

**Exhibit:** CLC-02  
**Proceeding:** R.13-09-011  
**Judge:** Kelly A. Hymes  
**Witnesses:** Stephanie Wang  
and Greg Thomson

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Enhance the Role  
of Demand Response in Meeting the State's  
Resource Planning Needs and Operational  
Requirements.

Rulemaking 13-09-011

**REVISED REBUTTAL TESTIMONY OF STEPHANIE WANG AND  
GREG THOMSON ON BEHALF OF THE CLEAN COALITION  
ON DEMAND RESPONSE RULEMAKING PHASE 2 AND 3 ISSUES**

June 11, 2014

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ON DEMAND RESPONSE RULEMAKING PHASE 2 AND 3 ISSUES**

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1 **I. MAINTAIN EQUAL TREATMENT FOR LOAD MODIFYING AND**  
2 **SUPPLY RESOURCE DEMAND RESPONSE (Testimony of Stephanie Wang,**  
3 **Policy Director of the Clean Coalition)**

4

5 Q1: How can the Commission maintain equal treatment of load modifying and supply  
6 resource demand response?

7

8 Environmental Defense Fund’s testimony raises the concern that utilities do not have  
9 sufficient incentive to secure more load modifying demand response, and suggests  
10 allocating Resource Adequacy credit to load modifying demand response.<sup>1</sup> Pacific Gas  
11 & Electric’s testimony asserts that it is essential for maintaining equal treatment of load  
12 modifying and supply resource demand response that both types of demand response  
13 receive comparable Resource Adequacy value; given the definitions of the two types of  
14 demand response, PG&E finds that it would be logical for load modifying demand

1 Environmental Defense Fund Opening Testimony on Phase 2 and 3 Issues, page 30

1 response to reduce the Resource Adequacy requirement and supply resource demand  
2 response to get credit for meeting the Resource Adequacy Requirement.<sup>2</sup>

3  
4 The Clean Coalition agrees with Pacific Gas & Electric that it is essential for maintaining  
5 equal treatment of load modifying and supply resource demand response that both types  
6 of demand response receive comparable Resource Adequacy value. We recommend that  
7 the Commission work with the CAISO and stakeholders to clarify how all load  
8 modifying demand response tariffs and programs will be allocated a reduction to the  
9 Resource Adequacy requirement that has the same financial and certainty value as a  
10 Resource Adequacy credit. This would involve addressing how each type of load  
11 modifying demand response would be allocated a specified reduction of the Resource  
12 Adequacy requirement, including how projected performance would be established, and  
13 how this projection would be adjusted to reflect actual performance.

14

15 Q2: What is your name and business address?

16 My name is Stephanie Wang and my business address is as follows:  
17 16 Palm Ct. Menlo Park, CA 94025.

18

19 Q3: What is your job title?

20 Policy Director, Clean Coalition.


21

22 Q4: Please describe your educational background and professional experience.

23 I have over ten years of policy and legal experience, and I have been a director of the  
24 Clean Coalition for over three years. Before joining the Clean Coalition, I advised  
25 Pacific Environment on California energy policy. I practiced project development and  
26 finance law in San Francisco and New York for about six years. I received my J.D. from  
27 the University of Michigan in 2003 and my B.A. from the University of Michigan in  
28 2001.

29

30 Q5: Have you been involved in other related proceedings before this Commission?

  
<sup>2</sup> Pacific Gas & Electric Phases 2 and 3 Opening Testimony, Chapter 2, page 1

1 Yes, I have submitted comments on related proceedings before this Commission,  
2 including the Long Term Procurement Plan and Energy Storage.

3

4 Q6: Are you willing to be cross-examined in evidentiary hearings?

5 Yes.

6

7 Q7: Is this the end of your testimony?

8 Yes.

9

10

## 11 **II. IDENTIFY OPTIMAL LOCATIONS FOR DEMAND RESPONSE**

12 **(Testimony of Greg Thomson, Director of Programs of the Clean Coalition)**

13

14 Q1: The Environmental Defense Fund's opening testimony highlighted the importance of  
15 taking a geographically-targeted approach towards deployment of demand response  
16 tariffs and programs. How can improved distribution grid modeling and planning reveal  
17 optimal locations for demand response?

18

19 The Clean Coalition envisions a modern power system that is planned and operated in an  
20 optimized way. Local renewables and intelligent grid solutions like demand response  
21 and energy storage would work seamlessly together, using the latest technology to locally  
22 balance supply and demand of electricity and control voltage. The Clean Coalition  
23 established its Community Microgrid Initiative to highlight the technical and economic  
24 feasibility of high levels of local renewables. Working in collaboration with electric  
25 utilities, the Community Microgrid Initiative aims to develop five demonstration projects  
26 that prove local renewables can provide at least 25% of the total electric energy  
27 consumed within a distribution grid while maintaining or improving grid reliability.

28

29 The Clean Coalition is currently working on the Hunters Point Project, a Community  
30 Microgrid Initiative project in collaboration with Pacific Gas & Electric. This project  
31 will serve 25% of total energy consumed at the Hunters Point substation in San Francisco

1 with local renewables, balanced with intelligent grid solutions like advanced inverters,  
2 demand response, and energy storage.

3

4 The Clean Coalition team has already delivered a site plan showing the amount of  
5 potential for distributed generation from the most cost-effective locations – i.e.  
6 commercial and multifamily rooftops and parking lots – along with the expected costs of  
7 local renewables by type of site. The team has also published an analysis of the  
8 economic, ratepayer and environmental benefits of the project, which is available on the  
9 Clean Coalition website. [www.clean-coalition.org](#) Right now, the Clean Coalition team is deep in the powerflow  
10 modeling stage, working with data from Pacific Gas & Electric to add distributed  
11 generation and intelligent grid solutions to the validated baseline power flow model. Our  
12 team aims to complete this work in Q3. Later this year, the team will use cost  
13 optimization tools to develop optimal portfolios of local resources based on both  
14 powerflow and costs. The Clean Coalition plans to deliver a full report of  
15 recommendations by the end of the year, completing Phase 1 of the project. We are also  
16 developing standard specifications for modeling tools providers, so that our lessons  
17 learned from this experience can be applied to any other powerflow or cost optimization  
18 tool.<sup>3</sup> [www.clean-coalition.org](#)

19

20 Improved distribution grid modeling and planning can reveal optimal locations to use  
21 demand response to maximize locational value to ratepayers. The Clean Coalition uses  
22 sophisticated powerflow modeling and cost-benefit analysis tools to reveal how – and  
23 precisely where – local renewable energy can be supported in the distribution grid by  
24 intelligent grid solutions. The Clean Coalition team works with utilities and modeling  
25 tools providers to improve tools for seeing, and planning enhancements for, the  
26 distribution grid. For the Hunters Point project, we’re working with PG&E’s modeling  
27 tool provider Cyme. Our team has experience with a broad range of powerflow modeling  
28 tools, but we’ve found that it’s important to be able to show that utilities’ favored tools  
29 can meet these new challenges once they have the right specifications to move forward.

[www.clean-coalition.org](#)  
<sup>3</sup> For more information, please see [www.clean-coalition.org/our-work/community-microgrids/](http://www.clean-coalition.org/our-work/community-microgrids/)

1 We're also developing standard specifications for modeling tools providers, so that our  
2 lessons learned from this experience can be applied to any other modeling tool.

3

4 Q2: What is your name and business address?

5 My name is Greg Thomson and my business address is as follows:

6 16 Palm Ct. Menlo Park, CA 94025.

7

8 Q3: What is your job title?

9 Director of Programs, Clean Coalition.

10

11 Q4: Please describe your educational background and professional experience.

12 I direct the Clean Coalition's Community Microgrid Initiative, demonstrating that  
13 communities can support much higher levels of local, cost-effective renewable energy. I  
14 have over 15 years of experience delivering software and data platforms for startups and  
15 as Vice President of Advanced Product Development at Comcast Cable.

16

17 Q5: Have you been involved in other related proceedings before this Commission?

18 No.

19

20 Q6: Are you willing to be cross-examined in evidentiary hearings?

21 Yes.

22

23 Q7: Is this the end of your testimony?

24 Yes.

25