

Exhibit: \_\_\_\_\_  
Witness: Paul Chernick  
Date: March 26, 2019

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

Application of SOUTHERN CALIFORNIA GAS  
COMPANY (U 904 G) to Establish a Demand  
Response Program

Application 18-11-005  
(Filed November 6, 2018)

**ERRATA TO  
DIRECT TESTIMONY OF  
PAUL CHERNICK  
ON BEHALF OF  
SMALL BUSINESS UTILITY ADVOCATES**

Resource Insight, Inc.

**MARCH 26, 2019**

**REVISED APRIL 26, 2019**

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Attachment 3	<i>SoCalGas Schedule No. G-BTS</i>
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1 **I. IDENTIFICATION & QUALIFICATIONS**

2 **Q: Mr. Chernick, please state your name, occupation, and business address.**

3 A: My name is Paul L. Chernick. I am the president of Resource Insight, Inc.,  
4 located in 5 Water St., Arlington, Massachusetts.

5 **Q: Summarize your professional education and experience.**

6 A: I received a Bachelor of Science from the Massachusetts Institute of  
7 Technology in June 1974 from the Civil Engineering Department, and a  
8 Master of Science from the Massachusetts Institute of Technology in  
9 February 1978 in technology and policy.

10 I was a utility analyst for the Massachusetts Attorney General for more  
11 than three years, and was involved in numerous aspects of utility rate design,  
12 costing, load forecasting, and the evaluation of power supply options. Since  
13 1981, I have been a consultant in utility regulation and planning, first as a  
14 research associate at Analysis and Inference, after 1986 as president of PLC,  
15 Inc. (which was the predecessor to Resource Insight), and in my current  
16 position at Resource Insight. In these capacities, I have advised a variety of  
17 clients on utility matters.

18 My work has considered, among other things, the cost-effectiveness of  
19 prospective new electric generation plants and transmission lines,  
20 conservation program design, estimation of avoided costs, the valuation of  
21 environmental externalities from energy production and use, allocation of  
22 costs of service between rate classes and jurisdictions, design of retail and  
23 wholesale rates, and performance-based ratemaking and cost recovery in  
24 restructured gas and electric industries. My professional qualifications are  
25 further summarized in Attachment 1.

1 **Q: Have you testified previously in utility proceedings?**

2 A: Yes. I have testified over three hundred times on utility issues before various  
3 regulatory, legislative, and judicial bodies, including utility regulators in  
4 thirty-seven states and six Canadian provinces, and three U.S. federal  
5 agencies. This previous testimony has included planning and ratemaking for  
6 distributed resources, distributed resource planning, the benefits of load  
7 reduction on the distribution and transmission systems, utility planning,  
8 marginal costs, and related issues.

9 **II. INTRODUCTION**

10 **Q: On whose behalf are you testifying?**

11 A: I am testifying on behalf of Small Business Utility Advocates.

12 **Q: What is the scope of your testimony?**

13 A: I review the proposal of Southern California Gas (SoCalGas) to implement a  
14 set of pilot demand-response (DR) programs, as described in SoCalGas's  
15 filing and discovery responses. In particular, I focus on the inadequacy of  
16 SoCalGas's rationale for its programs.

17 **Q: How does SoCalGas justify the proposed programs?**

18 A: SoCalGas does not offer any specific rationale for any of the programs.  
19 Instead, SoCalGas takes the position that it must run the pilot program before  
20 it can determine whether the programs could even conceivably produce  
21 benefits at a reasonable cost.

22 In short, SoCalGas asserts that it has no idea what will work, how  
23 programs should be structured, or how much they will cost, and that the best  
24 way to develop DR capability is to try program designs more or less at  
25 random.

1 **Q: Is SoCalGas’s position correct?**

2 A: Part of SoCalGas’s premise—that gas DR is quite new and untested—is  
3 correct. But SoCalGas fails to use the information that it has to focus the  
4 design of its programs and to determine whether they could even conceivably  
5 be cost-effective.

6 **Q: What is your recommendation?**

7 A: I recommend that the Commission order SoCalGas to do the following:

- 8 • Determine the potential cost savings and reliability improvements for  
9 plausible DR load reductions, so that the Commission can judge  
10 whether DR programs are worth pursuing.
- 11 • Determine the period (hours, days, or the heating season) for which load  
12 reductions are valuable, so that SoCalGas can focus on appropriate end  
13 uses and program designs.
- 14 • Revise its approach to incentives, so that participants are encouraged  
15 and rewarded roughly in proportion to the load reductions they provide.
- 16 • Propose a cost allocator consistent with the potential benefits of the  
17 programs.

### 18 **III. POTENTIAL BENEFITS OF GAS DR**

#### 19 **A. *Benefits of DR for Electric Utilities***

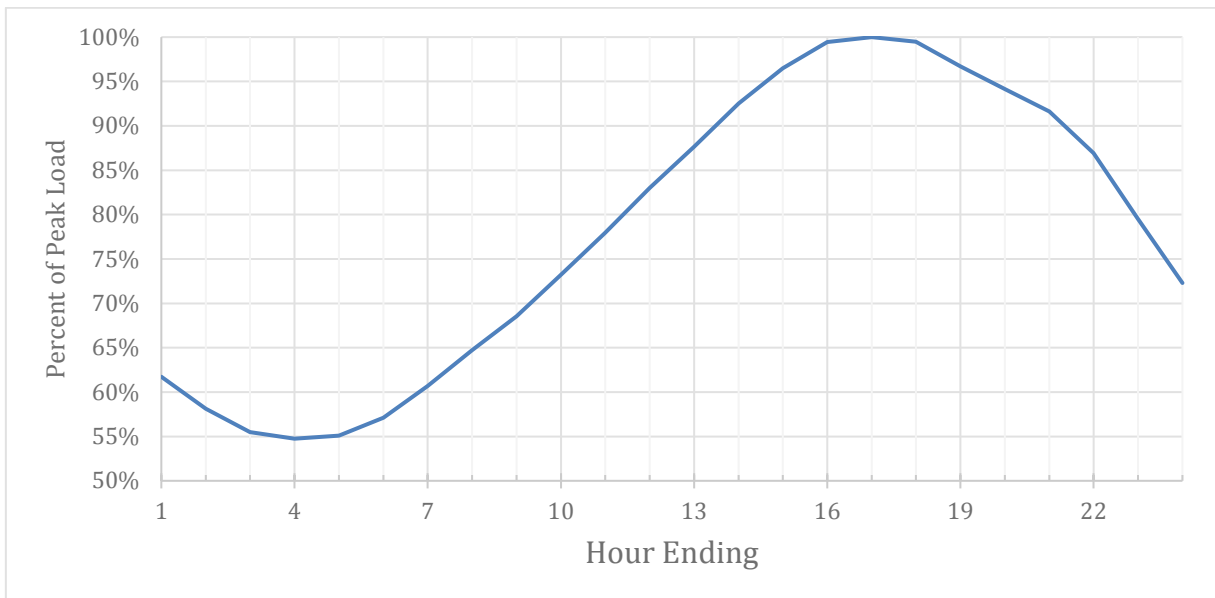
20 **Q: What benefits do DR programs provide to electric utilities?**

21 A: Electric utilities must meet loads that vary widely over the course of a day.  
22 On some days—often just a few days annually—the load may be high  
23 enough that the utility would need to dispatch very expensive resources to  
24 cover load, or might even face a risk of not being able to meet load,

1 especially if multiple supply resources become unavailable. The prospect of  
2 insufficiency in future years prompts utilities to acquire peaking resources to  
3 reduce risks.

4 Those high loads usually occur for only a few hours on each high-load  
5 day. For example, on the CA ISO peak day for 2017, load was within 5% (or  
6 about 2,500 MW) of the peak for the five hours ending 15 to 19.<sup>1</sup> As shown  
7 in Figure 1, any load shifted out of those five hours to cut load to 95% of  
8 peak could be absorbed in the few hours before or after the peak.

9 Figure 1: Hourly California ISO Load on 9/1/2017



10  
11 Electric supply and demand must be balanced essentially  
12 instantaneously, since the transmission and distribution systems do not store  
13 much energy. While storage capacity is increasing, both in terms of  
14 megawatts and megawatt-hours, planning for electric utility supply reliability  
15 is still mostly concerned with hourly (or sub-hourly) demands, rather than

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<sup>1</sup> The 5% band is an example; smaller load reduction for DR would have lower benefits. Only three hours are within 3% of peak, for example.

1 load over longer periods, such as a day.<sup>2</sup> In some cases, load reductions are  
2 needed for much less than an hour, while generators ramp up to meet load or  
3 replace failed resources.

4 **Q: What kinds of changes in load shape from DR programs are helpful to**  
5 **electric utilities?**

6 A: Since periods with a significant risk of very high prices or insufficient supply  
7 are short, electric DR programs that reduce those problems only need to  
8 reduce load for a few hours to be very effective. The benefits of DR are not  
9 greatly reduced if the energy usage in the peak hours shifts earlier or later.  
10 Thus, electric utilities can benefit from DR that does any of the following:

- 11 • Reduces load for a few hours, without any shift to other hours (e.g.,  
12 dimming commercial lighting);
- 13 • Reduces load for a few hours, with the energy shifted to later hours  
14 (e.g., restricting water-heater charging) or days (e.g., rescheduling of  
15 industrial operations); or
- 16 • Stores energy before the DR event, allowing load to be reduced in the  
17 event hours (e.g., ice storage for cooling, behind-the-meter batteries).

#### 18 ***B. Benefits of DR for Natural-Gas Utilities***

19 **Q: Do the benefits of electric DR apply to natural gas systems?**

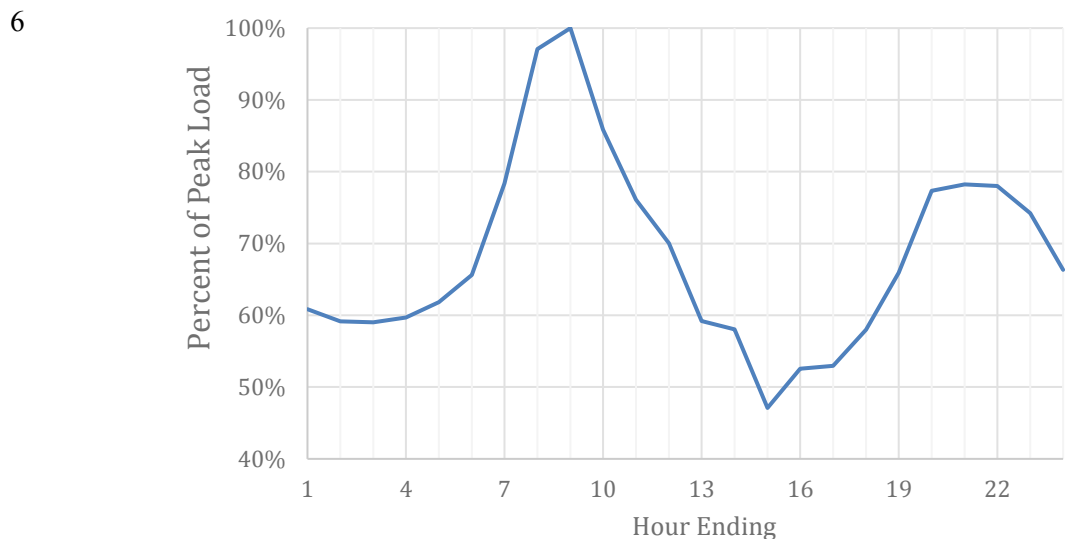
20 A: Not necessarily. SoCalGas's loads vary dramatically during the course of a  
21 peak day, just as an electric utility's load varies. Figure 2 shows Sempra's

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<sup>2</sup> Electric-utility DR is rarely used to reduce critical loads on the transmission and distribution systems, but where it is, the focus is mostly on a short period of high load. Equipment damage and failure result primarily from load in particularly high hours, exacerbated by equipment heating from high loads in the preceding hours.

1 system load on a winter peak day.<sup>3</sup> If hourly load were important in  
2 determining Sempra's costs, shifting load from a couple hours (from 7 to 9  
3 AM) into earlier or later hours, or reducing that morning load without  
4 shifting, might be very valuable.

5 Figure 2: Hourly Load on Sempra's System on 1/25/2017



7  
8 If that narrow peak requires additional supply contracts, pipeline take  
9 stations, compression, or storage, or reinforcements of the distribution  
10 system, cutting load in those hours, or moving load to other hours, could be  
11 very valuable. Unlike the electric system, the gas distribution system has  
12 large amounts of storage in what is called “line pack,” the pressurized gas in  
13 transmission lines and distribution mains. Thus, many gas utilities do all their  
14 planning based on daily load, supply, and capacity. In some cases, supply and

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<sup>3</sup> Attachment 2, A.18-07-024, *Sempra Utilities Response to Indicated Shippers Data Request-3*, Supplemental Response 5.a. (Jan. 10, 2019).



1 most transmission and distribution is sized for daily load, but some corners of  
2 the distribution system can be constrained on an hourly basis.<sup>4</sup>

3 **Q: Are SoCalGas’s costs driven by hourly loads?**

4 A: I cannot find any evidence that hourly load, as opposed to total daily load,  
5 affects SoCalGas’s costs.

6 Attachments 2 to 5 document SoCalGas’s focus on daily loads. These  
7 attachments include:

- 8 • The SoCalGas backbone transportation service tariff, which describes  
9 access in MMcfd (MMcf/day) and reservation charges in \$/Dth per day,  
10 rather than per hour.<sup>5</sup>
- 11 • The SoCalGas transportation imbalance service tariff, which includes  
12 charges for monthly balancing and daily balancing, but not hourly  
13 balancing.<sup>6</sup>
- 14 • The SoCalGas long-term storage service tariff, which charges for  
15 reserving storage injection and withdrawal capacity in dollars per  
16 decatherm per day.<sup>7</sup>
- 17 • The 2018 California Gas Report, which mentions “hour” in terms of  
18 electricity usage, and customer understanding of their gas use, but not in  
19 any gas planning context. Tables 1-SCG to 4-SCG and the tables on pp.

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<sup>4</sup> SoCalGas demand is falling, so any hourly constraints on the distribution system will tend to become less constrained over time. As the 2018 California Gas Report notes, “SoCalGas projects total gas demand to decline at an annual rate of 0.74 percent from 2018 to 2035” (p. 66). Thus, most constraints on the SoCalGas system would appear to result from the loss of storage capacity from Aliso Canyon.

<sup>5</sup> See Attachment 3, SoCalGas, *Schedule No. G-BTS, Backbone Transportation Service*.

<sup>6</sup> See Attachment 4, SoCalGas, *Schedule No. G-IMB, Transportation Imbalance Service*.

<sup>7</sup> See Attachment 5, SoCalGas, *Schedule No. G-LTS, Long-Term Storage Service*.

1           83 and 96–98 describe capacity and loads in MMcf/day, not in hourly  
2           terms.<sup>8</sup>

3           Likewise, the Triennial Cost Allocation Application for the SEMPRA  
4           utilities treats all load-related costs as being driven by daily loads or loads  
5           over a longer period, such as cold snaps and seasons.<sup>9</sup>

6   **Q: How has SoCalGas addressed the value of various types of DR load**  
7   **reductions?**

8   A: Strangely enough, SoCalGas does not specify what type of load reductions it  
9   believes would be valuable, or why they would be valuable (e.g., avoiding  
10   peaking supply contracts, avoiding storage capacity, reducing usage of  
11   expensive peak commodity, maintaining pressure given reduced storage  
12   capacity, avoiding pipeline delivery capacity, reducing operation of  
13   compression facilities, avoiding transmission or distribution upgrades).

14           The closest that SoCalGas gets to explaining the purpose of the DR  
15   programs is as follows:

16           ...the intent of gas DR is to reduce natural gas consumption during  
17   system stress to enhance reliability of the natural gas system during peak  
18   periods. Many factors may contribute to system stress, including, but not  
19   limited to, the availability of natural gas storage inventory and natural  
20   gas pipeline and storage constraints. Although DR may be a potential  
21   tool to enhance reliability that could marginally offset the impacts of  
22   system constraints, it will not fully mitigate reliability risks from the loss  
23   of supply at the gas system level.<sup>10</sup>

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<sup>8</sup> See Attachment 6, *2018 California Gas Report* (prepared in compliance with D.95-01-039).

<sup>9</sup> See A.18-07-024, *Triennial Cost Allocation Proceeding Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G)* (July 31, 2018).

<sup>10</sup> Attachment 7, *SoCalGas Response to Cal Advocates Data Request-02*, Response 1.c. (Dec. 12, 2018).

1           This description suggests that SoCalGas believes that DR may help  
2 ameliorate constraints in supply from pipelines and storage withdrawal,  
3 which are usually measured on a daily basis, which would suggest that the  
4 relevant measure of DR effectiveness would be reduction of daily, rather than  
5 hourly, load. SoCalGas does not cite to any hourly constraints on the local  
6 delivery system.

7           Importantly, SoCalGas also suggests that DR may be helpful in dealing  
8 with shortages in the “availability of natural gas storage inventory.” Storage  
9 inventory is a function of total demand since the last time that load was low  
10 enough that the storage facilities could be refilled. Moving load from one day  
11 to the next, or even one week to the next, may do little or nothing to improve  
12 storage inventory.

13 **Q: What can you conclude from the limited information that SoCalGas has**  
14 **provided on the potential benefit of DR on its system?**

15 A: The potential DR benefits appear to require load reductions on at least a daily  
16 basis, and perhaps longer. Reducing load in one hour of the day will  
17 contribute to reducing daily load, but only if the load is not shifted to other  
18 hours. As I discuss below, if my understanding of SoCalGas’s system  
19 constraints are correct, some of SoCalGas’s DR programs are unlikely to  
20 have any real benefits and are not worth pursuing.

21 **Q: Has SoCalGas presented any evidence demonstrating that its proposed**  
22 **programs would improve reliability or reduce costs?**

23 A: No.

24 **Q: Why not?**

25 A: The Company seems to believe that it cannot consider the potential value of  
26 DR until it knows more about the implementation of the programs. When

1 asked to “provide the results of any analysis that SoCalGas has conducted to  
2 determine the ongoing need for long-term natural gas DR programs,”  
3 SoCalGas responded as follows:

4 SoCalGas has not conducted an analysis to determine the need for long-  
5 term natural gas DR programs because additional data would be  
6 necessary to perform such an analysis including, but not limited to, the  
7 observed results of the DR program pilots and associated  
8 activities...SoCalGas’ application for a suite of DR programs for  
9 residential, commercial and industrial customers is aimed at testing and  
10 learning which programs, strategies, and technologies could enhance  
11 reliability of the natural gas system during times of system stress. The  
12 three-year pilots...will provide the opportunity for SoCalGas to develop  
13 the data and experience necessary to inform the on-going need and  
14 effectiveness of natural gas DR programs in the long-term.<sup>11</sup>

15 **Q: Is this a reasonable position?**

16 A: No. Whether a utility understands exactly how much a program will cost, or  
17 how best to implement it, or how much of a load reduction it might achieve,  
18 it can estimate the potential benefits. In this case, SoCalGas could have  
19 determined what types of load reduction (hourly, daily, weekly) would be  
20 needed to provide benefits. This information is needed so that stakeholders  
21 and Commission staff can determine whether a program is beneficial, just  
22 and reasonable.

23 If the benefits are financial, SoCalGas should be able to estimate the  
24 potential value of various amounts of load reduction. If the benefits are solely  
25 reliability-related, SoCalGas should at least be able to estimate the  
26 probability that a specific amount of DR would avoid loss of supply to  
27 customers, along with the number of customers and amount of curtailment  
28 that would be avoided.

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<sup>11</sup> *Id.* Response 1.a.

1 **Q: Would that information on reliability effects be useful?**

2 A: Yes, at least potentially. Suppose that the analysis concluded that very large  
3 annual expenditures would be needed to avoid a 0.1% chance of needing to  
4 curtail gas supply to a handful of industrial customers. Since SoCalGas sales  
5 are declining, and state decarbonization policy will require continued phase-  
6 out of natural-gas combustion, any short-term problem might disappear over  
7 the next several years. Under these circumstances, the Commission might  
8 decide that the avoided risk is not worth the likely cost, and that even running  
9 the DR pilots would be a poor investment.

10 Alternatively, the risk may be much higher and the potential  
11 consequences may be much greater, justifying massive efforts to promote  
12 DR. In that case, the pilots would be very useful in determining the  
13 feasibility and costs of achieving the potential savings and in refining  
14 program design.

15 Without any data on potential benefits, SoCalGas cannot provide a  
16 coherent argument for DR, the parties cannot critique the non-existent  
17 justification, and the Commission cannot make an informed decision  
18 regarding the application.

#### 19 **IV. PROGRAM DESIGN ISSUES**

20 **Q: What comments do you have on the design of the DR programs that**  
21 **SoCalGas has proposed?**

22 A: At a high level, SoCalGas's portfolio has some attractive features. Rather  
23 than focusing on a single class or end-use, SoCalGas proposes to consider the  
24 feasibility of DR from a range of classes and end uses. In addition, rather  
25 than limiting the DR programs to a single technology (such as direct control

1 of set-points), SoCalGas proposes to investigate a wide range of  
2 technological solutions, including programs that require no new technology.

3 **Q: What concerns do you have about SoCalGas's proposed program**  
4 **designs?**

5 A: I have a few concerns, regarding the targeted load changes, the incentive  
6 structures, the slow roll-out of the Behavioral Messaging Pilot and the  
7 effectiveness of the Winter Notification Campaign in reaching small business  
8 customers.

9 **Q: What concerns do you have about the targeted load changes?**

10 A: As I discussed above, it appears that a DR program must reduce the  
11 cumulative gas consumption for a day or more in order to improve reliability.  
12 Some of SoCalGas's proposed programs, such as water-heater load control  
13 (WHLC), shift load around within a gas day, but do not reduce gas  
14 consumption significantly. Indeed, in order to increase supply of hot water  
15 during the period of thermostat setback, customers may increase the  
16 thermostat setting in uncontrolled periods, potentially increasing total gas  
17 consumption. If the supply problem were limited to a few hours (as is the  
18 case for most electric constraints), shifting water-heating load within the day  
19 could be very valuable, but it has little use in solving the problems that  
20 SoCalGas has described.

21 Similarly, SoCalGas has not offered any rationale for invoking  
22 morning-only and evening-only events in the space-heating load-control  
23 (SHLC) program. If SoCalGas needs to reduce the amount of gas withdrawn  
24 from storage in a day, or otherwise reduce daily stress on the system, it  
25 would be more effective to provide controls and incentives based on daily  
26 usage. Reductions in thermostat settings overnight may be just as valuable

1 and less painful for participants than controls that produce the same amount  
2 savings in just a few morning or evening hours. Small businesses that are  
3 highly active in morning or evening hours will benefit from the flexibility to  
4 make thermostat reductions at alternative times. The short-period reductions  
5 in thermostat settings may actually encourage participants to increase the  
6 thermostat setting in the preceding hours, so that the building will remain  
7 warm into the control period; this strategy would offset much of the peak-  
8 period gas savings, leaving SoCalGas’s supply little better off for the day.<sup>12</sup>  
9 Control periods and incentives should align with SoCalGas’s needs.

10 For the Load Reduction Pilot, SoCalGas proposes that the reduction  
11 will be evaluated over at least 24 hours, which appears to be consistent with  
12 SoCalGas’s system requirements.

13 **Q: What concerns do you have about the incentive structures?**

14 A: SoCalGas proposes that participant incentives for residential customers  
15 participating in the SHLC and WHLC programs should be a flat annual value  
16 depending the end use and, for non-residential customers a fixed annual  
17 value depending on equipment size, so long as the customer participates “in  
18 at least 50% of the DR events called.”<sup>13</sup> This incentive structure means that a  
19 participant who has missed a large number of events has no incentive to  
20 participate later in the winter, and that a participant who has complied with  
21 most of the events early in the winter also has no incentive to participate later

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<sup>12</sup> Indeed, the Nexant report for 2017/18 says that “Vendor 1 thermostats additionally will pre-adjust the temperature in the home before the event to maximize comfort” (Application Chapter 1, Appendix B, page 5). This feature automatically erodes the daily gas savings.

<sup>13</sup> As used in the Application, “participation” may mean not overriding a load-control signal. Application, Ch. 1, *Prepared Direct Testimony of Darren Hanway* (Nov. 6, 2018) (“Ch. 1”), pp. 9, 10, & 13.

1 in the winter. Small-business customers tend to respond favorably to word-  
2 of-mouth efforts, so the likelihood of participation in the early years of the  
3 SHLC and WHLC pilots may increase as the winter season goes on and the  
4 financial benefits become known through word-of-mouth recommendations.  
5 That is just one example of a situation in which SoCalGas's proposed  
6 incentive structure could inappropriately disincentivize participation by  
7 customers (in this case, slow starters).

8 A larger base incentive, reduced by the percentage of events with which  
9 the participant fails to comply, may be more effective. This structure would  
10 be closer to the proposed performance incentives for the Load Reduction  
11 Pilot, which would pay participants in proportion to their load reductions.

12 SoCalGas should also seek ways to provide larger rewards for  
13 customers who reduce (or allow SoCalGas to reduce) their thermostat  
14 settings further. It appears that SoCalGas has been reducing thermostat  
15 settings no more than four degrees.<sup>14</sup> Some participants may be willing to  
16 reduce their settings much more than that, and should be rewarded for doing  
17 so, if they are protecting other customers from high costs or poor reliability.

18 **Q: Does SoCalGas offer any rationale for its incentive structure in the**  
19 **SHLC and WHLC programs?**

20 A: Yes. In its supplemental testimony, SoCalGas says:

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<sup>14</sup> *Id.* App. B, p. 5.



1 Both residential and non-residential customers will be incentivized for  
2 enrolling in the pilots with their control devices. Residential customers  
3 will be provided with a flat fee per winter season if they participate in  
4 over 50% of the events. The incentives are designed this way to limit  
5 “free riders” and promote participation in events.<sup>15</sup>

6 SoCalGas adds the footnote:

7 Free riders are defined as program participants who would have  
8 participated in the absence of the program and the incentives.<sup>16</sup>

9 **Q: What is your reaction to this evidence?**

10 A: I am concerned that SoCalGas is confused about the nature of free riders. The  
11 footnote is almost correct, except that it suggests that a free rider could have  
12 participated in a program that did not exist. A better definition would be  
13 “program participants who would have *taken the same action* in the absence  
14 of the program and the incentives.”<sup>17</sup>

15 More seriously, the text suggests that SoCalGas’s limitation of the fee  
16 to participants who “participate in over 50% of the events” somehow affect  
17 free riders. A classic free rider for the SHLC program (as SoCalGas has  
18 proposed it) would be a residential customer who works the late shift and sets  
19 the thermostat to a low setting while they are sleeping (perhaps 1 AM to 9  
20 AM) and again when they are commuting and at work (perhaps 2 PM to  
21 midnight). Such a customer would happily participate in the program and be

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<sup>15</sup> Non-residential participants in the WHLC and SHLC will also be paid a “fee per winter season if they participate in over 50% of the events,” but the fee will depend on the energy saved, as well as participation. Application, Ch. 5, *Revised Prepared Consolidated Supplemental Testimony of Darren Hanway and Nancy Carrel Lawrence* (Feb. 22, 2019) (“Ch. 5”), p. 3.

<sup>16</sup> *Id.* fn. 7.

<sup>17</sup> In many cases, a free rider could be said to deserve some financial compensation, for being inherently less expensive to serve than average customers in the class. Free ridership is an important input to program assessment and system planning, but it is not a moral issue.

1       paid \$25 annually for letting SoCalGas do exactly what the customer would  
2       have done anyway, and SoCalGas’s requirement of 50% participation would  
3       have no effect on them.

4               The 50% participation requirement (or any other performance-based  
5       incentive, such as the linear incentive I discuss above) would reduce or  
6       eliminate payments to another group of nominal participants, who might be  
7       called non-compliant, or cheaters, or gamers. In the DSM context, a customer  
8       who asks for a rebate for purchasing an efficient appliance they did not  
9       install is a fraudster, not a free rider. The same would be true of a customer  
10      who signs up for a DR incentive with no intention of complying.<sup>18</sup>

11              In the case of DR, in addition to the cheats, customers may sign up for  
12      programs with the best of intentions, but be unable or unwilling to comply.  
13      They may override the program control for very good reasons, such as frail  
14      elderly visitors who are having a hard time staying warm, or a new baby. Or  
15      the nominal customer may not be able to keep chilly family members,  
16      housemates, or employees from hitting the override button. These nominal  
17      participants are non-compliant and do not deserve an incentive. But they are  
18      not free riders.

19      **Q: What concerns do you have regarding the Behavioral Messaging Pilot?**

20      A: I am concerned that SoCalGas is proposing to roll out the Behavioral  
21      Messaging Pilot (BMP) rather slowly. The BMP would use a mobile  
22      application to sign up customers, notify them of event days and send them

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<sup>18</sup> This has been an issue in interruptible-load electricity discounts for industrial customers who have no interest in actually shedding load, and may be willing to incur penalties rather than shut down processes, in the rare event of an interruption. For those customers, the interruptible rate rider is simply a discount, at least until the utility needs to start calling for interruptions.

1 reports showing their “impact they had during event and non-event days.”<sup>19</sup>  
2 The responses of participants would benefit all customer classes.<sup>20</sup>

3 The proposed BMP budget is zero for the winter 2019/20 and ramps up  
4 in 2020/21 and 2021/22. Once SoCalGas determines what kind of load  
5 reductions would be valuable (which may not be complete in time for  
6 application in 2019/20), it will need to invest in front-loaded marketing to  
7 encourage customers to sign up, in addition to the ongoing communications  
8 for alerts before event days and to reporting afterwards. It seems that  
9 SoCalGas could be implementing this program more quickly. SoCalGas  
10 should specify how it intends to ramp up this program, including  
11 differentiating its budget between marketing and program operation.

12 **Q:** What concerns do you have regarding the Winter Notification Marketing  
13 Campaign?

14 **A:** While the outreach strategies proposed in the Winter Notification Campaign  
15 (WNMC) is likely to increase customer awareness of the winter supply  
16 constraints and encourage enrollment in the DR programs, I expect that a  
17 large share of small businesses will not be affected by the proposed  
18 marketing activities: digital advertising, social media, digital radio, radio,  
19 print, and paid search.<sup>21</sup> SoCalGas is likely to get a better response from  
20 outreach through community and small-business groups and through direct  
21 personal contact, particularly as part of direct-installation energy-efficiency

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<sup>19</sup> Though not specified, I assume “impact” refers to customer usage. Ch. 1, pp. 18-19.

<sup>20</sup> It is not clear whether small businesses (and other customers with limited resources) would be likely to participate in this program, without a clear financial benefit.

<sup>21</sup> Application, Ch. 4, *Prepared Direct Testimony of Reginald M. Austria and Michael Foster* (Nov. 6, 2018) (“Ch. 4”), pp. 5-6.

1 programs.<sup>22</sup> Energy-efficiency investments in gas-fired end uses are  
2 generally the measures that are most likely to reduce stress on the gas supply  
3 system, so increasing outreach to small business customers with a combined  
4 set of measures for efficiency, DR participation and winter-constraint  
5 notification may be the best option for delivering large on-peak gas energy  
6 savings in the near term.

## 7 **V. COST ALLOCATION**

8 **Q: How does SoCalGas propose to allocate the DR program costs?**

9 A: The Company proposes to use the Equal Percent of Margin (EPAM) method.

10 **Q: What is SoCalGas’s rationale for this approach?**

11 A: When asked for “the rationale or basis for allocating the proposed demand  
12 response cost to customer classes using EPAM,” SoCalGas responded:

13 This methodology allocates programs costs on the same percentages as  
14 base margin is allocated as per SoCalGas’ most recent TCAP Decision  
15 (D.16-10-004). Demand Response Programs broadly benefit all  
16 customers classes as they are intended to enhance system reliability  
17 during times of system stress.<sup>23</sup>

18 **Q: Is SoCalGas’s proposed allocation appropriate?**

19 A: I think not. Margin includes many costs that are not related to the benefits of  
20 the DR programs. The purposes of the DR programs (as best I can determine,  
21 given SoCalGas’s limited explanation) result from their benefits in relieving

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<sup>22</sup> SoCalGas must also develop a mechanism for getting appropriate contractors to install load-control devices on gas equipment of small businesses, many of whom will not have the in-house expertise (or perhaps even time) to hire contractors and supervise installation.

<sup>23</sup> Attachment 8, *SoCalGas Response to Indicated Shippers Data Request-01*, Response 4 (Dec. 12, 2018).

1 constraints on SoCalGas's storage and perhaps pipeline supplies, benefiting  
2 all SoCalGas customers (and perhaps especially the non-core customers that  
3 are most likely to be curtailed under shortage conditions).

4 **Q: What would be a more appropriate allocator for the DR cost?**

5 A: The costs should be allocated on an allocator more related to the program  
6 benefits, such as the allocated storage costs.

7 **Q: Does this conclude your testimony?**

8 A: Yes.