

**CITY OF GLENDALE  
INTERDEPARTMENTAL COMMUNICATION**

**DATE:** August 26, 2021

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

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

**SUBJECT: GWP Clean Energy Programs Update – July and August 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 May 2021 through June 2021, and work completed during July and August 2021.

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. **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
  
- b. **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.
  
- c. **July and August 2021 Update.** Peak Savings Program
  - Peak Savings Program is ready to schedule Peak Savings events
  - Residential Status Report
    - 356 customers enrolled (Nest & Ecobee thermostats)
    - Ability to control participating Nest and Ecobee thermostats which represent the largest share of the thermostat market.
    - Working on integrating other eligible thermostats which represent the smallest share of the market.
    - Ceiva program thermostats control date pending contracting between Franklin Energy and CEIVA which is in final phase.
  - C&I Status Report
    - No business customers currently enrolled

- Ramping up on C&I outreach
- 23 key accounts expressed interest, referred to Franklin by GWP
  - 9 Interested and waiting for “test event” to determine kW reduction
  - 11 unresponsive customers, unknown interest. GWP to following up
  - 3 Not interested
- GWP continues outreach to top 100 customers
- Franklin outreach to top 101 to 200 customers
- kW Forecast for control season of June through October

	May	June	July	Aug	Sept	Oct	TOTAL
<b>kW Under Control</b>	10	244	70	1701	838	282	<b>3145</b>

- Marketplace Launch
  - Estimate Marketplace launch on Wednesday August 19<sup>th</sup>
- Marketing
  - Continue with business and residential customer outreach to drive program participation. (BYOT emails, BYOT Postcard, Ceiva Marketing, Social Media post, web)

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. **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

b. **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.

c. **July and August 2021 Update.** Business Energy Upgrade Program

- Official program launch tentatively scheduled for 10/4/2021
- The program name has been selected – Business Energy Upgrade Program.
- Website has been designed.
- Press release is ready to be published upon program launch.
- Lime working on producing collateral.

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.

- a. **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.
- b. **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.
- c. **July and August 2021 Update.** On July 25, 2021, GWP received redlined drafts of the PPA and Interconnection Agreement from Sunrun. The parties are meeting to discuss and work through remaining open items on the agreements so that they can be finalized. On August 12, 2021, GWP received and is reviewing and editing the Marketing Agreement from Sunrun. On August 18, 2021, Sunrun proposed a change in the metering configuration for the program. This change will need to be reviewed by the California Energy Commission and WREGIS to ensure it does not affect RPS eligibility.

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 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.

- a. **May 2021 Update**. This project continues to be slightly behind schedule. NewGen plans to have the 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.
- b. **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.
- c. **July and August 2021 Update**. Work on COSA continues. Next steps are finalization and QAQC of billing database data to develop COSA impacts/results by customer class. Additionally, consultant is working to resolve some anomalies in the weather/data from 2019 July/August. We hope to have some updated results in the next couple of weeks.

5. **Transmission Negotiations with LADWP**. Confidential, all updates will be presented to City Council during closed session.

- a. **May 2021 Update**. GWP will provide Council with an update in Closed Session in June.
- b. **June 2021 Update**. A Closed Session briefing will be scheduled for July.

- c. **July 2021 Update.** No new updates.
  - d. **August 2021 Update.** On August 24, 2021, the City Council approved amendments with LADWP that preserve GWP's existing long-term, grandfathered Hoover and Adelanto transmission rights. These amendments are the culmination of over 5 years of negotiation with LADWP. On the same date, the City Council approved a transmission agreement under LADWP's Open Access Transmission Tariff that secures 25 MW of transmission capacity for GWP to import power from the Eland I Solar and Storage Project.
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. **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.
  - b. **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.
  - c. **July 2021 Update.** GWP staff revised the property list for potential solar development to 100 properties based on additional information and feedback from multiple departments. The project kickoff meeting between GWP and Black & Veatch was conducted on July 20, 2021 and the revised property list was agreed upon by both parties. GWP staff partnered with Building & Safety and Public Works to collect building drawings for the structures included in the solar development list and collected parcel and zoning map information for non-structure properties to provide to Black & Veatch. GWP staff also provided Black & Veatch with feeder load readings for the DER penetration impact study portion of the project. The next meeting with Black & Veatch is scheduled for August 5, 2021, to discuss the feeder hosting capacity and DER penetration study.
  - d. **August 2021 Update.** On August 5, GWP staff met online with Black & Veatch for a distribution studies workshop to discuss the scope of the initial study of the feeder hosting capacity. GWP and Black & Veatch gathered and exchanged relevant information, and on August 18 & 20, GWP staff met online with Black &

Veatch to review and confirm the solar candidate site locations, discuss site prioritization, and site specific details. The next meeting with Black & Veatch is scheduled for August 30, to walk through the analysis for a couple of scenarios on one feeder, discuss and finalize the approach for the analysis, and discuss the approach for regular updates to the study. Black & Veatch is continuing the solar candidate site evaluation process baseline and desktop assessments and will schedule site visits in the coming weeks.

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. **May 2021 Update.** No new updates.
  - b. **June 2021 Update.** No new updates.
  - c. **July 2021 Update.** No new updates.
  - d. **August 2021 Update.** No new updates.
  
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. **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.
- b. **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.

- c. **July 2021 Update**. The Public Works team continued to review the preliminary 10-year Capital Improvement Plan provided by Pcubed and a meeting is scheduled for August 17, 2021, between Public Works and GWP to discuss CIP items to be prioritized prior to solar development and funding sources for the CIP items and solar development.
- d. **August 2021 Update**. On August 17, GWP met with Public Works to discuss Public Works' priorities regarding the Capital Improvement items included on the preliminary CIP plan provided by Pcubed. Public Works expressed the desire to move forward with the infrastructure improvements including the seismic retrofit. GWP is continuing to partner with Public Works on how to fund the infrastructure improvements.

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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- cc. Michael J. Garcia, City Attorney
- Christine Godinez, Principal Assistant City Attorney
- Craig R. Kuennen, Assistant General Manager, GWP
- Dan Scorza, Chief Assistant General Manager, GWP