



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

FILED

09-25-09

04:59 PM

Application of Pacific Gas and Electric Company for Authority to Increase Revenue Requirements to Recover the Costs to Implement a Program to Improve the Reliability of Its Electric Distribution System U 39 E).

Application 08-05-023
(Filed May 15, 2008)

**OPENING BRIEF OF THE DIVISION OF RATEPAYER
ADVOCATES**

PAUL ANGELOPULO
Attorney
Division of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-4742
Email: pfa@cpuc.ca.gov

September 25, 2009

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	v
I. INTRODUCTION AND SUMMARY	1
A. SOME RED FLAGS HIGHLIGHTING THE UNREASONABLENESS OF PG&E’S PROPOSAL	3
II. BACKGROUND AND DESCRIPTION OF THE CORNERSTONE PROJECT	6
A. INDEPENDENT REASONS FOR REJECTING THIS APPLICATION	9
1. PG&E’s motivation for filing CIP is suspect, as evidenced by the dubious statements of its policy witness.	9
2. PG&E’s Updated Testimony Failed to Address the Deficiencies in its Application Identified in the ACR, or Adequately Respond to the Specific Questions Therein.	10
3. CIP Has No Clearly Defined Purpose.	11
4. PG&E Cannot Avoid Its Burden of Proof by Turning The Entire Proceeding Into a Question of Policy.	12
5. PG&E’s presentation is convoluted, ill-defined, contradictory and above all, unpersuasive.	14
6. PG&E has yet to determine the interrelationship between CIP and its AMI efforts, but still wants full funding for another communications system it is not sure it will need.	17
III. GENERAL POLICY ISSUES	19
A. CALIFORNIA LAW DICTATES THAT AS A MATTER OF POLICY, CIP CANNOT BE APPROVED.	19
B. CIP SHOULD BE REJECTED BECAUSE PG&E HAS FAILED TO MEET ITS BURDEN OF PROOF	20
IV. ELECTRIC DISTRIBUTION CAPACITY PROPOSAL	24
A. CIP CAPACITY COSTS ARE NOT JUSTIFIED BY THE SMALL BENEFITS	24
B. THE SMALL RELIABILITY IMPROVEMENTS ARE NOT ALL DUE TO CIP25	
C. PG&E DID NOT UPDATE ITS ANALYSES	31
D. PG&E PROVIDED FEW SPECIFIC PROJECTS TO ANALYZE	34
E. ANALYSIS OF SOME ISSUES RAISED IN PG&E’S REBUTTAL TESTIMONY	41

1. PG&E’s Rebuttal Illustration of the Relationship Between the Cornerstone Initiatives Exacerbates the Confused Nature of its Showing.....	41
2. Distribution Automation Is Not Necessarily Dependent Upon Approval of PG&E’s Feeder Interconnectivity and Substation Emergency Capacity Requests.	42
3. PG&E’s Argument That DRA Incorrectly States That It Expects Dramatic Changes In The California Economy To Impact Load Growth Is Unpersuasive.....	44
4. In an About Face, PG&E’s Rebuttal Argument That SAIDI And SAIFI Improvements Should Not Be The Determining Factor In Approving CIP Is Comical At Best	45
V. DISTRIBUTION AUTOMATION PROPOSAL.....	46
A. SUMMARY OF PG&E’S REQUEST.....	46
B. DISTRIBUTION AUTOMATION BACKGROUND	48
C. ISSUES.....	50
1. PG&E’s Worst 400 12kV Circuits	50
2. PG&E’s 17kV and 21 kV Circuits	52
3. PG&E Has Provided Little Proof to Support its Capital Expenditure Assumptions.....	53
4. San Francisco Distribution Automation Pilot Project	55
5. PG&E’s SAIDI Performance Improved in One Year by Almost the Full Estimated Benefit of Deploying DA	57
6. Communication Systems Costs	57
7. Replacement Pole Assumptions and Costs	61
8. O&M Expenses	62
VI. RURAL RELIABILITY PROPOSAL	62
A. RECLOSERS	63
B. FUSES.....	65
C. NEW/REPLACEMENT POLES	66
D. DRA’S RECOMMENDATION ON RURAL CAPITAL	68
E. OPERATION AND MAINTENANCE EXPENSES.....	68
1. Rural Reliability Expense.....	68
F. DRA’S RECOMMENDATION ON RURAL O&M EXPENSES	70

VII. ADDITIONAL ISSUES.....70
VIII. CONCLUSION70
CERTIFICATE OF SERVICE
SERVICE LIST

TABLE OF AUTHORITIES

	Page
<u>California Public Utilities Code</u>	
Public Utilities Code Section 399.2 (a)(1)	19, 21
Public Utilities Code Section 451	22
Public Utilities Code Section 454	22
<u>CPUC Decisions</u>	
D.07-06-027	17
D.09-09-030	20
D.06-05-016	22, 23
D.01-10-031	23
D.00-02-046	23
D.00-02-046	23

DRA’s Recommendations

DRA recommends that PG&E’s Cornerstone Improvement Project Application be denied in its entirety.

Application of Pacific Gas and Electric Company for Authority to Increase Revenue Requirements to Recover the Costs to Implement a Program to Improve the Reliability of Its Electric Distribution System U 39 E).

Application 08-05-023
(Filed May 15, 2008)

**OPENING BRIEF OF THE DIVISION OF RATEPAYER
ADVOCATES**

Pursuant to Rule 13.11 of the California Public Utilities Commission's (Commission) Rules of Practice and Procedure, the Division of Ratepayer Advocates (DRA) hereby files this Opening Brief in opposition to Pacific Gas & Electric Company's (PG&E) Cornerstone Improvement Project (CIP). CIP is an electric distribution reliability improvement program that PG&E proposes to, inter alia, increase the available capacity and interconnectivity of its distribution system in urban and suburban areas, to expand distribution automation in those same areas to reduce the frequency, extent and duration of outages, and to increase mainline protection to reduce the frequency and extent of outages in rural areas. DRA recommends that the Commission reject this Application in its entirety.

I. INTRODUCTION AND SUMMARY

The overarching and primary reason DRA advocates the rejection of PG&E's CIP proposal is PG&E's insistence that it is reasonable for it to first receive ratepayer funding in the billions of dollars before specifically knowing what it is going to do with the money. As will be discussed throughout this brief, there is a plethora of other independently convincing reasons for rejecting this project. However, this Application not only pushes every regulatory principle to its limits, in general it brazenly ignores them. The extraordinary and disturbing

regulatory bravado with which PG&E presents this proposal should be summarily rejected by the Commission, lest it set some ugly precedent for other utilities to follow, but especially because it systematically ignores PG&E's ratepayers' interests. DRA submits that there are broader issues and principles at stake here than deciding on the merits of the CIP project itself. The integrity of the Commission, as well as that of its legal process, is at stake.

The general issues upon which DRA bases its opposition to the project are as follows: PG&E fails to satisfy its evidentiary burden; it violates statutory law and Commission precedent; PG&E's regulatory showing has no meaningful or reliable evidence to support the project's cost-effectiveness, the value of the service it offers customers, or inter-utility comparisons on reliability, and pervasively provides insufficient details on the specific projects within CIP. Moreover, there is good evidence that the CIP Application is primarily motivated by its corporate interest in increasing its rate base, rather than some genuine concern with serving its customers interests.

Perhaps the most telling indication that this Application should be rejected is PG&E's continuous about-face with regard to the motivations and goals of CIP. By the time rebuttal time came around, PG&E realized that it could not meet its burden of proof, and suddenly tried to remove this case from its legal realm, where persuasive evidence in the record is necessary, into the political realm of "policy." For the Commission's decision to withstand legal scrutiny, it will have to rely on the details within the record, rather than the inevitable behind-the-scenes ex-parte presentations regarding Wall Street's and PG&E's shareholders' interests. The problem for PG&E is that there is a dearth of requisite detail in the record.

The Commission's mandate is to serve ratepayers' interests, not the utility's. DRA submits that the Commission has no option but to reject PG&E's policy argument, and consequently, the entire case, because it has chosen to redefine that as the determining issue. PG&E's policy witness incredulously testified under oath that ratepayers' perceptions or opinions are not one of the

factors policymakers need to consider regarding whether PG&E needs to improve its distribution reliability.¹ How can this Commission possibly base approval of this project on a policy that, by definition, ignores the very people it, as well as PG&E, are supposed to serve?

A. Some Red Flags highlighting the unreasonableness of PG&E's proposal.

Here are just a few of the glaring absurdities in the CIP proposal that highlight the need to reject it:

- Relative to the CIP's alleged benefits, its costs are unjustified and outrageous. PG&E estimates that the distribution capacity portion of CIP, which constitutes approximately 65% of the total project costs,² will achieve SAIFI improvements of 0.037 customer interruptions per year.³ So it is going to cost over \$3 billion (including costs through its useful life)⁴ for the average PG&E electric customer to experience one fewer outage every 27 years. That is preposterous – yes, **\$3 billion dollars for one less outage every 27 years**, and PG&E could not even muster up a response to this absurdity in its rebuttal.
- PG&E requests half a billion dollars for transformers and feeders to meet “emergency” contingencies in order to achieve a maximum of 0.8 SAIDI minutes reduction. Yet PG&E hopes to achieve a 57 minute SAIDI improvement through the entire CIP project. Therefore, **almost a quarter of the budget is going to be spent to achieve less than 1/57 of the SAIDI improvements.**⁵
- PG&E's Distribution Automation (DA) proposal constitutes a majority of the CIP's total estimated reliability benefits, or 68%.⁶ However, through regular GRC funding, and without DA in place, the difference between PG&E's 2006 and 2007 SAIDI figures was 26.2 minutes,⁷ or 93% of

¹ See ITR, at pp.128:17 through 129:3.

² Total request for CIP is \$1,992 million for capital expenditures and \$59 million for expenses, while the distribution capacity portion of the project is \$1,324.3 million for capital expenditures, and \$14.5 million for expenses.

³ PG&E Exh. 1, at 3-2, line 16.

⁴ DRA Exh.502, at p.11, footnote 12.

⁵ See TURN Exh. 121, at p.4.

⁶ PG&E Exh. 1, Table 1-2 at 1-9, and see section V.A and Table V2. below.

⁷ PG&E Exh. 1, Table 4-1 at p. 4-19.

PG&E's estimated DA benefits shown in Table 4-3. So **without the \$600 million DA capital investment, PG&E's SAIDI performance improved in one year by almost the full estimated benefit of deploying DA.**

- The cheapest 40% of the 194 capacity connectivity projects that actually have reliability benefits have the effect of reducing SAIDI by approximately one minute, for only **\$7 million – achieving 43% of the alleged reliability benefits of PG&E's 194 projects program for 7% of the cost of all of the projects.** That is less than the PG&E Corporation President's stock awards of almost \$10 million last year.⁸
- Within CIP is a proposal to **underground 3.16 miles of line at \$1.2 million per mile in order to avoid outages that would affect 535 customers under peak conditions.**⁹ Where is the "reasonableness" in spending \$3.8 million to serve such a limited amount of customers in such limited circumstances?
- PG&E's proposal maximizes its cost estimates and the proposed balancing account proposal provides an incentive to spend it all. An example of this is a data response concerning underground devices, where PG&E stated as follows: *"There are no specific workpapers or calculations that derive the cost PG&E used in the workpapers...**The underground device unit cost from the KEMA 2005 report is \$46,000...PG&E's estimate for underground devices is \$100,000...Because of the uncertainty associated with these cost drivers and the fact that PG&E is seeking balancing account treatment for its proposal, PG&E considered it reasonable to use a high-unit cost estimate for underground devices.**"*¹⁰ PG&E has nevertheless included the full cost of all of its capital additions in its request, with no opportunity for ratepayers to check PG&E's spending unless it goes over budget. The only opportunity to test the reasonableness of PG&E's estimates is now. The problem is that the evidence simply is not there.
- It is quite evident that PG&E is only paying lip service to the concept of "customer benefits." **The only evidence in the record regarding the value ratepayers would place in avoiding an outage is under \$5 per outage.**¹¹ That is a tiny fraction of what they will have to pay if CIP is approved. PG&E ignores that, and refuses to consider what ratepayers think as a matter of policy in this case.

⁸ See TURN Exh. 121, at pp.4-5.

⁹ Id. at p.30.

¹⁰ See DRA Exh. 503, Appendix, at p.104.

¹¹ See PG&E Exh. 1, at p.1-16, lines 16-20.

- **PG&E has failed to provide the most up-to-date analyses using the most up-to-date data.** In a complete departure from traditional ratemaking, PG&E states that it won't bother to re-analyze its studies to incorporate post-2006 data (or perform any, for that matter) until after the Commission approves CIP.
- **PG&E's balancing account and annual reporting proposal offers PG&E's ratepayers no protection whatsoever.** There is only one opportunity to test the reasonableness of CIP, and that is now, when PG&E by its own admission has very little knowledge regarding the specifics of most of the projects it now proposes. However, PG&E estimates its costs generally at the high end, and often bloats its estimates to the maximum. For example, PG&E admits it will not install a FLISR system on every 17 and 21 KV circuit, but is asking for funding to install all of them.¹² Once CIP is approved, there is nothing to stop PG&E from spending every dollar in the budget, no matter what they use it on. The details regarding PG&E's proposed annual reporting on CIP lacks any detail and is not by any stretch of the imagination an adequate medium for ensuring CIP is carried out as PG&E now says it will. The ratepayers' only recourse is when PG&E goes over budget, which is of no help in curbing its profligate desires at this stage.
- Finally, and perhaps the most egregious aspect of this case, is **PG&E's flagrant disregard for its evidentiary obligations** as exemplified in its discovery responses.¹³ As for cost estimates, typical discovery responses provided no workpapers or calculations showing how forecasted costs were derived. Instead, they are generally based on the mysterious and unverifiable internal discussions of PG&E personnel that provide miniscule evidentiary value into the record. Relevant detailed engineering analysis is also almost entirely non-existent.

It should come as no surprise to the Commission, therefore, that DRA has no interest in rewarding PG&E in any way for its efforts to unfairly increase its rate base at the expense of ratepayers, when it has not proven how and to what extent it will benefit them. The evidence simply is not there, and no matter how much mud PG&E has thrown against the wall, DRA refuses to agree that any of it should stick. DRA has been put in the untenable position of having to oppose a

¹² See PG&E Exh.2, p.3-3, Q. and A. #6.

¹³ See for e.g., Appendix to DRA Exh. 503.

project that ostensibly improves PG&E's electric system's reliability. DRA fully supports PG&E's stated goal of maintaining a reliable distribution system, and certainly does not oppose reasonable and economically viable proposals to enhance that system within the regulatory framework. It is the poor quality and manner in which PG&E has presented this Application that is unacceptable, not the ultimate goal PG&E professes it wants to achieve.

II. BACKGROUND AND DESCRIPTION OF THE CORNERSTONE PROJECT

DRA will briefly discuss the procedural history of this proceeding for the specific reason that it forms the basis for understanding how the underlying rationale for CIP has morphed continuously through the progress of this proceeding, depending on how PG&E has seen the wind blow. This is important because, as will be discussed below, DRA is convinced, and has proof, that CIP was filed not because PG&E is concerned with its customers' interests so much as it is with increasing its earnings per share through a larger rate base.¹⁴ If that is indeed PG&E's motivation, then DRA submits that even if there were some merit to CIP as proposed, that the Commission should reject it as a matter of policy and principle.

The primary justification for CIP cited by PG&E in its original Application is a distorted, self-serving, and opportunistic response to two Commissioner's off-the-cuff statements following an outage in San Francisco. Surely the Commissioners did not envisage this two billion dollar plus scheme to increase PG&E's rate base as the answer to their reliability concerns.¹⁵ PG&E claims that its CIP proposal is supported by the statements of President Peevey and

¹⁴ Please see TURN's discussion of this issue on pages 8-11 in Exh. 121.

¹⁵ See PG&E Exh. 1, at 1-2. To put these statements in context, see Attachment A to this Brief, an off the record transcript written by PG&E's regulatory staff of the July 26, 2007 Commission meeting, where a San Francisco Chronicle article was informally discussed. See also, Attachment B to this Brief, a copy of that article which stated in part, that PG&E blamed the power outage in the East Bay the previous week "on light rain, which mixed with dust to form mud, which caused equipment to short." Only in utility shareholder heaven can such billion dollar proposals be deemed an appropriate response to taking care of dust. Paying customers however, shudder.

Commissioner Simon at a meeting over two years ago. The particular words PG&E likes to cite are as follows:

You cannot continue to have a system that, where apparently despite the differences in weather and the physicality of the system, still has outages that by the data we collect, [PG&E's] are approximately double those of other utilities in the State of California.¹⁶

If one examines the two Commissioners' statements at the meeting,¹⁷ however, it is clear that what they envisaged was a collaborative effort between the Commission's Energy Division, the Executive Director Mr. Clanon, The Utility Reform Network (TURN), DRA, IBW Local Union 1245 and PG&E, but not something in the order of magnitude of CIP. It appears that Mr. Clanon expected the Energy Division to return with recommendations supporting the "many Commission initiatives under way in the area of reliability." It was DRA's and TURN's opinion therefore, particularly in light of the enormity of the project in terms of the rate base increases it would entail, that PG&E's filing was suspect from the beginning.

After examining the Application, TURN and DRA were seriously concerned about the long-term regulatory and rate-increase implications inherent in the CIP Application. We filed a Motion to Dismiss on June 17, 2008, for many different reasons. The principle reason was that distribution reliability improvement requests are typically filed as part of General Rate Case (GRC) filings, and since this was filed in between PG&E's rate case cycle, constituted a violation of the Commission's General Rate Case Plan. The filing also violated the settlement agreement reached between PG&E and others in its last GRC, where PG&E received all of its requested capital expenditures for system reliability improvements. Also, given the Application's strong emphasis on

¹⁶ Id.

¹⁷ See Attachment A.

system reliability comparisons (known as SAIDI/SAIFI comparisons)¹⁸ between California's utilities as justification for the CIP project, (based on President Peevey's statement), and given PG&E's long-standing history of opposition to such comparisons, the Motion to Dismiss highlighted this obvious contradiction as one of the bases for rejecting PG&E's underlying rationale for the project.

Six months later, on December 19, a Ruling was issued which denied in part, and granted in part, the Motion to Dismiss.¹⁹ The Ruling granted the Motion to the extent that any revenue requirement increase related to CIP for the 2007 GRC years of 2009 and 2010 could not be recoverable from ratepayers, and any reliability incentive mechanism that might be adopted could not be implemented until 2011.

On February 23, 2009, the Assigned Commissioner's Ruling and Scoping Memo was issued, and PG&E served its updated testimony on March 17, 2009. TURN, the City and County of San Francisco, the California Farm Bureau Federation, the Coalition of California Utility Employees, and DRA all filed testimony in June, 2009. PG&E filed rebuttal testimony on August 7, 2009, and the most revealing aspect of that testimony was PG&E's about face with regard to the underlying rationale for CIP. No longer was the project about bringing PG&E's electric distribution system's reliability in line with that of other California utilities, now it was about a newly invented "fundamental policy question" of "whether PG&E should undertake the work to move to a new level of reliability performance, distribution flexibility, and robustness."²⁰

What follows are some observations that apply across the entire PG&E CIP presentation that DRA believes justify rejection of CIP.

¹⁸ See, for example, PG&E Exh. 1, at p.1-1, lines 11-14, and Chapter 2. SAIDI stands for System Average Interruption Duration Index, and SAIFI stands for System Average Interruption Frequency Index.

¹⁹ See "Assigned Commissioner's and Administrative Law Judge's Joint Ruling Denying in Part and Granting in Part Motion to Dismiss the Application and Setting Prehearing Conference, filed on 12-19-08.

²⁰ See, for example, PG&E Exh. 2, at p.1-11, lines 12-14.

A. Independent reasons for rejecting this Application

1. PG&E's motivation for filing CIP is suspect, as evidenced by the dubious statements of its policy witness.

Everything Mr. Dasso, PG&E's policy witness, has testified to in this proceeding deserves to be treated with skepticism. An important statement he made in his rebuttal testimony is simply unbelievable.

Mr. Dasso provided misleading testimony in order to evade analysis of a critical weakness in PG&E's case. In response to TURN's well documented and compelling argument at pages 8-11 of its testimony regarding PG&E's obvious "growth in earnings per share" motivation for filing the CIP Application, Mr. Dasso, on page 1-2, lines 1-5 of Exhibit 2, stated that "I do not recall earnings growth or earnings per share ever being identified as the motivation for Cornerstone." Note that Mr. Dasso did not state on the record that earnings per share were never "a motivation" for filing CIP. Trying to finesse the statement into a truism by limiting his lack of knowledge to earnings per share as being "the" motivation for Cornerstone does not help his credibility.

Document after document in TURN's confidential Attachment 10, (and other public statements to the same effect in the above-referenced TURN testimony) are replete with references to the connection between Cornerstone and PG&E's attempts to reach an 8%+ compound annual growth rate in earnings per share. Mr. Dasso made this rebuttal statement despite evidence in the record that he, as well as PG&E's former attorney on the case, and its revenue requirement witness, were all privy to internal PG&E emails discussing PG&E's communications with Wall Street about the very facts he is now trying to deny ever existed²¹. How is the Commission supposed to believe anything this utility says when its policy witness submits testimony such as this into the record, and there are clear indications that primary players in the utility's showing were aware

²¹ See TURN Confidential Attachment 10, particularly the December 19, 2008 email.

of the same facts? It is not Mr. Dasso so much as his employer that should be sanctioned for presenting such misleading testimony. Given that so many in PG&E's upper hierarchy were aware of the Wall Street-related motivations for the project, the entire showing's credibility has been tainted by this proffering of misinformation. DRA submits that this is a perfect example of the brazen and cavalier attitude PG&E has displayed in presenting its case to the Commission.

On the other hand, from a sound business practices point of view, if Mr. Dasso's statement were true, then what would its shareholders have to say if they were aware that the senior director of the Electric Strategy and Regulation Department, who claims to have been extensively involved in CIP since its beginning,²² draws no connection between this multi-billion dollar project and the utility's earnings per share? Who is PG&E trying to fool, its shareholders or the Commission? The Commission, of course.

2. PG&E's Updated Testimony Failed to Address the Deficiencies in its Application Identified in the ACR, or Adequately Respond to the Specific Questions Therein.

The Assigned Commissioner's Ruling and Scoping Memo gave PG&E the opportunity to resurrect its Application by requiring that it provide further evidence in the form of "additional testimony and information,"²³ as well as requiring answers to six specific questions.²⁴ DRA expected that given the extra ten months given PG&E since the time it originally filed the Application, to update, further refine, and strengthen its analysis, that PG&E would have provided a lot more detail and relevant information than it did. DRA understood the Ruling as making it clear to PG&E that the original Application was deficient, and that if it wanted the Commission to seriously consider CIP, that PG&E had to go back to the drawing board and come up with a lot more relevant data and analysis than it

²² See Ex. 2, p.1-2, lines 2-3.

²³ Assigned Commissioner's Ruling and Scoping Memo of February 23, 2009, p.12.

²⁴ Id. at pp. 9-10.

had provided at that stage. DRA’s understanding was bolstered by two directives in the Ruling that instructed PG&E that 1) its opportunity to present a “cost-benefit analysis, using value of service or other information,”²⁵ and 2) with regard to meeting its burden of proof, that it “should be met principally through its direct showing and not through rebuttal testimony.”²⁶ DRA did not detect in PG&E’s Updated testimony anything of relevant import that could be regarded as curing its original deficiencies.

In fact, if one examines PG&E’s answers on pages 1-15 through 1-19 in Exhibit 1 to the specific questions laid out in the Scoping Memo, it is evident that PG&E did not take those questions seriously and failed to adequately address the Commissioner’s concerns. PG&E’s answers are predominantly evasive, non-responsive, and filled with platitudes and generalities, but no substance. In particular, the questions that call for descriptions of analyses, sample calculations and results of those analyses are not answered. The answers are indicative of PG&E’s nonchalant approach to this Application, which reflects its apparent insistence that the sole question to be answered in this proceeding is whether throwing billions of dollars at its electric distribution infrastructure will achieve greater system reliability. Its analytic abilities consistently fail to go beyond that threshold issue, and that is the main reason DRA advocates rejecting CIP.

3. CIP Has No Clearly Defined Purpose.

In the final stages of this proceeding, PG&E switched the emphasis of its rationale for CIP from one that emphasized SAIDI/SAIFI reductions, to one where it argues that CIP is designed to increase distribution system flexibility and help lay the foundation for potential future grid adaptations. This theme is repeated several times throughout the first two chapters of the Rebuttal. (In particular, see page 1-11 where PG&E takes this argument a step further and attempts to make

²⁵ Id. at p.9, footnote 3.

²⁶ Id. at p.11.

CIP into a policy question.) The only possible reason for PG&E's about-face is that it is an attempt to defuse intervenors' testimony concerning the largely non-existent cost-benefit analysis of CIP, and its glaring failure to satisfy its requisite evidentiary burden. **In effect, PG&E is trying to say that since CIP is about more than just reliability improvements, it doesn't really matter if the SAIDI and SAIFI reductions are small.**

This attempt at historical revisionism should be seen for what it is – a simple effort to remove tangible reliability improvement goals from the case and an escape mechanism from its evidentiary obligations into the more comfortable arena of policy. Right from the get go, the CIP case has been presented as primarily a SAIDI/SAIFI reduction project. Nothing in PG&E's original testimony indicates that CIP was a policy issue. Lastly, even in Commissioner Peevey's February 23, 2009 Scoping Memo, the Background Section states that PG&E filed the CIP application "...to address a perceived need to bring its reliability performance closer to that of other investor-owned electric utilities."

The Commission should not allow PG&E to change the rules once the game has started. More importantly, the Commission must not allow PG&E to undertake a multi-billion dollar project such as CIP without a clear understanding of what that project is supposed to accomplish. If PG&E is allowed to change its previously defined rationale for undertaking CIP, the Commission will find itself in the untenable position of attempting to rule on the reasonableness of a project that has no clearly stated purpose.

4. PG&E Cannot Avoid Its Burden of Proof by Turning The Entire Proceeding Into a Question of Policy.

As stated throughout this brief, PG&E has failed to perform the necessary work to meet its burden of proof. By its own admission, it has, on a multitude of issues, not performed the necessary analysis or studies commonly expected of a utility asking for money. Its primary reason for not meeting commonly accepted

regulatory requirements is that it will only make sense to do so once the Commission has approved the project and the necessary funding,²⁷ and details regarding the implementation and expenditures related to CIP can be tracked through undefined “annual reports.” By the time PG&E filed its rebuttal testimony, it was clear that all the intervenors save one had compellingly argued that PG&E was nowhere close to meeting its burden of proof. PG&E’s predictable response was to defiantly deny that fact. But perhaps knowing that its position was not credible, PG&E came up with a new alternative rationale that argues that approving Cornerstone is fundamentally a policy question. In other words, **when you have no evidence, turn the case into a policy question.**

Since PG&E has admitted to meeting the “adequate service” standard that is required to meet its GRC electric distribution reliability obligations,²⁸ it follows that what it is asking for here could accurately be described as discretionary spending. Why then does PG&E expect the Commission to accept a lesser burden of proof for something that is discretionary than the stricter burden that applies for mandatory projects? If the project is discretionary, good public policy would dictate that the reasons for spending ratepayer funding on the project should be even more compelling than normal, meaning that the utility’s burden to prove its case should be even stricter than normal. Instead, PG&E argues that the burden should be lowered to virtually nothing at the Application stage, and that details will come later in some undefined future annual reports. If this is going to be a decision that relies on public policy as its justification, absurd reasoning such as this, regarding the most fundamental issue in litigation, the utility’s proof, should be factored into the Commission’s decision. DRA submits that it is bad public policy to make it easier for utilities to get financing for multi-billion dollar discretionary projects than it is to fund its bread and butter GRC operations.

²⁷ See, for e.g., DRA Exh. 503, Appendix data request responses.

²⁸ See PG&E Exh.1, at p.1-2.

5. PG&E's presentation is convoluted, ill-defined, contradictory and above all, unpersuasive.

PG&E has made a miserable showing in this case, not only in terms of the largely irrelevant data it has presented, but also in the poor quality of its arguments. They suffer from vagueness, contradiction, wishful thinking, unsubstantiation, to downright falsehoods. Most of PG&E's arguments can be countered with contradictory arguments found elsewhere in its own testimony. Examples of fundamental flaws in PG&E's showing are as follows:

- a) Historically, PG&E has opposed SAIDI/SAIFI comparisons between utilities and urged the Commission to reject them. A quote from past testimony highlights the unconvincing original rationale for PG&E's present case:

[e]stimating actual SAIDI and SAIFI results from investments is confounded by numerous variables, not the least of which is the weather. Taking estimated values from an improvement initiative and subtracting them from a single year of system performance (or an average of system performance) is overly simplistic. A distribution system consisting of 124,000 miles of distribution lines that interact with virtually every element in nature and society is a dynamic entity. PG&E does not have the ability to 'dial-in' specific SAIDI and SAIFI values for any given year.²⁹

However, in this application, it originally claimed these comparisons as the primary motivator for bringing the project before the Commission, so as to decrease SAIDI and SAIFI numbers.³⁰ It did so ostensibly to tie its proposal to President Peevey's remarks so as to find some justification for bringing it before the Commission. In fact, it devoted an entire chapter, Chapter 2, to reliability

²⁹ Exh. 503 Appx. at 54, PG&E response to Data Request DRA-PG&E-007, Q.1, incorporating PG&E's TY 2007 GRC testimony, Exh. PG&E-4, p. 8-4, lns. 11-18.

³⁰ See PG&E Exh. 1, at pp.6-7, and Chapter 2.

comparisons. Then, when the contradiction was pointed out in intervenor's testimony,³¹ and the merit of its CIP proposal's ability to reduce those numbers was challenged, its response in its rebuttal was that the majority of the project, (i.e. all of the substation emergency capacity portion, the majority of the feeder interconnectivity portion, and half of the distribution automation portion) has nothing to do with improving SAIDI and SAIFI.³² PG&E abandoned the SAIDI/SAIFI argument almost entirely in its rebuttal, for example, by stating that it "included the comparison of performance metrics not to accept the comparisons as definitive, but rather to show, simply and clearly that differences do exist and that **there is some basis – even if not perfect** – for those differences."³³ Does PG&E really expect the Commission to agree to implementing a new evidentiary standard that calls for the "some basis" standard?

- b) PG&E argues in its rebuttal and ex parte notices that it has presented a detailed case,³⁴ but the majority of its discovery responses reveal that there are relatively few details, studies, analyses, data, to provide, and will only do so once it gets the money.³⁵
- c) In an attempt to maximize its funding request for CIP, PG&E presents the case as an all-or-nothing package that needs to be implemented as a whole in order for the reliability benefits it estimates to be realized.³⁶ In response to TURN's arguments at pages 26-28 in Exhibit 2, however, it denies this is the case, but then still argues that approval of the project in its entirety is necessary because the success of each initiative is dependent on the other initiatives being approved. The problem for PG&E here is that if it

³¹ See TURN Exh. 121, Section III.

³² See Figure 1-1 in PG&E Exh. 2, p. 1-10.

³³ Rebuttal Exhibit PG&E 2, at p.1-5, lines 19-22.

³⁴ See PG&E Exh.2, Chapter 2, section C.

³⁵ See discussion below in section IV.D.

³⁶ See TURN Exh.121, section II.F.

continues to present its case as an all-or-nothing project, by definition the exclusion of one initiative would dictate the exclusion of all.

- d) PG&E argues in rebuttal that Cornerstone has nothing to do with increasing rate base to increase earnings per share,³⁷ but its confidential internal memos reveal the opposite.³⁸
- e) As to the regulatory goals of the Application, PG&E on the one hand says that it is designed to get specific approval for a project to improve its distribution infrastructure, but later on in cross-examination of CCSF's witness, Mr. Sanborn, its attorney appears to believe that it is just a tool for finding out whether that is a good idea or not.³⁹ Perhaps it was a slip of the tongue, or perhaps it was PG&E's ultimate realization that its approach was a failure, but since the same question was asked in three different ways, it should be taken as some indication that PG&E was beginning to get the correct message.

Mr. Patrizio asked whether PG&E should have incurred the costs for studies and done the work “before it even came to the Commission to determine whether the Commission was interested in having PG&E attempt to improve reliability.”⁴⁰ Then he asked whether “PG&E should have incurred those study costs before it even knew whether the Commission was interested in having PG&E improve its reliability above the current adequate standard.”⁴¹ Finally, and most pertinently, he asked whether the studies and work should have been done “before requesting guidance from the Commission as to whether such a spending program is even something the Commission would entertain...”⁴² Mr. Sanborn's

³⁷ PG&E Exh.2, pp.1-1 and 1-2.

³⁸ See TURN Confidential Exh. 10.

³⁹ 3TR, at pp.333-334

⁴⁰ 3TR, at p.333, lines 16-19.

⁴¹ Id., at lines 25-27.

⁴² 3TR, at p.334, lines 7-9.

sensible response was as follows: “I didn’t think the Application was for guidance on whether such a thing should be entertained.”⁴³ If that is all PG&E wanted to know, why didn’t it say so in the first place, instead of wasting everybody’s time and resources with this overinflated, poorly developed excuse for an Application?

The appropriate response to PG&E is yes, everyone is interested in it improving its reliability, but it needs to consider those who are paying for it first, and not, as a matter of PG&E policy, ignore their interests by simply requesting funding on the assumption that the only issue to be determined is whether the premise is correct or not. PG&E got it all wrong. It is rudimentary practice here at the Commission that a utility support its request with data and analysis that is relevant and has some substance, which it has failed to do.

6. PG&E has yet to determine the interrelationship between CIP and its AMI efforts, but still wants full funding for another communications system it is not sure it will need.

The CIP proposal follows close on the heels of another PG&E hugely expensive undertaking promising untold benefits to customers. The utility’s “SmartMeter” program (with a budget of around \$3 billion) was premised at least in part on delivering distribution system reliability benefits.⁴⁴ In its most recent AMI Upgrade proceeding, A.07-12-009, PG&E stated that the upgrade was intended to take advantage of the utility’s “ongoing technology monitoring effort, [through which] PG&E has observed numerous enhancements in technology that offer customers increased reliability and enhanced performance.”⁴⁵ But in considering the interaction between the meter advances and the multi-billion dollar

⁴³ Id., at lines 10-11.

⁴⁴ “[T]he system will allow two-way communication between PG&E and the meter (and potentially the customer), which has both distribution system reliability and customer service benefits.” D.07-06-027, p.20. “Through better information related to customers’ individual power status, PG&E’s ability to potentially reduce the duration of outages and speed up the restoration efforts will be enhanced.” Exh. PG&E-3, p.2-2.

⁴⁵ A.07-12-009, PG&E Ex.1, p.12.

investment PG&E now proposes regarding the rest of its distribution system, the utility now professes not to be so sure:

It is possible that its SmartMeter program may have an impact on SAIDI/SAIFI, *but at this time PG&E cannot reasonably predict whether there will be an impact, what the magnitude of the impact will be, or whether the impact will be beneficial or detrimental to customers.*⁴⁶

In trying to assess the influence of CIP on SAIDI/SAIFI, therefore, the Commission has little to work with in terms of determining what the impact of PG&E's currently funded programs will have on its system's reliability, let alone trying to determine what impacts CIP itself will have.

To make matters worse, PG&E takes advantage of this lack of knowledge as an advantage to maximize its rate base request in CIP by asking for full funding of about \$31 million in communication systems costs,⁴⁷ despite acknowledging that "it may have the greatest potential for variation."⁴⁸ Surely the Commission cannot fund this aspect of the program, given that its balancing account proposal only permits review of PG&E's spending if it goes above the approved amount. PG&E should not be awarded this funding in light of the following statement:

Since filing the Cornerstone application in May 2008, PG&E has selected Silver Springs Networks to provide advanced networking products and services for the company's SmartMeter™ Program. PG&E hopes to utilize the Silver Springs information network for the FLISR systems the company is proposing. *However, at this time, PG&E is still including the cost for a communication infrastructure in the event that the Silver Springs network is not a suitable communication medium for the FLISR systems.*⁴⁹

⁴⁶ PG&E Exh. 1, p.6-11, lines 25-28.

⁴⁷ Id., Table 4-4, at p.4-34.

⁴⁸ Id. at p.4-30, lines6-7.

⁴⁹ Id., footnote 21.

This is a prime example of PG&E unnecessarily trying to goldplate its system.

III. GENERAL POLICY ISSUES.

A. California law dictates that as a matter of policy, CIP cannot be approved.

Public Utilities Code Section 399.2 (a)(1) states:

It is the policy of this state, and the intent of the Legislature, to reaffirm that each electrical corporation shall continue to operate its electric distribution grid in its service territory and shall do so in a safe, reliable, efficient, and cost-effective manner.

As will be discussed in the section below, PG&E cannot prove that CIP is cost-effective. As a matter of law and state policy then, CIP should be rejected.

That statute notwithstanding, as has been discussed in various sections in this brief, PG&E's choice to avoid its evidentiary burden by proclaiming that CIP is fundamentally a policy question of whether PG&E should undertake the work to move to a new level of reliability performance, distribution system flexibility, and robustness, over and above the regular GRC-related work, is unacceptable. The project was originally conceived as one aimed at reducing SAIDI and SAIFI figures and to avoid outages, and only in the rebuttal phase did it begin this novel "policy" approach to its case. As stated in the Assigned Commissioner's Ruling and Scoping Memo, PG&E's burden of proof should be met principally through its direct showing and not through rebuttal testimony.⁵⁰ The evidentiary deficiencies in PG&E's direct showing cannot be resolved and avoided by instituting in its rebuttal testimony a new and self-serving criteria by which to judge this Application.

Even without that impediment, and if one had to consider this case purely from a policy perspective, there could be a reasonable argument that PG&E should be entitled to consider whether to institute a program such as CIP. Mr. Patrizio's

⁵⁰ At p.11.

questions of Mr. Sanborn that were referenced above would be the better approach. PG&E should have limited its request as one for guidance from the Commission, rather than a poorly developed formal request for more than \$2 billion. However, for a policy-supported project to go into effect, it would have to be based on tangible, verifiable, and reasonable proof that its costs and benefits would ultimately serve the public's interest. CIP offers none of that.

The only thing one could be certain about if CIP were approved would be that it would serve the interests of PG&E and its shareholders by significantly increasing its ratebase. Whether it would serve its customers' short or long term interests still remains a mystery. But as stated in the introduction to this brief, PG&E's policy witness testified under oath that ratepayers' perceptions or opinions are not one of the factors policymakers need to consider regarding whether PG&E needs to improve its distribution reliability.⁵¹ A policy that by definition ignores the very people it is supposed to serve, and which clearly serves the interests of the utility and its shareholders, would be indefensible?

B. CIP Should Be Rejected Because PG&E Has Failed To Meet Its Burden Of Proof

If the Commission wishes to maintain some continuity in the reasoning for its Decisions, it only has to look back two weeks to its most recent decision in D.09-09-030, where it denied San Diego Gas & Electric Company's (SDG&E) Application for Review of its Proactive De-Energization Measures and Approval of Proposed Tariff Revisions. The Commission denied that Application on the ground that SDG&E failed to provide any evidence or analysis to meet its burden of proof.⁵² The decision was primarily based on SDG&E's failure to provide sufficient information regarding the costs and benefits of its Power-Shut-Off Program, and a predominant factor in the Commission's decision was that SDG&E did not demonstrate that shutting power would have done anything to

⁵¹ See 1TR, at pp.128:17 through 129:3.

⁵² D.09-09-030, at p.55.

prevent the October 2003 firestorm.⁵³ The Commission ordered SDG&E to develop a collaborative fire-prevention program based on a cost-benefit analysis, and if it chooses, to later file an application for approval of the jointly developed fire-prevention program.⁵⁴

One of the statutes relied upon as authority for its Decision was Public Utilities Code Section 399.2 (a)(1), which states:

It is the policy of this state, and the intent of the Legislature, to reaffirm that each electrical corporation shall continue to operate its electric distribution grid in its service territory and shall do so in a safe, reliable, efficient, and cost-effective manner. (Emphasis added)

DRA raises this most recent Commission Decision as persuasive authority for the Commission to come to a similar decision in this proceeding. As in the SDG&E case, PG&E has failed to provide sufficient evidence to show that the benefits of CIP outweigh its costs. By its own admission, PG&E cannot quantify the majority of CIP's costs, and certainly not its benefits. Instead, it relies on a policy argument as justification for its approval. Whatever that policy may be, it cannot be implemented if it violates the law. As P.U. Code section 399.2(a)(1) states, it is state policy and the legislature's intent that a utility operate its distribution grid in a cost-effective manner. PG&E does not have a cost-benefit showing, and chooses to let its Application stand or fall on what it has given thus far, which is by any standard, deficient.

One can draw a persuasive analogy between the firestorms in SDG&E's case and the outages in PG&E's case. Similar to SDG&E's inability to prove that its program could have eliminated the 2003 firestorm, PG&E has not proven that CIP could avoid any of the outages it originally proclaimed as the impetus behind its Application.⁵⁵ TURN provided strong evidence in its testimony in section II.A.

⁵³ Id., at p.56.

⁵⁴ Ibid., at p.58.

⁵⁵ See for example, PG&E Exh. 1, at p.1-2 and 1-3

of Exhibit 121 that the CIP project will not address the outages PG&E cites as causing the need for the project. It showed that CIP would not address the most frequent causes of outages, will not prevent the outages covered in news stories that so riled up the Commissioners two years ago, and furthermore, would not prevent heat storm outages. In fact, it admits that CIP would not have prevented any of the outages cited by TURN.⁵⁶

If the SDG&E decision can be a guide, DRA recommends that the Commission reject this CIP Application without prejudice. It should also order PG&E to develop its reliability improvement program with the necessary and verifiable analytical engineering and project development studies so that if it chooses to reapply for reliability improvement funding, that it can meet the standard of evidentiary proof necessary to satisfy the law. It should also include a cost-benefit study that meets the requirements of Public Utilities Code Section 399.2 (a)(1).

As the applicant, PG&E bears the burden of proof on all issues related to the reasonableness of its CIP Application. In D.06-05-016, the Commission summarized the framework in which the applicant's showing must be considered:

Public Utilities Code Section 451 provides, in part, that "all charges demanded or received by any public utility ... shall be just and reasonable." Section 454 provides, "Except as provided in Section 455, no public utility shall change any rate or so alter any classification, contract, practice, or rule as to result in any new rate, except upon a showing before the Commission and a finding by the Commission that the new rate is justified." Where a utility fails to demonstrate that its proposed revenue requirements are just and reasonable, the Commission has the authority

⁵⁶ Id. at p.1-4. PG&E tries to get out of this admission in its rebuttal testimony by arguing that CIP could have reduced the duration of outages and the impact on customers. But this is yet another example of PG&E's confused arguments that flip-flop between relying in one instance on CIP's SAIDI/SAIFI benefits, and denying them in another. Interestingly, these are conclusory arguments without any substantiating evidence.

to protect ratepayers by disallowing expenditures that the Commission finds unreasonable.”

Given PG&E’s poor showing in this proceeding, DRA submits that it cannot satisfy even the most rudimentary evidentiary standard of proof. Whether it be a “clear and convincing standard,”⁵⁷ or a “preponderance of the evidence standard,” PG&E’s application fails to meet either. PG&E has the burden of affirmatively establishing the reasonableness of all aspects of its application. The evidentiary burden is entirely the utility’s; intervenors have no burden of proving the unreasonableness of PG&E’s forecast.⁵⁸ As the Commission has explained, “The natural litigation advantage enjoyed by utilities, and the fact that we must rely in significant part on their experts, combine to reinforce the importance of placing the burden of proof in ratemaking applications on the applicant utilities.”⁵⁹ To meet its evidentiary burden, PG&E must “produce evidence having the greatest probative force.”⁶⁰ The utility must overcome the “presumption . . . that the existing rates are reasonable and lawful. Any doubts must be resolved against the party upon whom rests the burden of proof,” that is, PG&E.

PG&E’s Application and supporting testimony and workpapers are clearly deficient with regard to the utility’s showing on critical issues. As will be discussed below in the sections related to the individual Cornerstone initiatives, its cost-estimates are largely based on the unverifiable internal discussions of its employees; many of the necessary engineering studies have yet to begin; it admits it cannot quantify the benefits ratepayers will receive from each initiative; it has no workpapers to support a vast majority of its requests; to the extent that there are workpapers, most of them are useless because they fail to incorporate critical up-to-date information; it has overinflated its cost estimates with the weak argument

⁵⁷ D.01-10-031, Ordering Paragraph 26; D.00-02-046, pp.64-65

⁵⁸ See D.06-05-016, p.7; D.01-10-031, pp.8-9.

⁵⁹ D.00-02-046, p.36.

⁶⁰ D.00-02-046, p. 38.

that they will only be verified once its engineering research is done and the program actually goes into effect. Inherent in PG&E's Application is the evidentiary weakness that proof of all costs, benefits and expenditures can only be done after funding is provided through the Commission's approval of CIP. PG&E has it backwards. It first needs to prove its case, and then it can get the funding, not the other way around.

The Commission cannot possibly accept PG&E's Application based on this lack of evidence. It does not meet even the most rudimentary standard of proof, and should therefore be denied in its entirety.

IV. ELECTRIC DISTRIBUTION CAPACITY PROPOSAL.

DRA presented testimony in Exhibit 502 to analyze the electric distribution capacity portion of PG&E's CIP proposal that PG&E claims will improve the reliability of its electric distribution system in urban and suburban areas. The total requested costs for just this one part of CIP is \$1,324.3 million for capital expenditures, and \$14.5 million for expenses, approximately 65% of the total CIP request. As will be seen below, this portion of PG&E's proposal is the most egregious, and DRA recommends that under no circumstances should it be approved.

DRA presented four separate arguments supporting its recommendation to deny funding for the distribution capacity portion of CIP. Each of these arguments is independent of the others, and each of the four, by itself, is sufficient to justify the denial of funding. As will be seen below, PG&E's Rebuttal did not discredit any of the four arguments. Sections A through D below outline each of the four justifications.

A. CIP Capacity Costs Are Not Justified By The Small Benefits

The primary analytical tools used to measure reliability changes are the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI). Both SAIDI and SAIFI are indices that

attempt to quantify the reliability of a utility. In their simplest terms, SAIDI examines the average duration of sustained interruptions per customer during a year (total duration of sustained interruptions ÷ total number of customers), while SAIFI examines the number of sustained outages per customer during the year (total number of sustained outages ÷ total number of customers).

As stated on page 3-2 (line 16) of its Updated Testimony, PG&E has calculated that after all of the expenditures are made for this portion of CIP, SAIDI is expected to be lowered by 3.6 minutes per year, and SAIFI is expected to be reduced by 0.037 customer interruptions per year. These forecasted reliability improvements are very small, especially when compared to the very large CIP expenditures proposed by PG&E. The SAIFI improvement of 0.037 interruptions per year is equivalent to the average PG&E electric customer experiencing one fewer outage every 27.027 years. As DRA showed in Table 2-2 of Exhibit 502, the Revenue Requirement cost to achieve this once-in-27-year reduction is over \$710 million. However, even this large figure pales in comparison to the ongoing costs associated with these projects over their useful lives. A very conservative estimate developed by DRA in footnote 12 of Exhibit 502 shows that the continuing costs of CIP, after it is completed, is over \$2.6 billion. Combining the revenue requirement costs during the construction phase (through 2016) with the costs during its useful life (after 2016) results in a total revenue requirement of well over \$3 billion for this portion of the CIP – just to eliminate one outage every 27 years. It is very enlightening to note that in its Rebuttal, PG&E did not present any arguments to dispute this testimony.

B. The Small Reliability Improvements Are Not All Due To CIP

DRA believes that a portion of the reliability improvements associated with this portion of the CIP program (and which PG&E has solely attributed to it) is likely due to projects that are separate from the CIP program. This makes the

reliability benefits due to CIP even smaller than previously estimated by PG&E, making it even harder to justify the proposed program.

In Exhibit 502, Table 2-3 (reprinted below as Table IV-1) was presented which showed the SAIDI/SAIFI reliability improvement goals forecasted for the total CIP program as well as the reliability goals originally proposed by PG&E in its 2007 GRC.

Table IV-1
Electric Distribution Capacity
SAIDI And SAIFI Goals Using IEEE Standards⁶¹
Total CIP Vs. 2007 GRC

Line #	Years	Total CIP Goals		Initial 2007 GRC Goals	
		SAIDI Target (Minutes)	SAIFI Target (Outages)	SAIDI Target (Minutes)	SAIFI Target (Outages)
1	04 - 08 Average	154.7	1.238	NA	NA
2	2008	NA	NA	128.8	1.111
3	2009	NA	NA	125.4	1.082
4	2010	NA	NA	NA	NA
5	2011	151.8	1.21	NA	NA
6	2012	145.9	1.15	NA	NA
7	2013	138.1	1.07	NA	NA
8	2014	130.2	0.99	NA	NA
9	2015	124.2	0.92	NA	NA
10	2016	119.3	0.87	NA	NA
11	2017	115.4	0.83	NA	NA

PG&E uses the data contained in columns a and b to calculate the reliability improvements that it forecasts for the entire CIP program. The numbers in line 1 are the “starting point” for the improvement, while the numbers in line 11 are the ultimate SAIDI and SAIFI goals that the CIP program hopes to achieve. The differences between lines 1 and 11 constitute the reliability improvements that PG&E is forecasting for CIP.

In footnote 19 of Exhibit 502, DRA presented two compelling pieces of testimony that conclusively show that PG&E’s reliability is continuing to improve, even without any spending on CIP. First, in Table 6-1 of PG&E’s Updated

⁶¹ Total CIP goals come from PG&E’s Updated Testimony, page 6-7, Table 6-2. 2007 GRC goals come from Exhibit PG&E-11 in the 2007 GRC, page 3-9, Table 3-5.

Testimony (page 6-4), PG&E shows that recorded 2008 SAIDI and SAIFI numbers are already lower than the CIP “starting points,” shown on line 1 of Table 2-3. Second, page 12 of PG&E’s “Annual Electric Distribution Reliability Report,” sent to the Commission on March 2, 2009, shows a recorded 2008 total system decrease in the SAIDI and SAIFI indices of 7.9% and 7.0%, respectively, as compared to the 2003 through 2007 averages. (See Appendix B of Exhibit 502.)

As part of its application in the last GRC, PG&E submitted Exhibit PG&E-11. Chapter 3 of that document is titled “Electric Distribution Reliability And Outage Information Performance Metrics.” As stated by PG&E, the purpose of that chapter was to demonstrate that PG&E’s proposals for reliability and outage performance for 2007 through 2009 were reasonable and should be adopted by the CPUC.⁶² In that same chapter, PG&E went into even more detail regarding its SAIDI and SAIFI goals, stating the following:

The 2008 and 2009 goals are even more challenging. Achieving these goals will likely require a combination of measures including:

- *Additional spending on traditional reliability items like protective devices and distribution automation;*
- *Changes in emergency response processes;*
- *Changes in operating practices; and*
- *Changes in maintenance and/or vegetation management practices.*

PG&E anticipates that spending beyond what the Company is forecasting in the 2007 GRC likely is necessary to achieve the 2008 and 2009 targets. The Company intends to fund expenditures necessary to achieve the 2008 and 2009 targets within the Company’s proposed revenue requirement for this rate case.”⁶³ (Emphasis added.)

⁶² PG&E 2007 GRC, Ex. PG&E-11, page 3-1, lines 6 through 9.

⁶³ Ibid. Page 3-11, lines 8 through 19.

Not only are SAIDI and SAIFI already lower than the initial CIP starting point, DRA clearly has reason to expect that some lowering of these two indices will likely continue to occur. As stated previously, PG&E initially had the plans in place in the 2007 GRC to achieve the reductions, and specifically stated that improving reliability was possible and appropriate. Given the full funding provided in that case, one would expect PG&E to achieve at least a portion (if not all) of the reductions that it had initially set as its goal in the 2007 GRC. However, any reduction in the SAIDI and SAIFI indices for 2008 and 2009 that results in a lower “starting point” for CIP, no matter how small, reduces the amount of reliability improvements that are exclusively attributable to the CIP program.

At several points in its testimony, DRA acknowledged that the Settlement Agreement reached in the last GRC allowed PG&E to withdraw the performance incentives that it had initially proposed. (See, for example, page 14 of Exhibit 502.) Nevertheless, PG&E’s initial statements in that case indicated that it had both the means and the intent to improve its reliability in 2008 and 2009. (See Exhibit 502, page 13.) In fact, PG&E explicitly stated that it believed that improving reliability, particularly SAIDI, was possible and appropriate. (See Exhibit 502, page 14.)

As previously discussed, the costs for this portion of the CIP program cannot be justified by the extremely small reliability improvements. If the CIP reliability improvements are actually even less than the amounts forecasted by PG&E (due to a portion of the improvements actually occurring in programs that are not associated with CIP), then the justification for CIP becomes even more problematic. In its Rebuttal, PG&E did not present any arguments to dispute this testimony, other than to erroneously state on page 1-13 that DRA failed to mention the withdrawal of the 2007 reliability performance goals in its GRC Settlement.

PG&E's allegations are demonstrably false. In at least three separate portions of Exhibit 502, DRA specifically mentioned that the 2007 GRC reliability goals were withdrawn. On page 14, DRA states:

During the Settlement negotiations in the last GRC, PG&E was allowed to withdraw the performance incentives contained in Exhibit PG&E-11. As PG&E will be quick to point out, the fact that the reliability goals for 2008 and 2009 were withdrawn from Exhibit PG&E-11 means that PG&E had no obligation to improve its reliability for those two years.

Further down that same page, DRA states:

[t]he important fact regarding the 2007 GRC is not that these goals were withdrawn but rather that, with the resources it had requested in the 2007 GRC, PG&E stated it was willing and able to significantly reduce the SAIDI and SAIFI indices.

Lastly, on page 17, DRA states:

As stated previously, because of the Settlement in the 2007 GRC, PG&E is under no obligation to achieve the SAIDI and SAIFI improvements that it initially set forth in Exhibit PG&E-11 of that case.

As should be obvious, DRA was careful in its analyses, and there was no misconception (as PG&E characterized it) regarding PG&E's obligations under the previous GRC. It is PG&E itself that should be more thorough.

On page 1-14 of its Rebuttal, PG&E states that because its reliability goals were withdrawn in the Settlement of the last GRC, it is not reasonable to expect that its reliability performance would improve to the levels shown in Table 2-3 of Exhibit 502. Presumably, PG&E is specifically referencing the Initial 2007 GRC Goals shown in columns c and d of Table 2-3. PG&E appears to be erroneously suggesting that DRA expects that the Initial 2007 GRC Goals will definitely be reached. Because it is unlikely that all of the improvements targeted in the 2007 GRC will be achieved by 2009, PG&E seems to be calling into question the reliability of Table 2-3.

The sole purpose of Table 2-3 was to call into question whether the small reliability improvements forecasted to occur under the CIP program could actually be even smaller than PG&E had estimated. The discussion on page 16 of Exhibit 502 calculates the range of possible SAIDI and SAIFI improvements given several scenarios. Using the 2004 through 2008 averages as its starting points, and 2017 forecasted numbers as its ending points, PG&E calculates a SAIDI improvement of 39.3 minutes (see footnote 21) and a SAIFI improvement of 0.408 outages (see footnote 20) for the entire CIP program. Those numbers can be easily derived from columns a and b in Table 2-3 by subtracting the 2017 forecast (in line 11) from the starting point (the 2004 through 2008 average) in line 1. Footnote 22 calculates the SAIDI and SAIFI improvements for a second scenario, assuming that the 2009 goals initially targeted in the 2007 GRC are actually achieved. Using those 2009 forecasts as a new “starting point,” the actual SAIDI and SAIFI improvements attributable to the entire CIP program drop significantly to 10.0 minutes and 0.252 outages, respectively.

After establishing what the maximum and minimum reliability improvements were likely to be, DRA wanted to see whether recorded 2008 reliability data tended to support one or the other. Clearly, recorded 2008 data shows that the starting point used by PG&E (the 2004 through 2008 average) is too high. As mentioned in footnote 19 of Exhibit 502, Table 6-1 of PG&E’s Updated Testimony shows that recorded SAIDI and SAIFI numbers are already lower than PG&E’s starting point. DRA expects that the 2009 recorded data (when available) will continue to show a decrease, lowering the starting point even further. That expectation is strongly bolstered by the results shown in PG&E’s most recent Annual Electric Distribution Reliability Report, filed March 2, 2009. In that report, PG&E shows that for its system as a whole, recorded 2008 SAIDI figures have improved 7.9% as compared to the average of the previous five years, while recorded 2008 SAIFI have improved 7.0%. (Please see Appendix B in Exhibit 502.) While the improvements shown in the Annual Reliability Report

were calculated using a different reporting standard, the recorded data nevertheless shows that PG&E's reliability is continuing to improve even without the benefit of CIP. It is clear that the recorded 2008 data do not support the PG&E starting points shown on line 1 of Table 2-3 of Exhibit 502.

DRA did not state that it expects the actual CIP starting point to reach as low as the 2009 Target Goals forecasted in the 2007 GRC. As stated on page 17 of Exhibit 502, DRA does expect (for the reasons stated above) that some lowering of the SAIDI and SAIFI starting points will occur. However, any reduction in the SAIDI and SAIFI indices for 2008 and 2009 that results in a lower "starting point", no matter how small, reduces the amount of reliability improvements that are exclusively attributable to the CIP program. As previously discussed, DRA is convinced that the costs for this portion of the CIP program cannot be justified by the extremely small reliability improvements. If the CIP reliability improvements are actually even less than the amounts forecasted by PG&E (due to a portion of the improvements actually occurring in programs that are not associated with CIP), then the justification for CIP becomes even more problematic.

C. PG&E Did Not Update Its Analyses

Because its distribution system is large and diverse, PG&E divides it into numerous distribution planning areas (DPA) in order to conduct studies to determine where best to expand the system. As part of the planning process, PG&E forecasts load growth at the DPA level in order to determine where the peak demands on the system will likely occur. PG&E states that it conducted a detailed review of 113 DPAs, with over 100 distribution engineering personnel evaluating system capacity needs and identifying work needed to improve system reliability. On page 3-9 of PG&E's Updated Testimony, PG&E also states:

PG&E engineering personnel did not re-analyze the 113 DPAs for the March 2009 testimony update even though 2007 and 2008 actual loads and updated forecasts are now available. Redoing the analysis

would provide no benefit at this time since the analysis will need to be redone based upon the actual 2009 peak loads. If the commission approves PG&E's emergency capacity proposal the company will re-analyze the 113 DPAs utilizing 2009 actual loads and updated forecasts to determine exactly what work is to be constructed due to changes from 2006 to now. (Emphasis added.)

In question 3 of Data Request DRA 013, DRA attempted to determine whether PG&E had rerun its analyses to reflect any decrease in load growth that has resulted from the downturn in the economy. In response to that request, PG&E simply referred DRA to the testimony quoted above. (Please see Appendix A of Exhibit 502.) As clearly stated in the above quotation, PG&E is nonchalantly saying that the Commission and parties should simply trust that it needs all of the dollars that it has requested, the argument being that only after the Commission approves its CIP request, PG&E may then update its studies to justify its proposed expenditures. In terms of typical regulatory practice, this is patently absurd and is an unacceptable approach.

PG&E does present arguments in its Rebuttal that attempt to refute DRA's testimony, but they are fundamentally flawed. On pages 2-9 through 2-16 in Exhibit 2, PG&E argues that DRA's concerns regarding the use of 2006 load growth data are baseless since 2008 peak loads and yearly load growth were higher than 2006. It goes to some length to try and show that there is no need to update its analyses to include post-2006 data. PG&E includes several graphs and develops various trend lines. PG&E is obviously making another attempt to salvage its testimony by attempting to show that not only is it not necessary to update its analyses, but boldly argues that if such an update was done, the scope of CIP would be expanded.

On page 2-9, PG&E claims that the 2008 peak load and yearly load growth were higher than in 2006. The first of those claims is demonstrably false and can be quickly dismissed. A quick look at Figure 2-3 in PG&E's Rebuttal shows that

the peak load in 2008 (roughly 20,300 MW) is lower than the 2006 peak load (roughly 20,400 MW). PG&E's second allegation concerning load growth requires a bit more analysis.

PG&E's provides three trends in its Rebuttal: Figure 2-2, Figure 2-3, and Figure 2-4. Each of them presents recorded peak load growth for various periods, along with a least-square trend line of the data. On page 2-14, PG&E states that the load growth value associated with 2002 through 2008 data (451 MW/year) is higher than the original load growth value associated with 2000 through 2006 data (291 MW/year). Based on the results of these trends, had PG&E updated its analyses to include post-2006 data, PG&E states that it is likely that it would have identified additional emergency substation projects. PG&E's trends and calculations appear to be accurate, but as will be discussed below, are of little real use.

It is important to note that the three graphs, the three trends, and the load growth values are all based on total system peak loads. However, the substation emergency capacity analyses and the distribution interconnectivity analyses, which are discussed at length in this brief, are all based on the DPA studies, which use local peak loads. The total system peak load does not reveal anything about what the peak loads will look like at the DPA level. In fact, most of the peak loads at the DPA level are not even likely to occur on the same day as the total system peak load. As a simple example, PG&E's total system peak load is likely to occur sometime during the hot summer months. However, a DPA that encompassed a ski resort would likely have its peak in the winter.

The same fundamental flaw is present in PG&E's derivation of the load growth values. While PG&E calculates the 2000 through 2006 and the 2002 through 2008 load growth values correctly, a comparison of those two values does not reveal anything useful. The real question is not how the loads for the total system are changing, but how they are changing at the DPA level. Total system

changes do not reveal anything about what the changes at the DPA level will look like.

PG&E's analyses of total system data are not relevant when applied to the DPA level. PG&E certainly cannot claim that DRA's concerns regarding the use of 2006 data are baseless. Similarly, PG&E cannot reasonably claim that if it had used post-2006 data in its analyses that it would likely result in additional CIP projects. It is important to keep in mind that throughout its Updated Testimony, especially in the quotation previously printed from page 3-9, PG&E states that it intends to re-analyze the data to incorporate 2007, 2008, and 2009 recorded data. If a simple trend of total system peak load data was useful at the DPA level, PG&E would certainly not dedicate over 100 distribution engineering personnel to re-analyzing the 113 updated DPAs.

D. PG&E Provided Few Specific Projects To Analyze

1. DRA's Position

As PG&E acknowledges in the quotation printed in the previous section, only after the Commission approves PG&E's CIP request will PG&E update its forecasts "to determine exactly what work is to be constructed." Based on this quote, it is obvious that even PG&E does not know what projects it will undertake.

This "vagueness" of PG&E's construction plans also extends to feeder interconnectivity projects. On page 3-17 of its Updated Testimony, PG&E states the following regarding interconnectivity work:

Ultimately, the exact amount of work and associated projects must be determined on a case-by-case basis.

Even more telling, PG&E states the following on page 3-18:

[P]G&E has estimated an expenditure level it believes is appropriate but has not developed a specific list of projects pending the detailed circuit-by-circuit analysis referenced above. If the Commission approves PG&E's request, engineers will perform the detailed analysis necessary to identify the specific projects. (Emphasis added.)

It should be noted that the statements highlighted above directly contradict Table 2-3 in PG&E's Rebuttal. That table supposedly shows specific interconnectivity projects. That list may be "specific," but it certainly is not reliable or final. At best, Table 2-3 is an initial, preliminary list that will be revised when PG&E "performs the detailed analysis necessary to identify the specific projects," as PG&E notes in the above quote.

Lastly, on page 3-27 of the Updated Testimony, PG&E states that "... the specific work associated with feeder interconnectivity is unknown."

Even when it comes to Distribution Lines and Equipment (which is the single largest requested capital category in this portion of the CIP program), PG&E presents very little detail or justification. This \$692 million category is discussed on approximately one-half page in PG&E's Updated Testimony. PG&E simply presents a table that lists the miles of lines that are forecasted to be replaced, along with the number of units of various types of line equipment (capacitors, switches, etc.) that PG&E is requesting to be added. The forecasted expenditures for these projects are based on unit costs and contingency factors.

The quantities of additional lines and additional line equipment presented in PG&E's table apparently originate in the 113 DPA analyses that have been discussed previously. In volumes 2 and 3 of the workpapers (which only include recorded data up through 2006), each of the DPAs contains a spreadsheet that indicates the quantities of lines and equipment that would be required to remedy the specific problems that PG&E alleges can be found at that particular DPA. Under most circumstances, that might be a reasonable manner to present these quantities, and DRA could investigate any DPAs that seemed unreasonable. However, in this case, all of the analyses that are based upon the 2006-data DPA studies contain a fundamental flaw.

One major component of each DPA study is an analysis of the expected load growth. In its Updated Testimony, PG&E included two additional workpaper volumes (volumes 4 and 5) which contain recorded 2007 and 2008 peak loads,

respectively. Noticeably absent from those updated workpapers volumes are the spreadsheets that indicate the quantities of lines and equipment that would be required to remedy the specific DPA problems. In other words, while the DPA spreadsheets themselves have been updated in volumes 4 and 5 of the workpapers, they are never used to re-analyze the need for any of the proposed capital projects. PG&E confirms this in its Rebuttal. For example, on page 2-12 of its Rebuttal, PG&E states:

The individual DPA load growth forecasts PG&E used to identify emergency substation transformer requirements for the CIP was based on 2000 to 2006 recorded peak load data.

Similarly, on page 2-14 of the Rebuttal, PG&E states:

If PG&E had updated its detailed emergency substation analysis based on more recent load growth values (i.e., 2007 and 2008 peaks), what would have occurred? (Emphasis added.)

PG&E again clearly admits that it did not use the updated DPA spreadsheets provided in workpaper volumes 4 and 5 to re-analyze the need for the capital projects.

Since PG&E's analyses only included load growth data through 2006, and did not factor in the dramatic changes occurring in the California economy, DRA considers PG&E's list of proposed capital projects to be tentative at best. When the updated DPAs are eventually re-analyzed, and the load growth changes that have occurred since 2006 are incorporated into the substation emergency capacity studies and the distribution interconnectivity studies, it is certainly possible (even likely) that many of the proposed equipment upgrades to these DPAs will be scaled back and/or eliminated entirely. Given this eventual re-analysis (which even PG&E admits it must do), PG&E cannot now know with certainty the quantities of the additional lines or the additional line equipment that it actually needs. Therefore, as mentioned previously, the so-called "specific" lists of capital projects (reprinted in the Rebuttal beginning on page 2-7 and in Attachment 1 at

the end of Chapter 2) are really nothing more than initial, tentative lists that will change when the substation emergency capacity studies and the distribution interconnectivity studies are redone. Combining this with the previously quoted PG&E testimony, it is clear that PG&E does not have a reliable list of the capital projects it proposes to undertake for CIP.

PG&E presents arguments in its Rebuttal that attempt to refute DRA's argument that it provided few specific projects to analyze, but again, they contain fundamental errors. Beginning on page 2-4 of its Rebuttal, PG&E attempts to present the case that, not only is DRA incorrect, but the level of detail presented by PG&E is at least comparable to what is provided in a GRC.

2. The Problems With PG&E's Distribution Planning Area Analysis

To understand DRA's statement regarding PG&E's failure to provide specific projects to analyze, it is necessary to understanding how PG&E utilizes Distribution Planning Areas (DPA). Because its distribution system is large and diverse, PG&E divides it into numerous DPAs in order to conduct studies to determine where best to expand the system. On page 3-11 of its Updated Testimony, PG&E presents an example showing the first page of a hypothetical DPA study. As part of the planning process, PG&E forecasts load growth at the DPA level in order to determine where the peak demands on the system will likely occur. PG&E states that it conducted a detailed review of 113 DPAs, with over 100 distribution engineering personnel evaluating system capacity needs and identifying work needed to improve system reliability. This is shown schematically in the first box on Figure 2-5 of PG&E's Rebuttal.

It is important to note that two separate analyses are performed on the DPA data – one to evaluate the substation emergency capacity (i.e. the ability of a DPA to recover from the loss of the largest non-firm transformer), and one to evaluate distribution interconnectivity (i.e. the ability to recover after the failure of each feeder outlet.) (See page 3-26 of PG&E's Updated Testimony.) It is also

important to note that the accuracy and relevance of these two analyses is largely determined by whether the DPAs include the most currently available recorded data. As noted below, in both its Updated Testimony and its Rebuttal, PG&E states that it has only utilized recorded data through 2006. On page 3-9 of PG&E's Updated Testimony, PG&E states:

PG&E engineering personnel did not re-analyze the 113 DPAs for the March 2009 testimony update even though 2007 and 2008 actual loads and updated forecasts are now available. Redoing the analysis would provide no benefit at this time since the analysis will need to be redone based upon the actual 2009 peak loads. If the commission approves PG&E's emergency capacity proposal the company will re-analyze the 113 DPAs utilizing 2009 actual loads and updated forecasts to determine exactly what work is to be constructed due to changes from 2006 to now. (Emphasis added.)

As the underlined portion of the above quotation indicates, PG&E is being very clear and very candid about the need to re-analyze the 113 DPAs to include recorded data after 2006. Phrased another way, DRA is stating, and PG&E is confirming, that the two separate analyses discussed above (the evaluation of the substation emergency capacity and the evaluation of the distribution interconnectivity) **must eventually be re-analyzed to include 2007, 2008, and 2009 recorded data**. This candor also appears in its Rebuttal testimony where, on page 2-12, PG&E states:

The individual DPA growth forecasts PG&E used to identify emergency substation transformer requirements for the CIP was based on 2000 to 2006 recorded peak load data.

At numerous points in its Updated Testimony, PG&E comments on how it cannot determine the precise projects it plans to undertake. In addition to the page 3-9 quotation printed above, PG&E states the following on page 3-17 regarding interconnectivity work:

Ultimately, the exact amount of work and associated projects must be determined on a case-by-case basis.

Even more telling, PG&E states the following on page 3-18 regarding interconnectivity projects:

[P]G&E has estimated an expenditure level it believes is appropriate but has not developed a specific list of projects pending the detailed circuit-by-circuit analysis referenced above. If the Commission approves PG&E's request, engineers will perform the detailed analysis necessary to identify the specific projects. (Emphasis added.)

And lastly, on page 3-27, PG&E states:

[T]he specific work associated with feeder interconnectivity is unknown.

With the above discussion as a prologue, there should be no confusion or ambiguity regarding the following point: until such time as PG&E re-analyzes its studies to incorporate post-2006 recorded data, **PG&E does not know, and cannot know, which specific projects it needs to undertake.**

Let's now return to the initial allegation (regarding the level of specific project details PG&E provided in this CIP application) that initiated this portion of the Brief. On page 2-5 and 2-6 of the Rebuttal, PG&E presents a list of bulleted items that it alleges shows that it has supplied workpapers and updated testimony that provide information over and above what is included in a GRC. Examining each bullet in order, DRA finds the following:

- The list of “specific substation emergency capacity projects” (and associated estimates), are not specific at all; at best, the list of 95 “specific” emergency capacity projects (also provided in Table 2-1 of the Rebuttal) is nothing more than a tentative, provisional list that won't be final until such time as post-2006 data are analyzed.
- DRA agrees that load growth files for 2007 and 2008 were provided when PG&E filed its Updated Testimony. However, PG&E did not use this updated information to re-analyze its studies. As stated

above, until such time as PG&E re-analyzes its studies to incorporate post-2006 recorded data, **PG&E does not know, and cannot know, which specific projects it needs to undertake.**

- PG&E did provide a detailed analysis for the loss of each substation bank and circuit outlet. However, those analyses are of little use. PG&E must re-analyze its studies to incorporate post-2006 data. PG&E admits that the re-analysis must be done. (See the above quote from page 3-9 of PG&E's Updated Testimony.)
- PG&E does provide information from the analysis of the 113 DPAs. However, this information is based on 2000 through 2006 load growth data, as PG&E states on line 16. Once again, this detailed "high level" information is tentative at best, and will change when post-2006 data are analyzed.
- The long list of information outlined in this bullet was indeed provided by PG&E. However, this list is completely meaningless. When PG&E re-analyzes its studies using post-2006 data (which PG&E admits it must do), all of this provided information will change. At this point in time, **PG&E does not know, and cannot know, which specific projects it needs to undertake.**
- Unit costs, escalation factors, and Excel spreadsheet were provided. However, this information will only be useful when it can be applied to an updated list of projects. As mentioned *ad nauseam*, until such time as PG&E re-analyzes its studies to incorporate post-2006 recorded data, **PG&E does not know, and cannot know, which specific projects it needs to undertake.**

Despite PG&E's claims to the contrary, PG&E has not provided the details necessary for DRA to conduct an analysis of specific projects. Not only that, while the details provided were quite voluminous, they were mostly of no use. Therefore, the provided information is not equivalent to what is normally

proffered in a GRC. In a GRC, DRA is never asked to approve funding for a specific program, such as CIP, without being told which projects make up the program. In the case of CIP, even the utility does not know which projects will be undertaken.

E. Analysis of Some Issues Raised in PG&E’s Rebuttal Testimony

1. PG&E’s Rebuttal Illustration of the Relationship Between the Cornerstone Initiatives Exacerbates the Confused Nature of its Showing

In its Rebuttal, PG&E presents Figure 1-1 on page 1-10 to illustrate what it calls the two major categories of reliability benefits that will allegedly be provided by CIP. In describing that figure, PG&E makes a distinction between outages that are infrequent but have large impacts, and ordinary outages. In Figure 1-1, PG&E divides the diagram down the middle, with outages that do not impact SAIDI and SAIFI on the left, and those that do impact SAIDI and SAIFI on the right. PG&E states that substation transformer and/or circuit component failures should be placed on the left side, and should be treated like generation or transmission outages. This novel argument is clearly PG&E’s attempt to defuse DRA’s testimony concerning the cost versus benefits issue of CIP.

PG&E appears to be attempting to make a distinction where none is warranted. PG&E’s comparison of substation transformer and/or circuit component failures to generation and transmission failures is puzzling. According to page 18 of its March 2, 2009 Annual Electric Distribution Reliability Report (a link to which is included in footnote 19 of Exhibit 502), PG&E does not exclude generation-related outages or transmission outages from its SAIDI and SAIFI calculations. DRA does agree that substation transformer and/or circuit component failures are rare occurrences, and as such have minor impacts on SAIDI and SAIFI. However, Figure 1-1 is misleading when it shows that Substation Emergency Capacity belongs on the left side of the diagram and has no

SAIDI or SAIFI impacts. DRA agrees with PG&E in so far as substation transformer and circuit component failures are comparable to generation and transmission outages, but disagrees with PG&E's characterization that they should not be factored into the SAIDI and SAIFI calculations.

2. Distribution Automation Is Not Necessarily Dependent Upon Approval of PG&E's Feeder Interconnectivity and Substation Emergency Capacity Requests.

In Figure 1-1 of PG&E's Rebuttal, the Substation Emergency Capacity block is shown supporting the Feeder Interconnectivity block, which in turn supports Distribution Automation. On page 1-9, PG&E states that the blocks on the bottom of the figure support the blocks above them. The clear implication of this is that Distribution Automation cannot take place if the Commission adopts DRA's recommended adjustments for transformer and feeder interconnectivity reductions. DRA refers the Commission to TURN's persuasive testimony in section II.F. of Exhibit 121, where it discusses PG&E's unreasonable presentation of its proposal as an all-or-nothing package. DRA fully supports TURN's arguments in that respect, and in the interests of not cluttering the record with identical arguments, will leave it to TURN to make that argument itself. What follows is DRA's perspective on the flaws in PG&E's arguments about the interrelationship of the various CIP initiatives.

As shown schematically in Figure 3-3 of PG&E's Updated Testimony, Fault Location, Isolation and Service Restoration (FLISR) systems involve automating feeder breakers and feeder switches (among other things). Page 3-16 of the Updated Testimony discusses how over 1800 urban/suburban feeders were analyzed by PG&E's engineers. It should be emphasized that these 1800 feeders currently exist – they are not future additions that are associated with CIP. It should be obvious that the universe of switches that are available for automation is not appreciably reduced by DRA's recommendations contained in Exhibit 502. It therefore follows that Distribution Automation will not be appreciably impacted if

the recommendations contained in Exhibit 502 are adopted. PG&E appears to concede this point on page 2-2 of its Rebuttal. On that page, PG&E states:

Should reductions in the proposed substation emergency capacity plans occur, there would need to be reductions in the SAIDI and SAIFI benefits associated with the FLISR portion of Cornerstone Project.

Interestingly, PG&E does not allege that FLISR-related SAIDI and SAIFI improvements cannot take place. PG&E simply states that there would be a reduction. It should be noted that PG&E does not specify or quantify to what extent FLISR would be impacted by DRA's recommendation to disallow the proposed emergency capacity plans. More importantly, PG&E also does not state to what extent, if any the cancellation of the substation emergency capacity plans would have on FLISR-related SAIDI and SAIFI. However, in response to a question from TURN, PG&E's witness Pearson stated the following while on the witness stand:

Q. So have you done any formal studies to estimate by how much the absence of PG&E's proposed emergency capacity will decrease PG&E's FLISR-related reliability improvement?

A. As stated in B, we did not perform any actual calculation to come up with that. Actually, with the five to 10 percent noted in the answer to A, it was just an estimated value.⁶⁴

On page 159 of the transcript, the following exchange takes place:

Q. But your estimate is that it is probably just 5 to 10 percent?

A. Yeah. That was just an estimate.

It is obvious that PG&E does not anticipate any major impact to FLISR-related SAIDI and SAIFI improvements if the proposed substation emergency capacity plans are not approved. It is disingenuous for PG&E to therefore suggest,

⁶⁴ 1TR, p.158:7-14.

as shown on Figure 1-1 of its Rebuttal, that Distribution Automation is completely dependent on the completion of the proposed substation emergency capacity plans.

3. PG&E's Argument That DRA Incorrectly States That It Expects Dramatic Changes In The California Economy To Impact Load Growth Is Unpersuasive

On page 2-9 of its Rebuttal, PG&E alleges that DRA incorrectly asserts that important changes have occurred to California's economy since PG&E last conducted the analyses supporting the CIP filing. PG&E appears to be suggesting that it is not necessary to use post-2006 data in its analyses since no significant changes have occurred. This directly challenges DRA's statements regarding changes to the economy, and indirectly suggests that DRA was in error when it stated that specific projects were not provided (due to the fact that the list of "specific" projects was based on outdated information, as discussed in the previous section).

It would be the rare individual that was unaware of the economic conditions impacting California. Housing starts are down, unemployment is up, and businesses are scaling back. Various Bay Area news sources have reported that Toyota will be shutting down the NUMMI auto plant in Fremont early next year. PG&E's comments to the contrary, it is absurd for PG&E to allege that California's economy has not been negatively impacted by the economic slowdown. A closer look at the graphs submitted by PG&E in its Rebuttal (see for example, Figure 2-3 on page 2-14) reflects this slowdown.

Earlier, DRA commented at length on the relevance and usefulness of the peak load trends introduced by PG&E in its Rebuttal. A simple examination of the peak loads experienced in 2006, 2007, and 2008 fails to show why PG&E believes that peak demand has not been impacted. In Figure 2-3, it is easy to see the large increase in the peak load that PG&E experienced in 2006. It appears that the 2006 recorded peak load is almost 2000 MW higher than the 2005 level. However, for 2007, the peak load experienced in the previous year fails to occur.

In fact, the 2007 level shows a significant decrease. Even by 2008, the peak load failed to reach the 2006 level. It is well known that many factors, most notably weather conditions, can impact peak loads. However, there is nothing in the data that supports PG&E's allegation that DRA was in error when DRA stated that changes in the California economy need to be reflected in the DPA analyses. To the contrary, the data clearly support DRA's position.

4. In an About Face, PG&E's Rebuttal Argument That SAIDI And SAIFI Improvements Should Not Be The Determining Factor In Approving CIP Is Comical At Best

PG&E alleges on page 1-9 in its Rebuttal that there have been numerous instances where the Commission has authorized hundreds of millions of dollars of projects that do not necessarily correlate to improved SAIDI and SAIFI improvements. DRA infers from this statement that PG&E is trying to suggest that the Commission should treat CIP the same way it treated these other projects – namely that SAIDI and SAIFI not be a determining factor in its approval. PG&E is simply trying to defuse intervenor testimony concerning the cost versus benefits of CIP, and is yet another example of the internally inconsistent arguments endemic in PG&E's case. In the beginning, it was all about SAIDI and SAIFI improvements. Now that it is clear that argument won't work, PG&E's attempt to counter that reality practically turns its showing into a bad joke.

PG&E's allegation is obviously vague. Of course the Commission has approved projects that don't directly impact reliability. The clear distinction between these un-named prior projects and CIP is that CIP was conceived, proposed, and justified on the basis of bringing PG&E's reliability more in-line with the other California electric utilities. It is ludicrous to now suggest that reliability is unimportant, and that CIP should be treated the same as these un-named "typical" projects.

V. DISTRIBUTION AUTOMATION PROPOSAL

DRA’s testimony regarding PG&E’s distribution automation (DA) proposal can be found in Exhibit 503. Table V-1 provides a comparison between DRA’s recommended funding (\$0) and PG&E’s forecasts for distribution automation capital expenditures and Operations and Maintenance (O&M) expenses for 2010-2016:

Table V-1⁶⁵
2010-2016 Forecasted Distribution Automation Capital Expenditures
and O&M Expenses (in Millions of Dollars)

Description	DRA Recommended	PG&E Proposed ⁶⁶						
		2010-2016	2010	2011	2012	2013	2014	2015
Capital Expenditures:								
Line Devices	\$0	\$33.940	\$69.911	\$96.098	\$98.962	\$76.575	\$65.839	\$54.347
Substation	\$0	\$5.182	\$10.675	\$14.674	\$15.112	\$11.693	\$10.054	\$8.299
Communications	\$0	\$2.122	\$4.371	\$6.009	\$6.188	\$4.788	\$4.117	\$3.398
Other (Vehicles)	\$0	\$0.213	\$0.435	\$0.592	\$0.603	\$0.462	\$0.393	\$0.322
Capital Total	\$0	\$41.459	\$85.394	\$117.375	\$120.866	\$93.519	\$80.404	\$66.367
Expenses:	\$0	\$0.000	\$0.974	\$3.022	\$5.902	\$8.968	\$11.491	\$13.790

A. Summary of PG&E’s Request

PG&E’s DA proposal “is to install FLISR [Fault Location, Isolation and Service Restoration] schemes on approximately 1,200 circuits in urban and suburban areas [footnote omitted] between 2010 and 2016.”⁶⁷ As with the rest of the CIP proposals, DRA recommends that the Commission reject this portion of

⁶⁵ Exh. 503 at 3.

⁶⁶ Exh. 1, Tables 4-4 and 4-5 at 4-34.

⁶⁷ Exh. 1 at 4-17, Ins. 19-21.

the project because PG&E has presented the Commission with an unverifiable conceptual budget only, and refuses to do the necessary thorough capital and operating and maintenance (O&M) expense budgeting until it has received Commission funding to do so. As stated throughout this Brief, PG&E should not receive funding unless it provides sufficient information for the Commission to consider its proposal reasonable, which it has not done.

Again, as with the majority of data request responses regarding CIP that DRA received from PG&E, when it asked PG&E for workpapers detailing its proposed capital expenditures by Division and year, PG&E responded as follows:

PG&E has not prepared a forecast of distribution automation capital expenditures by division and year because the Company has not performed the detailed engineering associated with implementing the distribution automation work proposed in the March 2009 testimony update. PG&E does not plan on preparing such a forecast until the Commission issues a decision regarding the Company’s application.⁶⁸

PG&E’s Updated Testimony includes an estimate of DA reliability benefits.⁶⁹ PG&E’s DA reliability benefit estimates are incorporated into Table V-2 below.⁷⁰ PG&E’s DA proposal constitutes a majority of the CIP’s total estimated reliability benefits.⁷¹ The greatest portion of estimated DA reliability benefits come from DA deployment to PG&E’s 12kV system.

Table V-2

PG&E’s Estimated Distribution Automation Reliability Benefits, Compared With Estimated Total CIP Reliability Benefits

DA- SAIFI	DA- SAIDI	Total CIP-SAIFI	Total CIP-SAIDI	DA as % of Total CIP SAIFI	DA as % of Total CIP SAIDI
--------------	--------------	--------------------	--------------------	-------------------------------------	----------------------------------

⁶⁸ Exh. 503 Appx. at 123, PG&E response to Data Request DRA-PG&E-017, Q.5.

⁶⁹ Exh. 1, Table 4-3 at 4-27.

⁷⁰ Exh. 503 at 4.

⁷¹ Exh. 1, Table 1-2 at 1-9.

Reduction in 12 kV System due to DA	0.169	18.2	NA	NA	42%	46%
Reduction in 17 kV System due to DA	0.008	0.7	NA	NA	2%	2%
Reduction in 21 kV System due to DA	0.097	9.2	NA	NA	24%	23%
Total	0.275	28.1	0.405	39.3	68%	72%

B. Distribution Automation Background

The DA field appears to be developing rapidly.⁷² The Electric Power Research Institute (EPRI) expects to publish its first edition of a guide for advanced DA by December 2009.⁷³ EPRI also expects to publish a monthly report on advanced DA technical information and field application experience by December 2009.⁷⁴ These advances however, do not mean that the technology has developed to a stage where the Commission can accept that PG&E’s estimates of performance, costs, benefits and ease of integration into its distribution system are what they say they will be. It is still in its relative infancy.

Regarding communications networks for advanced DA, EPRI has raised some issues that should cause the Commission to pause before funding this proposal:

Advanced distribution automation (ADA) equipment and applications require corresponding advances in the supporting communications infrastructure. Existing infrastructures do not have the ability to scale and effectively integrate across different communications media. In addition, limited capabilities to integrate different networks, physical communications media,

⁷² Exh. 505 at 43; for example, Cisco Systems’ recent entry into the emerging “smart grid” communications network market, “Smart Grid, Leveraging Intelligent Communications to Transform the Power Infrastructure”, Feb. 2009, http://www.cisco.com/web/about/citizenship/environment/docs/sGrid_wp_c11-532328.pdf

⁷³ Exh. 505 at 60; EPRI 2009 Portfolio, 124 Smart Distribution Applications and Technologies at 4, http://mydocs.epri.com/docs/Portfolio/PDF/2009_P124.pdf

⁷⁴ Id.

and equipment all point to the need for more effective open standards. *While next-generation standards are in development and use for advanced substation operations, these have not been developed for distribution equipment or ADA applications.* ADA equipment and applications require open standards to enable functions such as self description, assisted auto configuration of equipment and networks, and robust management and security.⁷⁵

Considering the rapid development and relative infancy of the DA field, DRA recommends that PG&E take a deliberative approach to deploying DA, and not make critical decisions right now. Although it has not made definitive decisions on how it will implement DA at this stage, it nevertheless, in DRA's opinion, is far too early for the Commission to agree to fund this proposal now. Particularly in light of PG&E's poor history regarding its advanced metering infrastructure (AMI) deployment, the Commission should be very skeptical about letting PG&E loose once again with new technologies, especially at the scale it proposes for DA. With AMI, PG&E realized very early after getting approval for its initial proposal that it had jumped the gun and made costly decisions to choose technologies that rapidly became outdated. As DRA predicted, PG&E had to return to the Commission to ask for a few billion dollars more to do pretty much what it had expected it could do in the first place. It is interesting to note that one of the arguments PG&E made in support of its upgrade was that following approval for its AMI project, Southern California Edison and San Diego Gas & Electric had more advanced AMI systems that deliberately incorporated open standards into the design of their communications systems. Since those have not been developed yet in the DA field, it is preferable for the Commission to only consider DA once those open standards have been developed and successfully been put into use by other utilities. Yes, California likes to be ahead of the game

⁷⁵ Exh. 505 at 125, EPRI 2008 Portfolio, 124 Advanced Distribution Automation at 19 (emphasis added), http://mydocs.epri.com/docs/Portfolio/PDF/2008_P124.pdf

in most arenas, but our pride in being number one does not mean we always have to be the first to try everything, especially when it is PG&E taking the lead.

DRA once again implores the Commission not to fall into the same trap again. PG&E should take advantage of the experiences of other utilities and the development of new technologies and standards in a careful and deliberative manner, and come back to the Commission when it has a tangible and well-developed proposal, rather than placing all the risk on its customers now because it might very well have to come back at a later stage to ask for either a new technology or to fill gaps it missed in the first place. PG&E proposes to make over \$600 million in DA capital expenditures over seven years, so it is advisable to have a clear understanding of standards, expected results and costs at the outset.

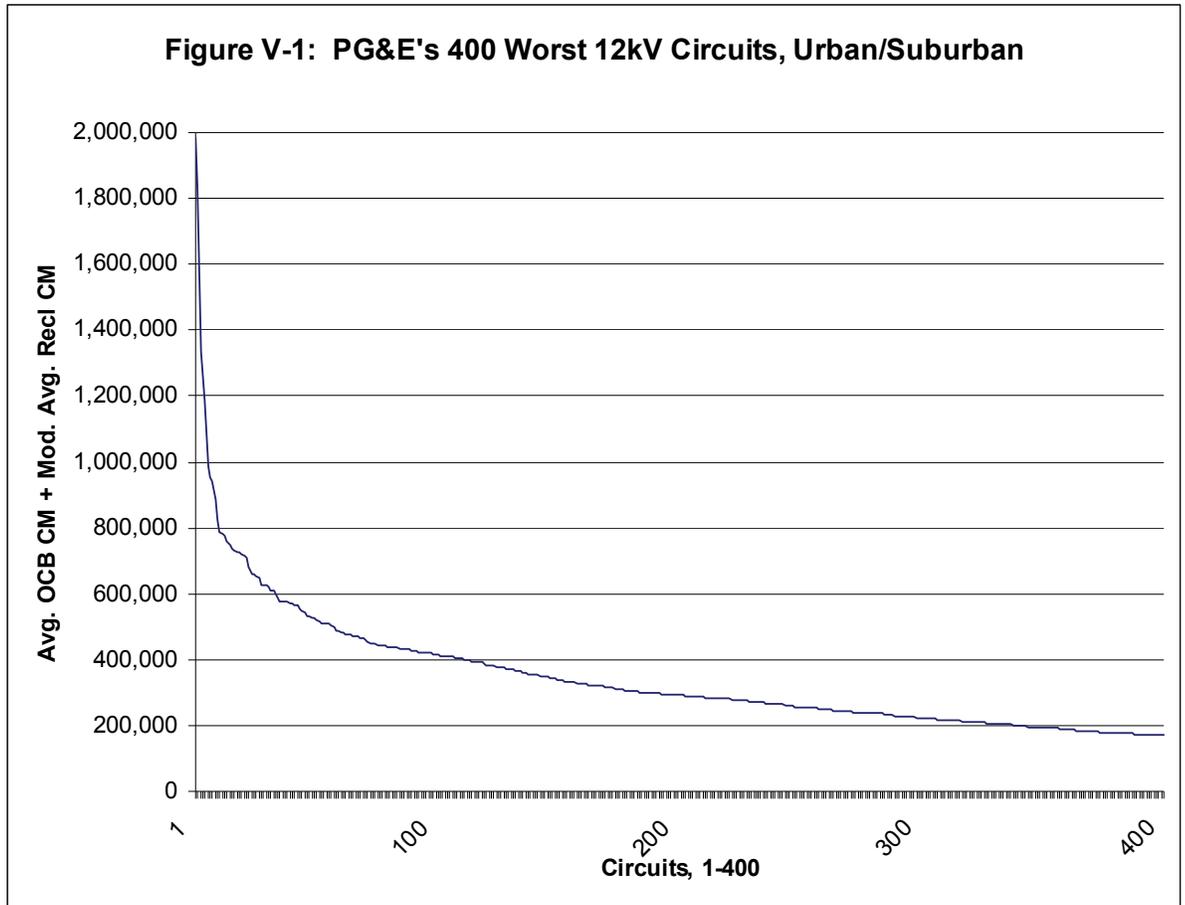
C. Issues

1. PG&E's Worst 400 12kV Circuits

PG&E's workpapers include data on the "worst 400 12kV circuits in urban/suburban areas."⁷⁶ PG&E's proposal to automate 800 12kV circuits represents 61% of its total of 1,307 12kV circuits. Data on the Worst 400 12kV circuits are presented in graphic format in Figure V-1 below.⁷⁷

⁷⁶ Exh. 10 at 4-16 to 4-19.

⁷⁷ Exh. 503 at 10.

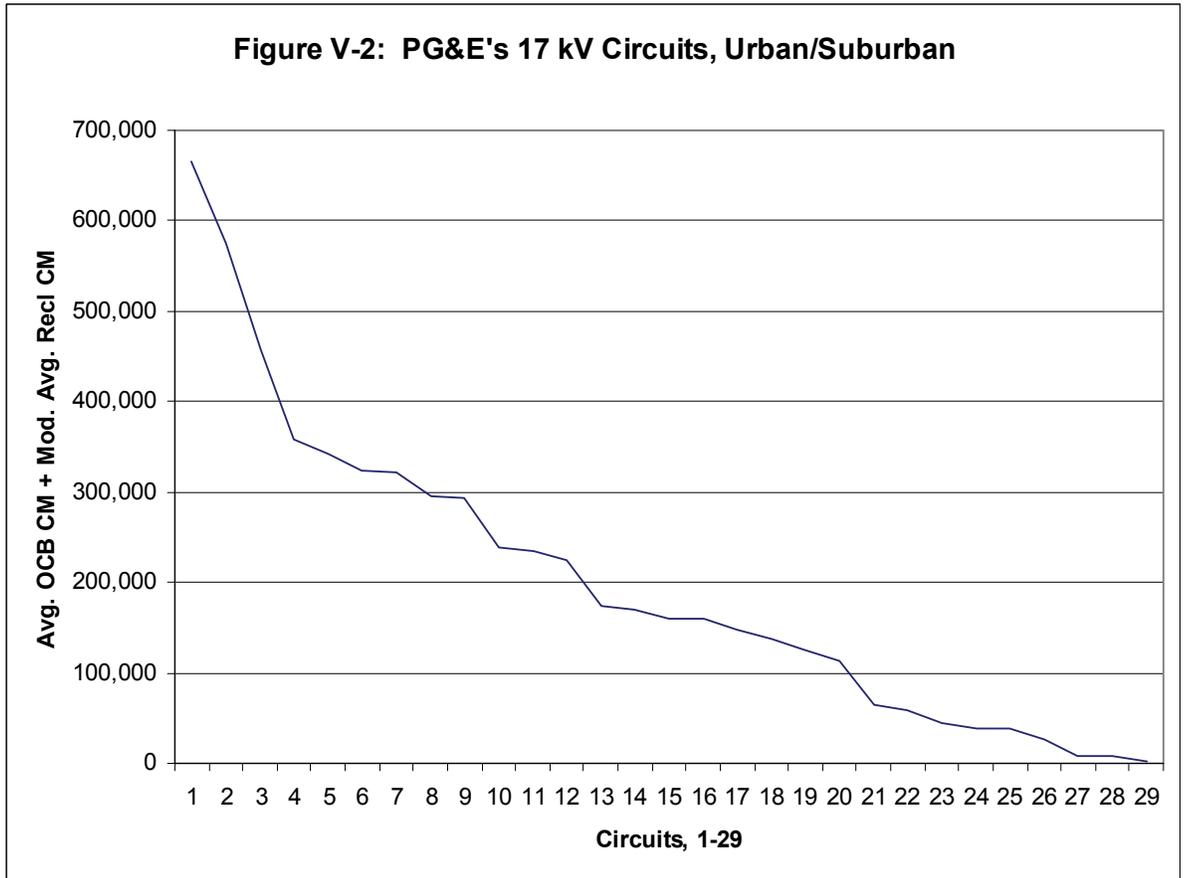


DRA notes that after the first 100 or so 12kV circuits of the Worst 400, the curve flattens significantly. PG&E could save significant capital expenditures if it concentrated on the worst of the Worst 400 12 kV circuits, instead of its proposal to automate 800 12kV circuits. *In fact, a closer examination of the Worst 400 12kV circuits reveals that 69 of the 400, or 17 percent, appear in the Worst 400 list four or five years out of the five years (2004-2008) examined.*⁷⁸ PG&E should concentrate on these Worst of the Worst before spending over \$600 million on DA. Furthermore, PG&E should be addressing its worst-performing circuits as part of the Company's regular business activities in the GRC, even without its CIP proposal.

⁷⁸ Exh. 2 at 3-20 to 3-25; 3 RT 361:10 to 362:6.

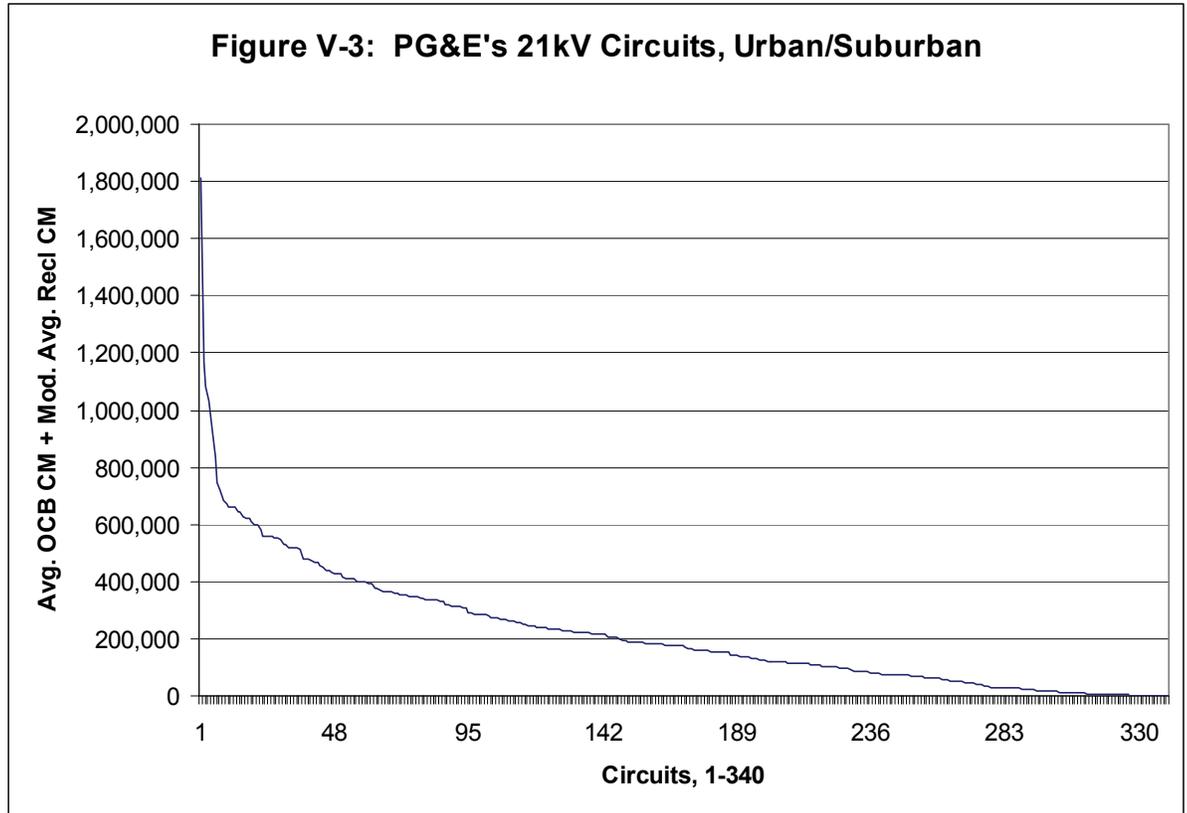
2. PG&E's 17kV and 21 kV Circuits

PG&E proposes to “automate all 17-kV and 21-kV circuits in urban and suburban areas.”⁷⁹ Data on the twenty-nine 17kV circuits are presented in graphic format in Figure V-2 below, while data on the 340 21kV circuits is presented in Figure V-3.⁸⁰



⁷⁹ Exh. 1 at 4-21, Ins. 23-24.

⁸⁰ Exh. 503 at 9-10.



As with PG&E's 12kV circuits, a subset of the 17kV and 21kV circuits have the worst performance. PG&E could save significant capital expenditures if it concentrated on the worst of its 17kV and 21kV circuits, instead of its proposal to automate all of its 17kV and 21kV circuits. Again, PG&E should be addressing its worst-performing circuits as part of the Company's regular business activities in the GRC, even without its CIP proposal.

3. PG&E Has Provided Little Proof to Support its Capital Expenditure Assumptions

PG&E's Updated Workpapers include a spreadsheet the Company used to estimate the total proposed DA capital expenditures.⁸¹ DRA asked PG&E for workpapers about many of the assumptions used in the spreadsheet, and in most cases, received no supporting workpapers. **PG&E is asking for over \$600 million for DA, yet has no workpapers to support the majority of its requests.**

⁸¹ Exh. 10 at 4-4 to 4-7.

That is outrageous and unacceptable. DRA refers the Commission to its Table 3-3 in DRA Exh. 503, at pages 11-12, which revealingly summarizes PG&E's extremely deficient responses to DRA's data requests regarding its DA capital expenditure assumptions.⁸² For example, DRA inquired about PG&E's \$100,000 estimated cost for new underground line devices, and received a response that, given the normally accepted regulatory regime, one would imagine was written by someone trying very hard not to get the project approved:

There are no specific workpapers or calculations that derive the cost PG&E used in the workpapers. The cost estimate was based on the judgment of the witness after discussions with other engineering management personnel. The underground device unit cost from the KEMA 2005 report is \$46,000 (see p. 4-82 of the workpapers). PG&E's estimate for underground devices is \$100,000. PG&E purposely estimated a significantly higher unit cost for underground devices because of the uncertainty associated with these installations. Until detailed engineering is performed it is unknown how many devices can be a padmount installation versus a subsurface installation. Additionally, independent of whether the installation of the device itself is subsurface or padmount, other substructure rearrangement (e.g., installing a new subsurface enclosure for cable pulling and/or splicing; rerouting existing duct lines) is sometimes necessary to accommodate a new device into the existing system. Finally, PG&E anticipates more difficulties with respect to communication with underground devices than overhead devices which may add additional costs. Because of the uncertainty associated with these cost drivers and the fact that PG&E is seeking balancing account treatment for its proposal, PG&E considered it reasonable to use a high-unit cost estimate for underground devices.⁸³

⁸² Exh. 503 at 11-12. All of the relevant Data Responses regarding DRA's DA discovery can be found in the Appendix and endnotes to Exhibit 503.

⁸³ Exh. 503 at 11, PG&E response to Data Request DRA-PG&E-011, Q.6 (emphasis added).

Balancing account treatment is not going to do anybody except PG&E any good, since DA funding should not be approved to begin with. PG&E is purposefully overinflating its estimated costs with full knowledge that these costs will not be reviewed unless they exceed an inflated amount specified in the balancing account.. Talk about having your cake and eating it, too.

In its rebuttal testimony, PG&E responded to seven of the twenty-one issues in DRA's Table 3-3, but still provided no workpapers.⁸⁴ Based on PG&E's failure to provide workpapers to support its dubious DA capital expenditure assumptions, DRA recommends that the Commission reject PG&E's DA capital expenditure request.

4. San Francisco Distribution Automation Pilot Project

PG&E's Test Year 2007 GRC testimony included a description of a distribution area automation pilot project.⁸⁵ DRA requested further information from PG&E on the DA pilot project. PG&E responded:

The distribution automation pilot project was initiated in 2006 in San Francisco Division and consisted of installing S&C Intelliteam II systems on the Hunters Point 1103 and 1105 distribution circuits The installation was completed and placed in service in 2006. The system is still in service. *While PG&E has not prepared a formal written evaluation of this system, the Company has reviewed its performance after operations in January 2008 and April 2008 and determined that the system operated as designed.*⁸⁶

Does PG&E really expect the Commission to accept such an explanation as sufficient proof that its pilot project reasonably reflects the future success of its CIP DA proposal? DRA does not.

⁸⁴ Exh. 2 at 3-9 to 3-11; 3 RT 355:23 to 356:1.

⁸⁵ Exh. 503 Appx. at 85-87, PG&E response to Data Request DRA-PG&E-007, Q.1, incorporating PG&E's Test Year 2007 GRC testimony, Exh. PG&E-4 at 8-36 to 8-38.

⁸⁶ Exh. 504 at 3, PG&E response to Data Request DRA-PG&E-007, Q.3 (emphasis added).

While PG&E deployed S&C's Intelliteam II system as part of its San Francisco DA pilot project, the Company is making no technology commitments going forward:

PG&E has not determined which kind of FLISR systems it will install at specific locations. For the distribution automation pilot discussed in response to several questions from DRA_007, PG&E used S&C Intelliteam II systems. However, the Company has no agreements with specific vendors at this time to purchase FLISR systems should the Commission decide to approve PG&E's proposal. Decisions regarding which vendors PG&E will use will be made as necessary depending on how the Commission rules on the Company's application. PG&E notes that it may use different vendors over the time period of the project.⁸⁷

This is another example of the total unreasonableness of PG&E's approach in this proceeding. Despite its candor regarding its troublesome conjecture and indecision, it still expects the Commission to fully fund its DA proposal.

DRA asked PG&E about the incremental O&M costs associated with the San Francisco DA pilot project. PG&E responded:

PG&E has not separately recorded the incremental O&M costs associated with the San Francisco distribution automation project. It is PG&E's judgment that *the incremental O&M costs for the FLISR system the Company installed in San Francisco are not significant.*⁸⁸

Before expanding DA throughout PG&E's service territory, DRA recommends that PG&E perform a thorough evaluation of its pilot DA project and its options going forward. Since PG&E considers the incremental O&M expenses

⁸⁷ Exh. 504 at 5, PG&E response to Data Request DRA-PG&E-009, Q.8.

⁸⁸ Exh. 503 Appx. at 121, PG&E response to Data Request DRA-PG&E-17, Q.1 (emphasis added).

associated with its DA pilot project to be “not significant”, DRA recommends that the Commission reject PG&E’s request for additional DA O&M expenses.

5. PG&E’s SAIDI Performance Improved in One Year by Almost the Full Estimated Benefit of Deploying DA

Table 4-1 in PG&E’s Updated Testimony shows PG&E’s “SAIDI and SAIFI values for 2004 to 2008 and the resulting 5-year average.”⁸⁹ DRA notes that there are significant variations in the SAIDI and SAIFI figures from year to year. For example, as mentioned above in section xxx, the difference between the 2006 and 2007 SAIDI figures in PG&E’s Table 4-1 is 26.2 minutes, 93% of PG&E’s estimated DA SAIDI benefits shown in PG&E’s Table 4-3. *In other words, without a \$600 million DA capital investment, PG&E’s SAIDI performance improved in one year by almost the full estimated benefit of deploying DA.* This fact seriously concerns DRA. The Commission should take this into consideration when looking at this case from a cost-benefit and sound business practices perspective. If PG&E is accomplishing the same reliability improvements through its GRC “adequate service” standards, why is it necessary to spend \$600 million more on something PG&E isn’t even sure about? DRA is sure however, that once PG&E has done the requisite research and development of this aspect of its proposal, and has the patience for DA technology to reach a reasonable level of maturity, it will not come up with the same figures.

6. Communication Systems Costs

Table 4-4 of PG&E’s Updated Testimony includes a line item for communication systems capital expenditures.⁹⁰ PG&E’s Updated Testimony discusses its proposed DA communication systems:

PG&E’s SmartMeter™ Program is currently considering the use of an upgraded energy information network that may provide advanced communication

⁸⁹ Exh. 1 at 4-19, lns. 6-7.

⁹⁰ Exh. 1 at Table 4-4 at 4-34, ln. 3.

technology suitable for DA applications. PG&E is currently in the planning and testing phase for consideration of this upgraded SmartMeter™ Program network. If the planning and testing confirms that it is an appropriate communication medium for DA applications, PG&E will seek to use the energy information network.⁹¹

PG&E's Updated Testimony includes a footnote that details recent events:

Since filing the Cornerstone application in May 2008, PG&E has selected Silver Springs Networks to provide advanced networking products and services for the Company's SmartMeter™ Program. *PG&E hopes to utilize the Silver Springs information network for the FLISR systems the Company is proposing. However, at this time, PG&E is still including the cost for a communication infrastructure in the event that the Silver Springs network is not a suitable communication medium for the FLISR systems.* PG&E notes that it may use this portion of the expenditure forecast to modify the Silver Springs network and/or components of various FLISR systems in order to avoid the need to install a separate communications infrastructure. Finally, it is possible that some FLISR systems will use the Silver Springs network while others will use a different communication system.⁹²

As with the majority of the other DA and CIP-related issues, PG&E is floundering and uncertain about what communication system or systems it will use, but wants all the money anyway. The Commission should send PG&E back to the drawing board.

DRA then asked PG&E when the planning and testing phase of the upgraded SmartMeter information network would end. PG&E responded:

In 2008 PG&E conducted lab tests involving Silver Springs Networks and SCADA equipment with

⁹¹ Exh. 1 at 4-30, lns. 8-15.

⁹² Exh. 1 at 4-30, fn. 21 (emphasis added).

satisfactory results. In 2009, PG&E will conduct field tests with the Silver Springs Networks and Intelliteam systems in San Francisco. PG&E also needs to work with Silver Springs Networks on programming issues related to message prioritization, radio software and the number of communication interfaces needed within the network when communication needs to occur over a longer distance, but there is currently no schedule for this work.⁹³

It is simply unacceptable for PG&E to expect the Commission to approve funding for this so-called plan that is contingent on so many variable factors, and furthermore, has no schedule.

By now it must be clear to the Commission that PG&E picks and chooses when it wants to use the SmartMeter™ network as a motivating influence. It all depends on the particular result it wants. When it talks about the Smart Grid for example, (notwithstanding the cursory and unsophisticated treatment it gives that concept in this proceeding) the SmartMeter™ network is always used as justification for acceptance that the Smart Grid is actually something real so as to give CIP a positive spin. The capital expenditure budget in PG&E's Updated Testimony in this proceeding, however, assumes that "the SmartMeter™ communications network is not suitable" for DA use.⁹⁴ DRA asked PG&E to provide a revised communication systems budget that assumes the SmartMeter communications network is suitable for DA use. PG&E responded:

PG&E can not provide a revised table that assumes the SmartMeter™ communications network is suitable. Of course, the best scenario is that no additional communication infrastructure, beyond what is provided by the SmartMeter™ communications network, is necessary and all FLISR components integrate seamlessly within that communication

⁹³ Exh. 504 at 6, PG&E response to Data Request DRA-PG&E-009, Q.10 (excerpt, emphasis added).

⁹⁴ Exh. 1 at 4-31, ln. 8.

environment. What is unknown is if the SmartMeter™ communications network will be suitable for all applications in all instances across all of PG&E's service territory. It is not possible to determine this until the detailed engineering portion of the project begins.⁹⁵

Obfuscation such as this is not deserving of full funding, let alone any funding. While PG&E's candor regarding its lack of knowledge is commendable, DRA again points out the unreasonable nature of PG&E's request that this amorphous portion of its proposal be fully funded.

DRA recommends that the Commission reject PG&E's request for DA communication systems capital expenditures. PG&E's decision to include DA communication systems capital expenditures in CIP is premature, considering that PG&E has not yet performed field tests with the Silver Spring Network hardware and the San Francisco DA pilot project. PG&E is operating under the assumption that the Silver Spring Networks communication system is "not suitable" for DA use, but SMUD has apparently concluded the opposite.⁹⁶ As discussed above in PG&E's response to Data Request DRA-PG&E-009, Q.10, there will likely be additional programming issues that need to be resolved. As stated in PG&E's response to Data Request DRA-PG&E-009, Q.11, PG&E has not yet performed detailed engineering work on its DA communication systems request. With the evolving rollout of PG&E's SmartMeter program, it would be more appropriate for PG&E to solidify its distribution communication system decisions before implementing DA. The least PG&E could do is consult with its sister California utilities about DA, to learn what they are doing, but that appears to be beyond PG&E's will or abilities.⁹⁷

⁹⁵ Exh. 504 at 7, PG&E response to Data Request DRA-PG&E-009, Q.11 (emphasis added).

⁹⁶ See DRA Exh. 503, at p.18.

⁹⁷ 2RT 258, at lines 11-14.

7. Replacement Pole Assumptions and Costs

PG&E's Updated Testimony discusses the need for new poles:

Many overhead devices will likely need a new pole installation because the existing pole is deteriorated, cannot support the additional weight of the new equipment, to allow for appropriate G.O. 95 requirements or to locate the device in the correct location. Consequently, PG&E assumed that one-third of the overhead devices will require a new pole.⁹⁸

DRA requested workpapers from PG&E supporting the one-third assumption. PG&E responded that there are no supporting documents:

The estimate that one-third of the overhead devices will require a new pole or the replacement of an existing pole was based on the judgment of the witness after discussion with several engineering management personnel. *There are no supporting documents.*⁹⁹

PG&E's Updated Workpapers included an estimated unit cost for new/replacement poles of \$11,000.¹⁰⁰ DRA requested workpapers from PG&E supporting the \$11,000 estimate; and PG&E responded with a table that results in 2008 forecast costs that range from \$9,840 to \$14,100, with 37 percent of the poles (Central Coast Division) costing \$9,840 each, while only 3 percent have the maximum estimated cost (San Francisco Division) of \$14,100 each.¹⁰¹ In contrast, PG&E reported that the estimated cost for a rural pole is \$8,200 each, and that the 2008 forecast costs range from \$6,156 to \$10,524, with the largest group (Fresno Division) costing \$6,859 each.¹⁰²

Given the lack of workpapers supporting PG&E's one-third pole replacement assumption, DRA has no confidence in PG&E's assumption and

⁹⁸ Exh. 1 at 4-28, Ins. 24-29.

⁹⁹ Exh. 503 at 94, PG&E response to Data Request DRA-PG&E-009, Q.5 (emphasis added).

¹⁰⁰ Exh. 10 at 4-4, ln.16.

¹⁰¹ Exh. 503 at 20, data from PG&E response to Data Request DRA-PG&E-011, Q.4.

¹⁰² Exh. 503 Appx. at 1-2, PG&E response to Data Request DRA-PG&E-004, Q.11.

recommends rejection of this part of its request. However, if the Commission approves PG&E's DA request, that it should require PG&E to use a \$9,840 cost estimate for urban/suburban new/replacement poles, as opposed to PG&E's \$11,000 estimate. DRA's lower estimate represents the lowest cost urban/suburban pole estimate, and it will give PG&E an incentive to reduce pole costs. PG&E may believe that there is inconsistency between how DRA treated urban/suburban poles versus rural poles, but the difference in treatment reflects different factual bases.

8. O&M Expenses

PG&E's Updated Testimony includes a discussion of forecast O&M expenses. As discussed above in section V. C.4, DRA recommends that the Commission reject PG&E's request for additional DA O&M expenses. DRA's discussion on this topic can be found on pages 21-23 in Exhibit 503. It repeats the same sorry tale of no supporting workpapers as applies to the majority of PG&E's showing, and comes to the same conclusion that its request be rejected.

VI. RURAL RELIABILITY PROPOSAL

PG&E is seeking to improve service reliability by increasing mainline protection to reduce the frequency and extent of outages in rural areas. PG&E proposes to install approximately 500 reclosers and 5,000 fuses on rural circuits between 2010 and 2016. PG&E estimates that the total capital expenditure for these devices, over the seven years, will be \$62.4 million. In addition, PG&E estimates that the operation and maintenance expenses for the period 2011 through 2016 will be \$236,666.

DRA's recommendations for this CIP initiative are as follows: PG&E should not be authorized the requested \$62,365,200 in capital expenditure for Rural Reliability as there is insufficient justification for the capital expenditures; and PG&E should not be authorized the requested \$236,666 Operation and Maintenance expenses for testing reclosers as there is insufficient justification for

the expense. In short, DRA's recommendations to this portion of CIP is based on its failure to meet its evidentiary burden, plus the fact that the proposal could just as easily be met through the normal GRC process.

A. Reclosers

PG&E is forecasting to install 500 reclosers in the rural area at a cost of \$21,250,000. PG&E states that it "...determined the number of reclosers and fuses to install by reviewing data provided by distribution engineers as part of the analysis the Company performed for the work identified in Chapter 3; ...decided to propose installing 500 reclosers and 5,000 fuses in order not to overstate the number of devices the Company can install and still realize the estimated reliability benefits."¹⁰³

PG&E provides very little basis for its proposal to install approximately 500 reclosers on rural circuits between 2010 and 2016.¹⁰⁴ When DRA asked how it determined the need for 500 reclosers,¹⁰⁵ PG&E referred to its testimony on page 5-3, lines 9-16. In addition, PG&E referred DRA to "as part of the analysis described in Chapter 3, pages 3-24 to 3-25, PG&E distribution engineers identified a potential of approximately 1,300 new reclosers and 7,300 new fuses that could be installed in urban/suburban areas." PG&E's testimony, as referenced above, addresses its proposed electric distribution and substation capacity increase portion of the CIP. It does not address PG&E's need to install reclosers or fuses in its rural areas. PG&E has not provided any correlation between capacity improvements and rural reliability improvements.

PG&E has not justified its need for a special funding program outside of the normal General Rate Case (GRC) process to install reclosers in its rural areas. Adequate capital funding has been provided in past GRCs and prospective funding for these facilities can be requested in future GRCs. DRA recommends a zero

¹⁰³ See PG&E Updated Testimony, chapter 5, Page 5-3, lines 11 through 18.

¹⁰⁴ See PG&E Updated Testimony, Chapter 5, Page 5-2, Lines 15 through 16.

¹⁰⁵ See response to data request DRA-004, Question 1.

funding for rural area reclosers. PG&E routinely replaces reclosers from funding received through the GRCs. In fact, PG&E has replaced 376 reclosers over the period of 2002 through 2007. This averages to approximately 63 new reclosers installed each year during the 2002 to 2007 period.

Table VI-1
Number of Reclosers Replaced by PG&E from 2002-2007

Description	2002	2003	2004	2005	2006	2007
Reclosers	5	6	6	6	7	5
Installed	3	0	1	7	9	6

Source: 2002-2007 data from Data Request DRA-PG&E-004-DFB, Question 2.

In the CIP proposal, PG&E is proposing to install approximately 500 reclosers which average to approximately 71 new reclosers installed each year during the 2010 to 2016 period. The number of reclosers requested in the CIP is similar to the historical averages of the number of reclosers installed during 2002 to 2007. The incremental increase in reclosers being installed does not warrant special funding. Therefore, DRA recommends zero ratepayer special funding for rural area reclosers. Funding for installation of new reclosers should continue to be requested through the GRCs.

As to the costs of reclosers, PG&E has estimated \$42,000 per unit cost to install the 500 reclosers. PG&E’s response to DRA’s data request¹⁰⁶ as to how this unit cost was derived, was “The unit cost was based on the judgment of the witness after reviewing material from the 2007 GRC, a sampling of project authorizations and discussions with other engineering management personnel. There are *no specific calculations* (emphasis added) that derive the unit cost PG&E uses in the workpapers.” DRA finds this justification for the unit cost unpersuasive and insufficient. PG&E cannot expect DRA and the Commission to just accept the \$42,000 unit cost of installing 500 reclosers if all they have to offer

¹⁰⁶ See response to DRA-004-DFB, Question 8.

is “internal discussions.” DRA recommends PG&E not be authorized special funding of \$21,250,000 for the installation of the 500 reclosers.

B. Fuses

PG&E is proposing to install 5,000 fuses on rural circuits between 2010 and 2016¹⁰⁷ at a cost of \$22,603,000. PG&E provides insufficient justification for installing 5,000 fuses on the rural circuits.

PG&E provides very little justification for installing 5,000 fuses on rural circuits between 2010 and 2016.¹⁰⁸ When DRA asked how it determined the need for 5,000 fuses,¹⁰⁹ PG&E referred to its testimony on page 5-3, lines 9-16. In addition, PG&E stated that “as part of the analysis described in Chapter 3, pages 3-24 to 3-25, PG&E distribution engineers identified a potential of approximately 1,300 new reclosers and 7,300 new fuses that could be installed in urban/suburban areas.” DRA found no reference to reclosers or fuses on the referenced pages in PG&E’s testimony.

PG&E has not justified its need for a special funding program outside of the GRC to install fuses in its rural area. PG&E routinely replaces fuses from funding received through the GRCs. In fact, PG&E has replaced 7,676 fuses over the period 2002 through 2007. This averages to approximately 1,279 new fuses installed each year during 2002 to 2007.

**Table VI-2
Number of Fuses Replaced by PG&E from 2002-2007**

Description	2002	2003	2004	2005	2006	2007
Fuses Installed	1,414	1,506	1,401	1,114	1,192	1,049

Source: 2002-2007 data from Data Request DRA-PG&E-004-DFB, Question 2.

¹⁰⁷ See PG&E Updated Testimony, Chapter 5, Page 5-2, Lines 15 through 16.

¹⁰⁸ See PG&E Updated Testimony, Chapter 5, Page 5-2, Lines 15 through 16.

¹⁰⁹ See response to data request DRA-004, Question 1.

In the CIP proposal, PG&E is proposing to install approximately 5,000 fuses which average to approximately 714 new fuses installed each year during the 2010 to 2016 period. As Table 4-3 shows, PG&E has been historically replacing fuses in its rural area. PG&E does not need special funding to install less than the historical average number of fuses. Therefore, DRA recommends zero ratepayer special funding for rural area fuses. Funding for installation of new fuses should continue to be requested through the GRCs.

Regarding the cost of installing fuses, PG&E has estimated that the per unit cost to install 5,000 fuses to be \$4,500. PG&E's response, to DRA's data request¹¹⁰ as to how this unit cost was derived, was "The unit cost was based on the judgment of the witness after reviewing material from the 2007 GRC, a sampling of project authorizations and discussions with other engineering management personnel. There are *no specific calculations* (emphasis added) that derive the unit cost PG&E uses in the workpapers." PG&E has not provided the necessary supporting documentation for the \$4,500 cost to install the fuses. PG&E cannot expect DRA and the Commission to just accept that the \$4,500 unit cost of installing 5,000 fuses is reasonable if that is all it has to offer in support for its request. Therefore, DRA cannot find the \$4,500 unit cost for installing fuses to be reasonable. DRA recommends PG&E not be authorized \$22,500,000 for the installation of 5,000 fuses.

C. New/Replacement Poles

PG&E is forecasting \$9,553,000 for new or replacement poles. PG&E assumes that 33% of the reclosers and 20% of the fuses installations will require a new pole or the replacement of an existing pole due to deterioration.¹¹¹ For the reclosers, PG&E estimates new or replacement poles to be 165 and for fuses 1,000 poles.¹¹²

¹¹⁰ See response to DRA-004-DFB, Question 8.

¹¹¹ See PG&E Workpapers Supporting Chapter 5 Rural Reliability Update, Page 5-2, line 28.

¹¹² See PG&E Workpapers Supporting Chapter 5 Rural Reliability Update, Page 5-2, line 37.

PG&E has provided no reasonable justification for the number of poles to install or replace.¹¹³ DRA data requested PG&E to indicate how it determined that 33% of devices would require pole work, PG&E's response: "The estimate that 33% of the recloser installations will require a new pole or the replacement of an existing pole was based on the judgment of the witness after discussion with several engineering management personnel. There are *no supporting documents*." (Emphasis added)¹¹⁴ Further, when DRA data requested how many of the poles will be replaced, PG&E's responses was "PG&E does not know how many will poles (sic) be new and how many poles will be replaced because the Company *has not performed the detailed engineering* (emphasis added) associated with the installation of the reclosers or fuses on rural circuits... With respect to replacement poles...[s]ince the Company has not performed any detailed engineering it does not know the specific locations where the proposed reclosers and fuses will be installed. Therefore, it is not possible to correlate poles that are currently scheduled to be replaced with locations reclosers and fuses will be installed."¹¹⁵ PG&E provided the same response for its estimate that 20% of fuses installation will required pole work.¹¹⁶ It does not appear as if PG&E even thinks it needs to make an effort in supporting its funding request. DRA finds this shotgun approach to regulatory revenue requests entirely unacceptable and strongly suggests that the Commission reject the request in total.

PG&E estimates the unit cost of new/replacement pole to be \$8,200. This \$8,200 average is based on 3,381 poles being replaced in 2008 at a cost of \$27,676,856. The average pole replacement ranges from a low of \$6,156 to a high of \$10,524. DRA questioned the range of average costs of pole replacement with

¹¹³ See PG&E Workpapers Supporting Chapter 5 Rural Reliability Update, Page 5-2, Line 28.

¹¹⁴ See PG&E's response to DRA-004-DFB, Question 9.

¹¹⁵ See PG&E's response to DRA-004-DFB, Question 10.

¹¹⁶ See PG&E's response to DRA-004-DFB, Question 13.

PG&E's witness, who indicated that the North Bay should have been eliminated. That would have changed the unit cost from \$8,200 a pole to \$7,750.

As DRA has rejected PG&E's proposal to fund the installation of reclosers and fuses, the need for the installation of new or replacement poles should also be rejected. Therefore, DRA recommends that PG&E should not be authorized the pole replacement program of \$9,553,000, for the rural area as it has provided no justification for the 1,165 pole replacement outside the normal GRC application.

D. DRA's Recommendation on Rural Capital

DRA recommends that the Commission deny PG&E's request for \$62,365,200 (escalated) in capital expenditure for the rural circuits as PG&E has not provided adequately justified the need for the expenditure.

E. Operation and Maintenance Expenses

1. Rural Reliability Expense

PG&E is forecasting \$236,666 in Operation and Maintenance (O&M) expenses for the period 2011 through 2016.¹¹⁷ PG&E's testimony does not provide any details as to how it arrived at the forecasted O&M expense. The only support was found in PG&E's workpapers¹¹⁸ indicating that the O&M expense is to test the new reclosers. PG&E plans to test the 500 new reclosers over the period 2011 through 2016. The forecasted cost is broken down between labor and non-labor on a 90%/10% split.

PG&E's witness, John Carruthers, indicated that reclosers are subject to being tested twice a year. PG&E's Utility Operations (UO) S2302 Attachment 1¹¹⁹, states: "New Reclosers and Controllers: New reclosers and controllers are completely tested at the factory, in accordance with the applicable ANSI and IEEE standards, and there is no need to duplicate this testing....After the recloser is

¹¹⁷ See PG&E Updated Testimony, chapter 5, Page 5-5, Table 5-3, Line 1.

¹¹⁸ See PG&E Workpapers Supporting Chapter 5 Rural Reliability Updated, Page 5-5.

¹¹⁹ See PG&E's response to DRA-016-DFB, Question 1.

installed, perform a ‘trip check’ to ensure that the control, cable and recloser are functioning properly.”¹²⁰ According to the UO S2302 Attachment 1, reclosers are to be tested twice a year.¹²¹ The following table indicates the system wide number of reclosers, but PG&E had not provided the number of reclosers in its rural area that PG&E tested during the period 2003 through 2008:

Table VI-3¹²²

Number of Reclosers Tested by PG&E from 2003-2008

Description	2003	2004	2005	2006	2007	2008
Number of Reclosers	3,946	4,036	4,075	4,168	4,270	4,486

Clearly testing of reclosers is a recurring O&M expense and not a new incremental cost that should be funded outside of GRC rates.

PG&E is using an estimated unit cost of \$125 to test the reclosers. PG&E “...determined the unit cost of \$125 per piece of distribution line equipment inspected or tested, the witness reviewed the unit costs for 2007 GRC (Exhibit PG&E-4, p. 2-31, Table 2-6, line 6) and consulted with the Electric Line Maintenance Program manager. The resulting value of \$125 is reasonable considering that the average unit cost from the GRC material was \$118 and a labor escalation rate of four percent yields a value of \$123.”¹²³ In addition, “Although PG&E does not separately record the costs of testing reclosers the Company does calculate a unit cost for testing overhead (OH) line equipment (capacitor banks, voltage regulators, reclosers and other line equipment that requires periodic testing).”¹²⁴

¹²⁰ Ibid Attachment DRA_016-1-2, page 17 through 18.

¹²¹ Ibid attachment DRA_016-1-2 page 2.

¹²² Source: 2003-2008 data from Data Request DRA-PG&E-016-DFB, Question 3.

¹²³ See PG&E’s response to DRA-004-DFB, Question 20.

¹²⁴ See PG&E’s response to DRA-016-DFB, Question 2.

PG&E was unable to provide the recorded costs of testing the reclosers. Instead PG&E provided an estimate based on a blended cost of testing the reclosers. PG&E has not provided adequate justification for the unit cost of testing reclosers.

F. DRA's Recommendation on Rural O&M Expenses

DRA recommends that the Commission deny PG&E's request for \$236,666 in Operation and Maintenance expense for testing rural circuit reclosers, because PG&E has not adequately justified the need for such a small incremental expense outside the normal GRC proceeding.

VII. ADDITIONAL ISSUES

DRA has nothing to add to the above.

VIII. CONCLUSION

There is little doubt that PG&E's premise that throwing billions of dollars at PG&E's electric infrastructure will likely achieve greater system reliability. That would apply to any utility, whether it has an acceptably reliable system or not. But as DRA and TURN stated months ago in their Motion to Dismiss this Application, that has never been the appropriate question. The real question is whether from the perspective of PG&E's customers the reliability improvements warrant the amount of spending being foisted on them. PG&E's Application ignores that concept, and presents nothing that would allow the Commission to make this critical determination.

If the Commission wishes to maintain the integrity of this august body, or that of its legal process, and to respect the rights of PG&E's ratepayers not to be exploited by their utility's insatiable pecuniary motives at a time when they can least afford it, DRA submits that the Commission should send PG&E the correct message by rejecting CIP in its entirety.

Finally, DRA hereby requests final oral argument before the Commission in this proceeding.

Respectfully submitted,

/s/PAUL ANGELOPULO

PAUL ANGELOPULO

Attorney for the Division of Ratepayer
Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-4742
Email: pfa@cpuc.ca.gov

September 25, 2009

Attachment A

Unofficial PG&E transcript of Commission Meeting, dated July 26, 2007

**PG&E Power Outage Transcript
July 26, 2007 Commission Meeting**

Executive Director Paul Clanon: Thank you Mr. President and before I get to the item on the agenda I wanted to take some public notice of an article that I think many of us read on the front page of the San Francisco Chronicle this morning pointing out some issues that PG&E has been having with its reliability, especially its distribution system reliability especially here in San Francisco. We'll be doing some follow up beginning with the conversation that I had this morning with the head of our Energy Staff Sean Gallagher. Sean's going to convene a group of his own folks, PG&E, and perhaps some others to try and get to the bottom of these long standing issues that PG&E has been having, particularly here in San Francisco, particularly here at the distribution level. I've asked Sean to take a renewed interest in getting to the bottom of the reliability issues and to come back to us with recommendations for anything that he thinks the Commission ought to be doing that we are not already doing; there are certainly many Commission initiatives under way in the area of reliability. So just wanted to let you know, take some public notice of that article and let you know about our follow up.

President Michael R. Peevey: Thank you Mr. Clanon. In that regard I would hope that Mr. Gallagher, and as we go forth in this, that you involve IBW Local 1245. I mean these are the people that actually do the work, as well as the other professional unions at PG&E. You know, frankly enough is enough. You can't be what they seek to be and claim to be – the number one utility in the U.S. – and have these kinds of outages repeatedly in this city again and again and again and again. In this very building that we are in we had to postpone one of our meetings for over an hour a couple of years ago because the power was out up the street. I mean, you would think we might deserve some special wiring, but I guess that...

Clanon: I want to note Mr. President that the building experienced an outage again last week - a PG&E outage that blacked out the Energy Division.

Peevey: It was very selective.

Clanon: And some others.

Peevey: But I think all of us are really serious, and I hope that TURN and DRA and others will participate in any inquiries we have here. You cannot continue to have a system that, where apparently despite the differences in weather and the physicality of the system, still has outages that by the data we collect are approximately double those of other utilities in the State of California. This cannot continue without dire consequences for the company in terms of the eyes of this Commission. I think we have a fundamental consumer protection responsibility in that regard, so I commend the efforts that apparently the Executive Director and the Energy Division are going to commence now.

Any other comments on this? Any personal stories of inconvenience that want to be related?

Commissioner Dian M. Grueneich: I will add my personal story. I was briefed yesterday by PG&E on how they had risen to very high up in the JD Power Survey of Customer Satisfaction. Again we have some gap going on between a utility who clearly does want to position itself, and we welcome it, to be a leader and to understand the needs of its customers. I wholeheartedly endorse President Peevey what you are doing and Executive Director Clanon and Sean [Gallagher] that there is something going on when we have a commitment from a utility saying 'we want to serve our customers and understand how important it is,' but we continue to have these outages. I think it comes down to really understanding what the gap is and how collectively we can move forward.

Commissioner Timothy A. Simon: On the morning that I was leaving for the NARUC Convention I suffered a blackout at my home and had to dress and pack by flashlight--it was quite a challenge. My concern is that in my area outages have become almost an expectation and I think the bar is being lowered considerably. I commend you President Peevey and my colleagues for bringing the point that enough is enough. We have to have some type of resolution in this service so we don't find ourselves constantly hampered as families and as businesses with these continuous blackouts and I encourage Executive Director Clanon to move aggressively and efficiently [on this].

Attachment B

San Francisco Chronicle article: The Blackout Blues, dated July 26, 2007
Found on the Internet at <http://www.sfgate.com>

[Show Header](#)[Print](#) [Hide Envelope](#)

From: Angelopulo,Paul [Add to Address Book](#)
 To: Administrative Assistant
 Date: Monday, June 16, 2008 5:20:16 PM
 Subject: Emailing: THE BLACKOUT BLUES - PG&E leaves customers in the dark more often than the other big utilities in California

SFGate.com [Print This Article](#) [Back to Article](#)
SFGate.com

THE BLACKOUT BLUES

PG&E leaves customers in the dark more often than the other big utilities in California

David R. Baker, Chronicle Staff Writer
 Thursday, July 26, 2007



Pacific Gas and Electric Co. customers endure more frequent and longer-lasting blackouts than other Californians, state data show.

Tuesday's power outage in San Francisco and the Peninsula was no isolated incident. In 2006, the average PG&E customer lost power for more than 4 1/2 hours, according to statistics compiled by the utility and submitted to state energy regulators.

In contrast, Southern California Edison's average customer lost half as much time to blackouts -- not quite 2 1/2 hours. And residents of San Diego fared even better, spending less than an hour without power all year.

PG&E's performance exasperates many of its customers and has fueled unsuccessful attempts in several cities -- including the company's hometown of San Francisco -- to break away from the vast utility.

San Francisco Mayor Gavin Newsom expressed frustration Wednesday that the city had experienced another blackout.

"We've been through this so many times," he said after his staff met with PG&E representatives. "There's nothing more I can say. I've already said (everything) to them. Should I handcuff them? Arrest them? Should I bring them all to justice? Should I sue them? Obviously, we're not happy. Obviously, they're not happy."

PG&E still had not determined the cause of the blackout by Wednesday afternoon. But company representatives said they had made progress improving service in San Francisco in recent years, including installing another high-voltage line on the Peninsula to bring power into the city. Utility President Bill Morrow called Tuesday's outage unacceptable.

"The performance does not reflect the level and quality of service that we are committed to providing customers and that they expect from PG&E," Morrow said in a prepared statement.

Causes of Bay Area blackouts have varied from the startling to the mundane.

In 2003, for example, a fire at a San Francisco substation cut power to 120,000 customers the weekend before Christmas. In contrast, about 17,000 customers in the East Bay lost power last week in outages that the utility blamed on light rain, which mixed with dust to form mud, which caused equipment to short.

Many customers were stunned that such minor rainfall -- less than a tenth of an inch in most places -- could wreak such havoc.

"It was the most ridiculous thing I ever heard," said Rebecca Renfro, whose Berkeley home went without power for roughly 12 hours. "I thought, 'Wait a minute, this was not the first time in the history of the universe that there has been drizzle.'"

The company's blackouts occasionally have cost it money. PG&E agreed to pay \$6.5 million in lieu of fines for the December 2003 outage. And the company's overall outage performance in 2005 triggered a \$9.2 million penalty from the California Public Utilities Commission.

ANSWER OUR WEEKLY QUESTION ABOUT HEALTH CARE ISSUES.

Which of the below is most important for parents of a newborn?

Good support network

Good childcare

Good ear plugs

All the above

[Vote](#)

 **California Pacific Medical Center**
 A Sutter Health Affiliate

California's utilities keep tabs on their annual performance by compiling statistics that measure the frequency and length of blackouts year after year. One measurement -- known as the system average interruption duration index, or SAIDI -- adds up the duration of blackouts experienced during the year and divides that by the company's total number of customers.

PG&E's average customer went without power for 280.5 minutes last year, according to data compiled by the company and submitted to state energy regulators. Southern California Edison's average customer was blacked out for 142.3 minutes, and San Diego Gas and Electric's, 52.8 minutes.

The Sacramento Municipal Utility District recorded 99.3 minutes without power for the average customer last year. The Los Angeles Department of Water and Power did not have comparable data available for 2006.

Utilities use a similar statistic to measure how often blackouts occur. Called the system average interruption frequency index, or SAIFI, this measurement counts the utility's total number of outages during the year and divides that by the number of customers.

There again, PG&E fared worse than its fellow California utilities in 2006.

The company's average customer lost power 1.7 times, compared to 1.1 times for Southern California Edison, 0.5 times for San Diego Gas and Electric Co. and 1.4 times for the Sacramento Municipal Utility District.

PG&E representatives often point out that their electrical distribution system is larger than the other utilities', spanning the territory from the Humboldt County coast to Bakersfield. It serves more customers -- many of them living in remote and rugged terrain -- and endures more frequent storms than the southern part of the state.

But some utilities in states with far worse weather still manage to rack up better performance statistics than PG&E.

Wisconsin, which endures blizzards in the winter and severe thunderstorms in the summer, had only one of the state's five large utilities reporting more than 160 minutes of outages for the average customer in 2006. In neighboring Minnesota, the highest number was 118 minutes.

Ed Salas, PG&E's senior vice president for engineering and operations, said not all utilities compile their data in quite the same way, even if they use the same basic formula. That's true when comparing within California as well as state to state, he said.

"You don't really have a clean ability on an apples-to-apples basis to compare, from one utility to another," Salas said.

California energy regulators allow utilities to compile a second set of statistics excluding outages that strike during government-declared emergencies or freak weather events, like last July's record-setting heat wave. By that standard, PG&E's performance has been improving steadily for three years. The average customer last year experienced 150.8 minutes of blackouts, compared with 187.1 minutes the previous year and 205.1 minutes in 2003.

Without those exceptions, PG&E's performance has been worsening since 2004, when the utility's average customer experienced 205.3 minutes of blackouts.

Salas said excluding unusual weather from the statistics shows the system's underlying health. States along the Gulf Coast, for example, would have seriously skewed statistics if they counted outages during hurricanes.

"If you're in the South, I'm not sure that including the Katrina effects would really tell you how your system performs," Salas said.

Still, some of the company's critics claim PG&E is excluding too many storms from its data in an effort to make the utility look better.

The Utility Reform Network, a local watchdog group, recently filed a complaint with state regulators after PG&E requested a \$151,899 bonus for meeting performance goals set by the state. The utility excluded blackouts caused by minor winter storms, said the group's staff attorney, Matt Freedman.

"It's easy to get a reward when you remove all the days when you have outages," said Freedman, whose group argues that PG&E should face a \$5.1 million penalty instead.

Chronicle staff writers Marisa Lagos and Cecilia Vega contributed to this report. E-mail David R. Baker at dbaker@sfchronicle.com.

http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/07/26/MNGPER769I1.DTL

This article appeared on page **A - 1** of the San Francisco Chronicle

San Francisco Chronicle Sections

[© 2007 Hearst Communications Inc.](#) | [Privacy Policy](#) | [Feedback](#) | [RSS Feeds](#) | [FAQ](#) | [Site Index](#) | [Contact](#)

**Service List
A.08-05-023**

nes@a-klaw.com
pfoley@adamsbroadwell.com
PGG4@pge.com
thomas.long@sfgov.org
pfa@cpuc.ca.gov
norman.furuta@navy.mil
bfinkelstein@turn.org
bcragg@goodinmacbride.com
mdp5@pge.com
wbooth@booth-law.com
rliebert@cfbf.com
julien.dumoulin-smith@ubs.com
zango@zimmerlucas.com
Jheckler@levincap.com
keith.mccrea@sablaw.com
ralphdennis@insightbb.com
mcnultfa@sce.com
case.admin@sce.com
liddell@energyattorney.com
RGiles@semprautilities.com
mdjoseph@adamsbroadwell.com
bruce.foster@sce.com
srovetti@sflower.org
tburke@sflower.org
jim.howell@recurrentenergy.com
mflorio@turn.org
bts1@pge.com
filings@a-klaw.com
ldri@pge.com
cem@newsdata.com
cem@newsdata.com
crmd@pge.com
JSAd@pge.com
CPUCCases@pge.com
regrelcpuccases@pge.com
mmitchell@ifpte20.org
mrw@mrwassoc.com
dmarcus2@sbcglobal.net
rschmidt@bartlewells.com
rschmidt@bartlewells.com
wendy@econinsights.com
brbarkovich@earthlink.net
garrick@jbsenergy.com
kenneth.swain@navigantconsulting.com
atrowbridge@daycartermurphy.com
m

bds@cpuc.ca.gov
dkf@cpuc.ca.gov
dkl@cpuc.ca.gov
kms@cpuc.ca.gov
mjd@cpuc.ca.gov
swc@cpuc.ca.gov
txb@cpuc.ca.gov
kev@cpuc.ca.gov