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Description:	Form 6-Efficiency Program Impacts (Form 3.2)
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Efficiency Program Impacts (Form 3.2)

In December 2016, CEC issued Forms and instruction for Submitting Electricity Demand forecasts prepared in support of the 2017 Integrated Energy Policy Report (IEPR) . Form 6 requests that SCE:

1. Document the estimated incremental load impacts reported in Form 3.2
2. List any studies or sources used to support these assumptions
3. Describe the method by which potential load impacts are reconciled with the UDC's demand forecast as reported in Form 1

Consistent with Form 3.2 requirements, SCE has provided forecasted energy and coincident peak impacts captured (2015) or expected to be captured by SCE EE Programs. EE Program savings are categorized into the following market sectors:

- Residential
- Commercial
- Industrial
- Agricultural
- Street Lighting

Source documentation of EE program savings are:

1. 2015 Reported Program Results
2. 2016-2024 = 2015 EE Potential and Goals Annual Incremental model output converted to Cumulative starting in 2015
3. Residential includes Low Income (ESA -formerly LIEE)
4. 2025 and 2028 values are CAGR from 2020-2024

EE program energy savings (GWh) represent annual estimates of installed measure savings. Demand (MW) savings are consistent with the California Public Utilities Commission definition of demand savings promulgated in Decision 06-06-063. Said decision defines peak impacts as the average grid level impact for a measure between the hours of 2 pm and 5 pm during the three consecutive hottest weekdays of the year. As such, the EE program definition of Demand impacts are not necessarily consistent with the CEC definition of peak savings.

Demand Response Program Impacts (Form 3.3)

SCE's Demand Response forecast reflects ex-ante estimates based on the Load Impact Protocols . The protocols governing the development of ex-ante load impacts were designed to help ensure that demand response impact estimates would be directly comparable with other resource alternatives (i.e.,

other DR resources, energy efficiency, renewables, and generation). The protocols require that the ex-ante load impact estimates be based on analysis of historical data whenever the existing data and characteristics of the program allow for such an approach. Analysis of historical program data is then employed to produce ex-ante load impact estimates that are subsequently used for resource adequacy, cost-effectiveness assessment and, by connection, resource planning.

Ex-ante load impacts reflect the fact that demand response load impacts vary as a function of weather, participant characteristics, changes in the number of program participants and other factors such as switch failure rates in order to provide an appropriate comparison with alternative resources under the same planning paradigm. Put differently, ex-post load impacts for any given year may differ from the load impacts that could be achieved during the low probability, extreme conditions under which many DR resources are likely to be used and for which they provide insurance value.

For dispatchable programs, describe what criteria will be used in deciding whether to dispatch and how they will be operated to reduce the peak.

Statewide and Local DR Program Ex Post and Ex Ante Reports and Model Assumptions:

- [Southern California Edison 2016 Demand Response Portfolio Summary Report, April 1, 2017](#)
- [SCE Final Load Impact Reports for Program Year 2016, April 1, 2017](#)

Renewable and Distributed Generation Program Impacts (Form 3.4)

See Self-Generation and Residential Solar Photovoltaic discussion on page 5 and 6 of Form 4 (Methodology Work Paper).