Monthly energy forecast models are based on two years of load data.
--Actual hourly load data aggregated into seven customer classes. (Residential, Large Commercial, Small Commercial, Industrial, Street Lights, Traffic Lights and Agriculture) by month.
--Industrial, Small and Large Commercial and Residential monthly energy modelled as a function of typical day of week loads, number of meters, typical heating degree hours, cooling degree hours, and a COVID19 recession binary using seemly unrelated regressions.
--Agriculture and Lighting loads were developed as typical seasonal shapes
--Assumed 0% growth rate for 2022 and 2023 due to a planned adjustment to rates and increased opt-out of large commercial and industrial load. The forecast includes a 1.0% growth for the years between 2024 and 2028 in customers based upon expectation of the City's planning department of economic growth for the San Jose.

Hourly Load Forecast were produced by shaping monthly energy.
--Hourly shaping factors were developed by month and typical temperature week for the Residential, Large Commercial, Small Commercial, Industrial sectors. As such the load shapes reflect at least one hot week and one cool week in each month these sectors. The month energy forecast were then dispersed by the forecasted load shapes.
--Hourly Agriculture and Lighting loads were based on monthly averages.

Load Modifiers: The forecast for 2022 was based upon regression analysis using data from April 1, 2019 (SJCE launched to most customers during the month of February 2019) through April 30, 2021. As such, the impacts of load modifiers were assumed to be captured in the historical data and carried forward through the forecast period.

Residential TOU default: The forecast of 2021 was based upon historical data. As such, the impacts of load shifting, and opt-outs were assumed to be captured in the historical data and carried forward to 2022 except for expected shift of Residential customers from non-TOU rates to TOU rate.   Given the average load shape difference between these two rate groups it is expected that the non-coincident residential peak will be reduced by 20 MW. Only a portion of this reduction is reflected in the coincident peak.

Commercial and Industrial Direct Access: The 2022 hourly load forecast did include loss of load due to direct access. The loss of load was based on the number of eligible customers in the commercial and industrial sectors that have applied for direct access. The hourly loss energy due to direct access is expected to be 74,516 during 2022, up from 21,700 MWh estimated for the April filing.

Energy Efficiency:

As noted on Form 3, SJCE has applied to administer CPUC energy efficiency programs. More details on those estimates are described below:

- Units selected: Sites – Each project will consist of slightly different energy efficiency measures aimed at optimizing facility reductions. Therefore, our metric will be the number of sites/facilities that are upgraded each year. It's important to note that residential sites and commercial sites are very different.
- First year values:
    - Residential: 150 sites for a total of 81MWh energy reduction and 0.0039 MW peak demand reduction.
    - Commercial: 100 sites for a total of 4,815MWh energy reduction and 0.71 MW peak demand reduction.
- The program is currently planned to run for 3 years with the same amount of work being repeated in each of the first 3 years. Work is expected to continue past 2032 with reduced savings from the commercial sector.
- Demand impacts are based on SJCE's forecasted energy efficiency programs for 2022-2024 and plans to extend programs as authorized into the following years.
- Forecasted programs utilize CPUC-approved workpapers to estimate average site savings and average site demand reductions and the CEDARS Cost-effectiveness Tool (CET) to calculate annual gross savings and gross demand reductions.
- The number of sites in both residential and commercial sectors are based on a market assessment to determine achievable savings potential.

BTM Storage: SJCE has no contracts in place for large scale behind the meter solar, storage or demand side response for the calendar year 2022. Once contracts are signed for the out years of the forecasts 2023 through 2032 the effects on energy and load will be included in the forecast.

Enrollment: No new mass customer enrollments are expected.