

Southern California Edison Company's Final Report on the Feasibility and Economic Impact of Establishing Public School Electric and Gas Rates that Would Reflect a Discount from the Current Rate Structure Pursuant to AB 2068

December 11, 2019

Assembly Bill No. 2068, approved on August 27, 2018 and effective January 1, 2019, added Public Utilities Code (PUC) Section §749.5, which requires the California Public Utilities Commission (CPUC) to direct each electrical and gas corporation to evaluate and report findings to the CPUC, by January 1, 2020, on the feasibility and economic impact of establishing public school electric and gas rates that would reflect a discount from the current rate structure. SCE provides below the information requested for each of the four items listed in PUC Section §749.5. Pursuant to Section 749.5(c), the Commission is obligated to compile the reports it receives from SCE and other electrical and gas corporations and “submit the compilation to the Legislature, on or before January 1, 2020, in compliance with the requirements of Section 9795 of the Government Code.”

In terms of the general feasibility of providing a discount to public schools, as defined in Section §749.5, SCE would need to validate the eligibility criteria of customers through the North American Industry Classification System (NAICS) and determine a periodic process for continuous vetting of customer eligibility, as eligibility may lapse with change of ownership or other special circumstance. A public school flag identifier based on a customer’s NAICS criteria would need to be added in SCE’s billing system to ensure that only eligible customers could receive the proposed public school discount. Further, some of SCE’s public school customers take service as complex Net Energy Metering (NEM) customers, including Virtual Net Metering (V-NEM) and Renewable Energy Self- Generation Bill Credit Transfer (RES-BCT) where the public school customer represents one of several benefiting accounts subscribed to one solar generating account. In this case, there would be operational difficulty for SCE to apply a potential public school discount to only one eligible benefiting complex NEM customer, as the billing treatment is equivalent for all benefiting accounts in such a complex NEM arrangement.

1- Commercial rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation

a- SCE’s Electric Service

SCE’s commercial rate changes that affect public schools within its service territory are shown in Table 1-1 below. Rates do not necessarily increase from year to

year as can be seen in the year 2016, when all of SCE's commercial rates declined from the prior year's levels.¹ The rate levels shown below neither exhibit a pattern nor a trend. While the majority of SCE's commercial and industrial (C&I) rates trended upwards over the five-year period from 2014 to 2019, reflecting moderate increases in rates, the small C&I rate, TOU-GS-1, trended downwards over the same time period.

To assess the impact of SCE's commercial rate changes on public schools within the Company's service territory, Table 1-2 shows the number of public school accounts taking service on each rate. The majority of public school accounts receive electric service on the TOU-GS-2 rate, while others receive service on the TOU-GS-1, TOU-GS-3, and TOU-8 rates. The TOU-GS-2 rate showed a mild increase of 2.7% over the five-year period 2014-2019, while the TOU-GS-3 rate increased by 3.4% during that same period. TOU-GS-1 showed a decrease, dropping 4.4% in 2019 from the rate's 2014 levels. TOU-8-Sec and TOU-8 Pri both exhibited moderate increases over the same five-year period, increasing by 1.2% and 1.5%, respectively. Changes in SCE's commercial rate levels are reflective of changes in authorized revenue requirements allocated to the commercial customer class, in addition to changes in volumetric sales attributed to that customer class.

¹ The decrease in SCE's rates in 2016 was a result of over-recovery of the Company's generation revenue requirements in the year 2015 that was then corrected and refunded to customers through a 2016 rate decline

Table 1-1 SCE’s C&I Rates Over the Five-Year Period 2014-2019

Southern California Edison
Historical Average Rates by Rate Group (Nominal ¢/kWh)
Based on Recorded Revenue and Sales

Bundled Service

		2014	2015	2016	2017	2018	2019	Percentage Five-Year Change 2014-2019
Small C&I (< 20 kW)	TOU-GS-1	18.1	19.0	16.6	17.6	17.8	17.3	-4.4%
Medium C&I (20 kW - 200 kW)	TOU-GS-2	16.9	18.2	15.8	17.2	17.9	17.3	2.7%
Medium C&I (200 kW - 500 kW)	TOU-GS-3	14.9	16.1	14.5	15.4	15.9	15.4	3.4%
Large C&I (Sec)	TOU-8-Sec	13.6	14.7	13.1	13.7	14.2	13.8	1.2%
Large C&I (Pri)	TOU-8-Pri	12.3	13.2	11.7	12.5	12.9	12.4	1.5%
Large C&I (Sub)	TOU-8-Sub	8.6	9.1	7.5	8.4	8.7	8.4	-2.7%

Notes: Rates shown reflects January 1 rate levels for each specified year.
All rates provided reflect bundled service

Table 1-2 SCE’s Public-School Customers Per Commercial Rate Class
Bundled Service²

Rate Schedule	Number of Public School Accounts
TOU-GS-1	955
TOU-GS-2	1,958
TOU-GS-3	832
TOU-8-Pri	64
TOU-8-Sec	112
Grand Total	3,921

² SCE serves a total number of 1,379 un-bundled public school customers with electric delivery service, of which 941 represent Community Choice Aggregation (CCA) customers and 438 represent Direct Access (DA) customers. SCE’s un-bundled public school customers were not included in the cost-shift quantification analyses.

b- SCE's Gas Service

SCE provides commercial customers on Catalina Island with gas service,³ some of which are public school customers. SCE's Catalina Island gas rates over the period 2014-2019 are shown in Table 1-3 below. Commercial gas rates dropped in 2016 compared to 2015 rates and trended upwards over the five-year period 2014-2019. Of note, there are only four public school customers receiving gas service from SCE on the island of Catalina.

Table 1-3 SCE's Commercial Gas Rates Over the Five-Year Period 2014-2019

Southern California Edison						
Historical Average Commercial Gas Rates Nominal (\$/Therm)						
Based on Recorded Revenue and Sales						
2014	2015	2016	2017	2018	2019	Percentage Five-Year Change (2014-2019) 2014-2019)
4.99	5.4	3.78	4.43	5.25	5.56	11.4%

Notes: Rates shown reflects January 1 rate levels for each specified year.
All rates provided reflect bundled service

2- Economic impact to all ratepayers if all public schools within the service territory received a discount from the current rate structure

a- SCE's Electric Service

SCE interprets the phrase "current rate structure" to mean current at the time of the report submission and not current at the time of the enactment of Assembly Bill 2068 or the addition of PUC Section §749.5. In the analysis provided herein, SCE applied its rates currently in use and that became effective as of July 2019. SCE performed this

³ SCE owns and operates Catalina Island Gas Company, the sole natural gas supplier for Catalina Island.

analysis for its bundled service public school customers only, which represent 73% of SCE's total (bundled and un-bundled) public school customers kWh sales.

SCE chose a proxy public school discount of 10 percent to represent an illustrative discount to the Company's public school customers from their current rate structure. SCE applied this 10% discount to the total sum of public schools' revenues collected for their annual 2018 kWh usage using current rates as of July 2019, which equals roughly \$15 million. This amount represents the total cost shift to provide a 10% discount for its bundled public school customers represented in Table 1-2.

b- SCE's Gas Service

SCE performed a similar analysis for its propane gas public-school customers on Catalina Island, using the same proxy discount of 10% to represent an illustrative discount provided to benefit public school customers. SCE applied this 10% discount to the total sum of its propane gas public school customers' revenues on the island of Catalina for their annual 2018 therm usage using current rates, which equals a total of \$2,426.

3- The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the commission and in the planning stages or proposed by electric and gas corporations.

a- SCE's Electric Service

The planned modifications to the time intervals reflected in time-of-use rates at the time of the enactment of Assembly Bill 2068 or the addition of PUC Section §749.5 are in effect and reflected through current rates. These modifications are changes to SCE's Time-Of-Use peak periods that were effective as of March 1st, 2019 and approved in CPUC Decision (D.) 18-07-006. These changes are:

- The on-peak period for summer weekdays of 4:00pm to 9:00pm replaced the hours of 12:00pm to 6:00pm.
- The mid-peak period of 4:00pm to 9:00pm for summer weekends was created where there was none before
- The mid-peak period for summer weekdays was eliminated

- The mid-peak period of 4:00pm to 9:00pm for winter weekdays replaced the hours of 8:00am to 9:00pm
- The mid-peak period of 4:00pm to 9:00pm was created for winter weekends where there was none before
- The super off-peak period from 8:00am to 4:00pm for winter weekdays and weekends was created where there was none before
- The off-peak period applies to all other hours in the summer and winter

Other modifications to SCE’s rate design elements, effective March 1st, 2019 and approved in D.18-11-027, are the changes to the methodology for calculating generation and distribution marginal costs for purposes of revenue allocation. These rate design modifications will help align rates with time-dependent cost-causation by reducing non-coincident demand charges. As such, SCE’s new rates are better equipped to send appropriate price signals that reflect actual grid conditions and encourage customer adoption of Distributed Energy Resources (DER) technologies. These changes were motivated by the State’s policy objective of encouraging the adoption of behind-the-meter DERs and customer choice via the Commission’s endorsed “DER Action Plan.”⁴

The combined impact of the modifications to the time intervals reflected in SCE’s time-of-use rates and of the changes to the rate design elements described above was beneficial to the public-school customer class as a whole. This makes intuitive sense, since the majority of public-schools end their operations prior to the start of SCE’s new on-peak weekday hours of 4:00-9:00pm in the summer season and the new mid-peak weekday period for the same hours of 4:00-9:00pm in the winter season, when electricity consumption becomes costlier. In effect, SCE’s newly implemented time-of-use periods have provided an effective discount to the majority of the Company’s public school customers by charging lower rates for electricity during their hours of operation. This

⁴ The Commission endorsed the “DER Action Plan” in 2016 to align the organization’s vision and actions in shaping California’s distributed energy resource future. More information can be found: <https://www.cpuc.ca.gov/General.aspx?id=6442458159>

advantageous impact of the change in time-of-use peak periods can be seen in the analyses provided below. Table 1-4 provides the weighted average rate for SCE’s public-school customers on the Company’s new time-of-use rates per rate group and compares these to the weighted average rate for the Company’s public school customers on the old time-of-use periods for each of those rate group classes. As shown in Table 1-4 below, the weighted average rates for public-school customers, as a whole, is lower on rates with the newly implemented time-of-use periods; mostly as a result of the public schools’ time of operations coinciding with the new off-peak and super-off-peak time-of-use periods, when electricity prices are cheaper.

Table 1-4 Difference Between Weighted Average Rates for Public School Customers on Old Time-Of-Use Periods and New Time-Of-Use Periods⁵

Bundled Service

Rate Groups	Average Rate for Public School Customers – Old TOU Periods (cents/kWh) (a)	Average Rate for Public School Customers – New TOU Periods (cents/kWh) (b)	Difference in Average Rates (c) = (a) – (b) (cents/kWh)	Percentage Change in Average Rates (d) = [(b)/(a)] - 1
TOU-GS-1	19.11	17.83	1.28	-6.70%
TOU-GS-2	21.94	18.81	3.13	-14.27%
TOU-GS-3	20.73	17.96	2.77	-13.36%
TOU-8-Sec	18.57	17.05	1.52	-8.19%
TOU-8-Pri	17.55	15.14	2.41	-13.73%

Given that the public-schools customers’ weighted average rates for electricity have dropped as a result of SCE’s changes to the time-of-use on-peak hours, a percentage

⁵ Rates provided do not include demand response credits.

discount calculated on top of these already implemented rates would be a higher effective discount than if the percentage discount was calculated on top of SCE's old rates with the expired time-of-use on-peak periods of 12:00pm-6:00pm during summer weekdays and 8:00am-9:00pm mid-peak during winter weekdays. This means that a new public-school discount on today's rates, if approved and implemented, would result in an even more burdensome cost-shift to other customer classes, especially to SCE's residential class customers.

b- SCE's Gas Service

SCE's Catalina Island propane gas rates are not currently time-differentiated and there are no planned modifications to provide time-differentiated rates at this time. Therefore, this section of PUC Section 749.5 is not applicable to SCE's propane gas service rates.

4- The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

There would be a cost-shift that occurs as a result of providing a discount to SCE's public-school customers. Any discount for one group of customers would lead to a revenue deficiency that would have to be recovered from all other customers. The magnitude of this cost shift is dependent on the percentage discount applied. The relative impact on other customer classes who bear the cost-shift burden is influenced by the allocation methodology used to allocate the revenue recovery deficiency as a result of the applied discount among all other customer classes. SCE has illustrated in its response to item number two above, the total cost shift dollar amount of an illustrative 10% discount to public-school customers. This cost-shift impact on each customer class is as follows:

a- SCE's Electric Service

SCE allocated the resulting 10% discount calculated in item number two of roughly \$15 million on the basis of each customer class's contribution to SCE's total kWh volumetric sales through the Public Purpose Program (PPP) charge. The discount was not allocated back to public school customers, as these customers are the subject and the beneficiaries of the discount and would not be required to fund it. The impact of the

10% public school-discount revenue deficiency on each customer class is an annual increase in bills recovered through the PPP charge as follows:

- ❖ Residential class: annual bill increases of \$1.46, or 0.12%
- ❖ Lighting and Small Power (LSMP), with the exception of public-school customers: annual bill increases of:
 - (TOU-GS-1): \$2.88, or 0.14%
 - (TOU-GS-2) \$32.22, or 0.15%
 - (TOU-GS-3) \$225.25, or 0.16%
- ❖ Large Power, with the exception of public school customers: annual bill increases of
 - (TOU-8-SEC) \$773.50, or 0.18%
 - (TOU-8-PRI) \$1,720.09, or 0.20%
 - (TOU-8-SUB) \$9,759.02, or 0.26%
- ❖ Agricultural class: annual bill increases of
 - (TOU-PA-2) \$18.46, or 0.17%
 - (TOU-PA-3) \$203.56, or 0.2%
- ❖ Street Lighting class: annual bill increases of \$4.24, or 0.13%

SCE notes that if the revenue deficiency resulting from the 10% public-schools discount was allocated on a functional basis to generation, transmission, and distribution functions, then the residential class's burden would be higher as a result.

b- SCE's Gas Service

SCE allocated the resulting 10% discount, or \$2,426 calculated in item number two on the basis of the public school customers' total forecasted therm sales for 2019. SCE allocated the public school discount revenue deficiency to its two Catalina Island propane gas customer classes (residential and non-residential), with the exception of public-school customers, as these customers are the beneficiaries of this discount and would not be required to fund it. The impact of the 10% public school-discount revenue deficiency on each customer class is an annual increase in bills recovered via volumetric charges as follows:

- ❖ Residential class: annual bill increases of \$0.74 or 0.11%.

- ❖ Commercial and Industrial class, with the exception of public-school customers:
annual bill increases of \$13.21 or 0.1%.

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**PACIFIC GAS AND ELECTRIC COMPANY'S EVALUATION OF
THE FEASIBILITY AND ECONOMIC IMPACTS OF ESTABLISHING
A PUBLIC SCHOOL ELECTRIC AND GAS RATE DISCOUNT**

A Compliance Study Pursuant to Assembly Bill 2068

Submitted to the California Public Utilities Commission

December 13, 2019

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
I. INTRODUCTION AND BACKGROUND	1
II. RESULTS OF ANALYSIS.....	3
III. METHODOLOGY	12
IV. OTHER CONSIDERATIONS	16
V. POLICY CONSIDERATIONS.....	17
VI. CONCLUSION	19

APPENDIX

Attachment 1 – Assembly Bill (AB) 2068	APP-1
Attachment 2 – Public Utilities Code Section 749.5.....	APP-3

List of Tables and Figures

Table 1: Five-Year Electric Average Rate History	APP-4
Table 2: Five Year Gas Average Rate History	APP-5
Table 3: Impact of Potential School Discount on Other Electric Ratepayers.....	APP-6
Table 4: Impact of Potential School Discount on Other Gas Ratepayers	APP-7
Table 5: Electric Revenues and Impact of Old versus New TOU Hours for Schools.....	APP-8
Table 6: Gas Revenues and Impact of Old versus New Rates for Schools	APP-9
Table 7: School Electric Bill Impacts of New Time-of-Use Hours.....	APP-10
Table 8: School Gas Bill Impacts of Pending Rate Design Changes	APP-11
Figure 1: Annual Monthly School Load Profile	APP-12
Figure 2: Typical School Weekday versus Weekend Load Profile	APP-13

Pacific Gas and Electric Company

Assembly Bill (AB) 2068 Evaluation of the Feasibility and Economic Impacts of Establishing a Public School Electric and Gas Rate Discount

I. INTRODUCTION AND BACKGROUND

California state Assembly Bill (AB) 2068 required each investor owned utility (IOU) to provide the California Public Utilities Commission (CPUC) with certain information and analyses on the feasibility and economic impacts of a possible gas and electric rate discount for public and charter schools from kindergarten through the twelfth grade.¹ Specifically, AB 2068 provided:

This bill would require the commission to direct all electrical and gas corporations to evaluate, and report findings to the commission on, the feasibility and economic impacts of establishing a public school electric and gas rate that would reflect a discount from the current rate structure.²

PG&E hereby provides its report presenting its evaluation and findings based on the relevant information referenced in AB 2068. This Report along with the other IOUs' Reports are expected to be used by the CPUC as part of its overall AB 2068 report to the Legislature, due by January 1, 2020.

PG&E respectfully requests that the CPUC's report to the Legislature recommend that the factual and ratemaking policy matters necessary to be considered before adopting any potential schools rate discount should be fully evaluated in a public ratemaking proceeding conducted by the CPUC.

AB 2068 sets forth four main analytical requirements that the IOUs must evaluate and provide to the CPUC. The subject utilities conferred to develop a generally consistent approach and broad analytical and presentation framework for their evaluations of the feasibility and economic impact for all ratepayers if eligible schools were provided with a special gas and electric rate discount. That common analytical framework is intended to help facilitate analysis and inter-utility comparisons by Energy Division staff, the CPUC, and the Legislature. However, the IOUs' presentations may each differ somewhat, due to their diverse

¹ This report will use the term "schools" to refer to public and charter schools for students from kindergarten (K) through the 12th Grade ("K-12"), as defined by AB 2068.

² Pub. Util. Code, § 749.5(b). AB 2068 (2017-2018 Reg. Sess.) was signed into law by California Governor Jerry Brown on August 27, 2018 and codified into the Public Utilities (Pub. Util.) Code Section 749.5. The full text of AB 2068 is provided in Attachment 1, and Pub. Util. Code Section 749.5 is provided in Attachment 2.

factual circumstances, such as differing gas and electric costs of service and rate environments, such as the fact that PG&E has yet to implement the new electric rates with later time-of-use hours.

Accordingly, as a standard basis for evaluation, the IOUs agreed to each present the estimated impact of an illustrative ten percent school rate discount for gas and electric service. Illustrative results at this ten percent discount level could then be linearly or proportionately extrapolated to evaluate the impacts of alternative levels of discount.

More specifically, this report includes data and analysis responsive to the four key data elements required by AB 2068 (Pub. Util. Code Section 749.5), paraphrased as follows:

INFORMATION ITEM #1: Estimation of five years of historical generalized rate increases schools may have faced. (Section (b)(1).)

INFORMATION ITEM #2: Economic impact of a school rate discount on other ratepayers (using the IOUs' agreed, illustrative ten percent discount as the initial standard basis to facilitate comparison). (Section (b)(2).)

INFORMATION ITEM #3: Impact on schools of later Time-of-Use (TOU) hours or other rate design changes. (Section (b)(3).)

INFORMATION ITEM #4: Total cost shift caused by a rate discount for schools. (Section (B)(4).)

While PG&E provides below a synopsis of its findings on these economic impact issues, it also presents more detailed tables and figures in the Appendix to this Report.

In addition to the results of its economic impact analysis, PG&E presents the underlying methodology, inputs, and assumptions supporting its analysis. PG&E also addresses certain aspects of the feasibility of such a discount, and briefly highlights numerous policy issues and conflicting considerations raised by any potential future schools rate discount.

Clearly, a wide range of factual as well as complex policy issues would need to be carefully considered, with an appropriate and robust record and opportunity for all concerned to be heard. The CPUC, to which the Legislature has delegated responsibility to conduct rate design proceedings, has developed the necessary expertise and has the appropriate procedural mechanisms for considering such ratemaking issues as this.

Finally, serious equity concerns appear to be raised by the prospect of changing how public K-12 schools' energy costs are funded. Moving some such

costs away from the state's generally progressive (income-based) taxation system to a new CPUC program that would charge the cost of a schools' rate discount to all ratepayers would be based on ratepayers' energy usage without regard to their income levels. This could end up charging more to low and moderate-income households of more than two people than if the current state taxation system continued to be used to cover all schools' energy costs. Great care should be taken to fully assess these income equity concerns, before any decision is made as to whether to proceed in the direction of a new rate discount at all.

II. RESULTS OF ANALYSIS

As shown in the high-level Executive Summary table below, a possible gas and electric rate discount for qualified schools within PG&E's service territory would necessarily cause other ratepayers' rates to increase because rate design is inherently a "zero-sum" exercise. Although an illustrative ten percent discount was agreed upon, PG&E also provides figures for 20 percent and 30 percent discounts, simply to illustrate and confirm the linear nature of multiples of a ten percent discount. PG&E presents the results of its analysis in the order of issues listed in Section (b) of AB 2068.

The rate increases experienced by the customer class and rate schedules available to schools over the past five years have generally been in the range of two to four percent per year for electric service, and three percent for gas service.

The amount of cost-shift and economic impact on other customers of potentially adding a schools' discount in the future would depend on the level the CPUC might select for any such rate discount. PG&E's analysis shows that an illustrative ten percent discount would cause a 0.13 percent system average electric rate increase for all PG&E customers based on bundled service customers, while a twenty percent schools discount would result in a 0.25 percent electric rate increase, and a thirty percent schools discount would cause a 0.38 percent rate increase. PG&E's analysis was based on (1) comparing current revenues to proposed revenues, as described further below, and (2) using the longer-term "proposed" revenues to illustrate the impact of an illustrative ten percent or alternate level of schools' discount.

Table A: EXECUTIVE SUMMARY

Table A.1: FIVE YEAR RATE CHANGE HISTORY FOR SCHOOLS

ELEC 2% to 4% increase per year
GAS 3% increase per year

Table A.2: SYSTEM AVERAGE ECONOMIC IMPACT ON OTHER CUSTOMERS OF POTENTIAL ILLUSTRATIVE SCHOOL DISCOUNTS OF 10, 20 or 30 PERCENT, BASED ON BUNDLED SERVICE

	<u>at 10%</u>	<u>at 20%</u>	<u>at 30%</u>
ELEC	0.13%	0.25%	0.38%
GAS	0.08%	0.17%	0.25%

Table A.3 ANNUAL SCHOOL REVENUES UNDER IMPACT OF OLD VERSUS NEW RATES BEFORE ANY POTENTIAL ADDITIONAL SCHOOLS DISCOUNT BASED ON BUNDLED RATES

	<u>Customers</u>	<u>Old Rates</u>	<u>New Rates</u>	<u>SAVE \$</u>	<u>SAVE %</u>
ELEC	7,339	\$233,526,817	\$228,488,384	\$5,038,433	2.16%
GAS	4,825	\$50,750,980	\$53,528,961	-\$2,777,981	-5.47%
TOTAL	12,164	\$284,277,797	\$282,017,345	\$2,260,452	0.80%

Table A.4: ILLUSTRATIVE ANNUAL TOTAL "COST SHIFT" TO OTHER CUSTOMERS FROM POTENTIAL ILLUSTRATIVE SCHOOL DISCOUNTS OF 10, 20, or 30 PERCENT

	<u>at 10%</u>	<u>at 20%</u>	<u>at 30%</u>
ELEC	\$22,848,838	\$45,697,677	\$68,546,515
GAS	\$5,352,896	\$10,705,792	\$16,058,688
TOTAL	\$28,201,735	\$56,403,469	\$84,605,204

PG&E presents the central results of its analysis of a gas and electric rate discount for public and charter schools, serving kindergarten through twelfth grade students, in Tables 1 to 8, and in Figures 1 to 2, provided in the Appendix to this Report, as discussed below.

A. INFORMATION ITEM #1: Five-Year Rate History

1. Five-Year Electric Average Rate History (Table 1)

Section (b)(1) of AB 2068 seeks a five-year history of generalized rate increases schools may have faced. Accordingly, in Table 1, PG&E provides a summary of bundled rates on all electric rate schedules from January 1 of each year from 2014 through 2019. These are based on bundled service schedule average electric rates for all customers taking service on such rates. These average rate statistics are not limited to schools as defined in AB 2068, but encompass all customers in PG&E's service territory receiving electric service from PG&E. Data specific to schools or a school rate discount as defined in AB 2068 are provided below in the Appendix in Tables 3 to 8, in response to Sections (b)(2), (b)(3), and (b)(4) of AB 2068. The specific data for schools also indicates the number of school accounts taking service on each applicable electric rate schedule in Table 5. The two right hand columns of Table 1 show the cumulative percentage increase from 2014 to 2019, and the compound annual average percentage increase from 2014 to 2019.

In terms of the financial impact on schools of the past five years of rate increases, many other rate classes have had five years of rate increases well in excess of those for school rate classes. (Table 5 indicates the rate schedules on which school electric accounts generally take service.)

2. Five Year Gas Average Rate History (Table 2)

Gas data responsive to Section (b)(1) of AB 2068 is provided in Table 2, similarly for January 1 of each year from 2014 through 2020. The average gas rates also reflect bundled or core service, for all customers, not the subject schools. Again, data specific to schools is provided in Tables 3 to 8 in the Appendix in response to Sections (b)(2), (b)(3), and (b)(4), and indicates the number of schools taking service on each applicable gas rate schedule in Table 6. The two right hand columns of Table 2 show the cumulative percentage increase from 2014 to 2020, and the compound annual average percentage increase from 2014 to 2020. Again, even more so than on the electric side, many other gas customer classes received substantially larger gas rate increases over the six-year period shown, some as high as 20 percent compounded annually, for noncore service, than for the gas small commercial class on which most schools take service, with increases of only three percent compounded per year. (Table 6 indicates the rate schedules on which school gas accounts generally take service.)

B. INFORMATION ITEM #2: Impact on Other Ratepayers

1. Impact of Potential School Discount on Other Electric Ratepayers (Table 3)

For ease of scalability of the impact, Table 3 shows the impact of the cost of an illustrative \$20 million in annual school rate discounts, which is slightly below the \$22.8 million at the ten percent discount for each bundled customer class. As discussed above, the bundled system average percent electric change would be 0.13 percent for each \$20 million in electric school rate discounts. In developing the increase for each rate schedule, PG&E allocated the cost of the program based on recovering these amounts in distribution rates based on a distribution allocation. The Commission may determine that recovery in Public Purpose Programs is a more appropriate or transparent approach to cost recovery compared to recovery in distribution rates. If so, an approach to allocation of these costs used for other Public Purpose Program charges may be more appropriate.

Whichever approach to allocation the CPUC might adopt, the cost of the discount would apply to a modest extent to the schools themselves. As the CPUC and the Legislature are aware, the target level for the residential CARE discount (under the Commission's glide path decision) is 35 percent for low income electric customers, whereas for such customers the gas CARE discount is 20 percent. Further, for large families that slightly exceed the CARE income threshold, the FERA discount was initially 12.5 percent but in 2019 was legislatively mandated to increase to 18 percent. Since the CARE and FERA discounts are structured as a percent reduction to full rates, the schools discount would also be funded by these low-income customers, but to a slightly lesser degree than by non-low-income customers.

2. Impact of Potential School Discount on Other Gas Ratepayers (Table 4)

In Table 4, the cost-shift or subsidy related to a new gas rate discount for qualifying schools, as defined in AB 2068, is based on assigning all discount dollars to the distribution function and recovering these costs through the distribution rates on the basis of an allocation to the distribution component of all gas customers' rates. Table 4 shows the impact of \$10 million per year in gas school rate discounts on all other gas customer classes, based on a distribution allocation. The \$10 million figure is approximately double the estimated \$5.4 million in annual discounts for the illustrative 10 percent gas school discount. As shown, \$10 million in annual gas school rate discounts would impose rate increases generally in the range of one-tenth to three-tenths of a percent. The average impact of the \$5.4 million in annual estimated school gas rate discounts is 0.08 percent, as shown above in Table A.2. Here again, the schools discount could be collected in PPP rates, and use an allocation factor more suitable to PPP cost recovery. Again, regardless of which allocation method is selected, the

discount would be funded by CARE customers as well as the schools themselves.

C. INFORMATION ITEM #3: Impact of Legacy versus New TOU Hours

1. Electric Revenues and Impact of Old versus New TOU Hours for Schools (Table 5)

As shown in Table 5, the “proposed” annual electric revenues under the rates with later TOU hours for eligible kindergarten to 12th grade public or charter schools, as defined in AB 2068, are approximately \$228 million per year, spread across 7,339 accounts. Under an illustrative ten percent electric rate discount for schools, the total annual discounts would amount to about \$22.8 million per year under the new rates with updated later TOU peak hours of 4 p.m. – 9 p.m.³ This would translate to an average per school account customer electric bill savings of about \$259 per month, although individual schools’ results will vary widely based on differences in usage.

From this starting point, PG&E projects, through a straight-line proration, the total effect on electric bills of a potential alternate 20 percent schools rate discount, which would amount to approximately \$46 million per year for all eligible schools combined (or an average per school customer account electric bill savings of about \$519 per month. Similarly, under an alternate potential schools electric rate discount of 30 percent, the total electric discount would amount to approximately \$69 million per year for all eligible schools combined (or an average per school customer account electric bill savings of about \$778 per month, with results varying for individual schools based on usage differences.)

Table 5 provides a breakdown of the estimated number of qualifying schools on each electric rate schedule, and the aggregate revenues on each rate schedule under legacy rates as opposed to the new rates with later TOU hours. The results cited above are based on the figures in Table 5’s column entitled “Total Annual Proposed Bills.”

In Table 5, all figures are annual, including the final two columns at the right, which shows the single maximum and minimum annual bill change by rate

³ The mandatory migration of all PG&E commercial customers (including schools) to rates with the new, updated 4pm – 9pm TOU peak hours and shorter, four-month summer season is expected to begin in November 2020 and be largely completed by 2021. If all eligible schools were under the legacy TOU rates, the total annual discount would have amounted to \$23.3 million. However, these different impacts under the legacy rates would be moot once all customers had been through the mandatory migration. Because the legacy commercial TOU rates are soon to be phased-out, for the remainder of this Report, PG&E refers to the “Total Annual Proposed Bills” revenue for eligible schools of \$228 million per year under the updated new rates with later TOU hours as the basis for an illustrative ten percent electric rate discount, which would amount to approximately \$22.8 million in total savings per year for eligible schools as a group.

schedule for any one customer. As noted in Table A.3, revenue under the new rates is about \$5 million less under the rates with new TOU periods compared to current legacy rates.

It should be noted that, as shown in line 1 of Table A.3 above, as a group, schools are already expected to see overall electric bill savings of about \$5 million per year, or 2.16 percent per year even if no additional dedicated schools discount were approved by the CPUC. This is because schools generally have less electric usage during the updated, later peak hours of 4 p.m. – 9 p.m. as compared with the outdated, legacy Time-of-Use (TOU) peak hours of Noon – 6 p.m. This also reflects that, in general, schools have less usage in the summer, so they also benefit from the new TOU rates' shortening of the summer season from six months to four months, since electric rates are generally higher in the summer season than in the winter season.

For purposes of Table 5, Direct Access (DA) and Community Choice Aggregation (CCA) customers were billed as if bundled, based on PG&E's component generation rates, in order to estimate the revenues from eligible subject schools taking DA/CCA service. In preparing this estimate, PG&E has assumed that the discount would be the same (computed on a dollar basis) regardless of whether the energy was served by PG&E as a bundled customer or whether supply was provided by an ESP or CCA. The discount would then be funded by all customers, either through higher distribution rates or through Public Purpose Program charges where they would be paid by both bundled service customers and Direct Access and CCA customers.

The above approach preserves the customer indifference principle between bundled, DA and CCA service, and follows the practice used for other types of discounts, such as California Alternate Rates for Energy (CARE) discounts.

2. Gas Revenues and Impact of Old versus New Rates for Schools (Table 6)

In Table 6, annual gas revenues for PG&E's kindergarten to 12th grade public or charter schools, as defined in AB 2068, are approximately \$51 million for approximately 4,825 accounts under estimated rates expected to be implemented in January 2020, and \$54 million under imminent gas rate changes that will soon take effect in March 2020. An illustrative ten percent gas rate discount would equate to annual gas bill discounts of approximately \$5.4 million per year after incorporation of estimated rates for both PG&E's Annual Gas True-Up (AGT) in January 2020, and 2018 Gas Cost Allocation Proceeding (GCAP) in March 2020.

Table 6 also provides a breakdown of the estimated number of qualifying schools on each gas rate schedule, and the aggregate revenues on each rate schedule under AGT rates as opposed to the AGT rates combined with the

GCAP rates. Non-core gas customers were billed as if taking bundled service, based on PG&E's component gas commodity procurement rates, in order to estimate the revenues from eligible schools taking non-core service.

Because the legacy gas rates with only the AGT rates will not be in effect much longer, PG&E refers mainly to the total annual revenue for eligible schools of \$54 million per year under the combined AGT and GCAP rates estimated for March 2020 as the basis for an illustrative ten percent gas rate discount. Such a ten percent discount would therefore amount to approximately \$5.4 million per year in gas bill savings spread across all eligible customers. The average per customer account gas bill savings would be about \$92 per month (with monthly gas bill savings for each school varying based on its specific usage). To illustrate the straight-line proration or projection intended, for a 20 percent discount, the total gas school rate discount would amount to approximately \$10.7 million per year spread across all eligible schools' customers (or an average per school customer account gas savings of about \$185 per month). Similarly, a potential 30 percent schools gas discount, would result in a total savings of approximately \$16.1 million per year spread across all eligible schools (or an average per school customer account gas savings of about \$277 per month, with results varying depending on each school's actual usage).

D. INFORMATION ITEM #3: COMBINED GAS AND ELECTRIC ILLUSTRATIVE DISCOUNT RESULTS

Based on the two tables discussed above, the illustrative ten percent schools discount would result in a combined gas and electric total discount amount of approximately \$28.2 million per year. If a 20 percent discount were instead adopted, the combined total would be \$56.4 million per year. If a 30 percent discount were instead adopted, the combined annual gas and electric school discounts would total approximately \$85 million per year.

1. School Electric Bill Impacts of New Time-of-Use Hours (Table 7)

In Table 7, PG&E presents a detailed correlation matrix of joint dollar and percent average monthly electric bill impacts for the distribution of the estimated impact on schools as defined in AB 2068 of the change from legacy seasons and TOU hours on 12:00 noon to 6:00 p.m., with summer defined as May 1 to October 31, to the new later TOU hours of 4:00 pm to 9:00 p.m., with summer defined as June 1 to September 30. Table 7 compares bills under legacy November 1, 2019 rates to the new rates with later TOU hours. These new, commercial TOU rates became available to schools and other commercial customers on an opt-in basis beginning November 1, 2019 for a one-year period. These new rates then become mandatory, with all remaining customers transitioned to them effective on November 1, 2020.

Evaluation of Table 7 shows that 66.5 percent of all eligible subject 7,339 identified school accounts are already estimated to be receiving a bill decrease under the new, later TOU hours (compared to their bills on the legacy rates with legacy seasons and TOU hours). Underlying data indicates that under the old legacy seasons and TOU hours, 6,154 non-solar school accounts used 16.2 percent of total annual kWh in the legacy summer on-peak hours, but only 7.0 percent of total annual kWh in the new summer on-peak hours.

Tables 7 and 8 use the same format as the bill comparisons filed in PG&E's last several GRC Phase II proceedings on marginal cost, revenue allocation, and rate design. In PG&E's 2019 Rate Design Window proceeding, an additional column was added to the right to indicate the average monthly bill across all customers on each row of the matrix, similar to the entry at the bottom of each column.

2. School Gas Bill Impacts of Pending Rate Design Changes (Table 8)

Table 8 presents a detailed correlation matrix of joint dollar and percent average monthly gas bill impacts for the distribution of the estimated impact on schools as defined in AB 2068 of the change from AGT rates compared to AGT plus GCAP rates. More specifically, in PG&E's 2018 Gas Cost Allocation Proceeding, the CPUC issued Decision (D.) 19-10-036 in October of 2019, which approved revenue allocation and rate design revisions across all gas customer classes. In particular, updated cost allocation will impose an average rate increase of approximately five percent on the transportation component of small commercial customer class gas rates where the majority of all subject gas schools take service. Table 8 compares bills under an estimate of January 1, 2020 rates to the rates estimated for March 1, 2020 after the GCAP cost allocation is implemented. Since the AGT plus GCAP rates are unilaterally higher than the rates for only the AGT, all gas customers will obviously receive bill increases under the combined rates. However, as shown in Table 8, the majority, or 62.1 percent, receive bill increases of only 2.5 to 5 percent.

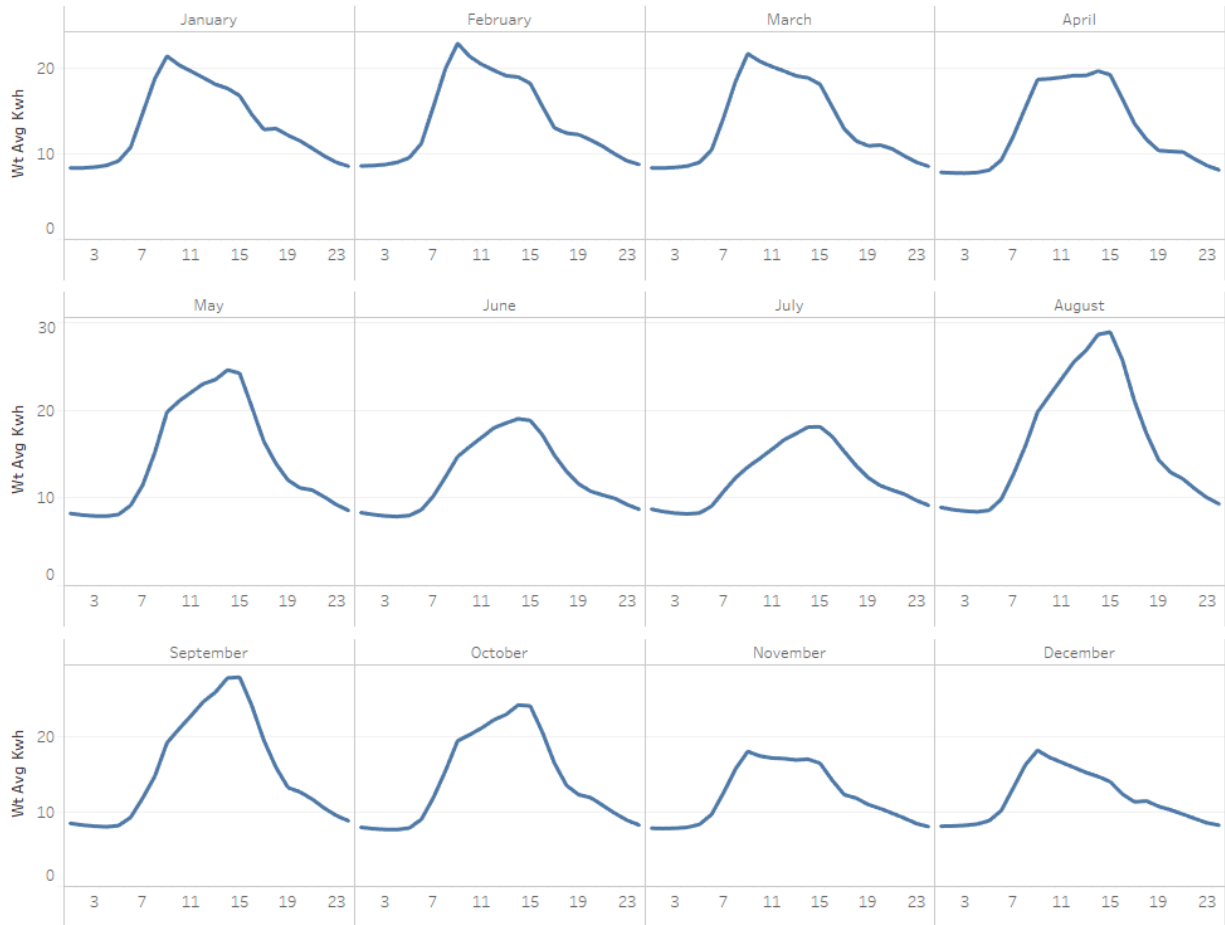
3. Annual Monthly School Load Profile (Figure 1)

In Figure 1, provided both here and in the Appendix to this report along with Figure 2, PG&E provides a depiction of the typical or average school electric hourly load profile across each month of the entire calendar year. This graph is limited to non-solar school accounts. As may be generally expected, the average kWh usage declines in the key summer months, however it reaches its annual peak level in August and September when the school year typically begins. This peak usage may reflect the need for air conditioning during the summer months.

Figures 1 and 2 reflect kWh usage data averaged across a selection of 4,252 accounts from the total population of 6,154 total non-solar schools accounts.

Non-NEM Annual Monthly Load Profile

Average Hourly Load Profile



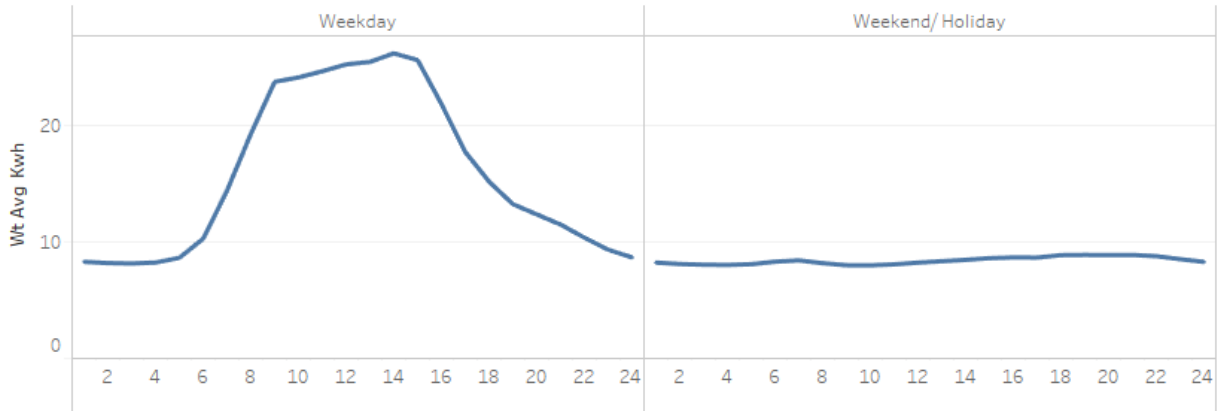
4. Typical School Weekday vs. Weekend Load Profile (Figure 2)

As may be expected, Figure 2 corroborates lower electric usage by schools on the weekends. Figures 1 and 2 were based on a randomly drawn sample of an earlier inquiry prior to the addition of a wider North American Industry Classification System (NAICS) protocol query, as discussed further below. As such, Figures 1 and 2 include the usage data of approximately 4,252 schools dispersed across the main commercial and industrial rate schedules A-1, A-6, A-10, E-19, and E-20, as well as TC-1, OL-1, and LS-1/2/3.⁴

⁴ It is worth noting that the weekend loads shown in Figure 2 are very low compared to the weekdays of regular school days. This tends to suggest that as a result of the change from legacy TOU hours, which only apply on weekdays and not on weekends, over to the new TOU hours, which apply on all 365 days of the year including weekends, schools will be relatively unaffected by the expansion of the new TOU hours to now include the weekends.

Non-NEM Weekday/ Weekend

Average Hourly Load Profile



III. METHODOLOGY

A number of input assumptions and methodological approaches were used in PG&E's evaluation and quantification of the items required in AB 2068, as summarized above. The various underlying assumptions and inputs are described more fully below.

A. Electric Rates

PG&E's analyses used its November 1, 2019 electric rates. Two alternative sets of PG&E's electric rates for November 1, 2019 were used. The first set was the legacy rates with Noon to 6:00 p.m. on-peak hours, and six summer months of May 1 through October 31. The second set was the new, updated rates, with later TOU hours of 4:00 p.m. to 9:00 p.m. and four summer months of June 1 through September 30, which became available to customers on an opt-in basis November 1, 2019 and will become mandatory for all remaining customers on November 1, 2020. PG&E's updated new TOU rates should be the basis for any future longer-term quantifications of discounts and associated rate impacts, bill impacts, and cost shifts to other ratepayers, because those will be the mandatory rates for all commercial customers including schools as of November 1, 2020.

These rates were applied to a full calendar year of 15-minute electric usage interval data from 2018. Interval usage data is necessary to reframe the recorded electric usage data from legacy TOU seasons and hours, to the new later TOU hours and the shorter summer season.

In assessing or estimating bills under the new later TOU hours, only recorded usage historical data was used, without making any assumption that customers would adjust or adapt their usage to respond to the new later TOU

hours. This may tend to overstate the magnitude of electric bills under the new rates with later TOU hours and could thus overstate the magnitude of an illustrative ten percent discount for schools.

For solar Net Energy Metering (NEM) customers, PG&E calculated NEM Annual True-Up Bills based on the imposition of all applicable customer and demand charges, combined with the annual carryover across twelve months of the net energy charges associated with all usage and net exports, combined with a Net Surplus Compensation rate of \$0.03152 per kWh for any excess solar exports. Based on recorded calendar 2018 interval usage, of the total of approximately 7,339 qualifying electric school accounts, there were 6,154 non-NEM accounts, and 1,185 NEM accounts.

Of the NEM accounts, 1,185 were identified for a NEM Annual Bill True-Up calculation, while the remainder were complex NEM accounts, such as NEMA, or NEM aggregation accounts, for which bill calculation was too difficult because usage from a central NEM account is assigned to multiple contiguous accounts or involves multiple technologies.

PG&E also clarifies that while NEM accounts were billed on November 2019 legacy and November 2019 new rates, qualifying NEM accounts will be able to take grandfathered service on the legacy rates beginning on the mandatory date for the new commercial rates in November 2020. As those rates will not exist until November 2020, PG&E has not attempted to bill school NEM accounts on those rates. However, since the grandfathered solar rates will update legacy rates with cost-based rate values for the old legacy seasons and TOU hours, the resulting bills can most likely be expected to fall somewhere between the lower legacy November 2019 and higher new November 2019 bills.

Finally, while the main commercial sector rates have both legacy and new versions with later TOU hours, there are some specialized rates that are not TOU based that PG&E excluded from electric Tables 5 and 7. These include traffic control Schedule TC-1, outdoor area lighting Schedule OL-1, such as for school parking lots, and streetlight schedules LS-1, LS-2, and LS-3. However, because it is ambiguous as to whether the school itself, or some other city or county jurisdiction pays such bills, PG&E has generally excluded revenues for these specialized rates from its figures above. However, PG&E has quantified these as aggregating to approximately \$180,000 in total annual revenues, based on calendar 2018 usage and November 2019 rates, for approximately 625 traffic control, outdoor area lighting, and streetlight accounts.

In addition, some complicated virtual and multiple technology NEM school arrangements too difficult to reconstruct and bill at legacy and new rates for purposes of this AB 2068 evaluation, were also excluded from all of the above Table 5 and 7 figures. However, PG&E quantifies these to involve annual NEM revenues of approximately \$10 million for approximately 470 such accounts. Thus, in broad terms, assuming a ten percent discount, the excluded accounts

would account for an additional \$1 million per year in school rate discounts, in addition to the figures implied by Tables 5 and 7.

B. Gas Rates

Two sets of estimated or illustrative PG&E gas rates for January 1, 2020 were used. As the first set of gas rates, estimated January 1, 2020 gas rates were used that reflect the impacts of PG&E's GT&S rate case implemented in October 1, 2019 rates, combined with a forecast of Annual Gas True-Up (AGT) rates scheduled to take effect on January 1, 2020, as filed in Advice Letter 4173-G. For the second set of gas rates, these first set of rates were combined with the estimated rate changes scheduled to take effect, most likely on March 1, 2020, to incorporate the impact of the combined effects of the AGT and PG&E's 2018 GCAP. These rates were applied to the full calendar 2018 year of recorded usage data. Gas usage data is not interval data, but is not needed on an interval basis, as gas service is not provided on a TOU basis.

The GCAP involved cost allocation expected to impose an average 5 percent increase on gas Schedule G-NR1 transportation rates, the gas rate schedule on which the majority of eligible subject schools take service from PG&E. PG&E used a monthly gas commodity or procurement rate which varies by month to capture the seasonal nature of gas prices, which are lower in the summer, and higher in the winter, particularly in the peak winter months, as a general matter, to enhance the accuracy of the estimated total annual gas revenue amount for the subject schools.

For the gas GCAP impacts, these are the first-year impacts from adopting an updated gas throughput forecast. All else equal, the GCAP will result in a partial offset to these rate impacts in year two, when the structural under-collection due to an outdated throughput forecast is eliminated. Small Commercial rates would experience a decrease of about 1.7 percent in the second year.

C. Inflation

For both gas and electric rates and revenues, as well as cost-shift figures and the associated subsidy impact on other ratepayers, it should be noted that future gas and electric rates may generally be subject to inflationary pressures. In that sense, future annual revenues and rate discounts for schools may be expected to increase, such as based on the rate of inflation or other increases in IOUs' revenue requirements. The specific percentage increases applicable in the future for the electric and gas rate schedules on which the subject schools take service are not possible to precisely predict. Therefore, PG&E has not incorporated any inflation or escalation assumptions into the figures provided in this evaluation report.

D. IDENTIFYING K – 12th Grade Public Schools

North American Industry Classification System (NAICS) Codes applicable to public schools from kindergarten through the twelfth grade were used, excluding sub-codes which identify private schools. Colleges and universities beyond the twelfth grade were excluded. The following list of NAICS codes highlights all main categories of schools. However, only the NAICS codes shown in grey highlighting, below, were used by PG&E to identify the subject schools. PG&E understands that NAICS codes for public schools also include the category of “charter” schools that were also identified by AB 2068 to receive or be evaluated for rate discounts.

610000	Educational Services
611000	Educational Services
611100	Elementary and Secondary Schools
611110	ELEMENTARY SCHOOLS - PUBLIC
611111	ELEMENTARY SCHOOLS - PRIVATE
611112	SECONDARY SCHOOLS - PUBLIC
611113	SECONDARY SCHOOLS - PRIVATE
611114	JUNIOR HIGH SCHOOLS (7 &/OR 8&9 &/OR 10) - PUBLIC
611115	JUNIOR HIGH SCHOOLS (7 &/OR 8&9 &/OR 10) - PRIVATE
611116	ELEMENTARY AND HIGH SCHOOLS COMBINED
611117	JUNIOR & HIGH SCHOOLS COMBINED
611119	UNIFIED SCHOOL DISTRICTS (GARAGES, OFFICES, ETC.)
611200	Junior Colleges
611210	JUNIOR COLLEGES & TECHNICAL INSTITUTIONS - PUBLIC
611211	JUNIOR COLLEGES & TECHNICAL INSTITUTIONS - PRIVATE
611300	Colleges, Universities, and Professional Schools
611310	COLLEGES, UNIVERSITIES & PROFESSIONAL SCHOOLS - PUBLIC
611311	COLLEGES, UNIVERSITIES & PROFESSIONAL SCHOOLS - PRIVATE

Except for NAICS code 611110 above, the detailed NAICS codes set forth above in grey are not generally listed in NAICS manuals or other reference materials. Instead, the level of detail in the gray codes shown above are customized codes approved by the California Energy Commission (CEC) for use by utilities to distinguish private from public schools. The codes with a zero in the sixth digit are generally all that is listed in publicly available NAICS manuals.

There are two NAICS codes: NAICS1 and NAICS2. NAICS1 is for the general business type, while NAICS2 is for the nature of the business activity for the service agreement identification number (SAID) at the specific premise. As an example, a computer manufacture has a NAICS1 of 334111 [Computer and Peripheral Equipment Manufacturing] describing the primary activity of the customer, and the SAID or premise may have a NAICS2 describing the specific use of the SAID – distribution center, retail space, office, R&D.

Accordingly, to identify applicable eligible qualifying schools based on NAICS codes, PG&E sought to ensure that private entities were excluded.

Although the nuances of NAICS codes led to more than one iteration in PG&E's methodology, which affected the number of accounts included, PG&E ultimately settled on a wider protocol. For example, earlier queries failed to capture electric streetlight or outdoor area lighting accounts, such as for school parking lots, and earlier gas draws failed to capture natural gas vehicle accounts, as well as accounts that appeared to relate to ineligible private schools but in fact were for public schools.

Also, PG&E excluded those accounts with NAICS codes related to eligible schools, but which were taking service under residential rate schedules, or which included "church," "military," "private," "Christian," or individual person names in the account title holder name. Accordingly, PG&E evaluated both the NAICS2 code for a particular premise, as well as the NAICS1 code of the entity that owned that premise as a cross-check. If either of the NAICS1 or NAICS2 codes for the entity that owned the premise were flagged as a private rather than public school, PG&E excluded that premise from its analysis.

Generally, all accounts in PG&E's billing system are assigned NAICS1 and NAICS2 codes. However, codes are in some cases based on self-reported information from customers and may change over time with changes of party at the premise. Therefore, PG&E cannot guarantee the accuracy of the NAICS codes, which are not used for billing purposes as a general matter. In short, should such a gas and electric rate discount for schools ultimately be implemented, extra administrative program costs may result, such as requiring each eligible school to periodically submit a Form affirming eligibility, for the IOUs to review, and/or requiring the IOUs to work with the proper school authorities or jurisdictions to exchange lists of eligible accounts.

IV. OTHER CONSIDERATIONS

If a gas and electric rate discount for schools were required to be implemented, billing system implementation and balancing account ratemaking issues would need to be considered, as discussed below. If a potential future schools discount is to be considered, PG&E reserves the right to expand on these and any other feasibility and policy issues necessary for the robust record necessary for CPUC approval.

A. Implementation and Administrative Costs, Timing and Feasibility

If a gas and electric rate discount for qualifying schools had to be implemented in PG&E's billing system, at a very high level, PG&E currently preliminarily estimates that it would have to incur an initial implementation cost of approximately \$1.6 million based on estimated costs of similar projects. In addition, PG&E would expect to incur ongoing administrative costs to monitor and validate ongoing eligibility for school accounts, or new eligibility for newly constructed schools. Ultimately, the cost and time requirements will be determined by the final scope of the Commission approved initiative. PG&E

would expect to implement these structural and system changes diligently as time permits, in a manner consistent with smooth operations of the systems involved. Structural changes necessary to implement this initiative will be prioritized and coordinated with all other initiatives approved by the Commission, recognizing that these changes may be significant and may require an extended implementation period.

B. Ratemaking Considerations

As a practical matter, if an electric or gas rate discount were adopted for eligible schools, with the discounts recovered from all ratepayers, a balancing account framework may be necessary. This framework generally involves balancing accounts to track the amount of the discount against the amount funded by ratepayers, and to reconcile or true-up the under-collection or over-collection in a given year by amortizing the balance into rates for the following year.

A rate discount for schools would presumably similarly require such a balancing account framework, patterned in a manner similar to other balancing accounts. The electric AET and gas AGT would then amortize balances into rates in the following year. In those other cases, the CPUC also authorizes a certain level of program administrative costs, which are then combined with the rate discounts, for recovery in rates.

V. POLICY CONSIDERATIONS

Consideration of a potential new gas and electric rate discount for qualifying schools raises numerous policy issues. Because the process and content of evaluating such ratemaking policy considerations falls squarely within the unique expertise of the Commission, PG&E respectfully requests that the CPUC's report to the Legislature recommend that the CPUC be ordered to conduct the necessary participatory public proceeding to create a robust and full record on all of the factual and ratemaking policy and legal issues involved in any potential future schools rate discount. The CPUC is best suited to weigh the related and sometimes conflicting policy implications of such ratemaking questions as summarized below.

Alternatively, if the Legislature were to move forward on this issue and seek to mandate a school rate discount through subsequent legislation, these same factual and policy and legal issues should be carefully considered. Whichever jurisdiction conducts future proceedings, PG&E expects that all of the IOUs, the schools, representatives of other customer classes, and other interested parties would be afforded a full and fair opportunity to provide testimony and prepare briefs on such issues as:

Should a Schools Discount be Allowed at All?

- a) Would a discount for public schools violate Public Utility (Pub. Util.) Code Sections 451 or 453, for just and reasonable rates, and non-discriminatory rates, respectively, for similarly situated private schools, or for public community colleges?
- b) Would a discount for public schools potentially violate Pub. Util. Code Sections 451 or 453, or create a slippery slope with respect to other publicly funded services such as fire, police, paramedics, first responders, hospitals, public health agencies, governmental office buildings or accounts, charities, non-profit organizations, community based organizations, public parks, roads and highways, pothole repair, drug rehabilitation centers, after-school programs, Senior centers, cities in fiscal crisis, or other types of utility end-users who might also desire a similar rate discount to any schools discount?
- c) Would recovery of the cost of any schools' rate discount through all other ratepayers be more regressive (i.e., not well correlated to income levels) than continuing to recover those energy costs through the progressive state taxation system?

If a Schools Discount is Allowed, How Should it be Implemented?

- a) Would it be reasonable to create a separate customer class only for gas and electric public K-12 schools, and depart from longstanding CPUC customer class definitions?
- b) Would providing a school rate discount be consistent with the ten rate design principles the CPUC set forth in the Residential Rate Order Instituting Investigation in OIR 12-06-013, adopted in Decision 15-07-001 at page 28?
- c) What would be an appropriate magnitude of any potential gas and electric school rate discount that reasonably balances economic impacts on other customers? Would a discount that results in charges that are less than marginal cost be reasonable?
- d) How should the discount be applied to and collected from customers? Should it be applied on the same basis regardless of energy supplier as proposed by PG&E above? Should the discount be funded through PPP or distribution charges? How should the cost of the discount be allocated among customers?
- e) What are the appropriate recovery mechanisms (e.g., balancing accounts)?

- f) Should the provision of a rate discount to schools require administrative certification through signed applicant forms, and should a periodic re-certification be required?

As a general matter, in the event that a gas and electric school rate discount were to move forward either in a Commission ratemaking proceeding and/or through further Legislative proceedings, PG&E respectfully requests that it and all other interested parties be afforded the opportunity to fully participate in all such proceedings to assess the relevant issues, including but not limited to those outlined above. Such participation should include an opportunity to provide prepared testimony, participate in hearings, and provide post-hearing briefs, among other things, as provided for in the CPUC's long-established Rules of Practice and Procedure governing ratemaking proceedings.

VI. CONCLUSION

In this Report, PG&E has estimated that the schools covered by AB 2068 will already be benefiting from the revision to electric rates with new later time-of-use hours, by reducing approximately \$234 million in current revenues to approximately \$228 million, a reduction of \$5 million, or two percent. These estimated electric revenues of \$228 million per year, combined with gas school revenues of \$54 million per year, would under an illustrative ten percent discount provide schools, as a group, with an estimated \$28 million dollars per year in gas and electric rate relief, subsidized by rate increases to other ratepayers. This subsidy amount may be expected to increase over time with inflation. Further, if a 30 percent discount were adopted, instead, the school rate discounts would total \$85 million per year, with rate impacts to other customers also three times higher than under the ten percent illustrative base case.

In addition, estimates for comparable work suggest implementation costs of approximately \$1.6 million. PG&E also would expect additional ongoing administrative costs to monitor and update program eligibility. Finally, regulatory balancing accounts would need to be established to ensure that the discount amounts match gas and electric component revenues, with under-collections or over-collections amortized into rates the following year.

This Report notes concerns about the advisability of shifting from taxpayers to IOU ratepayers the mechanism for funding a portion of this one, energy aspect of funding the costs of operating public K-12 schools. As discussed above, there are numerous complex statutory and policy concerns that the Commission and the Legislature should consider before deciding whether to impose the costs of such a gas and electric schools rate discount on all other ratepayers. PG&E respectfully requests that the Commission's report advise the Legislature of these complex issues and recommend that the Legislature refer these issues back to the CPUC for consideration through a robust ratemaking regulatory proceeding in which all interested parties can participate to create the

necessary full and complete record. Regardless of whatever jurisdiction(s) takes up further consideration of a potential future schools' discount, PG&E reserves its right to participate in the consideration of this issue should it move forward either in the Legislature and/or at the Commission.

**PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT**

APPENDIX

Attachments 1 and 2

Tables 1 to 8

Figures 1 and 2

**PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT**

Attachment 1 – Assembly Bill (AB) 2068

Assembly Bill No. 2068

CHAPTER 208

An act to add Section 749.5 to the Public Utilities Code, relating to electricity.

[Approved by Governor August 27, 2018. Filed with Secretary
of State August 27, 2018.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2068, Chu. Electricity: rates: public schools.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations and gas corporations, as defined, while local publicly owned electric and gas utilities, as defined, are under the direction of their governing boards. Existing law authorizes the Public Utilities Commission to fix the rates and charges for every public utility, and requires that those rates and charges be just and reasonable. Existing law requires public utilities to develop programs in cooperation with local school districts to reduce their electricity and gas bills through conservation and improvements in efficiency.

This bill would require the commission to direct all electrical and gas corporations to evaluate, and report findings to the commission on, the feasibility and economic impacts of establishing a public school electric and gas rate that would reflect a discount from the current rate structure. This bill would require the commission to compile these reports and submit this compilation to the Legislature, by January 1, 2020. Because a violation of the commission's directions would be a crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares the following:

(a) The state's public schools are nonprofit entities that provide a wide range of public benefits.

(b) The state has invested in energy efficiency improvements in public schools to reduce climate pollution and energy costs; however, energy needs are still great as schools are constantly improving and adapting to technological and operational essentials.

**PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT**

Attachment 1 – Assembly Bill (AB) 2068

Ch. 208

— 2 —

(c) Public schools spend the same amount on energy bills as they do on books and supplies annually.

(d) Recently, many public schools have experienced electricity rate increases that resulted in financial constraints and less funding for direct student services.

(e) The California Constitution and the Public Utilities Code authorizes the Public Utilities Commission to review and approve rates proposed by the public utilities in the state that reflect expenses and authorized revenue requirements.

(f) There are different rates for different energy users such as residential, commercial, and industrial; schools are under the commercial category.

(g) The Public Utilities Commission, in August 2017, made the recommendation, as part of the Decision Revenue Allocation and Rate Design for San Diego Gas & Electric Company (D17-08-030), that San Diego Gas & Electric Company develop a schools-only rate separate from the medium or large commercial and industrial class rates.

SEC. 2. Section 749.5 is added to the Public Utilities Code, to read:

749.5. (a) For the purposes of this section, “public school” means a public school, including a charter school, maintaining a kindergarten, or any of the grades 1 to 12, inclusive.

(b) The commission shall, as part of its ratesetting process, direct each electrical and gas corporation to evaluate and report findings to the commission, by January 1, 2020, on the feasibility and economic impact of establishing public school electric and gas rates that would reflect a discount from the current rate structure. The report shall include, but not be limited to, the following:

(1) Commercial rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation.

(2) Economic impact to all ratepayers if all public schools within the service territory received a discount from the current rate structure.

(3) The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the commission and in the planning stages or proposed by electric and gas corporations.

(4) The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

(c) The commission shall compile the reports required in subdivision (b) and submit the compilation to the Legislature, on or before January 1, 2020, in compliance with the requirements of Section 9795 of the Government Code.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

**PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT**

Attachment 2 – Public Utilities Code Section 749.5

749.5.

(a) For the purposes of this section, “public school” means a public school, including a charter school, maintaining a kindergarten, or any of the grades 1 to 12, inclusive.

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(1) Commercial rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation.

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(3) The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the commission and in the planning stages or proposed by electric and gas corporations.

(4) The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

(c) The commission shall compile the reports required in subdivision (b) and submit the compilation to the Legislature, on or before January 1, 2020, in compliance with the requirements of Section 9795 of the Government Code.

(Added by Stats. 2018, Ch. 208, Sec. 2. (AB 2068) Effective January 1, 2019.)

PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Table 1: Five-Year Electric Average Rate History

ELECTRIC
SUMMARY

BDLD RESULTS	Jan-2014		% Change	Jan-2015		% Change	Jan-2016		% Change	Jan-2017		% Change	Jan-2018		% Change	Jan-2019		Jan-2014	Jan-2014
	Total Proposed Rates	Total Proposed Rates		Total Proposed Rates	Total Proposed Rates		Total Proposed Rates	Total Proposed Rates		Total Proposed Rates	Total Proposed Rates		Total Proposed Rates	Total Proposed Rates		Total Proposed Rates	Total Proposed Rates	Total Proposed Rates	Total Proposed Rates
RESIDENTIAL																			
E-1	\$0.19904	\$0.20345	2.22%	\$0.21183	4.12%	\$0.22742	7.36%	\$0.23188	1.96%	\$0.22960	-0.98%	15.35%	2.9%						
EL-1	\$0.09738	\$0.11551	18.62%	\$0.12569	8.82%	\$0.13001	3.43%	\$0.13729	5.60%	\$0.13158	-4.16%	35.13%	6.2%						
E-7	\$0.18791	\$0.18142	-3.45%	\$0.19633	8.22%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
EL-7	\$0.09721	\$0.11598	19.31%	\$0.13355	15.15%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
E-8	\$0.22616	\$0.21003	-7.14%	\$0.23256	10.73%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
EL-8	\$0.09315	\$0.11037	18.49%	\$0.12919	17.05%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
TOTAL RES	\$0.17455	\$0.18145	3.95%	\$0.18967	4.53%	\$0.19971	5.30%	\$0.20498	2.64%	\$0.20215	-1.38%	15.81%	3.0%						
SMALL L&P																			
A-1	\$0.19567	\$0.21152	8.10%	\$0.22123	4.59%	\$0.22665	2.45%	\$0.23103	1.93%	\$0.23892	3.41%	22.10%	4.1%						
A-6	\$0.18618	\$0.20341	9.26%	\$0.21231	4.37%	\$0.21803	2.70%	\$0.22241	2.01%	\$0.22832	2.65%	22.64%	4.2%						
A-15	\$0.53937	\$0.57834	7.23%	\$0.48859	-15.52%	\$0.60969	24.79%	\$0.61407	0.72%	\$0.62394	1.61%	15.68%	3.0%						
TC-1	\$0.18623	\$0.20489	10.02%	\$0.20014	-2.32%	\$0.21663	8.24%	\$0.22101	2.02%	\$0.22822	3.26%	22.55%	4.2%						
TOTAL SMALL	\$0.19406	\$0.21010	8.28%	\$0.21948	4.47%	\$0.22515	2.58%	\$0.22953	1.95%	\$0.23704	3.27%	22.15%	4.1%						
MEDIUM L&P																			
A-10 T	\$0.12812	\$0.14084	9.93%	\$0.13784	-2.13%	\$0.14615	6.03%	\$0.14974	2.45%	\$0.15732	5.07%	22.79%	4.2%						
A-10 P	\$0.15914	\$0.17110	7.51%	\$0.17326	1.26%	\$0.18974	9.52%	\$0.19374	2.10%	\$0.19979	3.13%	25.54%	4.7%						
A-10 S	\$0.17437	\$0.18515	6.18%	\$0.19159	3.48%	\$0.20063	4.72%	\$0.20430	1.83%	\$0.21214	3.84%	21.66%	4.0%						
TOTAL MEDIUM	\$0.17423	\$0.18503	6.20%	\$0.19142	3.45%	\$0.20053	4.76%	\$0.20420	1.83%	\$0.21203	3.83%	21.69%	4.0%						
E-19 CLASS																			
E-19 FIRM T	\$0.11870	\$0.12855	8.29%	\$0.11947	-7.06%	\$0.12955	8.44%	\$0.13192	1.83%	\$0.12824	-2.79%	8.04%	1.6%						
E-19 V T	\$0.12797	\$0.12859	0.48%	\$0.13250	3.04%	\$0.13510	1.96%	\$0.13813	2.24%	\$0.14017	1.48%	9.53%	1.8%						
Total E-19 T	\$0.12054	\$0.12856	6.65%	\$0.12175	-5.29%	\$0.13199	8.40%	\$0.13464	2.01%	\$0.13227	-1.76%	9.73%	1.9%						
E-19 FIRM P	\$0.14358	\$0.15225	6.04%	\$0.15156	-0.45%	\$0.16155	6.59%	\$0.16411	1.58%	\$0.16443	0.20%	14.52%	2.7%						
E-19 V P	\$0.14319	\$0.15265	6.60%	\$0.15188	-0.50%	\$0.16190	6.60%	\$0.16477	1.77%	\$0.16234	-1.48%	13.37%	2.5%						
Total E-19 P	\$0.14347	\$0.15235	6.19%	\$0.15166	-0.46%	\$0.16164	6.58%	\$0.16427	1.63%	\$0.16388	-0.23%	14.23%	2.7%						
E-19 FIRM S	\$0.15434	\$0.16609	7.61%	\$0.16615	0.04%	\$0.18037	8.56%	\$0.18292	1.41%	\$0.18955	3.62%	22.81%	4.2%						
E-19 V S	\$0.14835	\$0.15992	7.79%	\$0.16506	3.21%	\$0.17621	6.76%	\$0.17849	1.29%	\$0.18359	2.86%	23.75%	4.4%						
Total E-19 S	\$0.15012	\$0.16193	7.87%	\$0.16538	2.13%	\$0.17767	7.43%	\$0.18004	1.33%	\$0.18557	3.07%	23.62%	4.3%						
E-19 T	\$0.12054	\$0.12856	6.65%	\$0.12175	-5.29%	\$0.13199	8.40%	\$0.13464	2.01%	\$0.13227	-1.76%	9.73%	1.9%						
E-19 P	\$0.14347	\$0.15235	6.19%	\$0.15166	-0.46%	\$0.16164	6.58%	\$0.16427	1.63%	\$0.16388	-0.23%	14.23%	2.7%						
E-19 S	\$0.15012	\$0.16193	7.87%	\$0.16538	2.13%	\$0.17767	7.43%	\$0.18004	1.33%	\$0.18557	3.07%	23.62%	4.3%						
TOTAL E-19	\$0.14954	\$0.16107	7.71%	\$0.16423	1.96%	\$0.17618	7.27%	\$0.17857	1.36%	\$0.18345	2.73%	22.68%	4.2%						
STREETLIGHTS	\$0.18100	\$0.19351	6.91%	\$0.21037	8.71%	\$0.21785	3.56%	\$0.22009	1.03%	\$0.23093	4.93%	27.59%	5.0%						
STANDBY																			
STANDBY T	\$0.11730	\$0.12770	8.86%	\$0.13821	8.23%	\$0.13534	-2.07%	\$0.13846	2.30%	\$0.15398	11.21%	31.27%	5.6%						
STANDBY P	\$0.23059	\$0.30620	32.79%	\$0.26741	-12.67%	\$0.32371	21.06%	\$0.32680	0.95%	\$0.42402	29.75%	83.88%	13.0%						
STANDBY S	\$0.25282	\$0.26041	3.00%	\$0.29085	11.69%	\$0.23739	-18.38%	\$0.23762	0.10%	\$0.25515	7.38%	0.92%	0.2%						
TOTAL STANDE	\$0.12830	\$0.13823	7.74%	\$0.15417	11.53%	\$0.14608	-5.25%	\$0.14917	2.12%	\$0.16569	11.07%	29.14%	5.2%						
AGRICULTURE																			
AG-1A	\$0.30002	\$0.31372	4.57%	\$0.35326	12.60%	\$0.34719	-1.72%	\$0.34986	0.77%	\$0.35545	1.60%	18.47%	3.4%						
AG-RA	\$0.22308	\$0.23206	4.02%	\$0.24920	7.39%	\$0.25348	1.72%	\$0.25614	1.05%	\$0.26192	2.26%	17.41%	3.3%						
AG-VA	\$0.22371	\$0.23473	4.92%	\$0.25320	7.87%	\$0.25992	2.66%	\$0.26258	1.02%	\$0.26702	1.69%	19.36%	3.6%						
AG-4A	\$0.25210	\$0.25809	2.38%	\$0.28533	10.56%	\$0.29976	5.06%	\$0.30242	0.89%	\$0.30438	0.65%	20.74%	3.8%						
AG-5A	\$0.18192	\$0.19390	6.59%	\$0.21239	9.54%	\$0.22630	6.55%	\$0.22897	1.18%	\$0.23241	1.51%	27.76%	5.0%						
AG-1B	\$0.23905	\$0.25318	5.91%	\$0.27714	9.46%	\$0.27429	-1.03%	\$0.27695	0.97%	\$0.28758	3.84%	20.30%	3.8%						
AG-RB	\$0.20749	\$0.21395	3.11%	\$0.24744	15.66%	\$0.24942	0.80%	\$0.25209	1.07%	\$0.25744	2.12%	24.08%	4.4%						
AG-VB	\$0.19227	\$0.20285	5.50%	\$0.21850	7.72%	\$0.22859	4.62%	\$0.23125	1.17%	\$0.22869	-1.11%	18.94%	3.5%						
AG-4B	\$0.19481	\$0.20819	6.87%	\$0.22471	7.94%	\$0.24158	7.51%	\$0.24424	1.10%	\$0.25118	2.84%	28.93%	5.2%						
AG-4C	\$0.18529	\$0.19184	3.53%	\$0.20952	9.22%	\$0.21945	4.74%	\$0.22211	1.21%	\$0.23341	5.09%	25.97%	4.7%						
AG-5B	\$0.12757	\$0.13603	6.63%	\$0.15136	11.27%	\$0.16410	8.41%	\$0.16676	1.62%	\$0.18481	10.82%	44.87%	7.7%						
AG-5C	\$0.12306	\$0.12805	4.06%	\$0.13699	6.99%	\$0.14798	8.02%	\$0.15064	1.80%	\$0.16131	7.08%	31.08%	5.6%						
Total AG A	\$0.24116	\$0.24724	2.52%	\$0.27042	9.37%	\$0.27911	3.21%	\$0.28177	0.95%	\$0.29170	3.52%	20.98%	3.9%						
Total AG B	\$0.13647	\$0.14432	5.75%	\$0.15766	9.24%	\$0.16854	6.90%	\$0.17120	1.58%	\$0.19160	11.92%	40.40%	7.0%						
Total AG	\$0.14421	\$0.15237	5.65%	\$0.16608	8.98%	\$0.17606	6.02%	\$0.17872	1.51%	\$0.20134	12.65%	39.61%	6.9%						
E-20 CLASS																			
E-20 FIRM T	\$0.10232	\$0.10608	3.68%	\$0.10391	-2.05%	\$0.11502	10.69%	\$0.11767	2.31%	\$0.12284	4.40%	20.06%	3.7%						
FPP T																			
TOTAL	\$0.10232	\$0.10608	3.68%	\$0.10391	-2.05%	\$0.11502	10.69%	\$0.11767	2.31%	\$0.12284	4.40%	20.06%	3.7%						
E-20 FIRM P	\$0.13019	\$0.13908	6.83%	\$0.14142	1.69%	\$0.15022	6.22%	\$0.15276	1.69%	\$0.15775	3.26%	21.16%	3.9%						
FPP P																			
TOTAL	\$0.13019	\$0.13908	6.83%	\$0.14142	1.69%	\$0.15022	6.22%	\$0.15276	1.69%	\$0.15775	3.26%	21.16%	3.9%						
E-20 FIRM S	\$0.14283	\$0.15216	6.53%	\$0.15582	2.40%	\$0.16620	6.66%	\$0.16916	1.78%	\$0.17478	3.32%	22.36%	4.1%						
FPP S																			
TOTAL	\$0.14283	\$0.15216	6.53%	\$0.15582	2.40%	\$0.16620	6.66%	\$0.16916	1.78%	\$0.17478	3.32%	22.36%	4.1%						
E-20 T	\$0.10232	\$0.10608	3.68%	\$0.10391	-2.05%	\$0.11502	10.69%	\$0.11767	2.31%	\$0.12284	4.40%	20.06%	3.7%						
E-20 P	\$0.13019	\$0.13908	6.83%	\$0.14142	1.69%	\$0.15022	6.22%	\$0.15276	1.69%	\$0.15775	3.26%	21.16%	3.9%						
E-20 S	\$0.14283	\$0.15216	6.53%	\$0.15582	2.40%	\$0.16620	6.66%	\$0.16916	1.78%	\$0.17478	3.32%	22.36%	4.1%						
TOTAL E-20	\$0.12148	\$0.12924	6.38%	\$0.12990	0.51%	\$0.13985	7.65%	\$0.14250	1.90%	\$0.14762	3.59%	21.51%	4.0%						
SYSTEM	\$0.16313	\$0.17176	5.29%	\$0.17776	3.50%	\$0.18779	5.64%	\$0.19172	2.09%	\$0.19553	1.99%	19.86%	3.7%						

PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

TABLE 2: FIVE-YEAR AVERAGE GAS RATE HISTORY

Line No.	Customer Class ²	Jan-2014	Jan-2015	% Change	Jan-2016	% Change	Jan-2017	% Change	Jan-2018	% Change	Jan-2019	% Change	Jan-2020	% Change	2014-2020 Cumulative % Change	2014-2020 Compound Annual %
1	BUNDLED—RETAIL CORE ¹															
2	Residential Non-CARE	\$1,248	\$1,497	19.9%	\$1,473	-1.6%	\$1,568	8.5%	\$1,519	-5.0%	\$1,609	5.9%	\$1,591	-1.1%	27.5%	4.1%
3	Small Commercial Non-CARE	\$0,952	\$1,051	10.4%	\$0,961	-8.6%	\$1,134	18.0%	\$1,058	-6.7%	\$1,120	5.8%	\$1,141	1.9%	19.9%	3.1%
4	Large Commercial	\$0,762	\$0,773	1.4%	\$0,687	-11.1%	\$0,881	28.2%	\$0,803	-8.8%	\$0,849	5.7%	\$0,788	-7.2%	3.4%	0.6%
5	Uncompressed Core NGV	\$0,655	\$0,617	-5.9%	\$0,518	-16.0%	\$0,732	41.2%	\$0,657	-10.2%	\$0,694	5.6%	\$0,674	-2.9%	2.8%	0.5%
6	Compressed Core NGV	\$1,940	\$2,173	12.0%	\$2,066	-3.6%	\$2,191	4.5%	\$2,061	-5.9%	\$2,169	5.3%	\$2,165	-0.2%	11.5%	1.8%
7	TRANSPORT ONLY—RETAIL CORE															
8	Residential Non-CARE	\$0,727	\$0,997	37.2%	\$1,090	9.3%	\$1,171	7.4%	\$1,200	2.5%	\$1,294	7.8%	\$1,286	0.2%	78.4%	10.1%
9	Small Commercial Non-CARE	\$0,449	\$0,569	26.6%	\$0,596	4.8%	\$0,724	21.5%	\$0,756	4.4%	\$0,821	8.6%	\$0,864	5.2%	92.3%	11.5%
10	Large Commercial	\$0,295	\$0,324	9.7%	\$0,354	9.4%	\$0,501	41.4%	\$0,530	5.8%	\$0,579	9.4%	\$0,540	-6.8%	83.1%	10.6%
11	Uncompressed Core NGV	\$0,188	\$0,170	-9.4%	\$0,188	10.4%	\$0,354	88.7%	\$0,386	9.0%	\$0,426	10.4%	\$0,428	0.5%	128.2%	14.7%
12	Compressed Core NGV	\$1,472	\$1,726	17.2%	\$1,765	2.3%	\$1,813	2.7%	\$1,790	-1.3%	\$1,902	6.3%	\$1,919	0.9%	30.3%	4.5%
13	TRANSPORT ONLY—RETAIL NONCORE - NONCOVERED ENTITIES ²															
14	Industrial - Distribution	\$0,199	\$0,229	15.4%	\$0,239	4.1%	\$0,298	24.8%	\$0,326	9.4%	\$0,376	15.4%	\$0,377	0.3%	89.8%	11.3%
15	Industrial - Transmission	\$0,095	\$0,074	-22.1%	\$0,079	6.0%	\$0,150	89.8%	\$0,172	14.9%	\$0,213	23.8%	\$0,208	-2.1%	118.4%	13.9%
16	Industrial - Backbone	\$0,054	\$0,045	-17.5%	\$0,046	2.2%	\$0,047	2.3%	\$0,060	28.3%	\$0,103	72.4%	\$0,088	-5.3%	80.9%	10.4%
17	Uncompressed Noncore NGV - Distribution	\$0,182	\$0,212	16.0%	\$0,219	3.5%	\$0,282	28.7%	\$0,311	10.3%	\$0,360	15.8%	\$0,347	-3.8%	90.0%	11.3%
18	Uncompressed Noncore NGV - Transmission	\$0,081	\$0,056	-30.8%	\$0,061	9.1%	\$0,134	119.3%	\$0,157	16.5%	\$0,197	25.5%	\$0,190	-3.2%	134.4%	15.3%
19	Electric Generation - Distribution/Transmission	\$0,055	\$0,030	-44.8%	\$0,037	20.6%	\$0,102	179.4%	\$0,128	25.6%	\$0,168	30.5%	\$0,161	-4.4%	192.2%	19.6%
20	Electric Generation - Backbone	\$0,019	\$0,009	-51.2%	\$0,012	33.0%	\$0,008	-35.4%	\$0,026	218.2%	\$0,068	167.0%	\$0,059	-13.7%	207.4%	20.6%

(1) CARE Customers receive a 20% discount off of PG&E's total bundled rate and are exempt from the CARE portion of PG&E's Public Purpose Program Surcharge (G-PPPS) rates and cost recovery of the California Solar Initiative Thermal
(2) Billied Transportation rates paid by all customers include an additional GHG Compliance Cost and Operational Cost component starting in January 1, 2019 rates shown above. Gas GHG costs were included in gas rates effective August 1, 2018.

**PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT**

Table 3: Impact of Potential School Discount on Other Electric Ratepayers

BDDL RESULTS Class/Schedule	Nov-2019		2019		\$20,000,000 School Discount Impact
	Dist Revenue	Total Proposed Revenue	Total Sales (kWh)	Total Proposed Rates	
RESIDENTIAL					
E-1	\$1,151,865,754	\$3,033,455,674	13,211,774,079	\$0.22960	0.17%
EL-1	\$64,637,559	\$676,261,620	5,139,397,020	\$0.13158	0.04%
TOTAL RES	\$1,216,503,313	\$3,709,717,294	18,351,171,100	\$0.20215	0.15%
SMALL L&P					
A-1	\$339,909,341	\$962,200,379	4,027,344,822	\$0.23892	0.16%
A-6	\$65,321,769	\$195,991,472	858,414,772	\$0.22832	0.15%
A-15	\$156,007	\$206,745	331,356	\$0.62394	0.34%
TC-1	\$2,068,595	\$5,096,787	22,332,660	\$0.22822	0.18%
TOTAL SMALL	\$407,455,712	\$1,163,495,383	4,908,423,610	\$0.23704	0.16%
MEDIUM L&P					
A-10 T	\$34,488	\$352,390	2,239,893	\$0.15732	0.04%
A-10 P	\$1,696,222	\$7,179,436	35,934,529	\$0.19979	0.10%
A-10 S	\$250,099,961	\$1,041,856,171	4,911,138,774	\$0.21214	0.11%
TOTAL MEDIUM	\$251,830,671	\$1,049,387,998	4,949,313,196	\$0.21203	0.11%
E-19 CLASS					
E-19 FIRM T	\$265,010	\$2,285,142	17,818,828	\$0.12824	0.05%
E-19 V T	\$75,959	\$1,275,099	9,096,964	\$0.14017	0.03%
Total E-19 T	\$340,969	\$3,560,241	26,915,792	\$0.13227	0.04%
E-19 FIRM P	\$13,821,934	\$70,015,231	425,796,185	\$0.16443	0.09%
E-19 V P	\$4,463,066	\$24,601,056	151,539,720	\$0.16234	0.08%
Total E-19 P	\$18,285,000	\$94,616,287	577,335,905	\$0.16388	0.09%
E-19 FIRM S	\$83,377,342	\$376,722,540	1,987,493,501	\$0.18955	0.10%
E-19 V S	\$162,569,887	\$734,043,417	3,998,331,572	\$0.18359	0.10%
Total E-19 S	\$245,947,229	\$1,110,765,957	5,985,825,073	\$0.18557	0.10%
E-19 T	\$340,969	\$3,560,241	26,915,792	\$0.13227	0.04%
E-19 P	\$18,285,000	\$94,616,287	577,335,905	\$0.16388	0.09%
E-19 S	\$245,947,229	\$1,110,765,957	5,985,825,073	\$0.18557	0.10%
TOTAL E-19	\$264,573,198	\$1,208,942,485	6,590,076,770	\$0.18345	0.10%
STREETLIGHTS					
	\$19,410,880	\$40,732,189	176,380,675	\$0.23093	0.21%
STANDBY					
STANDBY T	\$6,720,082	\$46,700,617	303,282,978	\$0.15398	0.06%
STANDBY P	\$3,159,606	\$5,213,242	12,294,830	\$0.42402	0.27%
STANDBY S	\$497,686	\$1,063,837	4,169,471	\$0.25515	0.21%
TOTAL STANDBY	\$10,377,374	\$52,977,697	319,747,279	\$0.16569	0.09%
AGRICULTURE					
AG-1A	\$2,951,259	\$5,215,917	14,674,301	\$0.35545	0.25%
AG-RA	\$2,045,396	\$4,267,889	16,294,435	\$0.26192	0.21%
AG-VA	\$1,406,142	\$2,851,224	10,677,941	\$0.26702	0.22%
AG-4A	\$64,341,400	\$117,782,305	386,958,686	\$0.30438	0.24%
AG-5A	\$7,489,322	\$19,968,680	85,918,742	\$0.23241	0.17%
AG-1B	\$8,372,728	\$18,099,163	62,936,736	\$0.28758	0.21%
AG-RB	\$1,994,865	\$4,232,451	16,440,529	\$0.25744	0.21%
AG-VB	\$1,317,188	\$2,994,330	13,093,280	\$0.22869	0.20%
AG-4B	\$93,642,841	\$224,623,062	894,287,837	\$0.25118	0.19%
AG-4C	\$5,045,649	\$12,460,693	53,385,593	\$0.23341	0.18%
AG-5B	\$111,753,891	\$392,804,974	2,125,426,691	\$0.18481	0.13%
AG-5C	\$50,959,075	\$259,343,936	1,607,744,505	\$0.16131	0.09%
Total AG A	\$78,233,519	\$150,086,015	514,524,106	\$0.29170	0.23%
Total AG B	\$273,086,236	\$914,558,608	4,773,315,170	\$0.19160	0.13%
TOTAL AG	\$351,319,756	\$1,064,644,623	5,287,839,275	\$0.20134	0.15%
E-20 CLASS					
E-20 FIRM T	\$7,163,073	\$334,781,738	2,725,287,643	\$0.12284	0.01%
FPP T					
TOTAL	\$7,163,073	\$334,781,738	2,725,287,643	\$0.12284	0.01%
E-20 FIRM P	\$92,237,036	\$551,295,025	3,494,848,374	\$0.15775	0.07%
FPP P					
TOTAL	\$92,237,036	\$551,295,025	3,494,848,374	\$0.15775	0.07%
E-20 FIRM S	\$42,511,775	\$206,681,625	1,182,538,975	\$0.17478	0.09%
FPP S					
TOTAL	\$42,511,775	\$206,681,625	1,182,538,975	\$0.17478	0.09%
E-20 T	\$7,163,073	\$334,781,738	2,725,287,643	\$0.12284	0.01%
E-20 P	\$92,237,036	\$551,295,025	3,494,848,374	\$0.15775	0.07%
E-20 S	\$42,511,775	\$206,681,625	1,182,538,975	\$0.17478	0.09%
TOTAL E-20	\$141,911,885	\$1,092,758,387	7,402,674,992	\$0.14762	0.06%
SYSTEM	\$2,663,382,789	\$9,382,656,055	47,985,626,897	\$0.19553	0.13%

PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Table 4: Impact of Potential School Discount on Other Gas Ratepayers

		Class Average Rates (\$/therm)			
		Proposed			
Line No.	Customer Class ²	Forecasted January 1, 2020	January 1, 2020 Increased for \$10M discount for Schools	\$ Change	\$10M % Chg
1	BUNDLED—RETAIL CORE ¹				
2	Residential Non-CARE	\$1.591	\$1.595	\$0.004	0.26%
3	Small Commercial Non-CARE	\$1.141	\$1.143	\$0.002	0.19%
4	Large Commercial	\$0.788	\$0.789	\$0.001	0.11%
5	Uncompressed Core NGV	\$0.674	\$0.674	\$0.000	0.07%
6	Compressed Core NGV	\$2.165	\$2.171	\$0.007	0.31%
7	TRANSPORT ONLY—RETAIL CORE				
8	Residential Non-CARE	\$1.296	\$1.301	\$0.004	0.31%
9	Small Commercial Non-CARE	\$0.864	\$0.866	\$0.002	0.25%
10	Large Commercial	\$0.540	\$0.541	\$0.001	0.16%
11	Uncompressed Core NGV	\$0.428	\$0.429	\$0.000	0.11%
12	Compressed Core NGV	\$1.919	\$1.926	\$0.007	0.35%
13	TRANSPORT ONLY—RETAIL NONCORE - NONCOVERED ENTITIES ³				
14	Industrial – Distribution	\$0.377	\$0.378	\$0.001	0.25%
15	Industrial – Transmission	\$0.208	\$0.209	\$0.000	0.07%
16	Industrial – Backbone	\$0.098	\$0.098	\$0.000	0.08%
17	Uncompressed Noncore NGV – Distribution	\$0.347	\$0.348	\$0.001	0.28%
18	Uncompressed Noncore NGV – Transmissio	\$0.190	\$0.190	\$0.000	0.04%
19	Electric Generation – Distribution/Transmiss	\$0.161	\$0.161	\$0.000	0.01%
20	Electric Generation – Backbone	\$0.059	\$0.059	\$0.000	0.03%
21	TRANSPORT ONLY—RETAIL NONCORE - COVERED ENTITIES ³				
22	Industrial – Distribution	\$0.327	\$0.328	\$0.001	0.29%
23	Industrial – Transmission	\$0.159	\$0.159	\$0.000	0.09%
24	Industrial – Backbone	\$0.048	\$0.049	\$0.000	0.17%
25	Uncompressed Noncore NGV – Distribution	\$0.297	\$0.298	\$0.001	0.32%
26	Uncompressed Noncore NGV – Transmissio	\$0.141	\$0.141	\$0.000	0.06%
27	Electric Generation – Distribution/Transmiss	\$0.111	\$0.111	\$0.000	0.02%
28	Electric Generation – Backbone	\$0.009	\$0.009	\$0.000	0.22%
29	TRANSPORT ONLY—WHOLESALE				
30	Alpine Natural Gas (T)	\$0.107	\$0.107	\$0.000	0.00%
31	Coalinga (T)	\$0.108	\$0.108	\$0.000	0.00%
32	Island Energy (T)	\$0.116	\$0.116	\$0.000	0.00%
33	Palo Alto (T)	\$0.105	\$0.105	\$0.000	0.00%
34	West Coast Gas – Castle (D)	\$0.302	\$0.303	\$0.001	0.35%
35	West Coast Gas – Mather (D)	\$0.361	\$0.362	\$0.001	0.39%
36	West Coast Gas – Mather (T)	\$0.109	\$0.109	\$0.000	0.00%

- (1) CARE Customers receive a 20% discount off of PG&E's total bundled rate and are exempt from the CARE portion of PG&E's Public Purpose Program Surcharge (G-PPPS) rates and cost recovery of the California Solar Initiative Thermal Program.
- (2) Transportation rates paid by all customers include an additional GHG Compliance Cost Recovery component of \$0.05121 per therm.
- (3) Covered Entities (i.e. customers that currently have a direct obligation to pay for allowances directly to the Air Resources Board) will pay a GHG Obligation Cost component of \$0.0017 per therm to cover PG&E allowance costs associated with lost & unaccounted for (LUAF) gas and compression costs. Covered entities will see a line item credit on their bill equal to \$0.04951 (\$0.05121 minus \$0.0017) per therm times their monthly billed volumes.

PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Table 5: Electric Revenues and Impact of Old versus New TOU Hours for Schools

Current: Nov 2019 Legacy TOU Rates, Proposed: Nov 2019 New TOU Rates
For Qualifying Bundled, DA/CCA, NEM, and non-NEM Schools
Using Jan 2018 to Dec 2018 Interval Usage Data

RATE SCHEDULE	COUNT	SUM OF TOU KWH	TOTAL ANNUAL CURRENT TOTAL ANNUAL										MIN DIFFERENCE
			CURRENT BILLS	AVG RATE	PROPOSED BILLS	AVG RATE	PROPOSED BILLS	AVG RATE	DIFFERENCE (PROPOSED-CURRENT)	CURRENT / PROPOSED	MAX DIFFERENCE		
A10PX	8	4,157,648	\$927,823	0.22316	\$919,752	0.22122	\$-8,070	(0.87%)	\$2,833	\$-6,184			
A10SX	2,164	513,777,012	\$129,489,509	0.25203	\$124,838,801	0.24298	\$-4,650,708	(3.59%)	\$10,575	\$-17,951			
A1X	3,440	106,321,497	\$26,693,383	0.25106	\$26,258,600	0.24697	\$-434,783	(1.63%)	\$1,464	\$-3,759			
A6	1,544	164,991,817	\$39,194,635	0.23756	\$39,932,694	0.24203	\$738,059	1.88%	\$47,458	\$-63,896			
E19P	21	33,842,228	\$7,555,218	0.22325	\$7,411,596	0.21900	\$-143,622	(1.90%)	\$27,622	\$-39,220			
E19PV	7	7,618,398	\$1,503,609	0.19737	\$1,483,632	0.19474	\$-19,976	(1.33%)	\$13,276	\$-18,919			
E19S	61	71,759,214	\$19,184,029	0.26734	\$18,809,790	0.26212	\$-374,239	(1.95%)	\$55,623	\$-47,102			
E19SV	92	30,291,724	\$7,376,438	0.24351	\$7,285,702	0.24052	\$-90,736	(1.23%)	\$29,974	\$-30,121			
E20P	2	7,782,993	\$1,602,173	0.20586	\$1,547,816	0.19887	\$-54,357	(3.39%)	\$-18,229	\$-36,128			
TOTAL	7,339	940,542,530	\$233,526,817	0.24829	\$228,488,384	0.24293	\$-5,038,433	(2.16%)	\$170,597	\$-263,280			

PACIFIC GAS AND ELECTRIC COMPANY EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Table 6: Gas Revenues and Impact of Old versus New Rates for Schools

Current: Jan 2020 AGT Rates, Proposed: Jan 2020 AGT+GCAP Rates
For Qualifying Core and Non-Core Schools
Using Jan 2018 to Dec 2018 Usage Data

RATE SCHEDULE	COUNT	SUM OF THERMS	TOTAL ANNUAL CURRENT		TOTAL ANNUAL PROPOSED		DIFFERENCE (PROPOSED-CURRENT)	DIFFERENCE (PROPOSED-CURRENT) / CURRENT	MAX DIFFERENCE	MIN DIFFERENCE
			BILLS	AVG RATE	BILLS	AVG RATE				
GNGV1	20	1,286,172	\$3,047,252	2.36924	\$3,571,663	2.77697	\$524,411	17.21%	\$155,315	\$44
GNGV2	33	91,426	\$70,922	0.77573	\$82,611	0.90358	\$11,689	16.48%	\$2,318	\$4
GNR1	4,771	39,820,786	\$47,550,131	1.19410	\$49,782,196	1.25016	\$2,232,066	4.69%	\$8,564	\$0
GNTD	1	145,616	\$82,676	0.56777	\$92,491	0.63517	\$9,815	11.87%	\$9,815	\$9,815
TOTAL	4,825	41,344,000	\$50,750,980	1.22753	\$53,528,961	1.29472	\$2,777,981	5.47%	\$176,013	\$9,864

**PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT**

Table 7: School Electric Bill Impacts of New Time-of-Use Hours

Current: Nov 2019 Legacy TOU Rates, Proposed: Nov 2019 New TOU Rates
For Qualifying Bundled, DA/CCA, NEM, and non-NEM Schools
Using Jan 2018 to Dec 2018 Interval Usage Data

PCT DIFFERENCE	Rate Schedule=ALL											ABOVE 20% AVG.MO BILL	
	BELOW -20%	-20% - -10%	-10% - -5%	-5% - -2.5%	-2.5% - 0%	0 - 2.5%	2.5% - 5%	5 - 10%	10 - 20%	20% - 30%	30% - 40%		40% - 50%
\$ MONTHLY \$	58(0.8%)	96(1.3%)	115(1.6%)	180(2.5%)	40(0.5%)	6(0.1%)	0	0	0	0	0	0	\$13,270.55
4% \$-720.1	12(0.2%)	58(0.8%)	180(2.5%)	40(0.5%)	6(0.1%)	0	0	0	0	0	0	0	\$7,670.59
8% \$-460.6	9(0.1%)	59(0.8%)	159(2.2%)	61(0.8%)	5(0.1%)	0	0	0	0	0	0	0	\$5,885.24
12% \$-320.3	9(0.1%)	49(0.7%)	133(1.8%)	95(1.3%)	8(0.1%)	0	0	0	0	0	0	0	\$4,801.05
16% \$-233.8	7(0.1%)	31(0.4%)	108(1.5%)	30(0.4%)	0	0	0	0	0	0	0	0	\$4,398.44
20% \$-164.7	7(0.1%)	27(0.4%)	66(0.9%)	134(1.8%)	60(0.8%)	0	0	0	0	0	0	0	\$3,847.70
24% \$-110.0	4(0.1%)	22(0.3%)	37(0.5%)	150(2.0%)	80(1.1%)	0	0	0	0	0	0	0	\$3,124.55
28% \$-69.8	4(0.1%)	13(0.2%)	32(0.4%)	105(1.4%)	139(1.9%)	0	0	0	0	0	0	0	\$2,426.34
32% \$-44.3	2(0.0%)	12(0.2%)	24(0.3%)	98(1.3%)	159(2.2%)	0	0	0	0	0	0	0	\$1,996.19
36% \$-29.3	0	3(0.0%)	15(0.2%)	113(1.5%)	163(2.2%)	0	0	0	0	0	0	0	\$1,351.25
40% \$-19.0	1(0.0%)	4(0.1%)	15(0.2%)	89(1.2%)	183(2.5%)	0	0	0	0	0	0	0	\$1,047.55
44% \$-13.0	0	1(0.0%)	8(0.1%)	95(1.3%)	190(2.6%)	0	0	0	0	0	0	0	\$879.55
48% \$-8.6	0	0	9(0.1%)	86(1.2%)	199(2.7%)	0	0	0	0	0	0	0	\$640.04
52% \$-5.4	0	1(0.0%)	7(0.1%)	80(1.1%)	208(2.8%)	0	0	0	0	0	0	0	\$420.10
56% \$-3.2	0	0	2(0.0%)	42(0.6%)	247(3.4%)	0	0	0	0	0	0	0	\$472.10
60% \$-1.4	0	0	0	18(0.2%)	277(3.8%)	0	0	0	0	0	0	0	\$256.32
64% \$-0.1	0	0	0	0	183(2.5%)	174(2.4%)	0	0	0	0	0	0	\$26.15
68% \$0.0	0	0	0	0	0	229(3.1%)	0	0	0	0	0	0	\$129.42
72% \$0.3	0	0	0	0	0	277(3.8%)	18(0.2%)	0	0	0	0	0	\$292.22
76% \$1.8	0	0	0	0	0	219(3.0%)	64(0.9%)	7(0.1%)	2(0.0%)	0	0	0	\$487.95
80% \$5.4	0	0	0	0	0	197(2.7%)	80(1.1%)	11(0.1%)	2(0.0%)	0	0	0	\$1,149.37
84% \$17.5	0	0	0	0	0	184(2.5%)	67(0.9%)	23(0.3%)	6(0.1%)	14(0.2%)	0	0	\$2,784.14
88% \$58.1	0	0	0	0	0	93(1.3%)	67(0.9%)	49(0.7%)	27(0.4%)	57(0.8%)	0	0	\$3,823.50
92% \$203.3	0	0	0	0	0	10(0.1%)	23(0.3%)	37(0.5%)	46(0.6%)	178(2.4%)	0	0	\$2,846.98
96% \$496.6	0	0	0	0	0	2(0.0%)	7(0.1%)	32(0.4%)	49(0.7%)	203(2.8%)	0	0	\$6,221.80
100% \$4,635.2	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	113 1.5%	376 5.1%	910 12.4%	1,342 18.3%	2,141 29.2%	1,385 18.9%	326 4.4%	159 2.2%	132 1.8%	455 6.2%			
CUMULATIVE	113 1.5%	489 6.7%	1,399 19.1%	2,741 37.3%	4,882 66.5%	6,267 85.4%	6,593 89.8%	6,752 92.0%	6,884 93.8%	7,339 100.0%			
AVG.MO DIFF.	\$-1,067.6	\$-605.9	\$-413.5	\$-122.9	\$-27.2	\$16.8	\$66.9	\$323.7	\$682.1	\$705.7			
AVG.MO BILL	\$3,225.0	\$3,874.8	\$5,557.1	\$3,220.2	\$1,968.6	\$1,650.3	\$2,047.8	\$4,729.2	\$5,392.6	\$1,709.8			

A Percentage difference which falls on a column boundary is included in the higher column

PACIFIC GAS AND ELECTRIC COMPANY EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Table 8: School Gas Bill Impacts of Pending Rate Design Changes
 Current: Jan 2020 AGT Rates; Proposed: Jan 2020 AGT+GCAP Rates
 For Qualifying Core and Non-Core Schools
 Using Jan 2018 to Dec 2018 Usage Data

	Rate Schedule=ALL											ABOVE 20% AVG.MO
	BELOW -20%	-20 - -10%	-10 - -5%	-5 - -2.5%	-2.5 - 0%	0 - 2.5%	2.5 - 5%	5 - 10%	10 - 20%	INCREASE	INCREASE	
\$ MONTHLY \$	DECREASE	DECREASE	DECREASE	DECREASE	DECREASE	INCREASE	INCREASE	INCREASE	INCREASE	INCREASE	INCREASE	BILL
4% \$0.	0	0	0	0	0	193(4.0%)	0	0	0	0	0	\$8.43
8% \$1.	0	0	0	0	0	52(1.1%)	137(2.8%)	0	40(0.1%)	0	0	\$22.26
12% \$2.	0	0	0	0	0	0	193(4.0%)	0	1(0.0%)	0	0	\$46.37
16% \$4.	0	0	0	0	0	0	191(4.0%)	0	2(0.0%)	0	0	\$77.95
20% \$6.	0	0	0	0	0	0	191(4.0%)	0	2(0.0%)	0	0	\$114.53
24% \$8.	0	0	0	0	0	0	188(3.9%)	3(0.1%)	1(0.0%)	0	0	\$155.83
28% \$10.	0	0	0	0	0	0	173(3.6%)	18(0.4%)	2(0.0%)	0	0	\$200.21
32% \$12.	0	0	0	0	0	1(0.0%)	150(3.1%)	40(0.8%)	2(0.0%)	0	0	\$246.23
36% \$14.	0	0	0	0	0	0	133(2.8%)	60(1.2%)	1(0.0%)	0	0	\$282.10
40% \$16.	0	0	0	0	0	0	125(2.6%)	64(1.3%)	3(0.1%)	0	0	\$318.76
44% \$17.	0	0	0	0	0	0	108(2.2%)	83(1.7%)	2(0.0%)	0	0	\$358.13
48% \$19.	0	0	0	0	0	1(0.0%)	110(2.3%)	80(1.7%)	2(0.0%)	0	0	\$411.59
52% \$22.	0	0	0	0	0	0	108(2.2%)	85(1.8%)	1(0.0%)	0	0	\$445.97
56% \$24.	0	0	0	0	0	0	98(2.0%)	96(2.0%)	0	0	\$491.26	
60% \$27.	0	0	0	0	0	1(0.0%)	83(1.7%)	108(2.2%)	0	0	\$561.33	
64% \$30.	0	0	0	0	0	0	78(1.6%)	114(2.4%)	1(0.0%)	0	0	\$603.86
68% \$33.	0	0	0	0	0	0	85(1.8%)	105(2.2%)	3(0.1%)	0	0	\$662.59
72% \$37.	0	0	0	0	0	0	92(1.9%)	100(2.1%)	1(0.0%)	0	0	\$735.39
76% \$42.	0	0	0	0	0	0	82(1.7%)	111(2.3%)	0	0	\$836.72	
80% \$50.	0	0	0	0	0	0	74(1.5%)	115(2.4%)	3(0.1%)	0	0	\$963.62
84% \$59.	0	0	0	0	0	0	75(1.6%)	116(2.4%)	2(0.0%)	0	0	\$1,141.69
88% \$79.	0	0	0	0	0	0	79(1.6%)	114(2.4%)	0	0	\$1,450.31	
92% \$115.	0	0	0	0	0	0	90(1.9%)	100(2.1%)	3(0.1%)	0	0	\$2,014.17
96% \$197.	0	0	0	0	0	0	179(3.7%)	12(0.2%)	2(0.0%)	0	0	\$3,266.23
100% \$12,942.	0	0	0	0	0	0	176(3.6%)	1(0.0%)	16(0.3%)	0	0	\$8,086.20
TOTAL	0	0	0	0	0	248	2,998	1,525	54	0	0	
	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	62.1%	31.6%	1.1%	0.0%	0.0%	
CUMULATIVE	0	0	0	0	0	248	3,246	4,771	4,825	4,825	4,825	
	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	67.3%	98.9%	100.0%	100.0%	100.0%	
AVG.MO DIFF.	0	0	0	0	0	\$0.3	\$43.9	\$37.8	\$851.2	0	0	
AVG.MO BILL	0	0	0	0	0	\$43.3	\$1,006.3	\$781.7	\$5,841.7	0	0	

A Percentage difference which falls on a column boundary is included in the higher column

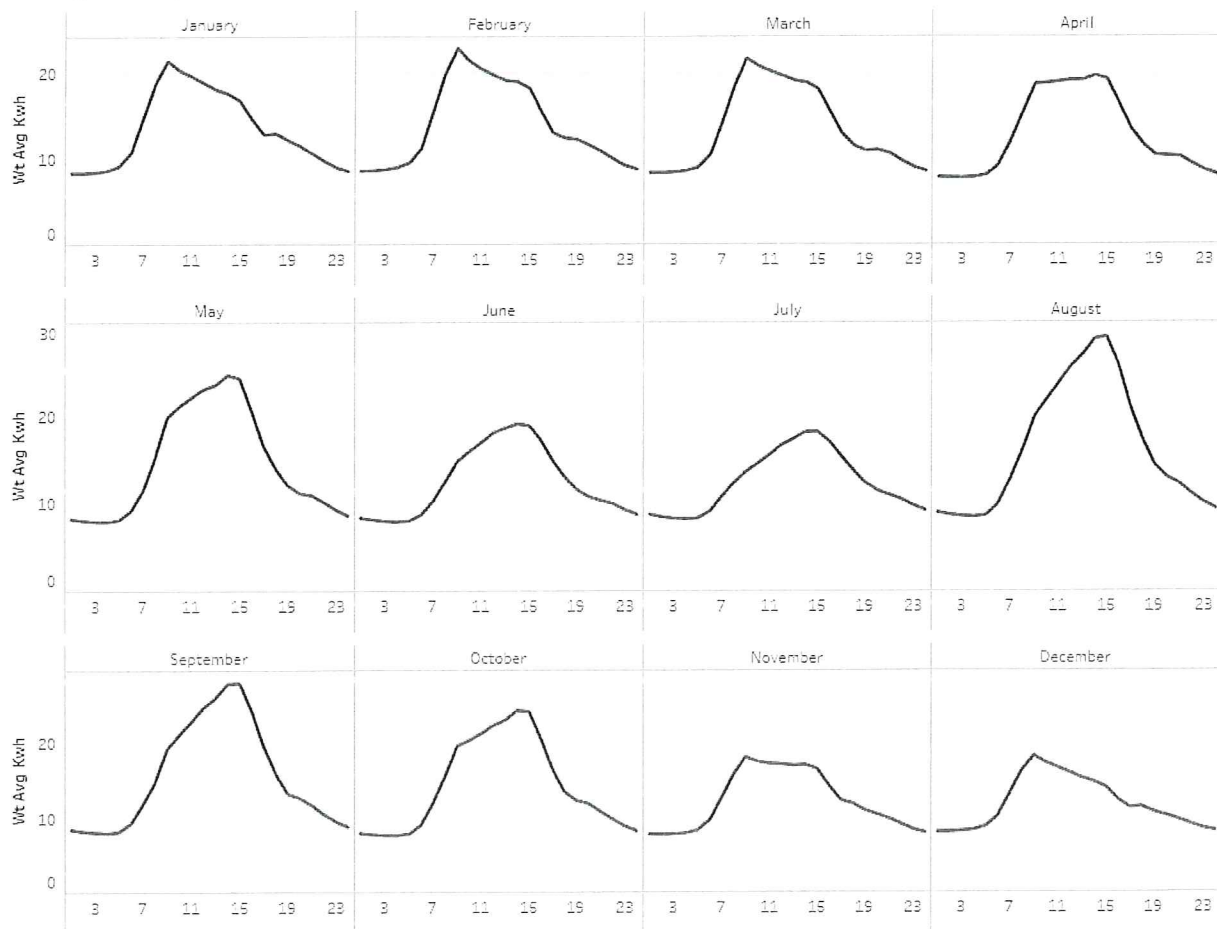
PACIFIC GAS AND ELECTRIC COMPANY EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Figure 1: Annual Monthly School Load Profile

Figures 1 and 2 reflect kWh usage data averaged across a selection of 4,252 accounts from the total population of 6,154 total non-NEM schools accounts.

Non-NEM Annual Monthly Load Profile

Average Hourly Load Profile

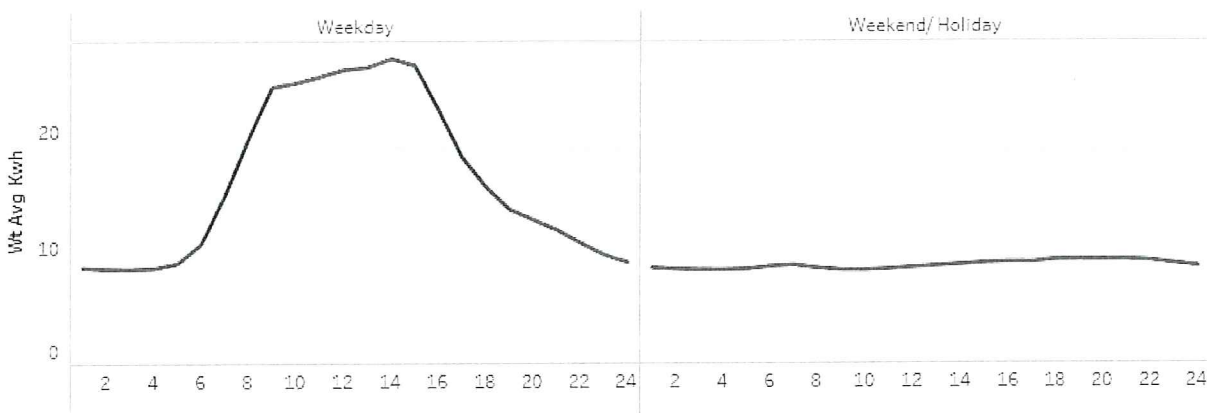


PACIFIC GAS AND ELECTRIC COMPANY
EVALUATION OF AB 2068 SCHOOL RATE DISCOUNT

Figure 2: Typical School Weekday versus Weekend Load Profile

Non-Solar Weekday/ Weekend School Load Profile

Average Hourly Load Profile





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December 18, 2019

Edward Randolph, Energy Division Director
California Public Utilities Commission
505 Van Ness Avenue
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RE: San Diego Gas & Electric Company (“SDG&E”) Report on the Feasibility and Economic Impacts of Establishing a Public School Electric Rate as Directed by Assembly Bill 2068

Director Randolph,

Enclosed please find SDG&E’s report on the feasibility and economic impacts of establishing a public school electric rate, as directed in Assembly Bill (“AB”) 2068.

AB 2068 requires the California Public Utilities Commission (“Commission”) to direct all electrical and gas corporations to evaluate, and to report findings to the Commission on, the feasibility and economic impacts of establishing a public school electric and gas rate that would reflect a discount from the current rate structure.

SDG&E is submitting an electric-only school rate analysis for its service territory, while the Southern California Gas Company will be submitting a gas rate school discount analysis for both its own, and SDG&E’s service territory.

AB 2068 requires the Commission to compile these reports and submit this compilation to the Legislature by January 1, 2020. SDG&E timely provides this report in anticipation of the Commission’s upcoming submission date.

Clay Faber

Director, Regulatory Affairs

cc: Bruce Kaneshiro
Paul Phillips
Masoud Foudeh

I. INTRODUCTION

Assembly Bill (“AB”) No. 2068, approved by the California Governor on August 27, 2018, added Section 749.5 to the Public Utilities Code, which requires the California Public Utilities Commission (“CPUC” or “Commission”) to direct all electrical and gas corporations to evaluate, and report findings to the Commission on the feasibility and economic impacts of establishing a public school electric and gas rate that would reflect a discount from the current rate structure. This bill also requires the CPUC to compile these reports and to submit this compilation to the California Legislature by January 1, 2020.

As directed by AB 2068 §749.5(b), the report should include, but should not be limited to, the following:

(1) Commercial rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation.

(2) Economic impact to all ratepayers if all public schools within the service territory received a discount from the current rate structure.

(3) The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the commission and in the planning stages or proposed by electric and gas corporations.

(4) The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

II. SDG&E’S EFFORT-TO-DATE IN DEVELOPMENT OF AN ELECTRIC RATE FOR A SCHOOLS-ONLY CLASS

Commission Decision (“D.”) 17-08-030 (adopted August 24, 2017) required that San Diego Gas & Electric Company (“SDG&E”) develop a Schools-Only¹ electric rate proposal and preview this proposal prior to filing its 2019 General Rate Case (“GRC”) Phase 2.² Based in part on the outcome of this analysis, in Application (“A.”) 19-03-002, SDG&E proposed a Schools-Only electric rate. SDG&E also proposed that only schools that meet the definition of a “public school” under AB 2068 should be eligible to take service on its Schools customer class tariffs, and that all school accounts that meet this definition should be required to take service on one of the Schools customer class proposed tariffs, with the exception of Schools Street Lighting accounts and an opt-out exception for separately metered electric vehicle (“EV”) charging.

Through its modeling and analysis, SDG&E has found that the cost to serve the Schools customer class as a separate customer class is lower on average than the cost to serve the Medium and Large Commercial and Industrial (“M/L C&I”) customer class, which is the class

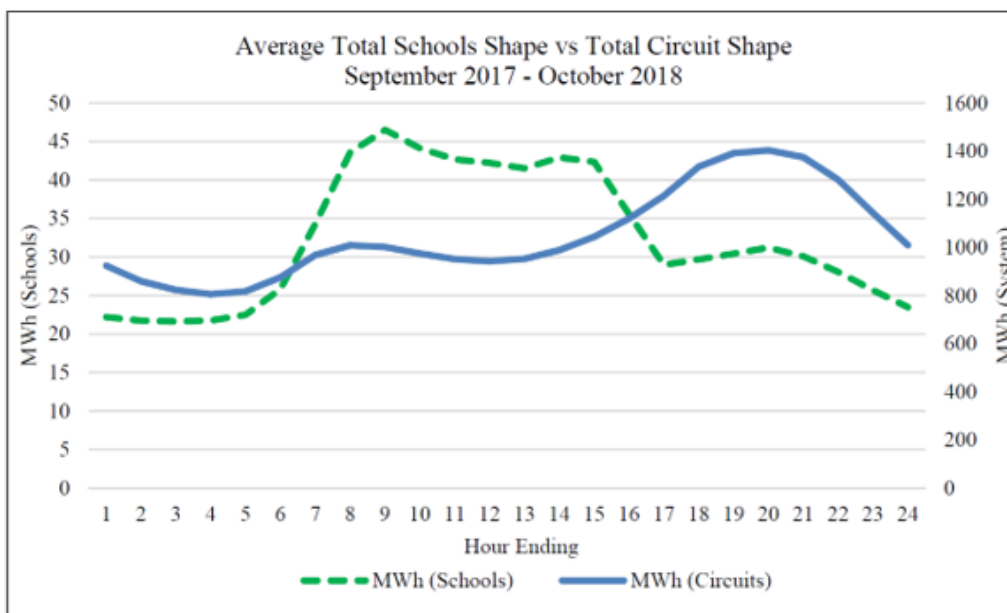
¹ School is defined as a public school, including a charter school, maintaining a kindergarten, or any of the grades 1 to 12, inclusive.

² Ordering Paragraph (“OP”) 36 of D.17-08-030.

from which many of the Schools accounts currently take service. The difference in cost of service is driven by the average load profile of the Schools customer class, as a whole.

The average daily load profile of the Schools customer class typically peaks in the morning and afternoon, with the highest usage between 7:00 AM and 4:00 PM, as displayed in the Average Total Schools Shape in Figure 1. Schools class customers tend to be located in predominantly residential areas, meaning that their typical local circuit has a load profile similar to that of an average residential customer, as reflected in the Total Circuit Shape displayed in Figure 1. The average residential customer has lower usage during the day and higher usage in the evening, during SDG&E’s Standard On-Peak TOU period (4:00 PM – 9:00 PM). The Schools’ customer class pattern of demand has an overall average profile that contributes less to SDG&E’s peak load needs, relative to the circuits on which Schools customer class take service.

Figure 1³: SDG&E Total Schools Customer Class Shape vs. Total Circuit Shape (September 2017- October 2018)



Note: Total circuit shape is the aggregate load of circuits with a school account on that circuit.

As a result, the Schools customer class typically use energy when it is more beneficial for the local distribution grid, as they do not peak coincidentally with their respective distribution circuits and substations, on average, and therefore have a lower marginal distribution demand cost to serve relative to the M/L C&I class.

This same pattern holds for marginal generation commodity costs, in that the Schools customer class, on average, does not contribute as much load to SDG&E’s highest demand system hours that determine the allocation of marginal generation capacity costs; therefore, they have a lower marginal generation capacity cost to serve relative to the M/L C&I class. SDG&E’s proposal in A.19-03-002 aims to provide Schools with electric rates that reflect their actual cost to serve.

³ A.19-03-002. Prepared Direct Testimony of Jeff P. Stein, at page JS-8.

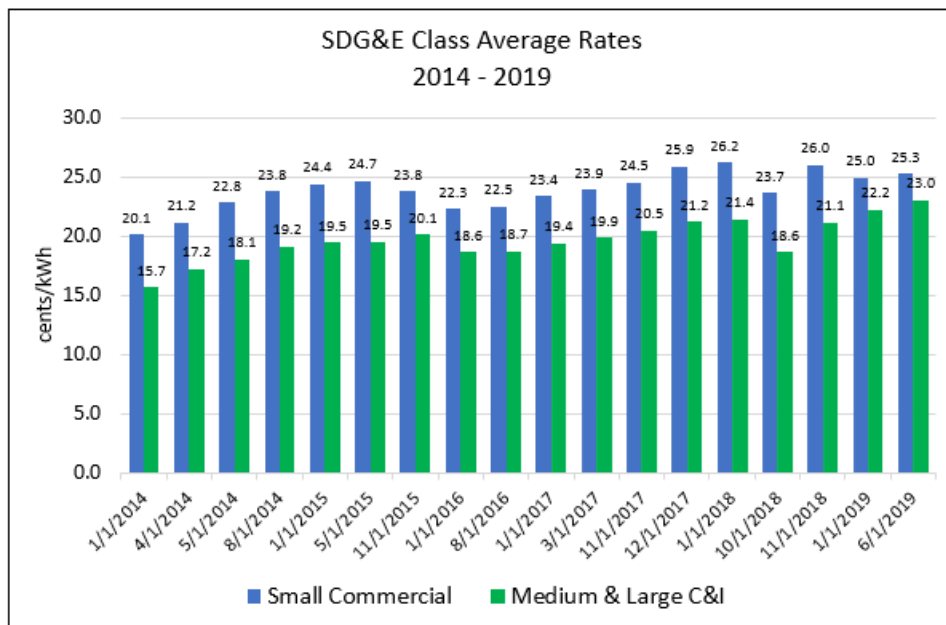
The proposed electric rate schedules for the Schools customer class in SDG&E’s 2019 GRC Phase 2 are designed to ease the transition of these customers to a new rate. The electric rate design for the Schools customer class mirrors the rates on which the majority of the Schools accounts currently take service. Therefore, the Schools customer class accounts will have the same rate structure as they are transitioned to the new Schools customer class rate schedules. SDG&E has also proposed an optional Schools customer class electric rate for those customers who are currently served on Schedule DG-R, which is a M/L C&I Class electric rate schedule limited to non-residential customers with distributed generation. SDG&E has not proposed changes to its FERC-jurisdictional electric rate design, as it is outside the scope of A.19-03-002.

III. REPORT REQUIREMENTS OUTLINED IN AB 2068

1) Commercial electric rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation.

Figure 2 presents the Small Commercial and Medium and Large Commercial/Industrial customer class average electric rates as of January 1, 2014 through current.⁴

Figure 2: SDG&E Small Commercial & Medium and Large Commercial/Industrial Customer Class Average Electric Rates (2014 – 2019)



⁴ The June 1, 2019 rates are the current and effective rates at the time this document was submitted.

2) Economic impact to all electric ratepayers if all public schools within the service territory received a discount from the current rate structure.

Schools-Only Customer Electric Rate Class

SDG&E estimates the proposed Schools-Only customer class would result in a net 11% reduction of revenue collected from the Schools’ accounts compared to revenue otherwise collected under the Schools current tariff schedules. This is because their electric rates would reflect the actual cost to serve the Schools-Only class. SDG&E’s analysis assumed the electric rate structure that was in effect as of January 1, 2019, which reflects the electric rates and TOU periods each School account took service on at the time the 2019 GRC Phase 2 Application was filed. This equates to an illustrative revenue shift of approximately \$8.6 million and \$10.6 million in SDG&E’s application for Year 1 and Year 2,⁵ respectively, of its 2019 GRC Phase 2. While some Schools accounts could see a greater reduction or even an increase in bills, this is because the illustrative electric rates reflect the actual cost of service to Schools as a customer class.

Figure 3 presents the illustrative class average electric rates on January 1, 2019,⁶ and the 2019 GRC Phase 2 Proposed Year 1 electric rates.

Figure 3: SDG&E Illustrative Electric Rates – Current and with Proposed 2019 GRC Phase 2⁷

Customer Class	Current 1/1/2019 Rates (¢/kWh)	2019 GRC Phase 2 Proposed Rates (¢/kWh)	Rate Change (¢/kWh)	Percentage Rate Change (%)
Residential	26.251	27.742	1.491	5.68%
Small Commercial	24.963	26.034	1.071	4.29%
Medium and Large C&I	22.205	22.815	0.610	2.75%
Agricultural	17.459	18.159	0.700	4.01%
Lighting	21.850	20.332	-1.518	-6.95%
Schools	0.000	25.912	25.912	0.00%
System Total	23.738	24.885	1.147	4.83%

Figure 4 presents the class average revenues on January 1, 2019 (“Current”), and the illustrative 2019 GRC Phase 2 Proposed Year 1 revenues.

⁵ Year 1 corresponds to 2021, and Year 2 corresponds to 2022.

⁶ Advice 3326-E, Consolidated Filing to Implement January 1, 2019 Electric Rates

⁷ See Appendix C, Table 1 in SDG&E’s 2019 GRC Phase 2 Application.

Figure 4: SDG&E Illustrative Electric Rate Revenues - Current and with Proposed 2019 GRC Phase 2⁸

Customer Class	Current 1/1/2019 Rate Revenue (\$Million)	2019 GRC Phase 2 Proposed Revenue (\$Million)	Rate Revenue Change (\$Million)	Percentage Rate Revenue Change (%)
Residential	1,614	1,568	-46	-2.85%
Small Commercial	561	558	-3	-0.58%
Medium and Large C&I	1,700	1,666	-34	-2.01%
Agricultural	55	56	1	1.82%
Lighting	17	17	0	-1.14%
Schools	0	80	80	0.00%
System Total	3,947	3,945	-2	-0.06%

The estimated illustrative billed revenue of the School class at the time of SDG&E’s GRC Phase 2 filing is presented in Figure 5. Actual bill amounts could vary, as SDG&E’s illustrative bill impacts only include customer accounts that have 12 months of historical usage data, and accounts are opened and closed regularly.

Figure 5: SDG&E Illustrative Annual Estimated Billed Electric Revenue of School Customer Class Accounts (\$ millions)⁹

	Annual Estimated Billed Revenue (\$ millions)
Current (January 1, 2019)	\$ 79.0
2019 GRC Phase 2 - Year 1	\$ 70.4
2019 GRC Phase 2 - Year 2	\$ 68.4

Line Item Discount

To illustrate a single percentage line-item discount approximately equivalent to the reduction in revenue that the School customer class would be billed if SDG&E’s Proposed 2019 GRC Phase 2 Year 1 was adopted as proposed, SDG&E estimates an illustrative cost shift of \$8.7 million annually. However, if SDG&E’s electric rates increased over time, then the absolute amount of the discount would increase as well. This discount, if it were established, would not be tied to the School customer class cost of service after the discount’s inception; therefore, the percent discount would not change, even if the cost of service for the Schools

⁸ See Appendix C, Table 2 in SDG&E’s 2019 GRC Phase 2 Application.

⁹ Bill impacts based on 12 months of historical usage data (August 1, 2017 – July 31, 2018).

customer class increased or decreased. This could result in a much larger subsidy than the line-item discount scenario contemplated herein.

3) The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the Commission and in the planning stages or proposed by electric and gas corporations.

SDG&E has not proposed any modifications in its 2019 GRC Phase 2 Application to the current Standard TOU periods that were implemented on December 1, 2017 as a result of its 2016 GRC Phase 2 Decision (D.17-08-030). Schools that interconnected a distributed generation system with net energy metering (“NEM”) after the issuance of D.17-10-018 are allowed to stay on their old “grandfathered” TOU periods for 10 years after interconnection, per D.17-06-001 as modified by D.17-10-018.^{10,11} In no event shall the [grandfathering] duration continue beyond December 31, 2027 (for schools).¹² The number of school accounts taking service on Standard TOU and Grandfathered TOU electric rates is presented in Figure 6.

Figure 6: Number of Schools Accounts on Standard and Grandfathered TOU Periods for SDG&E

	Current TOU Periods	Grandfathered TOU Periods
Decision	D.17-08-030	D.17-08-030, D.17-06-001, D.17-10-018
Number of Accounts	1,038	161

SDG&E has not proposed changes to electric rate design elements in its 2019 GRC Phase 2. The proposed Schools customer class electric rates have the same rate design as SDG&E’s default Small Commercial rate, default M/L C&I rate, and Schedule DG-R for Schools with distributed generation currently taking service on Schedule DG-R. Most of the Schools accounts take service on either the current default Small Commercial rate, the current default M/L C&I electric rate, or Schedule DG-R.

4) The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

SDG&E’s proposed Schools customer class in its 2019 GRC Phase 2 application is based on marginal costs and the actual cost to serve the Schools customer class, and therefore would not result in a cost shift. A line item discount for Schools accounts as discussed previously would create a cost shift that would result in a redistribution of revenue as displayed in Figure 7. SDG&E’s contemplated line item discount below is recovered volumetrically (\$/kWh) through the Public Purpose Program (“PPP”) electric rate component, allocated on customer class sales.

¹⁰ D.17-06-001, Ordering Paragraph (“OP”) 5.

¹¹ D.17-10-018, OP 2.

¹² *Id.*, at 6.

Figure 7: SDG&E Illustrative Estimated Annual Revenue Requirement to Recover Line-Item Discount

Customer Class	% System Sales¹³	Estimated Annual Revenue Requirement to Recover Schools Discount
Residential	35.1%	\$ 3,054,097
Small Commercial	11.4%	\$ 989,240
Med. & Large C&I	51.5%	\$ 4,476,073
Agriculture	1.5%	\$ 134,116
Lighting	0.4%	\$ 37,260
System	100.0%	\$ 8,690,785

Feasibility of Implementation

The Schools Customer Class rate proposed in SDG&E’s 2019 GRC Phase 2 has a proposed implementation timeline of 2021.

¹³ Reflects sales determinants used in PPP rate component calculations effective January 1, 2019.



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December 23, 2019

Edward Randolph
Energy Division Director
California Public Utilities Commission
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RE: Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (“SDG&E”) Report on the Feasibility and Economic Impacts of Establishing a Public School Gas Rate Discount as Directed by Assembly Bill 2068

Director Randolph,

Enclosed please find SoCalGas’ and SDG&E’s report on the feasibility and economic impacts of establishing a public school gas rate, as directed in Assembly Bill (“AB”) 2068.

AB 2068 requires the California Public Utilities Commission (“Commission”) to direct all electrical and gas corporations to evaluate, and to report findings to the Commission on, the feasibility and economic impacts of establishing a public school electric and gas rate that would reflect a discount from the current rate structure.

SoCalGas is submitting a gas rate school discount analysis for both its own and SDG&E’s gas service territory.

Ronald van der Leeden
Director, Regulatory Affairs

cc:

Paul Phillips
Dorothy Duda
Jean Spencer
Elizabeth La Cour

I. INTRODUCTION

Assembly Bill (“AB”) No. 2068, approved by the California Governor on August 27, 2018, added Section 749.5 to the Public Utilities Code, which requires the California Public Utilities Commission (“CPUC” or “Commission”) to direct all electrical and gas corporations to evaluate, and report findings to the Commission on the feasibility and economic impacts of establishing a public school electric and gas rate that would reflect a discount from the current rate structure. This bill also requires the CPUC to compile these reports and to submit this compilation to the California Legislature by January 1, 2020.

As directed by AB 2068 §749.5(b), the report should include, but should not be limited to, the following:

(1) Commercial rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation.

(2) Economic impact to all ratepayers if all public schools within the service territory received a discount from the current rate structure.

(3) The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the commission and in the planning stages or proposed by electric and gas corporations.

(4) The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

II. REPORT REQUIREMENTS OUTLINED IN AB 2068

1) Commercial rate increases in the past five years that affected public schools within the service territory of each electrical and gas corporation.

For both SoCalGas and SDG&E, public schools¹ receive gas service under the core commercial and industrial (C&I) rates. For both utilities, the core C&I transportation rate structure reflects three-tiered declining block rates. Figure 1 and Figure 2 show, respectively, SoCalGas’ and SDG&E’s core C&I tiered gas transportation rates as of January 1, 2015 through current.²

¹ Kindergarten through 12th grade including Charter schools.

² The May 1, 2019 rates are the current and effective rates at the time this document was submitted.

Figure 1: SoCalGas' Core C&I Tiered Gas Transportation Rates (2015 – 2019)

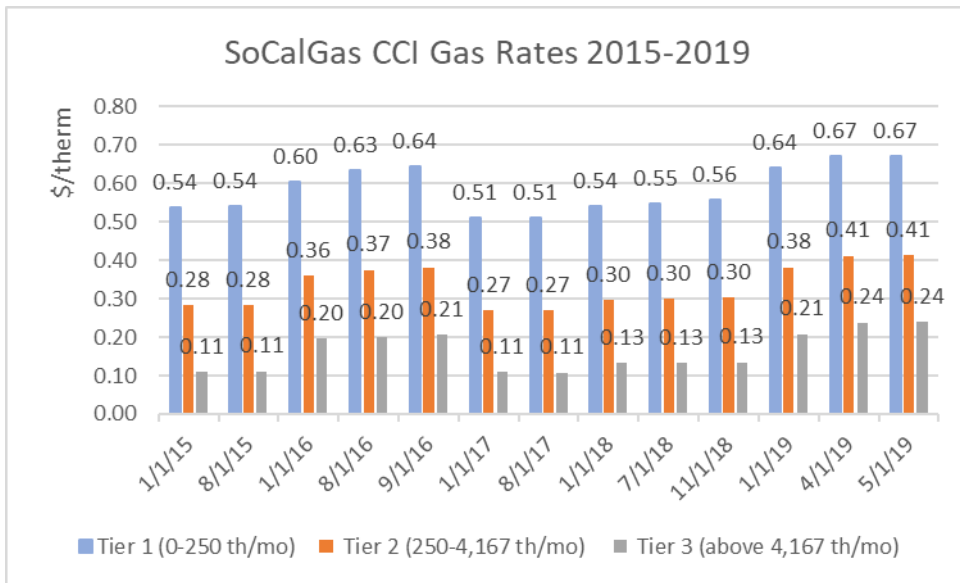
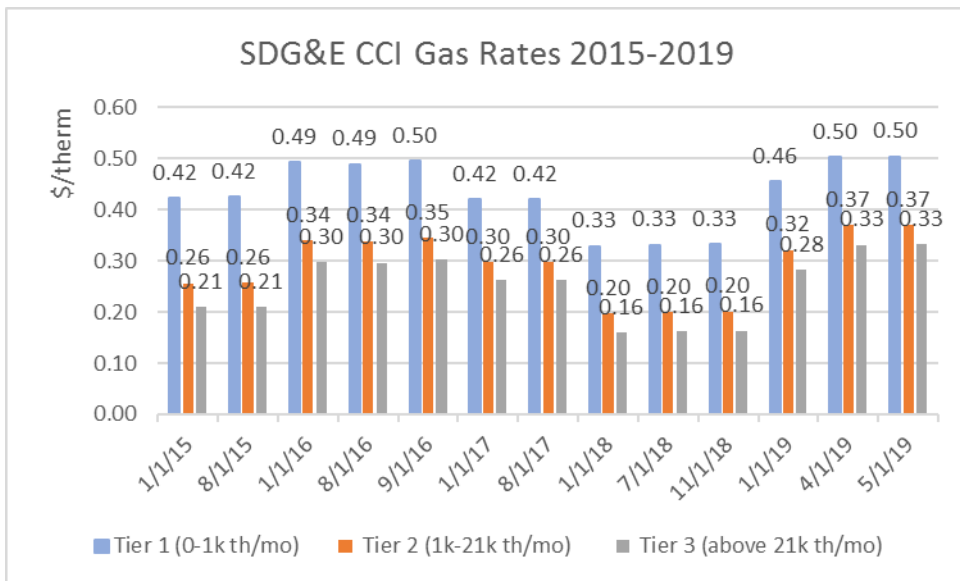


Figure 2: SDG&E's Core C&I Tiered Gas Transportation Rates (2015 – 2019)



2) Economic impact to all ratepayers if all public schools within the service territory received a discount from the current rate structure.

To evaluate the economic impact to all gas ratepayers if all public schools within their respective service territories received a discount, SoCalGas and SDG&E assumed that such a discount would be applicable to the core C&I transportation rates only (i.e., the discount would not apply to the commodity rate or other surcharges, such as the Public Purpose Program Surcharge). SoCalGas and SDG&E assumed an illustrative 10% discount for public schools relative to other customers who take service under the core C&I transportation rates. To determine the school rate and discount, SoCalGas and SDG&E applied the 10% discount to both the core C&I customer charge as well as the core C&I volumetric rates. The total cost to provide such an illustrative discount was then allocated to all customer classes on an equal-cents-per-therm basis.

The revised Core C&I tiered transportation rates were determined using recent³ average monthly aggregated public schools' gas usage by respective tier to derive the total public school discount by tier. For each of the two utilities, this amount represents the cost that needs to be recovered from all customer classes to make the discount revenue neutral. The estimated 10% public schools gas transportation rate discount results in \$1.34 million discount for SoCalGas and \$18 thousand discount for SDG&E's gas customers.⁴

3) The impact of planned modifications to the time intervals reflected in time-of-use rates and to rate design elements, as adopted by the Commission and in the planning stages or proposed by electric and gas corporations.

SoCalGas and SDG&E do not have time-of-use rates for gas service. Hence, this section is not applicable.

4) The cost shifts that would occur, if any, and to which consumers the costs would shift, as a result of a discounted rate for public schools.

The illustrative 10% public school transportation rate discount will result in cost shifts to other customer classes to keep the utilities revenue neutral. Which customer classes would pay for this discount, and by how much, would depend on the specific cost allocation method chosen to recover such discount. For this report, SoCalGas and SDG&E have assumed that all core and noncore customer classes would share this cost recovery responsibility by allocating the discount cost on an equal-cents-per-therm basis. Each customer class' share is shown in Figure 3 and Figure 4 below for SoCalGas and SDG&E, respectively.

³ "Recent" gas usage is defined as September 2018-August 2019 for SoCalGas and January 2018-December 2018 for SDG&E.

⁴ The revenue shortfall from SDG&E's illustrative public school transportation rate discount appears low. SDG&E is reviewing the gas accounts eligible for public school rate discount.

Figure 3: SoCalGas' Illustrative Public Schools Transportation Rate Discount Cost Recovery by Customer Class

Customer Class	% of System Revenue	Estimated School Discount Revenue Increase (\$ in thousands)
Residential	66.7%	\$307
Core C&I	13.9%	\$229
NGV	1.0%	\$21
Gas A/C	0.0%	\$0
Gas Engine	0.1%	\$0
Non-Core C&I	4.1%	\$206
Non-Core EG	2.8%	\$364
Wholesale	0.9%	\$213
BTS	9.7%	\$0
UBS	0.7%	\$0
Total	100.0%	\$1,340

Figure 4: SDG&E's Illustrative Public Schools Transportation Rate Discount Cost Recovery by Customer Class

Customer Class	% of System Revenue	Estimated School Discount Revenue Increase (\$ in thousands)
Residential	74.9%	\$8
Core C&I	17.3%	\$6
NGV	1.0%	\$0
Non-Core C&I	1.4%	\$1
Non-Core EG	5.4%	\$3
Total	100.0%	\$18

III. FEASIBILITY OF IMPLEMENTATION

The illustrative discounts described in this report are not infeasible. However, if rate discounts for public schools are to be implemented, the time required to make changes to billing systems must be considered and balancing accounts to amortize public schools rate discounts into customers' transportation rates must be authorized by the Commission.