



REPORT TO: SUA

MEETING DATE: MARCH 7, 2022

<p>Agenda Item:</p>	<p>6e. SUA-22-14</p>
<p>Issue:</p>	<p>Phase shift between switchgears</p> <ul style="list-style-type: none"> • During final commissioning of the Stillwater Energy Center, it was found that there was a phase shift between the 480V switchgears that powers the auxiliaries to the engines and the switchgear that power the ancillary services to the plant. • The auxiliary service to the engines consist of all electrical supply critical to the operations of the engines. • The ancillary services to the plant are those non-critical but important services related to lighting, building heat, administration building electric supply, etc. • The phase shift creates a scenario where the two switchgears are not able to be tied together without one or the other being de-energized. • The ability to not seamlessly transfer between the switchgears limits staff's ability to effectively provide redundancy to the facility without an outage. • Redundancies were built into the plant to ensure there was not a single point of failure that would keep the plant from being operational. • Due to the push to get to substantial completion and get the plant online at the time of discovery, it was determined that staff would address this issue as time permitted.
<p>Solution:</p>	<p>Powell Non-Segregated Bus Duct</p> <ul style="list-style-type: none"> • In order to correct the phasing issue, two new pieces of non-segregated phase bus duct needs to be manufactured and installed on two station service transformers. • Non-segregated phase bus is an assembly of bus conductors with associated connections, joints, and insulating supports confined within a metal enclosure without interphase barriers. • Powell was the low bidder and furnished the original equipment and they maintain the original design drawings

and documents that included all details, dimensions, and fabrication information.

Sole Source Purchase Request

- Powell’s bus ducts are not directly interchangeable with other OEM manufacturers and would require significant customization to be compatible with other manufacturers; thus, resulting in significant additional costs and lead time if another manufacturer was used.
- Based on the original design specifications and Powell’s bus duct that is in place, there is no other option to meet compatibility needs that would not potentially compromise warranty and/or certification of installation.
- For the aforementioned reasons, the design, manufacture, and installation will need to be completed as a sole source purchase.
- Staff has received a quote from Powell for \$78,001 to design, manufacture, and install the two new sections of non-segregated bus duct.

Financial Impact/Funding Source(s):

- Funding is available in the Electric O&M budget.

Strategic Plan Alignment:

#1 Effective Services & Accountable Government: To provide effective services and accountable government for all residents by practicing fiscal responsibility, transparency and outstanding customer service.

Recommended Action/Motion:

Motion to approve the sole source purchase from Powell for a not to exceed cost of \$85,000 subject to satisfactory negotiation of the terms and conditions of the purchase and authorize the general manager to sign agreement documents.

Prepared By:

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Reviewed By:

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Submitted By:

Norman McNickle, General Manager