

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
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January 22, 2014

Advice Letter SDG&E 2498-E-A/2210-G-A et.al.

To:

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Subject: Disposition approving SDG&E Advice Letter 2498-E-A/2210-G-A et. al. to implement a residential HVAC upstream incentive pilot

Dear Ms. Caulson, Mr. Jazayeri, Mr. Starck, Mr. Cherry and Mr. Newsom:

SDG&E Advice Letter 2498-E-A/2210-G-A was filed jointly as directed in Ordering Paragraph (OP) 6 of D. 12-11-015. The Decision requires the investor-owned utilities (IOUs)¹ to file an AL with a proposal for a residential HVAC upstream incentive pilot program (the upstream pilot). Energy Division (ED) has determined after review and analysis that SDG&E Advice Letter (AL) 2498-E-A/2210-G-A, SCE AL 2010-E-B, SoCalGas AL 4514-G-A and PG&E AL 3395-G-A/4241-E-A (the Joint AL) is compliant with D. 12-11-015 (the EE Decision) and is approved effective July 30, 2013.

The initial Joint AL was timely filed on July 1, 2013. On July 20 and July 22, 2013 Heating, Air Conditioning, Refrigeration Distributors Institute (HARDI), M.S.D.C, Sigler Wholesale Distributors (Sigler), The Utility Reform Network (TURN) and Women's Energy Matters (WEM)

¹ Pacific Gas & Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), and Southern California Gas Company (SoCalGas).

SDG&E Disposition Advice Letter 2498-E-A/2210-G-A
Megan Caulson, Akbar Jazayeri, Lesilie Starck, Brian Cherry & Sid Newsom
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all filed timely protests to the AL. On July 29, 2013 the IOUs filed a joint reply to the protests. On October 4, 2013, staff requested the IOUs to file a supplemental AL addressing concern raised in protest and by staff in its review. On November 8, 2013, the Disposition Advice Letters IOUs filed their supplement AL, which was timely protested by HARDI on December 2, 2013. Finally, on December 9, 2013 the IOUs filed a joint reply to the HARDI protest. On December 2, 2013 SCE filed supplemental AL 2919-E-B correcting an error in their budget allocation to non-incentive costs. Staff waived the protest period for SCE's second supplemental AL.

Pursuant to GO 96-B Section 7.5.2 on July 26, 2013, staff suspended the AL to allow more time for review. On October 11, 2013 and December 20, 2013 SDG&E, on behalf of the Joint IOUs, agreed to extend the initial review period to January 21, 2014. On January 21, 2014 SDG&E agreed to extend the review period until February 4, 2013.

Attachment 1 contains a detailed discussion of the protests, replies and our determination that the Joint AL is compliant with OP 6 of the EE Decision. In addition to our overall approval of the Joint AL, we direct the IOUs, as recommended by TURN to monitor the effectiveness of providing participating distributors QI/QM program collateral as a strategy to encourage qualifying equipment to also participate in the QI/QM program.

Please contact Nils Strindberg of the Energy Division staff at 415-703-5219 (ns2@cpuc.ca.gov) if you have any questions.

Sincerely,



Edward Randolph
Director, Energy Division

cc: Service List A.12-07-001 et al.
Simon Baker, Energy Division
Hazlyn Fortune, Energy Division

Attachment 1

Review and Analysis

I. Background

Decision 12-11-015 (the EE Decision), OP 6 states:

“Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company, and Southern California Edison Company shall propose an upstream incentive program for distributors of residential heating, ventilation, and air-conditioning equipment in a Tier 2 advice letter by no later than April 1, 2013.”

On March 19, 2013 SDG&E, on behalf of the Joint IOUs (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company, and Southern California Edison Company), requested a three-month extension until July 1, 2013, to comply with OP 6 of the EE Decision. The IOUs’ request was approved by the Commission’s Executive Director on March 28, 2013.

Pursuant to GO 96-B Section 7.5.2 on July 26, 2013, staff suspended the AL to allow more time for review. On October 11, 2013 and December 20, 2013 SDG&E, on behalf of the Joint IOUs, agreed to extend the initial review period to January 21, 2014. On January 21, 2014 SDG&E agreed to extend the review period until February 4, 2013.

The initial Joint AL was timely filed on July 1, 2013. On July 20 and July 22, 2013 Heating, Air Conditioning, Refrigeration Distributors Institute (HARDI), M.S.D.C, Sigler Wholesale Distributors (Sigler), The Utility Reform Network (TURN) and Women’s Energy Matters (WEM) all filed protests to the AL. On July 29, 2013 the IOUs filed a joint reply to the protests. On October 4, 2013, staff requested the IOUs to file a supplemental AL addressing concern raised in protest and by staff in its review. On November 8, 2013 the IOUs filed their supplement AL, which was timely protested by HARDI on December 2, 2013. Finally, on December 9, 2013 the IOUs filed a joint reply to the HARDI protest. On December 2, 2013 SCE filed supplemental AL 2919-E-B correcting an error in their budget allocation to non-incentive costs. Staff waived the protest period for SCE’s second supplemental AL.

II. Party Protests and Reply Comments to the initial AL filing

Parties protests focused on a number of areas, including: rebates and eligible equipment; promoting quality installation (QI) and code compliance and data collection requirements.

Rebates and Equipment Eligibility:

HARDI, Sigler and WEM all protested the rebate levels and equipment eligibility in the proposed upstream pilot in the initial Joint AL filed on July 1, 2013. HARDI and Sigler claim that the IOUs proposed rebates in their July filing are too low to cover enough of the incremental cost and justify the investment of moving from code compliant HVAC equipment to higher efficiency equipment. HARDI and Sigler add that the rebate structure is unlikely to encourage distributors of residential HVAC equipment to significantly alter equipment stocks.

The IOUs counter, in their July 19, 2013 reply comments, that their proposed rebates cover between 25% and 75% of the incremental cost according to the Database for Energy Efficiency Resources (DEER) data. The IOUs claim that maintaining incentive levels at no more than 75 percent of the incremental measure cost is necessary to improve program cost effectiveness.

Sigler and WEM also claim that the rebate ranges proposed by the IOUs in their July filing are confusing. Both parties believe that the IOUs incentive ranges are based on climate zones which they find problematic. Sigler and WEM maintain that the proposal in the AL would be nearly impossible to implement because in some parts of the state there are many different climate zones in close proximity. Sigler and WEM maintain this would require the distributor know where the equipment was installed to set a price; and would require the contractor to know what price the distributor would set before they quote a homeowner. Sigler asserts this would require too much investigation for every job.

The IOUs agree in their July 29, 2013 reply comments that it would be confusing to offer different incentive levels for the same measure based on climate zone. The joint IOUs assert that their proposal did not intend to imply that there would be different incentive levels in different climate zones or by time of year. The IOUs claim that when the program is approved and officially launched, only one incentive level for each measure will be offered regardless of climate zone.

In their protests, HARDI and Sigler also state that as filed in the July AL the equipment eligible for rebates is too limited to gain uptake. The IOUs' original proposal limited eligibility to only Tier 3 HVAC equipment.² HARDI and Sigler argue that the IOUs should provide incentives for the two lower Tiers (1 and 2) of higher efficiency HVAC equipment which have potentially greater sales volume. However, WEM believes that providing a rebate for only Tier 3 HVAC equipment is appropriate. In their reply comments the IOUs agree with WEM and add that for the initial pilot offering, a smaller population of distributors is sufficient to gauge the potential success of continuing a residential HVAC distributor incentive program beyond this program cycle.

HARDI and WEM also argue, in their protests, that Advanced Main Circulating Fans should be eligible for rebates. The IOUs respond in their reply comments that motor upgrades are currently part of the Residential Quality Maintenance (RQM) program.

Promoting QI and Code Compliance:

M.S.D.C. and TURN protested the July AL claiming that the pilot fails to promote QI or code compliance. M.S.D.C. believes that the program design doesn't support two of the four HVAC goals of the California Long Term Energy Efficiency Strategic Plan: namely, (1) promoting quality work or (2) improving code compliance.³ TURN also asserts that the program is missing the opportunity to influence the proper sizing and installation of new residential HVAC equipment. Moreover, TURN adds that the program will squander potential energy savings with the installation of high efficiency equipment which meet the requirements of the upstream incentive program but are improperly installed or maintained. The IOUs reply that the purpose of the proposed residential HVAC distributor incentive program is to explore if such a program can be designed and implemented, in order to achieve a level of energy savings success similar to the

² Tier 3 HVAC equipment is the most efficient classification of equipment, while Tier 2 is less efficient than Tier 3 and Tier 1 is less efficient than Tier 2.

³ The four HVAC related Strategic Plan goals are: consistent and effective compliance; quality installation and maintenance becomes the norm; whole building design and construction practices fully integrate building performance objectives to reduce cooling and heating loads and new climate appropriate HVAC technologies are developed with accelerated market penetration.

commercial HVAC distributor incentive program model. They add that other parts of the Residential HVAC subprogram that are focused on improving the quality of installations and this pilot does include cross pollination of these other subprogram elements.

Data Collection:

HARDI, TURN and WEM expressed concern in their July protests regarding the pilot's proposed data collection procedures. In their protests TURN and WEM recommended that the Commission order the utilities to incorporate data collection procedures into the residential HVAC upstream incentive they believed would improve code compliance. WEM states that the distributors should provide the installation address; unit size; certified performance data; serial number and date of installation. TURN added three additional suggestions they allege would facilitate improved permit and code compliance and QI/quality maintenance (QM):

- First, TURN recommends that the Commission should require that the utilities monitor the effectiveness of providing QI/QM program collateral to participating distributors in terms of encouraging those purchasing and/or installing the qualifying equipment to also participate in the QI/QM program.
- Secondly, TURN suggests that the distributors provide the: Air Conditioner, Heating and Refrigeration Institute AHRI number; serial number, tonnage and signed application for proof of sale.
- Finally, and TURN believes most importantly, they want program participants to collect the CEC's CF-1R (for new construction) or CF-1R-Alt (for building alterations) registration number, which is the unique CEC certificate of compliance number associated with the residential project for which the HVAC equipment is being purchased.

HARDI claims, in their protest, that the IOUs proposed data collection protocols need further scrutiny.⁴ Furthermore, they claim the IOU proposal will severely limit distributor participation so any surveying of participating companies will be an insufficient and misleading sample that is not reflective of the overall market. HARDI also claims that distributors are wary of unnecessary bureaucratic complexity – especially if the end result could lead to reduced or eliminated financial incentives. Finally, HARDI and TURN believe that the IOUs should work with the CPUC and other stakeholders to identify data needs and program design opportunities going forward.

The IOUs disagree with TURN that they should have to have to collect the CEC'S CF-1R registration numbers, because they claim that the upstream pilot is only part of the residential HVAC portfolio and the other programs are designed to support code compliance. The IOUs agree with WEM's request that the distributors should provide the installation address; size; certified performance data; serial number and date of installation and claim the program already includes these components. The IOUs maintain that they intend to work with stakeholders on the data needs and maintain that the residential upstream program will have the same data requirements as the commercial program.

III. Supplemental Advice Letter Filing and Responses

On October 4, 2013 staff requested the IOUs to file a supplemental AL filing addressing issues raised in protests and staffs own review. Specifically staff directed broadening the eligible equipment and raising

⁴ The IOUs propose collecting the following information from the distributor: installation address, size, performance data, serial number, and date of installation as a requirement for payment of incentives.

incentive levels. On November 8, 2013 the IOUs filed their supplemental ALs, which were protested by HARDI on December 2, 2013.

In their protest of the supplemental AL HARDI claims that HVAC distributors are wary of providing data that they believe may result in reduced financial incentives. They support the use of an independent “data steward” that could be worked into the implementation of the program and suggest that their current data aggregator could perform this role. HARDI also claims to be sensitive to the IOUs concerns about how this program could influence portfolio cost effectiveness. They suggest testing alternative evaluation methodologies using data provided by the data aggregator.

HARDI also states that while they’re encouraged that the efficiency levels targeted for incentives improved over the July filing. However, they still believe that Tier 1 HVAC equipment remains a critical component that must be included for the program to be widely accepted by distributors. HARDI also alleges that a double standard exists when the Energy Upgrade California (EUC) program is allowed to award efficiency savings for “below-code” and less efficient equipment and the residential upstream HVAC pilot is not able to offer this same equipment. HARDI also claims they would support promoting EUC as an “upsell” opportunity for the residential upstream HVAC pilot, if Tier 1 equipment were included.

The IOUs respond that they understand that industry market actors may be uncomfortable with providing program related information to the IOUs, the CPUC or third-parties. They note that their programs are expected to operate and be evaluated in a transparent manner and that it would be difficult for the IOUs and state to continue to support the program if insufficient data was available to evaluate it. The IOUs also add that the role of Commission staff and its consultants is to act as independent evaluators of the IOU programs. Finally, in response to HARDI’s suggestion for testing alternative evaluation methodologies using data provided by the data aggregators the IOUs state that per Commission directive it is ED’s role to evaluate EE program savings.

The IOUs state that they excluded Tier 1 equipment to keep the scope reasonable for a new pilot, eliminate inter-program competition and avoid double counting of savings with EUC. The IOUs agree with HARDI that there is different saving treatment in EUC as compared to the pilot, however, they clarify that it is not because of an inherent bias. They point out that HVAC replacements in the EUC program are considered “Early-Retirements” of equipment which allow the claiming of savings from the original less efficient equipment for one-third of the measure’s Effective Useful Life (EUL) and then from a code baseline for the remaining EUL. The IOUs claim that the upstream pilot is only allowed to claim savings from current code as all equipment in this program is considered a replacement on burnout. The IOUs state that they’re unclear about how HARDI would “support promoting EUC”, via its members, if Tier 1 measures were added to the residential HVAC upstream pilot.

III. Discussion:

Rebates and Equipment Eligibility:

After review and analysis, staff agrees with HARDI and Sigler that the rebates offered in the original filing for purchasing highly efficient were too low to drive market uptake. However,

staff finds the rebates offered in the November supplemental AL filing appropriate.⁵ HARDI did not express strong concerns with the rebate levels in their protest to the supplemental.

HARDI, Sigler and WEM commented on what type of equipment should be eligible for rebates in the upstream pilot. The IOUs proposed providing rebates for both Tier 2 and 3 equipment in their supplemental AL; whereas the original filing only included rebates for Tier 3 equipment. Staff finds the IOU's supplemental AL reasonable for reasons below and we approve of this approach. First, we believe that there is considerable risk of double counting of savings of HVAC equipment in the residential upstream pilot and EUC if the upstream pilot were to include Tier 1 HVAC equipment. According to EUC data only two out of the 26 units installed were Tier 2 and 3 equipment (from a sample in the Advanced Home Upgrade program). In addition, the EUC Home Upgrade program only includes SEER 14/15 units currently as eligible A/C measures. We acknowledge the possibility of double counting savings with EUC Advanced Home Upgrade also exists if Tier 2 and 3 equipment are eligible; however we believe this risk is small given how infrequently these measures are installed under EUC. During pilot evaluation activities ED believes it can later examine the potential risk of doubling counting of savings by examining how prevalent Tiers 1, 2 and 3, HVAC equipment are part of EUC retrofits. Secondly, staff agrees with Sigler and HARDI that inclusion of Tier 1 equipment would greatly increase participation. However, staff ultimately agrees with the IOUs that the Commission intends for pilot programs to be reasonably limited in scope. For purposes of this pilot we believe it is prudent to constrain the scope while we test out the program design. The IOUs, in consultation with staff, can always increase the rebates and eligible equipment at a later date if deemed necessary. Finally, we are concerned that if the IOUs were to include the Tier 1 equipment there is a significant likelihood that their proposed budgets would not be sufficient to implement the program for the entire program cycle.

Linkage to Quality Installation (QI) / Quality Maintenance (QM) or Code Compliance:

Staff agrees with M.S.D.C and TURN in their July protests that one of the biggest challenges to HVAC units performing at optimal or rated efficiency is improper installation and maintenance. The Commission directed this pilot with the knowledge that the offering was intended to promote the stocking and selling of high efficiency HVAC equipment and model itself after the success of the commercial upstream HVAC program offering. Along with promoting quality work and improving code compliance, encouraging the stocking of highly efficient and climate appropriate equipment, in and of itself, is an important contributor to achieving California's energy and climate goals. Staff agrees with the IOUs that the residential HVAC offerings⁶ and EUC, combined with the upstream pilot, work in concert to achieve the goals of the Strategic Plan for residential HVAC. Staff finds it infeasible to require participating HVAC distributors to collect permit compliance information from contractors because distributor sales occur prior to, and may not be associated with, a specific job for which a permit would be required. Furthermore the distributor does not come into direct contact with the equipment installation process by the contractor or end user. Staff encourages the IOUs to work with stakeholders to explore ways the program could incorporate compliance enhancement elements and include this at a later date in an updated PIP.

Data Collection and Evaluating Program Performance:

⁵ In the November supplemental AL filing the IOUs proposed the rebates would cover between 50-65% of IMC.

⁶ Residential Quality Installation and Residential Quality Maintenance.

In their July protests a number of parties commented on data collection requirements for the pilot program, including HARDI, TURN and WEM. In the early stages of this pilot Staff believes the first priority at this early stage is to get program uptake. The pilot could be compromised if the distributors become overburden with data requirements and not choose to participate. Thus, we direct the IOUs to work with staff and its evaluation consultants, HARDI and other stakeholders to identify data collection needs to evaluate this pilot program going forward. These discussions have already begun, and we expect them to continue.

In their December protest HARDI raised additional concerns with data collection and program evaluation procedures. First, they claimed that distributors are wary of providing data to unknown third parties that may result in reduced financial incentives for a program. HARDI suggests having an independent “data steward” for the program and recommend that their data aggregator could perform this role. HARDI respectfully suggest testing alternative evaluation methodologies using data provided by the data aggregator as a means to address the IOUs cost effectiveness concerns.

D.05-01-055 page 114, states that “Energy Division will assume management and contracting responsibilities for all EM&V studies that will be used to: (1) measure and verify energy and peak load savings for individual programs, groups of programs and at the portfolio level, (2) generate the data for savings estimates and cost-effectiveness inputs, (3) measure and evaluate the achievements of energy efficiency programs, groups of programs and/or the portfolio in terms of the “performance basis” established under Commission-adopted EM&V protocols and (4) evaluate whether program or portfolio goals are met.” Staff looks forward to getting feedback from HARDI on any proposals they suggest for evaluating the programs. Any data provided by HARDI or its data aggregator would need to be reviewed by the Commission staff. Commission staff will determine what evaluation methods to ultimately employ.



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July 1, 2013

Advice 2498-E/2210-G

(San Diego Gas & Electric Company - U902-M)

Advice 4514-G

(Southern California Gas Company – U 904-G)

Advice 2919-E

(Southern California Edison Company – U 338-E)

Advice 3395-G/4241-E

(Pacific Gas and Electric Company - U 39-M)

Public Utilities Commission of the State of California

SUBJECT: REQUEST OF SAN DIEGO GAS & ELECTRIC COMPANY, SOUTHERN CALIFORNIA GAS COMPANY, SOUTHERN CALIFORNIA EDISON COMPANY AND PACIFIC GAS AND ELECTRIC COMPANY FOR UPSTREAM INCENTIVE PROGRAM FOR DISTRIBUTORS OF RESIDENTIAL HEATING, VENTILATION AND AIR CONDITIONING EQUIPMENT IN COMPLIANCE WITH DECISION 12-11-015

PURPOSE

San Diego Gas & Electric Company (SDG&E), on behalf of itself, Southern California Gas Company (SCG), Southern California Edison Company (SCE) and Pacific Gas and Electric Company (PG&E) (together the Investor-Owned Utilities (IOUs)), hereby submit for filing, a proposed upstream incentive program for distributors of residential heating, ventilation and air conditioning (HVAC) equipment in compliance with Ordering Paragraph (OP) 6 of the California Public Utilities Commission (CPUC or Commission) 2013-2014 Energy Efficiency Portfolio Decision (D.) 12-11-015 (Nov. 12, 2012).

Attachment 1 to this advice letter (AL) is the proposed Program Implementation Plan (PIP) addendum information for the joint-IOU statewide Residential HVAC sub-program PIP for this new incentive program. The Residential HVAC sub-program is part of the Residential Program PIP.

BACKGROUND

Ordering Paragraph 6 of D.12-11-015 requires the IOUs to propose an upstream incentive program for distributors of residential HVAC equipment in a Tier 2 advice letter by April 1, 2013.

On March 19, 2013 SDG&E, on behalf of the Joint IOUs, requested a three-month extension until July 1, 2013, to comply with OP 6. The Joint IOUs' request was approved by the Commission's Executive Director on March 28, 2013.

The upstream program is intended to promote increased energy savings and equipment efficiency in the residential HVAC market and build on the success of the CPUC-approved commercial upstream HVAC Distributor Incentive Program.¹

Upstream Incentive Program

The IOUs have worked collaboratively with the Energy Division staff (Staff), Western HVAC Performance Alliance (WHPA) Stakeholder group, The Utility Reform Network (TURN), and other parties to design the incentive program.

Upon approval of this AL, the IOUs will update the Residential Program PIP to reflect the approved upstream incentive program through Staff's PIP Addendum Process.

While the IOUs plan to launch the residential upstream HVAC program as soon as possible, a four to six month implementation timeframe following AL approval may be needed. The four to six month timeframe is needed for vendor solicitation processes and information technology work required adding necessary functionality to the existing online application system used by the commercial upstream HVAC distributor incentive program.

The following summarizes the IOUs' proposed residential upstream HVAC incentive program.

Program Design

The residential upstream HVAC equipment distributor incentive program offers incentives to distributors to stock and promote qualifying high efficiency residential HVAC equipment. The logic that underscores this program's design is that a relatively small number of wholesale distributors are in a position to influence the choice of equipment of thousands of customers, contractors, architects, and retailers. With an incentive, these upstream market actors are expected to increase the stocking and promotion of high efficiency HVAC equipment.

The residential upstream HVAC distributor incentive program design is also modeled after the successful commercial upstream HVAC distributor incentive program. Incentives are provided to distributors for the sale of high-efficiency residential HVAC systems in the IOUs' service territories, with measures covering air-conditioning and furnaces to drive a variety of energy savings for customers.

Incentives in this program will be provided for the highest of three efficiency tiers of common types of air conditioners, heat pumps and furnaces as proposed by the WHPA working group. The program also includes an incentive measure for evaporatively-cooled air conditioners in order to better support the California Long-Term Energy Efficiency Strategic Plan for increasing market share of high-efficiency climate-appropriate HVAC technologies.

Incentives for lower efficiency tiers of residential HVAC equipment are not proposed for this new program for two reasons. First, the newly re-designed and approved Energy Upgrade California (EUC) Home Upgrade program, administered by the IOUs and by the Regional Energy

¹ D. 12-11-015, p. 75.

Networks (RENs), already includes incentive measures for air conditioners and furnaces at an efficiency tier above code level. The IOUs plan to work with the RENs to add incentive measures for a second efficiency tier of HVAC systems during this program cycle. By including HVAC measures in the EUC program, customers are given the opportunity to achieve deep energy savings through a package of measures. Additionally, it is simpler to support permit compliance through the EUC program than through a program that involves distributors, who are not directly involved in the process.

Secondly, offering only the highest tier of efficiency in the new residential upstream HVAC program supports better cost-effective opportunities for the program than if lower tiers were included. As it stands, even with the program proposed at the highest efficiency tier for qualifying equipment a Total Resource Cost (TRC) of no more than 0.3 across the IOUs is achieved. This TRC is based on savings and incremental measure costs (IMCs) in the Database of Energy Efficiency Resources (DEER).

The TRC could be increased by limiting the program to the hotter climate zones; however, for PG&E that only raises the TRC to 0.41. Since limiting the geographic reach of this program would create other challenges related to typical distributor sales models, the slight TRC improvement is insufficient to merit restricting the climate zones for this new program.

The IOUs will continue to work with the HVAC Industry, TURN, and Energy Division to seek market data and other improvements to increase the cost-effectiveness of this program. As indicated above, the proposed residential upstream HVAC program is less cost-effective than its model, the commercial upstream HVAC program which has a TRC of approximately 1.0. Although there are unique nuances in the residential and commercial markets that lead to these differences, there may be some additional areas of opportunity to improve the TRC calculation input values.

Code and permit compliance will be supported through this program by cross-promotion of other residential HVAC programs. The IOUs will provide participating distributors with collateral about Quality Installation (QI) and how to maintain the system with the IOUs' Quality Maintenance (QM) Program. This information is for dissemination to contractors and customers who purchase the qualifying systems from participating distributors.

The new program incorporates an "upstream" model which means that the incentives will be paid to the distributor for equipment sales rather than to a customer or contractor who may be installing the equipment. Decision 12-05-015, OP 53 requires the IOUs to collect, for certain HVAC programs, the HVAC permit number and contractor certifications to ensure that appropriate permits have been obtained. Since the transaction being incented is not an installation and occurs well in advance of any installation, permit information is not available and thus cannot be collected as part of the Upstream HVAC Distributor Program.

Similarly, Public Utilities Code Section 399.4 requires that incentive programs involving the "installation" of energy efficient equipment require a certification from the incentive recipient that a permit has been obtained, if applicable, and that if a contractor is used, "the contractor holds the appropriate license for the work performed." Since the new program is for the sale of the equipment and not the installation, the Section 399.4 certification is not required for this new program.

EFFECTIVE DATE

The Joint IOUs believes this filing is subject to Energy Division disposition and should be classified as Tier 2 (effective after disposition) pursuant to GO 96-B. SDG&E respectfully requests that this filing be approved and become effective on July 31, 2013, which is 30 calendar days after the date of filing.

PROTEST

Anyone may protest this Advice Letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and must be received no later than July 21, 2013, which is 20 days of the date this Advice Letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division at EDTariffUnit@cpuc.ca.gov. A copy of the protest should also be sent via both e-mail and facsimile to the addresses shown below on the same date it is mailed or delivered to the Commission.

For SDG&E:

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NOTICE

A copy of this filing has been served on the utilities and interested parties shown on the attached list, including interested parties in R.09-11-014 and A.12-07-001, by providing them a copy hereof either electronically or via the U.S. mail, properly stamped and addressed.

Address changes should be directed to the emails or facsimile numbers above.

CLAY FABER
Director – Regulatory Affairs

Attachments

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **SAN DIEGO GAS & ELECTRIC (U 902)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Christina Sondrini

Phone #: (858) 636-5736

E-mail: csondrini@semprautilities.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 2498-E/2210-G

Subject of AL: Request of SDG&E, SCE, SoCalGas & PG&E for Upstream Incentive Program for Distributors of Residential HVAC Equipment in Compliance with D.12-11-015

Keywords (choose from CPUC listing): Energy Efficiency, Compliance

AL filing type: Monthly Quarterly Annual One-Time Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

D.12-11-015

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL N/A

Summarize differences between the AL and the prior withdrawn or rejected AL¹: N/A

Does AL request confidential treatment? If so, provide explanation: N/A

Resolution Required? Yes No

Tier Designation: 1 2 3

Requested effective date: 7/31/13

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Ave.,
San Francisco, CA 94102
EDTariffUnit@cpuc.ca.gov

San Diego Gas & Electric
Attention: Megan Caulson
8330 Century Park Ct, Room 32C
San Diego, CA 92123
mcaulson@semprautilities.com

¹ Discuss in AL if more space is needed.

General Order No. 96-B
ADVICE LETTER FILING MAILING LIST

cc: (w/enclosures)

Public Utilities Commission

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Energy Price Solutions

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Pacific Utility Audit, Inc.

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San Diego Regional Energy Office

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School Project for Utility Rate Reduction

M. Rochman

Shute, Mihaly & Weinberger LLP

O. Armi

Solar Turbines

F. Chiang

Southern California Edison Co.

M. Alexander

K. Cini

K. Gansecki

H. Romero

TransCanada

R. Hunter

D. White

TURN

M. Hawiger

UCAN

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U.S. Dept. of the Navy

K. Davoodi

N. Furuta

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Utility Specialists, Southwest, Inc.

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Western Manufactured Housing

Communities Association

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White & Case LLP

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ATTACHMENT 1

Residential Upstream HVAC Equipment Distributor Incentive Program Implementation Plan (PIP)
Addendum Information for the Residential HVAC Subprogram of the Statewide Residential Program
PIP

- 1) Program Name: Residential HVAC Subprogram
Program type: Statewide
- 2) Total Authorized Program Budget Table
Table 1 – Reference Residential Program PIP for total authorized budget for the Residential HVAC Subprogram.
- 3) Projected Program Gross Impacts Table
Table 2 – Reference Residential Program PIP for projected gross impacts detail for the Residential HVAC Subprogram.
- 4) Program Description
 - a) Describe program

The Residential Upstream HVAC Equipment Distributor Incentive Program offers incentives to distributors to stock and promote qualifying high efficiency Residential HVAC equipment. The logic that underscores this program's design is similar to the Commercial Upstream HVAC program, in that a relatively small number of wholesale distributors are in a position to influence the choice of equipment of thousands of customers, contractors, architects, and retailers. With an incentive, these upstream market actors are expected to increase the stocking and promotion of high efficiency HVAC equipment. Upstream HVAC leverages this market structure and existing relationships. Although some additional functionality will need to be added, the program will use the existing Commercial Upstream HVAC program online incentive application system to facilitate distributor sales and invoice tracking, which reduces administrative costs as compared with paper application processing. The Residential upstream program is designed to adapt to market changes; therefore, the IOUs will continue working with relevant industry players to continually investigate enhancements to the program such as inclusion of additional beyond-code Residential upstream incentive measures.

b) List of measures

Eligible measures include packaged and split-system air conditioners and heat pumps, air conditioners with evaporative cooled condensing units, and natural gas furnaces for single family residential homes. The table below illustrates the minimum qualifying efficiency ratings for each size category and the range of corresponding incentive values. The list of qualifying HVAC system makes and models that meet the required specifications can be referenced using the AHRI website, and will also be tracked within the IOU program online application system in a manner similar to the Commercial Upstream HVAC program.

Table A - Measures and Incentive Levels

Equipment Type		Minimum Efficiency Rating	Incentive Range
Air Conditioners	Split System	18 SEER, 13 EER	\$89/ton - \$268/ton
	Packaged	16 SEER, 12 EER	\$89/ton - \$268/ton
	With Evaporatively Cooled Condensing Units	14.5 EER	\$227/ton - \$681/ton
Heat Pumps	Split Air Source	18 SEER, 13 EER, 9 HSPF	\$103/ton - \$308/ton
	Packaged	16 SEER, 12 EER, 9 HSPF	\$103/ton - \$308/ton
Furnaces	Natural Gas	97% AFUE	\$143/house - \$429/house

c) List non-incentive customer services

The following non-incentive service will be offered through this program:

- Education of the market on the value of selecting high-efficiency systems.

- Education of the market on the value of code compliance.
- Education of the market on the value of quality maintenance (QM) and quality installation (QI) as performed by licensed, qualified contractors in accordance with HVAC industry standards.

5) Program Rationale and Expected Outcome

a) Market Transformation Information:

The program or market logic model that demonstrates a solid causal relationship between the proposed intervention(s) and their intended results is provided below in Section 8.

b) Program Design to Overcome Barriers:

The program will overcome the following priority barriers:

- Lack of value proposition awareness
 - Residential home owners have limited desire, in terms of time commitment, to research energy efficiency options and its benefits.
 - Most residential customer purchase decisions rely on contractors to select or recommend the actual equipment.
- Availability of higher efficiency equipment
 - HVAC equipment stocking in local distribution centers is primarily lower priced, standard-efficiency systems. This stocking pattern is a direct result of low customer participation due to the fact the customer does not fully appreciate the value of the energy efficient equipment
- High first-cost of higher efficiency equipment
 - Higher-efficiency equipment is more expensive for customers to purchase than standard efficiency systems.
 - Without program intervention customers who want to purchase higher-efficiency systems suffer delays such as waiting for systems to be shipped from other locations, or they select standard-efficiency systems. These delays add costs, whether directly or indirectly, to equipment purchases.

The program is designed to overcome these priority barriers by utilizing the Upstream distributor incentive delivery channel, which has the following benefits:

- The delivery process is streamlined. Program delivery through distributors and high-efficiency equipment promoted through QI and QM qualified contractors will provide consistent information on the benefits of energy efficiency.
- The Upstream incentives ensure product availability to influence the decision maker at the time of purchase or service.
- The Upstream incentive channel controls incentive availability to the most relevant segments to improve cost-effectiveness.
- Smaller per-unit incentives through the upstream channels reduce costs and reach a larger number of customers.

- Upstream incentives to distributors encourage the development and promotion of new energy efficiency technologies and incentive structures to build toward meeting future codes and standards changes.
- Increasing marginal value to customers by inducing incentives at the first stage of distribution to reduce marginal costing, thereby changing the total cost of high efficiency equipment.
- Educating and promoting distributor and contractor communications to customers on the benefits of high efficiency equipment
- Leveraging the market place by creating a demand for the purchase of bulk quantity of high efficiency units
- Removing the barriers associated with availability, competitive bids, quantity, stock planning and space requirement
- Digitized online rebate processing that reduces paper waste and administrative handling cost
- The program will promote climate-appropriate emerging technologies through incentives for evaporative cooling systems.

c) Metrics Baseline Study:

The IOUs propose to leverage an existing study currently underway, *Market Assessment to Identify Baselines and Barriers for Existing HVAC Conditions*, to support the design and development of future program metrics for the current Upstream program. The study, expected to be completed in 2014, will identify baselines for CA HVAC industry standard practice in obtaining building permits and achieving 2013 Title 24 compliance for Residential and Commercial HVAC equipment installations (new construction or replacement). EM&V methods include:

- Cover commercial HVAC equipment promoted by upstream program and residential HVAC equipment that could be promoted through an upstream incentive.
- Prioritize based on participation of HVAC units that are being incentivized in the upstream programs.
- Field monitoring of participant and non-participant HVAC equipment across a variety of commercial building types and climate zones, while also monitoring participants and non-participant residential HVAC equipment as the programs becomes more mature.

d) Advancing Strategic Plan goals and objectives:

One of the goals of the Strategic Plan is to increase the market penetration of new climate-appropriate HVAC technologies to 15% of equipment shipments by 2015. The Strategic Plan recommends several strategies to accomplish this that are included in the Residential HVAC Upstream Distributor Incentive program or its connections to other elements of the Residential HVAC subprogram, including:

- Develop a regional (southwest) strategy to introduce new technology designed for hot/dry climate conditions.
- Support incremental improvements to HVAC equipment.
- Link distributor sales and Quality Installation and Quality Maintenance.
- Utilize the Residential Upstream HVAC program design as an incubator program for increasing the market penetration of promising HVAC technologies.
- Support incremental improvement to HVAC equipment by providing incentives in the 2013-2014 program cycle for various high-efficiency HVAC equipment categories. Leveraging the geographic area of the Residential Upstream HVAC program throughout California will increase distributor participation, leading to increased market share of high-efficiency equipment sufficient to argue for standards changes.
- Most HVAC distributors and manufacturers have not actively engaged in the area of quality installations but are supplying equipment to contractors who are in the best position to achieve quality installations. The program will continue to engage these market actors to promote their support of quality installations, as well as quality maintenance, and to seek additional ideas and program modifications. As newer technology and techniques arise that can impact this area, this channel can become an avenue of support or inclusion of the new technology or techniques.

6) Program Implementation

a. Statewide IOU Coordination:

The IOUs have jointly participated in program design, including the stakeholder engagement process, and will deliver this program through core or third party implementation. The IOUs will continue to work together and jointly with the HVAC industry and Energy Division on efforts to explore and implement design enhancements for the Residential HVAC program.

i. Program delivery mechanisms

The four IOUs will offer Residential HVAC distributor incentives that use the same online participation process.

ii. Incentive levels

See Table A above.

iii. Marketing and outreach plans

The program will coordinate outreach activities to distributors that ship into and across service territories and will continue communication with the industry to see where additional collaboration can occur to maximize marketing and outreach

resources. Additional marketing and outreach activities exist through personal contact between the program staff and program participants.

To support deeper energy savings, the program will support cross-promotion of other residential energy efficiency programs. The IOUs will provide participating distributors with collateral on Quality Installation, on maintaining the system with the IOUs' Quality Maintenance program, and on how the Energy Upgrade California program can drive additional savings for customers. This information is for dissemination to contractors and customers that purchase the qualifying systems from participating distributors. The collateral is planned to contain a code related to participation in the QM and/or QI program. This code could then be used to track submitted customer information.

- iv. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable.

The IOUs are engaged in communication with the CEC and other agencies via the codes and standards process and will be able to coordinate and communicate voluntary programs and incentives with mandatory codes that become enacted for the future. Increasing the communication regarding the Strategic Plan will allow all entities to move and plan towards the same objectives.

- v. Similar IOU and POU programs
As mentioned in Section 6.a.ii., above, the four IOUs will implement the same Residential Upstream HVAC Equipment Program. The IOUs will coordinate with POUs in California to encourage these other utilities to make this program a broader statewide effort.

The program will seek opportunities to integrate further with the Residential HVAC Quality Installation and Quality Maintenance programs and Energy Upgrade California program to streamline the implementation of higher efficiency equipment for residential customers.

- b. Program delivery and coordination:
The Program will be coordinated with the following activities.

- i. Emerging Technologies Program

As Emerging Technologies identify new technology that appears to be a good candidate to be included in the portfolio, a measure and incentive level, plus appropriate supplemental marketing can be included for the new technology via this program design.

- ii. Codes and Standards Program

As technologies advance and market penetration increases to an acceptable level, the minimum threshold for eligibility in California can increase to lock in the higher efficiency levels and continue an upward level of efficiency for HVAC equipment.

Through mandatory cross-promotional links of distributor participation to other Residential HVAC elements and the Energy Upgrade California program, the program can support code compliance and proper permitting and the use of licensed contractors.

iii. WE&T efforts

The Residential Upstream program will work with the IOU energy training centers to develop informational classes for contractors.

iv. Program-Specific Marketing and Outreach efforts

The Residential Upstream program will work with industry and Residential HVAC QI and QM program participating contractors to promote the program, in return for participating distributors cross-promoting the QI and QM programs. Supporting outreach will include content on IOU websites which will build general awareness of the program, educate customers about the program and other EE options, and provide a touch point for local marketing efforts related the program.

v. Non-energy activities of program

In addition to the direct energy benefits, this program will encourage development of enhanced HVAC designs and raise the knowledge and awareness of EE issues at the distribution and contractor level. Additionally incentives within the program have been specifically designed to support market transformation.

vi. Non-IOU programs

Through the Western HVAC Performance Alliance (WHPA) and other stakeholder engagement forums the program interacts with the HVAC industry and other stakeholders to continue to develop relationships for ongoing collaboration on program improvements.

vii. CEC work on EPIC: N/A

viii. CEC work on codes and standards

Continuous improvements and enhancements will be coordinated statewide to ensure the Residential Upstream Program maintains consistency with updates to codes and standards.

ix. Non-utility market initiatives

In addition to the direct energy benefits, this program will encourage development of enhanced HVAC designs and raise the knowledge and awareness of EE issues at the distribution and contractor level.

c. Best Practices:

In the fall of 2007, ACEEE awarded the “Exemplary” Award to the similarly designed Commercial HVAC Upstream Program design implemented by PG&E. This award designated that program model as the highest-performing program to promote HVAC equipment, compared to all programs across the United States.

d. Innovation:

An important component of this program is its use of a web-based application and participation tool that provides to both participating distributors and the host IOU the ability to see what is occurring for applications that involve them. Allowing participants to know the status, in aggregate or down to the customer application level, makes participation easy and efficient. For distributors, a paperless participation system is critical for ease of participation; for utilities, the system reduces cost per kWh, saving more than a paper review process would.

e. Integrated/coordinated Demand Side Management:

The program design is flexible enough to allow the potential for including and incentivizing equipment that increases the ability of the equipment to be included in DR programs. Manufacturer equipment with built-in controllability via wireless or power line carrier or other could be integrated once any appropriate measures and incentives would be determined.

f. Integration across resource types (energy, water, air quality, etc) : N/A

g. Pilots: N/A

h. EM&V:

Detailed plans for process evaluations and other evaluation efforts specific to this program will be developed after the final program design is approved by the CPUC and program implementation has begun, since final plans will be based on identified program design and implementation issues and questions. An EM&V Impact evaluation to include this program is already included in the 2013-2014 EM&V plan for HVAC.

A brief description of preliminary additional program review plans is provided below:

Routinized evaluation: The program will use the online incentive application system to track the sale of high-efficiency equipment from year to year. Reports can then be created to show the percent of equipment, incentivized in tons, based on SEER or

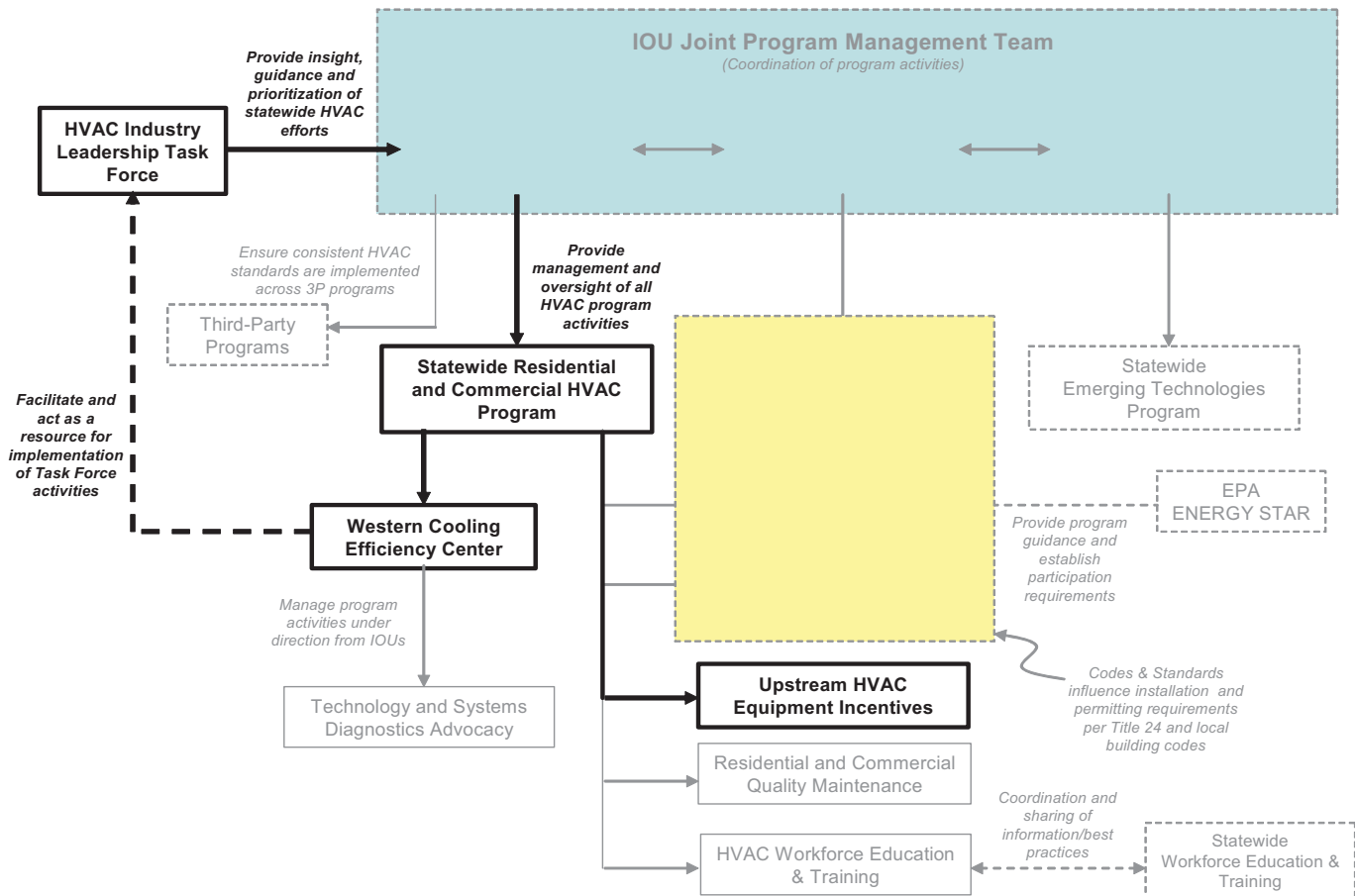
EER. These reports will be prepared every year and compared to the previous accomplishments, and will determine whether the program is achieving the goals.

The evaluation of this program will also entail yearly surveys of distributor stocking practices, starting with an immediate baseline survey. Through a combination of telephone and on-site surveys, the residential HVAC high-efficiency share will be estimated for appropriately designed samples of distributors. The overall high-efficiency stocking percentage, as one example of the parameters estimated in this process, will be obtained by appropriately weighting the sample results, taking into sample site share of overall distributor stock, and distributor market share.

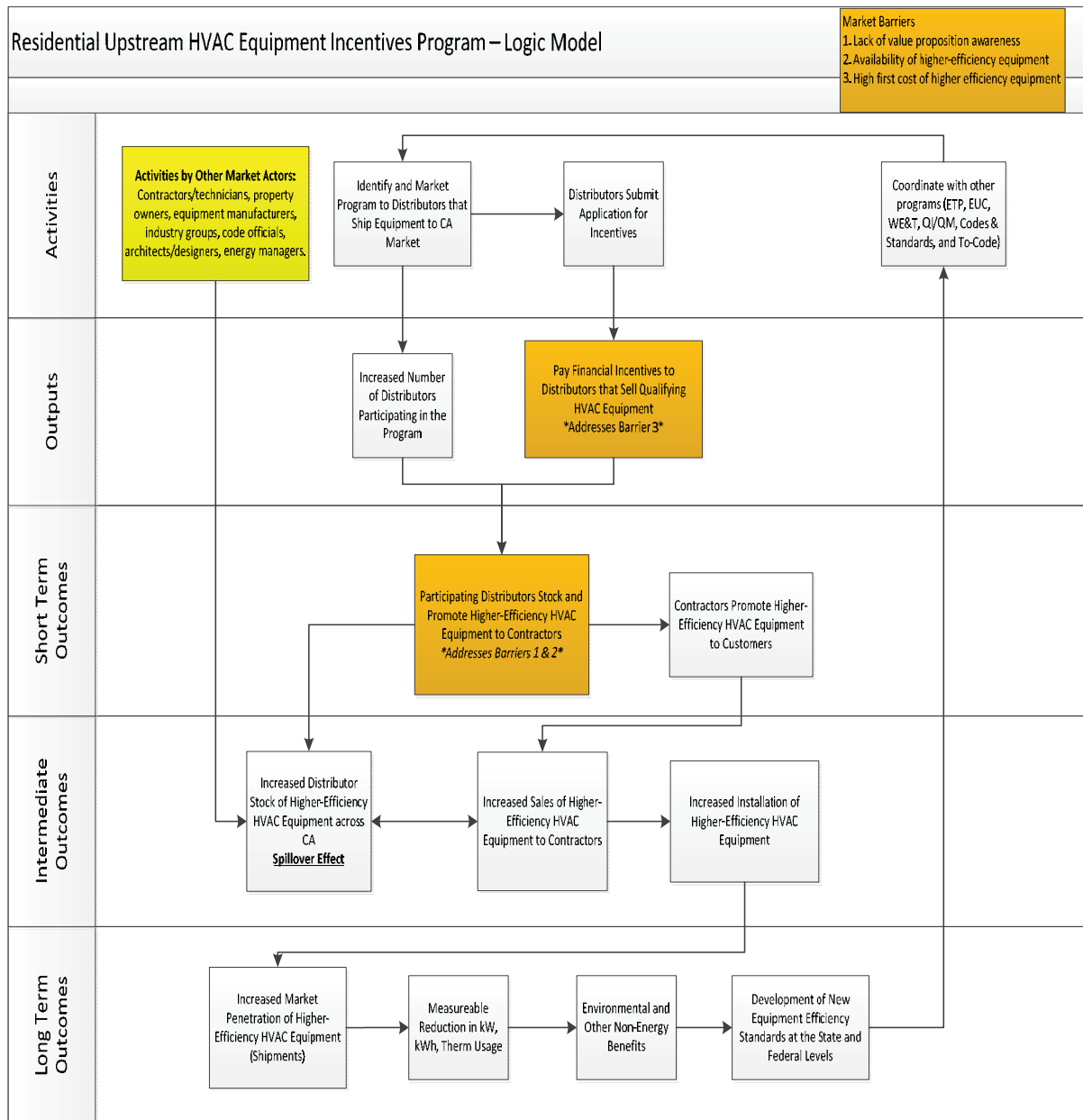
In addition to tracking and providing feedback to the program with respect to market share and stocking practice changes, a number of issues may be addressed via process evaluation, but only if additional EM&V study work is authorized and funded to be conducted throughout the 2013-2014 program cycle. Potential process evaluation work would provide feedback on the effectiveness of the numerous linkages between organizations connected to the program, and address certain key connections or correlations that ought to occur if the program theory holds. Key issues that could be addressed include:

- Lessons learned from participating distributors and customers with respect to the online rebate application system, including reliability, amenability of smaller dealers to the system, and promptness on incentives.
- The effectiveness of coordinated multi-utility distributor outreach and recruitment.
- The degree to which the program and distributors are able to adapt to changes in code efficiency.
- Effectiveness of collaboration with HVAC market stakeholders, and manufacturers, in furthering the development and commercialization of California-appropriate technological advances, including on-board diagnostic systems.
- Collection and synthesis of market player and regulatory viewpoints on program effectiveness, particularly with respect to the program's market share impacts and possible consequent impacts on standards changes.

7) Diagram of Program



8) Program Logic Model:



ATTACHMENT A

Advice No. XXXX

(See Attached Service List)