DOCKETED	
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Project Title:	Electricity Resource Plans
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Document Title:	2025 GWP IEPR Narative
Description:	Documentation of the reporting details and process as well as an overview of the Data provided in the 2025 IEPR
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City of Glendale

CEC 2025 IEPR – Demand Forecast

Observations:

The City of Glendale Water and Power (GWP) developed the CEC IEPR – Demand Forecast report utilizing model information provided by a third-party consultant, whom also assisted GWP in developing the 2024 Integrated Resource Plan (IRP). The IRP covered a 21-year forecasting period between the years 2024 and 2045, whereas the IEPR covers historical data from 2022 and 2023, as well as forecasted data into the next 10 years through 2033.

The forecasting approach considers relationships between supply and demand, anticipated/contracted growth in load due to a major commercial addition in the jurisdiction of GWP over the next 4 years, weather conditions, historical data, market conditions, and environmental constraints to develop a capacity expansion planning model for GWP which includes the recommended addition of generic resources and predictions into current resource allocation.

The Demand forecast shows a growth in demand over the next 10 years, with a spike in load of 31.3% between 2028 and 2029 due to the addition of a major industrial load in the city's jurisdiction.

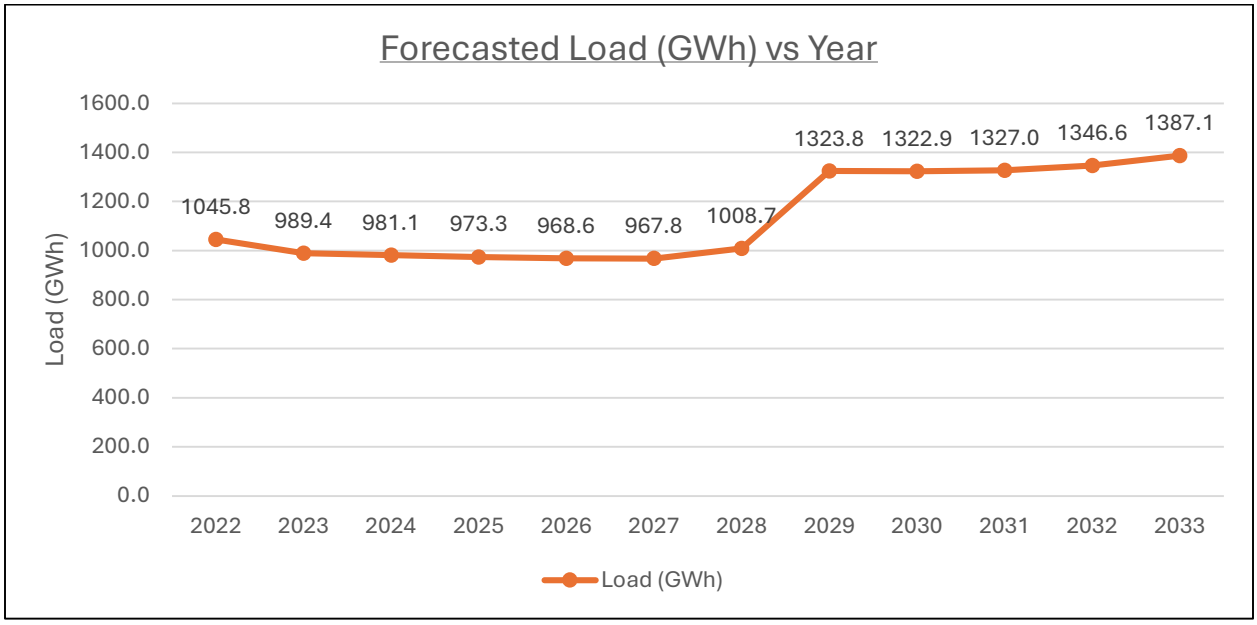

Figure 1, Forecasted Load (GWh) vs Year

Opposed to conventional standards of utilizing Base Load % as a leading parameter in planning for a Required Reserve Margin, GWP uses the N-1-1 scenario which relates the Base Load and the N-1-1 scenario as described in the following equation.

$$Total\ Planning\ Supply = Base\ Forecasted\ Load + Required\ Reserve\ Margin_{(N-1-1\ contingency)}$$

Where GWP identifies the N-1-1 contingency be a total outage on the Pacific DC Intertie line (PDCI) amounting to 100MW, and a loss of access to the Magnolia Power Plant (MPP) amount to 48MW, for a total of 148MW of reserve margin requirement.

In the short-term future, with the addition of internal generation amounting to 64MWs, GWP will plan for a new reserve margin of 164MW post-2026 upon completion of the Reciprocating Internal Combustion Engines (RICE) at the Grayson Power Plant in Glendale.

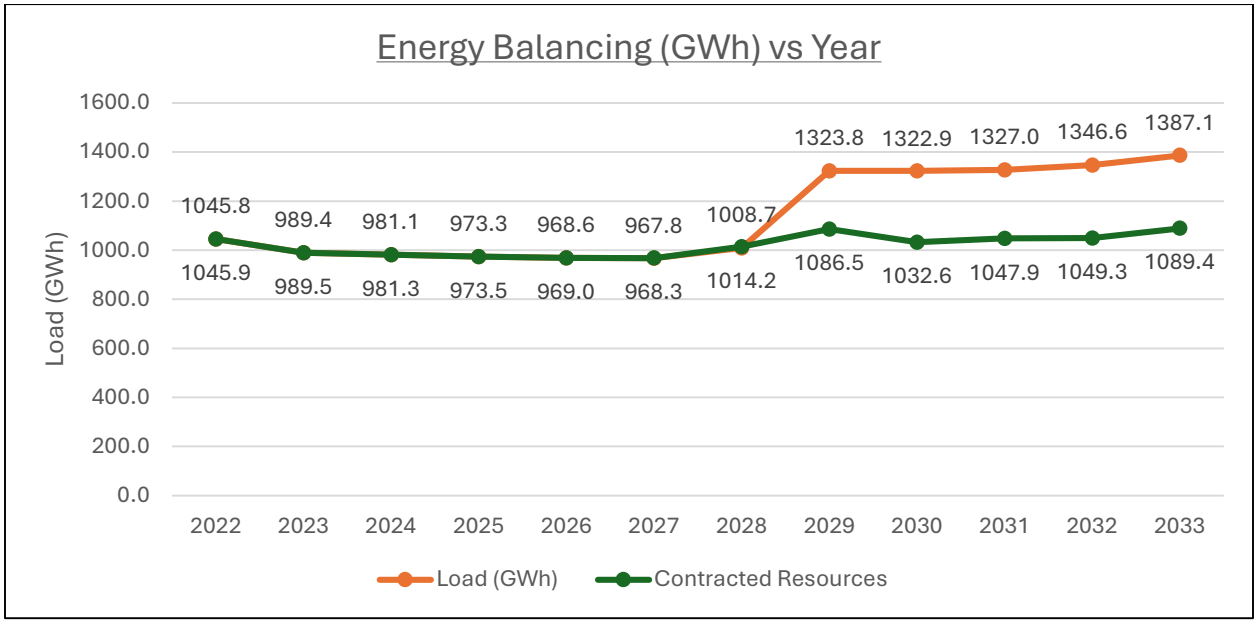

Figure 2, Energy Balancing (GWh) vs Year

As figure 2 shows, there exists a deficit between the forecasted load and contracted resources post-2028, due to the addition of previously mentioned industrial load. This is covered by the addition of generic resources ranging from Solar, Wind, Battery, and Geothermal resources (More details are mentioned in the 2024 GWP IRP). This leads to open

positions on the 2025 GWP IEPR which are anticipated to be covered by the beforementioned generic clean additions to the system.

It is important to note that GWP's model does not consider sales made into the CAISO, which GWP imports and exports with on a self and market based schedule. This causes the model to not identify these transactions and potentially keep Glendale in unrealistic open/closed positions. This is mitigated through adding these transactions as part of Spot Market Purchase/Sales in the S-2 portion of the IEPR.

Data Sources:

The data source for the load forecast and the resource planning forecasts are extracted through the model presented by GWP's third party consultant. The original inputs into the model include data stemming from internal customer-sided demand response programs, COSA studies into forecasted load and rates, as well as forwards and futures into market trends.

Other than the model ran by GWP's third party consultant, GWP acquired data from various other data sources, most notably from internal resources for the historical Load and Weather forecasts which are measured at the Airway busbar and the Burbank Airport weather station respectively.

For any further inquiries on the narrative or the IEPR report itself, please refer to the below contact list for GWP's Power Management Team:

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