ALJ/MEG/tcg

Decision 92 03 007

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's own motion to establish rules and procedures governing utility demand-side management.	R.91-08-003 (Filed August 7, 1991)
Order Instituting Investigation on the Commission's own motion to establish procedures governing demand-side management and the competitive procurement thereof.	I.91-08-002

ORIGINAL

ORDER CORRECTING ERROR

The Commission has been informed of an inadvertent omission of the Appendix to Attachment 1 of Decision (D.) 92-02-075.

Under Resolution A-4661,

IT IS ORDERED that the attached Appendix entitled "DSM Program Terms and Definitions" should be added to Attachment 1 of D.92-02-075.

This order is effective today.

Dated MAR 05 1992, at San Francisco, California.

Wesley Franklin for

NEAL J. SHULMAN
Executive Director

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY

Neal J. Shulman

NEAL J. SHULMAN, Executive Director

pb

ATTACHMENT 1

DSM PROGRAM TERMS AND DEFINITIONS

Lost Opportunities

Efficiency measures which offer long-lived, cost-effective savings that are fleeting in nature. If these measures are not exploited promptly, the opportunities are lost irretrievably or rendered much more costly to achieve.

Cream Skimming

Designing and implementing only the lowest cost energy efficiency programs and load management programs which promote energy efficiency while leaving behind other cost-effective opportunities for energy efficiency.

Resource Value

A measure of the extent to which energy efficiency and load management programs reliably reduce utilities' fuel and/or capacity needs.

I. Conservation and Energy Efficiency Programs

Conservation programs are defined as programs which have the effect of reducing consumption of at least one fuel during most or many hours of operation of the equipment or building affected by the measure. Energy efficiency programs are defined as programs which reduce energy use for a comparable level of service.

Residential Conservation and Energy Efficiency

Residential Information Programs: Programs intended to provide customers with information regarding generic (not customer-specific) conservation opportunities. For these programs, the information is unsolicited by the customer. Programs which provide incentives in the form of unsolicited coupons for discounts on low cost measures are included.

Residential Energy Management Services: Programs intended to provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and recommendations are based on the customer's recent billing

history and/or customer-specific information regarding appliance and building characteristics.

Residential Weatherization Retrofit Incentives: Programs which provide financial incentives (rebates, low-interest loans) to install weatherization measures in existing buildings. The incentives are solicited by the customer and based on the customer's billing history and/or customer-specific information regarding appliance and building characteristics. Incentives are predominantly weatherization measures that affect the building shell. Incentive payments for other measures (nonbuilding shell) are included if provided in connection with building shell materials.

Residential New Construction: Programs which provide financial incentives or significant technical assistance to builders of new residential structures. The incentives are intended to lead to the installation of more energy efficient materials or appliances than would have been installed in the absence of the program.

Appliance Efficiency Incentives: Programs which provide incentives to customers in existing residential structures. The incentives are intended to lead to the installation of a more efficient appliance than would have been installed in the absence of the program. Incentives are paid (to manufacturers, salespersons, or customers) for the replacement of an existing appliance or the installation of a new appliance in an existing residential building.

Direct Assistance: Programs which are intended to provide assistance to low income or other "target" customer groups. Assistance consists primarily of full subsidies of the conservation measures. The primary purpose of the program is to serve an equity objective in assisting customers who are highly unlikely or unable to participate in other residential programs.

Master Meter: Program intended to reduce energy usage in existing residential structures which have master meters by replacing the master meter with individual meters.

Other Residential Conservation Programs: Any residential conservation program or program activities not defined above.

Nonresidential Conservation and Energy Efficiency

Nonresidential Information Programs: Programs intended to provide customers with information regarding generic (not customer-specific) conservation opportunities. For these programs, the information is unsolicited by the customer.

Programs which provide incentives in the form of unsolicited coupons for discounts on low cost measures are included.

Commercial Energy Management Services: Services to customers in commercial buildings which provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and is based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

Industrial Energy Management Services: Services to customers in industrial facilities which provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and is based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

Agricultural Energy Management Services: Services to customers in agricultural facilities which provide customer assistance in the form of information on the relative costs and benefits to the customer of installing measures or adopting practices which can reduce the customer's utility bills. The information is solicited by the customer and is based on the customer's recent billing history and/or customer-specific information regarding appliance and building characteristics.

Commercial Energy Efficiency Incentives: Programs which provide incentives to customers in existing commercial buildings. The incentives are intended to lead to the installation of a more efficient device than would have been installed in the absence of the program.

Industrial Energy Efficiency Incentives: Programs which provide incentives to customers in existing industrial facilities. The incentives are intended to lead to the installation of a more efficient device than would have been installed in the absence of the program.

Agricultural Energy Efficiency Incentives: Programs which provide incentives to customers in existing agricultural facilities. The incentives are intended to lead to the installation of a more efficient device than would have been installed in the absence of the program.

Nonresidential New Construction: Programs which provide financial incentives or significant technical assistance to

builders of new nonresidential structures. The incentives are intended to lead to the construction and operation of equipment which is more efficient than would have occurred in the absence of the program.

Street Lighting Conversion: Programs designed to replace less efficient lighting equipment with more efficient lighting equipment in utility-owned street lights.

Other Nonresidential Conservation/Energy Efficiency Programs: Any nonresidential conservation program or program activities not defined above.

System Efficiency

Conservation Voltage Reduction: Programs which improve utility generation system efficiency by regulating the voltage levels of delivered electricity.

Other System Efficiency Programs: Any other program intended to improve the efficiency of utility-owned transmission or distribution facilities.

II. Load Management

Load management programs are defined as any program which reduces electric peak demand or has the primary effect of shifting electric demand from the hours of peak demand to non-peak time periods.

Residential Air Conditioner Cycling: Programs which involve the installation of cycling devices on residential air conditioning equipment. Air conditioning loads are interrupted ("cycled" or "shed") by the utility at times of peak load.

Residential Time-of-Use: Programs intended to reduce customer bills and shift hours of operation of appliances to off peak periods through the installation of a time-of-use meter and the availability of time-differentiated rates.

Pool Pump Timer: Programs which involve the promotion of shifting pool pump hours of operation from on-peak to off-peak periods.

Nonresidential Air Conditioner Cycling: Programs which involve the installation of cycling devices on air conditioning equipment in nonresidential buildings. Air conditioning loads are

interrupted ("cycled" or "shed") by the utility at times of peak load.

Nonresidential Time-of-Use: Program intended to reduce customer bills and shift hours of operation of equipment from on-peak to off-peak periods through the installation of a time-of-use meter and the availability of time-differentiated rates. Mandatory TOU participation is not included.

Thermal Energy Storage: Programs which provide financial incentives to customers or builders to install thermal storage equipment and materials capable of fully or partially storing thermal energy during nonpeak periods for use during peak demand periods.

Interruptible/Curtailable: Programs which provide financial incentives in the form of reduced billing charges to customers in exchange for the capability of utility-initiated interruption or curtailment of service. Terms of the reduced service agreement (frequency, duration, penalty clauses, incentive levels, cost of equipment) are agreed to by contract.

Other Load Management: Any other load management program not defined above.

III. Fuel Substitution

Fuel Substitution programs are defined as programs which are intended to substitute (replace) energy using equipment of one fuel with a different fuel. The programs are intended to influence the customer's choice between electric or natural gas service from the utility, with the effect of increasing sales/consumption from one fuel and decreasing sales/consumption from the competing fuel. The reference point for classifying a program as a fuel substitution program is the effect on fuel choice of the customer, not the effects on utility generation.

Electric Fuel Substitution: Programs which promote the customer's choice of electric service for an appliance, group of appliances, or building rather than the choice of service from a different fuel. These programs increase customers' electric usage and decrease usage of utility-supplied natural gas. Electric fuel substitution includes Bypass Deferral Special Contracts which cause the deferral or avoidance of the installation of gas-fired equipment which would have been used to produce electricity for the customer's use, and are negotiated and established pursuant to CPUC procedures. Contract provisions may include a discounted rate, conservation and/or load

management incentives, or a combination of rate and conservation/load management incentives.

Gas Fuel Substitution: Programs which promote the customer's choice of natural gas service for an appliance, group of appliances, or building rather than the choice of service from a different energy source. These programs increase customer usage of natural gas and decrease usage of an alternative fuel.

IV. Load Retention and Load Building

Load Retention and Load Building programs are defined as programs which have the effect of increasing the annual sales/consumption of one fuel without affecting the customer's use of other fuels.

Electric Load Retention: Consists of Bypass Deferral Special Contracts, established and negotiated pursuant to adopted CPUC procedures, which defer or prevent a customer decision to terminate or substantially reduce electric utility service with no corresponding establishment of incremental utility-supplied natural gas purchases. Contract provisions may include a discounted rate, conservation and/or load management incentives, or a combination of rate discount and conservation/load management incentives.

Electric Load Building: Programs which have the effect of increasing electric annual sales/consumption without changes in the customer's use of alternate fuels. Increased sales/consumption is promoted by increased usage of existing electric equipment, or the addition of electric equipment/service when no meaningful alternative fuel source is available. Electric Load Building includes Incremental Sales Contracts negotiated and established pursuant to adopted CPUC procedures.

Natural Gas Load Retention: Consists of programs which provide an incentive to defer or prevent a customer decision to terminate or substantially reduce utility natural gas service, with no corresponding establishment of incremental utility-supplied electricity use by the customer.

Natural Gas Load Building: Programs which have the effect of increasing gas annual sales/consumption without changes in the customer's use of alternate fuels. Increased sales/consumption is promoted by increased usage of existing natural gas equipment, or the addition of natural gas equipment/service when no meaningful alternative fuel source is available.

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APPENDIX

V. Measurement and Evaluation Programs

Measurement and Evaluation activities are defined as programs and activities intended to establish or improve the ability to measure and evaluate the impacts of demand-side management programs, collectively or individually.

Load Metering: Activities related to the collection, analysis and reporting of data obtained through the use of metering devices. Includes metering at the level of appliances within buildings as well as total building metering and class load metering. Metering activities are conducted on samples of customers for the primary purpose of obtaining consumption and demand estimates which are representative of a customer class, not of DSM program participants.

Customer Surveys: Activities related to the collection, analysis and reporting of data obtained from customer contacts (e.g. mail, telephone, on-site) regarding building characteristics, appliance holdings, energy efficiency measures in place, customer attitudes, or other information related to current or future energy usage patterns. Survey activities are conducted on samples of customers for the primary purpose of obtaining information about customers which are representative of a customer class not of DSM program participants.

New Technology Testing: Activities related to the measurement and assessment of demand-side technologies for possible inclusion in future C&LM programs. Costs associated with in-site testing and evaluation of measures or devices in a pilot program are included.

Program Evaluation: Activities related to the collection, analysis, and reporting of data for purposes of measuring program impacts from past, existing or potential program impacts. Activities include program-specific evaluations as well as activities which evaluate more generic issues which are relevant to more than one program. Costs associated with the preparation of this Reporting Requirements Manual to the CPUC are included as a separate program within this category.

Other Measurement: Activities not listed above which contribute to the measurement of past, current, or future demand side program impacts.

VI. Other DSM Activities

Other DSM activities are defined as a residual category to capture expenditures which cannot be meaningfully included in the previously-defined DSM program categories. A primary element includes general administrative and support costs which cannot readily be attributable to the implementation of any specific DSM program.

Program Element Definitions

Description: "Program element" refers to either customer classes within sectors or to end uses/measures within customer classes or customer sub-classes.

Customer classes are defined by either rate schedule, SIC code, or energy consumption characteristics. "End use" refers to the purpose for which energy is used (see below); "measure" refers to specific customer actions which reduce or otherwise modify energy end use patterns.

Customer Sub-Class Program Element Definitions: For the residential sector the following three types of program element sub-class designations should be used:

Single Family(SF)
Multi-Family(MF)
Mobile Home (MH)

For the nonresidential sector, sub-class program elements consist of customers classified by SIC code and size (consumption/demand). The size program element designations are as follows:

Large (greater than 500 kw)
Medium (less than 500kw and more than 49kw)
Small(less than 50kw)

Customer SIC-based program elements consist of the further dissaggregation of "industrial" (per the program definition) into the four sub-class designations used by the CEC in the CFM process (TCU, Assembly, Process, and Mining/Extraction) and dissagregation of the Commercial Buildings into the 10 SIC-based building types used by the CEC.

End Use Program Element Definitions: Recommended end use definitions/acronyms for the residential sector are as follows :

SPHT(e)=space heating, electric;
SPHT(HP)=space heating, heat pump;
SPHT(g)=space heating, natural gas;
SPCL(C)=central electric air conditioner;
SPCL(Ev)=evaporative cooler;
SPCL(HP)=space cooling, heat pump;
SPCL(W)=window air conditioner;
WATHT(e)=electric water heating;
WATHT(g)=gas water heating;
REFR=refrigerator;
FREEZ=freezer;
COOK(e)=electric range;
COOK(g)=gas range;
LGHT=lighting;
PLPMP=pool pump.

Recommended end use designations/acronymns for the commercial building sector are as follows:

LGHT(I)=indoor lighting;
LGHT(O)=outdoor lighting;
AC(e)=air conditioning, electric;
AC(g)=air conditioning, natural gas;
VENT=ventilation(motors/fans to operate HVAC equip);
SPHT(e)=electric space heating;
SPHT(g)=natural gas space heating;
WATHT(e)=electric water heating;
WATHT(g)=natural gas water heating;
REFR=refrigeration
COOK(e)=electric cooking;
COOK(g)=natural gas cooking;
MISC(e)=miscellaneous electric;
MISC(g)=miscellaneous natural gas.

Other Terms:

Useful Life: The length of time (years) for which the load impacts of a DSM measure/device is expected to last.

Load Impact Adjustments: Refers to any adjustments made to load impacts for purposes of valuing the impacts in the context of cost-effectiveness evaluation. The primary example would be the use of "Net-to-Gross" factors, as defined and used in the

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Standard Practice Manual for Economic Analysis of Demand-Side Management Programs, December, 1987. Other examples would include estimates of the amount and rate or decay in effectiveness of the measures, and therefore the decline in load impacts over time.

(END OF ATTACHMENT 1)