BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues Rulemaking 13-11-005 (Filed November 14, 2013)

MOTION OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC), SIERRA CLUB, AND THE CALIFORNIA ENERGY EFFICIENCY INDUSTRY COUNCIL (THE COUNCIL) SEEKING REVIEW AND MODIFICATION OF THE THREE-PRONG FUEL SUBSTITUTION TEST

June 8, 2017

Merrian Borgeson
Natural Resources Defense Council
111 Sutter St., 20th Fl
San Francisco, CA 94104
415-875-6100
mborgeson@nrdc.org

Margie Gardner
California Energy Efficiency Industry
Council
1535 Farmers Lane, Ste 312
Santa Rosa, CA 94505
707-480-1844
mgardner@cedmc.org

Alison Seel
Rachel Golden
Sierra Club
2101 Webster Street, Ste 1300
Oakland, CA 94612
415-977-5737
alison.seel@sierraclub.org
rachel.golden@sierraclub.org

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues Rulemaking 13-11-005 (Filed November 14, 2013)

MOTION OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC), SIERRA CLUB, AND THE CALIFORNIA ENERGY EFFICIENCY INDUSTRY COUNCIL (THE COUNCIL) SEEKING REVIEW AND MODIFICATION OF THE THREE-PRONG FUEL SUBSTITUTION TEST

I. Introduction

Pursuant to Rule 11.1 of the Commission's Rules of Practice and Procedure, the Natural Resources Defense Council (NRDC), Sierra Club, and the California Energy Efficiency Industry Council¹ ("The Council") (the "Moving Parties") respectfully submit this motion seeking the review and modification of the three-prong fuel substitution test (the "Test") within the Energy Efficiency (EE) proceeding. This Test is effectively a roadblock to incentives using utility customer funds for fuel substitution opportunities in buildings – even when there are significant climate benefits and energy savings available – and is opaque in terms of the "burden of proof" required to pass the Test. It is critical to update the Test as soon as possible to align it with California's climate and energy policies as well as ensure the state does not miss opportunities to upgrade buildings.

To enable program administrators to launch programs that include fuel substitution with confidence and clear guidance, we request that the Commission address the following issues within Phase 3 of the Energy Efficiency proceeding:

 Review the Test for clarity, utility, and alignment with Commission policies and California's climate goals; modify the Test as needed and provide clear guidance on the methodology and baseline for conducting the Test.

¹ The California Energy Efficiency Industry Council (Council) is now the California Efficiency + Demand Management Council (CEDMC, Council), however the name change is still pending at the docket office.

- 2) Clarify under what conditions the Test must be passed (e.g., for substitution of regulated fuels vs substitution between regulated and unregulated fuels such as propane and wood), and consider modifying Commission policy to enable switching between regulated and unregulated fuels when key policy objectives are met.
- 3) Provide guidance, with example cases, on how projects or programs that include fuel substitution will be assessed using the Commission's standard cost effectiveness tests that are required of all energy efficiency programs.

Below we provide background on the Test, explain why this issue is important to address now, and show how this issue falls within the scope of the general EE proceeding. In addition to the three parties filing this motion – NRDC, Sierra Club, and The Council – we also include a list of 24 stakeholder organizations that support this motion: Association for Energy Affordability (AEA), Association of Bay Area Governments (ABAG), Build It Green, Carbon Free Palo Alto, Center for Sustainable Energy (CSE), City of Arcata, City of Berkeley, Clean Coalition, County of Marin, Design AVEnues LLC, Efficiency First California, Environmental Defense Fund (EDF), Local Government Sustainable Energy Coalition (LGSEC), Marin Clean Energy (MCE), Redwood Energy, San Francisco Department of the Environment, Solar Energy Industries Association (SEIA), SolarCity Corporation, Sonoma Clean Power, Sonoma County Regional Climate Protection Authority, Southern California Edison (SCE), StopWaste, Union of Concerned Scientists (UCS), and University of California Office of the President (UCOP). We appreciate consideration of this request, and look forward to working with the Commission on this issue.

II. Discussion

A. Background on the Three-Prong Fuel Substitution Test

The California Public Utilities Commission's (CPUC) three-prong fuel substitution test determines what fuel substitution projects can receive utility customer-funded energy efficiency incentives and support. The Test applies to substitution from natural gas to electricity, and from electricity to natural gas.²

² It is unclear if the test can apply to unregulated fuels such as propane and wood; the Moving Parties are not aware of a precedent for this, and clarification on this point from the Commission would be helpful.

The CPUC established the three-prong fuel substitution test³ in the early 1990s when a primary concern was to mitigate the risk of "fuel wars" between utilities in Southern California as energy efficiency programs were ramping up. At the time, NRDC and others supported the three-prong test due to concern both about the successful roll-out of new energy efficiency programs and about increased air pollution and greenhouse gas emissions that would result from switching from natural gas to electricity due to the emissions from electricity generation at that time. However, given both the significantly cleaner electric resource mix today and the maturity of California's energy efficiency programs, the Commission should reconsider the three-prong fuel substitution test through a formal process to better align it with California's climate policies.

B. Language of the Three-Prong Test

The three-prong test has components that attempt to assess a) energy savings, b) cost effectiveness, and c) environmental impact. As described in the California Energy Efficiency Policy Manual (EEPM), the three-prong fuel-substitution test stipulates that:

Fuel-substitution programs/projects, whether applied to retrofit or new construction applications, must pass the following three-prong test to be considered further for funding:

- a. The program/measure/project must not increase source-BTU consumption. Proponents of fuel substitution programs should calculate the source-BTU impacts using the current CEC-established heat rate.
- b. The program/measure/project must have TRC and PAC benefit-cost ratio of 1.0 or greater. The TRC and PAC tests used for this purpose should be developed in a manner consistent with Rule IV.4.
- c. The program/measure/project must not adversely impact the environment. To quantify this impact, respondents should compare the environmental costs with and without the program using the most recently adopted values for avoided costs of emissions. The

2

³ D.92-10-020 at pages 6-10 and 15-16; and D.92-12-050 at pages 7-10 and 12-13.

burden of proof lies with the sponsoring party to show that the material environmental impacts have been adequately considered in the analysis.⁴

In addition, the EEPM describes the "baseline" to which the proposed fuel substitution should be compared:

For purposes of applying these tests, fuel substitution proponents must compare the technologies offered by their program/measure/project with the industry standard practice same-fuel substitute technologies available to prospective participants that would have TRC and PAC benefit-cost ratio of 1.0 or greater. The burden of proof falls on the party sponsoring the analysis to show that the baseline comparison adheres to this requirement.⁵

While this guidance might seem simple at first glance, upon closer analysis the Moving Parties and stakeholders have found there is significant uncertainty around what "burden of proof" is acceptable (i.e., how to pass the Test), inherently creating a barrier to pursuing fuel substitution programs. There are also several ways in which this policy is not the best means of ensuring that fuel substitution programs "reduce the need for supply without degrading environmental quality," a primary goal described in the EEPM and in foundational Commission decisions on fuel substitution. In addition, there are substantive language changes to the Test that have been made between the last several versions of the EEPM, despite the absence of any Commission decision or ruling, as noted by TURN in their March 15, 2017 response 7 to a previous motion regarding the three-prong test. For example, one language change that TURN highlights concerns the "baseline" to which the proposed fuel substitution project should be compared. The EEPM, Version 5, requires a comparison to "the industry standard practice samefuel substitute technologies available to prospective participants," while the version of this rule

⁴ CPUC (California Public Utilities Commission). 2013. Energy Efficiency Policy Manual, R.09-11-014, Version 5, July 5, 2013, pages 24-25:

http://www.opus.com/selector/CPUC_Public_Website/Content/Utilities_cond_Industries/Energy

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_- Electricity_and_Natural_Gas/EEPolicyManualV5forPDF.pdf

⁵ Ibid.

⁶ Ibid.

⁷ Response of The Utility Reform Network to the Motion of the Natural Resources Defense Council, Sierra Club, the Solar Industry Association, and the California Energy Efficiency Industry Council Seeking Review and Modification of the Three-Prong Fuel Substitution Test, filed March 15, 2017 in the IDER (R.14-10-003) proceeding, pages 3-5.

adopted in D.05-04-051, and contained in the EEPM Versions 3, 3.1, and 4, instead points to "the most efficient same-fuel substitute technologies available to the prospective participants." An assessment of these issues is required to clarify and update the Test.

C. Offer of Proof: The Test is a Barrier to California's Progress on Climate and Energy Goals

We offer the below evidence and argument in support of the review and modification of the three-prong test. The Test limits the CPUC's ability to support projects that reduce both energy use and greenhouse gas emissions when they include fuel substitution. Governor Brown rightly highlighted the need to "make heating fuels cleaner" in his 2015 State of the State address. Additionally, as President Picker stated at a recent CPUC En Banc:

Our electricity supply is relatively clean in California compared to other states, only 20 percent of the carbon emissions budget in California comes from the electricity supply; 30 percent comes from the use of gas in homes, business and industry, and 40 percent comes from transportation... I hear [a focus on] renewable electricity without talking about this important task of fuel switching. We can get to 100 percent clean electricity across the state, but we don't get to our greenhouse gas goal unless we start to supplant gas and transportation fuel with clean electricity as our first fuel.⁹

While significant progress has been made building out a vision and policy framework to support the Governor's other climate pillars, little attention has been paid to putting California on a path to clean up the fuels burned in homes and businesses. Early action from leadership states like California will be critical to catalyze the market transformation needed to reduce these emissions from buildings in a cost-effective manner and stay within our 2050 carbon budget.

In California, direct emissions just from residential and commercial buildings are approximately equal to emissions from all in-state power plants, and the majority of these emissions are from natural gas burned in buildings.¹⁰ Notably, these emissions from buildings do

⁸ Governor Brown's Inaugural Address on January 5, 2015: https://www.gov.ca.gov/news.php?id=18828

⁹ CPUC's En Banc hearing on Community Choice Aggregation (CCA) held February 1, 2017, recording available: http://www.adminmonitor.com/ca/cpuc/en_banc/20170201/ (quoted from Part 2, at minutes 13:15 and 19:10).

¹⁰ California Air Resources Board (CARB) GHG Inventory data shows that over the last five reported years (2010-2014) emissions from the residential and commercial sectors averaged 51 MMT CO2e

not include all fugitive natural gas emissions, where gas is unintentionally released during the production, storage, transmission, distribution, and onsite use of natural gas. Furthermore, as our electricity mix gets cleaner, which is required by existing state law, these direct emissions from buildings will be a growing share of the total emissions from buildings.

To cut emissions by 80 percent economy-wide by 2050, we need to drastically reduce emissions from residential and commercial buildings. ¹¹ In addition to increasing energy efficiency and renewable electricity – which will not, alone, be sufficient – there are two strategies to significantly cut emissions from buildings:

- **Electrification** of building equipment for space and water heating with efficient technology that is powered by electricity from renewable sources.
- Decarbonized fuels such as biogas and synthetic gas generated from renewable electricity to replace the remaining direct use of fossil fuels in buildings.¹²

These pathways will be challenging and logistically complex, but reducing emissions through one, or both, of these pathways will be required to meet long term climate targets. Many electric technologies are already known and commercially available, but need policy support to move into wider market adoption. As shown in the graphic below, high efficiency electric heat pump water heaters (the dotted green line) already reduce emissions at most levels of renewable electricity penetration – and offer significant emissions reduction potential for states like California ramping up to 50 percent renewable electricity and beyond. Less energy efficient, resistance hot water heaters can also reduce emissions at high levels of renewables on the grid or when paired with on-site solar generation.

CA Energy Principals' 2030 and 2050 modeling:

https://ethree.com/public projects/energy principals study.php

annually, compared to 48 MMT CO2e for in-state power plants. In the residential sector 90 percent of these emissions were from fuels burned on-site, versus 63 percent for the commercial sector.

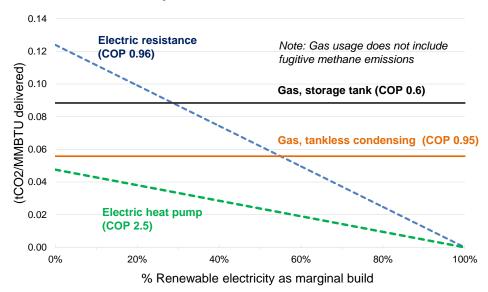
¹¹ Multiple studies support this conclusion, see for example:

Deep Decarbonization Pathways Project: http://unsdsn.org/what-we-do/deep-decarbonization-pathways/

The California Council on Science and Technology's report "California's Energy Future: The View to 2050" http://www.ccst.us/publications/2011/2011energy.php

Decarbonized gas is scheduled to be explored through the 2017 Integrated Energy Policy Report. See the California Energy Commission (CEC) Docket # 17-IEPR-10: http://www.energy.ca.gov/2017_energypolicy/index.html

Carbon Intensity of Gas and Electric Water Heaters¹³



The current structure and lack of clear guidance for the Test make it difficult to access energy efficiency funding available through California's efficiency programs for projects that involve fuel substitution – even when these projects use highly-efficient technologies and reduce climate pollution. The CPUC should consider changes to the Test to enable progress towards state policy goals, while also affirming the principle established in D.92-02-075 and reiterated in D.92-10-020 that fuel substitution should only be promoted "if it has a neutral or beneficial effect on the environment." 14

In addition to this overarching policy rationale for reviewing the Test, there are active and urgent issues pertaining to climate and energy policy in California that will benefit from this review. These issues include the following:

• The Test is a barrier to California's progress on the SB 350 energy efficiency doubling goal. Fuel substitution to efficient electric appliances could be an important contributor to meeting the SB 350 energy efficiency doubling goal, which the State has just 13 years to meet. This goal is attainable but ambitious, and will require tapping into new sources of energy savings. Market transformation for electric technologies will take time, and action in the near term is required to enable savings to ramp up by 2030. Today's heat pump hot water

¹³ Graphic adapted by NRDC based on Figure 3 (page 9-7) from "What if Efficiency Goals Were Carbon Goals?" by Mahone et al. (ACEEE Summer Study 2016): http://aceee.org/files/proceedings/2016/data/papers/9 284.pdf

¹⁴ See D.92-10-020 at page 8.

¹⁵ Senate Bill 350: Cal. Public Resources Code § 25310(c)(1).

heaters have average efficiencies of 230 to 330 percent across California's climate zones (more than 250 percent on average), and efficiencies are continuing to increase with rapid heat pump technology improvements. ¹⁶ This technology should be deployed where it supports the SB 350 energy efficiency doubling goal.

• The Test discourages opportunities for increased load flexibility and renewables integration. In addition to reducing GHGs and overall energy use, electric appliances also have the potential to provide demand response and other load flexibility services. ¹⁷ In particular, grid-responsive electric water heaters represent a potentially large and low cost thermal storage capacity that can help integrate renewables while reducing costly infrastructure upgrades, but currently this is not encouraged or even analyzed in California. As just one tangible example, hot water heaters were not considered in the estimates of potential in the Commission's Phase 2 Demand Response Potential Study, excerpted here:

Water heaters were not explicitly modeled in this study, but could potentially offer shift and shimmy services to the distribution and transmission systems. At the time of this study, we are not aware of any pilots for electric or heat pump hot water heaters in CA...electrification of this end use (retrofitting existing gas water heaters with electric) could increase the potential for this resource to provide thermal storage for shifting load and/or providing shimmy services, especially in constrained service areas. We recommend that water heater DR technologies be piloted to determine the effectiveness of this end use in providing Shift and fast DR services. ¹⁸

Valuing this potential resource for its energy efficiency, storage, and demand response capabilities could increase uptake in California and support the State's energy goals, but requires the Commission to reduce barriers such as the Test to realizing this value.

¹⁶ Pierre Delforge, NRDC, "Very Cool: Heat Pump Water Heaters Save Energy and Money," https://www.nrdc.org/experts/pierre-delforge/very-cool-heat-pump-water-heaters-save-energy-and-money

¹⁷ Robin Roy, NRDC, "Advanced Electric Water Heaters Could Save Money and Cut Pollution," https://www.nrdc.org/experts/robin-roy/advanced-electric-water-heaters-could-save-money-and-cut-pollution.

¹⁸ Lawrence Berkeley National Laboratory, "Final Report on Phase 2 Results: 2025 California Demand Response Potential Study," Prepared for the California Public Utilities Commission, published March 1, 2017, page 7-10.

- Reviewing the Test will aid in understanding the range of options available to cope with the gas storage leakage crisis at Aliso Canyon. The Commission is currently investigating the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility while still maintaining energy and electric reliability for the region (I.17-02-002). As part of this investigation, the Commission will consider a range of alternatives to continued natural gas storage at Aliso Canyon, including programs that can reduce the overall demand for natural gas. A key concern in this proceeding is how to reduce peak gas consumption in the winter, which is largely driven by seasonal heating needs. For the Commission to successfully determine the feasibility of minimizing or eliminating the use of Aliso Canyon, the range of options to reduce natural gas consumption in buildings needs to be clear. Timely review and clarification of the Test is important to ensure that the Phase 1 investigation into demand-side measures to minimize or eliminate use of Aliso Canyon gas storage facility is not delayed or compromised.
- residents in disadvantaged communities in the San Joaquin Valley (SJV). The Commission has an open proceeding (R.15-03-010) to consider energy options to better serve disadvantaged SJV communities that do not have access to natural gas pipelines. Many of these customers currently use inefficient electric appliances, propane, or wood as their source of space and/or water heating. Efficient electric appliances may be one viable option to lower costs, improve air quality, and reduce GHG emissions but may require switching from an unregulated fuel (e.g., propane or wood) to a regulated fuel (e.g., electricity) for heating. It is unclear to the Moving Parties if incentives could be made available for this switch, and if the Test would apply or could be modified to enable incentives.
- Existing energy efficiency programs are being administered inconsistently across the state due to lack of clarity around the Test. It is the understanding of the Moving Parties that home performance contractors participating in the Home Energy Upgrade program in different utility territories are being given different guidance around what measures qualify,

8

¹⁹ Order Instituting Investigation pursuant to Senate Bill 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region. I.17-02-002. February 9, 2017.

and how overall incentives are impacted by the presence of fuel substitution measures in a home upgrade package. Apparently, in some regions projects are being denied *all* program incentives if the work scope includes fuel switching measures. This has negatively impacted businesses in these regions, and led to layoffs at home performance contracting companies.

• Energy efficiency program administrators require clarity to propose programs as part of their new portfolios. For example, Marin Clean Energy (MCE) would like to offer a suite of fuel substitution programs as part of their recently filed Business Plan, currently under review in A.17-01-013 et al., which would align with their mission to reduce GHGs.²⁰ The lack of clarity around the Test presents a significant barrier to incorporating this technology into both existing and proposed programs. In the short term, MCE plans to launch a two-year pilot program that includes heat pump installations for income-qualified multifamily residents through the Energy Savings Assistance Programs.²¹ While that program is an important step forward, and should be constructive in informing possible modifications to cost effectiveness analyses by quantifying the avoided cost of combustion safety testing, MCE and other program administrators are currently constrained in their ability to serve their customers with programs that involve fuel substitution.

D. Request for Considering Key Issues Regarding the Three-prong Test

Given the need to align the three-prong test with California's energy and climate goals, the Moving Parties ask that the Commission move quickly to review and modify this policy. To enable program administrators to launch programs that include fuel substitution with confidence and clear guidance, we request that the Commission address the following issues within Phase 3 of the Energy Efficiency proceeding:

1) Review the Test for clarity, utility, and alignment with Commission policies and California's climate goals; modify the Test as needed and provide clear guidance on the methodology and baseline for conducting the Test.

9

²⁰ Application 17-01-013 et al.; *See also*. MCE's Energy Efficiency Business Plan (2017), available at https://www.mcecleanenergy.org/2017-EE-Business-Plan (describes MCE's energy efficiency strategy including fuel substitution).

²¹ MCE's Low-Income Families and Tenants ("LIFT") pilot was approved in D.16-11-022.

- 2) Clarify under what conditions the Test must be passed (e.g., for substitution of regulated fuels vs substitution between regulated and unregulated fuels such as propane and wood), and consider modifying Commission policy to enable switching between regulated and unregulated fuels when key policy objectives are met.
- 3) Provide guidance, with example cases, on how projects or programs that include fuel substitution will be assessed using the Commission's standard cost effectiveness tests that are required of all energy efficiency programs.

The Energy Efficiency (EE) proceeding (R.13-11-005) is the appropriate forum to address the three-prong test. The EE proceeding encompasses the use of and restrictions on utility-customer energy efficiency funds, including updates to cost-effectiveness measurements. In fact, the topic of fuel substitution was included in the November 2013 OIR for the EE proceeding.²² The Moving Parties request that the three-prong test be reviewed in Phase 3 of the general efficiency proceeding R.13-11-005 at the as time as the Market Transformation policy review indicated in the most recent Scoping Memo.²³ This will allow the Test to be addressed early in Phase 3, given the urgency of this issue as described above.

There are also likely useful connections to consider between the opportunity for fuel switching broadly across all program types, and the consideration of a framework for Market Transformation in California. For example, high-efficiency equipment such as electric heat pump technology will require fuel substitution in most California buildings and may require some market transformation activities given this technology's early stage of market development in California. In addition, both topics will require consideration of cost effectiveness metrics, which is within scope as well.

However, we are not proposing that fuel substitution programs be restricted as ordered in D.16-08-019, which states that all market transformation programs must be statewide from the onset.²⁴ We also do not support limiting such programs to pilots given that pilots often have

²³ Assigned Commissioner and Administrative Law Judge's Ruling and Amended Scoping Memorandum, regarding Phase III of R.13-11-005 (Issued November 2, 2016), page 4.

²² Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Program, Evaluation, and Related Issues (Issued November 21, 2013), page 24.

²⁴ D.16-08-019, Ordering Paragraph 8 (p.110): "All upstream and midstream programs, including but not necessarily limited to the following programs and/or subprograms from the existing portfolio, plus new programs proposed in business plans that are market transformation, upstream, or midstream, shall be

shorter time frames and fewer resources than are likely needed in this case. The application of changes to the Test will be relevant to *a range* of existing and future programs, but to expeditiously address this issue within the EE proceeding and to take advantage of some of the connections with a Market Transformation framework, we request that the Test be reviewed alongside Market Transformation, which is slated as the next topic to be considered as part of Phase 3.

A version of this motion was previously filed in the Integrated Distributed Energy Resources (IDER) proceeding (R.14-10-003) on February 28, 2017. That motion was denied without prejudice on May 5, 2017 by the Administrative Law Judge because it was deemed "more appropriate to address this motion in an energy efficiency proceeding." To provide context for this current motion, the Moving Parties note that four of the five parties that responded to the February 28, 2017 Motion within IDER supported a review of the Test:²⁶

- ORA "supports the Motion's proposal to include review of the three-prong fuel substitution test in the IDER proceeding."²⁷
- PG&E "appreciates the Moving Parties' efforts to expedite a review of the threeprong test."²⁸
- SCE "agrees that the three-prong fuel substitution test…is unclear and may be a barrier to greater adoption of fuel substitution technologies."²⁹

delivered statewide according to the definition in Ordering Paragraph 5...."

²⁵ ALJ's Ruling Denying Without Prejudice the Request to Review the Three-Prong Fuel Substitution Test in this Proceeding (Issued May 5, 2017 in R.14-10-003), page 1.

²⁶ Pacific Gas and Electric (PG&E), Southern California Edison (SCE), Southern California Gas (SCG), the Office of Ratepayer Advocates (ORA), and The Utility Reform Network (TURN) all filed responses on March 15, 2017 to the February 28, 2017 Motion in R.14-10-003. All except SCG support a review of the Test. SDG&E did not respond to the February 28, 2017 Motion, but responded on March 30, 2017 to a subsequent related filing.

²⁷ Response of the Office of Ratepayer Advocates to the Motion of the Natural Resources Defense Council, Sierra Club, the Solar Industry Association, and the California Energy Efficiency Industry Council Seeking Review and Modification of the Three-Prong Fuel Substitution Test, filed March 15, 2017 in the IDER (R.14-10-003) proceeding, page 2.

²⁸ Pacific Gas and Electric Response to the Motion of the Natural Resources Defense Council, Sierra Club, the Solar Industry Association, and the California Energy Efficiency Industry Council Seeking Review and Modification of the Three-Prong Fuel Substitution Test, filed March 15, 2017 in the IDER (R.14-10-003) proceeding, page 2.

²⁹ Response of Southern California Edison Company to the Motion of the Natural Resources Defense Council, Sierra Club, the Solar Industry Association, and the California Energy Efficiency Industry

• TURN "agrees with NRDC et al. on the appropriateness of this review." 30

In addition, as described in the May 5, 2017 ALJ Ruling, "SoCalGas and SDG&E maintain that any review of the Test should be undertaken in the energy efficiency proceeding."³¹ The Moving Parties argue that there is wide interest in resolving issues related to fuel substitution, and that the general EE proceeding is the best available venue to expediently address these issues. If the Commission denies this motion to consider the three-prong test in the general EE proceeding, the Moving Parties request that the Commission deny the motion without prejudice and provide guidance on the appropriate venue.

III. **Stakeholder Support**

In addition to the three parties filing this motion – NRDC, Sierra Club, and The Council – the following 24 stakeholder organizations have agreed to sign on in support of this motion and encourage the Commission to act quickly:

Gerald L. Lahr, Energy Programs Manager **Association of Bay Area Governments (ABAG)** 375 Beale Street. San Francisco, CA 94105 415-820-7908 JerryL@abag.ca.gov

Andrew Brooks, Dir, West Coast Operations **Association for Energy Affordability** 5900 Hollis St, Suite R2 Emeryville, CA 94608 (510) 431-1791 abrooks@aea.us.org

Susan Ornelas Susan Orneles, Mayor

City of Arcata City of Arcata 736 F Street

Arcata, CA 95521

707-822-5953

citymgr@cityofarcata.org

Dee Williams-Ridley, City Manager

City of Berkeley 2180 Milvia Street Berkeley, CA 94704 510-981-7000

DWilliams-Ridley@cityofberkeley.info

Council Seeking Review and Modification of the Three-Prong Fuel Substitution Test, filed March 15, 2017 in the IDER (R.14-10-003) proceeding, page 1.

³⁰ Response of The Utility Reform Network to the Motion of the Natural Resources Defense Council, Sierra Club, the Solar Industry Association, and the California Energy Efficiency Industry Council Seeking Review and Modification of the Three-Prong Fuel Substitution Test, filed March 15, 2017 in the IDER (R.14-10-003) proceeding, page 2.

³¹ ALJ's Ruling Denying Without Prejudice the Request to Review the Three-Prong Fuel Substitution Test in this Proceeding (Issued May 5, 2017 in R.14-10-003), page 5.



Amy Dryden

Director of Policy and Technical Innovation

Build It Green

300 Frank Ogawa Plaza, Suite 620, Oakland, CA 94612

510-590-3360

amy@builditgreen.org

Bruce Hodge

Carbon Free Palo Alto

3481 Janice Way

Palo Alto, CA 94303

650-494-3941

hodge@tenaya.com

Sachu Constantine, Director of Policy

Center for Sustainable Energy (CSE)

426 17th St., Suite 700 Oakland, CA 94612

510-725-4768

www.energycenter.org

Charley Cormany, Executive Director

Efficiency First California

1250 Addison St #211b

Berkeley, CA 94702

510-404-0872

ccormany@efficiencyfirstca.org

/s/ Larissa Koehler

Environmental Defense Fund (EDF)

123 Mission Street, 28th Floor

San Francisco, CA 94105

415-293-6093

lkoehler@edf.org

Kenneth Sahm White

Director of Policy & Economic Analysis

Clean Coalition

16 Palm Ct.

Menlo Park, CA 94025

(831) 295 3734

sahm@clean-coalition.orgv

Dana Armanino, Senior Planner

County of Marin

3501 Civic Center Dr., Rm 308

San Rafael CA 94903

415-473-3292

darmanino@marincounty.org

Ann V. Edminster, M.Arch., LEED AP

Design AVEnues LLC

115 Angelita Ave

Pacifica, CA 94044

650-355-9150

ann@annedminster.com

Deborah O. Raphael, Director

SF Department of the Environment

1455 Market Street, Suite 1200

San Francisco, CA 94103

415-355-3701

deborah.raphael@sfgov.org

Jason B. Keyes, Keyes & Fox LLP

Counsel to SolarCity Corporation

436 14th Street, Suite 1305

Oakland, CA 94612

510-314-8203

ikeyes@kfwlaw.com

Margaret Bruce

Program Manager

Local Gov't Sustainable Energy Coalition

980 9th St. Suite 1700 Sacramento, CA 95814 408-605-2761 mbruce@lgc.org

Beckie Menten

Director of Customer Programs

Marin Clean Energy

1125 Tamalpais Ave. San Rafael, 94901

415-464-6034

bmenten@mcecleanenergy.org

Sean Armstrong,

Partner and Project Manager

Sean armstrong

Redwood Energy

1887 O Street Arcata, CA 95521 707-826-1450

sean@redwoodenergy.net

Michael A. Backstrom, Managing Dir Energy & Environmental Policy

Southern California Edison Company

8631 Rush Street Rosemead, CA 91770 626-302-8442

Michael.Backstrom@sce.com

loven bu

Karen Kho, Senior Program Manager

StopWaste

1537 Webster St. Oakland, CA 94612 (510) 891-6500

kkho@stopwaste.org

Brandon Smithwood, Director

California State Affairs

Solar Energy Industries Association

600 14th Street, N.W., Suite 400

Washington, D.C. 20005

(978) 869-6845

BSmithwood@SEIA.org

Cordel Stillman

Director of Programs

Sonoma Clean Power

50 Santa Rosa Avenue, 5th Floor

Santa Rosa, CA 95404

(707) 890-8486

CStillman@sonomacleanpower.org

Lauren Casey

Director of Climate Programs

awer a Casey

Sonoma County Regional Climate

Protection Authority

490 Mendocino Ave. #206

Santa Rosa, CA 95401

707-565-5379

lauren.casey@rcpa.ca.gov

Eric Eberhardt, Director

Energy Services

University of CA Office of the

President

1111 Franklin St

Oakland, CA 94607

510-987-9392

Eric.Eberhardt@ucop.edu

Laun Wile

Laura Wisland, Senior Energy Analyst

Union of Concerned Scientists

500 12th Street

Oakland, CA 94607

510-809-1572

LWisland@ucsusa.org

IV. Conclusion

The three Moving Parties and 24 supporting organizations appreciate the consideration of this request, and encourage a speedy resolution of these issues. Addressing the three-prong test is just one barrier among many to enable decarbonizing California's buildings, and it is important that we make rapid progress on this issue.

Dated: June 8, 2017

Respectfully submitted,

Merrian Borgeson

Natural Resources Defense Council

111 Sutter St., 20th Fl San Francisco, CA 94104

415-875-6100

mborgeson@nrdc.org

/s/

Margie Gardner

California Energy Efficiency Industry

Council

1535 Farmers Lane, Ste 312 Santa Rosa, CA 94505 707-480-1844

mgardner@cedmc.org

/s/

Alison Seel Rachel Golden

Sierra Club

2101 Webster Street, Ste 1300 Oakland, CA 94612

415-977-5737

<u>alison.seel@sierraclub.org</u> rachel.golden@sierraclub.org