SDG&E's PROPOSALS TO SIMPLIFY THE DR LI FILING REQUIREMENTS

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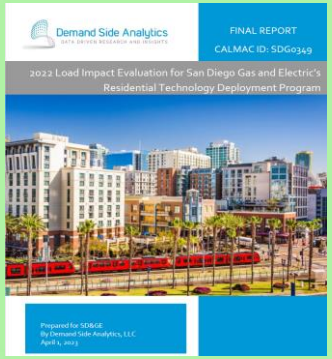
August 8th, 2023

DR LI CURRENT FILING REQUIREMENTS

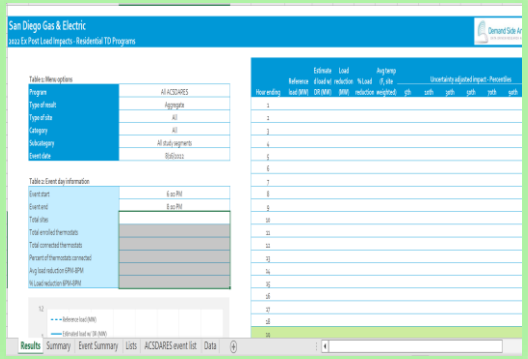
DR Load Impact Reports by Program

DR Load Impact Evaluation Report



Executive summary
Introduction and purpose of the study
Ex-post/ex-ante methodologies
Ex-post/ex-ante findings
Recommendations.

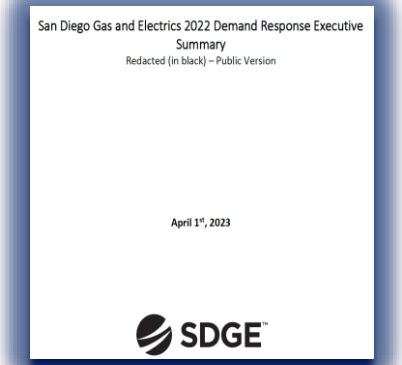
The ex-post and ex-ante table generators



Ex-post: hourly load impact by event dat.
(Protocol 4-16).
Ex-ante: 11-years hourly load impact by month.
(Protocol 17-22).

Executive Summary Report

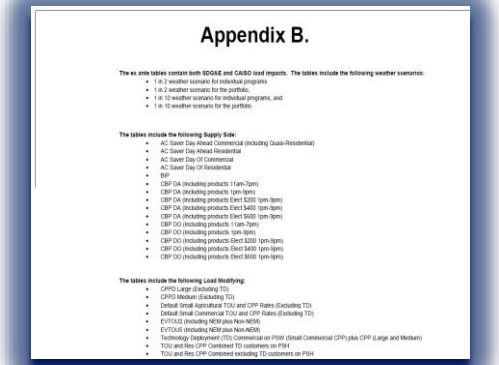
Executive Summary Load Impact Report.


San Diego Gas and Electrics 2022 Demand Response Executive Summary
Redacted (in black) – Public Version
April 1st, 2023
SDGE

D.10-04-006:

- Program descriptions program options.
- Ex-post/ex-ante load impact methodologies and event results.
- Recommendations

Appendix: Summary Table


Appendix B.

For both SDG&E and CAISO load impacts: 1in2 and 1in10 weather scenarios by portfolio and program

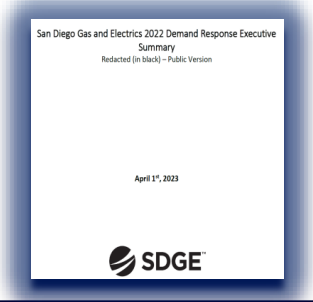
DR LI PROPOSAL # 1 – REMOVE THE EXECUTIVE SUMMARY REQUIREMENT

KEY POINT:

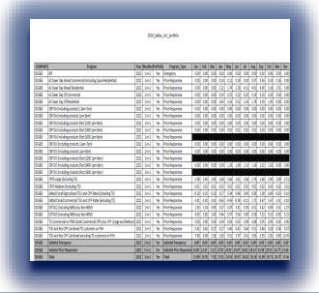
- Remove the Executive Summary Load Impact Report requirement
- Keep Summary Table requirement.

Executive Summary Report

DR Load Impact Evaluation Report



Executive Summary Load Impact Report.



Summary Table

Introduction
Ex-post/ex-ante methodologies
Ex-post/ex-ante findings
Recommendations

11-years ex-ante load impact estimates:

- ✓ Portfolio vs program
- ✓ 1in2 and 1in 10 weather conditions

Reasons:

- ✓ SDG&E has produced this summary since 2009, includes a summary of 9-10 different studies, 80 pages approx.
- ✓ Internal and external stakeholders look directly to the SDG&E and statewide DR Programs' and DR Load Modifying Programs' individual load impact reports.
- ✓ Preparing the summary in its current form is extremely laborious.
- ✓ The Summary Table is produced in a flat excel file easy to navigate.
- ✓ The ex-ante estimates values match with the table generators.

DR LI PROPOSAL #2 – PRODUCE A TIME TEMPERATURE MATRIX

KEY POINT: Produce a Time Temperature Matrix Format.

Time Temperature Matrix Format

Program name	Maxtemp	Weekday	Start	End	Duration	Forecast Impact (kW)
ACSDARES (BYOT)	71	Weekday	4 pm	5 pm	1	0.0332
ACSDARES (BYOT)	71	Weekday	4 pm	6 pm	2	0.0304
ACSDARES (BYOT)	71	Weekday	4 pm	7 pm	3	0.0268
ACSDARES (BYOT)	71	Weekday	4 pm	8 pm	4	0.0231
ACSDARES (BYOT)	71	Weekday	4 pm	9 pm	5	0.0198
ACSDARES (BYOT)	71	Weekend	4 pm	5 pm	1	0.0326
ACSDARES (BYOT)	71	Weekend	4 pm	6 pm	2	0.0308
ACSDARES (BYOT)	71	Weekend	4 pm	7 pm	3	0.0277
ACSDARES (BYOT)	71	Weekend	4 pm	8 pm	4	0.0241
ACSDARES (BYOT)	71	Weekend	4 pm	9 pm	5	0.0207
ACSDARES (BYOT)	72	Weekday	4 pm	5 pm	1	0.0657
ACSDARES (BYOT)	72	Weekday	4 pm	6 pm	2	0.0600
ACSDARES (BYOT)	72	Weekday	4 pm	7 pm	3	0.0528
ACSDARES (BYOT)	72	Weekday	4 pm	8 pm	4	0.0455
ACSDARES (BYOT)	72	Weekday	4 pm	9 pm	5	0.0390
ACSDARES (BYOT)	72	Weekend	4 pm	5 pm	1	0.0644
ACSDARES (BYOT)	72	Weekend	4 pm	6 pm	2	0.0607
ACSDARES (BYOT)	72	Weekend	4 pm	7 pm	3	0.0546
ACSDARES (BYOT)	72	Weekend	4 pm	8 pm	4	0.0474
ACSDARES (BYOT)	72	Weekend	4 pm	9 pm	5	0.0406

Method:

Develop a model that predicts impacts for the average customer as a function of temperature. This will be the same model that is used to develop weather-normalized ex-ante impacts as a part of the annual reporting process for demand response.

Reasons:

- ✓ Simulate the resource availability for different weather years.
- ✓ Compare actual event performance to historical event forecasts
- ✓ Would better reflect the load impacts estimates at different weather temperatures.

DR LI PROPOSAL #3 – PRODUCE A 24-SLICE OF DAY TABLE WITH THE IMPACTS FOR THE WORST DAY

KEY POINT: Produce a Summary 24-Slice of Day Table .

Summary 24-Slice of Day Table Format

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1												
2												
3												
4												
5												
6												
7												
8												
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Reasons:

- ✓ D. 22-06-050 (Appendix A). The 24-hour slice framework requires each load-serving entity (LSE) to demonstrate it has enough capacity to satisfy its specific gross load profile (including planning reserve margin) in all 24 hours on the California Independent System Operator's (CAISO) "worst day" in that month.
- ✓ The "worst day" is defined as the day of the month that contains the hour with the highest coincident peak load forecast.

MODIFY D. 10-04-006

KEY POINT: Incorporate the changes listed below to D.10-04-006.

- Remove the Executive Summary Load Impact Report requirement and incorporate the Time Temperature Matrix and 24-slice of day table that shows impact of the resource for all 24 hours for each of the 12 months on the worst day.
- Keep Summary Table requirement.

D.10-04-006 – Appendix 1 under Executive Summary Requirement section

Consistent with D.08-04-050, Attachment A, Protocol 26 under item 4, the utilities shall prepare Executive Summaries of their load impact reports. These executive summaries shall include an overview of the evaluation findings and the study's recommendation for changes to the demand response resource. In addition, it should also describe briefly the methodology, the enrollment forecast and the inputs and assumptions used for calculating the ex post and the ex ante load impact estimates. The utilities should also report the regression model specification for each demand response program. The Executive Summary shall also contain an explanation of how the Monthly System Peak Load Day under the "1-in-2 Weather Conditions" and the "1-in-10 Weather Conditions" were derived and disclose the temperature or Weather Year used for those conditions. It shall also disclose the assumption used for ex ante "portfolio basis" load impacts.

QUESTIONS

THANK YOU.