

**SALEM COUNTY IMPROVEMENT AUTHORITY**

**RESOLUTION 2021-52**

**APRIL 8, 2021**

**RESOLUTION OF THE SALEM COUNTY IMPROVEMENT AUTHORITY  
AUTHORIZING PROFESSIONAL ENGINEERING SERVICES IN CONNECTION  
WITH THE PURCHASE OF A FLARE CONTROL PANEL REPLACEMENT AND  
REMOTE MONITORING AND CONTROL UPGRADE**

**WHEREAS**, The Salem County Improvement Authority ("SCIA") needs to replace the flare control panel ("Flare Control Panel") and upgrade the remote monitoring system and controls ("RMC"); and

**WHEREAS**, in connection with the replacement of the Flare Control Panel there is a need for professional engineering services to prepare bid documents for the purchase of the new Flare Control Panel and to design, fabricate and install the RMC; and

**WHEREAS**, due diligence was conducted and it was decided that the best option is Option 1 reflected on the attached scope of work provided by SCS Engineers, a copy of which is attached hereto as Exhibit A, which will cost the approximate amount of \$36,800; and

**WHEREAS**, as per Resolution 2021-35, SCS Engineers has submitted qualifications and was approved by the Board through a fair and open process to render the type of engineering services identified in this project; and

**WHEREAS**, funds are available in the full amount of the purchase price of the flare control panel replacement and remote monitoring and same have been certified by the Certifying Financial Officer;

Vendor: SCS Engineers

| Account Number | Amount      | Department Description |
|----------------|-------------|------------------------|
| 60-00-000-200  | \$36,800.00 | Equipment Purchase     |

**NOW, THEREFORE, BE IT RESOLVED** that the Executive Director is hereby authorized to execute the required documents to engage SCS Engineers in the professional engineering services set forth above and as contained in the scope of work attached hereto as Exhibit A.

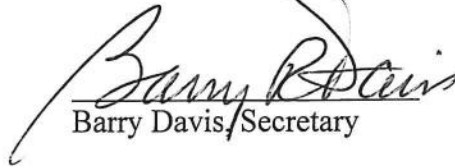
ATTEST:

  
Barry Davis, Secretary

  
Cordy Taylor, Chairman

**CERTIFICATION**

I hereby certify the above to be a true copy of a resolution adopted by the Salem County Improvement Authority Board at their regular meeting held April 8, 2021.

  
Barry Davis, Secretary

March 31, 2021  
File No. 020068221

Ms. Julie Acton, Executive Director  
Salem County Improvement Authority  
286 Welchville Road, PO Box 890  
Alloway, New Jersey 08001

Subject: Flare Control Panel Replacement and Remote Monitoring and Control Upgrade

Dear Ms. Acton,

As requested, presented below and attached is our detailed proposal for procuring the goods and services required to replace the existing flare controller and add remote monitoring and control (RMC) features to the blower/flare station.

## SCOPE OF WORK – FLARE CONTROLS BIDDING WITH SCS-PROVIDED RMC

The proposed work will be accomplished in two steps treating the Flare Control Panel and the RMC components separately.

### **Flare Control Panel**

SCS will prepare general specifications and performance requirements for bidders to design, fabricate, and startup a new programmable logic controller (PLC) based control panel for the existing blower and flare equipment. VFD's for the existing blower motors would also be specified and provided under this step. The specifications will stipulate that the PLC be provided with a modem and the necessary input and outputs to accommodate the RMC equipment under the next step.

The likely bidders would be flare manufacturers such as John Zink, Perennial, Parnel, and Aptim/LFG Specialties. They routinely provide such services and are familiar with the basic system operational requirements for your situation.

The work products for this step would be bid documents prepared in accordance with SCIA procurement requirements. SCS also will review bids received and recommend the lowest responsive bidder.

### **RMC**

Under this step, SCS would design, fabricate, program, and startup the RMC controls and communications equipment that will piggyback with the new flare control panel. The specific attributes of the RMC system will include the capabilities to:

- Remotely monitor and control your blower/flare system through a web-browser
  - You will be able to remotely start/stop/reset the flare and change setpoints
- View a piping and instrumentation diagram of the overall system with live data



- View pre-configured graphs. These graphs are preset for things that engineers, managers, and operators are typically interested in.
- Create graphs based on whatever datapoints are being collected by the system.
- View and export historical data from the system.
- View active alarms.
  - Alarms will be sent out via text messages and emails.
- Analyze the alarms coming from the system.
- Operate the system from your mobile device.

This task is more fully described in the attached RMC proposal dated 3/31/21.

## INSTALLATION PHASE

An electrical contractor will be needed to remove the existing controls and to install the new controls, including power supply and wiring between the control panel and the various equipment being controlled. The solicitation of bids for such a contractor can be prepared by SCS using the shop drawings supplied by the successful bidder for furnishing the new flare control panel as well as plan from the RMC task. While the new controls are being fabricated, bids to install the same can be solicited. For budgeting purposes, we estimate this to be about a \$10,000 effort.

Other services that SCS can perform during the installation phase, include the following:

1. Shop drawing review
2. Answering supplier/contractor questions
3. Periodic construction inspection
4. Review and approval of contractor/supplier invoices
5. Change order preparation as needed
6. Meeting attendance
7. Startup assistance

## BUDGET AND SCHEDULE

Our proposed budget and schedule for the tasks described above are presented below:

- SCS-prepared Bid documents for Flare Control Panel: \$6,000, We anticipate this work taking 3 weeks from notice to proceed to draft bid documents for your review.
- SCS RMC design, fabrication, startup: \$26,300 plus \$375/month for RMC application services (see attached proposal). The RMC system will be provided in time for installation with the flare control panel by others.

March 31, 2021

Page 3

If you have any questions about our qualifications or desire further information, do not hesitate to contact either of the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "David Hostetter". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

David Hostetter, P.E.  
Business Manager, SCS RMC  
SCS Engineers

A handwritten signature in black ink, appearing to read "Eric Peterson". The signature is cursive and includes a large, stylized initial "E" that loops around the first part of the name.

Eric R. Peterson, PE  
Project Director/Vice President  
SCS Engineers