

**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA**

Application of Pacific Gas and Electric Company for)	
Approval of its Residential Rate Design Window Proposals,)	Application 17-12-011
Including to Implement a Residential Default Time-of-Use)	(Filed December 21, 2017)
Rate along with a Menu of Residential Rate Options,)	
Followed by addition of a Fixed Charge Component to)	
Residential Rates.)	
_____)	
)	
)	A. 17-12-012
And Related Matters)	A. 17-12-013
)	
_____)	

Prepared Direct Testimony of
Patrick G. McGuire
on behalf of the
Solar Energy Industries Association

May 31, 2019

EXECUTIVE SUMMARY OF RECOMMENDATIONS

This testimony presents the recommendations of the Solar Energy Industries Association (SEIA) concerning residential fixed charges and minimum bills for the three investor-owned utilities (IOUs). SEIA strongly favors the use of minimum bills in preference to fixed charges. This testimony explains why, for residential customers, minimum bills provide a better balance among the Commission's competing rate design goals than do fixed charges. Of particular concern to SEIA in this case is San Diego Gas & Electric's (SDG&E) proposal to increase significantly the level of its minimum bill, from \$10 per month to \$39 per month.

This testimony recommends that the Commission adopt a policy that the minimum bill for standard residential electricity customers should be the higher of (1) \$10 per month or (2) the utility's adopted marginal customer costs.

In Decision 15-07-001, the Commission adopted a \$10 per month minimum bill for the delivery portion of residential customer bills. Residential fixed charges currently are limited by statute to \$10 per month (indexed to inflation). Subsequently, Decision 17-09-035 determined that the types of costs recovered in fixed charges should include only certain customer-specific delivery costs. I argue that the design of minimum bills also should be consistent with these adopted limitations on the types of costs that can be included in fixed charges. Thus, the residential minimum bill should collect only the same type of marginal customer-related delivery costs that can be collected through a fixed charge for delivery service.

SEIA strongly opposes SDG&E's proposal to raise its minimum bill for residential customers from \$0.329 per day to \$01.284 per day (that is, from about \$10 per month to \$39 per month). Increasing the minimum bill to four times its previous level is not consistent with Commission rate design principles, and may be confusing to affected customers at a time when the focus should be on the transition to default TOU rates for residential customers.

The impact of higher minimum bills is most acute for smaller customers, including (1) low-income, low-use customers and (2) solar customers that have small net loads for utility delivered energy given their investments in onsite solar generation. The Commission should disregard SDG&E's argument that a higher minimum bill will reduce an alleged cost shift from solar customers to other ratepayers. Whether such a cost shift exists (and if it does, its magnitude) is not an issue for this case, and will be examined in detail in the upcoming review of net energy metering (NEM). Rate changes primarily intended to change customer incentives to adopt specific distributed energy resource (DER) technologies should be addressed in the Commission proceeding established to consider those issues, not in a proceeding to establish rate design for overall residential rates.

My review of current marginal customer costs for the three IOUs indicates that these marginal costs are in the neighborhood of \$10 per month (or less) for each of the three IOUs. As a result, there is no pressing need to revise the IOUs' current \$10 per month residential minimum bill for delivery service.

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**Prepared Direct Testimony of Patrick G. McGuire
on behalf of the Solar Energy Industries Association**

1 I. INTRODUCTION AND SEIA'S INTEREST

2
3 **Q1: Please state for the record your name, position, and business address.**

4 A1: My name is Patrick G. McGuire. I am a consultant for the firm Crossborder Energy. My
5 business address is 2560 Ninth Street, Suite 213A, Berkeley, California 94710.
6

7 **Q2: Please describe your experience and qualifications.**

8 A2: My experience and qualifications are described in the attached CV, which is **Attachment**
9 **PGM-1** to this testimony. I have more than 25 years of experience on rate design and
10 ratemaking issues for natural gas and electric utilities. I began my career in 1989 with
11 the consulting firm Sierra Energy and Risk Assessment. Since 1992, I have worked for
12 Crossborder Energy as an energy analyst in support of the analytic work and studies
13 performed by the firm. I have contributed analysis and policy recommendations to

1 Crossborder Energy’s participation in numerous cost allocation and rate design phases of
2 general rate cases for the investor-owned utilities (IOUs) in California.

3
4 **Q3: Have you testified previously before this Commission?**

5 A3: Yes, I have. This prior testimony is listed in my CV.
6

7 **Q4: On whose behalf are you testifying today?**

8 A4: I am appearing on behalf of SEIA. SEIA is the national trade association of the United
9 States solar industry. Through advocacy and education, SEIA and its 1,000 member
10 companies work to make solar energy a mainstream and significant energy source by
11 expanding markets, removing market barriers, strengthening the industry, and educating
12 the public on the benefits of solar energy. SEIA’s members have a strong interest in the
13 adoption and implementation of innovative, forward-looking policies and programs that
14 will accelerate the development of solar photovoltaic (PV) generation. The views
15 contained in this testimony represent the position of SEIA as an organization, but not
16 necessarily the views of any particular member with respect to any issue.
17

18 **Q5: What is the purpose of your testimony?**

19 A5: My testimony presents SEIA’s recommendations opposing San Diego Gas & Electric
20 Company’s (SDGE) proposal to increase the residential non-CARE customer’s minimum
21 bill by almost four times (+280%), from \$0.329 per day on March 1, 2018 to \$1.284 per
22 day starting March 1, 2020. Minimum bills are an issue closely related to fixed charges,
23 so this testimony also provides SEIA’s views on residential fixed charges and discusses
24 why minimum bills are preferable as a substitute for fixed charges for residential
25 customers.
26

1 II. BACKGROUND AND POLICY

2
3 A. Policies on Residential Fixed Charges

4
5 **Q6: Decision (D.) 15-07-001 was the Commission’s policy order in its residential rate**
6 **design rulemaking initiated in 2012 (R. 12-06-013). What did the Commission**
7 **determine in this order concerning residential fixed charges?**

8 A6: D. 15-07-001 declined to adopt new residential fixed charges. Instead, the order directed
9 that future general rate case (GRC) Phase 2 cases should determine which categories of
10 costs were “fixed costs” that might be included in a residential fixed charge. The
11 decision also expressed concern with residential customers’ opposition to, and lack of
12 understanding of, a fixed charge. Given all the other major rate design changes that the
13 order adopted, the Commission decided that it was “reasonable to defer consideration of
14 fixed charges until the IOUs have completed the tier convergence and tier flattening
15 adopted in this decision and default TOU has been approved.”¹

16
17 The order made a number of findings about residential fixed charges that illustrate
18 both the pros and cons of this rate design element, when applied to small customers:

19 163. A fixed charge or minimum bill that recovers customer-related costs would result in
20 more equitable rates for low usage customers such as vacation homeowners and
21 some NEM customers.

22 164. A fixed charge or minimum bill to reflect a portion of fixed costs will decrease
23 volumetric rates.

24 165. A decrease in the volumetric rate could reduce conservation.

25 166. Through letters to the Public Advisor’s Office and at public participation hearings,
26 customers have indicated that a fixed charge is not popular.

27 167. It is not clear that customers understand how a fixed charge would impact overall
28 rates.

29 168. A fixed charge cannot be avoided by a customer’s reducing usage or being more
30 energy efficient.

31 169. Fixed charges are used in other industries and by other utilities, including other
32 electric utilities in California.

¹ See D. 15-07-001, at pp. 215-217 and Conclusion of Law 20.

1 170. Customers have accepted fixed charges in contexts outside of their electric bills.

2 171. Any fixed charges should reflect appropriate customer-related costs.

3 175. A fixed charge to reflect fixed costs would send a more accurate price signal to
4 customers.

5 176. A fixed charge is not intended to incent specific customer behavior, but is intended
6 to assist the customer in making economically efficient decisions regarding energy
7 usage and investments.
8

9 **Q7: PG&E's 2017 General Rate Case (Application 16-06-013) litigated the fixed cost**
10 **categories that can be included in a residential fixed charge. Please summarize the**
11 **Commission's determination in its order in this docket.**

12 A7: This decision determined that a fixed charge should include only revenue cycle service
13 costs, meter capital costs, and the service drop and final line transformer costs for a
14 customer of minimum size. The order also determined that fixed charges should not be
15 scaled up using the equal percent of marginal cost (EPMC) multiplier and should not
16 cover costs that vary with demand or energy (i.e. costs related to generation charges,
17 transmission charges, or public purpose program charges). The decision noted that
18 Assembly Bill (AB) 327, codified as Public Utilities Code Section 739.9, capped
19 residential (non-CARE) fixed charges at \$10 per month in 2015, plus annual inflation
20 adjustments starting in 2016.²
21

22 Thus, current Commission policy only allows certain customer-specific costs to
23 be recovered through fixed charges. For example, the decision determined that the cost
24 of power poles in residential neighborhoods do not fall within the definition of fixed
25 costs, because they are not costs driven by the number of customers. The decision
26 determines that fixed costs must be customer-specific to be included in fixed charges.³ In
27 particular, the decision rejected the Joint Utilities' proposal to define fixed costs as the
28 difference between total and marginal costs, because that definition does not comport
29 with the requirement that fixed costs be customer-specific and fails to minimize

² See P.U. Code § 739.9(f).

³ See D. 17-09-035, at pp. 10-15.

1 regressive impacts that would result if fixed costs that vary by demand are assigned to a
2 fixed charge. The decision notes that, by not being demand-related, fixed costs do not
3 need to be differentiated by customer size, dwelling type, or demand levels, and are
4 consistent with the direction in D. 15-07-001 that a fixed charge should reflect cost
5 causation principles.⁴ Thus, D. 17-09-035 adopted what it characterized as a “narrow
6 definition of fixed costs.”⁵

7
8 **Q8: What did Decision 17-09-035 determine with regard to the timing for implementing
9 higher fixed charges?**

10 A8: The decision did not commit to the immediate adoption of fixed charges. Rather it
11 expressed a willingness to evaluate the appropriateness of fixed charges on a case-by-
12 case basis. Pursuant to Decision 15-07-001, a residential fixed charge cannot be
13 implemented until one year after the start of default TOU rates.⁶ To ensure affordability,
14 the decision found merit in exploring, in the relevant utility rate design proceedings, an
15 option for a phase-in process, in order to resolve concerns over excessive customer bill
16 impacts. It also stated that the Commission expects to see a showing on marketing,
17 education, and outreach efforts if and when fixed charge proposals are filed. Thus, if
18 higher fixed charges are implemented, the decision determined certain steps that should
19 occur first.⁷

20
21 **B. Policies on Residential Minimum Bills**

22
23 **Q9: When was the current \$10 per month minimum bill adopted for all three IOUs?**

24 A9: The current \$10 per month minimum bill was adopted in D. 15-07-001, the
25 Commission’s policy order in its residential rate design rulemaking R. 12-06-013.⁸

⁴ *Ibid.*, at pp. 14-15.

⁵ *Ibid.*, at p. 15.

⁶ See D. 15-07-001, at pp. 214-217.

⁷ See D. 17-09-035, at pp. 40-42.

⁸ See D. 15-07-001, at pp. 225-229.

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Q10: Did D. 15-07-001 limit the size of minimum bills for residential customers.

A10: Yes. It adopted a residential non-CARE customer minimum bill limited to \$10 per month in 2015 to 2017, then increasing in 2018 with an annual inflation adjustment, subject to further revision based on the outcome of GRC Phase 2 proceedings. The order found that AB 327’s statutory limits on fixed charges do not apply to minimum bills, but nevertheless determined that, at that time, it was reasonable to adopt a minimum bill amount that was consistent with the statutory limit for fixed charges.⁹

Q11: Did D. 15-07-001 recognize the differences between fixed charges and minimum bills?

A11: Yes. It recognized that minimum bills only apply to a small percentage of customers whose usage is equal to (or less than) the minimum kWh of consumption required to produce a monthly bill equal to (or less than) the minimum bill, whereas fixed charges apply to all customers regardless of usage. Minimum bills thus collect less revenues than would a fixed charge of the same size.¹⁰ At the same time, a minimum bill does not have as large an impact on lowering volumetric rates, and thus does not harm conservation and load-shifting incentives as much as does a fixed charge.¹¹

Q12: Did D. 15-07-001 consider minimum bills as an alternative to fixed charges?

A12: Yes. It noted that minimum bills are an alternative the Commission can consider using in place of fixed charges:

As an alternative to the fixed charge, the minimum bill charge is a mechanism that is designed to recover a minimum level of revenue, recognizing that some costs are still incurred to maintain service even in the event that a customer does not use energy. As noted by several parties, AB 327 authorizes the Commission to

⁹ *Ibid.*, at pp. 219-225.
¹⁰ *Ibid.*, at pp. 218 and 224.
¹¹ *Ibid.*, at pp. 214 and 225-226.

1 *consider minimum bills as an alternative to fixed charges.*¹²
2

3 I note that both a fixed charge and a minimum bill are rate elements which, when they
4 apply to a customer, do not vary with the customer's energy usage or demand.
5

6 **Q13: Did D. 15-07-001 determine that the Commission can use its discretion to determine**
7 **whether minimum bills are an appropriate substitute for a fixed charge?**

8 A13: Yes. In discussing the requirement of Public Utilities Code Section 739.9(h) that “the
9 Commission may evaluate whether minimum bills are an appropriate substitute for any
10 fixed charges,” the decision notes that the word “appropriate” implies Commission
11 discretion. The decision states: “While a minimum bill of \$12 might be an appropriate
12 substitute for a non-CARE fixed charge of \$10, a minimum bill of \$25 probably would
13 not.” The decision later concludes that “[a] minimum bill far in excess of the fixed
14 charge caps—or which undermined legislative objectives including those embodied in the
15 section 739.9I(1)-(3) requirements—would not be appropriate.”¹³ This suggests the
16 Commission does not expect minimum bills to far exceed fixed charges, even if the two
17 types of charges are not exactly equivalent. The Commission also indicated that it
18 expected to apply to minimum bills the same standards in section 739.9I(1)-(3) that apply
19 to fixed charges. These standards are:

- 20 (1) Reasonably reflect an appropriate portion of the different costs of serving small
21 and large customers.
22 (2) Not unreasonably impair incentives for conservation and energy efficiency.
23 (3) Not overburden low-income customers.
24

25 **Q14: Did Decision 15-07-001 limit minimum bills to delivery charges?**

26 A14: Yes. The decision specified that minimum bills should be calculated using only the
27 delivery portion of the customer's bill, which was Southern California Edison's (SCE)
28 practice at that time:

¹² *Ibid.*, at p. 217.

¹³ *Ibid.*, at pp. 223-224.

1 We agree that the minimum bill should be calculated using the method currently
2 used by SCE, which calculates a minimum bill on only the delivery portion of the
3 customer's bill (the delivery portion is defined as all rate components except for
4 the generation rate).¹⁴
5

6 I note that the limitation of the minimum bill to the delivery component of the rate
7 effectively increased a customer's expected minimum bill to well above \$10 per
8 month, because \$10 of delivery costs will be accompanied by a significant
9 amount of generation costs that are not subject to the minimum bill.

10
11 **C. Review of Residential Fixed Charges and Minimum Bills in Light of**
12 **the Commission's Rate Design Principles**

13
14 **Q15: Please provide your general observations on residential fixed charges and minimum**
15 **bills in light of the rate design policies that the Commission adopted in R. 12-06-013.**

16 A15: Fixed charges and minimum bills raise important concerns in light of the ten rate design
17 principles that the Commission adopted in R. 12-06-013 and has used in its recent rate
18 design decisions. I explain these concerns below.

19
20 1. *Low-income and medical baseline customers should have access to*
21 *enough electricity to ensure basic needs (such as health and comfort) are*
22 *met at an affordable cost.*
23

24 SEIA expects that the impact on low income and medical baseline customers will
25 be a primary concern of the Commission in deciding whether a fixed charge should be
26 adopted and in selecting both the magnitude and timing of any increases to fixed charges
27 or minimum bills.

28 2. *Rates should be based on marginal cost.*
29 3. *Rates should be based on cost-causation principles.*
30 4. *Rates should encourage conservation and energy efficiency.*
31 5. *Rates should encourage reduction of both coincident and non-coincident*
32 *peak demand.*
33 6. *Rates should encourage economically efficient decision-making.*

¹⁴ D. 15-07-001, at p. 228.

1
2 D. 17-09-035 correctly limited fixed charges to certain marginal customer-related
3 costs, on cost causation principles. Recovering more than customer-specific costs from a
4 fixed charge or a minimum bill will violate cost-causation and interfere with accurate
5 price signals for demand- and energy-related costs. Accurate price signals are vital to
6 encourage customers to make economically-efficient decisions on conservation, energy
7 efficiency, demand response, and the installation of many types of distributed energy
8 resources (DERs) that result in a reduction or shift in time of the loads served from the
9 utility system.

- 10 7. *Rates should be stable and understandable and provide customer choice.*
11 8. *Rates should generally avoid cross-subsidies, unless the cross-subsidies*
12 *appropriately support explicit state policy goals.*
13 9. *Incentives should be explicit and transparent.*
14

15 Customer choice is not encouraged if a large fixed charge or minimum bill
16 inhibits a customer from reducing or shifting their energy use, adopting a DER
17 technology, or even remaining on the system. Rate design price signals should apply to
18 all customers, regardless of the DER technology they adopt. If adjustments are needed in
19 the compensation to customers who adopt specific DERs, it should focus on DER-
20 specific incentives or rate elements – for example, changing the SGIP incentive for
21 storage adopters or the export compensation for net energy metering (NEM) customers –
22 not on rate elements that are broadly applicable such as fixed charges or minimum bills.

- 23 10. *Transitions to new rate structures should emphasize customer education*
24 *and outreach that enhances customer understanding and acceptance of*
25 *new rates, and minimizes and appropriately considers the bill impacts*
26 *associated with such transitions.*
27

28 Customers are used to low or zero fixed charges and the \$10 minimum bill that
29 has been in place since D. 15-07-001. Major, abrupt changes to these rate elements
30 should be avoided.
31

1 **Q16: Is a decision on whether to adopt a residential fixed charge likely to require a**
2 **complex balancing of these principles?**

3 A16: Yes, absolutely. Review of the Commission’s findings on residential fixed charges in D.
4 15-07-001, summarized above, shows that such charges are not fully consistent with all
5 of the rate design principles. Implementing a residential fixed charge that is limited to
6 certain marginal customer costs would advance some of these principles, such as
7 Principles 2 (based on marginal costs), 3 (advancing cost causation), and 6 (encouraging
8 economically efficient decision-making). However, such a fixed charge is unlikely to be
9 consistent with other principles, including Principle 1 (affordable electricity for low-
10 income customers), Principles 4 and 5 (promoting conservation and demand reduction),
11 and Principle 10 (customer understanding and acceptance).

12
13 **Q17: What is SEIA’s position on whether the Commission should implement a fixed**
14 **charge in this proceeding?**

15 A17: It is SEIA’s position that the continued use of a minimum bill is preferable to a fixed
16 charge as the best means to balance the Commission’s rate design principles. A
17 minimum bill ensures that all customers at least contribute an amount each month that
18 covers marginal customer costs, thus advancing Principles 2, 3, and 6. At the same time,
19 a minimum bill reduces the bill impacts on low-income customers (Principle 1) and does
20 not have as large an impact on incentives for conservation and demand reduction
21 (Principles 4 and 5). Customers appear to understand and accept the \$10 per month
22 minimum bills that have been in place since D. 15-07-001 (Principle 10).

1 III. SDG&E'S PROPOSAL TO RAISE ITS MINIMUM BILL

2
3 **A. SDG&E's Proposal**

4
5 **Q18: Is SDG&E proposing to raise its minimum bill?**

6 A18: Yes, from \$0.329 per day, or about \$10 in an average month, to \$1.284 per day, or about
7 \$39 in an average month. This is an increase of 280%, i.e. almost four times higher.

8
9 **Q19: Would this higher minimum bill substitute for a fixed charge?**

10 A19: No. SDG&E is proposing to increase the minimum bill to \$39 per month in addition to a
11 new \$10 per month fixed charge. Thus, the minimum bill increase proposed by SDG&E
12 is not a substitute for the fixed charge. SDG&E indicated to SEIA in discovery that the
13 higher minimum bill will collect an additional \$23 million per year from residential
14 customers.¹⁵ The proposed \$10 per month residential fixed charge will collect about
15 \$123 million per year.¹⁶

16
17 **Q20: Does SDG&E propose that its higher minimum bill would be applied only to**
18 **delivery charges, as required by D. 15-07-001?**

19 A20: No. SDG&E's proposed minimum bill of \$1.284 per day is equal to the sum of a \$1.110
20 per day utility distribution company (UDC) delivery rate and a \$0.174 per day electric
21 energy commodity cost (EECC) generation rate. Given that SDG&E's proposed
22 minimum bill includes a generation component, I expect that this minimum bill would
23 apply to the generation and delivery portions of the monthly bill for bundled customers,
24 not just to delivery charges.¹⁷

¹⁵ See SDG&E response to question 8a of SEIA's first data request, included in **Attachment PGM-2**.

¹⁶ Assumes that SDG&E's residential class consists of 901,326 non-CARE customers paying \$10 per month and 247,300 CARE customers paying \$5 per month.

¹⁷ In the attached response to SEIA data request 2, question 3b, SDG&E indicates that unbundled customers would not pay a minimum bill for generation: "Unbundled customers who are subject to the PCIA would not be required to pay the generation capacity costs through a minimum bill to SDG&E."

1 **Q21: Does SEIA oppose SDG&E’s proposal to raise its minimum bill?**

2 A21: Yes, for the reasons discussed in the next two sections.

3
4 **B. Review of SDG&E’s Proposed Minimum Bill in Light of the Commission’s**
5 **Rate Design Principles**

6
7 **Q22: Have you reviewed SDG&E’s proposal for consistency with the Commission’s rate**
8 **design principles?**

9 A22: Yes, I have, and my analysis is presented in the next set of answers below.

- 10 *1. Low-income and medical baseline customers should have access to enough*
11 *electricity to ensure basic needs (such as health and comfort) are met at an*
12 *affordable cost.*

13
14 **Q23: Does SEIA expect SDG&E’s proposed minimum bill to affect whether low-income**
15 **and medical customers have access to affordable electricity?**

16 A23: Yes. SEIA expects that this will be a primary concern of the Commission in reviewing
17 SDG&E’s proposal to increase its minimum bill by almost a factor of four. These types
18 of customers would have fixed charges and minimum bills set equal to 50% of the level
19 for other customers, but would still be experiencing very significant increases in costs.
20 SDG&E’s bill impact data indicates that the 11% of CARE customers with the lowest
21 usage (i.e. with monthly energy use up to 150 kWh per month) would experience an
22 average 29% bill increase.¹⁸ These CARE customers are likely to include low-income
23 customers who can afford only a minimal amount of electricity use.

- 24
25 *2. Rates should be based on marginal cost.*
26 *3. Rates should be based on cost-causation principles.*

¹⁸ See Attachment D, page 2 of 50 of the population level bill impacts in the 5/8/19 email from SDG&E to parties. Also, importantly, in response to SEIA data request 2, question 2, SDG&E notes that: “a coding error was made when developing the database for producing population bill impacts, which resulted in erroneous data outputs. SDG&E is working to correct this error and will respond to this population bill impact question as soon as possible.” SIEA reserves the right to supplement this testimony with corrected bill impact data.

- 1 4. *Rates should encourage conservation and energy efficiency.*
2 5. *Rates should encourage reduction of both coincident and non-coincident peak*
3 *demand.*
4 6. *Rates should encourage economically efficient decision-making.*
5

6 **Q24: Does SDG&E’s proposal violate Principles 2 to 6?**

7 A24: Yes. Decision 17-09-035 limited fixed charges to certain customer-specific marginal
8 costs. Recovering more than customer-specific costs from a fixed charge or a minimum
9 bill will violate cost-causation and interfere with accurate price signals. Accurate price
10 signals are vital to encourage customers to conserve energy, reduce their demands, and
11 adopt a wide variety of DERs to reduce or shift the loads they place on the grid.

12
13 SDG&E’s proposed minimum bill appears designed to recover all non-energy
14 costs for a typical small customer (0 to 2 kW), including marginal delivery and
15 generation capacity costs. These are far more than just the customer-specific delivery
16 costs that the Commission has decided should be included in the charges to residential
17 customers that do not vary with usage.¹⁹ In effect, the design of this minimum bill
18 effectively assumes no customer can reduce their costs below this level, even if they use
19 no energy and need no capacity from the system.

- 20
21 7. *Rates should be stable and understandable and provide customer choice.*
22

23 **Q25: Does SDG&E’s proposal for a major increase in the residential minimum bill**
24 **promote rate stability?**

25 A25: No. SDG&E’s proposed 280% increase in the minimum bill would cause significant rate
26 shock for low-usage residential customers and for many NEM customers. I noted in
27 Q&A 23 above that the 11% of SDG&E CARE customers with the lowest usage would

¹⁹ As noted above, D. 15-07-001 determined that the minimum bill should apply only to delivery costs, and D. 17-09-035 limited any residential fixed charge to customer-specific costs that are delivery-related. A fixed charge and a minimum bill both are rate elements designed to recover costs that do not vary with

1 experience an average bill increase of 29%. SDG&E's bill impact data also indicates that
2 19% of non-CARE residential customers, who have monthly energy less than or equal to
3 150 kWh per month, would experience an average 36% bill increase.²⁰ SEIA is awaiting
4 data regarding NEM customer bill impacts by usage level.²¹ The next section discusses
5 the impacts of SDG&E's proposal on NEM customers.

6
7 *8. Rates should generally avoid cross-subsidies, unless the cross-subsidies*
8 *appropriately support explicit state policy goals.*
9

10 **Q26: SDG&E argues that a fixed charge set at the statutory maximum will help to offset**
11 **an alleged cost-shift from NEM customers.²² Does SEIA agree that this is the**
12 **correct proceeding to assess and correct any potential cross subsidies between solar**
13 **customers and other retail electricity customers?**

14 A26: No. The Commission has an established process for that purpose, and expects to begin
15 its next review of NEM (NEM 3.0) later in 2019, as provided in D. 16-01-044. SEIA
16 does not accept and would contest SDG&E's assertions both as to (1) whether such a
17 cross-shift exists and (2) even if it does, what is its magnitude.²³ Making significant
18 changes to residential rate design in this case to correct an alleged and unproven cross-
19 subsidy would thwart and prejudice the Commission's upcoming NEM 3.0 review, and
20 potentially arrive at the wrong outcome. Such premature valuations should be avoided.

usage. As a result, like a fixed charge, any minimum bill should include only delivery-related, customer-specific costs.

²⁰ See Attachment D, page 1 of 50 of the illustrative bill impacts provided in the 5/8/19 email from SDG&E to parties. SEIA reserves its rights to supplement this testimony with SDG&E's corrected bill impact data.

²¹ SDG&E is working to provide corrected bill impacts, including for NEM customers. See response to SEIA data request 2, question 2b, attached. SEIA reserves its right to supplement this testimony with that information when it becomes available.

²² SDG&E Phase III Testimony (Stein), at pp. JS-5 and JS-8.

²³ For example, I would note that Ms. Fang's Phase 1 testimony has an analysis of NEM cross-subsidies that assumes distributed solar avoids just 5.6 c/kWh in energy costs. SEIA believes the value of distributed solar to be far higher, and SDG&E's low-ball value for distributed solar appears to ignore completely any avoided transmission and distribution costs from distributed solar. SDG&E's cost-shift

1 Moreover, if adjustments are needed in the compensation to customers who adopt
2 specific DERs, those changes should focus first on DER-specific incentives or rate
3 elements, not on making broad changes to the rates applicable to all customers. For
4 example, changing the SGIP incentive for storage adopters or the export compensation
5 for NEM customers would be preferable ways to adjust compensation for DER customers
6 that does not alter standard rate elements that are broadly applicable to all customers,
7 such as fixed charges or minimum bills.

8
9 *9. Incentives should be explicit and transparent.*

10
11 **Q27: Does SEIA expect fixed charges and higher minimum bills to affect customer**
12 **incentives?**

13 A27: Yes. Customer choice is not encouraged if a large, new fixed charge or a major increase
14 in the minimum bill inhibits a customer from reducing or shifting their energy use, or
15 from adopting a distributed energy resource (DER) technology.

16
17 *10. Transitions to new rate structures should emphasize customer education and*
18 *outreach that enhances customer understanding and acceptance of new rates, and*
19 *minimizes and appropriately considers the bill impacts associated with such*
20 *transitions.*

21
22 **Q28: Does SEIA expect that the creation of a new fixed charge in combination with a**
23 **much higher minimum bill would be perceived as a major change in rates?**

24 A28: Yes. SDG&E's customers are accustomed to no fixed charges and a \$10 minimum bill.
25 Major, abrupt changes to these rate elements should be avoided. The imposition of a new
26 \$10 per month fixed charge plus the 280% increase in the minimum bill would have
27 severe bill impacts on affected customers, as I have explained. The Commission already
28 is in the midst of overseeing a transition to default time-of-use rates for residential
29 customers, so it does not make sense to make other major, visible, and disruptive changes

calculation also ignores the fact that customers are increasingly installing solar paired with storage, which substantially increases the value to the utility system of this distributed resource.

1 to rates before customers have had a period of time in which to adjust to the transition to
2 default time-of-use rates.

3
4 **C. The Impact of SDG&E's Proposed Minimum Bills on NEM Customers**
5

6 **Q29: Why are minimum bills of particular importance to SEIA and solar customers?**

7 A29: Many solar customers have net usage that is similar to a customer with low usage, and
8 low usage customers obviously are most impacted by the minimum bill. Thus, for
9 SDG&E, a significant share of the customers subject to the minimum bill are solar
10 customers.

11
12 SDG&E's 136,306 residential NEM customers in 2018 represented about 12% of
13 SDG&E's overall residential customers.²⁴ Based on discovery responses from SDG&E,
14 23,942 (18%) of SDG&E's NEM customers paid just the \$10 per month minimum bill in
15 every month. SDG&E also indicates there were 32,826 NEM customers, or 24% of all
16 NEM customers, who paid the minimum bill in at least one month of 2018.²⁵ These are
17 the NEM customers who would be most impacted by the minimum bill increase. Higher
18 minimum bills will also affect additional NEM customers who may not have paid the
19 current \$10 per month minimum bill, but who would pay the much higher \$39 per month
20 minimum bill. SDG&E data indicates that 63% of NEM customer bills in 2018 (as
21 opposed to 22% of non-NEM residential bills) were less than the proposed \$39 per month
22 minimum bill amount.²⁶ This would represent a very large increase from the 24% of
23 today's NEM customers with at least one month at today's \$10 minimum bill.

24
25 **Q30: Does SDG&E's proposed minimum bill impact (1) existing NEM customers and/or**

²⁴ SDG&E's responses to SEIA DR1-Q1 indicates that SDG&E had 136,306 residential NEM customers that were trued-up in 2018. Cynthia Fang's testimony indicates 901,326 standard residential and 247,300 CARE/FERA residential customers, which sums to 1,148,626 residential customers.

²⁵ See SDG&E responses to SEIA DR1-Q3a and Q4.

²⁶ From the spreadsheet embedded in SDG&E's response to SEIA data request 2, question 1.

1 **(2) the incentives of potential NEM or DER customers to install solar PV, onsite**
2 **storage, paired solar plus storage, or other DERs?**

3 A30: Yes, both groups would be impacted.

4
5 With respect to existing NEM customers, according to discovery responses,
6 SDG&E expects to receive \$22.7 million per year of additional residential minimum bill
7 revenues, \$11.1 million (49%) of which would come from NEM customers.²⁷ As a
8 result, an increased minimum bill disproportionately impacts existing NEM customers
9 who made their investments in DERs in reliance on no more than the existing \$10 per
10 month minimum bill. It is the 18% of NEM customers who pay the minimum bill in all
11 months who would be most severely impacted by a minimum bill increase. These
12 customers will see their monthly costs rise by \$29 per month (or \$349 per year).²⁸ Other
13 NEM customers who were not impacted by the \$10 minimum bill in the past would now
14 fall under the new \$39 minimum bill and thus pay higher costs.²⁹

15
16 A much higher minimum bill also will discourage adoption of DERs. Using a
17 spreadsheet model to estimate bill savings, I estimate that residential customers with solar
18 plus storage or with solar alone will see reductions of 15% and 18%, respectively, in their
19 expected bill savings at SDG&E's proposed 2020 rates.³⁰

20
21 **Q31: Does this large increase in the minimum bill violate Commission ratemaking**
22 **principles?**

²⁷ See SDG&E responses to SEIA DR1-Q8a and Q8b.

²⁸ \$349 per year equals the change in the daily minimum bill ($0.955 = 1.284 - 0.329$) times 365 days. The 23,942 NEM customers who pay the minimum bill each month would pay a total of \$8.3 million more per year.

²⁹ These NEM customers who do not pay the minimum bill today will pay the remaining \$2.8 million, out of the \$11.1 total NEM customer impact, in increased minimum bill revenues.

³⁰ Assumes a customer with gross load of 9,400 kWh per year, a 5.5 kW-AC solar system size (the average SDG&E DG solar system size per <https://www.californiadgstats.ca.gov/charts/nem>), and 13.3 kWh of storage capacity.

1 A31: Yes. The proposed minimum bill of \$1.284 per day, or about \$39 per month, represents a
2 280% increase over the current minimum bill of \$0.329 per day, or about \$10 per average
3 month. A 280% increase clearly violates Principles 7 (stable rates) and 10 (rate
4 transitions that emphasize customer education/outreach and consider bill impacts). Such a
5 large and abrupt change in the minimum bill certainly may surprise, disappoint, and
6 anger the significant number of customers who would be most heavily impacted by this
7 proposal.

8
9 In addition, SDG&E's proposal appears to be designed to recover all costs for a
10 typical small customer (0 to 2 kW), including marginal costs, thus effectively assuming
11 no customer can reduce their costs below this level. This removes almost all incentive
12 for a small customer to further reduce their energy use below the "break-even" usage that
13 would incur the \$39 per month minimum bill (or \$33 per month for delivery costs). For
14 example, a small coastal area customer with "break-even" usage of 396.6 kWh per month
15 would not be able to reduce their delivery bill below this amount.³¹ For this reason, as
16 noted above, SDG&E's proposal appears to violate Principles 2 through 6.

17
18
19 IV. SEIA'S PROPOSED MINIMUM BILL POLICY

20
21 **Q32: Does SEIA have a policy proposal for how the Commission should set the level of**
22 **the minimum bill?**

23 A32: Yes. SEIA urges the Commission to adopt minimum bills that are set to the higher of (1)
24 \$10 per month, as the level of today's minimum bill and the statutory maximum for a
25 fixed charge or (2) a utility's marginal customer-related costs (if those are higher than

³¹ A customer with this usage would pay a delivery bill of \$33.30, which reflects the minimum delivery bill of \$1.11 per day times 30 days, since that is the level of usage below which the monthly minimum bill takes effect with a \$10 per month fixed charge. The calculation is based on SDG&E's proposed rates

1 \$10 per month). This proposal would ensure the greatest consistency between minimum
2 bills and the statutory maximum for fixed charges, including ensuring that minimum bills
3 are limited to customer-specific marginal delivery costs. SEIA proposes to set the
4 minimum bill at marginal customer costs calculated using the average size of customer
5 access facilities, in recognition that customers of all sizes can incur minimum bills, not
6 just low-usage customers.
7

8 **Q33: What minimum bill limit does SEIA propose for PG&E?**

9 A33: PG&E's stated average marginal customer-related costs are \$10.73 per month, based on
10 PG&E's testimony in A. 16-06-013, its last GRC Phase 2 case.³² This level for PG&E's
11 minimum bill assumes use of the rental method and is not adjusted for the new tax law.
12 If the Commission adopts an approach to calculating marginal customer costs different
13 than the rental method and/or adjusts for the new tax law, PG&E's marginal customer
14 costs for an average residential customer are likely to fall below \$10 per month. In this
15 case, PG&E's minimum bill should remain at \$10 per month for standard residential
16 customers.
17

18 **Q34: What minimum bill limit does SEIA propose for SCE?**

19 A34: SCE's average marginal customer-related costs are \$10.35 per month, based on SCE's
20 testimony in A. 17-06-030, its last GRC Phase 2 case.³³ As with PG&E's average
21 marginal customer-related costs, this level for SCE's minimum bill presumes use of the
22 rental method and is not adjusted for the new tax law. If the Commission adopts an
23 approach to calculating marginal customer costs different than the rental method and/or
24 adjusts for the new tax law, SCE's marginal customer costs for an average residential

for Schedule DR, and the baseline allowance for coastal area customers, \$33.30 per month = \$10 + 374.4 kWh x \$0.04493 per kWh + 22.2 kWh x \$0.29185 per kWh.

³² See A. 16-06-013, *Amended Supplemental Information of Pacific Gas and Electric Company on Fixed Charge Methodologies Pursuant to December 20, 2016, Energy Division Request* (January 6, 2017), at Table 1.

1 customer are likely to fall below \$10 per month. In this case, SCE's minimum bill should
2 remain at \$10 per month for standard residential customers.

3
4 **Q35: What minimum bill limit does SEIA propose for SDG&E?**

5 A35: SDG&E supplemental testimony in this proceeding indicated average residential
6 marginal distribution customer costs of \$12.76 per month under the rental method.
7 "Eligible" fixed costs, based on minimum observed costs for the residential class, were
8 lower, at \$8.84 per month. SEIA recommends adopting the \$12.76 per month for the
9 SDG&E residential minimum bill, assuming SDG&E's recommended marginal customer
10 costs using the rental method are adopted. As with PG&E and SCE, if an average
11 marginal customer cost for SDG&E below \$10 per month is adopted, there should be no
12 change in SDG&E's present \$10 per month minimum bill.

13
14 For all of the IOUs, SEIA takes no position on whether the rental method or the new
15 customer only method should be used to determine marginal customer costs.

16
17 **Q36: Does this conclude your testimony in this case?**

18 A36: Yes, it does.

³³ See A. 17-06-030, *Phase 2 of 2018 General Rate Case Marginal Cost and Sales Forecast Proposals*, Exhibit SCE-02A (Errata), served November 1, 2017, at Table I-22.

Attachment PGM-1

CV of Patrick G. McGuire

Mr. McGuire is energy policy advisor with the consulting firm Crossborder Energy. Crossborder Energy provides analytical consulting services and strategic advice on market and regulatory issues concerning the natural gas and electric industries. The firm is based in Berkeley, California, and its practice focuses on the energy markets in California and the U.S.

Mr. McGuire has worked for Crossborder Energy since 1992, and has participated in the most of the firm's analytic work. From 1989 through 1992 he was employed by Sierra Energy and Risk Assessment, an energy consulting firm in Roseville, California with a focus on electric utility production cost modeling.

AREAS OF EXPERTISE

- *Mathematics, Economics, and Computer Programming.* Applies economic theory, mathematics, and computer programming and modeling skills to the firm's study of regulatory and public policy issues in the natural gas and electric industries. Responsible for drafting much of the technical analyses used in the firm's work products. Detailed knowledge of relevant computer applications used for consulting studies.
- *Electricity Markets.* Modeling and statistical review of electricity markets, with particular emphasis on California and other deregulated electricity markets. Has monitored of California Independent System Operator electricity markets since deregulation commenced in April, 1998. Studies have included the impact of cap-and-trade regulation of greenhouse gas emissions on the California electricity market.
- *Natural Gas Markets.* Monitoring and modeling of natural gas markets in the U.S. Developed a model of the North American regional natural gas transportation grid, using a network equilibrium methodology. Provides clients with summary and analysis of regulatory developments in the California and western U.S. natural gas market.
- *Rate Design and Cost Allocation.* Work has included analysis and forecasts of the impacts of changes in policies and regulations on retail rates for electricity and natural gas. Has worked with cost allocation and rate design models used to develop natural gas and electricity rates, including natural gas transmission and distribution rates. Has extensive experience with PG&E, SoCal Edison, SoCalGas, and SDG&E electricity and natural rates. Has developed and updated the cost allocation and rate design for a small municipal electric utility in California.
- *Renewables.* Analysis of Renewable Portfolio Standard (RPS) programs, including the impacts of such programs on retail rates. Developed models of revenue requirement impacts of the proposed RPS programs in Florida, New York, and Nevada. Has tracked the historical and forecasted development of the RPS program in California.
- *Net Metering and Photovoltaic Incentives.* Has modeled the Renewable Energy Credit (REC) incentive payments for solar photovoltaic installations, including analysis of state incentive programs for Florida and New York. Has conducted cost/benefit studies,

including detailed computer modeling, of the net metering program for residential and commercial solar installations in California. Co-authored state-level studies of Net Energy Metering or distributed solar generation costs and benefits, in several states including California, Colorado, New Hampshire, North Carolina, and Arizona.

- *Gas-fired Generation Costs.* Has modeled traditional gas-fired generation costs using the Market Price Referent (MPR) approach used in California as the cost benchmark for the RPS program. Has worked extensively on Combined Heat and Power (CHP) issues in California.
- *Contract Analysis.* Performed contract analyses for independent power producers, to address contract restructuring and economic evaluation issues. Served as an expert witness in an arbitration case for a Nevada Geothermal project.

Testimony

- *Oregon Public Utilities Commission.* October 15, 2015 Testimony in Docket UM 1734 on behalf of Sierra Club.
- *Vermont Public Service Board.* September 23, 2014 Testimony in Docket No 8010 on behalf of Allco Renewable Energy Limited.
- *California Public Utilities Commission.* March 19, 2003 Testimony in Rulemaking 02-01-011 regarding Direct Access.

Papers

- A Self-Scoring System to Elicit True Cost Multi-Dimensional Bids in an Electric Power Auction, C. B. McGuire and Patrick G. McGuire. Proceedings of the 15th Annual North American Conference of the International Association for Energy Economics, October 1993, pp. 304-314.

EDUCATION

Mr. McGuire holds a B.A. in mathematics from the University of California at Santa Cruz.

EXPERIENCE

Crossborder Energy

Energy Policy Advisor 1992 - Present

Responsible for general analytic support for a broad range of policy and rate design issues in the natural gas and electric industries. Conducted regular reviews of avoided cost energy pricing for cogeneration clients. Assisted in power purchase contract implementation and renegotiation. Monthly market monitoring of the deregulated California electricity and natural gas markets. Review of CAISO, CPUC and FERC policy developments affecting the California market.

Application of general analytical policy analysis tools to electricity and gas market issues. Developed computer model of the deregulated California electricity market and a linear programming model of the North American pipeline grid. Developed models of various state-level renewable programs and related solar customer incentives, including net metering.

Sierra Energy & Risk Assessment

Associate Mathematician, 1989-1992

Responsible for maintaining databases and I/O related to electric production cost simulation models. Developed numerous computer models related to the electric industry, including electricity transmission and losses, load profile analysis, DSM program evaluation, and merger cost/benefit analysis.

Attachment PGM-2

SDG&E Responses to Selected Data Requests

SEIA DATA REQUEST
SEIA-SDG&E-DR-01
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 1, 2019
DATE RESPONDED: MAY 17, 2019

1. Please provide the number of residential NEM customers in 2017 and 2018 on the SDG&E system. Also, please break these annual 2017 and 2018 numbers down by number of NEM customers taking bundled service from SDG&E, and those not taking bundled SDG&E service (e.g. CCA customers).

SDG&E Response:

The figures below represent the total number of residential NEM customers that were “trued-up” in 2017 or 2018, respectively. The NEM “true-up” process determines the net difference between the kWh a NEM customer uses and what they produce above usage in the previous 12 months. Note that these numbers include customers that were NEM for all or a portion of one year. Also, a customer was considered bundled or not bundled depending on status in the “true-up” month.

YEAR	TOTAL	UNBUNDLED	BUNDLED
2017	115,258	187	115,071
2018	136,306	692	135,614

**SEIA DATA REQUEST
SEIA-SDG&E-DR-01
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 1, 2019
DATE RESPONDED: MAY 17, 2019**

3. Please provide, for each of the years 2017 and 2018:
- a. The number of residential customers who paid just the minimum bill for electric service in any month:
 - b. The number of customer-months in which just the minimum bill was paid, and
 - c. The additional revenues to SDG&E from the application of the minimum bill, by the month in 2017 and 2018.

SDG&E Response:

- a. Unique non-NEM customers that received at least one minimum bill in the calendar year:

Year	Total Res Customers with Minimum Bill
2017	32,123
2018	32,826

- b. Sum of non-NEM customer months with a minimum bill for 2017 and 2018:

Year	Total Number of Minimum Bills months
2017	46,796
2018	48,346

- c. To provide the revenues collected through a minimum bill, the difference between each minimum bill and what would have been charged in the absence of the minimum bill was calculated. This value was then summed for all minimum bills.

Year	Revenue Collected with Application of Minimum Bill
2017	\$219,994
2018	\$226,021

SEIA DATA REQUEST
SEIA-SDG&E-DR-01
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 1, 2019
DATE RESPONDED: MAY 17, 2019

4. Please provide, for each of the years 2017 and 2018, the number of residential NEM customers who paid just the minimum bill for electric service over their 12-month NEM billing cycles ending in that year (i.e. \$10 per month for 12 months, or \$120 per year). Please also differentiate these 2017 and 2018 customer counts, according to whether the customer had positive or negative annual year-end NEM balances without considering the minimum bill.

SDG&E Response:

The sum of the 2017 and 2018 customer counts below is the total number of NEM customers who received a minimum bill each month for the respective year. The “NEG_YR_END_BAL” is the number of customers that would have a negative bill if the minimum bill was not applied.

YEAR	YEAR END BALANCE	CUSTOMERS
2017	NEGATIVE YEAR END BALANCE	21205
2017	POSITIVE YEAR END BALANCE	3
2018	NEGATIVE YEAR END BALANCE	23942
2018	POSITIVE YEAR END BALANCE	0

SEIA DATA REQUEST
SEIA-SDG&E-DR-01
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 1, 2019
DATE RESPONDED: MAY 17, 2019

8. Please provide:
- a. The additional minimum bill revenues that SDG&E expects to earn from all residential customers if SDG&E's proposal to increase the residential minimum bill to about \$37 per month (\$1.225 per day) is approved.
 - b. The additional minimum bill revenues that SDG&E expects to earn from residential NEM customers if SDG&E's proposal to increase the residential minimum bill to about \$37 per month (\$1.225 per day) is approved.
 - c. The additional minimum bill revenues that SDG&E would earn from all residential customers with a minimum bill of:
 - i. \$0.50 per day
 - ii. \$0.75 per day
 - iii. \$1.00 per day
 - d. The additional minimum bill revenues that SDG&E would earn from residential NEM customers with a minimum bill of:
 - i. \$0.50 per day
 - ii. \$0.75 per day
 - iii. \$1.00 per day

SDG&E Response:

- a. The additional minimum bill revenues that SDG&E estimates it would receive from all residential customers if SDG&E increases the residential minimum bills to about \$38.52 (\$1.284/day) from the 3/1/19 residential minimum bill of about \$9.87 (\$0.329/day)¹ is approximately \$22.7 million annually. This estimate uses bill impact data for the residential customer population, billed under the proposed TOU-DR1 rate (default residential TOU rate) using the requested minimum bill values.
- b. The additional minimum bill revenues that SDG&E estimates it would receive from NEM residential customers if SDG&E increases the residential minimum bills to about \$38.52 (\$1.284/day) from the 3/1/19 residential minimum bill of about \$9.87 (\$0.329/day) is approximately \$11.1 million annually. This estimate uses bill impact data for the residential customer population, billed under the proposed Rental TOU-DR1 rate (default TOU residential rate) using the requested minimum bill values.
- c. The additional minimum bill revenues that SDG&E estimates it would receive from all residential customers if SDG&E increases the residential minimum bills from the 3/1/19 residential minimum bill of about \$9.87 (\$0.329/day) to:
 - i. \$0.50 per day is about \$2.4 million annually,
 - ii. \$0.75 per day is about \$7.1 million annually, and

¹ SDG&E's Supplemental Testimony and rate proposals are based on then effective rates from 3-1-2019, per AL 3346-E.

**SEIA DATA REQUEST
SEIA-SDG&E-DR-01
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 1, 2019
DATE RESPONDED: MAY 17, 2019**

iii. \$1.00 per day is about \$13.3 million annually.

These estimates use bill impact data for the residential customer population, billed under the proposed Rental TOU-DR1 rate (default TOU residential rate) using the requested minimum bill values.

- d. The additional minimum bill revenues that SDG&E estimates it would receive from NEM residential customers if SDG&E increases the residential minimum bills from the 3/1/19 residential minimum bill of about \$9.87 (\$0.329/day) to:
- i. \$0.50 per day is about \$ 1.7 million annually,
 - ii. \$0.75 per day is about \$ 4.4 million annually, and
 - iii. \$1.00 per day is about \$ 7.3 million annually.

These estimates use bill impact data for the residential customer population, billed under the proposed TOU-DR1 rate (default TOU residential rate) using the requested minimum bill values.

SEIA DATA REQUEST
SEIA-SDG&E-DR-02
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 15, 2019
DATE RESPONDED: MAY 29, 2019

1. For each of the years 2017 and 2018:
 - a. Please indicate the number of residential customers who would have paid just SDG&E's proposed new, higher minimum bill (e.g. \$1.28 per day for non-CARE customers, or \$0.64 per day for CARE customers) for electric service in any month. SDG&E's bill impacts do not provide this data.
 - b. Please also provide these amounts in terms of percentages of SDG&E's total number of residential customers.
 - c. How many of these residential customers who would have paid SDG&E's proposed new, higher minimum bill in any month are NEM customers?

SDG&E Response:

Please refer to the file attached below.



20190524_SEIA_SDG
E_DR_submitted.xlsx

Grand Totals

BILL_YR_MO	NEM	TOTAL_BILLS	BILLS_Less_Than_Min_Charge	PERCENT_Less_Than_Min_Charge
201801	N	1,355,295	221,964	16%
201801	Y	131,488	50,177	38%
201802	N	1,354,817	250,190	18%
201802	Y	133,180	75,953	57%
201803	N	1,355,790	249,496	18%
201803	Y	135,733	92,253	68%
201804**	N	1,355,623	708,926	52%
201804**	Y	137,536	121,984	89%
201805	N	1,355,575	281,656	21%
201805	Y	139,102	115,512	83%
201806	N	1,358,975	243,569	18%
201806	Y	140,781	114,342	81%
201807	N	1,362,222	192,146	14%
201807	Y	142,378	99,774	70%
201808	N	1,360,133	167,530	12%
201808	Y	144,239	70,403	49%
201809	N	1,357,045	173,154	13%
201809	Y	146,204	67,428	46%
201810**	N	1,352,030	544,873	40%
201810**	Y	148,396	97,521	66%
201811	N	1,347,326	251,190	19%
201811	Y	150,900	91,360	61%
201812	N	1,345,846	249,558	19%
201812	Y	153,513	69,934	46%

****April includes Climate Credit of \$33.50 for each Residential Customer's Bill**

****October includes Climate Credit of \$33.50 for each Residential Customer's Bill**

non CARE, non Medical, non-FERA

BILL_YR_MO	NEM	TOTAL_BILLS	.S_Less_Than_1.28_pre_	PERCENT_Less_Than_1.28_per_day
201801	N	1,054,018	197,271	19%
201801	Y	119,281	46,656	39%
201802	N	1,053,151	218,607	21%
201802	Y	120,834	70,332	58%
201803	N	1,053,395	218,338	21%
201803	Y	123,081	85,124	69%
201804**	N	1,052,507	511,663	49%
201804**	Y	124,705	110,692	89%
201805	N	1,050,770	245,236	23%
201805	Y	126,002	105,488	84%
201806	N	1,053,392	215,157	20%
201806	Y	127,411	104,303	82%
201807	N	1,055,230	174,411	17%
201807	Y	128,806	91,376	71%
201808	N	1,053,209	153,819	15%
201808	Y	130,422	64,615	50%
201809	N	1,052,877	158,619	15%
201809	Y	132,258	61,982	47%
201810**	N	1,046,989	392,803	38%
201810**	Y	134,119	88,250	66%
201811	N	1,041,355	220,211	21%
201811	Y	136,258	83,833	62%
201812	N	1,038,453	218,776	21%
201812	Y	138,455	64,376	46%

CARE, FERA, or Medical Baseline

BILL_YR_MO	NEM	TOTAL_BILLS	BILLS_Less_Than_0.64_per_Day	PERCENT_Less_Than_0.64_per_day
201801	N	301,277	24,693	8%
201801	Y	12,207	3,521	29%
201802	N	301,666	31,583	10%
201802	Y	12,346	5,621	46%
201803	N	302,395	31,158	10%
201803	Y	12,652	7,129	56%
201804**	N	303,116	197,263	65%
201804**	Y	12,831	11,292	88%
201805	N	304,805	36,420	12%
201805	Y	13,100	10,024	77%
201806	N	305,583	28,412	9%
201806	Y	13,370	10,039	75%
201807	N	306,992	17,735	6%
201807	Y	13,572	8,398	62%
201808	N	306,924	13,711	4%
201808	Y	13,817	5,788	42%
201809	N	304,168	14,535	5%
201809	Y	13,946	5,446	39%
201810**	N	305,041	152,070	50%
201810**	Y	14,277	9,271	65%
201811	N	305,971	30,979	10%
201811	Y	14,642	7,527	51%
201812	N	307,393	30,782	10%
201812	Y	15,058	5,558	37%

SEIA DATA REQUEST
SEIA-SDG&E-DR-02
SDG&E 2018 RATE DESIGN WINDOW – A.17-12-013
SDG&E RESPONSE
DATE RECEIVED: MAY 15, 2019
DATE RESPONDED: MAY 29, 2019

2. For the bill comparisons provided in Attachment D of the supplemental testimony of Jesse B. Emge, please provide:
 - a. the percentage of all residential customers in each “bin” (i.e. the percent of all residential customers that fall into each of the 20 lines shown in each bill comparison), and
 - b. the percentage of residential net energy metering (NEM) customers in each “bin.”

SDG&E Response:

As noted in SDG&E’s May 22, 2019 email to the service list, a coding error was made when developing the database for producing population bill impacts, which resulted in erroneous data outputs. SDG&E is working to correct this error and will respond to this population bill impact question as soon as possible.

SEIA DATA REQUEST
SEIA-SDG&E-DR-02
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3. Based on Attachment B-1 to the supplemental testimony of Jesse B. Emge, we understand that the residential minimum service cost of \$39.06 per month includes customer costs, distribution demand-related costs, generation capacity costs, transmission costs, and other rate components for public purpose programs, competition transition charge, reliability services, local generation charges, and demand response and vehicle grid integration program costs.
 - a. Please explain whether SDG&E believes that the inclusion of non-delivery cost components in the proposed minimum bill conflicts with CPUC policy that minimum bills should apply only to delivery bills. See, for example, D. 15-07-001, at p. 228. If not, why not?
 - b. Please explain how SDG&E's minimum bill proposal that includes generation costs would affect rates paid by unbundled (e.g. DA/CCA) customers. For example, how would the proposed minimum bill impact the calculation of the PCIA or unbundled delivery rates?

SDG&E Response:

- a. SDG&E objects to this request as seeking a legal conclusion and based on the false presumption that the Commission is prohibited from deviating from past CPUC decisions or policies, as it often does. Subject to and without waiving these objections, SDG&E provides the following response:

SDG&E includes the components required to maintain a minimum threshold of service for all bundled customers in its minimum bill proposal. This includes direct customer-based costs, such as the wires and meters directly associated with an individual customers home or facility, and generation capacity costs, which are built to meet SDG&E's system needs in a reliable and safe way.

- b. Unbundled customers who are subject to the PCIA would not be required to pay the generation capacity costs through a minimum bill to SDG&E. Therefore, the generation capacity costs would have to be excluded from the minimum bill. Excluding generation capacity costs today would result in an approximately \$.18 decrease in the daily minimum bill, or about \$5.30 a month (based on 30-day billing cycle).