

Dated: February 23, 2005.

Sally L. Stroup,

Assistant Secretary for Postsecondary Education.

[FR Doc. E5-799 Filed 2-25-05; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

Energy Conservation Program for Consumer Products: Publication of the Petition for Waiver and Granting of the Application for Interim Waiver of Samsung Air Conditioning From the DOE Residential and Commercial Package Air Conditioner and Heat Pump Test Procedures (Case No. CAC-009)

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of petition for waiver, granting of application for interim waiver, and solicitation of comments.

SUMMARY: Today's notice publishes a Petition for Waiver from Samsung Air Conditioning (Samsung). The Samsung Petition requests a waiver of the test procedures applicable to residential and commercial package air conditioners and heat pumps. The Department of Energy (DOE) is soliciting comments, data, and information with respect to the Petition for Waiver.

Today's notice also grants an Interim Waiver to Samsung from the existing Department of Energy (DOE or Department) test procedures applicable to residential and commercial package air conditioners and heat pumps.

DATES: The Department will accept comments, data, and information with respect to this Petition for Waiver not later than March 30, 2005.

ADDRESSES: You may submit comments, identified by case number CAC-009, by any of the following methods:

- Mail: Ms. Brenda Edwards-Jones, U.S. Department of Energy, Building Technologies Program, Mailstop EE-2J, 1000 Independence Avenue, SW., Washington, DC 20585-0121.
- Telephone: (202) 586-2945. Please submit one signed paper original.
- Hand Delivery/Courier: Ms. Brenda Edwards-Jones, U.S. Department of Energy, Building Technologies Program, Room 1J-018, 1000 Independence Avenue, SW., Washington, DC 20585.

Docket: For access to the docket to read copies of public comments received, this notice, and the Petition for Waiver and Application for Interim

Waiver, go to the U.S. Department of Energy, Forrestal Building, Room 1J-018 (Resource Room of the Building Technologies Program), 1000 Independence Avenue, SW., Washington, DC (202) 586-9127, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays. Please call Ms. Brenda Edwards-Jones at the above telephone number for additional information regarding visiting the Resource Room. Please note: The Department's Freedom of Information Reading Room (formerly Room 1E-190 at the Forrestal Building) is no longer housing waiver petition materials.

FOR FURTHER INFORMATION CONTACT: Dr. Michael G. Raymond, U.S. Department of Energy, Building Technologies Program, Mail Stop EE-2J, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9611; e-mail:

Michael.Raymond@hq.doe.gov; or

Francine Pinto, Esq., or Thomas DePriest, Esq., U.S. Department of Energy, Office of General Counsel, Mail Stop GC-72, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585-0103, (202) 586-9507; e-mail:

Francine.Pinto@hq.doe.gov, or

Thomas.DePriest@hq.doe.gov.

SUPPLEMENTARY INFORMATION: Title III of the Energy Policy and Conservation Act (EPCA) sets forth a variety of provisions concerning energy efficiency. Part B of Title III (42 U.S.C. 6291-6309) provides for the "Energy Conservation Program for Consumer Products other than Automobiles." Part C of Title III (42 U.S.C. 6311-6317) provides for an energy efficiency program entitled "Certain Industrial Equipment," which is similar to the program in Part B, and which includes commercial air conditioning equipment, packaged boilers, water heaters, and other types of commercial equipment.

Today's notice involves both residential products under Part B, and commercial equipment under Part C. Both parts specifically provide for definitions, test procedures, labeling provisions, energy conservation standards, and the authority to require information and reports from manufacturers. With respect to test procedures, both parts generally authorize the Secretary of Energy to prescribe test procedures that are reasonably designed to produce results which reflect energy efficiency, energy use and estimated annual operating costs, and that are not unduly burdensome to conduct. (42 U.S.C. 6293, 6314)

Samsung's petition requests a waiver from both the residential and commercial test procedures for its DVM products, which are sold for both residential and commercial use.

As noted above, the test procedures for residential products appear at 10 CFR Part 430, Subpart B, Appendix M.

For commercial package air-conditioning and heating equipment, EPCA provides that the test procedures shall be those generally accepted industry testing procedures developed or recognized by the Air-Conditioning and Refrigeration Institute (ARI) or by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), as referenced in ASHRAE/IES Standard 90.1 and in effect on June 30, 1992. (42 U.S.C. 6314(a)(4)(A)) This section also provides for the Secretary of Energy to amend the test procedure for a product if the industry test procedure is amended, unless the Secretary determines that such a modified test procedure does not meet the statutory criteria. (42 U.S.C. 6314(a)(4)(B)) On October 21, 2004, the Department published a direct final rule, effective December 20, 2004, adopting ARI Standard 210/240-2003 for small commercial package air conditioning and heating equipment with capacities ≤65,000 Btu/h and ARI Standard 340/360-2000 for small commercial package air conditioning and heating equipment with capacities ≥65,000 Btu/h and <135,000 Btu/h. (69 FR 61962) The capacities of Samsung's DVM products sold for commercial use fall in a range covered by ARI Standard 340/360-2000. Therefore, it is the applicable test procedure for this commercial equipment.

The Department's regulations contain provisions allowing a person to seek a waiver from the test procedure requirements for covered consumer products. These provisions are set forth in 10 CFR 430.27. The Department proposed waiver provisions for covered commercial equipment on December 13, 1999 (64 FR 69597), as part of the commercial furnace test procedure rule. The waiver provisions for commercial equipment are substantively identical to those for covered consumer products. The Department published a final rule on October 21, 2004, codifying this process in 10 CFR 431.201, effective November 22, 2004. (69 FR 61915)

The waiver provisions allow the Assistant Secretary for Energy Efficiency and Renewable Energy to waive temporarily test procedures for a particular basic model when a petitioner shows that the basic model contains one or more design characteristics that prevent testing according to the

prescribed test procedures, or when the prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption as to provide materially inaccurate comparative data. (10 CFR Sections 430.27(a)(1), 431.201(a)(1)) Waivers generally remain in effect until final test procedure amendments become effective, thereby resolving the problem that is the subject of the waiver.

The waiver process also allows the Assistant Secretary for Energy Efficiency and Renewable Energy (Assistant Secretary) to grant an Interim Waiver from test procedure requirements to manufacturers that have petitioned DOE for a waiver of such prescribed test procedures. (10 CFR 430.27(a)(2), 431.201(a)(2)) An Interim Waiver remains in effect for a period of 180 days or until DOE issues its determination on the Petition for Waiver, whichever is sooner, and may be extended for an additional 180 days, if necessary.

On October 7, 2003, Samsung filed an Application for Interim Waiver and a Petition for Waiver from the test procedures applicable to residential and commercial package air conditioning and heating equipment. In particular, Samsung requested a waiver from the residential test procedures contained in 10 CFR Part 430, Subpart B, Appendix M, and, for commercial products, a waiver from the test procedures in ARI 210/240 (1989), and from the test procedures contained in ARI 210/240 (1994), that the Department, at the time, proposed to adopt. As discussed above, for Samsung's commercial products, the applicable test procedure is now ARI 340/360–2000. Samsung requests a waiver from the test procedures for the following basic product models:

Commercial: Any product using these outdoor units: RVMH100FAMOU, RVMC100FAMOU, RVMC070FAMOU. For these products, the applicable test procedure is ARI 340/360–2000.

Residential: Any product using these outdoor units: RVMH050CBMOU, RVMC050CBMOU. DVM indoor units: AVMKH020CAOU, AVMKC020CAOU, AVMKH032CAOU, AVMKC032CAOU, AVMKH040CAOU, AVMKC040CAOU, AVMCH052CAOU, AVMCC052CAOU, AVMCH072CAOU, AVMCC072CAOU, AVMCH105CAOU, AVMCC105CAOU, AVMBH020CAOU, AVMB020CAOU, AVMBH032CAOU, AVMB032CAOU, AVMBH040CAOU, AVMB040CAOU, AVMBH052CAOU, AVMB052CAOU, AVMBH072CAOU, AVMB072CAOU, AVMHH105CAOU, AVMHC105CAOU, AVMHH128CAOU, AVMHC105CAOU, AVMDH052CAOU, AVMD052CAOU,

AVMDH072CAOU, AVMD072CAOU, AVMWH020CAOU, AVMWC020CAOU, AVMWH032CAOU, AVMWC032CAOU, AVMWH040CAOU, AVMWC040CAOU, AVMWH052CAOU, AVMWC052CAOU, AVMWH072CAOU, AVMWC072CAOU. For these products, the applicable test procedure is the residential test procedure contained in 10 CFR Part 430, Subpart B, Appendix M.

Samsung seeks a waiver from the applicable test procedures because, Samsung asserts, the current test procedures evaluate its DVM (Digital Variable Multi) systems in a manner not representative of their true energy efficiency. Samsung claims that the energy usage of its DVM systems cannot be representatively measured using the current test procedures for the following reasons:

1. Unlike the DVM system, no product currently for sale in the U.S. offers the ability of a direct expansion system to vary its capacity every 20 seconds between 10% and 100% of the building design load, and no existing test procedure can provide a method for rating at those capacity points.

2. No existing test procedure requires calculating Integrated Part Load Values (IPLV) in the heating mode.

3. No existing test procedure accounts for the benefits of the DVM system's zoned cooling. No existing test standard allows for the inherent benefits of eliminating duct loss in a ductless system.

4. No existing test procedure provides a method for testing and rating a system that utilizes one outdoor unit and sixteen indoor units.

5. No existing test procedure can provide a method for rating systems where the type and capacity of the indoor unit can be mixed in the same system. The DVM system can mix together six different indoor models with seven different capacities, resulting in over 1,000 combinations.

The Samsung petition requests that DOE grant a waiver from existing test procedures until such time as a representative test procedure is developed and adopted for this class of products. Samsung intends to work with ARI to develop appropriate test procedures.

Samsung also requested an Interim Waiver to allow it to work with manufacturers of similar products and industry organizations to develop a test procedure that accurately reflects the operation and energy consumption of these types of units. An Interim Waiver will be granted if it is determined that the applicant will experience economic hardship if the Application for Interim

Waiver is denied, if it appears likely that the Petition for Waiver will be granted, and/or the Assistant Secretary determines that it would be desirable for public policy reasons to grant immediate relief pending a determination on the Petition for Waiver. (10 CFR 430.27(g), 431.201(e)(3))

Samsung's Application for Interim Waiver does not provide sufficient information to evaluate what, if any, economic hardship Samsung will likely experience if its Application for Interim Waiver is denied. However, in those instances where the likely success of the Petition for Waiver has been demonstrated, based upon DOE having granted a waiver for a similar product design, it is in the public interest to have similar products tested and rated for energy consumption on a comparable basis. For Samsung's commercial DVM products, it appears likely that the Petition for Waiver will be granted. The Samsung DVM products are quite similar to the Mitsubishi City Multi products, for which DOE granted a waiver. (69 FR 52660, August 27, 2004) The Mitsubishi waiver was granted because Mitsubishi's products cannot be tested according to the prescribed test procedures, for two reasons: (1) Test laboratories cannot test products with so many indoor units (up to sixteen—the practical limit is about five); and (2) there are 58 indoor unit models, so for each outdoor unit, there are well over 1,000,000 combinations, and it is impractical to test so many combinations.

Samsung's commercial outdoor units are capable of operating up to sixteen indoor units. Samsung's system also allows for over 1,000 combinations of indoor and outdoor units. The upper limit on the number of indoor units that are currently able to be tested is about six. The Samsung commercial systems (with 100k and 72k Btu/hr outdoor units) will therefore experience the same testing problems that prompted DOE to grant Mitsubishi a waiver.

Samsung's residential models, with a 50k Btu/hr outdoor unit, are capable of operating up to seven indoor units. This would still be difficult to test, but it is not clear that it could not be tested. However, although it may be possible to test Samsung's residential DVM systems, it is not practical to do so. For standard split system air conditioners with one indoor unit, DOE's regulations allow use of an alternative rating method (ARM) for generating efficiency ratings of different combinations of indoor and outdoor units. There is no such ARM for systems with more than one indoor unit, so Samsung would

have to test every combination offered for sale. With up to seven indoor units of six different types, thousands of combinations are possible, and it would not be practical to test so many combinations. This is the second of the two reasons for which Mitsubishi received a waiver; therefore, it appears likely that Samsung's residential DVM products will also be granted a waiver.

Therefore, Samsung's Application for an Interim Waiver from the DOE test procedure for its DVM systems is granted. Hence, it is ordered that:

The Application for Interim Waiver filed by Samsung is hereby granted for any Samsung DVM product using these outdoor units: RVMH100FAMOU, RVMC100FAMOU, RVMC070FAM0U, RVMC050CBM0U, and RVMH050CBM0U. Samsung shall not be required to test or rate these products on the basis of the currently applicable test procedure, which is ARI 340/360-2000 for the first three of the above outdoor units, which are commercial, and the test procedures contained in 10 CFR Part 430, Subpart B, Appendix M, for the latter two, which are residential.

This Interim Waiver is based upon the presumed validity of statements and allegations submitted by the company. This Interim Waiver may be removed or modified at any time upon a determination that the factual basis underlying the Application is incorrect.

The Interim Waiver shall remain in effect for a period of 180 days or until DOE acts on the Petition for Waiver, whichever is sooner, and may be extended for an additional 180-day period, if necessary.

The Department is publishing Samsung's Petition for Waiver in its entirety. The Petition contains no confidential information. The Department solicits comments, data, and information with respect to the Petition. The Department is particularly interested in receiving comments and views of interested parties concerning any alternate test procedures, modifications to test procedures, or alternative rating methods, which the Department could use to fairly represent the energy efficiency of Samsung's DVM products. Any person submitting written comments must also send a copy of such comments to the petitioner. 10 CFR 430.27(b)(1)(iv).

Issued in Washington, DC, on February 22, 2005.

David K. Garman,

Assistant Secretary, Energy Efficiency and Renewable Energy.

Samsung Air Conditioning

2865 Pellissier Place
Whittier CA 90601

October 7th 2003

Mr. Michael Raymond
Office of Building Research and Standards
United States Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0121

Dear Mr. Raymond

I am writing this letter to you in regard to the process for a Petition for Waiver and application for interim waiver of test procedures.

Samsung Air Conditioning, acting through its exclusive distributors in the USA, QuietSide Corporation hereby petitions the United States Department of Energy for a Waiver of all Test procedures and makes application for an interim waiver pursuant to the provisions of 10 CFR 431.29.

To support this petition, please consider the following submission.

1. Models Covered by the Scope of This Petition

The Samsung DVM system products consist of three capacities of Outdoor units, nominally 100,000 Btu/h, 72,000 Btu/h and 50,000 Btu/h, operating on 208/230V-3Ph-60Hz (100k & 72k units) and 208/230V-1Ph-60Hz (50k unit).

These units are available in both Cooling only and Heat Pump models (72k is Cooling only) and these outdoor units can be matched with six different types of indoor unit—

Built in Duct
Low Silhouette Duct
High Static Pressure Duct
4 Way Ceiling Cassette
1 Way Ceiling Cassette
High Wall Mount unit

These indoor units are available in capacities from 7,000 Btu/h to 44,000 Btu/h depending on the model type.

Appendix 1: Full model list and description of items covered by petition

2. Inherent Characteristics of the Samsung DVM System

The Samsung DVM system is a Commercial and Residential multi split, multi zoned variable refrigerant flow system that will provide either heating or cooling to the building as dictated by the individual zone temperature.

The 100k & 72k Outdoor units are capable of operating up to 16 indoor units, and the 50,000 Btu/h Outdoor unit is capable of operating up to 7 indoor units

All of the indoor units are capable of operating independently, with their own temperature and fan speed setting. Based on those controls the outdoor unit will then determine the cooling or heating capacity delivered into the zones. The outdoor unit uses the following inputs to determine the capacity required by the zone—

Set Temperature (User selectable)
Room temperature (Measured in the return air of the unit)
Refrigerant temperature at the Evaporator Inlet
Refrigerant temperature at the Evaporator Outlet
Outdoor ambient temperature

The Samsung DVM system cannot provide simultaneous Heating and Cooling functions

into the zones, however it will operate to satisfy the building demands in the following manner—

First unit calling for operation
Majority rules for the building
All other zone requirements

The Outdoor and Indoor units communicate the control information listed above every 20 seconds to calculate the indoor capacity required for the next 20 seconds of operation, allowing the unit to correctly assess the load characteristics of the building and adjust the capacity output accordingly.

The method for controlling the capacity is to vary the quantity of refrigerant flowing through the entire system at any given time.

The compressor(s) used in the Samsung DVM system are manufactured by Copeland in Sidney OH, and are a "Digital Scroll" type. This revolutionary compressor allows the system capacity to be varied from 10% to 100% depending on the indoor load. This is accomplished by allowing the fixed and orbiting scrolls inside the compressor to separate during unloaded periods, which stops refrigerant flow through the compressor and operates the compressor motor in an unloaded fashion, which greatly reduces the power consumed by the compressor.

The outdoor unit also uses variable speed condenser fan motor(s) which can alter condenser airflow to exactly suit the outdoor air temperature and building load to ensure the unit operates in the most efficient manner possible.

The Indoor units all utilize an Electronic Expansion Valve (EEV) which operates over a 480 step range from fully closed to fully open. This extensive range allows precise monitoring of the refrigerant quantity entering the evaporator coil and hence the cooling or heating capacity of the unit.

This type of product will almost always operate below the 100% capacity threshold (part load versus full load operation), and due to the enhanced capacity control range of the DVM system it can operate at 10% capacity if the building load has reduced to that point.

This type of operation is very similar to the Water Chilling units as detailed in ARI standard 550/590.

3. Waiver Requirements

Samsung/QuietSide seeks a waiver of all current test standards until a test standard can be developed and adopted that will provide the HVAC market in the United States (US) with a fair and accurate assessment of the DVM system energy consumption and efficiency levels.

The current test procedures in place may evaluate the DVM system in a manner that is not representative of the true energy efficiency of the DVM system and provide inaccurate ratings which would be used to compare the DVM system with other forms of Air Conditioning/Heat Pumps in the market.

Due to the constant variation of the system capacity it is patently inaccurate to rate the unit at its full load capacity or at any other fixed point of capacity when the unit capacity is constantly varying between 10% and 100% of the capacity.

Any test method utilized to rate these types of full variable refrigerant flow units should be indicative of the ability of these units to operate at 10%, 20%, 30% * * * 100% as this is the true operation of the unit in the field.

During 2002 a committee was formed by ARI to discuss alternate test methods for this type of multi split variable refrigerant flow unit, however to this date no additional test methodology has been adopted by the committee. As the Department is aware the timeframe for drafting and approving such a standard may be months or even years. The International Standards Organization have been currently working on a standard of their own for several years at this point in time.

Due to the lack of an approved standard at this present time, the energy savings provided by the DVM System would not be accurately represented should it be tested under the current standards. This inaccurate representation will have a negative impact upon the sales of both the Samsung DVM system and other Variable Refrigerant Volume systems. This will not only greatly affect the business revenue of Quietside and Samsung, but it will prevent the country from realizing energy savings, particularly in the area of peak load usage reduction.

To summarize, the test waiver for the DVM system is requested for the following reasons:

A. No product currently for sale in the USA offers the ability of a direct expansion system to vary its capacity every 20 seconds between 10% and 100% of the building design load, and no existing test standard can provide a method for providing ratings at those capacity points.

B. No existing test standard allows for IPLV to be calculated in the Heating mode.

C. No existing test standard provides for the benefits of diversity due to the inherent ability of the DVM System to provide zoned cooling. Also no existing test standard provides for credit for negating duct loss from the nonducted units available with this system.

D. No existing test standard provides a method to test and rate a system that utilizes one outdoor unit and 16 indoor units.

E. No existing test standard can provide a method for rating systems where the type and capacity of indoor unit can be used. The DVM system can mix 6 different indoor models in up to 7 different capacities. For example a 100,000 Btu/h system can use 2 x 11,000 Btu/h units of different models, 2 x 13,000 Btu/h units of additional models, 2 x 24,000 Btu/h models from additional models

and still not be at 100% capacity load. The total number of unit combinations available is over 1,000, not including the ability to over or under size the indoor capacity with regard to the outdoor unit capacity.

4. Similar Equipment Currently Offered for Sale in the U.S.

Sanyo
Mitsubishi Comfort Systems
Mitsubishi Electric U.S.

The above companies currently offer similar systems for sale in the United States, these systems offer similar advantages and energy savings inherent to all Variable Refrigerant Flow units, however no other manufacturer utilizes the "Digital Scroll" technology and the capacity range of the DVM system.

Mitsubishi Electric U.S. currently has a test waiver proposal in front of the Department that has been published for comment in the **Federal Register**.

5. Reasons for Granting a Test Waiver to the DVM System

The Samsung DVM System is currently offered for sale in the U.S. marketplace, however the lack of an existing or proposed test standard has resulted in the unit having to be provided with Energy Guide labels detailing a 10 SEER, the lowest possible rating. The true SEER of the DVM system would be a minimum of 50% higher.

This failure to correctly rate the energy efficiency of the unit also does not allow the performance of the DVM system to be certified by the ARI (no applicable test standard or test availability), which causes a misconception of the efficiency level of the DVM system and provides wholly inaccurate data to the U.S. consumer.

These types of Variable Refrigerant Flow products are very well established in the Asian and European markets, based on the high levels of efficiency and comfort provided to the end user. U.S. consumers should not be excluded from these benefits due to the lack of an applicable test standard, and should not be beholden to inaccurate data that will heavily disadvantage the DVM system or any other Variable Refrigerant Flow system in a very competitive marketplace.

Independent testing of the DVM system against conventional Air conditioning systems shows an average of over 30% reduction on energy consumption, not even including the reduction in peak load operating consumption.

Samsung test data, showing EER values (Watt for Watt) shows almost a full EER point increase over VAV and compressor control units, and a similar increase over an Inverter Variable Refrigerant Flow system. This test data is included in Appendix 2.

The disadvantage of the lack of an applicable test standard will not only impact the potential sales of the DVM system, but also result in economic losses not only for Samsung and Quietside but also for the Copeland Corporation who have spent considerable time and resources in developing the "Digital Scroll" compressors.

Samsung/Quietside formally urges the Department to grant an interim waiver from existing test standards and allow Quietside to work in conjunction with the other manufacturers of Variable Refrigerant Flow products and the various organizations involved in our industry to formulate a test standard that accurately reflects the operation and energy consumption of these types of units.

Should the Department have any comments or questions regarding this petition please do not hesitate to contact the undersigned.

Yours truly,

John Miles

Director of Engineering and Technical Support

Appendix 1 : Full Model List Samsung DVM System Products

Appendix 2 : Samsung performed Tests detailing Energy Efficiency versus Delivered Capacity for the DVM System

I hereby certify that copies of this petition and application for Interim Waiver of test standards have been mailed to the following companies who are known to market similar Variable Refrigerant Flow products

Mitsubishi Electric US
4505-A Newpoint Place
Lawrenceville GA 30043
Attn: William Rau, President, HVAC
Advanced Products Division

Sanyo
1165 Allgood Road, Suite #22
Marietta, GA 30062
Attn: Tetsushi Yamashita, Engineering
Manager, HVAC

Mitsubishi Heavy Industries Climate Control Inc
3030 E. Victoria Street
Rancho Dominguez CA 90221
Attn: Caesar Ceballos, Technical Support
Manager

APPENDIX 1.—SAMSUNG DVM SYSTEM PRODUCTS AND CAPACITIES

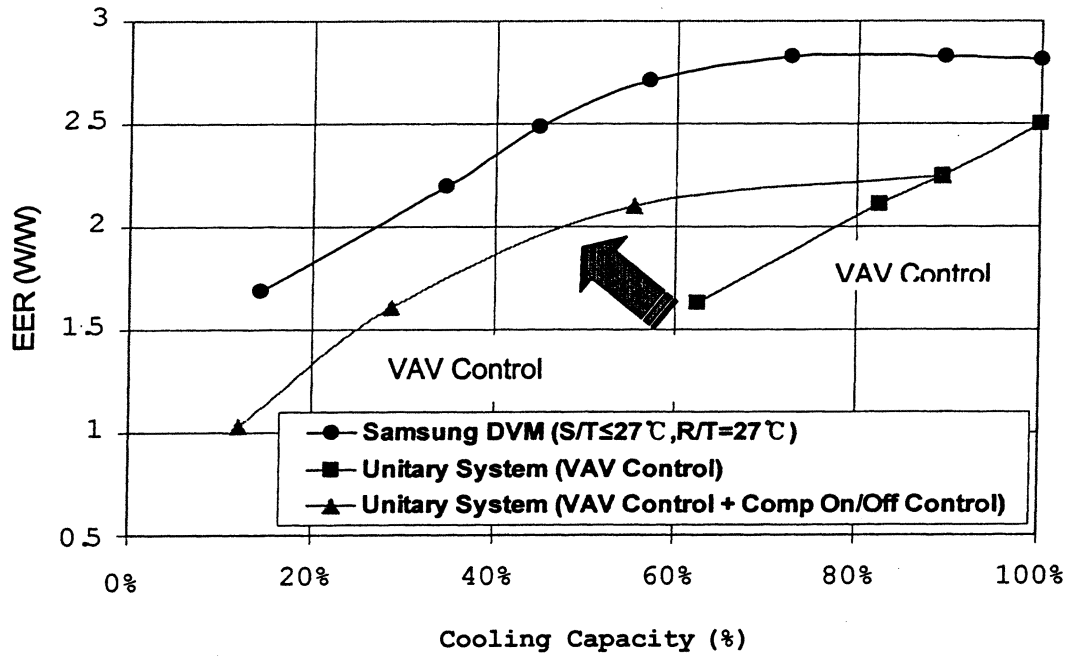
2003 Model	Description	Btu/h cooling/ heating
RVMH100FAMOU	Condensing Unit Heat Pump	95,500/107,500
RVMC100FAMOU	Condensing Unit Cooling Only	95,500/107,500
RVMH050CBMOU	Condensing Unit Heat Pump	50,000/55,000
RVMC050CBMOU	Condensing Unit Cooling Only	50,000/55,000
RVMC070FAMOU	Condensing Unit Cooling Only	76,000/85,000
AVMKH020CAOU	1-Way Ceiling Cassette Heat Pump	7,000/7,500
AVMKC020CAOU	1-Way Ceiling Cassette Cooling Only	7,000/7,500
AVMKH032CAOU	1-Way Ceiling Cassette Heat Pump	11,000/12,000
AVMKC032CAOU	1-Way Ceiling Cassette Cooling Only	11,000
AVMKH040CAOU	1-Way Ceiling Cassette Heat Pump	13,500/14,500

APPENDIX 1.—SAMSUNG DVM SYSTEM PRODUCTS AND CAPACITIES—Continued

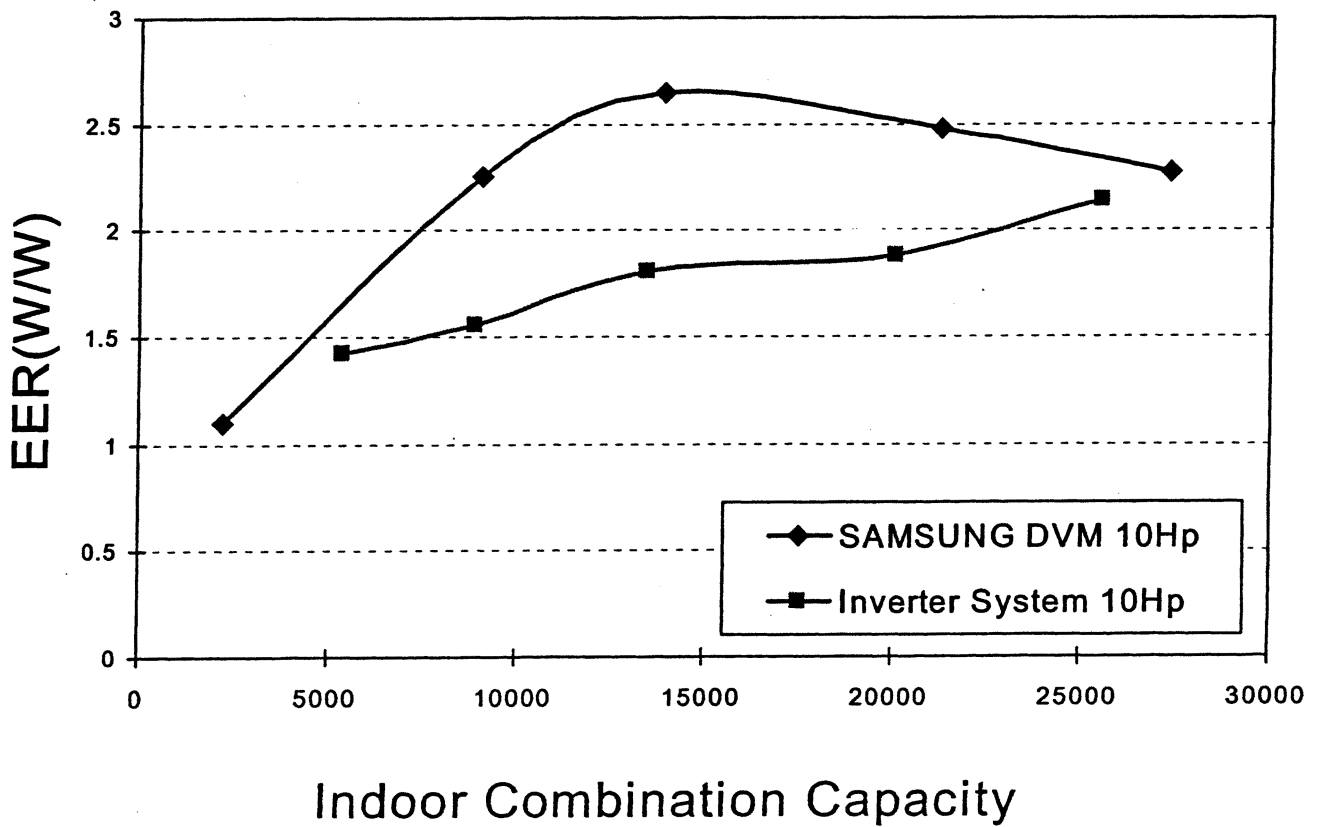
2003 Model	Description	Btu/h cooling/ heating
AVMKC040CAOU	1-Way Ceiling Cassette Cooling Only	13,500
AVMCH052CAOU	4-Way Ceiling Cassette Heat Pump	18,000/19,000
AVMCC052CAOU	4-Way Ceiling Cassette Cooling Only	18,000
AVMCH072CAOU	4-Way Ceiling Cassette Heat Pump	24,000/26,000
AVMCC072CAOU	4-Way Ceiling Cassette Cooling Only	24,000
AVMCH105CAOU	4-Way Ceiling Cassette Heat Pump	36,000/39,000
AVMCC105CAOU	4-Way Ceiling Cassette Cooling Only	36,000
AVMBH020CAOU	Built-In Duct Heat Pump	7,000/7,500
AVMBC020CAOU	Built-In Duct Cooling Only	7,000
AVMBH032CAOU	Built-In Duct Heat Pump	11,000/12,000
AVMBC032CAOU	Built-In Duct Cooling Only	11,000
AVMBH040CAOU	Built-In Duct Heat Pump	13,500/14,500
AVMBC040CAOU	Built-In Duct Cooling Only	13,500
AVMBH052CAOU	Built-In Duct Heat Pump	18,000/19,000
AVMBC052CAOU	Built-In Duct Cooling Only	18,000
AVMBH072CAOU	Built-In Duct Heat Pump	24,000/26,000
AVMBC072CAOU	Built-In Duct Cooling Only	24,000
AVMHH105CAOU	HSP Duct Heat Pump	36,000/39,000
AVMHC105CAOU	HSP Duct Cooling Only	36,000
AVMHH128CAOU	HSP Duct Heat Pump	44,000/47,000
AVMHC128CAOU	HSP Duct Cooling Only	44,000
AVMDH052CAOU	Low Silhouette Duct Heat Pump	18,000/19,000
AVMDC052CAOU	Low Silhouette Cooling Only	18,000
AVMDH072CAOU	Low Silhouette Duct Heat Pump	24,000/26,000
AVMDC072CAOU	Low Silhouette Cooling Only	24,000
AVMWH020CAOU	High Wall Mount Heat Pump	7,000/7,500
AVMWC020CAOU	High Wall Mount Cooling Only	7,000
AVMWH032CAOU	High Wall Mount Heat Pump	11,000/12,000
AVMWC032CAOU	High Wall Mount Cooling Only	11,000
AVMWH040CAOU	High Wall Mount Heat Pump	13,500/14,500
AVMWC040CAOU	High Wall Mount Cooling Only	13,500
AVMWH052CAOU	High Wall Mount Heat Pump	18,000/19,000
AVMWC052CAOU	High Wall Mount Cooling Only	18,000
AVMWH072CAOU	High Wall Mount Heat Pump	24,000/26,000
AVMWC072CAOU	High Wall Mount Cooling Only	24,000

BILLING CODE 6450-01-P

Appendix 2 - DVM System Vs. UNITARY System



Inverter versus DVM System



[FR Doc. 05-3782 Filed 2-25-05; 8:45 am]

BILLING CODE 6450-01-C

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket Nos. EL00-95-125 and EL00-98-112]

San Diego Gas & Electric Company, Complainants v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, Respondents; Investigation of Practices of the California Independent System Operator and the California Power Exchange; Notice of Compliance Filing

February 18, 2005.

On February 11, 2005, the City of Pasadena (Pasadena) submitted its emissions calculations in compliance with the Commission's Order issued November 23, 2004, in Docket Nos. EL00-95-100 and EL00-98-088, 109 FERC ¶ 61,218.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant and all the parties in this proceeding.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC

Online service, please e-mail FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: 5 p.m. eastern time on March 4, 2005.

Linda Mitry,

Deputy Secretary.

[FR Doc. E5-787 Filed 2-25-05; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EC05-20-000, et al.]

PPL Sundance Energy, LLC, et al.; Electric Rate and Corporate Filings

February 18, 2005.

The following filings have been made with the Commission. The filings are listed in ascending order within each docket classification.

1. PPL Sundance Energy, LLC, PPL Energy Plus, LLC, Arizona Public Service Company

[Docket No. EC05-20-000]

Take notice that on February 11, 2005, PPL Sundance Energy, LLC (PPL Sundance), PPL Energy Plus, LLC and Arizona Public Service Company (APS) (collectively, Applicants) filed with the Federal Energy Regulatory Commission a response to a deficiency letter issued on January 28, 2005, by Jamie L. Simler, Director, Division of Tariffs and Market Development—West, in connection with a section 203 application filed for authorization to acquire a 450 megawatt generating facility owned by PPL Sundance. Applicants request confidential treatment of certain supporting data contained in the filing.

Comment Date: 5 p.m. eastern time on March 2, 2005.

2. Duke Power, a Division of Duke Power Corporation

[Docket Nos. ER96-110-013 and EL05-4-000]

Take notice that on February 14, 2005, Duke Power, a division of Duke Energy Corporation (Duke Power) submitted a filing in compliance with the Commission's order issued December 15, 2004, in Docket No. ER96-110-010, *et al.*, 109 FERC ¶ 61,270.

Duke Power states that copies of the filing were served on parties on the official service list in the above-captioned proceed as well as its State commissions.

Comment Date: 5 p.m. eastern time on March 4, 2005.

3. Idaho Power Company

[Docket No. ER97-1481-007]

Take notice that on February 17, 2005, Idaho Power (IPC) submitted an amendment to its January 19, 2005, filing regarding IPC's revised generation market power screen analysis.

Comment Date: 5 p.m. eastern time on February 25, 2005.

4. PacifiCorp PPM Energy, Inc.

[Docket No. ER97-2801-005 and ER03-478-004]

Take notice that on February 14, 2005, PacifiCorp and PPM Energy, Inc. tendered for filing an updated market power analysis.

Comment Date: 5 p.m. eastern time on March 4, 2005.

5. Pacific Gas and Electric Company

[Docket No. ER03-1091-007]

Take notice that on February 11, 2005, Pacific Gas and Electric Company (PG&E) tendered for filing an amendment to its December 30, 2004, compliance filing regarding a Generator Special Facilities Agreement and Generator Interconnection Agreement between PG&E and Duke Energy Morro Bay LLC (Duke Morro Bay).

PG&E states that copies of this filing have been served upon Duke Morro Bay, the California Independent System Operator Corporation and the California Public Utilities Commission.

Comment Date: 5 p.m. eastern time on March 4, 2005.

6. The Detroit Edison Company

[Docket Nos. ER04-14-006 and EL04-29-006]

Take notice that on February 11, 2005, The Detroit Edison Company (Detroit Edison) filed an amendment to its Ancillary Services Tariff, First Revised Volume No. 5, filed on December 2, 2004 to repaginate the tariff sheets in compliance with Order No. 614.

Comment Date: 5 p.m. eastern time on March 4, 2005.

7. California Independent System Operator Corporation

[Docket No. ER05-277-001]

Take notice that on February 14, 2005, the California Independent System Operator Corporation (ISO) submitted a filing in compliance with the Commission's order issued January 28, 2005, in Docket No. ER05-277-000, 110 FERC ¶ 61,082.

The ISO states that the filing has been served on all parties on the official service list for this proceeding. In addition, the ISO states that it has posting the filing on the ISO home page.