schneider Electric with the bulk of the labor being completed by Pacific Industrial Electric.

4. After demolition is completed, Hi-pot testing will be completed on the entire

structure to ensure we have a good baseline to start from.

5. The next phase and the largest phase of the scope of work will be the reconstruction and modification of the existing switchgear to allow for the retrofill of the new, modern Schneider Electric retrofill breakers and cells. During this phase a wide variety of tasks will need to be completed such as: Minor Welding/cutting, Assemble/install breaker cradle, install wiring, install all new hardware/bussing and install new doors.

6. The final phase will be performing full testing/commissioning all new equipment and devices installed. Function testing will be completed on all SEL devices, all components in prefab doors will be tested along with the SAS. The final commissioning will be a joint effort between Schneider Electric and COR.

Below is the complete BOM that will be supplied and installed at Mountain View Substations 3, 4 & 6

WORKSCOPE: MV RETROFILLS, MT. VIEW SUBSTATION

- Schneider Electric shall provide and install vacuum circuit breaker retrofills for General Electric 13.2kV Magnablast breakers in 1200A (Feeders) and 2000A Mains & Ties) configuration as detailed below.
- Breaker retrofills shall include all materials necessary to install new vacuum circuit breaker and cradle assemblies. Materials include new copper connection bus, required barriers and cover panels, mounting hardware, secondary connectors and wiring.

DETAILED BOM, EACH

FEEDERS & CAPACITORS

Schneider Electric VR vacuum circuit breaker and cradle retrofill for:

OEM #GE AM13.8-500-1200 Magnablast

15KV Voltage Class

500 MVA New MVA Rating

Vacuum Element

MOC

Secondary Voltages

Charge Voltage: 125 VDC Close Voltage: 125 VDC Trip Voltage: 125 VDC

Retrofill kit, includes: bus, barriers, new door

QTY (3) SWITCHGEAR #3

QTY (4) SWITCHGEAR #4

MAINS AND TIES

Schneider Electric VR vacuum circuit breaker and cradle retrofill for: OEM #GE AM13.8-500-2000 Magnablast 15KV Voltage Class 500 MVA New MVA Rating Vacuum Element

MOC

Secondary Voltages

Charge Voltage: 125 VDC Close Voltage: 125 VDC Trip Voltage: 125 VDC

Retrofill kit, includes: bus, barriers, new door

QTY (3) SWITCHGEAR #3

QTY (3) SWITCHGEAR #4

WORKSCOPE: ISO-SWITCH RETROFILL MT. VIEW SUBSTATION #3

(3) Retrofill for existing no-load break switch with Cleaveland/Price LCG-C no-load switch, 3 pole, 15kV, 1200A, 61kA, 95kV BIL, chain drive manual operator; porcelain insulators

WORKSCOPE: ISO-SWITCH RETROFILL MT. VIEW SUBSTATION #4

(4) Retrofill for existing no-load break switch with Cleaveland/Price LCG-C no-load switch, 3 pole, 15kV, 1200A, 61kA, 95kV BIL, chain drive manual operator; porcelain insulators

WORKSCOPE: SWITCHGEAR #3 DOORS, MT. VIEW SUBSTATION

- (3) FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks
- (1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks
- (1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware

- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks
- (1)MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (2) FT-1 Test Switch, 129A501G01

WORKSCOPE: SWITCHGEAR #4 DOORS, MT. VIEW SUBSTATION

- (3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door.

utilizes existing hinges and hardware

- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1) CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461

- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks

(1)MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32

WORKSCOPE: SWITCHGEAR #6 DOORS, MT. VIEW SUBSTATION

- (3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461

- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables

- (1) Fiber Optic Point Sensor
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks
- (1) MAIN BUS TIE UNIT DOOR REPLACEMENT;

BOM EACH:

(1) New, Replacement Cell Door,

utilizes existing hinges and hardware

- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (2) FT-1 Test Switch, 129A501G01

WORKSCOPE: SUBSTATION AUTOMATION SYSTEM (SAS UPGRADE), MT. VIEW SUBSTATION

- (1) GPS clock with modulated IRIG:125VDC Arbiter Systems 1093B OPT10, 34,92, 92
- (1) GPS Antenna Mounting Kit: Arbiter System AS0044600
- (1) Fuse Blocks: Weidmuller 297520000
- (1) Novatech ORIONLX-A12-B0-C3-G1ENET-HVHV-IHV-01-03-04-14-42-44-47-81-82-94
- (1) Novatech DDIO: SER-G-WR-110-HV-42-RACK
- (1) Ethernet Switch: Ruggedcom RSG2100-R-RD-HI-HI-FX01-FX01-TX01-TX01-CG01-

1CG01-TX01-TX01-TX01-XX

(1) Patch Panel – Corning Model no PCH04U (The fiber patch panel installation will be performed by RPU crew)

Freeman Substation will be the next substation to be completed in the scope of work. Similar to Mountain View, the first step for Freeman Substation would be to schedule our engineering site visits. During the first 2-day outage, we will be gathering all of the final details and measurements to complete our design. Our field personnel would be

accompanied by Factory Engineers, Power System Engineers and our in-house Substation Automation team.

After the first site visit is complete, engineering will provide a submittal package to COR for review and approval. Once returned, the complete BOM will be released for fabrication. Following the release to fabrication, the outage schedule will be presented to the COR for review and approval.

The scope of work for Freeman substation includes upgrading five (5) walk-in switchgear (SWGR 1, SWGR 3, SWGR 4, SWGR 5 and SWGR 6). The scope will include replacing all electromechanical

protective and control relays with SEL relays as noted in Table 2 for SWGR 3, SWGR 4 and SWGR 5). Replace all 15kV circuit breakers and cells for SWGR 3 and SWGR 4 as noted in Table 2. Replace all disconnects in SWGR 3 and SWGR 4 with a 1200A new non-load interrupting disconnect switches. Add new Substation Automation (SAS) for SWGR 1, SWGR 3 and SWGR per the requirement of section 4.2.6 6.

Below is high-level draft of the sequence of events that will occur after the complete BOM is shipped and received:

Inventory Review with engineering, project management and our contractor. We
will spend several days reviewing the shipped BOM to ensure everything
matches the drawings and all materials have been shipped complete. BOM will
be sorted into complete assemblies per switchgear cell and staged in shipping
containers at the job site prior to the first scheduled outage.

2. Prior to the first outage, our lead FSRs will schedule a safety review meeting with the COR substation department to discuss site safety, MOP, LOTO and any

other additional details related to performing the scope of work.

3. The first major stage of construction will be the demolition of the existing Freeman Substations 1, (3-4), 5 & 6. We would then handle complete removal and disposal of the existing paying special attention to any equipment known or suspected to contain asbestos. This portion will be supervised by Schneider Electric with the bulk of the labor being completed by Pacific Industrial Electric.

- 4. After demolition is completed, Hi-pot testing will be completed on the entire structure to ensure we have a good baseline to start from.
- 5. The next phase and the largest phase of the scope of work will be the reconstruction and modification of the existing switchgear to allow for the retrofill of the new, modern Schneider Electric retrofill breakers and cells. During this phase a wide variety of tasks will need to be completed such as: Minor Welding/cutting, Assemble/install breaker cradle, install wiring, install all new hardware/bussing and install new doors.
- 6. The final phase will be performing full testing/commissioning all new equipment and devices installed. Function testing will be completed on all SEL devices, all components in prefab doors will be tested along with the SAS. The final commissioning will be a joint effort between Schneider Electric and COR.

Below is the complete BOM that will be supplied and installed at Freeman Substations 1, (3-4), 5 & 6

WORKSCOPE: MV RETROFILL, FREEMAN SUBSTATION

- Schneider Electric shall provide and install vacuum circuit breaker retrofills for Allis Chalmer breakers in 1200A (Feeders) and 2000A Mains & Ties) configurations as detailed below to convert the existing lever-in racking breakers to screw-in racking breakers.
- Breaker retrofills shall include all materials necessary to install new vacuum circuit breaker and screw type racking. Materials include new floor mounted screw type racking Assembly to mate to new screw type replacement breakers.

DETAILED BOM, EACH:

FEEDERS & CAPACITORS

MAGNUM DIRECT REPLACEMENT MV
CIRCUIT BREAKER CONSISTING OF
Replacement for Allis Chalmers / Siemens Allis
Circuit Breaker
OEM # FC-500-1200
15KV Voltage Class
500 MVA Original MVA Rating
500 MVA New MVA Rating
Vacuum Element
MOC
Secondary Voltages

Charge Voltage: 125 VDC
Close Voltage: 125 VDC
Trip Voltage: 125 VDC
Special Features
No Undervoltage Trip
Single Coupler

QTY (4) SWITCHGEAR #3

QTY (4) SWITCHGEAR #4

MAINS AND TIES

MAGNUM DIRECT REPLACEMENT MV CIRCUIT BREAKER CONSISTING OF Replacement for Allis Chalmers / Siemens Allis Circuit Breaker **OEM # FC-500-2000** 15KV Voltage Class 500 MVA Original MVA Rating 500 MVA New MVA Rating Vacuum Element MOC Secondary Voltages Charge Voltage: 125 VDC Close Voltage: 125 VDC Trip Voltage: 125 VDC **Special Features** No Undervoltage Trip Single Coupler

QTY (3) SWITCHGEAR #3

QTY (2) SWITCHGEAR #4

WORKSCOPE: ISO-SWITCH RETROFILL FREEMAN SUBSTATION #3

(3) Retrofill for existing no-load break switch with Cleaveland/Price LCG-C no-load switch, 3 pole, 15kV, 1200A, 61kA, 95kV BIL, chain drive manual operator; porcelain insulators

WORKSCOPE: ISO-SWITCH RETROFILL FREEMAN SUBSTATION #4

(4) Retrofill for existing no-load break switch with Cleaveland/Price LCG-C no-load switch, 3 pole, 15kV, 1200A, 61kA, 95kV BIL, chain drive manual operator; porcelain insulators

WORKSCOPE: SWITCHGEAR #1 DOORS, FREEMAN SUBSTATION

- (2) FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks
- (1) MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ

(1) Misc slide-link terminal blocks

- (1) MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks

WORKSCOPE: SWITCHGEAR #2 DOORS, FREEMAN SUBSTATION

- (2) FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks
- (1) MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor

- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks
- (1) MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 03522132551X4XX
- (2) FT-1 Test Switch, 129A501G01

WORKSCOPE: SWITCHGEAR #3 DOORS, FREEMAN SUBSTATION

- (3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp

- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT

- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks

(1)MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (2) FT-1 Test Switch, 129A501G01

WORKSCOPE: SWITCHGEAR #4 DOORS, FREEMAN SUBSTATION

- (3) FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate

- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw

- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks
- (1)MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (4) FT-1 Test Switch, 129A501G01

WORKSCOPE: SWITCHGEAR #5 DOORS, FREEMAN SUBSTATION

- (3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200(2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch

- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks

(1)MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (4) FT-1 Test Switch, 129A501G01

WORKSCOPE: SWITCHGEAR #6 DOORS, FREEMAN SUBSTATION

- (3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks
- (1)CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks

- (1) MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (4) FT-1 Test Switch, 129A501G01

WORKSCOPE: SUBSTATION AUTOMATION SYSTEM (SAS UPGRADE), FREEMAN SUBSTATION

- (1) GPS clock with modulated IRIG:125VDC Arbiter Systems 1093B OPT10, 34,92, 92
- (1) GPS Antenna Mounting Kit: Arbiter System AS0044600
- (1) Fuse Blocks: Weidmuller 297520000
- (1) Novatech ORIONLX-A12-B0-C3-G1ENET-HVHV-IHV-01-03-04-14-42-44-47-81-82-94
- (1) Novatech DDIO: SER-G-WR-110-HV-42-RACK
- (1) Ethernet Switch: Ruggedcom RSG2100-R-RD-HI-HI-FX01-FX01-TX01-TX01-CG01-1CG01-TX01-TX01-TX01-TX01-xx
- (1) Patch Panel Corning Model no PCH04U (The fiber patch panel installation will be performed by RPU crew)

Springs Substation will be the next substation to be completed in the scope of work. Similar to Freeman, the first step for Springs Substation would be to schedule our engineering site visits. We will gather all of the final details and needed to complete our design. Our field personnel would be accompanied by Factory Engineers, Power System Engineers and our in-house Substation Automation team.

After the first site visit is complete, engineering will provide a submittal package to COR for review and approval. Once returned, the complete BOM will be released for fabrication. Following the release to fabrication, the outage schedule will be presented to the COR for review and approval.

The scope of work at Springs includes upgrading two (2) walk-in switchgear (SWGR 1 and SWGR 2). The scope will include replacing all electromechanical protective and control relays with SEL relays as noted in Table 3 for SWGR 1 and SWGR 2. Add new Substation Automation (SAS) for SWGR 1 per the requirement of section 4.2.6.

Below is high-level draft of the sequence of events that will occur after the complete BOM is shipped and received:

- Inventory Review with engineering, project management and our contractor.
 We will spend several days reviewing the shipped BOM to ensure everything
 matches the drawings and all materials have been shipped complete. BOM
 will be sorted into complete assemblies per switchgear cell and staged in
 shipping containers at the job site prior to the first scheduled outage.
- 2. Prior to the first outage, our lead FSRs will schedule a safety review meeting with the COR substation department to discuss site safety, MOP, LOTO and any other additional details related to performing the scope of work.
- 3. The first major stage of construction will be the removal of the existing doors and wiring at Springs Substations 1 & 2. We would then handle complete removal and disposal of the existing. This portion will be supervised by Schneider Electric with the bulk of the labor being completed by Pacific Industrial Electric.
- 4. Next, the new prefabricated doors will be installed and wired along with the new SAS.
- 5. The final phase will be performing full testing/commissioning all new equipment and devices installed. Function testing will completed on all SEL devices, all components in prefab doors will be tested along with the SAS. The final commissioning will be a joint effort between Schneider Electric and COR.

Below is the complete BOM that will be supplied and installed at Springs Substations 1 & 2.

WORKSCOPE: SWITCHGEAR #1 DOORS, SPRINGS SUBSTATION

(3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch . w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1) CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1) TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1) MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks

(1) MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks

WORKSCOPE: SWITCHGEAR #2 DOORS, SPRINGS SUBSTATION

- (3)FEEDER UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01

- (2) FT-1 Test Switch, 714B325G32
- (1) Amber LED Indicating Lamp
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1)CAPACITOR UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (6) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch LOR, 78PB05MR
- (2) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Electroswitch 24PA202LT switch
- (1) Misc slide-link terminal blocks

(1)TXFR BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B switch w/nameplate
- (1) Satec PM172N-P-U-5-ACDC-00 meter
- (1) Misc slide-link terminal blocks

(1) MAIN INCOMING UNIT DOOR REPLACEMENT; BOM EACH:

- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 0351S7X3D4G5461
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor

- (1) Transformer Mounted Bushing CT
- (5) FT-1 Test Switch, 129A501G01
- (2) FT-1 Test Switch, 714B325G32
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Red LED Indicating Lamp
- (1) Electroswitch 24PA202MT switch
- (1) Electroswitch LOR, 78PB05MJ
- (1) Misc slide-link terminal blocks
- (1) MAIN BUS TIE UNIT DOOR REPLACEMENT; BOM EACH:
- (1) New, Replacement Cell Door, utilizes existing hinges and hardware
- (1) SEL Relay, 03522132551X4XX
- (1) SEL Relay, 751A01ACACA74850200
- (2) Fiber Optic Loop Cables
- (1) Fiber Optic Point Sensor
- (1) Electroswitch 24202B, transfer sw
- (1) SATEC PM172N-P-U-5-ACDC-00 Meter
- (1) Misc slide-link terminal blocks
- (1) AUXILLIARY SECTION DOOR REPLACEMENT; BOM:
- (1) SEL Relay, 0387XXXXX
- (2) FT-1 Test Switch, 129A501G01

WORKSCOPE: SUBSTATION AUTOMATION SYSTEM (SAS UPGRADE), SPRINGS SUBSTATION

- (1) GPS clock with modulated IRIG:125VDC Arbiter Systems 1093B OPT10, 34,92, 92
- (1) GPS Antenna Mounting Kit: Arbiter System AS0044600
- (1) Fuse Blocks: Weidmuller 297520000
- (1) Novatech ORIONLX-A12-B0-C3-G1ENET-HVHV-IHV-01-03-04-14-42-44-47-81-82-94
- (1) Novatech DDIO: SER-G-WR-110-HV-42-RACK
- (1) Ethernet Switch: Ruggedcom RSG2100-R-RD-HI-HI-FX01-FX01-TX01-TX01-CG01-1CG01-TX01-TX01-TX01-TX01-xx
- (1) Patch Panel Corning Model no PCH04U (The fiber patch panel installation will be performed by RPU crew)

OPTIONAL PRICING

Schneider Electric Services would like to propose the following options:

1. The existing Allis Chalmers FC-500 circuit breakers in Freeman Substation to be retrofilled are currently lever-in type breakers. Schneider Electric Services is offering a deduct to provide lever-in type breakers. This would eliminate the need for modifying the cells with the screw type mechanism. In addition, we can provide a quotation upon request for providing a remote racking device to remove these breakers.

The deduct price for this option is: \$52,000

2. During the job walk, it was observed that some of the bus insulation and bracing in the cells to be retrofilled has deteriorated and we recommend it be replaced. Schneider Electric Services is offering

the following adder to replace the bus insulation and bracing in both Mt. View and Freeman.

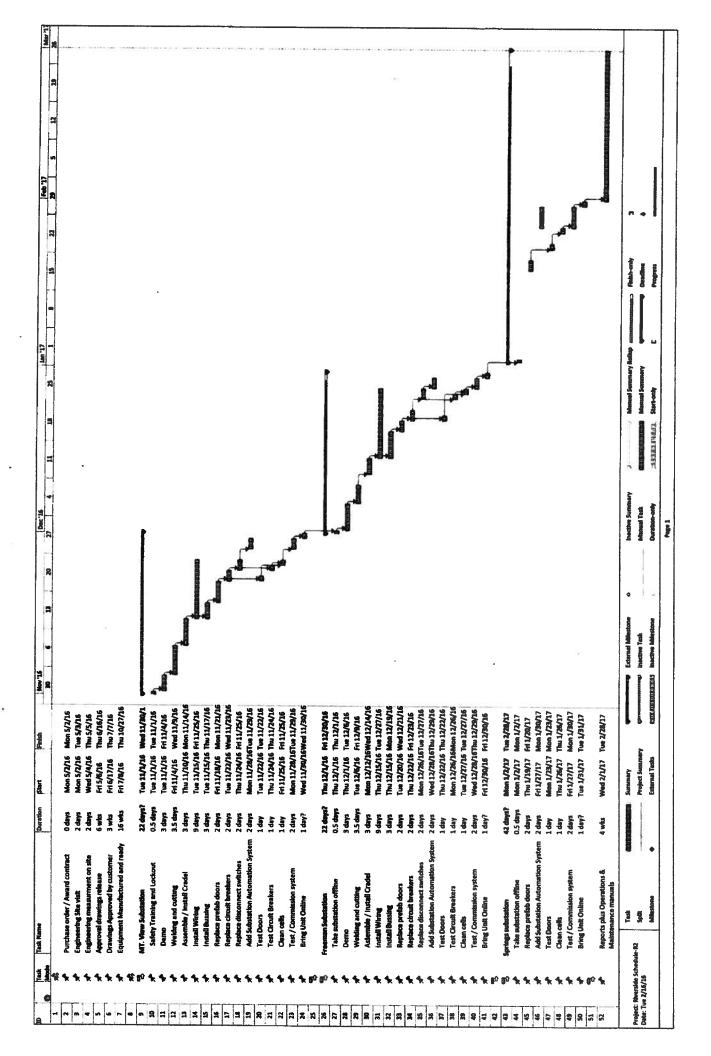
Total Price for Mt. View (13 breaker cells) \$85,500 Total Price for Freeman (13 breaker cells) \$85,500

> Project Schedule

Project Management

Our team of highly qualified and experienced Project Managers offers their expertise in the project's Initiation, Planning, Execution, Monitoring & Control as well as closing phases. The Schneider Electric services Project Manager will be the single point of contact for the duration of the project who will be responsible for the overall project delivery, customer satisfaction and timely completion.

The detailed project schedule will be developed by leveraging all pertinent Subject Matter Experts from the several internal Schneider Electric departments and business units - including - services engineering, services operations, power systems engineering, any Schneider Electric sub-contractors, accounting, finance, contracts etc. The PM will utilize the vast knowledge base of technical, engineering, manufacturing and supply chain experts to help us develop the overall project schedule in collaboration with the customer to plan the outages and scope of work to be executed during the limited outage times. The PM will use qualitative and quantitative risk analysis to evaluate and help mitigate any risk associated with the project's schedule. The PM will closely monitor the progress of the project through regularly scheduled project meetings to ensure the project's progress is on track as compared with the Project Development Plan. We are confident that through meticulous planning, thorough monitoring and periodic controls, we will be able to complete the project within the 360 day schedule constraint.



Previous Retrofill Projects

*Customer contact information is available upon request. Due to the sensitivity of this information and the potential for this bid to be posted publicly, we have decided to refrain from posting additional sensitive information such names, phone numbers or email addresses of our customers. We hope you can respect this decision.

1. Customer: Nuclear Logistics Inc.

1.1. Location: Fort Worth, TX 1.2. Project Date: Jan 2015 1.3. Contract Value: 220K

1.4. Description: Retrofill MV Project – Provided Circuit Breaker Direct Replacements

2. Customer: Talen Energy - Colstrip

2.1. Location: Colstrip, MT

2.2. Project Dates : Dec 2013 - Dec 2015

2.3. Contract Value: 4.2M

2.4. Description: MV GE Magne-Blast Retrofill Project - Provided and Installed Retrofills GE Breakers for substations. Converted cells from Vertical racking to Horizontal. AF Study and Arcterminator included as well as relay upgrades. A portion of the total value also included LV breaker replacements.

3. Customer: Public Service New Mexico

3.1. Location: Albuquerque, NM

3.2. Project Dates : Dec 2013 - Nov 2015

3.3. Contract Value: 3.2M

3.4. Description: MV Retrofill Project. Provided and Installed GE, Westinghouse, FPE, and Allis Chalmers roll-in replacements Breakers. Turn-key project also included asbestos mitigation at all substations.

4. Customer: NSTAR Electric Utility

4.1. Location : Dorchester, MA

4.2. Project Dates: Oct 2013 - Nov 2014

4.3. Contract Value: 1.1M

4.4. Workscope: Retrofill MV Project – Provided and installed Breakers consisting of replacement for Cutler Hammer/ Westinghouse breakers for several substations. Installed Remote racking motors and limiting relay assemblies.

5. Customer: NSTAR Electric Utility

5.1. Location: Dorchester, MA

5.2. Project Date: May 2013

5.3. Contract Value: 686K

5.4. Description: MV Retrofill Project – Provided and Installed Breakers consisting of replacement for ITE/ABB Breakers.

6. Customer: Ford Research & Engineering

6.1. Location : Dearborn, MI

6.2. Project Dates: Jun 2012

6.3. Contract Value: 323K

6.4. Description: MV Retrofill Project – Supplied and Installed direct vacuum replacements circuit breakers for GE Type 1200A and 2000A.

7. Customer: Duke Energy

7.1. Location: Cincinnati, OH

7.2. Project Date: Jun 2012 - Mar 2013

7.3. Contract Value: 1.1M

7.4. Description: MV/LV Retrofill Project Swgr, Breakers and SEL Relays. Supplied and installed all necessary components to connect to the existing system. This involved removal of existing sections and installation of redesigned bus, barriers, cradle assy, SEL relays and breakers.

8. Customer: Union Electric

8.1. Location: Saint Louis, MO

8.2. Project Dates : Jan 2011 - Dec 2013

8.3. Contract Value: 1.3M

8.4. Description: MV Retrofill Project - Provided and Installed GE Breakers, SEL Relays, Bus design and upgraded and installed all necessary components into the existing gear.

9. Customer: Kimberly Clark MFG

9.1. Location: Neenah, WI 9.2. Project Date: Mar 2013

9.3. Contract Value: 280K

9.4. Description: MV Retrofill Project - Provided and installed 1200A direct replacement breakers consisting of replacements for Siemens Allis breakers.

10. Customer: MillerCoors Brewing Company - Multiple Projects

10.1. Location: Irwindale, CA

10.2. Project Dates : April 2013 - Nov 2015

10.3. Contract Value: 1.7M

10.4. Description: Facility Grounding/Engineering Study, Turnkey Medium Voltage (15kV) Breakers, Virtual Main (arc mitigating) installation, LV Breaker Retrofill, Metering Upgrade

11. Customer: AMGEN Biotech - Multiple Projects

11.1. Location: Thousand Oaks, CA

11.2. Project Dates: 2012 - 2015

11.3. Contract Value: 1.75M

11.4. Description: LV Retrofill Project on 60ea Breakers. AF Study, metering and CT replacement.

12. Customer: Eugene Electric Utility - EWEB

12.1. Location: Portland, OR

12.2. Project Dates : Dec 2014 - Current

12.3. Contract Value: 2.3M

- 12.4. Description: MV Retrofill Project Turn-key 15kV Breaker roll in replacement of GE, Westinghouse, ITE, McGraw Edison, and Siemens Allis breakers in multiple substations.
- 13. Customer: San Diego Gas & Electric
- 13.1. Location : San Diego, CA
- 13.2. Project Dates: Oct 2015
- 13.3. Contract Value: 330K
- 13.4. Description: MV Retrofill Project Supplied 15ea direct vacuum replacements circuit breakers for 15kv 2000A current production model ABB Breakers.

14. Customer: Digital Trust Reality

- 14.1. Location: Santa Clara, CA
- 14.2. Project Dates: Aug 2015
- 14.3. Contract Value: 340K
- 14.4. Description: MV Retrofill Project of existing Eaton Switchgear Supplied and Installed 6ea 15kV 1200A Breakers

15. Customer: Verizon Terremark LV Retrofill

- 15.1. Location: Miami, FL
- 15.2. Project Dates: Jun 2014
- 15.3. Contract Value: 1.4M
- 15.4. Description: LV Retrofill Project Phase 1 & 2. 46ea Masterpact Breaker Retrofills

16. Customer: Ford Research & Engineering Job No.31180184

- 16.1. Location : Dearborn, MI
- 16.2. Project Dates : Jun 2012
- 16.3. Contract Value: 323K
- 16.4. Description: MV Retrofill Project Supplied and Installed direct vacuum replacements circuit breakers for GE Type 1200A and 2000A.

Previous Turnkey Projects

17. Customer: PPG Paints

17.1. Location: Fresno, CA

17.2. Project Dates: Dec 2015

17.3. Contract Value: 4.8M

17.4. Workscope: MV Turnkey - 15kV utility substation. New

transformer, breaker replacements and metering

18. Customer: VA Hospital Portland

18.1. Location: Portland, OR

18.2. Project Dates: Aug 2014

18.3. Contract Value: 6.6M

18.4. Workscope: MV Turnkey - 15kV Switchgear, generator replacement

19. Customer: Snake River Electric

19.1. Location: Walla Walla, WA

19.2. Project Dates: Dec 2012

19.3. Contract Value: 4.3M

19.4. Workscope: MV Turnkey - 480V & 5kV switchgear and

generator replacement at 3 Hydro sites

20. Customer: Targa Gas Resources - Houston

20.1. Location: Houston, TX

20.2. Project Dates: Mar 2014

20.3. Contract Value: 450K

20.4. Workscope: HV Turnkey- 161kV Substation

21. Customer: PGW Meadville Job No. 36065910

21.1. Location: Cochranton, PA

21.2. Project Dates : Dec 2014 - Sept 2015

21.3. Contract Value: 2.4M

21.4. Workscope: MV Turnkey - Provided and Installed MCC buckets, Bus in existing 12.47kV outdoor substations and

transformers. Repaired Breakers and installed and tested AC-Pro Trip units.

22. Customer: Cargill Manufacturing

22.1. Location: Port Allen, LA

22.2. Project Dates: Jun 2014

22.3. Contract Value: 3.4M

22.4. Workscope: Engineer Procure Construct – 34.5kV Substation

23. Customer: Ford Livonia Transmission Plant Job No.33943558

23.1. Location : Livonia, MI

23.2. Project Dates: Sept 2013 - Dec 2015

23.3. Contract Value: 2M

23.4. Workscope: MV/LV Turnkey – Upgraded switchgear from 3200A to 4000A and provided new cap banks and Masterpact circuit breakers.

24. Customer: Grant PrideCo Oil Well Drilling Substation

24.1. Location : Houston, TX

24.2. Project Dates: Aug 2013

24.3. Contract Value: 3.7M

24.4. Workscope: Turnkey Project – EPC new 138kV substation.

25. Customer: Consolidated Edison Co of NY

25.1. Location: Harrison, NY

25.2. Project Dates: Mar 2014

25.3. Contract Value: 3.35M

25.4. Workscope: Turnkey Project – 42ea 15kV 1200A & 3000A Breakers. Supplied and installed Switchgear, Retrofills for customers' 63kA fault duty.

26. Customer: Cincinnati Children's Hospital

26.1. Location: Cincinnati, OH

26.2. Project Dates: Mar 2014 - Oct 2015

26.3. Contract Value: 3.8M

26.4. Description: MV/LV Turnkey Project – Provided and Installed the entire medium and low voltage distribution system.

27. Customer: Tenaris Pipe Manufacturing

27.1. Location: Bay City, TX

27.2. Project Dates : Aug 2014 - Dec 2015

27.3. Contract Value: 6.5M

27.4. Description: Turnkey Project – Provided and Installed MV/LV Switchgear and Transformers for a new secondary substation. New 34.5kV EPC Substation.

28. Customer: Koch Pipeline - Various MV & LV Substations

28.1. Location : Houston, TX

28.2. Project Dates : Jun 2012 - Dec 2015

· 28.3. Contract Value: 6.4M

28.4. Description: Turnkey Project – EPC of new 15kV & 480V substations, substation upgrades

29. Customer: Invista Houston - Various MV & HV Substations

29.1. Location: Houston, TX

29.2. Project Dates : Mar 2012 - Nov 2015

29.3. Contract Value: 10.64M

29.4. Description: Turnkey Project – EPC of new 15kv & 69kV substations, substation upgrades.

Technical Clarifications

- 1. Equipment that is not described in the proposal is excluded and assumed installed and provided by others
- 2. Hot work (welding and cutting) will be part of the demolition and assembly process for the proposed switchgear upgrades.
- 3. A complete power outage, including lockout /tag-out and grounding of entire switchgear line-up being retrofilled is required.
- 4. On retrofilled GE AM breaker sections, potheads will be removed. Potheads will not be provided for power cable terminations of the retrofilled cells.
- 5. The proposed direct replacement breakers are designed for total interchangeability with Allis Chalmers OEM breakers & and associated breaker cells. If cells have been modified to affect this interchangeability, customer may be responsible for additional charges to modify the cells to original OEM configuration.
- 6. Retrofill modifications of Freeman switchgear 3 & 4 consist of converting "lever in" racking to "screw in" racking.
- 7. Modifications to drawings per table in RFP No 1564 section 4:4.3 are based on existing AutoCad drawings being provided. If AutoCad drawings are not provided, any modifications will be marked up by hand on paper copies, or new drawings can be provided and invoiced in accordance with the man-hour rate of Schneider Electric Services USA Inc. Electric Services USA Inc. in force at the date of the execution of the project.
- 8. The rework requests, modifications of the Customer's schemes, drawings, functional description which do not concern the specifications and/or the description of our technical offer shall be invoiced in accordance with the man-

- hour rate of Schneider Electric Services USA Inc. in force at the date of the execution of the project.
- 9. Fiber Optics and the patch panels for the SAS are supplied, mounted and configured (if needed) by others
- 10. The electrical engineering scope includes no additional equipment either on the utility side or load side of the equipment being modified
- 11. The following items for the SAS are considered out of the scope of this proposal. This is an extended list but is not limited. The scope of supply is understood as the supply and services described clearly in BOM.
- a) Supply, installation and connection of cables outside the Control Panel (power, control, optic fiber communication and alarm cables);
- b) Marshalling panel;
- c) 125V DC power System, AC/DC Converter, UPS System;
- d) Archive System, Historian Server;
- e) Router, Firewall;
- f) Training;
- g) Special Tools such as Laptop;
- h) Spare Parts; Upon request, Schneider Electric Services USA Inc. Electric can provide a list of recommended spare parts.
- i) Any modification, integration, equipment or service to upper level;
- j) Integration of any equipment not listed in our proposal;
- k) Gateway to connect with other SCADA System or DCS
- 1) Equipment, material and services not described in our Technical Offer;
- 12. Room Layout Drawings to be Plan View only and will limited to the rack and adjacent equipment only.
- 13. The electrical engineering scope includes no additional equipment either on the utility side or load side of the equipment being modified.
- 14. No civil / structural engineering support is provided in this scope.
- 15. Major deviations from the above scope of work may require a change to the amount quoted. Such deviations will be brought to the attention of SE / RPU within 48 hours of being recognized.

- 16. This proposal is based on a general industrial working environment; any site specific environmental hazards that require special PPE or training are not within the scope of this proposal.
- 17. Customer must provide free and clear access to perform the above work. There will be additional charges for customer delays and for additional trips to the site as a result of work cancellation/reschedule.
- 18. Prior to the commencement of work, the facility management must advise employees that hazardous work will be taking place. Areas in which our personnel are working must be restricted to "qualified" personnel only.
- 19. Change in services due to additional electrical equipment and devices not included in original scope will require a negotiated change order. Approval time on inclusion of out of scope devices is critical in order to avoid re-mobilization charges. We will notify the facility of any out of scope devices within one business day of discovery, the facility will have 48 hours to notify SEES in writing of their intentions to expand the scope to include the additional equipment without incurring re-mobilization charges.
- 20. A specification for the coordination study was not provided in the RFP. The study will be performed based on Schneider Electric Services USA Inc. Electric Engineering Services standard specification. Pricing changes may be required if an alternate specification is provided.
- 21. This proposal does not include development of project drawings.
- 22. This proposal does not include onsite data collection. Any required system data
- 23. The scope of the coordination study will not extend beyond equipment shown on one-line diagrams provided with RFP 1564..
- 24. This proposal is based on a general industrial working environment; any site specific environmental hazards (asbestos, confined spaces... etc) that require special PPE or training are not within the scope of this proposal.
- 25. Pricing based on Riverside providing 30% design templates. 30% Drawings Design package to be provided by Owners Engineer.
- 26. Pricing for new SWGR at Mtn. View 3-4 is based on the specification provided for Casa Blanca. Pricing will be subject to change based on any Deviations from this specification
- 27. Substation Commissioning to be completed by COR with technical site

assistance and troubleshooting to be completed by Schneider Electric

- 28. Systems Studies, Short-circuit, Coordination, Relay Settings Files, RDB Files, SAS System Setting all to be provided by COR.
- 29. SAS Systems to be programmed, tested and commissioned by COR. Schneider Electric will provide the components listed in the proposal above and install and wire.
- 30. Riverside to provide existing Aspen Model. Schneider Electric will modify existing model to incorporate all new devices additions we are supplying.
- 31. Complete SAS BOM is as follows:

	Base Price	
	1x GPS clock with modulated IRIG:125VDC- Arbiter Systems 1093B OPT10, 34,92, 92	
	1x GPS Antenna Mounting Kit: Arbiter System AS0044600	
	1x Fuse Blocks: Weidmuller 297520000	
	1x Novatech OrionLX-A12-C3-G1-ENEN-IHV-HV-IV-01-03-04-14-42- 44-47-81-94	5
	1x Novatech DDIO: DDIO-SER-G-WR-110-HV-42-RACK	
	1x Ethernet Switch: Ruggedcom RSG2100-R-RD-HI-HI-FX01-FX01-TX01-TX01-CG01-1CG01-TX01-TX01-TX01-TX01-xx	
	1x Patch Panel - Coming Model no PCH-04U	
2	1x Novatech OrionLX-A12-C3-G1-ENEN-IHV-HVHV-01-03-04-14-42- 44-47-81-94	1
3	1x Rack enclosure (HxWxD: 1000mm x 600mm x 600mm)	5
4	Optional: 1x DA Logic: code 82 - Enables Orion to act as a Distribution Automation (DA) controller.	6

Contractual Clarifications

- 1. A copy of the Professional Consultant Services Agreement Appendix A with Schneider Electric Services marked-up comments follows below.
- 2. Project is based on Schneider Electric Standard Terms and Conditions. (copy attached)
- 3. This proposal is valid for 90 Days after proposal deadline of Feb.16, 2016.

> Proposer's Non-Collusion Declaration

Appendix F.- Proposer's Noncollusion Declaration

RFP-1564

The understand declares

NONCOLLUSION DECLARATION TO BE EXECUTED BY PROPOSER AND SUBMITTED WITH PROPUSAL

I am the <u>Publishment</u> of <u>Sinting Tourish</u>, the party making the foregoing proposal. The proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The proposal is genuine and not collusive or sham. The proposer has not directly or indirectly colluded, conspired, connived, or agreed with any proposer or anyone else to put in a sham proposal, or to refrain from proposing. The proposer has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price of the proposer or any other proposer or to fix any overhead, profit, or cost element of the proposal price, or of that of any other proposer. All statements contained in the proposal are true. The proposer has not, directly or indirectly, submitted his or her proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative therefor, to any corporation, partnership, company, association, organization, proposal depositiony, or to any member or agent thereof to effectuate a collusive or sham proposal, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a proposer that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the proposer.

I declare under penalty of perjury of the laws of the State of California that the above information is true and correct and that this declaration is executed on 2/03/16 (date) at All Dicap (city),

[Alifo Aif (state).

Title: SENICE GALES ENGINEEL

Medium Voltage Switchgear Upgrade Project

ADDENDUM NO.1

01/12/2016

Refer to the attached pages for any questions/changes.

***ACKNOWLEDGEMENT OF THIS ADDENDUM IS REQUIRED. Please acknowledge alladdends manually by signing and scanning each addendum cover pages. Do not forget to add the signed copies onto your disc submittals as part of your final submittal before the deadline. All addends cover pages should be signed and submitted on the same disc as the final submittal. Fallure to acknowledge an addendum, unless the requirement to acknowledge has been waived, will immediately cause your submittal to be deemed non-responsive.

Authorized Signature USS Uing (Sign here to acknowledge receipt of this addendum)

Medium Voltage Switchgear Upgrade Project

ADDENDUM NO. 2

01/22/2016

Refer to the attached pages for any questions/changes.

*** ACKNOWLEDGEMENT OF THIS ADDENDUM IS REQUIRED. Please acknowledge all addenda manually by signing and acanning each addendum cover pages. Do not forget to add the signed copies onto your disc submittals as part of your final submittal before the deadline. All addends cover pages should be signed and submittad on the same disc as the final submittal. Failure to acknowledge an addendum, unless the requirement to acknowledge has been waived, will immediately cause your submittal to be deemed non-responsive.

Authorized Signature COSS Ciny (Sign here to acknowledge receipt of this addendum)

Medium Voltage Switchgear Upgrade Project

ADDENDUM NO. 3

02/02/2016

Refer to the attached pages for any questions/changes.

***ACKNOWLEDGEMENT OF THIS ADDENDUM IS REQUIRED. Please acknowledge all addends manually by signing and scanning each addendum cover pages. Do not forget to add the signed copies onto your disc submittats as part of your final submittal before the deadline. All addends cover pages should be signed and submitted on the same disc as the final submittal. Fallure to acknowledge an addendum, unless the requirement to acknowledge has been waived, will immediately cause your submittal to be deemed non-responsive.

Authorized Signature (Sign here to ackn ledge receipt offitis addendum)

Medium Voltage Switchgear Upgrade Project

ADDENDUM NO. 4

02/05/2016

***ACKNOWLEDGEMENT OF THIS ADDENDUM IS REQUIRED. Please acknowledge all addends manually by signing and scanning each addendum cover pages. Do not forget to add the signed copies onto your disc submittals as part of your final submittal before the deadline. All addends cover pages should be signed and submitted on the same disc as the final submittal. Failure to acknowledge an addendum, unless the requirement to acknowledge has been waived, will immediately cause your submittal to be deemed non-responsive.

Authorized Signature (Sign here to acknowledge receipt of this addendum)

> Schneider Electric Terms and Conditions

The work described in this proposal has been submitted based upon the attached Schneider Electric USA, Inc. - Services Terms and Conditions of Supply and Performance or the existing terms and conditions of the pending project as mutually agreed upon between the City of Riverside and Schneider Electric.

Thank you for the opportunity to provide this proposal to the City of Riverside. If you have questions regarding the contents of this proposal or need additional information, contact me at 619-415-2700 or ross.king@schneider-electric.com. I look forward to the possibility of working with you in the

near future. Sincerely,

SCHNEIDER ELECTRIC SERVICES

Ross King Service Sales Engineer

Attachments:

Schneider Electric USA, Inc. - Services Terms and Conditions

Confidential: This quotation is for the exclusive use of the City of Riverside and is not intended for distribution to an outside party.

1.0 DEFINITIONS

1.1 Schneider Electric USA, Inc. - Services shall be known and referred to herein as "SEUSA".

1.2 The term "Quotation" shall be employed herein to refer to the complete offer of SEUSA, including commercial and technical section, and shall be subject to these Terms and Conditions of Supply and Performance, which are deemed incorporated unless specifically stated otherwise.

1.3 The term "Equipment" shall be applied to any equipment, materials, parts or supplies that shall be provided by SEUSA as a part

of the Quotation.

2.0 TERMS AND CONDITIONS OF SALE

2.1 SEUSA hereby gives notice of its objection to any different or additional terms and conditions, except for any such terms and

conditions as may be expressly accepted in writing.

2.2 Unless different or additional terms and conditions are stated or referred to in the Quotation, in which event such different or additional terms and conditions shall be exclusive to the particular subject covered, these terms and conditions supersede any prior or contemporaneous agreements or correspondence between the parties. No form provision of purchaser shall be of any force or effect.

3.0 QUOTATIONS

3.1 The Quotation shall be valid for thirty (30) days from the date of issue, unless specifically stated otherwise in the Quotation.

3.2 The Quotation shall be based solely on the bid documents. The bid documents are the drawings, specifications and/or instructions of the purchaser, as modified by agreement or SEUSA objection. Significant deviations between the actual conditions and circumstances of the work and those specified in the bid documents shall be just cause for an appropriate adjustment in work scope, price and time allowed for performance.

4.0 INVOICING, PAYMENT AND CANCELLATION

4.1 Unless specifically noted otherwise in the Quotation, all prices quoted are 'NET", without any discount, and are firm for the period

through the completion of the work.

4.2 SEUSA may invoice purchaser monthly for all work performed, and for all equipment delivered to the job site or to an off-site storage facility. Purchaser may delay the work, for a period not to exceed 45 days, by giving notice to SEUSA, and purchaser shall pay for all work prior to the delay, and will pay all costs incurred by SEUSA as a result of such delay. SEUSA will be entitled to an increase in the time of performance equal to the delay and a reasonable time necessary to accommodate conditions created by the delay. If such delay results in increased costs to SEUSA, or a general price increase of SEUSA occurs during the delay, SEUSA shall be entitled to an adjustment in the contract price, unless such delay is attributable to an action or inaction by SEUSA, then such additional costs or contract increase shall not apply.

4.3 Terms of payment are net upon receipt of invoice. All past due accounts will be charged interest at the rate of 1% per month,

4.4 If, in the opinion of SEUSA, the financial condition of the purchaser at the time the work is ready to be performed, or the equipment is ready for shipment does not justify the terms of payment specified, SEUSA may require payment in advance or other adequate

assurance of performance.

4.5 In the event of the insolvency, bankruptcy or default of the purchaser, SEUSA shall be entitled to cancel any outstanding contract, to receive reimbursement for its reasonable and proper cancellation charges, and to retain possession of equipment repaired or serviced under the contract until the charges for the services have been paid. If the charges are not paid within ninety (90) days of the completion of the work and involcing to purchaser, SEUSA shall be entitled to sell the repaired or serviced equipment at a public or private sale, upon written notice to the purchaser.

4.6 Purchaser shall not back charge SEUSA, or offset against SEUSA involces, for any costs or expenses, without the express

written consent of SEUSA.

4.7 Customer may terminate any purchase order on 20 days written notice to SEUSA and payment of reasonable cancellation charges of SEUSA. Cancellation charges shall include time and expenses incurred at applicable rates, charges incurred from third parties as a result of such termination, and equipment re-stocking charges equal to Square D usual and customary restocking charges to its distributors. A \$450 minimum charge will apply to any services cancelled within 48 hours of the date service was scheduled to commence.

4.8 SEUSA shall have the right to suspend affected services pending resolution of disputes. All remedies of SEUSA are cumulative,

and in addition to remedies available at law or in equity.

5.1 Prices are subject to change without notice. Price adjustment clauses will be stated at the time of quotation and a copy will be included as part of the Quotation.

6.1 The minimum billing for services performed on a single order will be four (4) hours charged at the applicable rate, but not less than \$450. The minimum billing for equipment supplied on a single order will be \$100, or such larger amount required by any affected third party vendor.

7.0 DELIVERY - RISK OF LOSS

7.1 Unless otherwise stated in the Quotation, all transportation costs shall be for the account of the purchaser and shall be added to the invoice. Equipment furnished by SEUSA, and purchaser's equipment repaired by SEUSA, shall be delivered to the purchaser F.O.B. SEUSA's Service Center. The purchaser shall deliver equipment to be repaired F.O.B. SEUSA's Service Center. Title to and risk of loss or damage to any equipment furnished by SEUSA under the contract shall pass to the purchaser F.O.B. SEUSA's Service Center.

8.0 LAWS, REGULATIONS, PERMITS, LICENSES AND LOCAL ORDINANCES

8.1 The purchaser shall inform SEUSA of any special laws, regulations, or ordinances that the purchaser may be aware of and which shall affect the performance of the work or the supply of the equipment.

8.2 Unless specifically noted elsewhere in the Quotation, the purchaser shall be responsible for securing any and all licenses and/or permits, whether temporary or permanent in nature, required for the performance of the work.

8.3 SEUSA will be entitled to a reasonable adjustment in the contract price or time of performance for significant changes in any of the laws, regulations, or ordinances governing the work or the equipment, which shall occur after the issuance of the Quotation and affect the time or cost of performance.

9.1 SEUSA warrants, to the extent to which any of the same may be applicable, that (a) any equipment furnished by it or any work done by it on the purchaser's equipment or both shall be free of defects in workmanship and materials, (b) any specialized tools, equipment and instruments for the use of which a charge is made to the purchaser shall be adequate for the work to be performed and (c) the engineering services performed by it will be competent and any recommendations of its representatives shall reflect

their best professional knowledge or judgment.

9.2 SEUSA shall, upon prompt written notice from purchaser, correct any failure to conform to any of the applicable foregoing warranties that may appear with a period of one (1) year after completion of the work, or shipment of the equipment, requiring correction under this warranty. Such repair or replacement shall be finalized, to the purchaser's satisfaction, within 6 months of prompt written notice from purchaser of the failure. Such correction may, in the case of item 9.1 above and the election of SEUSA, be limited to the repair or replacement F.O.B. SEUSA's Service Center, of the defective equipment furnished by it. In the case of any other breach of the foregoing warranty, SEUSA shall furnish services or specialized tools, equipment and instruments, to the same extent as on the original work. It is understood and agreed that unless otherwise agreed to in writing by SEUSA, SEUSA assumes no responsibility with respect to the suitability of purchaser's equipment. In no event shall SEUSA be responsible for providing working access to the defective parts

including the removal, disassembly, replacement or reinstallation of any equipment, materials or structures to the extent necessary to permit SEUSA to perform its warranty obligations, or transportation costs to and from the factory or repair facility, or for damage to equipment components or parts resulting in part from improper maintenance or operation of the equipment in a deteriorated condition. The condition of any tests shall be mutually agreed upon and SEUSA shall be notified of, and may be

present at all tests that may be made.

9.3 The above warranties do not apply to equipment that has a life, under normal use, inherently shorter than the one (1) year period Indicated above. On equipment not manufactured by Square D Company, SEUSA only extends the same warranty it receives from its supplier. SEUSA makes no warranties, express or implied with respect to such equipment and purchaser will look solely to the manufacturer for resolution of warranty issues.

9.4. SEUSA warrants that any engineering studies performed by it will conform to high professional standards. Any portion of the study that does not so conform shall be corrected by SEUSA upon notification in writing by purchaser within six (6) months after

completion of the study, as purchaser's sole remedy.

9.5 All warranty work shall be performed on a single shift straight time basis Monday through Friday. In the event that the product requires correction of warranty items on an overtime schedule, the premium portion of such overtime shall be for the purchaser's

- 9.6 THE FOREGOING WARRANTIES AND ANY ADDITIONAL WARRANTIES PROVIDED IN THE QUOTATION ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER STATUTORY, EXPRESS OR IMPLIED (INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE), EXCEPT OF TITLE AND AGAINST PATENT
- 9.7 The remedies provided above are the purchaser's sole remedies for any failure of SEUSA to comply with its obligations, unless SEUSA is unable to repair or replace the purchased equipment in accord with section 9.2 herein. Correction of any nonconformity in the manner and for the period of time provided above shall constitute complete fulfillment of all liabilities of SEUSA whether the claims of the purchaser are based in contract, in tort (including negligence) or otherwise with respect to or arising out of the work performed hereunder. IN NO EVENT SHALL SEUSA, BY REASON OF ITS WARRANTY OBLIGATIONS OR OTHERWISE, BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OF ANY KIND FROM ANY CAUSE, REGARDLESS OF THE BASIS OR FORM OF THE ACTION.

10.0 LIABILITY

10.1 Neither party shall be liable or responsible for loss, damage, injury, or delay caused by conditions beyond that party's reasonable control, including but not limited to a) acts of God, b) acts of government agencies, c) strikes, d) labor disputes, e) fire, explosions or other casualties funless caused or contributed to by the negligence or willful act of the party otherwise intended to be excused by this paragraph], f) thefts, g) riots, h) war, l) malicious mischief, or j) unavailability of repair material.

10.2 SEUSA shall have no liability under the Quotation for any injury, loss or damage caused directly or indirectly by any equipment

or system not specifically covered by the Quotation.

- 10.3 Notwithstanding anything to the contrary contained herein, and except as to claims for personal injury or tangible property damage or for failure to perform warranty service, the maximum liability of SEUSA to the purchaser for any claim, loss, damage or injury for which SEUSA may be liable pursuant to the terms and conditions of the Quotation or the work performed by SEUSA or the materials supplied by SEUSA, shall not exceed the price of the equipment or work on which such liability is based.
- 10.4 Unless otherwise agreed to in writing by a fully authorized representative of SEUSA, services and equipment proposed in the Quotation are not intended for use in, or connection with, a nuclear facility or activity. If so used, for whatever reason, SEUSA shall not be liable for any damage, injury or contamination arising out of the supply of any products hereunder or the providing of any services hereunder, and purchaser shall indemnify SEUSA against any such liability, whether as a result of breach of contract, warranty, tort [including negligence] or otherwise.

10.5 Notwithstanding anything to the contrary contained herein, and except as to claims for personal injury or tangible property damage or for failure to perform warranty service SEUSA, its contractors and suppliers of any tier, shall not be liable in contract, for loss of profits or revenue, loss of use of equipment or power system, cost of capital, cost of purchased or replacement power or temporary equipment (including additional expenses incurred in using existing facilities), claims of

customers of the purchaser, or for any special, indirect, incidental, or consequential damages whether based in contract or in tort, including negligence or strict liability.

11.0 TIME ALLOWED FOR PERFORMANCE

- 11.1 The time allowed for performance of the work shall be as specified in the Quotation. It shall commence upon the execution of the contract by the purchaser and SEUSA, and shall be deemed duly met if the work is substantially completed within the time allowed within the Quotation.
- 11.2 If the equipment to be furnished by SEUSA under the terms of the proposal shall become temporarily or permanently unavailable for reasons beyond the control and without the fault of SEUSA, then in the case of such temporary unavailability, the time for performance of the work shall be extended to the extent, thereof. In the case of permanent unavailability, SEUSA shall at purchaser's option either: (a) be excused from furnishing said equipment, or (b) be reimbursed by purchaser for the difference between the cost of the equipment unavailable and the cost of a reasonably available substitute thereof.
- 11.3 SEUSA shall not be liable for any delay in the performance of the work resulting from or attributed to acts or circumstances beyond SEUSA's reasonable control, including, but not limited to embargo or other governmental act, regulation, or request; accident; strike; slowdown; war; riot; delay in transportation; inability to obtain necessary labor, materials, or manufacturing facilities; acts of God; fire; and acts or ornissions of the purchaser, owner or other contractors or subcontractors, or delays caused by the suppliers or subcontractors of SEUSA.

12.0 TAXES

- 12.1 The price listed in the Quotation does not include any duties, levies, sales, use, excise, or other similar taxes, unless specifically noted otherwise within the Quotation.
- 12.2 Purchaser shall pay, in addition to the stated price, all taxes legally required to be paid by purchaser or, alternatively, shall provide SEUSA with valid tax exemption certificates.

13.0 OCCUPATIONAL SAFETY AND HEALTH

13.1 The parties hereto [SEUSA and purchaser, owners, representatives, employees, agents, contractors, subcontractors, heirs, and assigns] agree to notify each other immediately upon becoming aware of an inspection under, or any alleged violation of the Occupational Safety and Health Act, relating in any way to the project or project site.

EXHIBIT "B"

COMPENSATION

> Price Proposal

Sales Tax

Base price DOES NOT include sales tax.

Estimated Sales tax for **base bid** at 8% is \$168,000.00

*******If any options are selected (insulation upgrades, new SWGR, etc.) Sales tax is subject to change based on the taxable materials added into the final price.

Appendix D Cost Break-Down Sheet

SWGR	COST
Mountain View - SWGR 3	\$789,560.00
Mountain View - SWGR 4	\$919,380.00
Mountain View- SWGR 6	\$187,630.00
Freeman - SWGR 1	\$121,940.00
Freeman - SWGR 3-4	\$1,205,150.00
Freeman - SWGR 5	\$139,740.00
Freeman - SWGR 6	\$152,740.00

Project Optional Cost Break-Down

SWGR	COST
Springs - SWGR 1	\$254,700.00
Springs - SWGR 2	\$225,400.00

> Optional Pricing

Schneider Electric Services would like to propose the following options:

1. The existing Allis Chalmers FC-500 circuit breakers in Freeman Substation to be retrofilled are currently lever-in type breakers. Schneider Electric Services is offering a deduct to provide lever-in type breakers. This would eliminate the need for modifying the cells with the screw type mechanism. In addition, we can provide a quotation upon request for providing a remote racking device to remove these breakers.

The deduct price for this option is: \$52,000

2. During the job walk, it was observed that some of the bus insulation and bracing in the cells to be retrofilled has deteriorated and we recommend it be replaced. Schneider Electric Services is offering the following adder to replace the bus insulation and bracing in both Mtn. View and Freeman.

Insulation Only:

Total Price for Mt. View (3-4) +\$85,500

Total Price for Freeman (3-4) breaker cells) +\$85,500

Complete Bussing Replacement Option to also include transfer bus, main bus, section-to-section barriers, insulators, etc.

Total Price for Mt. View (3-4) +\$232,500.00

Total Price for Freeman (3-4) +\$248,000.00

3. Optional Complete Switchgear Replacement Adder from base Bid

Total Price for Mt. View (3-4) +\$378,760.00

Air Conditioning Cost Break-Down Sheet

SWGR	COST
Mountain View - SWGR 3	\$18,500.00
Mountain View - SWGR 4	\$18,500.00
Mountain View-SWGR 6	\$18,500.00
Freeman - SWGR 1	\$18,500.00
Freeman - SWGR 3-4	\$37,500.00
Freeman - SWGR 5	\$18,500.00
Freeman - SWGR 6	\$18,500.00

Project Optional Air Conditioning Cost

SWGR	COST
Springs – SWGR 1	\$18,500.00
Springs – SWGR 2	\$18,500.00

EXHIBIT "C" KEY PERSONNEL

> Key Project Personnel

Clint Bunce Field Service Rep.

Project Role:

Education:

N/A

Firm Affiliation: June 2003 -Present

Existing Employee: Prime

Training Course:

*VFD Troubleshooting, Repair Application and Train the Trainer *Low and Medium Voltage Switchboards/Circuit Breakers *Hospital Isolation Panels *Topaz UPS

Contact Information Email:

Olint.Bunce@schneiderelectric.com

Phone:

+1-714-566-6435



Project Team Member Resume

Summary

Clint Bunce is a FSR who has over 25 years experience performing startups, training, testing's, and commissioning of MV and LV Power Equipment. Extensive experience and knowledge with repairs and modification of Square D and other vendor's switchgear. 25 Plus year with the application repair, startup and training on variable speed motor controllers and AC Variable Frequency Drives.

Background

*Perform start-up and maintenance, inspect, test, and troubleshooting of low, medium and high voltage power distribution systems, including transformers, switchgear and circuit breakers, controls, protective relay systems and Powerlogic systems.

*Repair and modify switchgear

*Train on VFD,MV Switchgear,LV Switchgear,Motor Control Centers, Breakers and Protective Relays.



Gerardo Rivera Field Service Rep.

Project Role: **FSR**

Education:

BA in Electrical Engineering Grantham University (Current) Electrical Control Devices Tech. US Fleet Training Center

Firm Affiliation: July 2013 -Present

Existing Employee: Prime

Training Course:

- *Schweitzer Relay
- *Alternative Power Generation
- *Ground Fault Protection
- *Switchgear Functions
- *Electrical Distributions

Contact Information Email:

Gerardo.Rivera@schneiderelectric.com

Phone:

+1-714-360-7708



Project Team Member Resume

Summary

Gerardo Rivera is a FSR who has experience troubleshooting low, medium, and high voltage power distribution systems. He has interpersonal, communication and customer relationship skills.

Background

*Perform start-up and maintenance, inspect, test, and troubleshooting of low, medium and high voltage power distribution systems, including transformers, switchgear and circuit breakers, controls, protective relay systems and other critical power components.

*Switch gear and circuit breaker testing, instrument transformer testing, and power transformer testing/ various controls systems including auto-transfer switches and/ or schemes.

*Develop innovative solutions to more complex technical problems that arise during start-up Research. evaluate, and recommend new products or equipments upgrades that will meet the customer needs.

*Monitor and resolve recurring more complex problems to ensure ongoing customer satisfaction.

*Coach and mentor less experienced technicians, check the quality of their work, and help them diagnose and solve problems.



Ling H. Te Field Service Rep.

Project Role:

Education:

BS in Science, Electrical Eng. California State University

Firm Affiliation: June 2013-Present

Existing Employee: Prime

Training Course:

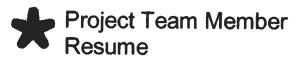
- *Electrical Distribution Systems
- *Ground Fault Protection
- *Schweitzer Relay
- *Short Circuit Calculations
- *Drop Voltage Calculations

Contact Information Email:

Ling.Te@schneiderelectric.com

Phone:

+1-714-566-6400



Summary

Ling H.Te is a FSR with extensive experience and knowledge of detail process instructions, policies and procedures. He has strong interpersonal, communication, and customer relationship skills. A self-starter who is well organized and attentive.

Background

*Perform acceptance, maintenance, start-up and commissioning on Square D products such as Medium Voltage Switchboard and distribution transformers.

*Testing electrical devices such as HVL, LV circuit breakers (Primary and secondary current injection), MV circuit breakers, instrument transformers (VT, CPT, CT), circuit monitors (metering).

*Testing modified differential ground fault system (MDFG) and retrofitting MDFG system and GF system.

*Basic knowledge and testing on protection devices such as Sepam Relays, Schweitzer Relays, and Vamp 321 relay (arc flash protection).

*Intermediate skills in control systems include control wiring in accordance to control and redline drawings, arc flash mitigation, and troubleshooting control wire Schemes.



Mathuri Latchman Field Service Rep.

Project Role: FSR

Education:

Prime Power, Electrical and Power Systems US Army

Firm Affiliation: March 2009 -Present

Existing Employee: Prime

Training Course:

- *Powerlogic and Troubleshooting
- *Advanced PZ4 and Masterpact
- *Ground Fault Protection
- *Sepam Startup and Troubleshooting

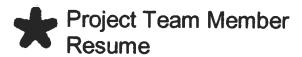
Contact Information

Email:

Mathuri.Latchman@schneiderelectric.com

Phone:

+1-714-227-2856



Summary

Mathuri Latchman is a FSR who has excellent electrical troubleshooting skills utilizing high voltage, medium voltage, and very attentive to detail. Through knowledge of diesel engine, electrical system, cable splicing (MV and HV) and air/hydraulic system repairs.

Background

*Perform maintenance, testing, adjustments and Repairs on the following Square D Schneider Electric Brand equipment:

*Masterpact Circuit breakers, Powerpact Circuit breakers, HVL Switches, Powerzone Switchgear, Power Cast Dry type transformers various sizes

*Install, repair, and network various current monitoring systems(CM2000 and CM4000)

*Install Repair and Test Modified Ground Fault Differential and Zero Sequence grounding protection systems

*Primary and Secondary Injection Test

*Program and install Model 98 temperature control systems and Sepam 20,40, and 80 series relays.



Michael Kersh Professional Engineer

Project Role: Staff Engineer

Education:

Bachelor of Science in Electrical Engineering

Washington State University

Professional Registration: Washington #35312

Existing Employee: Prime

Professional Organizations:

- *Board Member, Industrial Customers of NW Utilities
- *Technical Advisory Committee, Avista

Contact Information Email: Michael Kersh@schnelder-

Phone:

+1+509-279-9173

electric.com



Project Team Member Resume

Summary

Michael Kersh is a Staff Engineer with the Schneider Electric Engineering Services group. He has over 24 years of experience with large project management. design, and commissioning of industrial electrical power control, distribution, transmission systems as well as industrial process control systems. His past employment within industrial pulp, paper, aluminum plants as well as municipal water treatment plants makes him an invaluable resource for design.

Project Highlights

*700 Ton Per Day Newsprint Paper Machine: Lead engineer for 30MW electrical distribution system, process control systems, and instrumentation of \$100MM project including DC drive system, 11 motor control centers, VFDs, two substations including 13 transformers, PLCs, quality control system, power distribution human machine interface.

*Aluminum Sheet Coating Line: Commissioned DC drive system, Distributed Control System, Low Voltage motor controls, machine control PLC's, and instrumentation for \$40MM project.

*Kraft Paper Machine: Commissioned the \$100MM paper machine power system, including LV motor control and 13.8kV substation with 5 transformers Installed and commissioned a coordinated DC drive system. Programmed, installed and commissioned machine control PLCs, and induction disk style protective relays.



Raymond Winfield Field Service Rep.

Project Role:

Education:

Uninterruptable Power Systems, Troubleshooting US Air Force

Firm Affiliation: Feb.2004 -Present

Existing Employee: Prime

Training Course:

*AccuSine Startup and Troubleshooting

*ATV/61/71 Drive Commissioning and Applications

*Sepam Relay Startup and Troubleshooting

Contact Information Email: Raymond Winfield@schneide r-electric.com

Phone:

+1-714-513-1337



Summary

Raymond Winfield is a FSR who has experience troubleshooting and repairing low,medium,and high voltage power distribution systems. He has interpersonal, communication and customer relationship skills.

Background

*Perform start-up and maintenance, inspect, test, and troubleshooting of low, medium and high voltage power distribution systems, including transformers, switchgear and circuit breakers, controls, protective relay systems and other critical power components.
*Switch gear and circuit breaker testing, and power.

instrument transformer testing, and power transformer testing.

*Given drawings for switchgear and can troubleshoot wiring problems and issues.

*Performed mechanical inspections included checking dimensions of gear.CT polarity checks and ensuring breakers were installed properly.

*Operated switchgear to ensure PLC program is correct and matches customers approved sequence of operations.



Sean Morrissey Senior Field Service Rep.

Project Role: FSR

Education:

Engineer Battalion, Prime Power Electrical Specialist US Army

Firm Affiliation: Oct.2008-Present

Existing Employee: Prime

Training Course:

- *Sepam Startup and
- Troubleshooting
- *Ground Fault Protection
- *Powerlogic and TRE

Troubleshooting

See background for additional training

Contact Information

Email:

Sean.Morrissey@schneider-

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Phone:

+1-714-227-1306



Summary

Sean Morrissey is a Senior FSR with extensive experience and knowledge of detail process instructions, policies and procedures. He has strong interpersonal, communication, and customer relationship skills.

A self-starter who is well organized and attentive.

Background

*Training and experience include testing, troubleshooting and repair of low and medium voltage switchgear, circuit breakers, relays, drives, motor starters, transformers, ground fault systems, and remote operation systems.

OtherTraining

- *Grounds Systems Design and Testing
- *Electronics for Electricians
- *Cable Testing and Fault Location
- *Substation Maintenance I
- *Substation Maintenance II
- *Motorpact RVSS Start-up and Troubleshooting
- *Service Certification for AC Drives
- *Intelligent Motor Control Center (iMCC) Start-up and Troubleshooting



Steven McGovern Professional Engineer

Project Role: Principal Electrical Engineer

Education:

* B.S Electrical and Electronic Eng. Dublin Inst. of Tech, Ireland * M.Phil. Electrical Eng. Dublin Inst. of Tech, Ireland

Existing Employee: Prime

Professional Registration: California #E19912 Hawaii#E1<u>5704</u>

Professional
Organizations
Member IEE, Power
Engineering Society (PES)

Contact Information Email: Steven.McGovern@schoelderelectric.com

Phone:

+1-858-539-5187



Project Team Member Resume

Summary

Steven McGovern is presently the Principal Electrical engineer for the Southern California and Hawaii regions for Schneider Electric Engineering Services (SEES), He has been working for SEES since August 2009 and is based in San Diego, CA. Steven manages the team of engineers in the region whilst performing detailed engineering analysis work and engaging customer solutions. His experience includes various power system analysis; such as short circuit, protective device coordination, arc flash hazard, power quality, harmonics, load flow/voltage drop, motor transient starting and relay programming for commercial. industrial, and institutional projects, both new construction and existing facilities. Steven has also completed numerous Grounding System Assessments and Testing projects. Steven actively assists customers in evaluating their compliance with the National Fire Protection Association (NFPA) guidelines which are enforced by Occupational Health and Safety Administration(OSHA) during their inspections. In addition, the work involves onsite investigations of existing power systems, collecting and analyzing power data, preparing and presenting technical reports of findings and recommendations for power systems. He is a registered professional engineer (P.E.) in the states of California and Hawaii. Following this Steven worked as a design engineer with Jacobs International Engineering and later moved to INTEL, where he was employed as the lead facilities electrical engineer at the Ireland Facility.



Yazhoue Liu Professional Engineer, PH.D

Project Role: Engineering Manager

Education:

- *PH.D Electrical Eng.Arizona Univ.
- *M.S Electrical Eng.Harbin Inst.
- *B.S Electrical Eng. Harbin Inst.

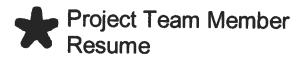
Professional Registration: CA #E18690 HI#14263 NV#021964 AZ#48194 UT#81739

Existing Employee: Prime

Professional Organizations:
*Senior Member, Institute of
Electrical and Electronics
Engineers (IEEE)
*Edison Solution Architect – Expert,
Schneider Electric, 2011
*USA New Faces of Engineers

Contact Information
Email:
Yazhou Liu@schneiderelectric.com
Phone:

+1-408-228-2579



Summary

Dr. Yazhou (Joel) Liu is working as an Engineering Manager in the Power System Engineering group of Schneider Electric. He is managing the engineering services team in California, Arizona, Hawaii, Nevada, and Utah. He was selected as one of the Edition Solution Architect in Schneider Electric in 2011.

Technical Papers & Books

- * Y. Liu, G. T. Heydt, R. Chu, "The Power Quality Impact of Cycloconverter Control Strategy," IEEE Transactions on Power Delivery, v. 20, No. 2, April 2005, pp. 1711-1718.
- * Y. Liu, M. Steurer, P. Ribeiro, "A Novel Approach to Power Quality Assessment: Real Time Hardware-in-the-Loop Test Bed," IEEE Transactions on Power Delivery, v. 20, No. 2, April 2005, pp. 1200-1201.
- * G. T. Heydt, Y. Liu, "Second Harmonic Components in Power System Voltages and Currents," IEEE Transactions
- on Power Delivery, v. 20, No. 1, January 2005, pp. 521-523.
- * Y. Liu, G. T. Heydt, "Power System Even Harmonics and Power Quality Indices," Journal of Electric Power Components and Systems, v. 33, No. 8, August 2005, pp.833-844

