



Presentation of PREPA Performance Metrics

Docket NEPR MI-2019-0007



January 19, 2021



Agenda

- Background
 - Procedural Order and goals of Technical Conference
 - Metrics: Performance report requirements
 - Overview of filed metric categories
 - General observations of filed data
- 18-Month Review of PREPA Filed Metrics
 - Metrics with comparable industry standards
 - Presentation of selected metrics filed by PREPA
- Questions and Comments from public and stakeholders



Background



Procedural Order and Goals of Technical Conference

- Share information provided by PREPA and collected by the Energy Bureau
- The Energy Bureau's Resolution and Order from May 14, 2019 (Docket NEPR MI-2019-0007)
 - Commencement of data gathering process to help develop "appropriate measures, metrics and targets"
 - Metrics for reporting purposes (Docket NEPR MI-2019-0007)
 - Metrics that will be the subject of Targets (Docket NEPR MI-2019-0007)
 - Metrics that will be subject to Financial incentives (Docket NEPR AP-2020-0025 will establish the specific Targets and Performance Incentives Mechanisms)
 - The data would help establish " a baseline and a uniform understanding of the current level of PREPA's performance"



Metrics: Performance Reporting Requirements

- The Energy Bureau ordered PREPA to report 117 metrics across 11 categories on a quarterly basis
- The Energy Bureau identified 15 additional anticipated metrics (energy efficiency, electric vehicles, and usage portal accessibility)
- Approximately 130 metrics are being reported by PREPA (municipalities included for several metrics, increasing the number of data rows)
- Data extends period of June 2019 through November 2020 (ongoing)



Subcategories of filed data

- Overall System (117 data rows)
- Generation (97 data rows)
- Transmission and Distribution (58 data rows)
- Customer Service (72 data rows)
- Finance (2 data rows)
- Planning and Environmental (5 data rows)
- Operations (26 data rows)
- Information Technology (IT) (4 data rows)
- Human Resources (2 data rows)
- Legal (6 data rows)
- Renewable Energy and Demand Side Management (206 data rows)



General Observations

- Approximately 600 rows of monthly data for the 18-month period
- Impacts of major events
 - January earthquakes
 - COVID-19
- Data Issues
 - Gaps/missing months
 - Some metrics had no data where PREPA does not collect the information (i.e., MAIFI)
 - Costa Sur data ends with shutdown following earthquakes
 - Emissions and energy efficiency data filed on annual basis rather than monthly basis
 - Units reported
 - Generally, changed the units to match the reported data



PREPA Filed Metrics: 18-Month Review



PREPA 18-Month Review

- Approximately 120 graphs across all sub-categories in the 55-page attachment provided by the Bureau.
- Where possible, we also included data for:
 - Industry Standard
 - Hawaiian Electric Company (HECO) Historical Performance
- Comparisons to PREPA are only for informative purposes
 - The establishment and determination of specific performance incentive metrics will be discussed in a separate docket
- The Attachments include 18-month average, minimum, and maximum values for each data row

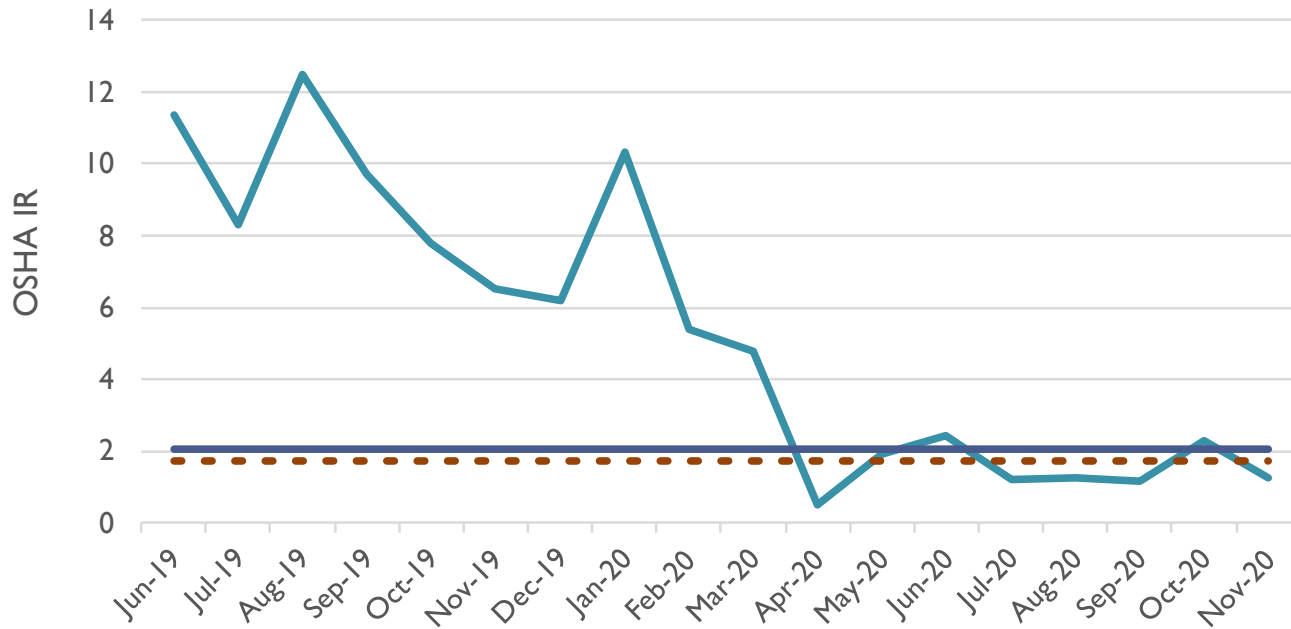


Metrics With Comparable Industry Standard



Overall System

OSHA Incidence Rate/Safety Recordables Rate



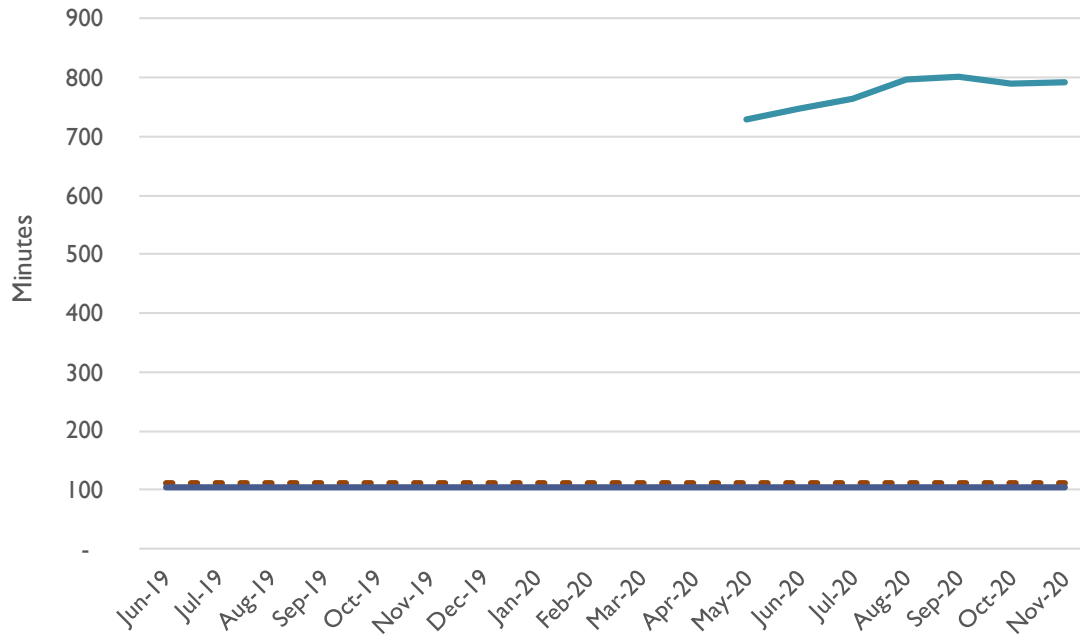
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PREPA	11.4	8.3	12.5	9.7	7.8	6.5	6.2	10.3	5.4	4.8	0.5	1.9	2.4	1.2	1.3	1.1	2.3	1.3
Industry	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
HECO	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07

Industry Standard Source: U.S. Bureau of Labor Statistics for Electric Utilities



Transmission and Distribution

SAIDI



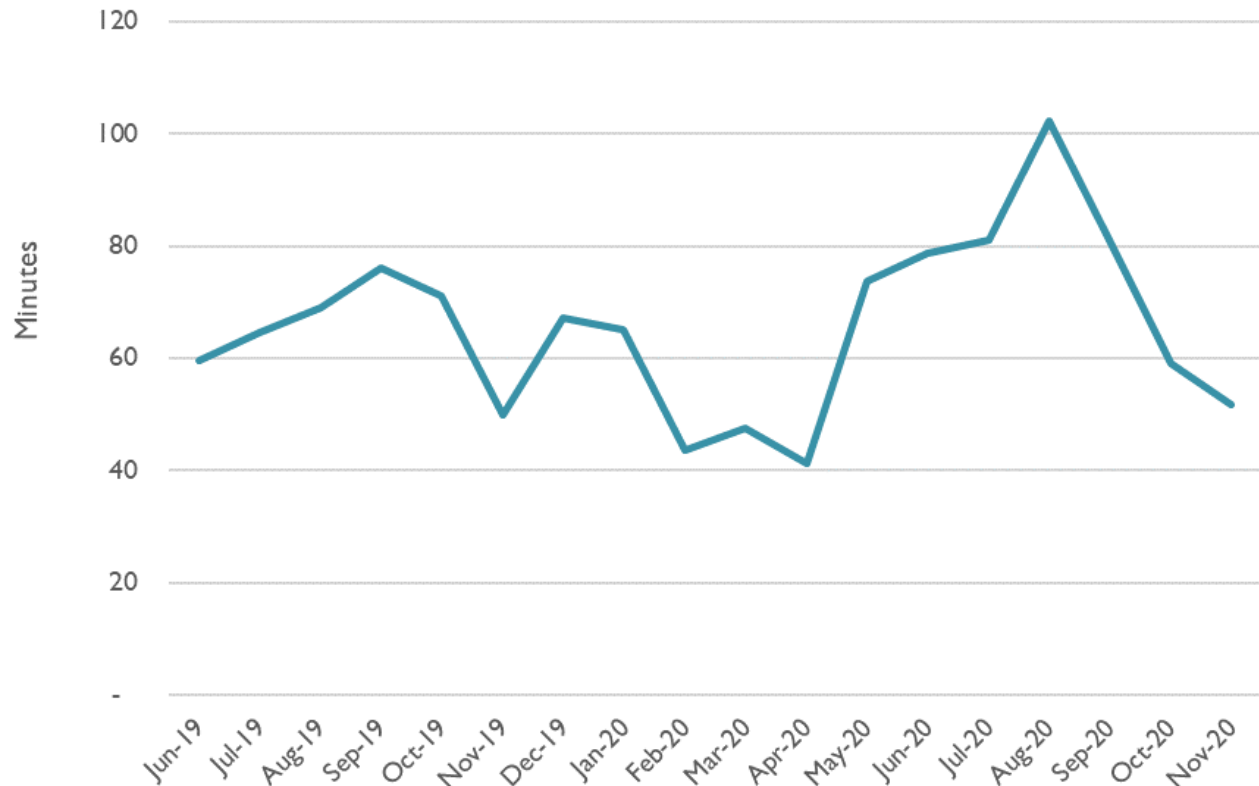
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PREPA												729	748	764	798	803	791	792
Industry	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
HECO	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104

Note: Industry standards for SAIDI are annual values from IEEE. PREPA's SAIDI values were reported monthly and converted to annual values on a 12-month rolling basis as soon as a year's worth of data was available.



Transmission and Distribution

Monthly SAIDI

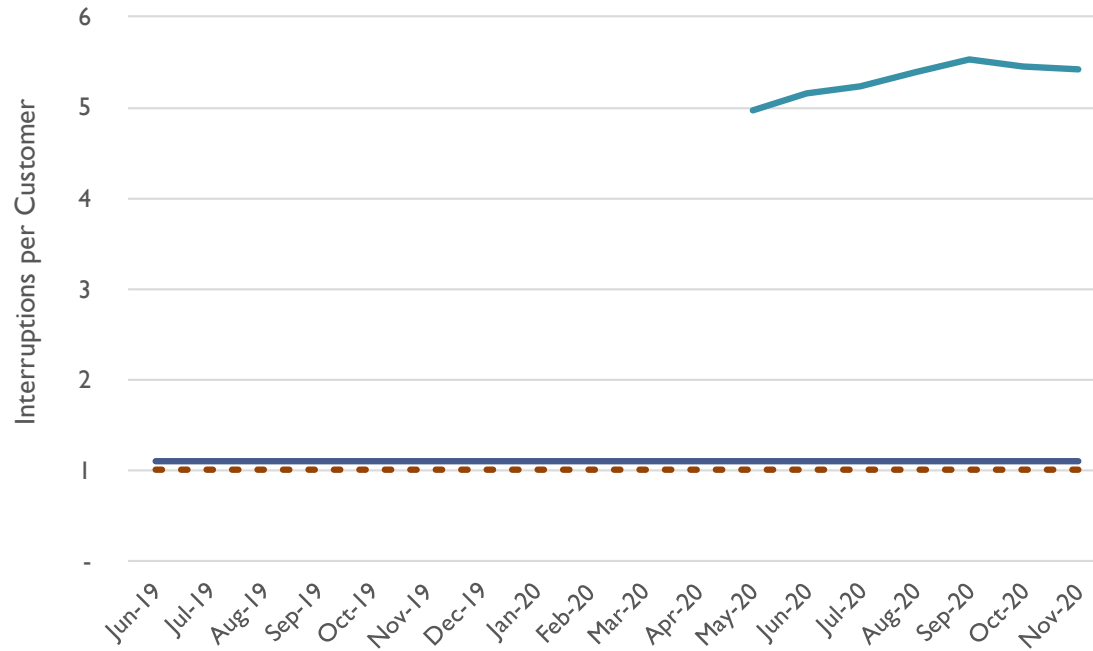


	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	60	65	69	76	71	50	67	65	44	48	41	74	79	81	102	81	59	52



Transmission and Distribution

SAIFI



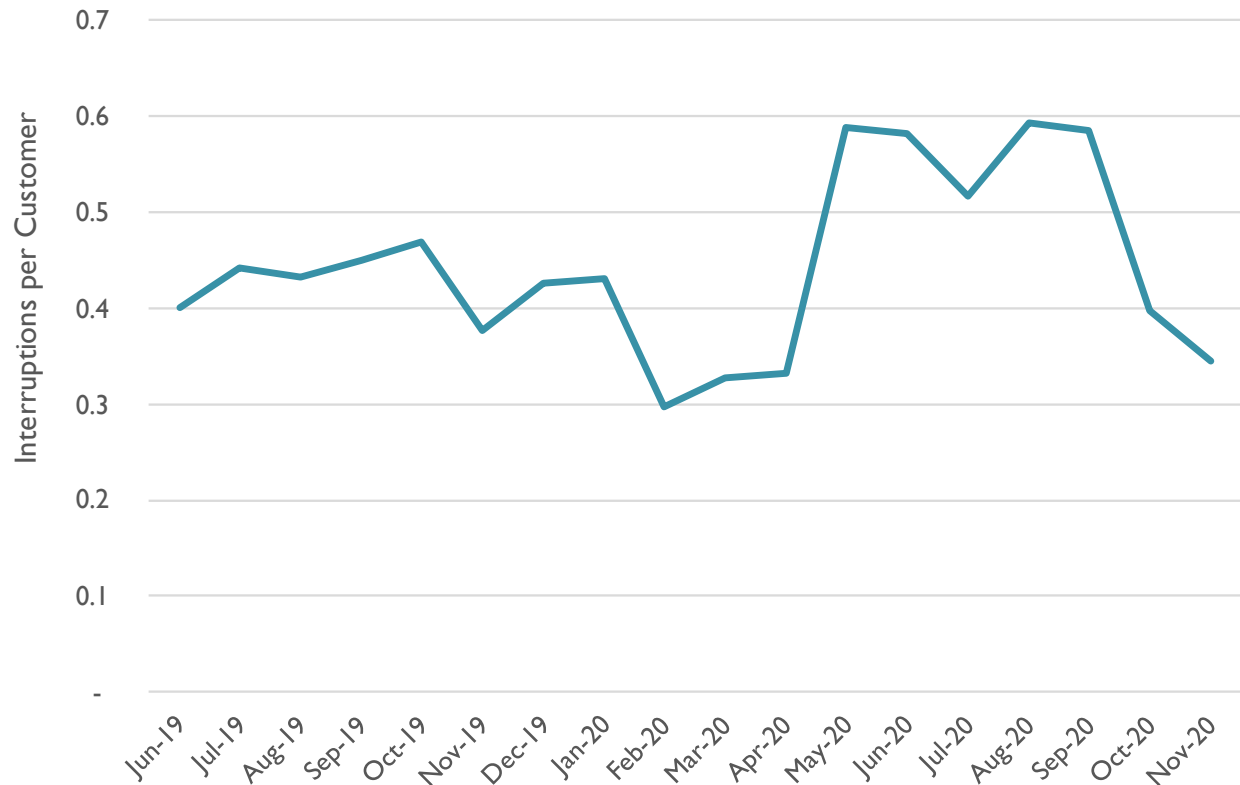
	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA												5.0	5.2	5.2	5.4	5.5	5.5	5.4
Industry	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HECO	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Note: Industry standards for SAIDI and SAIFI are annual values from IEEE. PREPA's SAIFI values were reported monthly and converted to annual values on a 12-month rolling basis as soon as a year's worth of data was available.



Transmission and Distribution

Monthly SAIFI

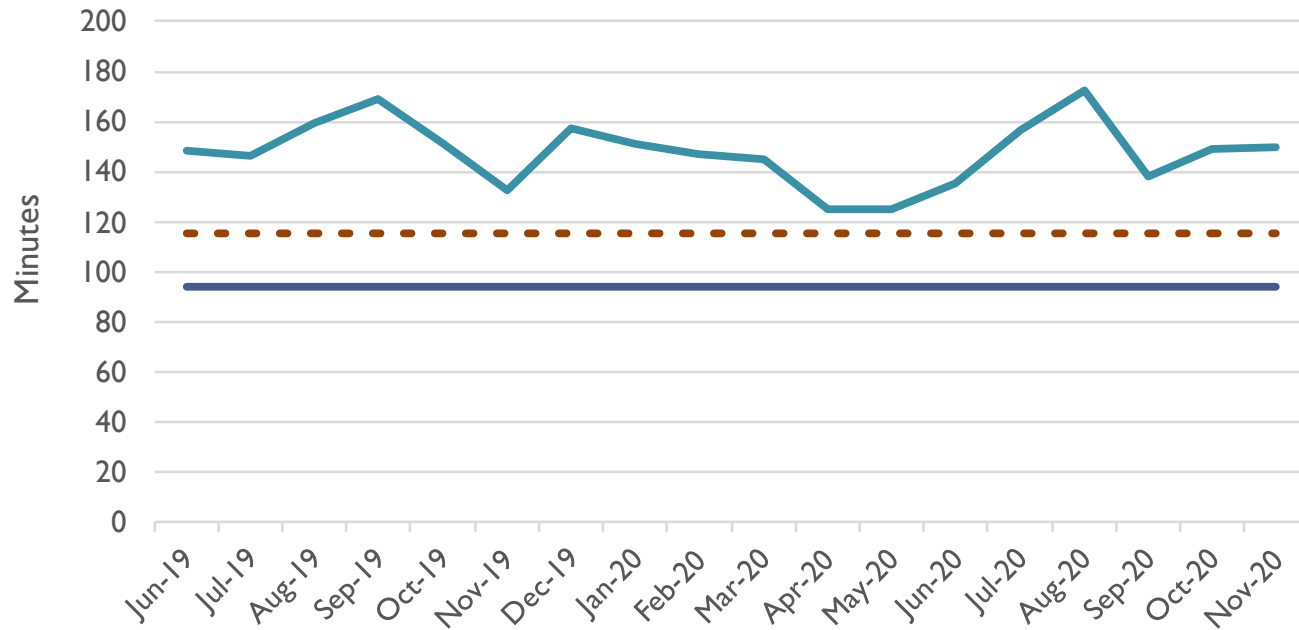


	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	0.40	0.44	0.43	0.45	0.47	0.38	0.43	0.43	0.30	0.33	0.33	0.59	0.58	0.52	0.59	0.59	0.40	0.34



Overall System

CAIDI



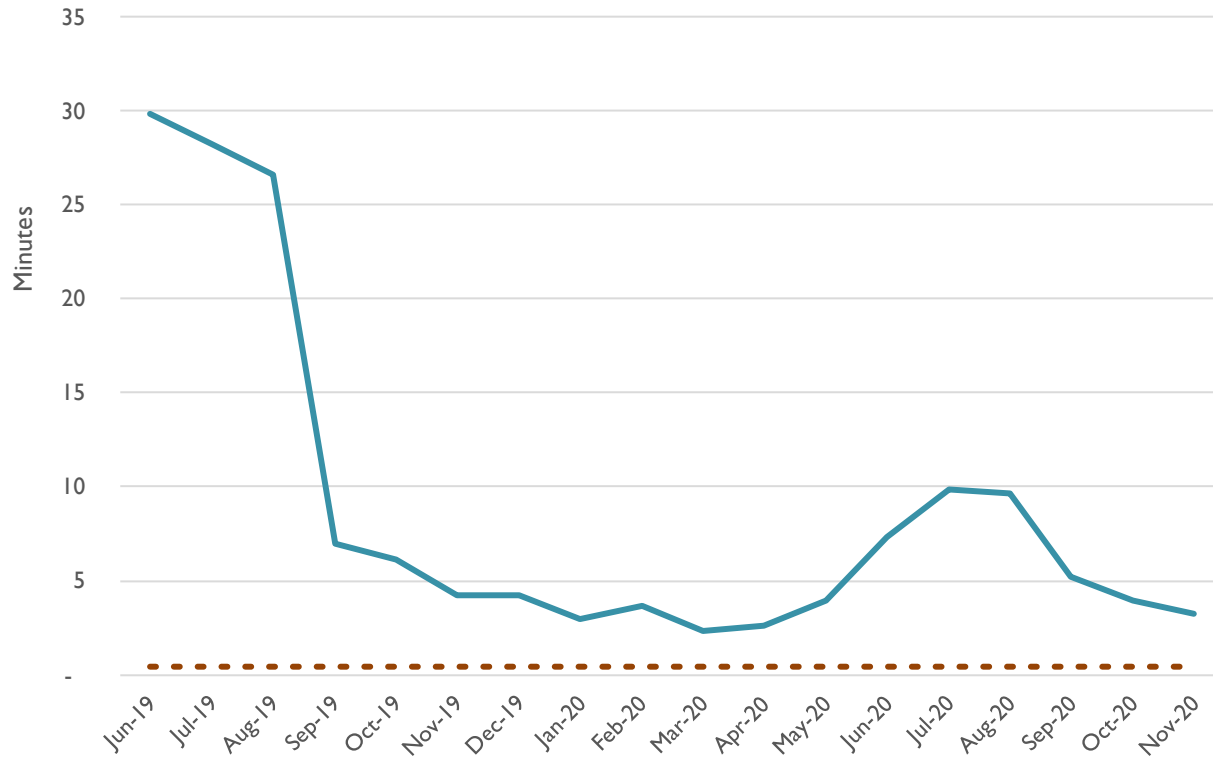
	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	149	146	159	169	151	132	157	151	147	145	125	125	135	157	172	138	149	150
Industry	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
HECO	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94

Industry Standard Source: EIA 2018 Annual Electric Power Industry Report (EIA-861) IEEE Standard 1366 for IOUs and state utilities



Customer Service

Average Speed to Answer



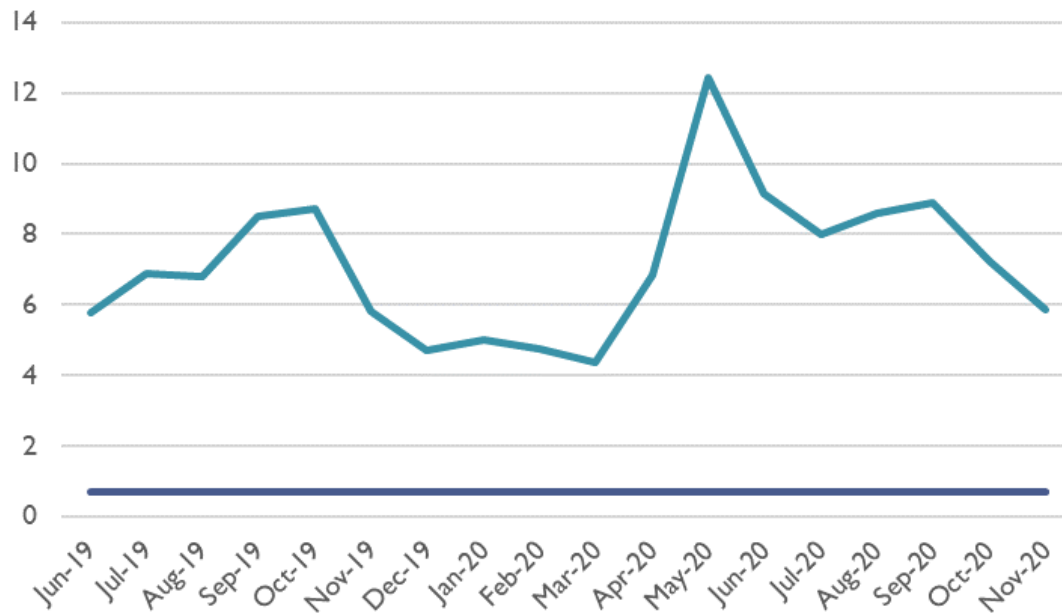
	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	30	28	27	7	6	4	4	3	4	2	3	4	7	10	10	5	4	3
Industry	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Industry Standard Source: IFC, "Measuring Call Center Performance, Global Best Practices."



Customer Service

Number of Formal Customer Complaints per 10,000 Customers

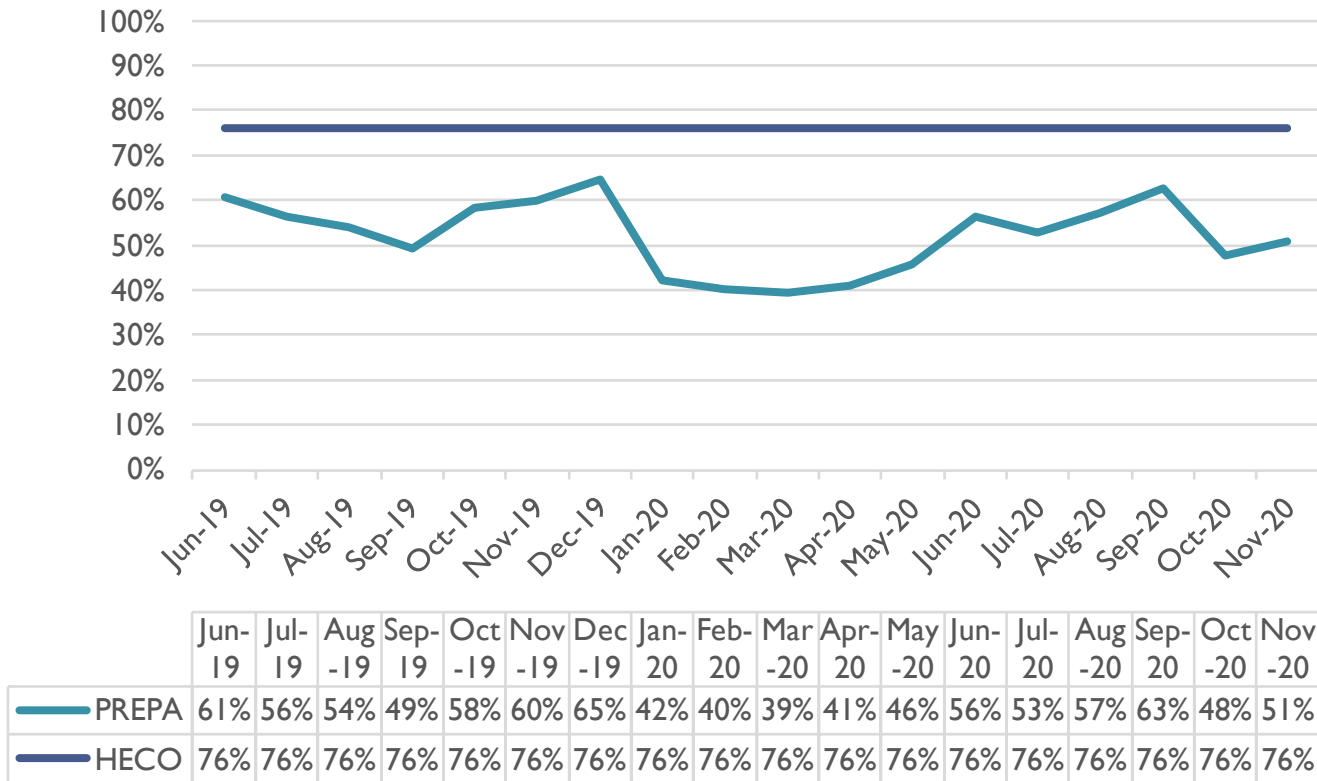


	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	5.8	6.9	6.8	8.5	8.7	5.8	4.7	5.0	4.8	4.4	6.9	12.2	9.2	8.0	8.6	8.9	7.2	5.9
HECO	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



Generation

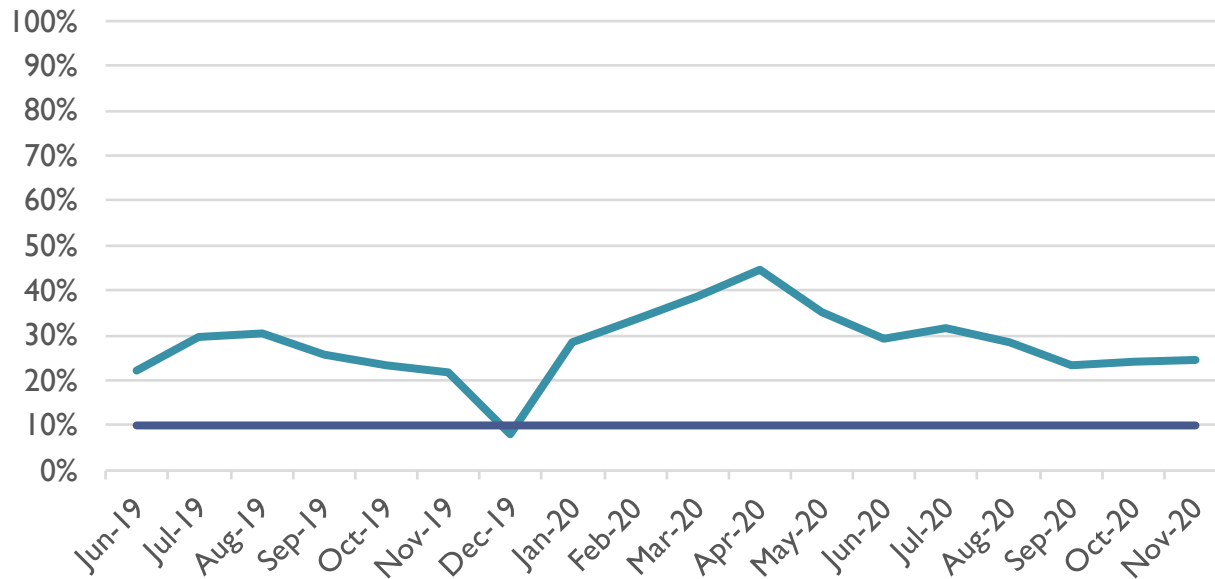
System-Level Plant Availability





Generation

System-Level Forced Outage Rate

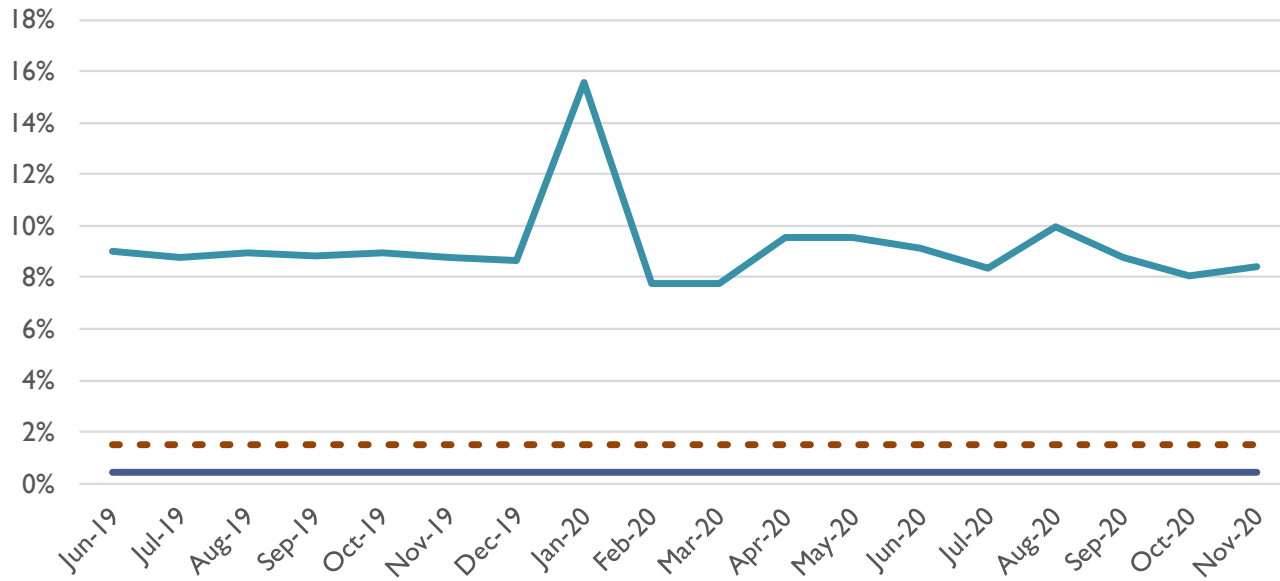


	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	22%	30%	31%	26%	23%	22%	8%	28%	34%	39%	45%	35%	29%	31%	28%	24%	24%	25%
HECO	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%



Customer Service

Percent of Bills Estimated vs Read



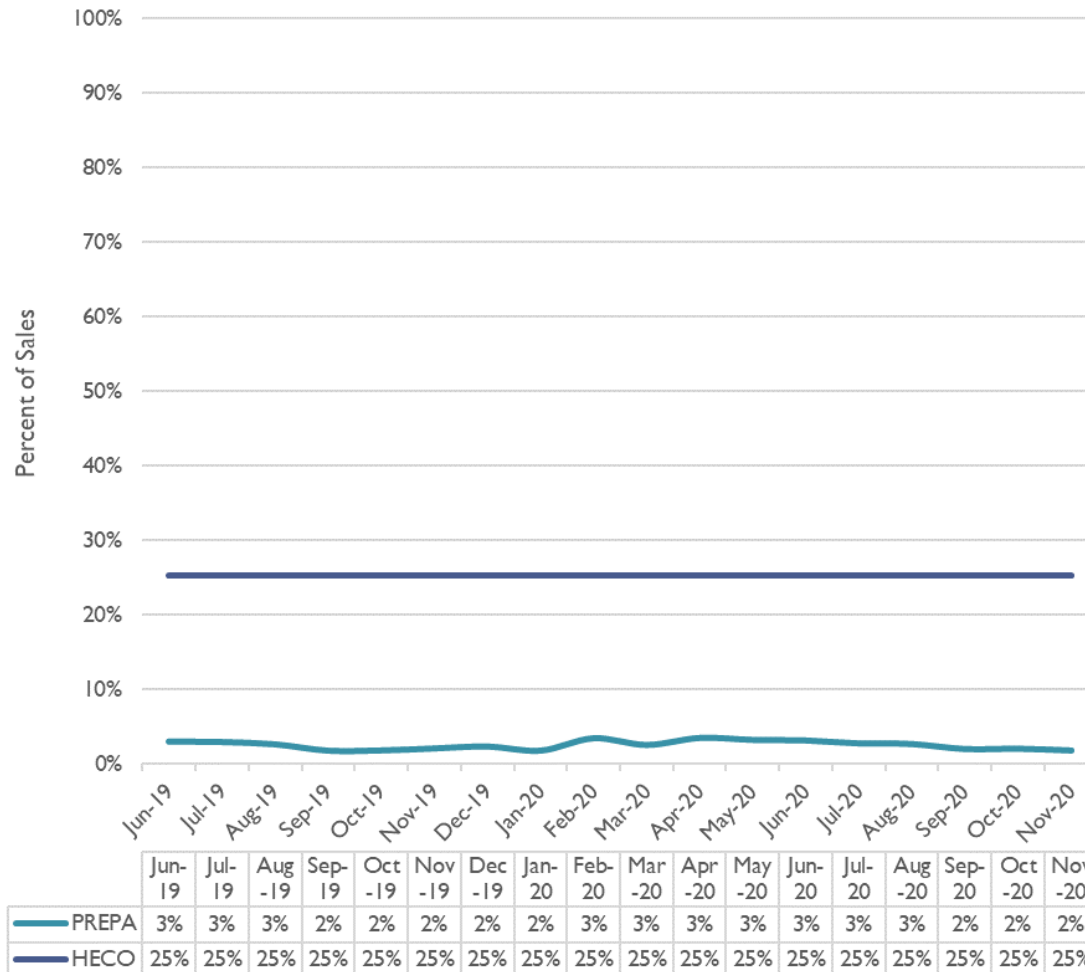
	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	9%	9%	9%	9%	9%	9%	9%	16%	8%	8%	10%	10%	9%	8%	10%	9%	8%	8%
ConEd	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
HECO	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%

Note: We recognize that ConEd may not be the most comparable utility for PREPA in terms of this metric, and is used for illustrative purposes only



Renewables

Generation from RPS-Eligible PPOA's



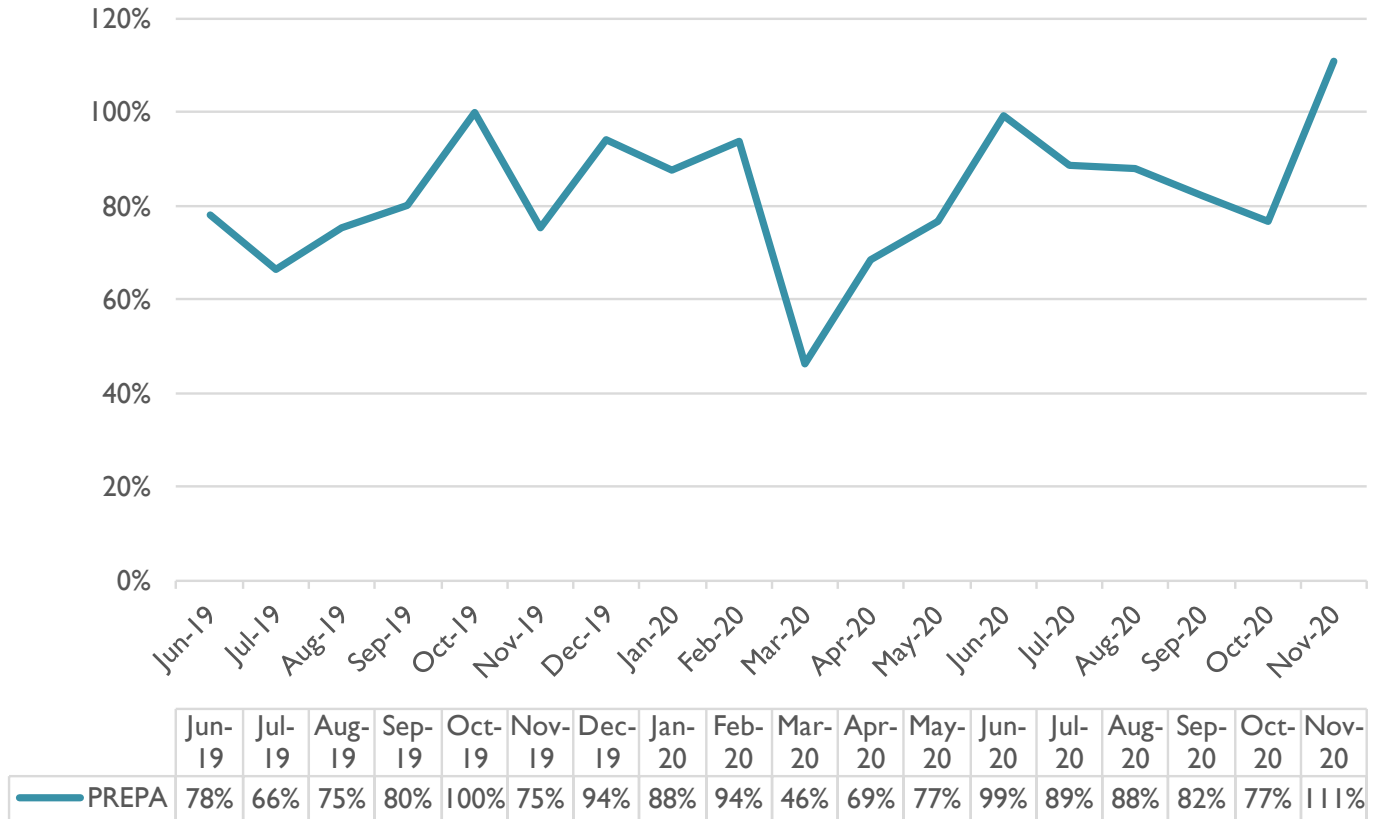


Additional Selected Metrics



Overall System

Operational Expenses vs. Budget

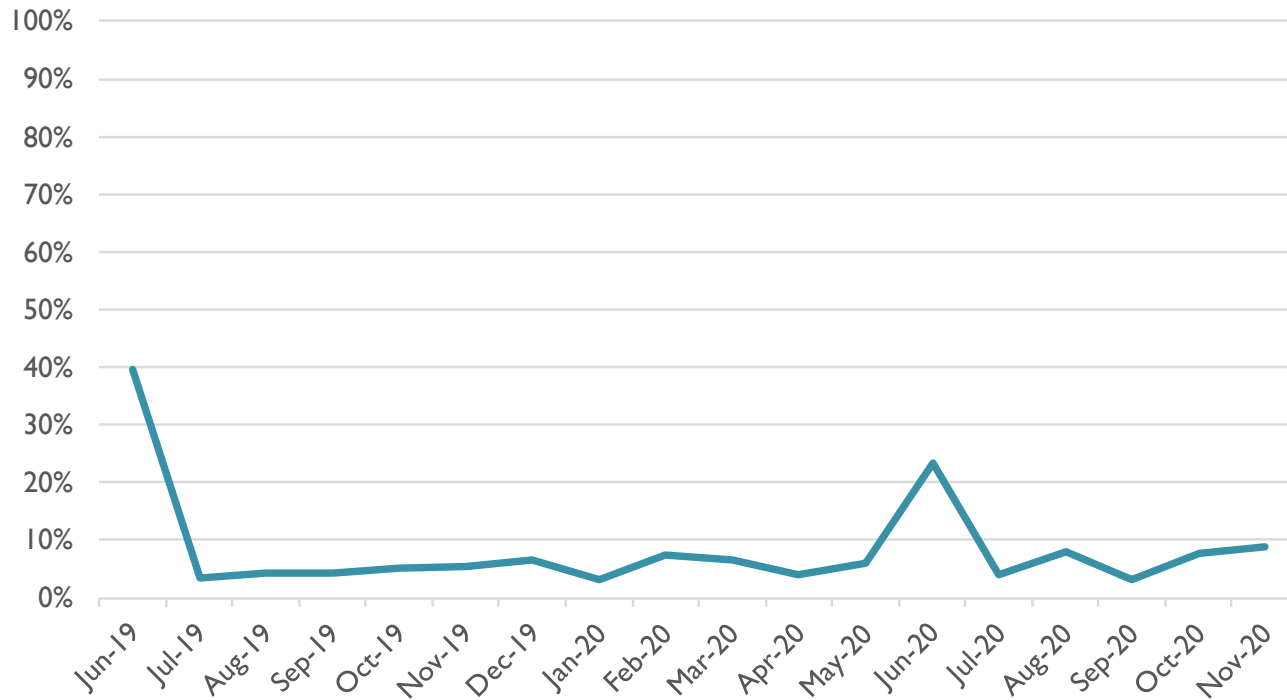


Note: PREPA is reporting monthly expenses versus the monthly budget



Overall System

Capital Expenses vs. Budget



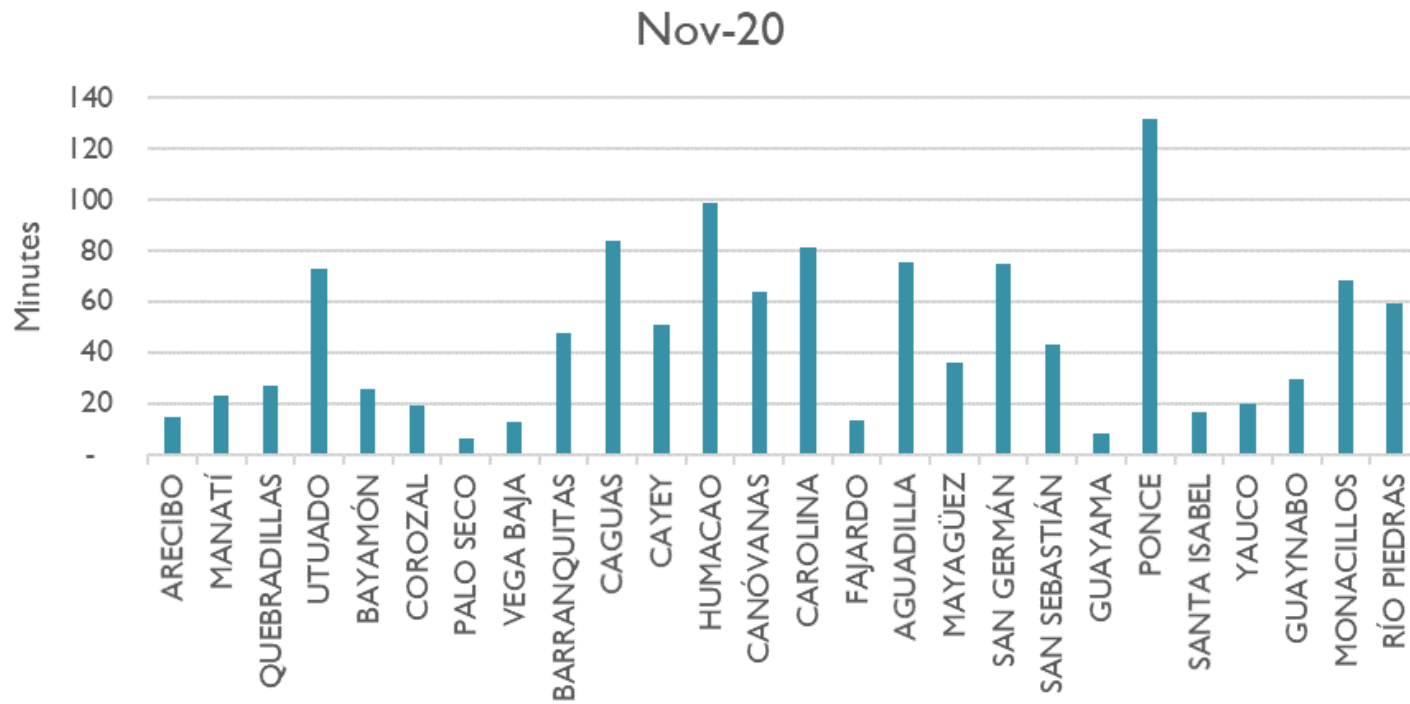
	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PREPA	40%	4%	4%	4%	5%	5%	7%	3%	8%	7%	4%	6%	23%	4%	8%	3%	8%	9%

Note: PREPA is reporting monthly expenses versus the fiscal year budget



Transmission and Distribution

SAIDI by month and municipality

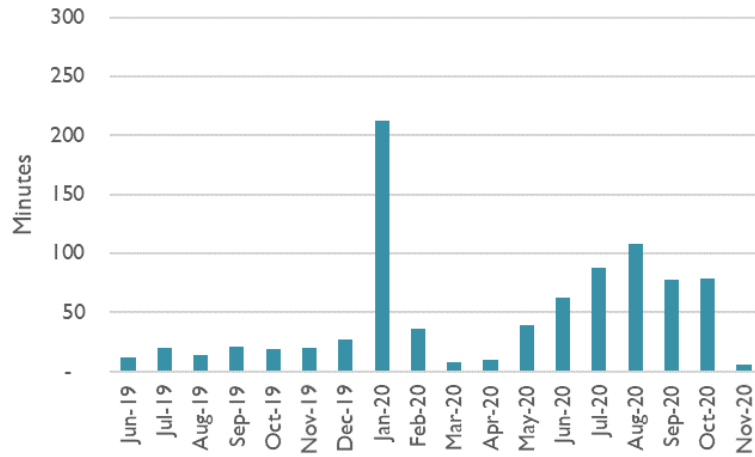




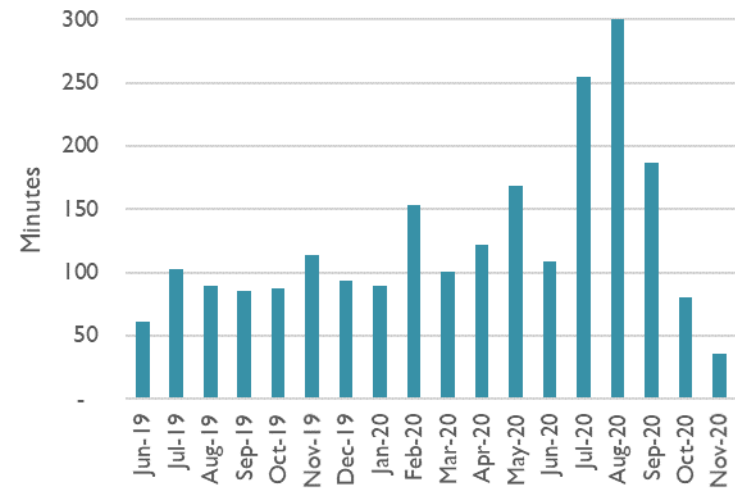
Transmission and Distribution

SAIDI by month and municipality

PALO SECO



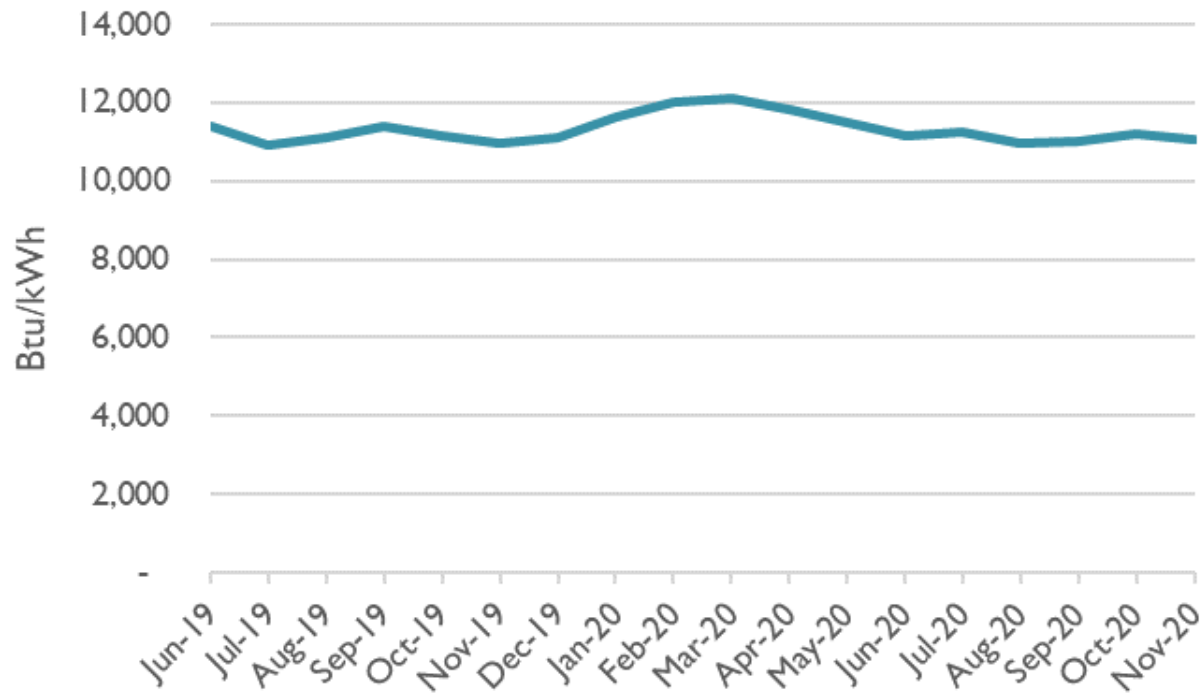
MAYAGÜEZ





Generation

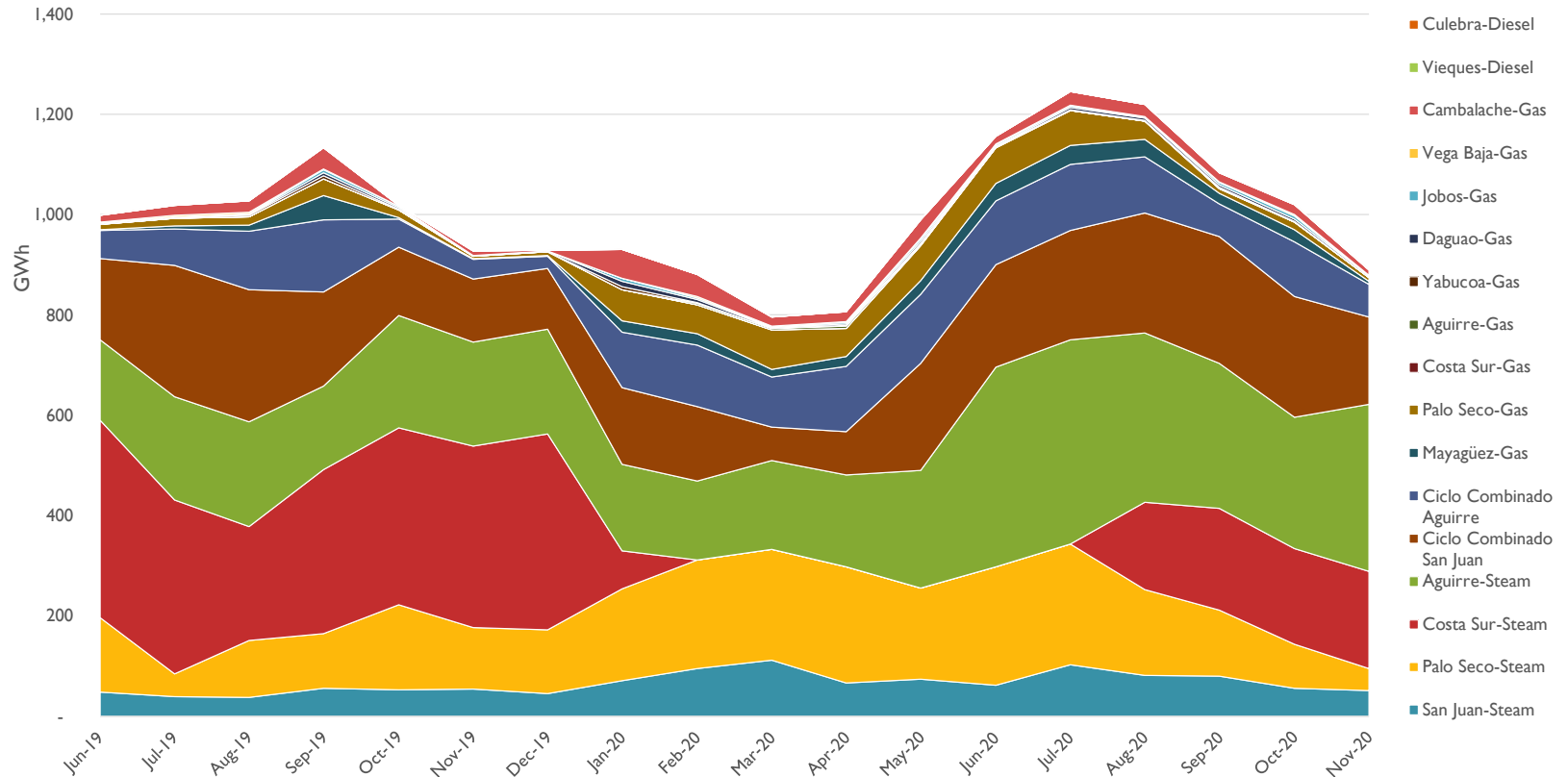
Average System Heat Rate





Monthly Generation by Unit

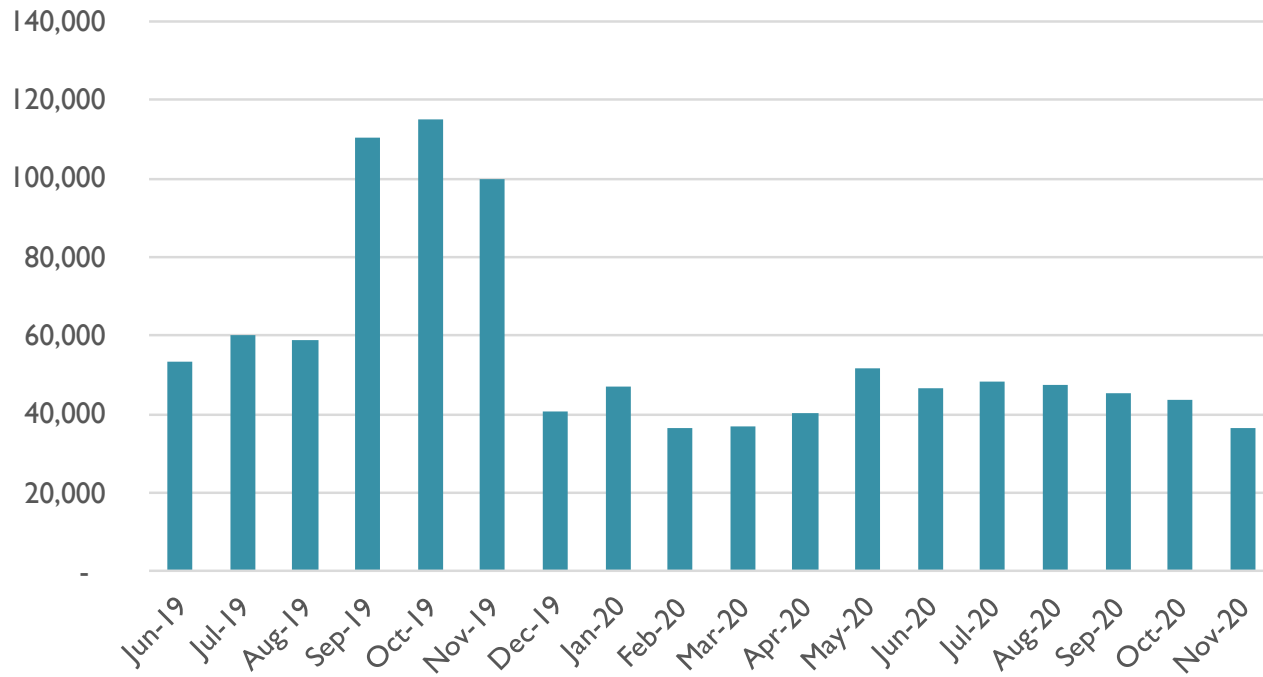
Thermal Generation by Plant





Customer Service

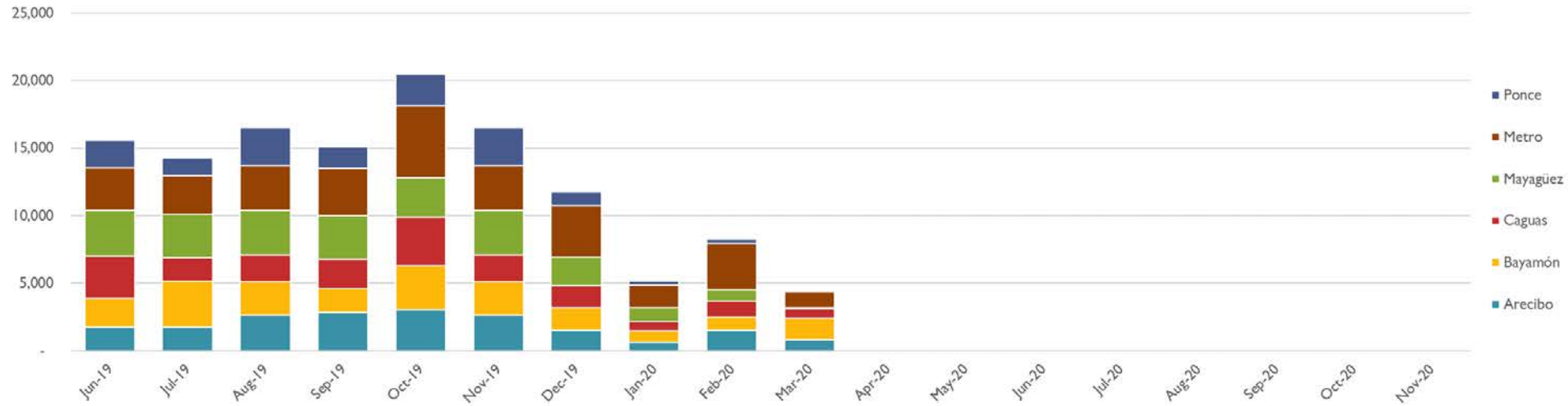
Number of Calls Answered





Customer Service

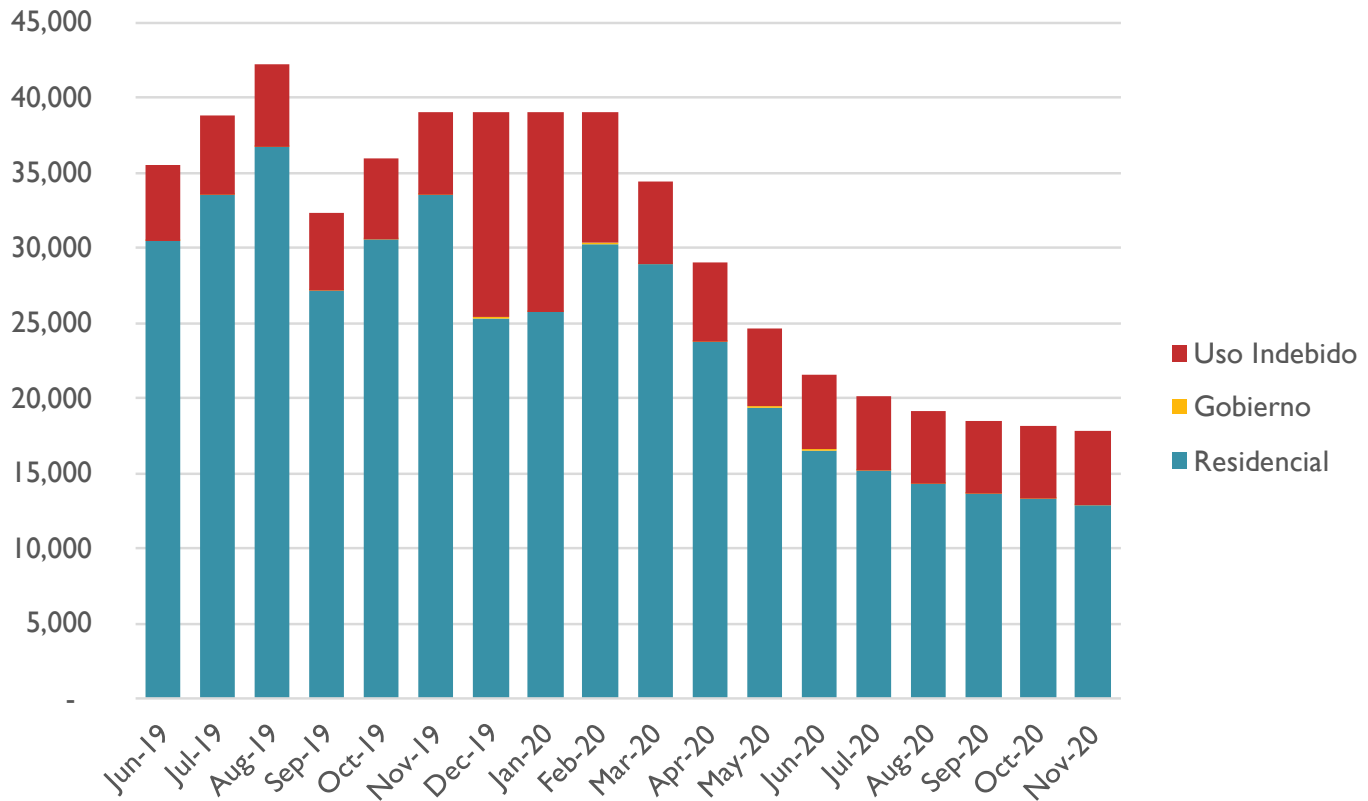
Number of Disconnections by Area





Customer Service

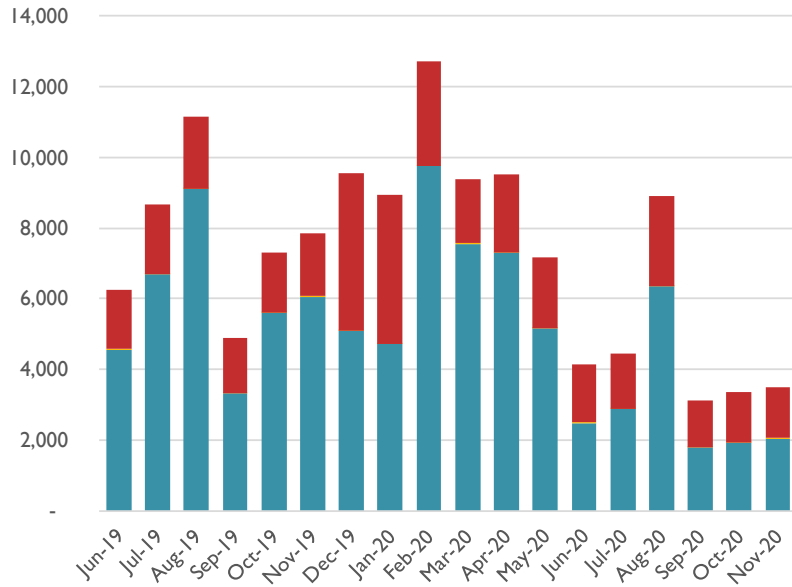
Customers on Extended Payment Plans



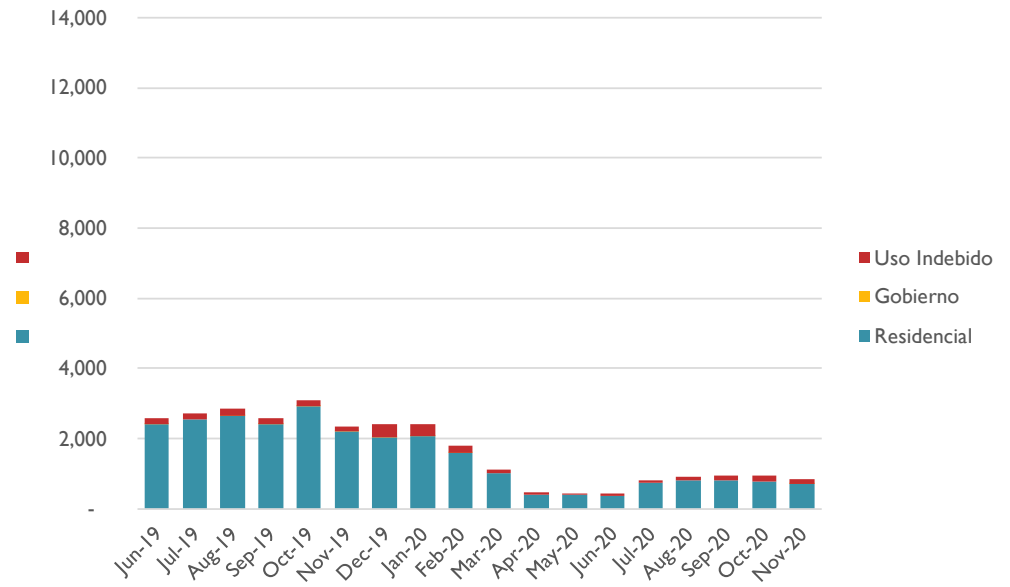


Customer Service

Customers Defaulting on Extended Payment Plans



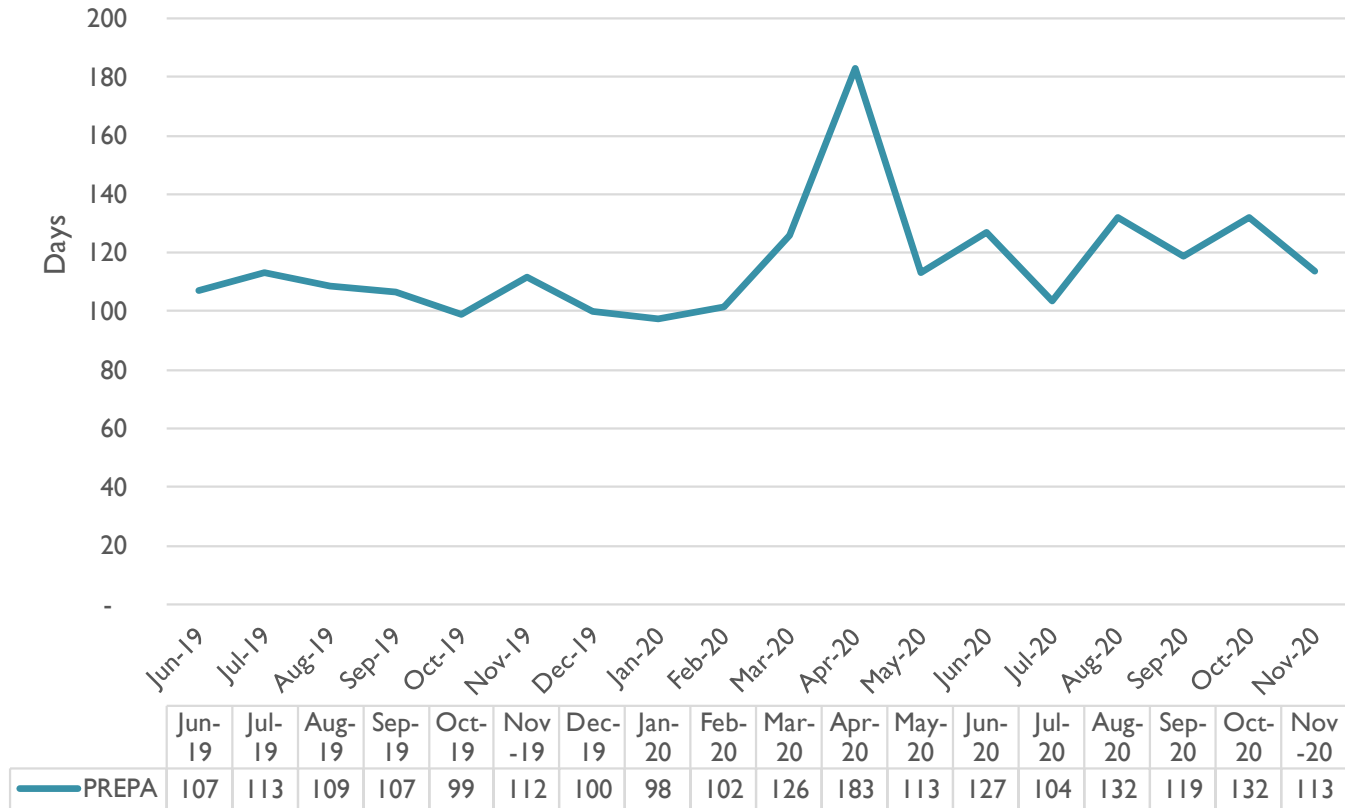
Customers Completing Extended Payment Plans





Customer Service

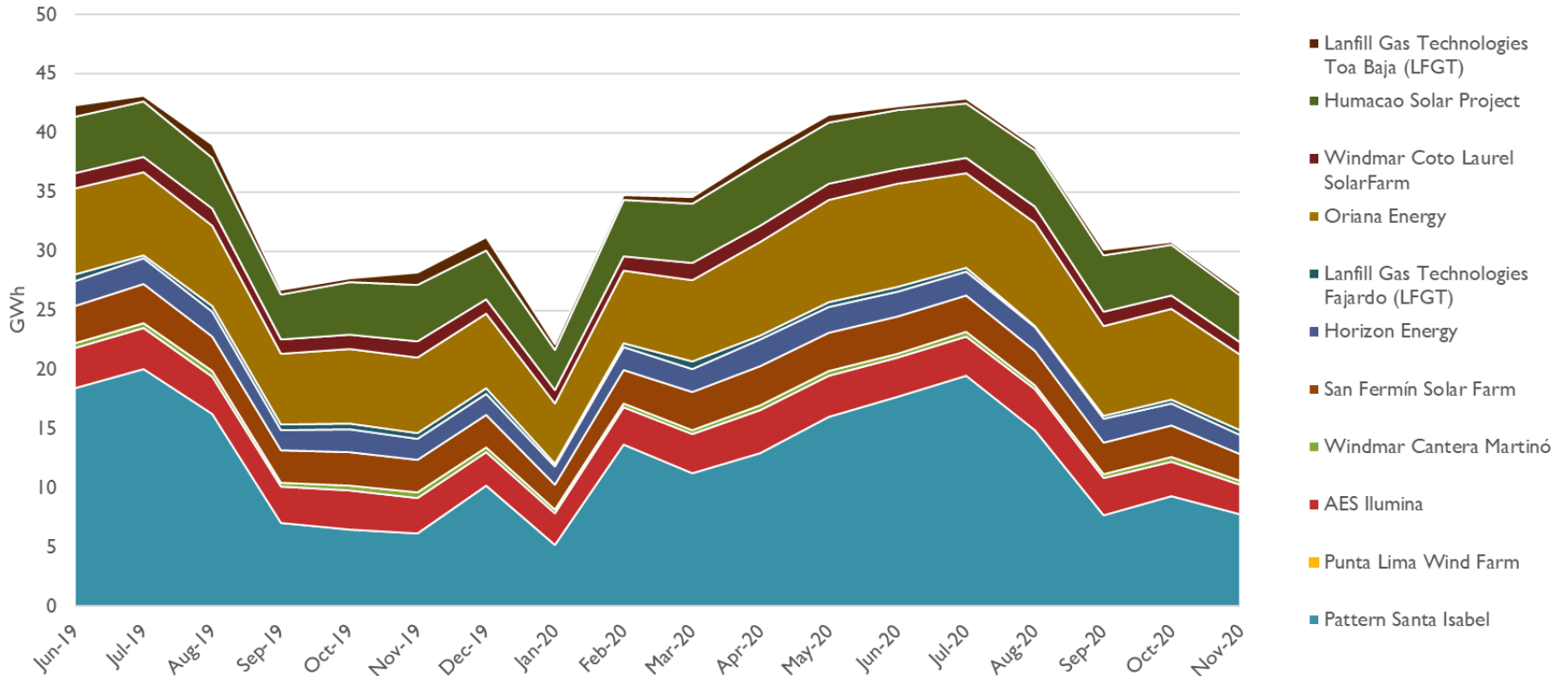
Days Sales Outstanding





Renewables and DSM Monthly Generation

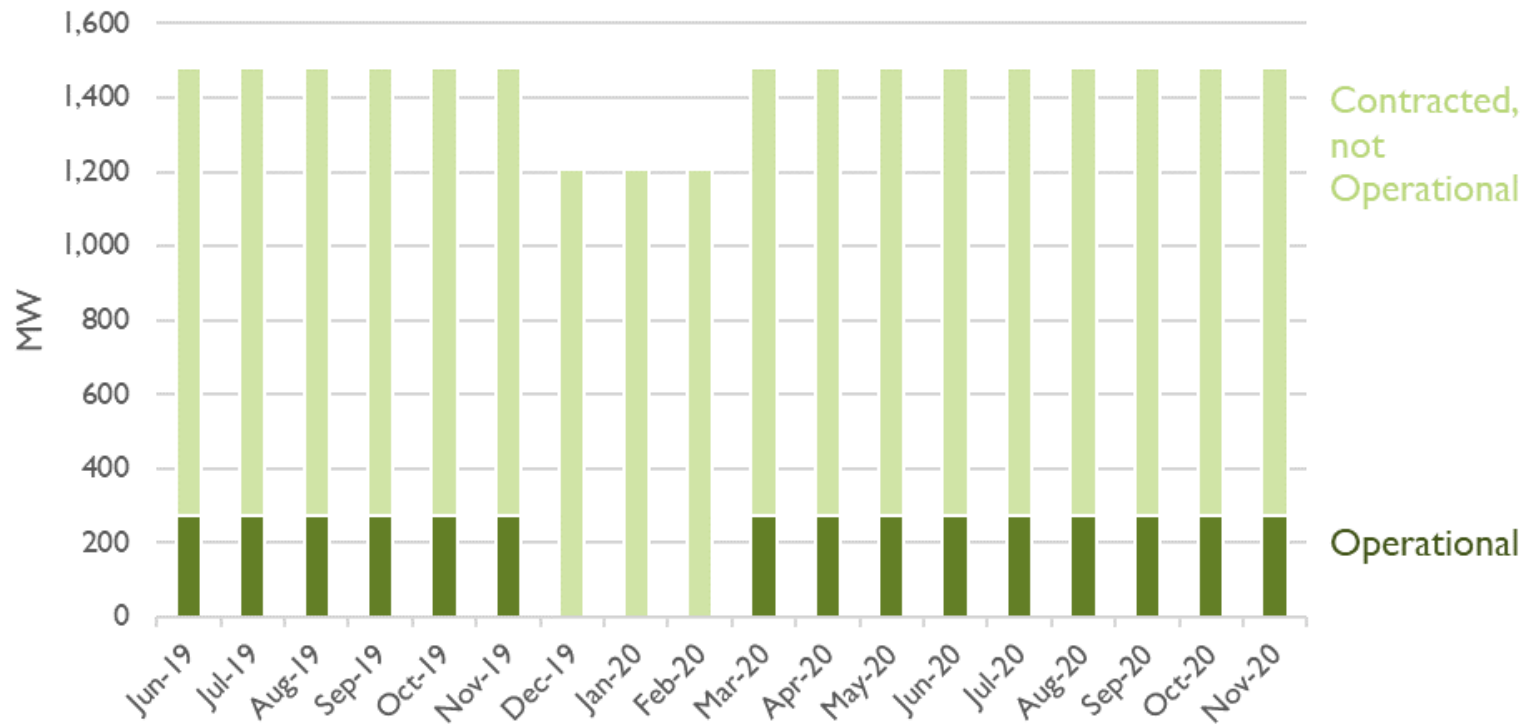
Generation from RPS Eligible PPOA's





Renewables and DSM

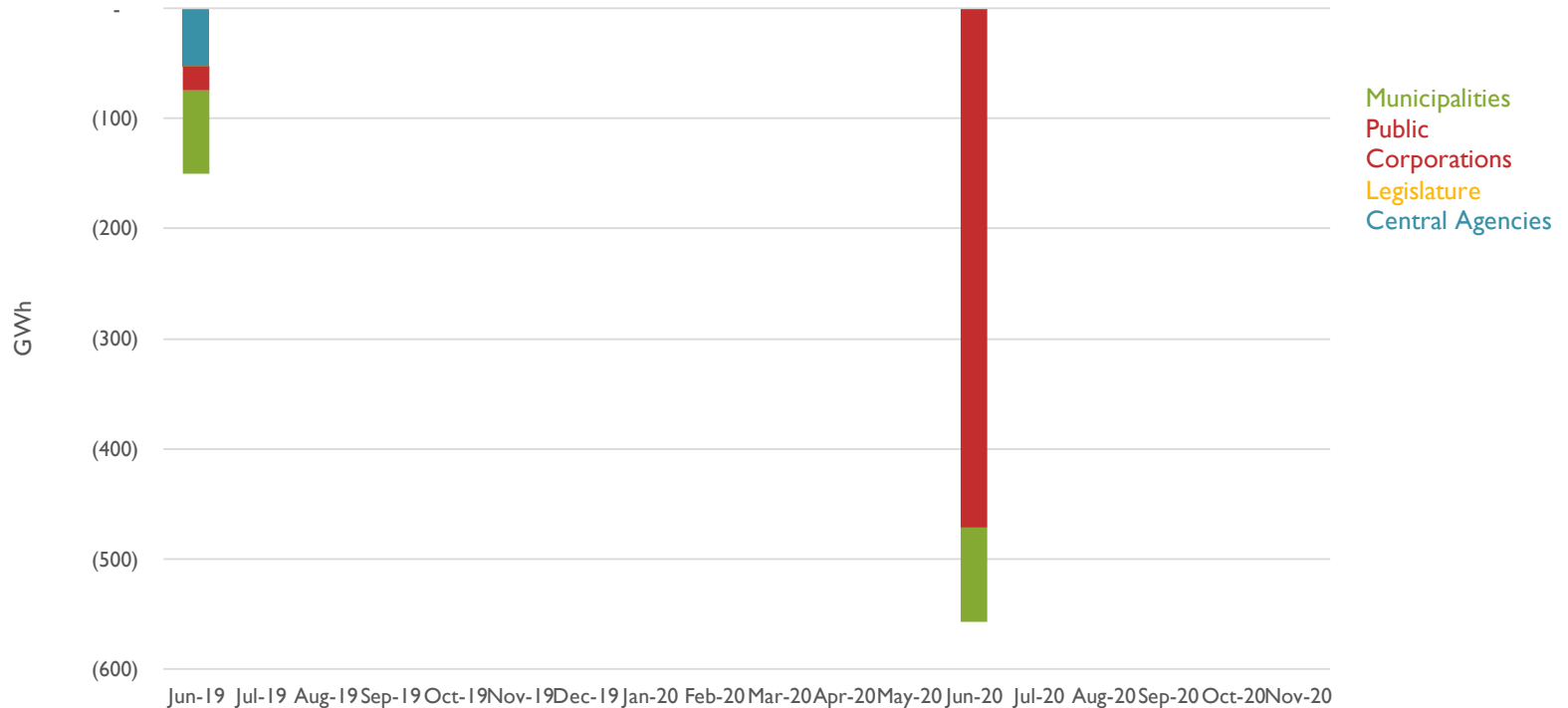
RPS-Eligible Capacity





Renewables and DSM

Annual Energy Efficiency Savings



	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
Municipalities	(76)	-	-	-	-	-	-	-	-	-	-	-	(85)	-	-	-	-	-
Public Corporations	(21)	-	-	-	-	-	-	-	-	-	-	-	(472)	-	-	-	-	-
Legislature	(1)	-	-	-	-	-	-	-	-	-	-	-	(0)	-	-	-	-	-
Central Agencies	(53)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: PREPA currently reports EE savings annually based on annual consumption relative to a 2013 baseline. There is an ongoing rulemaking for EE that will lay out specific EE PIMs and targets



Questions