

**AGREEMENT FOR GOODS AND SERVICES
(Metal Clad Switchgear Building)**

THIS AGREEMENT FOR GOODS AND SERVICES (“Agreement”) is made on this _____, between the **City of Lake Worth Beach**, Florida, a municipal corporation (“CITY”) with its office located at 7 North Dixie Highway, Lake Worth Beach, Florida 33460, and **Powell Electrical Systems**, a Delaware corporation with its principal office located at 8550 Mosley Rd, Houston Tx 77075 (“CONTRACTOR”).

RECITALS

WHEREAS, the CITY is a municipal corporation organized and existing pursuant to the Charter and the Constitution of the State of Florida; and

WHEREAS, the CITY issued Invitation for Bid #23-102 for supply of Metal Clad Switchgear Building (“IFB”) for City of Lake Worth Beach Electric Utility C, which IFB is incorporated by the reference into this Agreement; and

WHEREAS, the CITY received four (4) responses to the IFB including one (1) from the CONTRACTOR before the deadline; and

WHEREAS, the CONTRACTOR submitted the lowest, responsive and compliant bid; and

WHEREAS, the CITY requested minor changes in CONTRACTOR’s specifications and the CONTRACTOR submitted a revised specifications under the same bid price with the revised specifications attached hereto as an Exhibit “A” ; and

WHEREAS, the CITY desires to accept the CONTRACTOR’s revised bid specifications for CONTRACTOR to render the goods and services to the CITY as provided therein pursuant to the terms and conditions of this Agreement; and

WHEREAS, the CONTRACTOR further warrants that it is experienced and capable of performing the tasks hereunder in a professional and competent manner; and,

WHEREAS, the CITY finds entering this Agreement with the CONTRACTOR as described herein serves a valid public purpose.

NOW THEREFORE, the CITY hereby engages the services of the CONTRACTOR, and in consideration of the mutual promises herein contained, the sufficiency of which is hereby acknowledged by both parties, the parties agree as follows:

1. TERM

1.1 The term shall commence upon the approval of this Agreement for initial period of three (3) years for a supply of Metal Clad Switchgear Building with the option to renew for two (2) additional one (1) year periods for the supply of additional units depending on an annual appropriation of the funds by the City Commission and mutual agreement by both parties. During the renewal option(s), the City may utilize this Agreement to purchase an additional Metal Clad Switchgear Building(s). Should the City require additional Metal Clad Switchgear Building(s), the CITY and CONTRACTOR will prepare and execute a written amendment to this Agreement

setting forth the additional materials and/or services and the total cost for the same prior to any such additional materials or services being provided by the CONTRACTOR.

2. SPECIFICATIONS

2.1 The specifications set forth in the IFB details the Metal Clad Switchgear Building to be provided to the CITY. The CONTRACTOR's revised bid specifications, attached hereto as **Exhibit "A"** and incorporated herein, set forth further details for the furnishing of full engineering design, fabrication, testing, and delivery Metal Clad Switchgear Building for the City's Electric Utility department.

2.2 The CONTRACTOR represents to the CITY that all goods and services provided under this Agreement shall be in accordance with accepted and established trade practices and procedures recognized in the CONTRACTOR's trade in general and that the materials shall conform to the highest standards and in accordance with this Agreement.

2.3 The CONTRACTOR further warrants its capability and experience to perform the services provided for herein in a professional and competent manner.

2.4 The goods and services shall be provided by the CONTRACTOR or under its supervision and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under the state and local law to perform such services. All of the CONTRACTOR's personnel (and all subcontractors), while on CITY premises, shall comply with all CITY requirements governing safety, conduct and security.

2.5 The goods and services shall be provided and completed in accordance with the terms and conditions set forth in this Agreement.

3. INDEPENDENT CONTRACTOR; USE OF AGENTS OR ASSISTANTS

3.1 The CONTRACTOR is and shall be, in the provision of all goods and services under this Agreement, an independent contractor, and not an employee, agent, or servant of the CITY. All persons engaged in any of the work performed pursuant to this Agreement shall at all times, and in all places, be subject to the CONTRACTOR's sole direction, supervision, and control. The CONTRACTOR shall exercise control over the means and manner in which it and its employees perform the work.

3.2 To the extent reasonably necessary to enable the CONTRACTOR to perform the goods and services hereunder, the CONTRACTOR shall be authorized to engage the services of any agents or assistants which it may deem proper, and may further employ, engage, or retain the services of such other persons or corporations to aid or assist in the proper performance of its duties. All costs of the services of, or expenses incurred by, such agents or assistants shall be paid by the CONTRACTOR.

4. MATERIALS

4.1 The CONTRACTOR shall provide all materials as more specifically set forth in the IFB and its specifications and Exhibit "A" unless otherwise specified in writing by the CITY.

5. FEE AND ORDERING MECHANISM

5.1 The CITY shall utilize a City Purchase Order for the ordering of the Metal Clad Switchgear Building under this Agreement; however, the terms and conditions of the City Purchase Order shall not apply.

5.2 Should the CITY require additional goods and services, which additional goods and services are not included in this Agreement (but authorized by the IFB), the CITY and CONTRACTOR will prepare and execute a written amendment setting forth the additional goods and services and the total cost for the same prior to any such additional goods or services being provided by the CONTRACTOR.

5.3 The CITY's ordering mechanism is a CITY issued Purchase Order; however, the terms and conditions stated in this Agreement and any amendment thereto will apply. CONTRACTOR shall not exceed amounts expressed herein or in any CITY issued Purchase Order. The CITY's Fiscal Year ends on September 30th of each calendar year. Except for purchases authorized in a prior fiscal year and fully appropriated and funded, the CITY cannot authorize the purchase of additional goods or services beyond September 30th of each calendar year, prior to the annual budget being approved by the CITY's City Commission.

6. MAXIMUM COSTS

6.1 The CITY shall compensate the CONTRACTOR in accordance with the CONTRACTOR's bid pricing, which is attached hereto and incorporated herein as **Exhibit "A"**. The total cost to be paid by the CITY to the CONTRACTOR shall not exceed \$3,004,890 (Three Million, Four Thousand, Eight Hundred Ninety Dollars), which includes \$11,000 (Eleven Thousand Dollars) for Switchgear and Breaker Training. Since additional items and costs may be necessary to complete the scope of work identified in the CONTRACTOR's bid, the CITY's Electric Utility Director or designee is authorized an additional contingency amount of no more than \$150,000 (One Hundred and Fifty Thousand Dollars) to complete the scope identified in the CONTRACTOR's revised bid specifications. Use of the contingency amount must be pre-approved in writing by the Electric Utility Director or designee before any additional costs are added to the CONTRACTOR's bid pricing and before the CITY is responsible or liable for payment of any sums from the contingency amount to the CONTRACTOR.

7. INVOICE

7.1 The CONTRACTOR shall submit its invoice(s) to the CITY for the goods and services in accordance with the agreed to milestone payment schedule set forth in Exhibit "A". Final acceptance occurs when the unit becomes fully operational and accepted by the CITY. The CONTRACTOR shall be paid by the CITY within thirty (30) days of receipt of an approved invoice for all goods and services.

7.2 If the CITY disputes any invoice or part of an invoice, CITY shall notify the CONTRACTOR within a reasonable time after receipt of the invoice. CITY reserves the right to off-set, reduce or withhold any payment to the CONTRACTOR until the dispute is resolved.

8. AUDIT BY CITY

8.1 The CONTRACTOR shall permit the CITY, or any authorized representatives of the CITY, at all reasonable times, access to and the right to examine all records, books, papers or

documents related to the CONTRACTOR's performance under this Agreement including, but not limited to, expenses for sub-contractors, agents or assistants, direct and indirect charges for work performed and detailed documentation for all such work performed or to be performed under this Agreement. Notwithstanding anything in this Article 8 to the contrary, the cost makeup of lump-sum pricing shall not be subject to audit so long as the CITY's payment is based on agreed to lump-sum pricing.

9. COPIES OF DATA/DOCUMENTS

9.1 Copies or original documents prepared by the CONTRACTOR in relation to work associated with this Agreement shall be provided to the CITY. Data collected, stored, and/or provided shall be in a form acceptable to the CITY and agreed upon by the CITY.

10. OWNERSHIP

10.1 Each and every report, draft, work product, map, record, and other document reproduced, prepared, or caused to be prepared by the CONTRACTOR pursuant to or in connection with this Agreement shall be the exclusive property of the CITY.

11. WRITTEN AUTHORIZATION REQUIRED

11.1 The CONTRACTOR shall not make changes in the specifications or goods and services to be provided or perform any additional work or provide any additional materials under this Agreement without first obtaining written authorization from the CITY for such additional services or materials. Additional services or materials provided without written authorization shall be done at the CONTRACTOR's sole risk and without payment from the CITY.

12. DEFAULTS, TERMINATION OF AGREEMENT

12.1 If the CONTRACTOR fails to timely provide the goods and services or has failed in any other respect to satisfactorily perform in accordance with this Agreement; or, is in material breach of a term or condition of this Agreement, the City Manager or designee may give written notice to the CONTRACTOR specifying the default(s) to be remedied. Such notice shall set forth a reasonable timeframe for correcting the default(s) and any suggested corrective measures. If the CONTRACTOR does not remedy the default(s) within the timeframe provided in the CITY's notice or commence good faith steps to remedy the default to the reasonable satisfaction of the CITY, the CITY may take such action to remedy the default and all expenses related thereto shall be borne by the CONTRACTOR including, without limitation, utilization of another contractor to provide for such work and all of the CITY's legal fees; and/or, the CITY may withhold any money due or which may become due to the CONTRACTOR for such expense and/or work related to the claimed default. Alternatively, or in addition to the foregoing, if after three (3) business days the CONTRACTOR has not remedied defaults or commenced good faith steps to remedy defaults to the satisfaction of the CITY, the CITY may elect to terminate this Agreement. No cancellation fee or other compensation shall be paid by the CITY for de-mobilization, take-down, disengagement, wind-down, lost profits, or other costs incurred due to termination of this Agreement under this paragraph.

12.2 Notwithstanding paragraph 12.1, the CITY reserves the right and may elect to terminate this Agreement at any time, with or without cause. At such time, the CONTRACTOR would be compensated only for that work which has been satisfactorily completed to the date of termination. No compensation shall be paid for de-mobilization, take-down, disengagement, wind-down, lost

profits, or other costs incurred due to termination of this Agreement under this paragraph. However, CITY shall be responsible for the cancellation fee set forth in the CONTRACTOR's quote.

12.3 If the CITY fails to timely perform in accordance with this Agreement; or, is in material breach of a term or condition of this Agreement, the CONTRACTOR may give written notice to the CITY specifying the default(s) to be remedied. Such notice shall set forth a reasonable timeframe for correcting the default(s) and any suggested corrective measures. If the CITY does not remedy the default(s) within the timeframe provided in the CONTRACTOR's notice or commence good faith steps to remedy the default to the reasonable satisfaction of the CONTRACTOR, the CONTRACTOR may take such action to remedy the default and all expenses related thereto shall be borne by the CITY; and/or, the CONTRACTOR may withhold any work. Alternatively, or in addition to the foregoing, if after three (3) business days the CITY has not remedied defaults or commenced good faith steps to remedy defaults to the satisfaction of the CONTRACTOR, the CONTRACTOR may elect to terminate this Agreement.

13. INSURANCE

13.1. Prior to commencing any work, the CONTRACTOR shall provide certificates evidencing insurance coverage as required hereunder. All insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida. The Certificates shall clearly indicate that the CONTRACTOR has obtained insurance of the type, amount, and classification as required for strict compliance with this Section and that no material change or cancellation of the insurance shall be effective without thirty (30) days' prior written notice to the CITY. Failure to comply with the foregoing requirements shall not relieve the CONTRACTOR of its liability and obligations under this Contract. All insurance, other than Workers' Compensation, required hereunder shall specifically include the "City of Lake Worth Beach" as an "Additional Insured" on a primary, non-contributing basis, and the CONTRACTOR shall provide additional insured endorsements section of Certificates of Insurance.

13.2. The CONTRACTOR shall maintain, during the life of this Contract, commercial general liability, including contractual liability insurance in the amount of \$1,000,000 per occurrence (\$2,000,000 aggregate) to protect the CONTRACTOR from claims for damages for bodily and personal injury, including wrongful death, as well as from claims of property damages which may arise from any operations under this Agreement, whether such operations be by the CONTRACTOR or by anyone directly employed by or contracting with the CONTRACTOR.

13.3. The CONTRACTOR shall maintain, during the life of this Agreement, comprehensive automobile liability insurance in the minimum amount of \$1,000,000 combined single limit for bodily injury and property damages liability to protect the CONTRACTOR from claims for damages for bodily and personal injury, including death, as well as from claims for property damage, which may arise from the ownership, use, or maintenance of owned and non-owned automobiles, including rented automobiles whether such operations be by the CONTRACTOR or by anyone directly or indirectly employed by the CONTRACTOR.

13.4. The CONTRACTOR shall maintain, during the life of this Agreement, Workers' Compensation Insurance and Employer's Liability Insurance for all employees as required by Florida Statutes.

14. WAIVER OF BREACH

14.1 The waiver by either party of any breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach of that same or any other provision.

15. INDEMNITY

15.1 The CONTRACTOR shall indemnify, defend and hold harmless, to the maximum extent permitted by law, the CITY and its officers, agents, employees and representatives, from and against any and all liability, suit, actions, proceedings, judgments, claims, losses, liens, damages, injuries (whether in contract or in tort, including personal injury, accidental death, patent infringement or property damage, and regardless, of whether the allegations are false, fraudulent or groundless), costs and expenses (including attorney's fees, litigation, arbitration, mediation, appeal expenses) to the extent arising out of or alleged to have arisen out of the acts, omissions or neglect of the CONTRACTOR or any of its agents, employees, subcontractors or by anyone the CONTRACTOR directly or indirectly employed.

15.2 The CONTRACTOR's obligation to indemnify, defend and hold harmless shall remain in effect and shall be binding upon the CONTRACTOR whether such injury or damage shall accrue, or may be discovered, before or after termination of this Agreement.

15.3 Compliance with any insurance requirements required elsewhere in this Agreement shall not relieve CONTRACTOR of its liability and obligation to defend, hold harmless and indemnify the CITY as set forth in this section.

15.4 Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CITY or CONTRACTOR. Further, nothing contained in this Agreement shall be construed or interpreted as consent by the CITY to be sued, nor as a waiver of sovereign immunity beyond the waiver provided in section 768.28, Florida Statutes, as amended from time to time.

15.5 The CONTRACTOR's failure to comply with this section's provisions shall constitute a material breach upon which the CITY may immediately terminate or suspend this Agreement.

16. ENTIRE AGREEMENT AND ORDER OF PRECEDENCE

16.1 This Agreement consists of the terms and conditions provided herein; the IFB (including all specifications, exhibits and addenda attached thereto or referenced therein); and, the CONTRACTOR's revised bid specifications and bid pricing (Exhibit "A"). To the extent that there exists a conflict between this Agreement and the remaining documents, the terms, conditions, covenants, and/or provisions of this Agreement shall prevail with the IFB (including all specifications, exhibits and addenda attached thereto) next taking precedence. Wherever possible, the provisions of such documents shall be construed in such a manner as to avoid conflicts between provisions of the various documents.

16.2 This Agreement supersedes any and all other Agreements, either oral or in writing, between the parties hereto with respect to the subject matter hereof, and no other Agreement, statement, or promise relating to the subject matter of this Agreement which is not contained herein shall be valid or binding. This Agreement may be executed electronically and such electronic signature shall be treated as an original signature of the party executing this Agreement electronically.

17. ASSIGNMENT

17.1 Nothing under this Agreement shall be construed to give any rights or benefits to any party other than the CITY and the CONTRACTOR. All duties and responsibilities under this Agreement shall be for the sole and exclusive benefit of the CITY and the CONTRACTOR and not for the benefit or any other party. The CONTRACTOR shall not assign any right or interest in this Agreement, and shall not delegate any duty owned, without the CITY's prior written consent. Any attempted assignment or delegation shall be void and totally ineffective for all purposes, and shall constitute a material breach upon which the CITY may immediately terminate or suspend this Agreement.

17.2 In the event the CITY consents to an assignment or delegation, the assignee, delegate, or its legal representative shall agree in writing to personally assume, perform, and be bound by this Agreement's covenants, conditions, obligations and provisions.

18. SUCCESSORS AND ASSIGNS

18.1 Subject to the provision regarding assignment, this Agreement shall be binding on the heirs, executors, administrators, successors, and assigns of the respective parties.

19. WAIVER OF TRIAL BY JURY

19.1 TO ENCOURAGE PROMPT AND EQUITABLE RESOLUTION OF ANY LITIGATION, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THIS AGREEMENT.

20. GOVERNING LAW AND REMEDIES

20.1 The validity of this Agreement and of any of its terms or provisions, as well as the rights and duties of the parties hereunder, shall be governed by the laws of the State of Florida and exclusive venue shall be in Palm Beach County, Florida.

20.2 Except as otherwise specifically limited herein, no remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

21. TIME IS OF THE ESSENCE

21.1 Time is of the essence in the completion of the Scope of Work as specified herein.

22. NOTICES

22.1 All notices hereunder must be in writing and, unless otherwise provided herein, shall be deemed validly given on the date when personally delivered to the address indicated below; or on the third (3rd) business day following deposit, postage prepaid, using certified mail, return receipt requested, in any U.S. postal mailbox or at any U.S. Post Office; or when sent via nationally recognized overnight courier to the address indicated below. Should the CITY or the CONTRACTOR have a change of address, the other party shall immediately be notified in writing of such change, provided, however, that each address for notice must include a street address

and not merely a post office box. All notices, demands or requests from the CONTRACTOR to the CITY shall be given to the CITY address as follows:

City of Lake Worth Beach
Attn: City Manager
7 North Dixie Highway
Lake Worth Beach, Florida 33460

All notices, demands or requests from the CITY to the CONTRACTOR shall be given to the CONTRACTOR address as follows:

Powell Electrical Systems
8550 Mosley Rd
Houston, TX 77075

23. SEVERABILITY

23.1 Should any part, term or provision of this Agreement or any document required herein to be executed be declared invalid, void or unenforceable, all remaining parts, terms and provisions hereof shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby.

24. DELAYS AND FORCES OF NATURE

24.1 The CONTRACTOR shall not be considered in default by reason of a delay in timely performance if such delay and failure arises out of causes reasonably beyond the control of the CONTRACTOR or its subcontractors and without their fault or negligence. Upon the CONTRACTOR's request, the CITY shall consider the facts and extent of any such delay and failure to timely perform the work for reason beyond the control of the CONTRACTOR and, if the CONTRACTOR'S delay and failure to timely perform was without it or its subcontractors' fault or negligence, as determined by the CITY in its reasonable discretion, the time of completion shall be extended for any reasonable time that the CITY, in its reasonable discretion, may decide; subject to the CITY'S rights to change, terminate, or stop any or all of the work at any time. If the CONTRACTOR is delayed at any time in the progress of the work by any act or neglect of the CITY or its employees, or by any other contractor employed by the CITY, or by changes ordered by the CITY or in an unusual delay in transportation, unavoidable casualties, or any causes beyond the CONTRACTOR'S control, or by delay authorized by the CITY pending negotiation or by any cause which the CITY, in its reasonable discretion, shall decide justifies the delay, then the time of completion shall be extended for any reasonable time the CITY, in its sole discretion, may decide. No extension of time shall be made for any delay occurring more than five (5) days before a claim therefore is made in writing to the CITY. In the case of continuing cause of delay, only one (1) claim is necessary. The CONTRACTOR's sole remedy for a delay in completion of the work for any reason will be an extension of time to complete the work and CONTRACTOR specifically waives any right to seek any monetary damages or losses for a delay in completion of the work, including, but not limited to, waiving any right to seek monetary amounts for lost profits, additional overhead, salaries, lost productivity, efficiency losses, or any other alleged monetary losses which may be allegedly suffered by CONTRACTOR due to a delay in completion of the work.

24.2 Neither party shall be considered in default in the performance of its obligations hereunder or any of them, if such obligations were prevented or delayed by any cause, existing or future beyond the reasonable control of such party which include but are not limited to acts of God, labor disputes or civil unrest.

25. COUNTERPARTS

25.1 This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one and the same document. Each of the parties shall sign a sufficient number of counterparts, so that each party will receive a fully executed original of this Agreement.

26. PUBLIC ENTITY CRIMES

26.1 CONTRACTOR acknowledges and agrees that a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier or sub-contractor under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list. CONTRACTOR will advise the CITY immediately if it becomes aware of any violation of this statute.

27. PREPARATION

27.1 This Agreement shall not be construed more strongly against either party regardless of who was more responsible for its preparation.

28. PALM BEACH COUNTY INSPECTOR GENERAL

28.1 In accordance with Palm Beach County ordinance number 2011-009, the CONTRACTOR acknowledges that this Agreement may be subject to investigation and/or audit by the Palm Beach County Inspector General. The CONTRACTOR has reviewed Palm Beach County ordinance number 2011-009 and is aware of its rights and/or obligations under such ordinance.

29. ENFORCEMENT COSTS

29.1 All parties shall be responsible for their own attorneys' fees, court costs and expenses if any legal action or other proceeding is brought for any dispute, disagreement, or issue of construction or interpretation arising hereunder whether relating to the Contract's execution, validity, the obligations provided therein, or performance of this Contract, or because of an alleged breach, default or misrepresentation in connection with any provisions of this Contract.

30. PUBLIC RECORDS

CONTRACTOR shall comply with Florida's Public Records Laws, Chapter 119, Florida Statutes, and, if it is acting on behalf of the CITY as provided under section 119.011(2), the CONTRACTOR specifically agrees to:

- (a) Keep and maintain public records required by the CITY to perform the services under this Agreement.
- (b) Upon request from the CITY's custodian of public records, provide the CITY with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that said public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion of the Agreement, if the CONTRACTOR does not transfer the records to the CITY.
- (d) Upon the completion of the Agreement, transfer, at no cost, to the CITY all public records in possession of the CONTRACTOR or keep and maintain public records required by the CITY to perform the services. If the CONTRACTOR transfers all public records to the CITY upon completion of the Agreement, the CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the CONTRACTOR keeps and maintains public records upon completion of the Agreement, the CONTRACTOR shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the CITY, upon request from the CITY's custodian of public records, in a format that is compatible with the information technology systems of the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (561) 586-1660, CITYCLERK@LAKEWORTHBEACHFL.GOV OR 7 NORTH DIXIE HIGHWAY, LAKE WORTH BEACH, FLORIDA 33460.

31. COPYRIGHTS AND/OR PATENT RIGHTS

31.1 CONTRACTOR warrants that there has been no violation of copyrights and/or patent rights in the manufacturing, producing or selling of the goods, shipped or ordered, as a result of this Agreement and the CONTRACTOR agrees to hold the City harmless from any and all liability, loss, or expense occasioned by any such violation.

32. COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH

32.1 CONTRACTOR certifies that all material, equipment, etc., contained in this bid meets all OSHA requirements. CONTRACTOR further certifies that, if the material, equipment, etc., delivered is subsequently found to be deficient in any OSHA requirements in effect on date of delivery, all costs necessary to bring the material, equipment, etc. into compliance with the aforementioned requirements shall be borne by the CONTRACTOR.

33. FEDERAL AND STATE TAX

33.1 The CITY is exempt from Federal Tax and State Tax for Tangible Personal Property. The Procurement Official will provide the CONTRACTOR with a signed exemption certificate

submitted by the CONTRACTOR. CONTRACTOR shall not be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the CITY, nor shall CONTRACTOR be authorized to use the City's Tax Exemption Number in securing such materials.

34. PROTECTION OF PROPERTY

34.1 The CONTRACTOR shall at all times guard against damage or loss to the property of the CITY or of other vendors or contractors and shall be held responsible for replacing or repairing any such loss or damage to the extent that such damage is caused by CONTRACTOR'S or its agent's negligence or willful misconduct. The CITY may withhold payment or make such deductions as deemed necessary to insure reimbursement or replacement for loss or damage to property through negligence or willful misconduct of the CONTRACTOR or its agents. The CONTRACTOR shall be responsible to safeguard all of their property such as tools and equipment while on site. The CITY will not be held responsible for any loss of CONTRACTOR property due to theft or vandalism.

35. DAMAGE TO PERSONS OR PROPERTY

35.1 The responsibility for all damage to person or property arising out of or on account of work done under this Agreement shall rest upon the CONTRACTOR to the extent that such damage is caused by CONTRACTOR'S or its agent's negligence or willful misconduct, and he/she shall save the CITY and political unit thereof harmless from all claims made on account of such damages.

36. WARRANTY

36.1 . The CONTRACTOR warrants to the CITY that CITY will have good title to the goods delivered hereunder, that the goods to be delivered hereunder are new, unless otherwise stated and agreed to by the CITY, and that subject to the conditions below, the goods will be free from defects in material or workmanship and will conform to specifications as separately approved in writing by CONTRACTOR. The CONTRACTOR warrants to the CITY that services, if any, will be performed in a good and workmanlike manner. The warranty of performance, if any, and against defects in goods and/or for services shall apply only to issues for which the CONTRACTOR receives written notice of during the applicable warranty period that appear during proper operation in normal use and service and which are due to causes other than those excluded below. For goods that are not installed by the CONTRACTOR, this warranty period is eighteen (18) months from the date of shipment by the CONTRACTOR or twelve (12) months from first energization, whichever comes first. For goods installed by the CONTRACTOR and/or service work, if any, this warranty period is twelve (12) months from the completion of installation or the services, as applicable, provided same is not unreasonably delayed by the CITY. The date and conditions of any tests shall be mutually agreed upon by CONTRACTOR and CITY.

Provided that the CONTRACTOR has timely received written notice of a valid warranty claim, the CONTRACTOR shall thereupon correct any defect or remedy any performance failure, either (at its option) by repairing any defective or damaged parts of the goods at the CONTRACTOR plant or at the location of the goods, or by making available at the CONTRACTOR's plant necessary repaired or replacement parts. The CITY shall be responsible for providing "free and clear" access to the affected portion of the goods and shall be reimbursed for any required costs for shipping the goods or the parts to the CONTRACTOR plant for all CONTRACTOR corrective work. The liability of the CONTRACTOR under this warranty (except as to title), or for any loss or damage to the goods whether the claim is based on contract or tort (including negligence), shall not in any

case exceed the cost of correcting defects in the goods and for services the CONTRACTOR's cost of reperforming the services and all related costs including the cost of shipping, as herein provided and upon the expiration of the warranty period all such liability shall terminate.

These warranties and remedies are applicable only to the extent CITY's receipt, handling, storage, installation, testing, operation and maintenance, including tasks incident thereto, of the goods are in accordance with the recommendations of the CONTRACTOR; and, such goods shall not have been operated in excess of limitations specified by CONTRACTOR and not have been subjected to accident, alteration, abuse or misuse unless at the CONTRACTOR's direction. CONTRACTOR expressly excludes any warranty for defect or failure of performance caused by reasonable erosion, corrosion or normal wear and tear.

THE WARRANTIES AND REMEDIES SET FORTH ABOVE IN THIS ARTICLE 36 ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES, WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY (EXCEPT AS TO TITLE) WITH RESPECT TO THE PERFORMANCE OF THE GOODS AND SERVICES PROVIDED BY THE CONTRACTOR. THE CONTRACTOR DISCLAIMS AND MAKES NO OTHER WARRANTIES TO CITY OR ANY OTHER PERSON OR ENTITY REGARDING THE GOODS, WORK, ENGINEERING AND DESIGN SERVICES, FIELD INSTALLATION SERVICES OR ANY OTHER GOODS OR SERVICES PROVIDED UNDER THIS AGREEMENT AND EXPRESSLY DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION: (1) THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, PERFORMANCE AND SUITABILITY; (2) ANY WARRANTIES RELATING TO CITY-SPECIFIED THIRD-PARTY PARTS, COMPONENTS, PRODUCTS, SOFTWARE OR SERVICES; (3) ANY WARRANTIES RELATING TO LATENT DEFECT(S) BEYOND THE ORIGINAL WARRANTY PERIOD; AND/OR (4) ANY WARRANTIES THAT THE SERVICES, FIRMWARE OR SOFTWARE, IF ANY, WILL BE PROVIDED WITHOUT INTERRUPTION OR ERROR.

37. SCRUTINIZED COMPANIES

37.1 Contractor certifies that it and its subcontractors are not on the Scrutinized Companies that Boycott Israel List and are not engaged in the boycott of Israel. Pursuant to section 287.135, Florida Statutes, the City may immediately terminate this Agreement at its sole option if the Contractor or any of its subcontractors are found to have submitted a false certification; or if the Contractor or any of its subcontractors, are placed on the Scrutinized Companies that Boycott Israel List or is engaged in the boycott of Israel during the term of this Agreement.

37.2 If this Agreement is for one million dollars or more, the Contractor certifies that it and its subcontractors are also not on the Scrutinized Companies with Activities in Sudan List, Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or engaged in business operations in Cuba or Syria as identified in Section 287.135, Florida Statutes. Pursuant to Section 287.135, the City may immediately terminate this Agreement at its sole option if the Contractor, or any of its subcontractors are found to have submitted a false certification; or if the Contractor or any of its subcontractors are placed on the Scrutinized Companies with Activities in Sudan List, or Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or are or have been engaged with business operations in Cuba or Syria during the term of this Agreement.

37.3 The Contractor agrees to observe the above requirements for applicable subcontracts entered into for the performance of work under this Agreement.

37.4 The Contractor agrees that the certifications in this section shall be effective and relied upon by the City for the term of this Agreement, including any and all renewals.

37.5 The Contractor agrees that if it or any of its subcontractors' status changes in regards to any certification herein, the Contractor shall immediately notify the City of the same.

37.6 As provided in Subsection 287.135(8), Florida Statutes, if federal law ceases to authorize the above-stated contracting prohibitions then they shall become inoperative.

38. E-VERIFY

Pursuant to Section 448.095(2), Florida Statutes, beginning on January 1, 2021, CONTRACTOR shall:

38.1 Register with and use the E-Verify system to verify the work authorization status of all newly hired employees and require all subcontractors (providing services or receiving funding under this Agreement) to register with and use the E-Verify system to verify the work authorization status of all the subcontractors' newly hired employees;

38.2 Secure an affidavit from all subcontractors (providing services or receiving funding under this Agreement) stating that the subcontractor does not employ, contract with, or subcontract with an "unauthorized alien" as defined in Section 448.095(1)(k), Florida Statutes;

38.3 Maintain copies of all subcontractor affidavits for the duration of this Agreement and provide the same to the City upon request;

38.4 Comply fully, and ensure all of its subcontractors comply fully, with Section 448.095, Florida Statutes;

38.5 Be aware that a violation of Section 448.09, Florida Statutes (Unauthorized aliens; employment prohibited) shall be grounds for termination of this Agreement; and,

38.6 Be aware that if the City terminates this Agreement under Section 448.095(2)(c), Florida Statutes, CONTRACTOR may not be awarded a contract for at least one (1) year after the date on which the Agreement is terminated and will be liable for any additional costs incurred by the City as a result of the termination of the Agreement.

39. SURVIVABILITY

39.1 Any provision of this Agreement which is of a continuing nature or imposes an obligation which extends beyond the term of this Agreement shall survive its expiration or earlier termination.

40. DAMAGE WAIVER AND LIMITATION OF LIABILITY

40.1 IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL EITHER PARTY OR THEIR SUBCONTRACTORS OR SUPPLIERS BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, INCIDENTAL OR PUNITIVE OR PENAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFIT OR REVENUES, LOSS OF USE OF THE GOODS OR ANY ASSOCIATED FACILITIES, DAMAGE TO ANY FACILITIES, COST OF CAPITAL, COST OF

SUBSTITUTE PRODUCTS, FACILITIES, SERVICES OR REPLACEMENT POWER, DOWNTIME COSTS, OR CLAIMS OF THIRD PARTY'S FOR SUCH DAMAGES.

EXCEPT FOR EVENTS COVERED BY THE INSURANCE REQUIRED BY THIS AGREEMENT AND/OR DAMAGES DUE TO THE CONTRACTOR'S WILLFUL MISCONDUCT, CONTRACTOR'S OBLIGATION TO DELIVER TO CITY FULL LEGAL TITLE TO AND OWNERSHIP OF ALL OR ANY PORTION OF THE GOODS AND SERVICES , IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL THE CONTRACTOR'S TOTAL AGGREGATE LIABILITY TO CITY FOR ANY LOSS OR DAMAGE ARISING OUT OF, OR RESULTING FROM, THIS CONTRACT, OR FROM THE CONTRACTOR'S PERFORMANCE OR BREACH, OR FROM THE GOODS OR SERVICES FURNISHED HEREUNDER, EXCEED THE PRICE SET FORTH IN THE PURCHASE ORDER WHICH GIVES RISE TO THE CLAIM.

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement for Goods and Services for Metal Clad Switch Building on the day and year first above written.

CITY OF LAKE WORTH BEACH, FLORIDA

By: _____
Betty Resch, Mayor

ATTEST:

By: _____
Melissa Ann Coyne, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL SUFFICIENCY

By: _____
Glen J. Torcivia, City Attorney

By: _____
Yannick Ngendahayo, Financial Services Director

CONTRACTOR:

Powell Electrical Systems

By: Bobby Joe Paul

[Corporate Seal]

Print Name: Bobby Joe PAUL

Title: SALES Director

STATE OF Texas)
COUNTY OF Harris)

THE FOREGOING instrument was acknowledged before me by means of physical presence or online notarization on this 16 day of May 2023, by _____, as the _____ [title] of **Powell Electrical Systems** a Delaware corporation, who is personally known to me or who has produced _____ as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.

Patricia Fielder
Notary Public Signature

Notary Seal:



Exhibit "A"

Contractor's Revised Bid Specifications and Bid Pricing (34 pages total)



PROPOSAL NO. 252993 Rev 1
February 24, 2023

REFERENCE: 23-102 Metal Clad Switchgear Building F
SEALED BID

City of Lake Worth Beach
1900- 2nd Ave N
Lake Worth Beach, FL 33460

Attn: David Martyniuk
Email: dmartyniuk@lakeworthbeachfl.gov
Phone: 561.800.7248

We are pleased to offer the following proposal, which is our understanding of your requirements, subject to acceptance within 30 days from the above date. Please advise us if there are any misunderstandings. This quotation is also subject to change upon notice.

Powell is pleased to submit the following equipment proposal for your review and consideration.

The Equipment Descriptions and Bills of Material presented represent our best understanding of your equipment requirements based on the specifications, one-line drawings, and data sheets provided with the inquiry package.

Please review the content of our proposal and advise any changes or additions required to meet your specific project needs. Pricing submitted is based on the Bills of Material and Equipment Descriptions listed within this proposal.

Also note that any purchase order resulting from this proposal must reference the Powell proposal number in the contract documents.

Thank you for the opportunity to earn your business. Our Bill of Material and Pricing is as follows:

REFERENCE: 23-102 Metal Clad Switchgear Building F

Power Control Room
Tag Number: PCR REV1

One (1) Powell PCR®, Power Control Room suitable for installation in an unclassified area with approximate exterior dimensions of:

21' 2" Wide with 6" wall thickness
80' 0" Long with 6" wall thickness
11' 0" High less base and roof cap (interior height)

Low ambient temperature: 40°F
High ambient temperature: 110°F
Altitude: 16 FT. above sea level

Estimated shipping dimensions and weight:

21' 11" Wide including 4.5" overhang on each side
80' 5" Long including 2.5" overhang on each end
13' 7" High including base and roof cap (approximate)
Estimated weight including equipment: 188,230 LBS

Roof live load: 45 PSF
Floor live load: 250 PSF
Basic wind speed: 200 MPH

Structural Base:

- Welded channel construction, skid type, with structural supports and removable lifting lugs
- Steel floor, 1/4" thick with non-skid paint.
- 30 Floor penetrations, with surface mounted covers
- 1 Shipping Split Junction Boxes with Pull-Apart Terminal blocks (49 Points), Power Wire
- 1 Shipping Split(s) along the (width) of the building
- 1 Lot of installation of temporary supports for shipment along the width of the PCR.
- 1 Lot of installation of exterior plywood shipping barrier over the width of the enclosure.

Metal Preparation and Paint Finish:

- The welded base assembly is grit blasted to comply with the Commercial Blast Standard SSPC-6 as published by AISC.
- After blast, a primer is applied to the entire base using an industrial grade, high solid, and high build epoxy. The primer is applied to a minimum thickness of 4 mils.
- The structural elements of the base including all channels and angles are caulked to seal gaps and spaces that might allow moisture to collect.
- A second application of industrial grade, high solid, high-build epoxy is applied to the bottom of the base assembly. This application is BLACK in color and is applied to a minimum thickness of 4 mils.

REFERENCE: 23-102 Metal Clad Switchgear Building F

- The sides of the base are finished using a black polyurethane paint with a minimum thickness of 2 mils.
- Total dry film thickness after coating:
 - For the top of the floor is 2 mils minimum
 - For the sides of the base is 6 mils minimum
 - For the bottom of the base is 8 mils minimum
- Exterior interlocking panels, will be White (ANSI 01) per Powell Application Procedure. All interlocking panels and interior wall liners are pre-painted prior to assembly. An all-weather sealant is applied to all seams.

Exterior Wall, Interior Wall, Ceiling, and Roof Panels:

- Exterior walls and roof to be constructed of interlocking Powell, Pow-R-Loc panels. The design as a minimum, is to meet wind load requirements of FBC 2020
- Wall panels of 16 gauge stainless steel Type 304L painted White (ANSI 01) (Smooth)
- Roof panels of 18 gauge stainless steel Type 304L painted White (ANSI 01) (Smooth)
- Interior wall liner panels 16 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior ceiling panels 12 gauge galvanized steel with integral Powl Strut System painted White (ANSI 01) (Smooth)
- Roof will have a slope of 1/4 inches per foot minimum
- 180 Linear feet of Painted Aluminum Gutter with Downspouts

Insulation for Base, Walls and Roof:

- Polyurethane spray on foam (2" R-13.4), meets ASTM E84 Flame Spread Test
- 6" code compliant wall with effective R-18.3 continuous insulation
- Code compliant roof with effective R-19.4 continuous insulation

Doors and Hardware:

- 2 Sets of stainless steel panic door hardware, with door closer & key lock
- 1 Personnel door, single wide, 3' x 7', 304L Stainless Steel with 12" X 12" viewing window
- 1 Equipment door, double wide, 6' x 8', 304L Stainless Steel with 12" X 12" viewing window
- 14 304L stainless steel equipment rear access doors without split
- 14 4" Exiscan IR Window for PowIVac
- 1 Rain canopies over personnel doors (304L SS)
- 1 Rain canopies over double wide equipment doors (304L SS)

REFERENCE: 23-102 Metal Clad Switchgear Building F

The PCR® will include the following accessory items:

- 1 AC Panel 240/120VAC, 1 Phase, 3 Wire, 250A Main Bus, 42ckt with 150A Main Breaker, 22kAIC
- 1 Lot of Interior Vapor Tight LED lighting fixtures
- 2 Lighting contactor assembly for use with lighting fixtures as required
- 2 Light switches
- 2 Motion Sensor
- 25 Convenience receptacles
- 2 Exterior GFCI receptacles
- 2 Exit & Emergency Light Combo with dual LED lamps, 120/277 VAC
- 1 Lot of EMT conduit and wireway for interior and RGS for exterior building services
- 1 Lot of THHN/THWN wiring for utility lights, receptacles and space heater circuits

Equipment Power and Control Wiring and Interconnections:

- 380 Feet of cable tray 6", 12", or 18" wide x 4" deep Aluminum
- 3 Cable tray tees 4" deep 6", 12" or 18" wide
- 8 Cable tray elbows 4" deep 6", 12", or 18" wide
- PCR Power wiring limited to 110 Terminations
- PCR Control wiring limited to 44 Terminations
- PCR Instrumentation wiring limited to 150 Terminations
- PCR Communication wiring limited to 130 Terminations

Grounding System:

- 255 Linear feet of bare Copper ground bus 1/4" x 2"
- 2 Stainless steel ground pads on diagonal corners of building frame
- 16 Interconnection from each equipment ground bus to building ground loop

Exterior Devices:

- 1 Three Position (HOA) Control Switch with lighting contactor suitable for switching of exterior lights as required
- 2 General Purpose exterior light, LED Wall Pack with Photocell, 100W Metal Halide Equivalent

UPS and DC System Components:

- 1 Siemens DC Power Panel 250VDC, 250A Main Bus, 40ckt with 100A Main Breaker, 10KAIC

REFERENCE: 23-102 Metal Clad Switchgear Building F

- 1 Battery exhaust fan and duct assembly
- 1 Hydrogen Gas Detector Powell standard
- 1 Eye Wash & Bowl
- 1 Mechanical installation of a Battery Charger Floor Mounted Type
- 1 Mechanical installation of a Battery Spill Pan
- 1 **Furnished and Install Fused 2-Pole Safety Switch battery Disconnect 100 Ampere**

Fire Stop Equipment:

- 2 CO₂ 10 LB. fire extinguisher rated B-C

Standard HVAC System:

- 1 Building HVAC system for a non-classified area, to include:
- 2 **6-Ton Wall mounted HVAC with 10kW electric heat unit, 208-230V, 1-phase, 60Hz to include:**
 - BARD 10.0 EER HVAC part no. W73AC-A10ZXAXXJ
 - Aluminum air conditioner cabinet
 - Economizer for equipment building with Enthalpy sensor for operation down to -40° Fahrenheit
 - Compressor control module located on the Back side, adjustable from 30 seconds to 5 minutes
 - Phase rotation monitor
 - High and Low pressure switches with built-in auto-reset
 - Factory installed internal disconnect switch, padlockable
 - MERV2 1-in disposable air filter
 - Dry contracts for remote alarm or lockout
 - Auto changeover digital thermostat
 - ANSI/UL 1995/CSA 22.2 No. 236-05

HVAC Accessories:

- 1 Lead lag controller with enhance alarm and Ethernet board, 2 units, MC4002-AC
- 1 High temperature alarm
- 2 GE heavy duty, non-fusible, external NEMA 3R disconnect (on/off) switch installed on wall mounted HVAC

Mechanical Equipment Installation:

- 1 Lot of installation of Powell furnished equipment to include:
 - 15 Sections of Medium Voltage Switchgear
 - 1 Mechanical installation of a circuit breaker test cabinet

REFERENCE: 23-102 Metal Clad Switchgear Building F

- 2 Wall Mounted HVAC Unit(s)
- 2 Wall mounted ATS/MTS
- 2 Intrusion Alarm
- 4 Multi Cable Transit, Frames Only, Primed Steel, Max size 31"W x 14"H x 2"D

Miscellaneous:

- 1 Dimensions: 46" W x 22.5" D, Desk, Grainger part# 420G87
- 3 125Vdc interior LED light fixture, Marshall DC Lighting part# T8IN-2LED-125DC-20-WH
- 1 Generator Tap Box Appleton ADJA1033-125-RS
- 1 Brooks Meter Socket 652U3010C13-1624
- 1 SCADA & COMMS Cabinet 60"W x 20"D
- 1 Storage Cabinet, 36"W x 18" D, Grainger part# 1UEY1
- 1 Badge reader provisions
- 1 Lot of Internal device nameplates if required
- 1 Structural Analysis by Professional Engineer for the State of Florida to confirm PCR design and structural integrity per FBC 2020
- 1 State of Florida code compliance licensing fee

REFERENCE: 23-102 Metal Clad Switchgear Building F**29.8kV ND Metal-Clad Switchgear****Tag Number: SWGR M1 M2 REV1**

One (1) line-up of PowIVac-ND® 27kV metal-clad switchgear with vacuum circuit breakers in accordance with ANSI standards C37.04, C37.09, C37.20.2, C37.20.7, C37.100.1 and rated as follows:

Maximum Voltage Class:	29.8 kV
Service Voltage:	24.94 kV
Basic Impulse Level:	125 kV
Power Frequency Withstand:	60 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(9) **Vertical sections of metal clad switchgear each with the following common features:**

- Indoor enclosure, NEMA 1, 11 gauge steel, 36"W x 122"D x 105"H
- Basic one high construction including rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- Instrument compartment light 120 VAC LED type with switch
- Rear cable compartment light 120 VAC LED type with switch
- 2000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- 1/4" X 2" copper ground bus with plating to match main bus
- **Control terminal blocks, 600 volt, 30 ampere, SecuControl SAX**
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer control wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer terminations, insulated, ring tongue, crimp type
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wire markers, sleeve type

REFERENCE: 23-102 Metal Clad Switchgear Building F

- Barrier behind the instrument compartment doors
- Texture powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(2) Sets incoming line voltage monitoring equipment, each to include:

- Closed door racking type roll-out assembly complete with primary & secondary fuses

3 Voltage transformers, 16000:120 volt

(2) Sets switchgear main bus voltage monitoring equipment, each to include:

- Closed door racking type roll-out assembly complete with primary & secondary fuses

3 Voltage transformers, 16000:120 volt

(2) MAIN circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 2000 ampere with riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 2000A with boots
- Epoxy bus standoff assembly

1 PowIVac drawout vacuum circuit breaker rated 27kV, 2000A, 25kA with onboard racking provision 27PV25SND, with 2 "a" & 2 "b" contacts

1 Circuit breaker open/close control switch

4 Circuit breaker status indicating lights LED type

- Circuit breaker switch, MOC 9 circuit (5 a & 4 b)

- Circuit breaker switch, TOC 9 circuit (5 a & 4 b)

- Circuit breaker shutter position indicator

- Closed door racking to include viewing window, light 120 VAC LED type with switch

- Emergency push to trip switch with protective cover

1 Set close circuit disconnect fuse block with fuses

1 Set trip circuit disconnect fuse block with solid link

1 Set relay circuit disconnect fuse block with fuses

6 Current transformers, multi ratio, standard burden

- Set A-B chance ball stud with covers

1 Device 86, lockout relay LOR, 3 decks, 12 contacts

3 10 pole test switch with rear wired connection and semi-flush mount, current or potential as required, SecuControl ST

1 SEL 751501ACACA7085A630

1 Lot nameplates

REFERENCE: 23-102 Metal Clad Switchgear Building F

(1) BUS TIE circuit breaker equipment set, each to include:

- Circuit breaker cell rated 2000 ampere with riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper tie bus assembly rated 2000A
- Epoxy bus standoff assembly

1 PowIVac drawout vacuum circuit breaker rated 27kV, 2000A, 25kA with onboard racking provision 27PV25SND, with 2 "a" & 2 "b" contacts

- 1 Circuit breaker open/close control switch
- 3 Circuit breaker status indicating lights LED type
- Circuit breaker switch, MOC 9 circuit (5 a & 4 b)
- Circuit breaker switch, TOC 9 circuit (5 a & 4 b)
- Circuit breaker shutter position indicator
- Closed door racking to include viewing window, light 120 VAC LED type with switch
- Emergency push to trip switch with protective cover
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 1 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, standard burden
- 1 Device 10, Trip selector switch
- 1 Device 43, Auto/Manual selector switch
- 3 10 pole test switch with rear wired connection and semi-flush mount, current or potential as required, SecuControl ST**
- 1 SEL 751501ACACA7085A630**
- 1 Lot nameplates

(6) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly

1 PowIVac drawout vacuum circuit breaker rated 27kV, 1200A, 25kA with onboard racking provision 27PV25SND, with 2 "a" & 2 "b" contacts

- 1 Circuit breaker open/close control switch
- 3 Circuit breaker status indicating lights LED type
- Circuit breaker switch, MOC 9 circuit (5 a & 4 b)
- Circuit breaker switch, TOC 9 circuit (5 a & 4 b)
- Circuit breaker shutter position indicator

REFERENCE: 23-102 Metal Clad Switchgear Building F

- Closed door racking to include viewing window, light 120 VAC LED type with switch
- Emergency push to trip switch with protective cover
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 1 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, standard burden
- Set A-B Chance rear grounding provision
- 3 10 pole test switch with rear wired connection and semi-flush mount, current or potential as required, SecuControl ST
- 1 SEL 751501ACACA7085A630
- 1 Lot nameplates

REFERENCE: 23-102 Metal Clad Switchgear Building F**29.8kV ND Metal-Clad Switchgear****Tag Number: SWGR S1 S2 REV1**

One (1) line-up of PowIVac-ND® 27kV metal-clad switchgear with vacuum circuit breakers in accordance with ANSI standards C37.04, C37.09, C37.20.2, C37.20.7, C37.100.1 and rated as follows:

Maximum Voltage Class:	29.8 kV
Service Voltage:	24.94 kV
Basic Impulse Level:	125 kV
Power Frequency Withstand:	60 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(5) **Vertical sections of metal clad switchgear each with the following common features:**

- Indoor enclosure, NEMA 1, 11 gauge steel, 36"W x 110"D x 105"H
- Basic one high construction including rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- Instrument compartment light 120 VAC LED type with switch
- Rear cable compartment light 120 VAC LED type with switch
- 2000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- 1/4" X 2" copper ground bus with plating to match main bus
- **Control terminal blocks, 600 volt, 30 ampere, SecuControl SAX**
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer control wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer terminations, insulated, ring tongue, crimp type
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wire markers, sleeve type

REFERENCE: 23-102 Metal Clad Switchgear Building F

- Barrier behind the instrument compartment doors
- Texture powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(2) Sets incoming line voltage monitoring equipment, each to include:

- Closed door racking type roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 16000:120 volt

(2) Sets switchgear main bus voltage monitoring equipment, each to include:

- Closed door racking type roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 16000:120 volt
- 1 SEL 0387613X5H4X4XX
- 1 Test switch with rear wired connection and semi-flush mount, 10 pole, current or potential as required, SecuControl ST

(2) MAIN circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 2000 ampere with riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 2000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 27kV, 2000A, 25kA with onboard racking provision 27PV25SND, with 2 "a" & 2 "b" contacts
- 1 Circuit breaker open/close control switch
- 4 Circuit breaker status indicating lights LED type
- Circuit breaker switch, MOC 9 circuit (5 a & 4 b)
- Circuit breaker switch, TOC 9 circuit (5 a & 4 b)
- Circuit breaker shutter position indicator
- Closed door racking to include viewing window, light 120 VAC LED type with switch
- Emergency push to trip switch with protective cover
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 1 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, standard burden
- Set A-B chance ball stud with covers
- 1 Device 86, lockout relay LOR, 3 decks, 12 contacts

REFERENCE: 23-102 Metal Clad Switchgear Building F

- 3 10 pole test switch with rear wired connection and semi-flush mount, current or potential as required, SecuControl ST
- 1 SEL 751501ACACA7085A630
- 1 Lot nameplates

(1) BUS TIE circuit breaker equipment set, each to include:

- Circuit breaker cell rated 2000 ampere with riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper tie bus assembly rated 2000A
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 27kV, 2000A, 25kA with onboard racking provision 27PV25SND, with 2 "a" & 2 "b" contacts**
- 1 Circuit breaker open/close control switch
- 3 Circuit breaker status indicating lights LED type
- Circuit breaker switch, MOC 9 circuit (5 a & 4 b)
- Circuit breaker switch, TOC 9 circuit (5 a & 4 b)
- Circuit breaker shutter position indicator
- Closed door racking to include viewing window, light 120 VAC LED type with switch
- Emergency push to trip switch with protective cover
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 1 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, standard burden
- 1 Device 10, Trip selector switch
- 1 Device 43, Auto/Manual selector switch
- 3 10 pole test switch with rear wired connection and semi-flush mount, current or potential as required, SecuControl ST
- 1 SEL 751501ACACA7085A630
- 1 Lot nameplates

(2) Sets of switchgear AC control power equipment, each to include:

- Closed door racking type roll-out assembly complete with primary fuses
- Secondary molded case circuit breaker
- Set safety interlocks primary & secondary
- 1 **Fixed mounted CPT, 25kVA, 27600-120/240V, 60Hz, single phase**

REFERENCE: 23-102 Metal Clad Switchgear Building F

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Test coupler
- 1 Circuit breaker lift truck
- 1 Quart of touch up paint
- 1 FT Test Kit
- 1 Lot of Coax cable
- 1 Installation of fiber optic cable and pads for Arc Flash Sensing

REFERENCE: 23-102 Metal Clad Switchgear Building F

125 VDC System

**Energys OPzS Series 20 Year VRLA
125VDC 20 Year VLA Tubular Plate Lead Selenium Station Battery sized per the below
parameters:**

Number of Cells: 60	Minimum Temperature: 77 °F
Number of Jars: 60	Design Margin: 1.10
Final volts per cell: <u>1.75 vpc (average)</u>	Aging Factor: 1.25
Parallel Strings: 1	

Profile: Step Load
Step 1: 68.20 amps for 1 minutes
Step 2: 25.00 for 2878 minutes
Step 3: 68.200 for 1 minutes
Random Amp: N/A
Random Time: N/A
Total Time: 2880 minutes
AH Removed: 1201.44

Battery:
Model: 11OPzS 1375
Specific Gravity: 1.24
C8 Rating to 1.75ECV @ 77f: **1631Ah**
C8 Rating to 1.75ECV @ 77f: **171.25kW**
% of Requirement: 115%

Number of Cells: 60
Number of Jars: 60
Number of Plates: 33

Jar Weight: 239..8 lbs.
Battery Weight: 14,388 lbs.

Battery String Information:
Float vDC: 133.8 vDC Nominal Float (2.23vDC per cell)
Max vDC: 144. vDC Nominal Equalize (2.4vDC per cell)

Electrolyte Volume:
Per cell: 7.3 gal
Per string: 438 gal (60 cells in the string)

Heat Loss @ 25 amp discharge:

REFERENCE: 23-102 Metal Clad Switchgear Building F

Heat Generated Per 72 hr. Cycle: 117,922 BTU
Heat Generated on 48 hr. Discharge: 35,377 BTU
Heat Generated on 24 hr. Charge: 82,546 BTU
Heat Generated on Float Charge: 127.8 BTU/hr

Hydrogen Evolution: (ml H₂ / Hour) at float voltage

Per Cell: 379.17 ml/hour

Per String: 23 liters/hour (60 cells in the string)

Cell vDC: **2.23** vDC

Temperature: 77.0 °F

Hydrogen Evolution: (ml H₂ / Hour) at equalize voltage

Per Cell: 2.9 liters/hour

Per String 176 liter/hour (60 cells in the string)

Cell vDC: **2.40** vDC

Temperature: 77.0 °F

Cell Resistance & Short Circuit:

Short Circuit Current: **8800 max. amps.** Maximum calculated Short Circuit Current in Amperes

Cell Resistance: 0.000220 ohms. Resistance expressed in ohms, for Cell + 1 Connector

Standard Jar: Styrene Acrylonitrile (SAN)

Safety Vent: vent plugs with flame arrestor

Terminals: Lead alloy leak proof terminal and fully insulated solid copper inter-cell connectors

125VDC 20 Year Flooded Station Battery System Terminal Covers | Including terminal plate

Qty 5 - 827437 COVER, CONN,6'LONG,GRAY(SS=250)

Qty 4 - 825472 COVER, TERM.PLATE,SMALL (30)

2 Tier Seismic Battery Rack

Qty: 2

(Includes 58 spacers per rack EGD-SPCR10-33-39)

Model: AR12T1RERE2BP144

Style: 2 Tier

Rails: Powder Coated

'Painted' Rail

Rating: IBC 2012 (AC-156) SDs=1.0, Ip=1.5, z/h=1.0 (top of building) | SDs=1.6, Ip=1.5,

z/h=0.0 (at/below grade)

IEEE - 693 Moderate Qualification

REFERENCE: 23-102 Metal Clad Switchgear Building F

Dimensions of a single rack

Length: 144 in

Width: 21.5 in.

Height: 67.19 in.

Height to top of Battery: 83 in.

Weight: 492 lbs. X 2 Racks = 984 lbs

Spill Containment System

Qty: 2

Enviroguard Eagle System – EAGLE-31-88

Length 88 in.

Width 31 in.

Weight 186 lbs X 2 racks = 372 lbs

Alpha ACS-WM-125

240V 1 phase input | 125VDC 70 amp output | Single Charger Configuration

Charger capacity calculations: $1.1 \times 1201.44\text{Ah removed}/24 \text{ hr. recharge} + 25 \text{ amp continuous} = 80.06 \text{ amps}$. Use 70 amp charger. (Next step up from 70 amps is 105 amps which required a 3Ph input)

Thus actual recharge time is 29 hours with this charger

Model: Part number to be determined, Normally this charge is floor mounted but they configured for wall, No part number yet

ACS Wall Mount Charger: 125VDC/8.8KW(70A) \$9,995.97 \$9,995.97

Part No: TBD

Input: 208/240VAC/1phase/60Hz

Output: 125VDC/70A

Dimensions: 22.25" W x 20.25" D x 21.39" H

Consisting of

NEMA 1 Enclosure, Wall Mounted, Color:RAL 9005

1 x Cordex HP Controller

2 x Cordex CXRC 125-4.4Kw

3 x Cordex 4.4 Kw Module Blank

1 x Cordex 19" Flush Mount Shelf, 5xCXRC

1 x Breaker Panel

208/240VAC 1 Phase Input CB

125VDC Output CB

Alarms: AC Fail, Low Charger Output Voltage, High Charger Output Voltage, Charger Fault, & Ground Fault

DNP3 Adapter and Associated Power Supply

REFERENCE: 23-102 Metal Clad Switchgear Building F

Lead Time: 24 - 34 Weeks ARO

Dimensions and Weight Single Charger

Height 21.39 in

Width 2.25 in

Depth 20.25 in

Weight 160 lbs

Floor mount | top cable entry

Heat Loss 600 Btu/Hr. at 100% charger capacity

Input Amps required @ 240V – 80 amps

Battery Charger Approval Drawings

Certified Copy of Factory Test Results

REFERENCE: 23-102 Metal Clad Switchgear Building F

SCADA and Communication Cabinet

(1) SCADA and Communication Cabinet to include:

- QTY 2 EA: RACK ASSEMBLY - 90.125"H X 30"W X 20.125"D, 48 RU, W/DUAL ENDCOVER HCUDW903, MATERIAL 125 5052 H32 ALUMINUM BRUSHED (HARCRAFT #HCURC001)
- QTY 15 EA: BLANKING PANEL - 1RU, ALUMINUM (HARCRAFT #HCUH01)
- QTY 2 EA: BLANKING PANEL - 3RU, ALUMINUM (HARCRAFT #HCUH03)
- QTY 1 EA: BLANKING PANEL - 20RU, ALUMINUM (HARCRAFT #HCUH20)
- QTY 1 EA: BLANKING PANEL - 8RU, ALUMINUM (HARCRAFT #HCUH08)
- QTY 1 EA: BLANKING PANEL - 10RU, ALUMINUM (HARCRAFT #HCUH10)
- QTY 1 EA: BLANKING PANEL - 9RU, ALUMINUM (HARCRAFT #HCUH09)
- QTY 4 EA: 19" RACK PANEL EACH W/ 3 X 10P SAX TERMINAL BLOCKS FOR POTENTIAL / SIGNAL
- QTY 1 EA: TEST PLUG FOR SAX TERMINAL BLOCK
- QTY 1 EA: MINIATURE CIRCUIT BREAKER - 32A, 2P, 125VDC, 10KAIC, DIN RAIL MOUNT (EATON #FAZ-C32/2-DC OR AVAILABLE EQUAL)
- QTY 9 EA: MINIATURE CIRCUIT BREAKER - 3A, 2P, 125VDC, 10KAIC, DIN RAIL MOUNT (EATON #FAZ-C3/2-DC OR AVAILABLE EQUAL)
- QTY 4 EA: MANAGED HARDENED GIGABIT ETHERNET SWITCH - POE+ RACK MOUNTABLE, (24) 10/100/1000BASE-T, POE+ PORTS + (4) 100/1000BASE-X SFP SLOTS + (4) 1G/10GBASE-X SFP+ SLOTS (TRANSITION NETWORKS #SISPM1040-3248-L)
- QTY 2 EA: REAL-TIME AUTOMATION CONTROLLER - 8GB RAM, 32GB SSD, 2.0GHZ (SEL #3555-9CP2)
- QTY 1 EA: SATELLITE-SYNCHRONIZED NETWORK CLOCK - SEL-2488 W/ ANTENNA (SEL #24880RAA1181AX23X)
- QTY 1 EA: DISCRETE PROGRAMMABLE AUTOMATION CONTROLLER (DPAC) - SEL 2440, HORIZONTAL PANEL MOUNT (SEL #24402H12A6311640 /2440#B624)
- QTY 4 EA: COAX CONNECTOR - BNC MALE FOR RG-58 COAX CABLE (SCHWEITZER #915900505)
- QTY 2 EA: 2RU PATCH PANEL - 4 ADAPTER PLATES, LC DUPLEX 24 SM OS1/2, NO PIGTAILS, 2 SPLICE TRAYS, 1 STRAIN RELIEF CLAMP (RLH INDUSTRIES#PRO-2B-1-B53-N2-1)

REFERENCE: 23-102 Metal Clad Switchgear Building F

- QTY 15 EA: ETHERNET CABLE - CAT 5E, BLUE, 14FT, RJ45 MALE TO RJ45 MALE (AUTOMATION DIRECT #C5E-STPBL-S14)
- QTY 2 EA: COAXIAL CABLE - RG-6 CABLE (SCHWEITZER #C960)
- QTY 3 EA: TERMINAL STRIP - 30A, 600VAC/DC, 12 POINT (MARATHON #1512STD)
- QTY 1 EA: GROUNDING BAR - 12 PORT, #14 - #4AWG, 2/0 MAIN, TIN-PLATED COPPER (PANDUIT #UGB2/0-414-12)
- QTY 2 EA: DIN RAIL - TS35 X 7.5, ZINC PLATED, SLOTTED, 2M STICK (WEIDMULLER #0514500000)

Minor Materials

- Nameplates & Labels (Manufacturer, Customer & Component ID)
- Controls - #14AWG SIS Wire, Terminals, Non-Rotating Wire Markers
- Control Power & Potential - 10-12AWG SIS Wire, Terminals, Non-Rotating Wire Markers
- Component Bonding - #14-10AWG Green
- Main Bonding - #6AWG Green
- Zinc Component Mounting Hardware
- Wire Protection & Securing
- Nameplates

Includes 120 Internal Panel Wires - Additional Wires Subject to Price Adder

Customer Supplied Materials

- None

Labor & Other

- All Labor to Securely Mount, Assemble, Wire & Bond to Constitute a Complete System (As Applicable)
- Procurement, Professional Engineering & Project Management Oversight
- Standard Internal QC, Inspection, Test
- Shipping Preparation & Packing to Ensure Secure Domestic Transportation

Other Available Options

- Consult Zarlec Factory

Physical Data

REFERENCE: 23-102 Metal Clad Switchgear Building F

- Dimensions: 90.125"H X 60"W X 20.125"D
- Weight: 320 Lbs
- External Power Circuits: 1 X 30A/2P
- Heat Loss: 250W

REFERENCE: 23-102 Metal Clad Switchgear Building F

Fire Detection System

Provide Notifier addressable fire alarm control panel with smoke detectors, manual pull stations and notification devices for City of Lake Worth Beach project. This project include design, calculations, a submittal package, and a complete installation, which is to be performed at Powell facility.

FL Fire Marshal Plan Submittal and Final Checkout with Fire Marshal:

Building fire Alarm Bill of Materials Per Building:

Qty.	Part No.	Description
1	MS-4	Firelite Conventional Fire Alarm Panel
3	2W-B	System Sensor smoke detector
2	BG-12L	Firelite Conventional Pull Station
2	P2RL	System Sensor Weatherproof Horn/Strobe
1	MR-201-C/R	Space Age Multi Voltage Relay
2	PS1270	Power Sonic 12V 7AH Battery

Lot – Licensed Fire Alarm Installation Labor

Lot – Installation Materials

Lot – Programming Labor

Lot – Design & Submittal Package

SCOPE OF WORK:

- Provide shop drawings, calculations, and manufacturer’s datasheet and manual.
- Furnish labor and materials for the installation of all Vanguard supplied equipment.
- FAT Testing in the presence of the Authority Having Jurisdiction at Powell’s facility.
- Provide “as-built” drawings and “Operation Manuals” subsequent to the completion of the installation.
- The fire alarm system is based on the building dimensions stated above.
- Vanguard has proposed conventional fire alarm system for the proposed building.
- Vanguard will utilize 1900 & 40 boxes for building split.
- Florida fire Marshal permit and final commissioning at the end user location is included in this proposal.
- Vanguard has proposed surface mounted fire system devices under this proposal.
- Fire extinguishers shall be supplied by others.

REFERENCE: 23-102 Metal Clad Switchgear Building F

- Any site orientation classes, drug testing and background check fees and technicians' hours is not included under this proposal.
- Any delay during commissioning at Florida site will be billed at time and material basis.
- Vanguard is not responsible for connecting the building fire panel to the site wide fire alarm system.

REFERENCE: 23-102 Metal Clad Switchgear Building F

PROPOSAL SUMMARY

Powell Automation Division (PAD) is pleased to provide this proposal to the City of Lake Worth Beach for programming of OnBoard Racking utilizing Powell’s Sentry Technology and an **OPTION** for Circuit Breaker Monitoring. This proposal is based on hardware provided by Powell Electrical

ONBOARD® RACKING (OBR)

Statistics indicate that the manual racking of a circuit breaker on and off a live bus carries one of the greatest safety risks for operations personnel. At Powell, our primary goal is to continue the development of safety-centered products for the protection of personnel and assets. The OnBoard racking product epitomizes this goal.

For each switchgear lineup, PAD will provide Sentry OnBoard Racking (OBR) units to allow for remote racking-in/out of the circuit breakers.

Installation of the monitoring equipment is to be done by the switchgear manufacturer. The quantity of devices are listed in **Section 4.1: BILL OF MATERIALS**

1.1 BILL OF MATERIALS

SOURCE SWGR S1 S2

MANUFACTURER	DESCRIPTION	QTY
POWELL	SENTRY™ CONTROL UNIT	3
POWELL	PROXIMITY SENSOR	3
POWELL	LOCKOUT/TAGOUT SWITCH	3
POWELL	REMOTE CONTROL PORT ASSEMBLY	3
POWELL	HAND-HELD CONTROLLER	1
MISCELLANEOUS	TERMINAL BLOCKS, FUSES, ETC.	1 LOT

LOAD SWGR M1 M2

MANUFACTURER	DESCRIPTION	QTY
POWELL	SENTRY™ CONTROL UNIT	9
POWELL	PROXIMITY SENSOR	9
POWELL	LOCKOUT/TAGOUT SWITCH	9
POWELL	REMOTE CONTROL PORT ASSEMBLY	9
POWELL	HAND-HELD CONTROLLER	1
MISCELLANEOUS	TERMINAL BLOCKS, FUSES, ETC.	1 LOT

REFERENCE: 23-102 Metal Clad Switchgear Building F

DELIVERABLES

By Powell Automation Division

- ✓ Configured Sentry™ Units
- ✓ Communication Drawings

By Powell Electrical Division Houston

- ✓ Hardware Installation

By Customer

- ✓ Any special device addressing formats

CIRCUIT BREAKER MONITOR (CBM) OPTION

The breaker mounted CBM module uses advanced algorithms, analyzing past and present circuit breaker data to determine your breaker health and informing of potential faults or problems. Interfaced with the Powell BreakerView™ software, a client can further analyze data from their computer, as it offers intuitive data dashboards, alert management functions, maintenance reports and trending of data, together with its baseline.

Included in this proposal are the Infrared Interface Module (IRIM) & External Interface Module (EIM) which are required for data collection from the onboard CBM module, which will be installed into the breaker cubicle door. The client can then communicate remotely with the CBM through the IRIM module by Modbus with an RS485 interface, or locally through the EIM via USB port.

1.2 BILL OF MATERIAL

SOURCE SWGR S1 S2

MANUFACTURER	DESCRIPTION	QTY
POWELL	CIRCUIT BREAKER MONITOR (PROVIDED BY SWGR MANUFACTURER)	3
POWELL	IRIM MODULE	3
POWELL	EIM MODULE	3

LOAD SWGR M1 M2

MANUFACTURER	DESCRIPTION	QTY
POWELL	CIRCUIT BREAKER MONITOR (PROVIDED BY SWGR MANUFACTURER)	9
POWELL	IRIM MODULE	9
POWELL	EIM MODULE	9

REFERENCE: 23-102 Metal Clad Switchgear Building F

DELIVERABLES

By Powell Automation Division

- ✓ Configured CBM—IRIM/EIM Units
- ✓ BreakerView™ License
- ✓ Communication Drawings

By Powell Electrical Division Houston

- ✓ Product Installation

By Customer

- ✓ Any special device addressing formats

WORKSTATION

PAD will provide the following workstation for HMI visualization of the BreakerView servers:

ENCLOSURE: BREAKERVIEW WORKSTATION

DESCRIPTION	QTY
WALL MOUNTED ENCLOSURE	1
INDUSTRIAL COMPUTER (BREAKERVIEW)	1
19" LCD TOUCHSCREEN MONITOR	1
24V DC POWER SUPPLY	1
TERMINAL BLOCKS, NAMEPLATES, ETC.	1 LOT

DELIVERABLES

By Powell Automation Division

- ✓ As-Built Drawings for MCS Enclosures
- ✓ Procurement and Construction of MCS Enclosure
- ✓ Configured Breakerview EdgeServer

SERVICES INCLUDED/NOT INCLUDED

Included

- ✓ Project Management from Order Entry to Delivery
- ✓ Coordination with Electrical and Mechanical for Drawing and Manufacturing
- ✓ FAT Plan – For Approval/Final

REFERENCE: 23-102 Metal Clad Switchgear Building F

Not Included

- ✓ Professional Engineering Studies
- ✓ Determination or programming of relay protection settings
- ✓ Customer witnessed Factory Acceptance Testing
- ✓ Field service of any kind

REFERENCE: 23-102 Metal Clad Switchgear Building F

COMMENTS and CLARIFICATIONS

Commercial & technical comments, clarifications and exceptions will be detailed in either:

- Powell's standard Clarification Log SAE-FO-033, or
- The customer supplied clarification log which was provided with the RFP

The applicable clarification log will accompany this proposal as a separate attachment and shall be referenced as a part of any resulting contract or purchase order.

REFERENCE: 23-102 Metal Clad Switchgear Building F

COMMERCIAL SUMMARY

Power Control Room (PCR) PCR_REV1	\$1,056,428.00
DC Charging Systems.....	\$18,853.00
Battery Ship to Customer	\$124,820.00
Cabinets / Relay Panels/SCADA	\$115,564.00
Fire Systems Ship	\$8,978.00
PV System 27 kV ND Switchgear and Accessories SWGR_S1_S2 REV1	\$470,222.00
PV System 27 kV ND Switchgear and Accessories SWGR_M1_M2 REV1	\$782,381.00
Technologies and Systems On-Board Racking.....	\$94,136.00
Powell Standard Documentation.....	INCLUDED
2 days site supervision.....	\$27,000.00
Estimated Freight.....	\$295,508.00
TOTAL.....	\$2,993,890.00

OPTIONS

SWGR_S1&S2 Circuit Breaker Monitor Adder.....	\$4,526.00
SWGR_M1&M2 Circuit Breaker Monitor Adder	\$11,083.00
FL Fire Marshal Plan Submittal and Final Checkout with Fire Marshal.....	\$5,071.00
Start-Up Spare Parts.....	\$10,290.00
Two-Years Spare Parts	\$71,189.00

REFERENCE: 23-102 Metal Clad Switchgear Building F

Freight/Risk Transfer:

Freight Prepaid: DAP Gate at customer jobsite
(INCOTERMS 2010 – freight allowed and included in quoted price)
Equipment will be delivered DAP to gate at customer site by Powell nominated carrier. Risk shall pass at customer gate.

Good faith pricing for above prepaid freight options based on:

- Gate - to - gate transport only
- Standard heavy haul tractor/trailer configurations with air ride trailers
- Approved routings based on DOT information at time of bid
- Fuel rates at time of bid
- Bucket trucks (if required)
- Permits and Escorts as required by overall weights and dimensions
- Quantity and size of each shipping section at time of bid
- Four hours of free time are included at jobsite, after which \$325 per hour demurrage charges may apply

Pricing for prepaid shipping may be impacted by the following:

- Inability of Powell's designated carrier to transport to an offload location within the customer facility using the standard tractor/trailer configuration which was used as the basis of this estimate
- The requirement for specialized transport equipment such as SPMT's (self-propelled motorized transports) within the customer facility due to tight turn radius or in-plant obstructions.
- Detention/Demurrage charges due to unforeseen re-routing or delays as directed by Department of Transportation, State, or City officials. This may be due to weather conditions, new road construction, traffic accidents, or other factors beyond Powell's knowledge or control at the time of this estimate.
- Significant increases in fuel rates or surcharges.
- Scope and design changes during the project that result in increases to overall weights and dimensions of one or more shipping sections.

REFERENCE: 23-102 Metal Clad Switchgear Building F

TERMS & DELIVERY

General:

Powell's standard Terms and Conditions shall apply to any contract resulting from this quotation, unless negotiated otherwise prior to acceptance of order.

Drawings shall be submitted in Powell's standard format.

Factory acceptance testing of equipment manufactured by Powell shall be per Powell's established ISO QA/QC procedures, and in accordance with applicable IEEE industry standards.

Factory acceptance testing of major buy-out items, if required, shall take place at the factory of origin and at buyer's expense. Major buy-out components may include, but are not limited to: packaged HVAC systems, DC Systems, UPS systems, third-party LV motor control, VFDs, etc.

Project Schedule:

Drawings for Approval:
Submitted 24 to 25 Weeks after acceptance and confirmed agreement of purchase order.

Shipment:
52 to 54 weeks after return of all drawings approved, with full release for manufacture.

Lead-times for drawings and delivery are based on engineering and shop loading at the time of proposal submission. Lead-times may vary based on actual contract award date. Please contact your Powell Sales Representative to discuss potential expedited drawing or delivery options to meet your specific project needs.

Note: Design/Scope changes during drawing approvals and/or after RTM or Record drawing submittals may result in schedule and/or cost impacts.

Drawings and IOM Manuals: Powell issues drawings and manuals electronically to a customer specified FTP site, or via Powell Pitstop web based email. Powell generated drawings will be submitted as PDF, but native formats are available upon request. Electronic

REFERENCE: 23-102 Metal Clad Switchgear Building F

Drawing Submittals:

drawing formats from sub-suppliers will be provided as available from each sub-supplier.

For all projects, Powell will submit (4) drawing packages. The purpose and content of the packages are explained in order of submittal below.

Approval Drawings:

(See Project Schedule Above for Lead Times)

Approval drawing lead-time is inclusive of our Technical Review Process, which allows Powell to verify that we are in receipt of the latest project design information.

Tech Review will be completed within 1-3 weeks of order entry. Any resulting questions/clarifications will be submitted for customer acceptance and/or response before Powell completes and issues approval drawings.

Release to Manufacturing Drawings:

Submitted (3-4) Weeks after return of approval drawings.

RTM drawings will incorporate approved-as-noted customer mark-ups after return of approval drawings. This documents that the changes have been captured and incorporated into the final design for released to fabrication.

Record Drawing Package:

Submitted (4-6) weeks after issue of RTM drawings.

The Record drawing package will include:

- All previously submitted drawings with changes incorporated
- Detailed wiring diagrams
- PCR interconnection schedules (if applicable)
- Conduit schedules (if applicable).

Scope changes requested after completion of Record drawing package will be documented on final As-Built drawings which are submitted after shipment.

As-Built Drawings:

Submitted (2-4) Weeks after shipment from Powell Factory.

Certified As-Built Drawings will reflect the final design and construction of the equipment as it left the Powell factory upon completion.

REFERENCE: 23-102 Metal Clad Switchgear Building F

Pricing:	Pricing is firm through Powell's quoted drawing and delivery schedule.
Taxes and Duties:	None included in base proposal.
Terms of Payment:	Net (30) days from invoice date.
Milestone Billing:	<p>The following progress payments are applicable to this proposal:</p> <ul style="list-style-type: none">20% : At Order Acceptance25% : At Approval Drawing Submittal35% : At Release to Manufacture (RTM)20% : At Ship
Cancellation Charges:	<p>The following cancellation percentages are applicable to this proposal:</p> <ul style="list-style-type: none">25% : After Order Acceptance50% : After Submittal of Approval Drawings90% : After Release to Manufacture100% : After Start of Fabrication
Shipping Preparation:	Standard domestic preparation is included in quoted price.
Warranty:	<p>Powell standard warranty, 12 months from energization or 18 months from date of shipment, whichever occurs first.</p> <p>Note: Extended warranty terms available upon request. Please contact your Powell Sales Executive for more information.</p>
Spare Parts Quotation:	Will be supplied upon completion of customer approved bill of material.
Customer Witness Testing:	<p>(4) Standard testing days (virtual or onsite), Monday thru Friday, included in quoted price. Additional days, if requested, will be billed at \$2,500 per day.</p> <p>Custom or non-standard testing scenarios can be accommodated. Please consult your Powell Sales Representative for details for pricing.</p>
Field Services:	Not included in quoted scope of supply. Please refer to attached

REFERENCE: 23-102 Metal Clad Switchgear Building F

Powell Field Service Rate Schedule.

For Proposals that specify a split-PCR shipment, Powell recommends that a factory certified technician be present in an advisory capacity to the installing contractor during re-assembly. Please provide advance notice of 7-10 working days, allowing Powell adequate time to schedule a technician for this service at your site.

Thank you for the opportunity for Powell to serve you. Should you have any questions or additional requirements please contact me.

Submitted by:



Matt Smith
Sales Representative
713.947.4656
Matt.smith@powellind.com

/pf