FPUA Summary Abstract for Public Release

Fort Pierce Utilities Authority (FPUA) is ready to launch its latest project, *Mitigating Impacts of Extreme Weather and Natural Disasters through Increased Grid Resiliency*, through the Department of Energy's Grid Deployment Office, Grid Resilience and Innovation Partnership Program.

The overall anticipated benefits resulting from this project include a more resilient and reliable electric grid, with an increased capacity to accommodate new technologies and population growth, and decreased duration, frequency and impact of power disruptions in the City of Fort Pierce. Mr. Eric Meyer, Project Manager, states "this project will increase the reliability and resilience of FPUA's electric grid, utilizing adaptive protection technologies and key infrastructure improvements, while also increasing capacity to accommodate for population growth and new technologies, such as EV chargers, etc.".

FPUA will be upgrading two critical autotransformers, located at its Hartman Substation, reducing the risk of overload from population growth and innovative technologies, and increasing capacity to hold peak loading conditions without the risk of power loss. The increased capacity not only accommodates future demand but also allows for critical infrastructure maintenance, without having to place the transformer offline.

FPUA will also be replacing four distribution transformers within the Lawnwood, King and Savannah substations, resulting in increased reliability of the electric grid and reducing impacts of extreme weather events. These distribution transformers specifically service residences, and businesses in the community.

Further, FPUA will replace its current, manual-switch configuration at the Totten Substation to a Ring Bus configuration, increasing the resilience of the grid and reducing service disruptions. The Ring Bus configuration not only allows FPUA to de-energize only the damaged portions of the substation bus, but also allows FPUA to monitor and control the substation without having to physically be there.

Finally, FPUA will install 400 TripSaver devices, enabling FPUA's electric grid to be more resilient to vegetation, wildlife, and other transient disruptors. TripSavers represent an important modernization of the FPUA electric grid that will allow us to keep pace with the quickly evolving demand on the grid. TripSavers have a large variety of programmable settings that allow them to be easily configured to protect the electrical system and its elements. These programmable settings can be adjusted to accommodate increased load caused by, among other things, the addition of EV charging, solar panels, and population growth.

FPUA understands that hardening the transmission system, enhancing monitoring and control technologies, installing new adaptive protection technologies, and completing upgrades to substations, empowers FPUA to maintain reliable electric service while reducing impacts on the grid caused by unexpected outages, extreme weather and natural disasters.