

**CITY OF GLENDALE  
INTERDEPARTMENTAL COMMUNICATION**

**DATE:** July 6, 2021

**TO:** Roubik R. Golanian, P. E., City Manager

**FROM:** Mark Young, General Manager - GWP

**SUBJECT: GWP Clean Energy Programs Update - June 2021**

The report provides an update on the progress/schedule GWP has established for finalizing various GWP Clean Energy Programs (CEP), including updates on demand response programs, commercial customer programs, Glendale's proposed Virtual Power Plant, electric Cost of Service Analysis (COSA) and the clean energy and storage at City facilities program. This report includes prior updates for April 2020 through May 2021, and work completed during June 2021. Of particular note during this update is the progress on the Franklin program (paragraph 1c), Lime program (paragraph 2c), Sunrun program (paragraph 3c), COSA project (paragraph 4c), Solar/ Storage on City-Owned Property program (paragraph 6c), and RFP for Structural Upgrade of Civic Center Parking Structure project (paragraph 8c).

**1. Franklin Contract (Demand Response).** This program will provide commercial and residential Demand Response, a smart thermostat program and an online marketplace for a four-year term, for a total agreement amount not to exceed \$7,658,363, plus annual rebate funding for energy efficiency products purchased through the online store. By year four, the program will offer up to 10 MW of demand response capacity during up to 15 peak load events per year. (The capacity of the program is expected to ramp up over the four-year term as additional customers enroll).

**a. April 2021 Update.**

Phase I: Program launched on April 19.

- Program website launched
- Program Press Release issued
- Franklin's Customer Care staff ready to receive calls
- Online enrollment set up for Ecobee thermostats is active
- Online program Interest Form is active and has received 521 forms
- Outreach to business customers is underway

Phase II will start on May 12.

- Online enrollment set up for Nest thermostats
- Online enrollment set up for Energate, Carrier, Honeywell, and Emerson thermostats will be phased in late May as these are the smallest share of the market
- Continue with business and residential customer outreach
- AutoGrid training for Power Management staff prior to season start

b. **May 2021 Update.**

- Online program Interested Form is active and has received over 600 forms.
- By June 7<sup>th</sup> GWP will have the ability to control most of the participating residential thermostats that represent the largest share of the market - Nest and Ecobee thermostats.
  - Currently 210 residential customers pre-enrolled
- GWP will have the ability to control the other eligible thermostats which represent the smallest share of the market by early July - Energate, Carrier, Honeywell, and Emerson thermostats.
  - CEIVA program thermostats estimated control date of mid-June pending contracting between Franklin Energy and CEIVA.
- Participating commercial customers (C&I) will be ready by June 7<sup>th</sup>
  - Currently 1 commercial customer enrolled.
- The estimated operational/control date for the online Marketplace has been moved to mid-July as contractor experienced integration issues.
- Completed AutoGrid training for Power Management staff to schedule peak day events.
- Business and residential customer outreach is continuing as outlined in the marketing plan.
  - Direct emails to 88,000 residential customers
  - Direct emails to top 200 commercial customers
  - Direct phone calls to commercial customers by GWP and Franklin
  - Municipal bill envelope message
  - Bill inserts
  - Posted on social media platforms
  - Website banner
  - Initiated program enrollment messaging by thermostat manufacturers to a list of 7,000 registered users
  - 10 commercial customers have expressed interest

c. **June 2021 Update.**

- Program is set up and ready to schedule Peak Savings events.
- GWP has the ability to control participating Nest and Ecobee thermostats which represent the largest share of the thermostat market.

- GWP will have the ability to control the other eligible thermostats which represent the smallest share of the market by July 20<sup>th</sup>.
  - CEIVA program thermostats control date has been moved to July 20<sup>th</sup> pending contracting between Franklin Energy and CEIVA which is in final phase.
- Participating commercial customers (C&I) is ready and pending first customer enrollment.
- Ramping up on C&I customer outreach.
- Estimated launch of the online Marketplace is scheduled for July 20<sup>th</sup>.
- Continue with business and residential customer outreach to drive program participation.

2. **Lime Contract (Commercial Energy Efficiency)**. This program will provide energy efficiency upgrades to all commercial businesses in GWP's service territory. The program will be implemented over a 7-year term with the energy efficiency savings of the installed energy efficiency measures expected to last an average of 12.5 years. Energy efficiency savings are expected to reach 35,500 kilowatt-hours per year by year seven of the program.

a. **April 2021 Update**. Contract has been sent via DocuSign to Lime. Once signed via DocuSign, the contract will move through the Munis system for finalization. Program is set to launch on or about August 2, 2021.

b. **May 2021 Update**.

- Contract was fully executed on 5/10/2021
- General kickoff meeting completed on 5/27/2021
- Marketing team kickoff meeting scheduled for 6/2/2021
- Business systems team kickoff meeting scheduled for 6/3/2021
- Press release preparation is in progress
- Program launch scheduled for 8/23/2021

c. **June 2021 Update**.

- Official program launch scheduled for 10/4/2021.
- Outreach to larger customers scheduled to begin mid-August.
- Press release is ready to be published upon program launch.
- Customer data format preparation in progress.
- Website design and marketing material preparation in progress.

**3. Sunrun Virtual Power Plant Program.** This program would deploy a Virtual Power Plant (VPP) to approximately 3,400 single-family and multifamily residential rooftop solar and battery energy storage systems within Glendale territory. The VPP would provide up to 25.25 MW of dispatchable capacity over a two-hour period to help GWP manage existing and emerging load conditions on its grid.

1.

**e. April 2021 Update.** On April 13, 2021, the City received a copy of a letter from the CEC to Sunrun stating that if the proposed virtual power plant meets all applicable requirements for facility eligibility as stated in the CEC's current RPS eligibility guidebook, the facilities would be aligned with RPS certification requirements. The letter notes that pre-certification is not available and that the CEC's response is not a final decision; regulatory guidance is subject to change. The City is negotiating the Power Purchase Agreement with Sunrun and has been meeting multiple times a week, both internally and in meetings with Sunrun, in an attempt to work through the document and align on key terms. GWP will be reverting a draft of the PPA to Sunrun next week along with a draft of the Master Interconnection Agreement for Sunrun's review. GWP awaits a draft of a Co-Marketing Agreement from Sunrun. Separately, GWP staff has been meeting with Sunrun each week to discuss cybersecurity requirements as well as engineering and technical details of the program.

a.

**b. May 2021 Update.** GWP reverted the redlined PPA to Sunrun on May 4 and awaits Sunrun's response to the draft PPA. Pending receipt of the PPA, GWP has completed the draft Interconnection Agreement for Sunrun's review and comment. Sunrun has canceled recent PPA negotiation calls with GWP as it works through the PPA redline internally. Sunrun and GWP continue to meet frequently to discuss cybersecurity risk allocation and marketing protocols and GWP awaits a draft of the Marketing Agreement from Sunrun.

e.

**g-c. June 2021 Update.** GWP is waiting to receive Sunrun's proposed edits to the Power Purchase Agreement and the Master Interconnection Agreement. GWP continues to await a draft of the Marketing Agreement and the Customer Lease Agreement from Sunrun.

**3.4. Cost of Service Analysis (COSA).** The Scope of Services for the new Electric COSA is separated into four phases. Phase I: Financial Forecast will develop the long-term financial planning model using a Microsoft Excel-based electric utility financial model that

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will forecast potential rate, debt, and capital impacts, including the impacts of the proposed new Clean Energy Programs (CEP). Phase II: Cost of Service Analysis will allocate the total costs to operate the utility to each of the customer classes served by GWP. This will determine if current rates are adequately recovering the class' costs on the system. Phase III: Rate Design and Customer Usage Analysis will design the rates for each customer class aligned with the results of Phase II. This will also include the development of potential new rates or rate changes, such as:

- Customer Cogeneration and microgrid rates
- Net Energy Metering (NEM) successor
- Feed in Tariff (FIT)
- Green Tariff rates
- Electric Vehicle (EV) Rate
- Demand Response Incentive for large customers

Phase IV: Report and Presentations will include a draft and final report, and virtual presentations to the Community, GWP Commission, and City Council.

- April 2021 Update.** NewGen is reviewing the final power supply data developed by Ascend for use within the COSA model. Goal is to have this done the by Friday, May 7th. Work on the full COSA continues in parallel. We expect to have initial COSA results mid to late May for review. Project is slightly behind schedule due to delays in receiving power supply data. Original completion date was set for May 27<sup>th</sup>.
- May 2021 Update.** This project continues to be slightly behind schedule. NewGen plans to have for revenue requirements completed the week of June 1<sup>st</sup>, and the initial COSA results by class by the end of the following week. Once the revenue requirements and initial COSA results are completed, NewGen will provide GWP draft PowerPoint describing results for GWP's review. GWP anticipates that the COSA and suggested rate changes will be presented to City Council in October 2021.
- June 2021 Update.**
  - Preliminary COSA results have been completed. GWP is reviewing and will be working with rate consultant to finalize results over the next two to three weeks.

**4-5. Transmission Negotiations with LADWP.** Confidential.

**5-6. Solar/Storage on City-Owned Property.** This program will identify and ultimately develop local solar and (where cost-effective and feasible) energy storage at City-owned properties within the City of Glendale.

- a. **April 2021 Update.** The Black & Veatch Contract has been approved by Legal and submitted to GWP Admin, and was approved by GWP Utility Finance Section. It will be entered into the City's MUNIS Workflow System for approvals throughout the City (Finance, Legal, City Manager), then signatures (Contractor) will be gathered electronically. GWP anticipates the contract to be active early June, 2021. Contract scope includes: 1) Assist the City with a conceptual plan and preparation of specifications for developing solar and battery energy storage facilities on City-owned properties in the City of Glendale and 2) Conduct an initial study, assessing the current level of (Distributed Energy Resources) DER penetration and identify feeders with potential future DER growth and recommend corresponding distribution system upgrades/ Provide a roadmap for future resource decisions, covering issues with future renewable resource additions and storage.
- b. **May 2021 Update.** The Black & Veatch Contract has been edited to include negotiated minor exceptions. The DocuSign process has been reinstated in the City's MUNIS Workflow System and the Contract is expected to be executed by the end of the month. The project will begin in July 2021.
- c. **June 2021 Update.** The Black & Veatch Contract has been fully executed and the project kickoff meeting is scheduled for mid-July. In the meantime, the GWP project manager has partnered with multiple department heads and management staff regarding property locations and to collect preferences for potential solar development.

**6-7. Partnership with Commercial Customers.** The purpose of this project is to generate conversation with GWP's top 100 commercial customers in order to gauge their interest in partnering with GWP on future Clean Energy projects. The initial step was to send out a survey to the top 100 Commercial customers to assess their level of interest and to start up the conversation and have further discussions of how to commence this partnership and the level of involvement, and what would they like to explore with regards to energy efficiency, Distributed Energy Resources (DER), demand response, electric vehicle uses and charging, etc.

- a. **April 2021 Updates.** No new updates.

- b. **May 2021 Updates.** No new updates.
- c. **June 2021 Updates.** No new updates

**7-8. RFP for Structural Upgrade of Civic Center Parking Structure.** The City Council has directed all departments to leverage available City owned structures and facilities to install solar PV systems to augment clean energy production to meet state requirements for renewable energy production. Glendale Water & Power (GWP) has plans to utilize the Civic Center Parking Garage for this purpose. GWP wants to ensure that a new solar PV system can be safely installed on the roof without compromising the structural integrity of the parking structure. To accomplish this goal, the City has retained an engineering consultant to evaluate the structure and prepare specifications to strengthen the structure for the future installation of a solar array/ canopy.

- a. **April 2021 Update.** GWP and Pcubed have started investigations to assess the structural integrity of Parking Structure to take on the mechanical load of the future solar PV system. The consultant had initial discussions with the City's Building and Safety Official regarding the project:
  - During the field check several upgrades were suggested by the City. This includes bringing up to code the perimeter hand railing, concerns about ADA compliance etc. Building and Safety expressed concerns about the structural strength of the ramp area on the 4<sup>th</sup> floor that has been damaged during the 1994 Northridge earthquake and subsequently repaired. Adding an elevator(s) was also discussed.
  - Many of the above items are beyond the scope of the original plan for this project and further funding will be required to incorporate any or all of these upgrades.
  - Building Official expressed satisfaction about the competence of the consultant (Pcubed) who has worked with City Building Officials on prior projects.
- b. **May 2021 Update.** Key project personnel from GWP, Building and Safety, and Pcubed held a meeting to discuss the progress of the consultant's work.
  - The consultant provided a schedule for their work that shows an expected completion of their work by first week of October.
  - The consultant also prepared a preliminary Capital Improvement Plan (CIP) that lists several items that will help improve the longevity of the structure. The high priority items will cost \$346,000 in 10 years including \$240,000 in 2021 alone.

- The preliminary estimate for installing a solar canopy and solar panels is \$1.65 million.
  - With the planned removal of the concrete planters, the net load addition from the proposed solar canopy and solar panels will be a meagre 21,000 pounds. The removal of the planters and blast/clean and re-seal of the façade will cost \$120,000 in 2021.
  - The consultant took concrete core samples from several columns and determined that the concrete strength is >7,500psi while the design strength value is 6,000psi.
  - The GWP project team had a meeting with the Director of Public Works and his team to discuss the project and the details about the 10 year CIP. PW team will review the CIP details to identify the line items that are to be prioritized and get back to the project team in a few weeks.
  - Based upon a preliminary analysis, Glendale City Building and Safety Section indicated replacing the existing Parking Structure with a similar structure (that meets all current building and seismic codes) would cost an estimated \$ 35 M.
  - Based on the preliminary estimates from Pcubed, the Solar/Structure System would cost \$1.65M (with a 25-year life), Seismic/Code upgrades to the existing Parking Structure would cost about \$7 M (which should extend the life of the building substantially). A new ADA compliant elevator would cost an estimated \$1 M. For approximately \$8 M the existing structure could be brought up to code and extend its life.
  - Thus, based upon preliminary estimates, for \$10 M the exiting Civic Parking Structure can become a fully updated/code compliant Parking Structure with an 800KW Solar Canopy. Costs allocations between GWP and PW would need to be agreed upon.
  - Final note: As mentioned above, the Pcubed structural assessment is expected to be completed by the first week of October, 2021. Thereafter, subject to City Council authorization, the work of completing the structural upgrades and installing a solar array would be bid out and constructed via subsequent contracts.
- c. **June 2021 Update.** The GWP project team provided additional requested information to the PW team regarding the preliminary 10-year Capital Improvement Plan provided by Pcubed. The PW team is reviewing the CIP details to align the plan with their existing CIP and will get back to the GWP project team in July to discuss its priorities.

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We will continue to keep you updated and apprised of our efforts on Clean Energy Programs and any new endeavors we embark on in the future.

Please let me know if you have any questions.

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Mark Young  
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cc. Michael J. Garcia, City Attorney  
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