#### FIRST AMENDMENT TO TASK ORDER NO. 05

#### Additional Engineering Services – Canal 8-Bay Distribution Substation

THIS FIRST AMENDMENT TO TASK ORDER No. 5 ("Amendment") is made on\_\_\_\_\_\_\_, 2021, between the **City of Lake Worth Beach**, a Florida municipal corporation located at 7 North Dixie Highway, Lake Worth, Florida 33460 ("City") and **Power Engineers, Inc.**, a Florida corporation ("Consultant").

#### 1.0 **Project Description**:

The City desires the Consultant to provide those additional services as identified herein and generally described as: Additional scope of work and design for the Canal 8-Bay Distribution Substation (the "Project"). The Project is described in the consultant's project change request, dated September 2<sup>nd</sup>, 2021, and is attached hereto as Exhibit "1" and incorporated herein.

#### 2.0 Scope

Under this Amendment, the Consultant will provide additional professional services to the City as detailed in the **Consultant's project change request attached hereto and incorporated herein as Exhibit "1".** Additional services to be provided under this amendment include; Capacitor Bank Design, Express Feeder modifications, Bus Tie Motor Operated Switches, design revisions associated with original 7th Ave. N go-by package, develop Packaged Substation Specifications and bill of materials.

#### 3.0 Schedule

The services to be provided under this Amendment shall be completed concurrently with the initial scope of work under Task Order No. 5. An additional <u>30</u> calendar days will be added to the overall project duration following the City's approval of this Amendment or the issuance of a Notice to Proceed.

#### 4.0 Compensation

This Amendment is issued for a time and expense, not to exceed amount, of **\$64,788**. The attached proposal identifies all costs and expenses anticipated in the time and expense, not to exceed amount.

#### 5.0 Project Manager

The Project Manager for the Consultant is <a href="Ivette-Sanchez">Ivette Sanchez</a>, phone: <a href="407-341-6907">407-341-6907</a>; email: <a href="Ivette.sanchez@powereng.com">Ivette.sanchez@powereng.com</a>; and, the Project Manager on behalf of the City is <a href="Carl Turner">Carl Turner</a>, P.E.; with the Florida Municipal Power Agency, phone: <a href="321-239-1054">321-239-1054</a>; email: <a href="Carl Turner@fmpa.com">Carl Turner@fmpa.com</a>; and the Project Manager for the City is <a href="David Martyniuk">David Martyniuk</a>, phone: <a href="3561-586-1629">561-586-1629</a>; email: <a href="DMartyniuk@lakeworthbeachfl.gov">DMartyniuk@lakeworthbeachfl.gov</a>

#### 6.0 Progress Meetings

The Consultant shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

#### 7.0 Limitation of Liability

The City agrees to limit CONSULTANT's liability, to the City and to those under contract with the City to perform the work under the scope of the Project, for insurable events arising from the CONSULTANT's performance under this Amendment to <u>One Million Dollars (\$1,000,000.00)</u>. Except for the CONSULTANT's agreement and obligation to indemnify and hold harmless under the Agreement, the CONSULTANT's liability for non-insurable events including breach of contract shall not exceed <u>\$64,788</u> under the proposed Amendment for this project.

#### 8.0 Authorization

This Amendment is issued in compliance with the Consultants' Competition Negotiation Act, section 287.055, Florida Statutes, and pursuant to the Agreement for Professional Services between the City of Lake Worth and the Consultant, dated <a href="May 1st">May 1st</a>, 2018 ("Agreement" hereafter). If there are any conflicts between the terms and conditions of this Amendment and the Agreement, the terms and conditions of the Agreement shall prevail; however, the specific scope of services set forth in this Amendment shall take precedence over any other more general description of services.

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IN WITNESS WHEREOF, the parties hereto have made and executed this Amendment on the day and year first above written.

## CITY OF LAKE WORTH BEACH, FLORIDA

|                                                                                             | Ву:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
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|                                                                                             | Betty Resch, Mayor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| ATTEST:                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| By: Melissa Ann Coyne, CMC, City Clerk                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| APPROVED AS TO FORM AND LEGAL SUFFICIENCY:                                                  | APPROVED FOR FINANCIAL SUFFICIENCY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| By: Glen J. Torcivia, City Attorney                                                         | By:Bruce T. Miller, Financial Services Director                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| CONTRACTOR:                                                                                 | Power Engineers, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| [Corporate Seal]                                                                            | By: Alan Sowell Class Carbon Sowell Print Name:  Alan Sowell Sowe |  |  |  |
| STATE OF Florida (COUNTY OF Orange)                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| as the <u>vp Project Monagement</u> [title] of I to do business in the State of Florida, wh | Reknowledged before me by means of physical presence Spends 2021, by Alan Sauell Power Engineers, Inc., a Florida Corporation authorized no is personally known to me or who has produced on, and who did take an oath that he or she is duly and bind the CONTRACTOR to the same.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| Notary Search NOTAP My Comm. Expires July 27, 2023 No. EE 116421                            | Notary Public Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| PUBLIC POLITE                                                                               | age 3 of 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |

<u>EXHIBIT "1"</u> (Consultants Project Change Request)



### **Project Change Request**

**PCR issue Date:** <u>9/2/2021</u> **PCR Number:** <u>01</u>

To: Paul Nicholas PCR Revision No.: 1.0

Originator: Ivette Sanchez PCR Name: City of Lake Worth Beach

Related PCN: NA Project Number 171044

PCN Issue Date: NA Project Name: CLWB-25kV Canal Substation

PCN Approval Date: NA Developed By: Ivette Sanchez

#### **Event/ Decision Justifying Change:**

Design modifications and additional design requests impacting efforts in substation physical general arrangement design, plans and sections cuts details drawings, additional protection and control schematics/wiring, and protection schemes relay settings. Items include:

- 1. 4MVAR Controlled Staged Caps Bank connection to main 27kV Bus
- 2. Moving Express Feeder from distribution bay to main 27kV Bus
- 3. Bus Tie Motorized Operated Switches (MODs)
- 4. 7th Ave 27kV Station Go-Bys Fixes and Redrawn of drawings
- 5. Develop Dis-Tran Specifications and BOM

#### **Change Description:**

#### 1. 4MVAR Controlled Staged Caps Bank connection to main 27kV Bus

CLWB described the operation challenges encountered with MVARs deficiencies in the system. There is a need of an additional 3MVAR at the existing Canal Station. Capacitor banks are needed on the distribution side in the new Canal Distribution Substation. 4MVAR on each of the 4-bay 27kV main busses are initially required with a design to expand in the future. *Refer to Exhibit A for additional information dated 04/16/21*.

Original scope included one 27kV distribution feeder position to connect to capacitor bank via 35kV RMAG breaker. *Refer to pages 2-3 of 110-069 New Canal 8-Bay 25kV Distribution Station Proposal\_04-08-21 dated 04/08/21.* 

Current design entails the location of the 4MVAR Cap Bank in the existing distribution yard connecting to the main bus via UG duct.

#### Efforts for this task included:

- a. Research, evaluate and develop new specification with requirement of staged cap banks (\$7,638.00).
- b. Modification and additional physical design efforts including in the substation general arrangement layout and section cuts (\$5,800.00).
- c. Additional P&C design schematic design and wiring diagrams (\$5,510.00).
- d. Additional protection/control devices/schemes for relay settings (\$4,640.00).



### **Project Change Request**

#### 2. Moving Express Feeder from distribution bay to main 27kV Bus

The express feed needs to come in on the main 26.4kV bus because if it comes in on the bay then the 3 feeders adjacent to that bay will not get the reactor changes desired for short circuit control. *Refer to Exhibit A for additional information dated 04/16/21* 

Original scope included one 27kV distribution feeder position to connect to 27kV express feed via 35kV RMAG breaker. *Refer to pages 2-3 of 110-069 New Canal 8-Bay 25kV Distribution Station Proposal\_04-08-21 dated 04-8-21*.

Efforts for this task included:

a. Modification and additional physical design efforts including in the substation general arrangement layout and section cuts (\$5,510.00).

#### 3. Bus Tie Motorized Operated Switches (MODs)

Bus Tie Switches will be motorized operated. SCADA control for the MODs was brought up during RFI discussions and was not included in the original scope. *Refer to 170415 RFI #1 for additional information*.

Efforts for this task include:

- a. Additional P&C schematic design and wiring diagrams (\$5,510.00)
- b. Additional device settings to be developed (\$4,640.00)

#### 4. 7th Ave 27kV Station Go-Bys - Fixes and Redrawn of drawings

As discussed previously, the reason for this is the drawing supplied to us was not drafted properly. Dimensions were not to scale, and 90 percent of the drafting was poor workmanship. Structures were not true to any centerline buses were not perpendicular to each other.

Original scope was to use 7th Ave. N drawings and modify for the new 8 bay substation with two transformers. Needed to revise the general layout and all the sections and check/verify all dimensions and re-draft all the drawings.

Efforts for this task include:

a. Correct and redraw drawings (\$17,000.00)

#### 5. Develop Dis-Tran Specifications and BOM

CLWB decided to use Dis-Tran to be the 27kV Distribution substation packager.

#### a. Efforts for this task include:

Substation will need to create a structure and equipment specification and review Dis-Tran's drawings which is a scope change. Original scope submitted on 04/08/21 included Forty - Eight (48) hours for structure design which will be enough for review the 27kV structure drawings, BOM and structure calculations, but not cover the structure and equipment specification. This will shift that steel design (which we were going to use 7th Ave. N) from our scope of work to Dis-Tran. We would need to wait for reactions from Dis-Tran to complete foundation designs for the 27kv structures, but may be able to use what they did at 7th Ave. N in the meantime (\$8,040.00).



# **Project Change Request**

### **Assumptions:**

• None

**Requested PCR Approval Date:** 9/10/2021

### **Estimated Additional Cost:**

| Activities                                                       | Budget       |
|------------------------------------------------------------------|--------------|
| 1. 4MVAR Controlled Staged Caps Bank connection to main 27kV Bus | \$ 23,588.00 |
| 2. Moving Express Feeder from distribution bay to main 27kV Bus  | \$ 5,510.00  |
| 3. Bus Tie Motorized Operated Switches (MODs)                    | \$ 10,150.00 |
| 4. 7th Ave 27kV Station Go-Bys - Fixes and Redrawn of drawings   | \$ 17,500.00 |
| 5. Develop Dis-Tran Specifications and BOM                       | \$ 8,040.00  |
| Total Change Order (\$)                                          | \$64,788.00  |

| Im                                                        | npact on Schedule:<br>None       |  |                       |         |                           |  |  |  |
|-----------------------------------------------------------|----------------------------------|--|-----------------------|---------|---------------------------|--|--|--|
| Im                                                        | npact on Deliverables:<br>None   |  |                       |         |                           |  |  |  |
| Potential Impacts to other Project(s)/Department(s): None |                                  |  |                       |         |                           |  |  |  |
| <b>G</b> 1                                                | Albando                          |  |                       | 1 1 1 1 |                           |  |  |  |
| Sub                                                       | mitted by: <u>Ivette Sanchez</u> |  | Approved by: <u>I</u> | 'aul N  | <u>icholas</u>            |  |  |  |
| Dat                                                       | e: <u>9/2/2021</u>               |  | Date:                 |         |                           |  |  |  |
| Disciplines Impacted (check appropriate boxes):           |                                  |  |                       |         |                           |  |  |  |
|                                                           | Project Mgmt.                    |  | Electrical            |         | Environ. /ROW             |  |  |  |
|                                                           | Project Control                  |  | Controls              |         | POWER 360                 |  |  |  |
|                                                           | Civil                            |  | Substation            |         | Communications            |  |  |  |
|                                                           | Structural                       |  | Line                  |         | Construction Mgmt.        |  |  |  |
|                                                           | Mechanical                       |  | Studies               |         | Testing and commissioning |  |  |  |
|                                                           | Other                            |  |                       |         |                           |  |  |  |
| cc:                                                       |                                  |  |                       |         |                           |  |  |  |