



BOARD OF SUPERVISORS
AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Department Name: General Services
Department No.: 063
For Agenda Of: October 18, 2022
Placement: Administrative
Estimated Time: N/A
Continued Item: No
If Yes, date from:
Vote Required: Majority

TO: Board of Supervisors
FROM: Department: Janette Pell, General Services Director, 805-560-1011
Director(s): Kelly Hubbard, Director, Office of Emergency Management
Contact Info: Skip Grey, Assistant Director General Services 805-568-3083

SUBJECT: Sole Source Purchase of Mobile Nanogrid Emergency Response Trailer

County Counsel Concurrence

As to form: Yes

Other Concurrence: Purchasing

As to form: Yes

Auditor-Controller Concurrence

As to form: Yes

Recommended Actions:

That the Board of Supervisors:

- a) For the purchase of a Solar Mobile Nanogrid 100% Renewable Power for Emergency Response trailer, pursuant to County Code § 2-39, waive competitive bidding by the County and instead authorize the County Purchasing Agent to purchase this equipment as a sole source procurement from Sesame Solar, Inc. of Jackson, Michigan, without being required to conduct a formal bid process; and
- b) Determine pursuant to CEQA Guidelines: 15378(b)(5) that the above fiscal activity is not a project subject to the California Environmental Quality Act. It is an administrative activity of government that will not result in direct or indirect physical changes in the environment.

Summary Text:

Pursuant to County Code section 2-39, General Services and the Office of Emergency Management are requesting that the Board of Supervisors authorize the County's Purchasing Agent to purchase a Solar Mobile Nanogrid Emergency Response trailer, at a cost of \$199,000, as a sole source procurement from manufacturer Solar Sesame, Inc.

The recommended action will allow the purchase of this unique mobile unit that can be utilized during emergency response as a command center, neighborhood power station, communications center, or community resource that combines solar and battery storage, as well as green hydrogen as backup power.

Background:

The Office of Emergency Management (OEM) received Community Power Resiliency Allocation funding in November, 2020, with which OEM desires to purchase a 20-foot Solar Mobile Nanogrid Emergency Response trailer (Nanogrid) that generates carbon-free electricity from onboard solar panels, battery packs, and a fuel cell powered by green hydrogen. The Nanogrid can be towed – preferably by an electric pickup truck – around the County to provide essential services after a disaster. The Nanogrid can serve as a neighborhood power station, communications center, command center, and medical clinic. The Nanogrid is a self-contained unit that can run independently for up to seven (7) days, or longer using renewable energy. The Nanogrid can serve as a communication and information hub with billboard-sized walls that enable important messaging and televisions to keep the public informed. The Nanogrid would be outfitted with FirstNet communication technology, allowing connectivity via a 5G WiFi link, power outlets for charging the public’s electronic devices, and a level 2 Electric Vehicle (EV) Charger that can be used to charge EVs. The Nanogrid interior is being configured as an office with workstations, a whiteboard, desks, shelving, storage, a full-size RV refrigerator, and air conditioning.

The Nanogrid generates 6-kilowatts of electricity from solar panels installed on the roof and on retractable wings, which charge batteries that can store about 40 kilowatt-hours of electricity. The Nanogrid’s hydrogen fuel cell supplies electricity to keep the batteries charged when the sun is not shining. The hydrogen that powers the Nanogrid’s 4-kilowatt fuel cell is produced by an onboard electrolyzer, which uses solar-generated electricity to split water molecules into hydrogen and oxygen. The system can store about 2 kilograms of compressed hydrogen gas, and the Nanogrid carries a seven-day supply of water for the electrolyzer.

Fiscal and Facilities Impacts:

In October 2020, the Governor's Office of Emergency Service released the 2020-2021 Community Power Resiliency Allocation Program grants to support California in preparing for and responding to power outage events. This funding source for the Nanogrid trailer was received and accepted by the Board in November, 2020. First year maintenance for the trailer is included in the initial cost this fiscal year (equipment cost plus one year of maintenance is \$199,000). Annual maintenance, beginning in FY 2023-24, is estimated to be \$6,000 per year and will be funded in the recurring annual OEM budget. OEM is exploring ongoing funding opportunities for this maintenance cost with the County’s Sustainability Division and Community Partners. The cost of corrective repair services, if needed, would range from \$155 - \$235 per hour.

Fiscal Analysis:

<u>Funding Sources</u>	<u>FY 2022-23 Cost:</u>	<u>Fy 2023-24 and On-going Cost*</u>
Community Power Resiliency Allocation Program - Trailer	\$ 193,000.00	\$ -
Community Power Resiliency Allocation - 1st Year Maint	\$ 6,000.00	\$ -
OEM Budget Ongoing Maintenance	\$ -	\$ 6,000.00
Total	\$ 199,000.00	\$ 6,000.00

* This annual maintenance cost will be funded in the OEM budget beginning in FY 23-24.

Special Instructions:

After Board action, please send the Minute Order to Purchasing Attn: Phung Loman
ploman@countyofsb.org

Attachments:

1. Sesame Solar, Inc. Proposal

Authored by:

Skip Grey