Net Metering Program Update

June 29, 2021





<u>Program Background</u> <u>Definitions, History, and Legal</u> <u>Requirements</u>

- "Net-Metering" typically references to customer-owned renewable electric generation systems installed behind the meter on customers' premises which net their electric purchases with their own electric production
- mid-2008; Florida Statute 366.91 (Renewable Energy) required electric utilities to create Net Metering Programs and Interconnection Agreements for customer-owned renewable generation no later that July 1, 2009
- 2012; City Resolution 34-2012 added net metering rates and set a size limit of 10kw and stated that "....systems shall not be sized to exceed the customers annual energy needs...", however it did not include references to Interconnection Agreements as required by Fla. Stat. 366.91(6)



Program Background History and Program Changes

- Participation in City's program began with 6 systems installed in 2010 and has grown to 156 systems connected as of today.
- In 2019 Staff brought to the City Commission a number of suggested changes to the program which were reviewed and discussed in detail with the Electric Utility Advisory Board. Proposed changes mirrored those of utilities statewide, and were subsequently approved by the City Commission.
- Changes included reaffirmation of the previously adopted system size limit, established a cap on total Kw allowed, established an annual avoided costbased reimbursement rate for customer excess generation, removed exemptions from minimum bills, and established program rules and interconnection agreements.



Program Background Why do we have a Cap?

- The Cap of 1.5% of electric system peak on total kW installed was recommended by Staff in 2019 as a precautionary measure and was based on <u>actual operating experience</u> during multiple events of "island operations" in which the ability to restore or maintain system stability was hampered by "swings" in output of City's own solar farm and which mirrors the swings in output of customer-owned systems.
- City's power plant units are not sized nor equipped to rapidly react to swings in output while maintaining system frequency and voltage, which leads to either feeders or the entire power plant tripping off line, hence requiring a restart of the system restoration process.
- During these events electric utility system operators take the City's solar plant off-line until such time that normal tie line operations are restored.
- The Cap was anticipated to be revisited at such time that a second transmission tie line was operational, thereby negating the need for island operations. Currently planned for December 2022.
- Growth of solar installations on our system is adding to the need to address significant system
 power factor concerns by adding capacitor banks at major substations asap.



Program Background Where are we Today?

- We are rapidly approaching the 1.5% Cap of 1458 kW based on a system peak of 97.2 mW. Today
 we have 156 systems representing 1357 kW of customer-owned generation connected to our
 utility, in addition to the City's own 1700 kW solar unit. Our ability to operate the system with
 swings on this amount of production during an island operation is a high concern, and
 uncontrollable by our system operators.
- An additional 14 systems representing 98 kW of systems are in queue and are either in the permitting process or under construction.
- The combination of installed and proposed systems brings us to 3 kW below the Cap (1455 kW vs. 1458 kW).
- In anticipation of reaching the Cap, City Staff included a note in recent bills to all customers alerting them to same so they could contact us and be better informed and able to move rapidly if considering installing a system.



Program Background Legacy Issue to be Resolved

- 20 customers with systems that were installed prior to the implementation of Interconnection Agreements have yet to execute required agreements and are operating in violation of State Law and City's rules.
- Extensions to comply were granted until year-end 2019; notices and registered letters were issued without response.
- Customers without Interconnection Agreements can not receive credits for excess electric production, yet have been allowed to remain in operation.
- Staff needs policy direction in regards to non-compliant installations.

Reference Documents

- Resolution 34-2012; Adding Net Metering Rates and System Size Limitations
- Resolution 15-2019; Net Metering Moratorium To Bring City's Program Into Compliance with State Law
- Resolution 21-2019; Interconnection Agreement
- Resolution 45-2019; Amending Rates and Credits for Net Metering and Creating Billing Procedure
- City's Net Metering Rules and Regulations
- Blank Net Metering Application
- Blank Net Metering Interconnection Agreement

