## City Council Regular Meeting Date: December 16, 2025

To: City Council

From: Ashlee Painter, Chief Resilience Officer

Date: December 4, 2025

**SUBJECT**: Grant award from the National Laboratory of the Rockies (NLR) to complete a Strategic Energy Plan through the Energy Technology Innovation Partnership Project (ETIPP)

**BACKGROUND**: In 2023, the Sanibel City Council adopted the following Community Resiliency Strategic Goal:

"Build Sanibel's resilience to future threats from natural and manmade events by mitigating hazards, hardening infrastructure, encouraging the use of reliable, renewable energy sources, continually updating vulnerability, response, and recovery plans, and improving community education concerning building design, building codes, flood protection and the benefits of native vegetation."

Sanibel's location makes it highly vulnerable to multiple naturally occurring hazards including, tropical storm events (hurricanes), flooding, storm surge, lightning strikes, wildfire and sea level rise. According to <a href="mailto:the Federal Emergency Management Agency's (FEMA's) National Risk Index Map">Map</a>, Lee County is ranked in the 99.5th percentile for overall risk exposure while "community resilience" is "very low" at 9.2% (FEMA 2023).

Electric power to Sanibel is serviced by a single transmission line running over miles of open water and land leaving the island vulnerable to a systemwide outage related to the noted hazards. LCEC is a valued partner to the city, one that has made significant investment to improve the resilience of its distribution infrastructure, both organizations are actively discussing options to mitigate the risks to the electrical grid infrastructure on Sanibel.

On Sept. 28, 2022, Hurricane lan made landfall just north of Sanibel, and the island community. Sanibel experienced catastrophic damage from the near Category 5 strength winds and a storm surge of 8-12'. The storm caused extensive damage to homes, businesses, and critical infrastructure throughout the community. The island's overhead electric transmission line

infrastructure was heavily damaged by the hurricane, and the single electric substation on Sanibel was also damaged.

While LCEC worked diligently to repair their on-island infrastructure, portions of Sanibel remained without electric power for approximately six weeks. The previously mentioned Sanibel Causeway was breached in 7 locations which significantly interrupted LCEC's ability to respond and begin repairing damages.

In 2024, while the community was continuing to recover from Hurricane Ian, the island experienced two more storm surge inundation events caused by Hurricanes Helene and Milton and partial storm surge inundation from Hurricane Debby. During those events, underground electrical equipment and ground mounted transformers were significantly damaged causing power outages. The lack of power hindered the City's ability to operate wastewater lift stations and required the City to move portable generators and vac truck frequently to keep the system functioning and to prevent sewer overflows. Residents were asked to delay their return to the island until power could be restored to the sanitary sewer system to mitigate the risk of overflows.

Developing a Strategic Energy Plan for Sanibel, in partnership with LCEC and other community partners, is a critically important step in improving the community's resilience to natural events and mitigating the extent and duration of future electric outages.

The City of Sanibel has been awarded a grant from the National Laboratory of the Rockies (NLR), a research and development center of the Department of Energy (DOE), to support the development of a comprehensive Strategic Energy Plan aimed at strengthening the community's long-term resilience. The grant enables the City to participate in the fifth cohort of the Energy Technology Innovation Partnership Project (ETIPP). ETIPP helps coastal, remote, and island communities move toward the energy resilience goals they set for themselves. The program provides technical assistance through a community-driven process that identifies and plans solutions tailored to each community's unique energy and resilience challenges.

Regional Partners and technical experts will collaborate directly with our community throughout the planning process. Together, we will create a strategic energy plan that includes:

- A high-level assessment of Sanibel's current energy conditions
- A baseline of existing energy use
- Customized community goals
- A detailed action plan that outlines steps to improve energy resilience and affordability in the near, mid, and long term.

The City will work with one of the DOE National Labs to create the Strategic Energy Plan. The National Lab will provide technical support to the community and work with the Gulf regional Partner, the Southeast Sustainability Directors Network, to write the plan. In addition to the work completed by the National Lab, Sanibel will be sub-granted \$20,000 through the NLR contractor Alliance for Sustainable Energy, LLC. These funds will be used to conduct in-person workshops and reimburse staff time spent on the project.

On December 1, 2025, the National Renewable Energies Lab (NREL) changed its name to the National Laboratory of the Rockies (NLR) to better reflect its expanding mission. Both names are used within the grant documents based on preparation and execution.

Completing a Strategic Energy Plan through ETIPP will make the City eligible for additional "Deep Dive" program funding in the future to delve into specific actions from the plan.

FUNDING SOURCE: NLR SUB-2026-10052

**RECOMMENDED ACTION**: Staff recommends approval of NLR subcontract to complete a Strategic Energy Plan