SOLE SOURCE DETERMINATION

The Purchasing Division has been requested to approve a sole source purchase for the commodity or service described below. Pursuant to West Virginia Code 5A-3-10c, the Purchasing Division is attempting to determine whether the commodity or service is a sole source procurement. If you believe your company meets the required experience and qualification criteria stated below, please e-mail the Purchasing Division Buyer at Tara.L.Lyle@wv.gov with a copy to William.M.Sheets@wv.gov to express your interest in the project. Please forward any and all information that will support your company's compliance with required qualification and eligibility criteria along with any other pertinent information relative to this project to the Purchasing Division no later than 1:30 PM on 07/09/2012.

Requisition Number: COR61544

Department/Agency: West Virginia Division of Corrections

Detailed Description of Project:

At Lakin Correctional Center, lightning continually strikes the building and the surrounding areas during the lightning season each year. Every time there is a lightning strike, one or more of the Facility's major systems gets damaged. This includes but is not limited to the telephone and cable television incoming feeds; fire alarm systems; network communications cables; antenna coaxial cables; signal and power cables entering the protected Facility from field devices or other exterior systems including CCTV cameras, gate controls, exteriors intercoms, and perimeter (fence) security systems. The lightning strikes damages the Facility's major system because there are issues with the resistance of the soil, grounding system, bonding system, low level transient voltage surges, power quality, and harmonics at the Facility. Below is additional information concerning the previously stated issues.

1. The site soil makeup at the Facility and the surroundings is basically sand. Sand has a very poor ability to provide a low resistant ground system. This is needed for the electronic equipment and to dissipate electrical surges.

2. The existing grounding system does not address the existing soil conditions. In turn, does not provide a good low resistance ground for the electronic equipment. In addition, it does not providing an adequate grounding for the other installed equipment.

3. There is no surge protection at the present time. This is a contributing factor to pre-mature equipment failure and provides an easy path for any external voltage surges.

4. The existing electrical power distribution system is dangerously stressed and does not operate efficiently. There are also several code violations.

5. Because of the dangerous harmonics, there are elevated temperatures in the electrical conductors. This is a potential fire hazard. This also causes additional power consumption and energy costs for the Facility.

6. Because of the lack of equipment bonding and good surge protected circuits and equipment, the existing electronic equipment continually is degrading. This involves large equipment such as large air ventilation equipment, air conditioners, compressors, pumps and other equipment that produces a substantial electrical surge upon start up and shut down.

After reviewing the findings of the site evaluation and report that was done in 2008, the DOC would like to accomplish the following items to correct the above mentioned issues:

1. Installation of a UL780 air terminal (lightning rods) system for protection of Facility structure, roof mounted equipment, and adjacent structures such as pole mounted lighting and the perimeter fencing.

2. Conduct an engineering study of deficiencies found in the facility distribution system including power quality, power factor, and noise susceptibility.

3. Conduct a lightning protection system ground study to determine means of improving overall ability of grounding system to carry and dissipate lightning induced surges. Without a good ground installation of air terminals, lightning rods, could actually increase the lightning damage problems.

4. Installation of a building-wide transient voltage surge suppressor (TVSS) as part of ground system enhancements.

5. Installation of basic equipment bonding in compliance with National Electric Code (NEC) article 250.

6. Installation of an active lightning protection system to place critical systems in safe modes during storms or strike events.

Proposed Sole Source Vendor:

ILD Technologies, LLC.
121 Interpark Boulevard, Suite 406
San Antonio, TX 78216

Specific Eligibility Criteria:

1. The company must have a device specifically designed to provide complete control of all facility interconnections. This includes but is not limited to low voltage, utility line voltage, backup power, network, RF, etc. that are in a single system platform

2. The company must have a system that employs programmable digital signal processing (DSP) in order to virtually eliminate false triggering and/or employ complex triggering algorithms that can effectively provide both early warning and second-stage isolation triggering configuration.

3. The company must have available technology that allows the user to easily program an unlimited number of individual channel responses in order to simplify configuration for even the most demanding of Facility wide applications. A single system can handle simultaneous or staged disconnection of multiple subsystems of different signal types, automatic backup power start/stop, complex logical control between systems or devices, early warning, network data interface and manual control

4. The company must be able to manufacturer an active lightning protection systems that also engages in complete integration of the three most important elements of lightning protection; active detection and control, passive systems, and grounding systems.

5. The company must be able to manufacturer an active lightning protection equipment and integration services that can offer extensive experience with large scale detention systems; PLC door control, camera and IC systems, access control, fence detection systems, facility radio systems, UPS, etc.

6. The company must employ project managers with specific large scale detention Facility experience.

7. The engineering assessment must be conducted by a degreed electrical engineer with a minimum of 30 years of experience in correctional, institutional and process plant surge suppression, lightning protection, and power distribution with additional working experience with power supply and transmission companies.

Specific Qualification Criteria:

ILD Technologies, LLC., as per the above stated requirements is the only company that can provide all seven (7) of the eligibility criteria requirements. They will conduct an engineering assessment of the electrical systems, grounding system, bonding and surge suppression systems, and lightning protection systems at the Lakin Correctional Center to quantify and define the issues discovered in the 2008 lightning survey done by them. They were the only company that was qualified to do the initial study and feasibility stage of the Lakin Correctional Center project. They will provide assessment and design for a necessary lightning rod/air terminal system for the facility and parking lot to be integrated with the new Active Lightning Protection System. They will identify the necessary modifications and corrections needed to the facility electrical system to reduce/eliminate harmonic issues, wasted electrical power and safety issues. Finally, they will provide the facility with an adequate grounding system design for the modern electrical and electronic equipment installed in this facility.