

DOCKETED

Docket Number:	19-BSTD-02
Project Title:	Residential Alternative Calculation Method Variable Capacity Heat Pump Modeling Approach
TN #:	231023
Document Title:	Steve Uhler Comments - BSTD-19-02 SEER 14 rating and Title 20 1606(h)(1)(C)(3)(b)
Description:	N/A
Filer:	System
Organization:	Steve Uhler
Submitter Role:	Other Interested Person
Submission Date:	12/9/2019 4:34:47 PM
Docketed Date:	12/9/2019

*Comment Received From: Steve Uhler
Submitted On: 12/9/2019
Docket Number: 19-BSTD-02*

BSTD-19-02 SEER 14 rating and Title 20 1606(h)(1)(C)(3)(b)

BSTD-19-02 SEER 14 rating and Title 20 1606(h)(1)(C)(3)(b)

CVRH Project Findings, found, VCHP system evaluation findings from the 2014-2018 studies include: SEER and HSPF ratings do not reliably predict the field installed energy performance of VCHP systems.

This appears to indicate that the testing methods performed by AHRI to produce the information required by Title 20 section 1606(h) are not up to the standard of true, complete, accurate, and in compliance with all applicable provisions of Article 4. Appliance Efficiency Regulations.

The rulemaking under docket 19-BSTD-02 has set SEER to 14 for all VCHP systems regardless of AHRI rating.

This appears to place these VCHP systems in the ineligible category for rebates for fuel switching.

See attached rebate form for the requirement of SEER 16 or greater.

This rulemaking directly effects the public in choosing the type of system allowed on the rebate form.

Has the Energy Commission evaluated the effect of this rulemaking on those directly effected by the rulemaking as required by Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code?

Steve Uhler
sau@wwmpd.com

Additional submitted attachment is included below.

2019 Residential HVAC Rebate Application

DSM Agreement No. (SMUD USE ONLY)

This form **should be completed by the contractor** and is not intended to be a contract or replace the contract between the contractor and the customer, nor is it intended to be a contract between SMUD and any other party.

FORMS LISTED BELOW MUST BE SUBMITTED FOR ALL REBATE APPLICATIONS

- | | |
|--|---|
| <input type="checkbox"/> Copy of contract work | <input type="checkbox"/> Building Permit and ID |
| <input type="checkbox"/> Proof of product being installed (may be listed on contract, equipment stickers, packing slip, photo of nameplates) | <input type="checkbox"/> Copy of CF-3R HERS forms |
| <input type="checkbox"/> AHRI Number and Certificate | <input type="checkbox"/> Photo of old unit (If gas conversion, must show gas line removed/capped) |
| | <input type="checkbox"/> Photo of new unit installed |

APPLICANT INFORMATION

SMUD ACCOUNT NUMBER (at installation address)			
CUSTOMER/PURCHASER NAME (check payable to)		TENANT NAME (if different)	
MAILING ADDRESS (check to be mailed to)		INSTALLATION ADDRESS (if different)	
CITY / STATE / ZIP CODE (check to be mailed to)		CITY / STATE / ZIP CODE	
EMAIL ADDRESS		EMAIL ADDRESS	
HOME PHONE ()	WORK PHONE ()	TENANT HOME PHONE ()	TENANT WORK PHONE ()

SYSTEM REPLACEMENT REBATES

Electric Heat Pump Upgrade	A/C with Gas Furnace Upgrade	Gas Furnace to Heat Pump Upgrade
<input type="checkbox"/> \$1,500 rebate	<input type="checkbox"/> \$1,500 rebate	<input type="checkbox"/> \$4,000 rebate

PRODUCT REQUIREMENTS

	Split & Mini Split System (1)	Packaged System
A/C	<ul style="list-style-type: none"> ≥ 16 SEER ≥ 2-stage compressor 	<ul style="list-style-type: none"> ≥ 15 SEER ≥ 2-stage compressor
Furnace	<ul style="list-style-type: none"> ≥ 90% AFUE Sealed combustion (2) Sealed CVA vents (3) 	<ul style="list-style-type: none"> ≥ 80% AFUE
Heat pump	<ul style="list-style-type: none"> ≥ 8.2 HSPF ≥ 2-stage compressor 	<ul style="list-style-type: none"> ≥ 8.0 HSPF ≥ 2-stage compressor
All Air Handlers	<ul style="list-style-type: none"> ECM (4) blower motor as required by Title 24 	<ul style="list-style-type: none"> ECM blower motor as required by Title 24
Ductwork	<ul style="list-style-type: none"> Must pass Title 24, via HERS CF3R and/or If new ductwork is installed it must be insulated to ≥R-8 	<ul style="list-style-type: none"> Must pass Title 24, via HERS CF3R and/or If new ductwork is installed it must be insulated to ≥R-8
Thermostat	<ul style="list-style-type: none"> Wi-Fi Enabled 7-Day Programmable 	<ul style="list-style-type: none"> Wi-Fi Enabled 7-Day Programmable

- (1) Mini-splits must service entire home. Equipment standards are in above table
 (2) Combustion air from the outside
 (3) Existing CVA vents must be sealed unless another combustion appliance is present
 (4) ECM = Electronically Commutated (i.e. variable speed) Motor

HVAC INFORMATION

Type	Product Information		Efficiency Data
<input type="checkbox"/> Package	MANUFACTURER	AHRI REFERENCE NO.	SEER
<input type="checkbox"/> Split	OUTDOOR AC / HP or PACKAGE UNIT MODEL NO.	AC COIL BRAND	EER
<input type="checkbox"/> A/C			
<input type="checkbox"/> Heat Pump	FURNACE / FAN COIL MODEL NO.	AC COIL / HP INDOOR UNIT MODEL NO.	HSPF

PERMIT

PERMIT NO.	DATE EQUIPMENT INSTALLED
------------	--------------------------

CONTRACTOR / SUPPLIER INFORMATION

CONTRACTOR OR COMPANY NAME	EMAIL ADDRESS
MAILING ADDRESS	LICENSE NUMBER
CITY / STATE / ZIP CODE	BUSINESS PHONE ()

2019 Residential HVAC Rebate Application - Continued

NOTICE OF COMPLETION

NOTE: DO NOT SIGN UNTIL INSTALLATION IS COMPLETED

I certify by my signature that: (1) I have purchased the product(s) that meet the eligibility requirements set forth by SMUD. (2) I have read and understand all of the Terms and Conditions set forth by SMUD. (3) I declare under penalty of perjury under the laws of the State of California that the above information is true and correct.

CONTRACTOR SIGNATURE

DATE

CUSTOMER OR HOMEOWNER SIGNATURE

DATE

PAYMENT RELEASE AUTHORIZATION (to be completed only if rebate will be released to the contractor)

Please also refer to the Sales Terms, Conditions and Responsibilities

Authorized by: SMUD account holder (print) _____

Customer Signature: _____ Date: _____

Check made payable to: _____

Payee mailing address: _____ Apt. Unit #: _____

City: _____ State: _____ Zip Code: _____

If payee is a business, please provide either the Employee Identification Number (EIN)/Federal Tax ID or Social Security Number in the appropriate space below.

POST INSTALLATION ENERGY SAVINGS FOLLOW UP

- Check this box and include email below if you would like to receive a post-installation energy savings follow up from a SMUD Energy Advisor. We will look at usage patterns and help you align usage/times that maximize efficiency of the HVAC system and time of day pricing. Your email address will not be used for anything else.

Email: _____

SMUD USE ONLY

DSM AGMNT#

APPROVED

DENIED

SCANNED

INITIALS _____

DATE LETTER SENT _____



Program Terms and Conditions

Qualified Equipment / Rebate Eligibility

1. Rebates are based on Tier levels as described under Rebate Information on the front of this rebate application. Equipment installed must meet required efficiency levels for both SEER, and HSPF for heat pumps.
2. Rebates are available until funding is exhausted. SMUD expressly reserves the right to modify, amend or terminate the Residential HVAC Rebate Program in whole or in part, at any time and for any reason without prior notice. Visit smud.org/HVAC, call 916-732-5732, or email AdvancedHomeSolutions@smud.org to obtain current rebate program information.
3. Rebate application must be received within 180 days of purchase. Rebate amount is based on the program offering and funding levels.
4. Residence must have active SMUD residential electric service at time of application. Newly constructed subdivision homes built by developers do NOT qualify. Do-it-yourself installations do NOT qualify.
5. Installation must be permitted. Customer is solely responsible for obtaining related building permits and completing the inspection process as required by local jurisdiction.
6. Contractor performing work must possess active C-20 license (Heating, Air Conditioning & Ventilation / HVAC).
7. SMUD reserves the right to inspect installation premise or request additional information / documentation prior to or after rebate payment.

SMUD Disclaimer of Warranties

SMUD makes no representation expressed or implied, regarding the design, installation, construction, reliability, efficiency, performance, operation, maintenance, or use of any HVAC system analyzed, discussed, selected or rejected, installed or otherwise considered by the residential building owner or HVAC contractor. Any decisions regarding the selection of the design, installation, construction, reliability, efficiency, performance, operations, maintenance, or use of any HVAC system shall be made at the sole discretion and are the sole responsibility of the residential building owner or HVAC contractor.

Building Owner's Selection of HVAC Product and/or System

Building owner understands and agrees that there are a multitude of HVAC products and systems, and in no way does SMUD assume any responsibility for the HVAC product and/or system ultimately selected by building owner and/or HVAC contractor and / or installed by HVAC contractor. It is the building owner's discretion to select the HVAC products and/or system.

SMUD is not a Party

Residential building owner understands and agrees that SMUD is not a party to any HVAC installation contract entered into between building owner and contractor, and building owner agrees to hold harmless SMUD for any and all liability, loss, cost, or damage of every kind, nature or description arising out of such a contract, or any SMUD on-site verification of the installation of an HVAC system and/or product. Building owner further understands that SMUD does not guarantee energy or bill savings as a result of the installation of this equipment.

Indemnity

Residential building owner shall indemnify, defend, and hold harmless SMUD, its directors, officers, agents, and employees against all claims, loss, damage, expense, and liability asserted or incurred by other parties, including, but not limited to SMUD's employees, arising out of or in any way connected with the performance of this rebate program and excepting only such loss, damage, or liability as may be caused by the intentional acts or the sole negligence of SMUD.

SALESPERSON TERMS, CONDITIONS and RESPONSIBILITIES (in addition to aforementioned)

1. Tax liability: rebates are taxable if greater than \$600 and will be reported to the Internal Revenue Service (IRS). SMUD will report your rebates as income received on IRS Form-1099. Consult your tax advisor concerning taxability of incentives. SMUD is not responsible for any taxes imposed upon you as a result of this incentive payment.
2. Model number of the equipment installed (see Program Terms and Conditions, item 3 above) must be listed on the contract/bid, sales receipt or invoice, and on rebate form.
3. Attach IRS Form W-9 (Request for Taxpayer ID). Not necessary to resubmit Form W-9 after first application submission.

Mail completed rebate application along with required documents to the following address:

Sacramento Municipal Utility District
Residential Equipment Efficiency Program, MS A203
P O Box 15830
Sacramento CA 95852-0830

Or email documents to: rebate.center@smud.org

Important: Applicants are advised to retain a copy of this form and copies of all attachments submitted to SMUD for your records. Please allow four to six weeks for SMUD to process and mail your rebate check.

