

Application of San Diego Gas & Electric Company
(U-902-E) for Adoption of an Advanced Metering
Infrastructure Deployment Scenario and Associated Cost
Recovery and Rate Design.

Application 05-03-015

CHAPTER 21

**Prepared Rebuttal Testimony
of
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SAN DIEGO GAS & ELECTRIC COMPANY

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

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8 **I. Introduction**
9

10 The purpose of this testimony is to respond to revenue allocation proposals presented by
11 the Division of Ratepayer Advocates (DRA) witness Chris Blunt in his prepared
12 testimony submitted on August 14, 2006 in the matter of San Diego Gas & Electric's
13 (SDG&E) advanced metering infrastructure (AMI) application, A.05-03-015. In this
14 rebuttal testimony I will compare SDG&E's allocation proposals to those of DRA's
15 proposals to demonstrate the problems with DRA's methodology.

16
17 **II. DRA's proposal to allocate 44% of AMI revenue requirements based on**
18 **electric generation EPMC factors is inherently unfair to medium & large**
19 **C&I customers.**
20

21 DRA objects to how SDG&E proposes to allocate the electric AMI costs. (ref. DRA page
22 2-2) DRA asserts that if operational benefits of SDG&E's AMI proposal are 56% of
23 costs, then the remaining costs would have to be demand-related and therefore at least
24 44% of costs should be allocated the same way that demand response benefits would flow
25 to customers. DRA's proclaimed "hybrid allocation scheme" is proposed only for
26 electric AMI costs since gas demand benefits are relatively small. (ref. DRA page 2-3)

27
28 SDG&E on the other hand proposes that AMI revenue requirements be allocated in
29 proportion to meter installation costs per class. Meter costs comprise the majority of total
30 costs and therefore produce an equitable allocation result. For example, since the vast
31 majority of the AMI meter costs are associated with residential customers, the vast
32 majority of costs should be recovered from residential customers. SDG&E therefore
33 proposed that 63.79% of electric AMI costs be recovered from the residential class,
34 whereas DRA proposes that only 46.78% of costs be allocated to the residential class.
35 (ref. DRA page 2-4)

1
2 SDG&E currently determines a class' customer-related distribution cost responsibility
3 based on estimates of marginal customers costs multiplied by the number of customers in
4 the class. Since meter costs are the primary cost element of AMI, SDG&E's proposed
5 AMI allocation approach would allocate AMI costs in a similar manner as the currently-
6 adopted approach. For example, once AMI revenue requirements are incorporated in
7 SDG&E's distribution revenue requirements, and SDG&E has developed updated
8 marginal customer cost studies to reflect the new meter types, (in a future rate
9 proceeding) the AMI meter costs would ultimately be allocated based on a marginal cost
10 approach.

11
12 Severe problems with DRA's allocation approach are apparent when allocation results for
13 the medium and large C&I class are compared. Reflecting the fact that the large C&I
14 customers constitute a small fraction of the total customers (only 21,000 of the 1.4
15 million customers are 20 kW or greater), SDG&E proposed that only 5.08% of total costs
16 be allocated to the medium and large C&I class. DRA on the other hand proposes that
17 39.24% of total costs be recovered from the medium and large C&I class even though
18 medium and large customers are less than 2% of the customer base.¹ Medium and large
19 C&I customers would be severely disadvantaged under DRA's approach. DRA's
20 "scheme" clearly reduces the allocation to small customers, but the methodology should
21 be rejected since the resulting allocations make no intuitive sense.

22
23 DRA acknowledges the fact that its methodology produces problematic results in DRA's
24 response to SDG&E Data Request No: DRA- 2, Item 3.

- 25
26 3. Also referring to Table 2-1 on page 3-4, please explain why you have
27 allocated costs to the street lighting class.
28

29 **Response to Q.3:** The costs being allocated to streetlighting flow mainly
30 from the fact that the hybrid allocation schedule that DRA uses relies
31 partially on distribution EPMC factors. DRA recognizes that distribution
32 EPMC is not a perfect allocator of the AMI operational benefits, given
33 that it contains components not related to meter reading, which is the
34 primary operational benefit of AMI. Though there are general T&D

¹ Note that the cost to replace an existing medium or large customer poly-phase electric meter is greater than the cost of installing a typical residential single phase meter.

1 benefits from AMI (See Chapter 4 of SDG&E's testimony), they are a
2 significantly smaller percentage of operational benefits than are the non-
3 meter reading components of distribution EPMC. DRA would be open to
4 making an adjustment in the case of the streetlighting class given that this
5 imprecision in DRA's proposed allocator affects this class the most.
6 Alternatively, an allocator could be developed for the distribution function
7 that gives greater weight to the meter reading costs. But using SDG&E's
8 proposed allocator is not a reasonable solution to this problem because it
9 allocates costs in a way that is completely unrelated to benefits.

10
11
12 DRA's approach would imply that a significant portion of SDG&E's future distribution
13 revenue requirements be allocated based on *benefits* rather than marginal costs of
14 providing service. DRA's allocation method not only produces erroneous results, but the
15 approach is inconsistent with the currently-adopted revenue allocation approaches.

16
17 **III. DRA's proposal to allocate 11.33% of gas AMI system costs to non-core C&I**
18 **illustrates the absurdity of allocating the costs based on gas distribution**
19 **EMPC factors.**

20
21 DRA also objects to how SDG&E proposes to allocate gas AMI costs. (ref. DRA page 2-
22 2) DRA again asserts that gas EPMC factors should be used to allocate costs since, even
23 if a customer has Automated Meter Reading (AMR) devices, the devices become part of
24 the distribution revenue requirement allocated to all customers. (ref. DRA page 2-5)
25 DRA's allocation scheme again reduces the allocation to residential customers, but
26 increases the allocation to all non-residential classes.

27
28 SDG&E's proposal for gas cost allocations are consistent with its proposal for electric.
29 SDG&E proposes to allocate the gas transportation revenue requirement changes
30 associated with AMI implementation and incremental O&M costs based on the weighted
31 average cost of the gas devices by class. If a customer class already has gas AMR, and
32 customer costs assigned to the class therefore already reflect the AMR costs, then no
33 costs associated with AMI should be allocated to the class. SDG&E is not planning to
34 replace any of the existing non-core customer gas meters with AMI gas modules. The
35 existing non-core gas meter technology and communications already provides daily reads
36 to SDG&E and usage data is available to SDG&E non-core customers through the
37 current web-based system designed for non-core gas transactions.

1
2 In response a data request from SDG&E (Data Request No: DRA-2, Item 6), DRA
3 acknowledges an error in their gas allocation methodology.

- 4
5 6. Referring to Table 2-2 on page 2-5, please explain why the allocation
6 percentages do not sum to 100% under DRA's recommendation. Which class
7 is responsible for the remaining difference?
8

9 **Response to Q.6:** The allocation factors do not sum to 100% because the GN-2
10 class (having an allocation factor of 0.36%) was inadvertently omitted from
11 core C&I. DRA will fix this mistake in its errata.
12

13 The most obvious flaw in DRA's gas allocation method is in the allocation to noncore
14 C&I. SDG&E proposes an allocation of 0% to this class (as described above), whereas
15 DRA would allocate 11.33% of total gas costs to the noncore C&I. A sanity check of this
16 result should be sufficient to reject the DRA methodology. It makes no sense to allocate
17 costs to the noncore C&I class when they already have, and pay for, AMR devices.
18

19 This concludes my prepared rebuttal testimony.