LISA D. NORDSTROM
Lead Counsel

September 30, 2014

Attn: Filing Center
Public Utility Commission of Oregon
550 Capitol Street NE, Suite 215
P.O. Box 2148
Salem, Oregon 97308-2148

Re: Idaho Power Company's Advice No. 14-10
Modifications to Schedule 83, Building Efficiency Program

Dear Sir or Madam:

Idaho Power Company ("Idaho Power" or "Company") herewith transmits for filing proposed revisions to Schedule 83, Building Efficiency Program ("Building Efficiency" or "Program"). Please find attached an acronym list for reference in reviewing the Company's filing.

Building Efficiency is an incentive-based program designed to help recover a portion of the costs of designing and building energy efficiency features into new and renovated commercial construction projects. Building Efficiency uses a prescriptive approach to provide incentives for specific lighting, air conditioning, building shell, and control options. During 2013, Idaho Power claimed 10,988,934 kilowatt-hours ("kWh") of annual energy savings for the Program. During 2013, the Company did not claim any annual energy savings for the Program in its Oregon service area.

In an effort to encourage participation in the Program, and to keep the Program incentive measures current and reflective of market practices, the Company is proposing updates to this Schedule. The proposed Program revisions outlined in this request are consistent with the Program provisions currently in effect in the Company's Idaho jurisdiction. Also, to improve readability of the Schedule, ensure that the measures are consistent with other Demand-Side Management ("DSM") tariff schedules, and to list the measures in a meaningful manner, the Company proposes modifications to the layout of the Schedule itself. The proposed change to the layout will group incentives by measure type, similar to how they appear in the Company's Easy Upgrades Program Schedule 80.

The majority of the modifications of measures and incentives proposed in this filing are necessary to better align the overall Program offering with current savings and cost data provided by a recently completed program evaluation study performed by third-party consultant, ADM Associates Inc. ("ADM"). Using information from this source, the Company conducted an economic analysis of the existing energy-efficient activities or "measures" offered under the Program. Idaho Power also contracted with ADM to develop a Technical Reference Manual ("TRM") for the Program. In the TRM, ADM reviewed and updated measure kWh savings, measure costs, and measure specifications for the Program. The Company's cost-effectiveness models were updated to reflect the new information which prompted several of the proposed changes. The reduced savings reported in the TRM was the primary driver for the non cost-effectiveness of the three measures.

P.O. Box 70 (83707)
1221 W. Idaho St.
Boise, ID 83702

Based on this comprehensive cost-effectiveness analysis, the Company proposes to make a number of modifications to the measures and incentives applicable under "Lighting," "Air Conditioning (HVAC)," "Building Shell," and "Controls" incentive categories. The Company also proposes to add two measure categories: "Appliances With Electric Water Heating" and "Refrigeration" to the Program based on information provided by ADM.

The Company also proposes removing one measure determined to no longer be cost-effective, while the Company is seeking approval of an exception as allowed by Order No. 94-590, issued in UM 551 for three non cost-effective measures that remain in the Program. In accordance with these exception guidelines, if a measure is identified to have unquantifiable non energy benefits, is included for consistency with other DSM programs in the region, and/or the measure helps to increase participation in a cost-effective program, the Company proposes to continue the offering. The Company's request for an exception is included as Attachment 1 to this filing.

The changes to the schedule are as follows:

Incentive Structure:

The Company proposes deleting unnecessary language regarding the eligibility requirement for projects to be started after January 1, 2006, because this requirement is no longer applicable.

In an effort to increase Program participation, the Company is proposing a Professional Assistance Incentive equal to 10 percent of the Program participant's total incentive amount up to $2,500 paid to the design professional (architect or engineer) that supports the Program participant with the technical aspects of the project and compiles the supporting documentation that is required to complete the incentive process. The architect and/or engineer of a project works closely with the participant to provide technical assistance during project design and construction. The assistance is necessary to implement energy efficiency design and strategies into the project during the early stages of design, when they are typically at their least cost. If energy efficiency measures are not implemented in these early stages, that opportunity may be lost. The architect or engineer's technical support of the project will streamline the process and increase a Program participant's satisfaction with the incentive process.

Table 1 – Lighting

The Company proposes to increase and expand interior lighting measures. Based on improvements in lighting technology in the marketplace, the Company has determined that greater energy savings are achievable. Increased incentives and an addition of a higher target of energy savings are expected to increase customer satisfaction and participation in the Program. The Company also seeks approval to continue offering one non cost-effective measure, Daylight Photo Controls, based on the request outlined in Attachment 1 to this filing.

The proposed modifications to Table 1 are as follows:

- Increase Part A incentive to $0.10 per sq ft.
- Increase Part B incentive to $0.20 per sq ft.
- Add Part C incentive at $0.30 per sq ft.
- Add a non-standard interior lighting incentive. A project that is at least 60 percent below code and/or has high operating hours can receive an incentive of $0.18 per kWh saved, annually up to 100 percent of the incremental cost between a base and efficient lighting system.

- Remove redundant language from the Daylight Photo Controls measure regarding non-eligibility if the measure is already required by code. This language is already present in the Incentive Structure section.
- Remove redundant language from the Occupancy Sensors measure regarding non-eligibility if the measure is already required by code. This language is already present in the Incentive Structure section.

Table 2 – Air Conditioning (HVAC)

The Company proposes to revise and expand HVAC measures. The Company proposes to modify existing measures by adjusting the incentive amount and/or modifying the measure specifications to better align with national standards. The Company proposes the addition of one new cost-effective measure. The Company also seeks approval to continue offering two non cost-effective measures, 0-25 ton AC units that meet CEE Tier 2 and 0-25 ton HP units that meet CEE Tier 1, based on the request outlined in Attachment 1 to this filing.

The proposed modifications to Table 2 are as follows:

- Outline new minimum efficiency requirements and incentive levels under the Efficient Air-cooled AC, HP, and VRF HP unit measure (previously referred to as Premium Efficiency AC and Additional HVAC Efficiency Bonus). The proposed efficiency requirements are determined based on the AHRI standards for air-cooled systems and more accurately reflect current code requirements and market practices by aligning the requirements with the CEE minimum specifications for commercial unitary AC, HP, and VRF systems. Incentive levels have been adjusted to reflect the new requirements: Part A incentive decreased to $30 per ton and Part B incentives increased to $75 per ton.
- Increase the Efficient Chiller measure to $40 per ton for water-cooled chillers and to $80 per ton for air-cooled chillers based on updated savings.
- Remove redundant language from the Air Side Economizer measure regarding non-eligibility if the measure is already required by code. This language is already present in the Incentive Structure section.
- Add Direct Evaporative Cooler incentive at $200 per ton.

Table 3 – Building Shell

The proposed modifications to Table 3 are as follows:

- Add clarifying language to the Reflective Roof Treatment measure to improve customer understanding of the requirements.
- Remove High Performance Windows & Skylights based on savings and cost-effectiveness analysis. The TRM shows a significant reduction in savings over the previously used assumption which was the primary driver behind the measure's non cost-effectiveness. This measure is not noted as being removed from the Schedule because of the reorganization but the existing measure has been set forth below for reference:

High Performance Windows or skylights	$0.50 per square foot	High performance windows and skylights must be certified according to the test procedures established by the National Fenestration Rating Council ("NFRC") and must have a U-Factor rating of 0.30 or below and a Solar Heat Gain Coefficient of 0.30 or below.

Table 4 – Energy Management Control Systems

The proposed modifications to Table 4 are as follows:

- Revise the Energy Management Control System measure incentive level based on the tonnage of cooling controlled by the system and the energy efficiency strategies incorporated. This will align the savings and incentive amount directly based on the number of energy strategies incorporated. The proposed incentive structure is $70 per ton for Part A, $80 per ton for Part B, $90 per ton for Part C, and $100 per ton for Part D.
- Add Guest Room Energy Management System controls incentive at $50 per ton of controlled cooling.
- Revise Variable Speed Drives incentive to include HVAC Variable Speed Drives only. It was determined that industrial process VFD's savings are highly variable between process types and it is difficult to accurately claim savings through a prescriptive program. Modify the incentive structure to include a Part A incentive of $60 per hp for chilled water pumps, condenser water pumps and cooling tower fans, and a Part B incentive of $100 per hp for supply fans, return fans, outside air fans, make-up air fans, and hot water pumps.
- Remove the DCV measure as a standalone measure based on updated savings. The TRM shows a significant reduction in savings over the previously used assumption which was the primary driver behind the measure's non cost-effectiveness as a standalone measure. DCV is still represented in the program as an option in the Energy Management Control System measure. This measure is not noted as being removed from the Schedule because of the reorganization but the existing measure has been set forth below for reference:

Demand Controlled Ventilation	$0.50 per CFM of HVAC outside airflow	DCV systems must automatically adjust ventilation rates based on occupancy levels using carbon dioxide sensors. HVAC systems must include outside ventilation capacities of at least 1,500 cubic feet per minute ("CFM") and serve areas with variable occupant loading. Limited to applications where DVC systems are not already required per code.

Table 5 – Appliances with Electric Water Heating

The Company proposes the addition of Table 5, Appliances with Electric Water Heating. ADM provided kWh savings, measure costs, and specifications for three new measures in the TRM. The Company's cost-effectiveness models show the new measures are cost-effective which prompted the addition to the Program.

The proposed additions to Table 5 are as follows:

- Add Efficient Laundry Machines (Electric) at $125 per unit.
- Add Efficient Undercounter Dishwashers (Electric) at $200 per unit.
- Add Efficient Commercial Dishwashers (Electric) at $500 per unit.

Table 6 – Refrigeration

The Company proposes the addition of Table 6, Refrigeration. ADM provided kWh savings, measure costs, and specifications for three new measures in the TRM. The Company's cost-effectiveness models show the new measures are cost-effective which prompted the addition to the Program.

The proposed additions to Table 6 are as follows:

- Add Refrigeration Head Pressure Controls at $40 per hp.
- Add Refrigeration Floating Suction Controls at $10 per hp.
- Add Efficient Refrigeration Condensers at $20 per ton of refrigeration.

Modified Schedule 83 pages:

Because the reorganization of the tables within the Schedule was extensive and required moving various sections to various places, the Company has made the side notations correspond to the actual measure rather than the location of the change. As a result of these proposed changes, Idaho Power herewith transmits for filing:

Second Revised Sheet No. 83-1	Cancelling	First Revised Sheet No. 83-1
Second Revised Sheet No. 83-2	Cancelling	First Revised Sheet No. 83-2
First Revised Sheet No. 83-3	Cancelling	Original Sheet No. 83-3
First Revised Sheet No. 83-4	Cancelling	Original Sheet No. 83-4
Original Sheet No. 83-5	Added	

Idaho Power respectfully requests that the revisions to Schedule 83, Building Efficiency Program, be approved effective November 13, 2014. The proposed Program revisions outlined in this advice will align with the Building Efficiency provisions in the Company's Idaho jurisdiction. Should you have any questions or concerns, please feel free to contact Connie Aschenbrenner at 208-388-5994.

Very truly yours,

Lisa D. Nordstrom

Lisa D. Nordstrom
Lead Counsel

LDN:kkt
Enclosures
cc: Greg Said
Tami White
RA Files
Legal Files

SCHEDULE 83 ACRONYM REFERENCE

AC	Air Conditioner
AHRI	Air-Conditioning, Heating, & Refrigeration Institute
ARI	Air-Conditioning and Refrigeration Institute
BTU	British Thermal Unit
CEE	Consortium for Energy Efficiency
DCV	Demand Controlled Ventilation
DX	Direct Expansion
EER	Energy Efficient Ratio
HP	Heat Pump
hp	Horsepower
hr	Hour
HVAC	Heating, Ventilation, and Air Conditioning
IPLV	Integrated Part Load Value
ISO	International Organization for Standardization
kW	Kilowatt
kWh	Kilowatt-hour
LED	Light Emitting Diode
LPD	Lighting Power Density
N/A	Not Applicable
VFD	Variable Frequency Drive
VRF	Variable Refrigerant Flow
VSD	Variable Speed Drive
W	Watt

Attachment 1

IDAHO POWER COMPANY'S
COST-EFFECTIVENESS EXCEPTIONS REQUEST
FOR SPECIFIC ELECTRIC MEASURES

September 30, 2014

Background

In June 2013, Idaho Power Company ("Idaho Power or Company") filed its 2013 Integrated Resource Plan ("IRP") in LC 58 with the Public Utility Commission of Oregon ("OPUC" or "Commission"). The IRP included updated electric Demand-Side Management ("DSM") alternative cost assumptions used to calculate the cost-effectiveness of Idaho Power's energy efficiency programs and measures.

Through 2013 and 2014, Idaho Power conducted a comprehensive review of all the measures within the Building Efficiency Program ("Building Efficiency" or "Program") and Easy Upgrades Program. The Company contracted with ADM Associates, Inc. ("ADM") to produce a Technical Reference Manual ("TRM") for the two programs. After reviewing all of the measures within Building Efficiency and all of the non-lighting measures within Easy Upgrades, ADM provided updated savings and cost assumptions related to existing and new measures.

In 2014, the Company reviewed the savings and cost assumptions provided by ADM and found the assumptions to be reasonable. The Company analyzed the cost-effectiveness of each measure by applying the updated 2013 DSM alternative costs from the IRP. This memo describes the actions Idaho Power is recommending for the measures that are no longer deemed to be cost-effective, but that the Company proposes to continue offering to its Oregon customers through the Program.

As mentioned above, while both the Building Efficiency and Easy Upgrades programs underwent review by ADM, this memo is only intended to provide additional information for those Building Efficiency Program measures which the Company is seeking to continue offering. The Company received approval for those non cost-effective measures offered through the Easy Upgrades Program in Advice No. 14-06, which was allowed by the OPUC at the August 19, 2014, Decision Meeting.

Measure Grouping

In Order No. 94-590, issued in UM 551, the OPUC outlines specific cost-effectiveness guidelines for energy efficiency measures and programs managed by program administrators. It is the expectation of the OPUC that measures pass both the Utility Cost ("UC") and Total Resource Cost ("TRC") tests. Measures which do not pass these tests may be included in programs if they meet one or more of the following additional conditions specified by Section 13 of Order No. 94-590:

A. The measure produces significant non-quantifiable non-energy benefits. In this case, the incentive payment should be set at no greater than the cost-effective limit (defined as present value of avoided costs plus 10 percent) less the perceived value of bill savings, e.g., two years of bill savings;
B. Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure;
C. The measure is included for consistency with other DSM programs in the region;

D. Inclusion of the measure helps to increase participation in a cost-effective program;
E. The package of measures cannot be changed frequently and the measure will be cost-effective during the period the program is offered;
F. The measure or package of measures is included in a pilot or research project intended to be offered to a limited number of customers;
G. The measure is required by law or is consistent with Commission policy and/or direction.

Idaho Power is seeking approval from the OPUC for three measures that do not pass the TRC test within Building Efficiency. The measures were previously cost-effective, but due to updated savings, costs, and DSM alternative cost assumptions, the measures do not pass the TRC test.

Although some measures cited here have limited participation in Oregon, Idaho Power endeavors to keep consistency of the Program across its Idaho and Oregon jurisdictions. The importance of offering consistent incentives across the Idaho Power jurisdictions cannot be overstated. Trade allies (contractors/suppliers/engineers/architects) design and build projects in both states. Idaho contractors and professionals cross over to Oregon and vice versa. Offering two separate program designs would create confusion in the marketplace and could inhibit participation. In addition, program infrastructure is designed to implement consistent programs across jurisdictions.

Two of the non cost-effective measures identified below are measures that Idaho Power received an exception from in the recent Schedule 80, Easy Upgrades Program tariff advice filing (14-06). The Building Efficiency measures have the same baseline and efficiency assumptions as they do in the Easy Upgrade Program. The Commission allowed Advice No. 14-06 on August 19, 2014.

The Company has reviewed the measures and believes the measures meet at least one of the additional conditions identified in Order No. 94-590.

The non cost-effective measures are:

1. Daylight Photo Controls
2. 0-25 ton air conditioning ("AC") units that meet CEE Tier 2
3. 0-25 ton heat pump ("HP") units that meet CEE Tier 1

Daylight Photo Controls

This measure has a UC benefit cost ratio ("BCR") of 3.03 and a TRC BCR of 0.83. In 2013, Idaho Power did not incent any projects with this measure in Oregon, but there may be future projects that could include the measure.

Studies have shown that daylighting has significant non-quantifiable non-energy benefits. Daylighting provides a positive impact on building occupants both physiologically and psychologically. These benefits include "better health, reduced absenteeism, increased productivity, financial savings, and preference of workers."[1] A 2013 study illustrates that with daylighting, workers were found to be 18 percent more productive, students achieved 5-14 percent higher test scores, and retail sales increased 15-40 percent.[2]

[1] L. Edwards and P. Torcellini. "A Literature Review of the Effects of Natural Light on Building Occupants." National Renewable Energy Laboratory. July 2002. Page 9. http://www.nrel.gov/docs/fy02osti/30769.pdf

[2] "The Business Case for Green Building." World Green Building Council. 2013. Page 67. http://www.worldgbc.org/files/8313/6324/2676/Business_Case_For_Green_Building_Report_WEB_2013-03-13.pdf

Further, most Building Efficiency projects incented consist of several measures and the project is cost-effective when reviewed as a whole. Not incenting select measures within a project can have a negative impact by discouraging customers from pursuing otherwise cost-effective projects.

Idaho Power recommends that this lighting measure be included in the program offering due to the significant non-quantifiable non-energy benefits and to encourage participation in a cost-effective program. This is consistent with Order No. 94-590 conditions A and D.

> *A: The measure produces significant non-quantifiable non-energy benefits. In this case, the incentive payment should be set at no greater than the cost-effective limit (defined as present value of avoided costs plus 10 percent) less the perceived value of bill savings, e.g., two years of bill savings;*
> *D: Inclusion of the measure helps to increase participation in a cost-effective program.*

0-25 ton AC units that meet CEE Tier 2

Within the 0-25 ton AC units, there are some sizes that pass cost-effectiveness and some that are no longer cost-effective from a TRC perspective. The weighted average of the 0-25 ton AC units has a TRC BCR of 0.87 and a UC BCR of 1.34. In 2013, Idaho Power did not incent any projects with these measures in Oregon, but there may be future projects that could include these measures. The 0-25 ton AC units that meet CEE Tier 1 are cost-effective, but there is an opportunity to increase the energy savings by encouraging the customer to go to CEE Tier 2. Idaho Power has an opportunity to help increase market acceptance of CEE Tier 2 AC units which may bring the costs down for these units and bring them closer to cost-effectiveness.

Additionally, this measure received an exception from the OPUC in the recent Schedule 80, Easy Upgrades Program tariff advice filing (14-06). The Building Efficiency measure has the same baseline and efficiency assumptions as it does in the Easy Upgrade Program. The Commission allowed Advice No. 14-06 on August 19, 2014.

Idaho Power recommends that this measure be included in the program offering to encourage participation in a cost-effective program and increase market acceptance. This is consistent with Order No. 94-590 conditions B and D.

> *B: Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure.*
> *D: Inclusion of the measure helps to increase participation in a cost-effective program.*

0-25 ton HP units that meet CEE Tier 1

Within the 0-25 ton HP units, there are some sizes that pass cost-effectiveness and some that are no longer cost-effective. The weighted average of the 0-25 ton HP units has a TRC BCR of 0.95 and a UC BCR of 1.01. In 2013, Idaho Power did not incent any projects with these measures in Oregon, but there may be future projects that could include these measures. Also, the HP savings are based on cooling only savings to allow participation from both gas and electrically heated customers. The Company chose not to limit participation within this measure based on the customer's heating source to reduce customer confusion and dissatisfaction in the Program. However, if the Company limited participation to only those customers with electric heat, the heat pumps would be cost-effective.

Energy Trust of Oregon and Rocky Mountain Power offer incentives for some HP that meet CEE Tier 1.

Additionally, this measure received an exception from the OPUC in the recent Schedule 80, Easy Upgrades Program tariff advice filing (14-06). The Building Efficiency measure has the same baseline and efficiency assumptions as it does in the Easy Upgrade Program. The Commission allowed Advice No. 14-06 on August 19, 2014.

Idaho Power recommends that this measure be included in the program offering to encourage participation in a cost-effective program. These measures are also included in other programs in the region. This is consistent with Order No. 94-590 conditions C and D.

C: The measure is included for consistency with other DSM programs in the region.
D: Inclusion of the measure helps to increase participation in a cost-effective program.

Summary

Idaho Power is seeking approval from the OPUC to continue offering the following non cost-effective electric measures as exceptions to the cost-effectiveness test.

1. Daylight Photo Controls
2. 0-25 ton AC units that meet CEE Tier 2
3. 0-25 ton HP units that meet CEE Tier 1

SCHEDULE 83
BUILDING EFFICIENCY
PROGRAM

AVAILABILITY

Service under this schedule is available throughout the Company's service area within the State of Oregon to commercial building owners or developers who construct or remodel commercial buildings that will take service under the Company's Schedule 7, Schedule 9, or Schedule 19 upon completion.

APPLICABILITY

This schedule is applicable to commercial buildings scheduled to undergo new construction, expansion, or major renovations. Applicable major renovations must include professional design services, substantial replacement of major building components, and be subject to review by code authorities.

PROGRAM DESCRIPTION

Building Efficiency is an incentive-based program designed to help cover a portion of the costs of designing and building energy efficiency features into commercial construction projects. Building Efficiency uses a prescriptive approach to provide incentives for specific lighting, air conditioning, building shell, and control options.

INCENTIVE STRUCTURE

Incentives will not be paid for measures required by Oregon code, mandated by federal standards, or otherwise required. Incentive payments will not exceed 100% of the installed cost for any specified measure. (D) (D)

A Professional Assistance Incentive will be provided to a third-party architect or engineer that submits the application and provides the supporting documentation that is required to complete the application and incentive process. The professional is eligible for an incentive equal to 10% of the participant's total incentive to a maximum amount of $2,500. (N) (N)

TABLE 1: LIGHTING

Measure Type	Incentive	Eligibility Requirements
Interior Light Load Reduction	Part A: $0.10 Part B: $0.20 Part C: $0.30 per square foot covered by the lighting	Lighting systems designed with a lighting power density (LPD) that is at least: Part A: 10-19.9% below the Oregon Energy Efficiency Specialty Code will be eligible for this incentive, or Part B: 20-29.9% below the Oregon Energy Efficiency Specialty Code or Part C: Equal to or greater than 30% below the Oregon Energy Efficiency Specialty Code will be eligible for this incentive. (C) (C) A project that is at least 60% below code and/or has high operation hours can receive a non-standard interior lighting incentive at $0.18 per kWh saved, up to 100% of the incremental cost between a base and efficient lighting system. (N) (N)
Exterior Light Load Reduction	$200.00 per kW below code	Must be a minimum of 15% below the Oregon Energy Efficiency Specialty Code to qualify.
Daylight Photo Controls	$0.25 per square foot of daylit space	Daylight photo controls dim or turn off electric lights in response to levels of natural daylight. To qualify for an incentive, the design must include a consultation with the Integrated Design Lab or other qualified daylighting professional. (D)
Occupancy Sensors	$25.00 per sensor installed	Occupancy sensors are automatic switching devices that sense human occupancy and control the lighting system accordingly. Either wall- or ceiling-mounted sensors are eligible. (D)
High Efficiency Exit Signs	$7.50 per installed sign	Any code compliant exit sign that draws less than 4 watts per sign face including, but not limited to, light emitting diode (LED), cold cathode, electroluminescent, or self-luminous exit signs are eligible for an incentive.

SCHEDULE 83
BUILDING EFFICIENCY
PROGRAM
(Continued)

INCENTIVE STRUCTURE (Continued)

TABLE 2: AIR CONDITIONING (HVAC)

Measure Type	Incentive	Eligibility Requirements				
		Equipment Type	Size Category (single & three phase units)	Sub-Category	Part A: $30/ton	Part B: $75/ton
Efficient Air-cooled AC, HP and VRF units	Part A: $30.00 Part B: $75.00 per ton of air conditioning	Unitary Commercial Air Conditioners, Air Cooled (Cooling Mode)	<65,000 Btu/hr	Split system & single package	N/A	CEE Tier 2
			>=65,000 Btu/hr & <=300,000 Btu/hr	Split system & single package	CEE Tier 1	CEE Tier 2
		Heat Pumps, Air-Cooled (Cooling Mode)	<=300,000 Btu/hr	Split system & single package	CEE Tier 1	N/A
		Variable Refrigerant Flow Units	>=65,000 Btu/hr & <=300,000 Btu/hr	Multi-split AC or Heat Pump	N/A	CEE Tier 1
NOTE: Efficiency is based on AHRI and ISO standards.						

(C)

SCHEDULE 83
BUILDING EFFICIENCY
PROGRAM
(Continued)

INCENTIVE STRUCTURE (Continued)

TABLE 2: AIR CONDITIONING (HVAC) (Continued)

Measure Type	Incentive	Eligibility Requirements		
Efficient Chillers	Part A: $40.00 per ton for water cooled Part B: $80.00 per ton for air-cooled	Equipment Type	Size Category	Requirement
		Air Cooled Chiller with Condenser	<150 tons	IPLV: 14.0 EER or higher
			>=150 tons	IPLV: 14.0 EER or higher
		Water Cooled Chiller electrically operated, reciprocating & positive displacement	<75 tons	IPLV: 0.52 OR LESS (kW/ton)
			>=75 and <150 tons	IPLV: 0.52 OR LESS (kW/ton)
			>=150 and <300 tons	IPLV: 0.49 OR LESS (kW/ton)
			>=300 tons	IPLV: 0.49 OR LESS (kW/ton)
		Water Cooled Chiller electrically operated, centrifugal	<150 tons	IPLV: 0.52 OR LESS (kW/ton)
			>=150 and <300 tons	IPLV: 0.52 OR LESS (kW/ton)
			>=300 and <600 tons	IPLV: 0.45 OR LESS (kW/ton)
			>=600 tons	IPLV: 0.45 OR LESS (kW/ton)
NOTES: 1) Only primary use chillers will qualify. Chillers intended for backup service only are not eligible. 2) Air-cooled chiller efficiencies must include condenser fan energy consumption. 3) Efficiency ratings for IPLV kW/ton must be based on ARI standard rating conditions per ARI-550-98 & ARI-590-98. 4) IPLV = Integrated Part Load Value.				
Air Side Economizer	$75.00 per ton of air conditioning economized	Applicable economizers must allow outdoor air capacity to meet at least 85% of an air conditioning unit's airflow rate coupled with a programmable thermostat capable of two-stage cooling controls.		
Direct Evaporative Coolers	$200.00 per ton	Installation of a direct evaporative cooling system. Evaporatively pre-cooled DX systems do not qualify under this measure.		

(C)
(C)
(D)
(N)
(N)

TABLE 3: BUILDING SHELL

Measure Type	Incentive	Eligibility Requirements
Reflective Roof Treatment	$0.05 per square foot of roof treatment	Reflective roof treatments must meet a minimum initial solar reflectivity of 0.70 and a minimum emissivity of 0.75 consistent with California's Title 24 standards for flat or minimally pitched roofs.

(C)
(C)

SCHEDULE 83
BUILDING EFFICIENCY
PROGRAM
(Continued)

INCENTIVE STRUCTURE (Continued)

TABLE 4: CONTROLS

Measure Type	Incentive	Eligibility Requirements	
Energy Management Control System	Part A: $70.00 per ton for 2-strategies Part B: $80.00 per ton for 3-strategies Part C: $90.00 per ton for 4-strategies Part D: $100.00 per ton for 5-strategies	Systems must provide automatic control for cooling systems and incorporate specific strategies that result in energy savings over standard operation.	(C)
Guest Room Energy Management System	$50.00 per ton of controlled cooling	Systems must provide occupancy based thermostatic set-back controls for the HVAC system. Eligible systems include, thermostat based controls, room key-card controls and system check-in/check-out controls.	(C) (N) (N)
HVAC Variable Speed Drives	Part A: $60.00 per hp Part B: $100.00 per hp	Variable speed controls for fans, pumps and other variably-loaded electric HVAC motors Variable speed drive on HVAC system applications: Part A: $60/hp • Chilled water pumps • Condenser water pumps • Cooling tower fans Part B: $100/hp • Supply fan • Return fan • Outside air fan • Make-up air fan • Hot water pumps	(C) (C)

TABLE 5: APPLIANCES WITH ELECTRIC WATER HEATING

Measure Type	Incentive	Eligibility Requirements	
Efficient Laundry Machines (Electric)	$125.00 per unit	Clothes washer that is ENERGY STAR® certified or better efficiency in commercial applications that have both electric water heating and electric dryers.	(N)
Efficient Undercounter Dishwashers (Electric)	$200.00 per unit	Undercounter dishwasher that is ENERGY STAR® certified or better efficiency.	
Efficient Commercial Dishwashers (Electric)	$500.00 per unit	Doored, single or multi tank conveyor style dishwasher that is ENERGY STAR® certified or better efficiency and is located in fast food, pizza, full service restaurants or cafeterias.	(N)

SCHEDULE 83
BUILDING EFFICIENCY
PROGRAM
(Continued)

INCENTIVE STRUCTURE (Continued)

TABLE 6: REFRIGERATION

Measure Type	Incentive	Eligibility Requirements
Refrigeration Head Pressure Controls	$40.00 per compressor hp	Refrigeration systems with head pressure controls.
Refrigeration Floating Suction Controls	$10.00 per compressor hp	Refrigeration systems with floating suction controls.
Efficient Refrigeration Condensers	$20.00 per ton of refrigeration	Refrigeration condensers that incorporate specific strategies that result in energy savings over standard operation.

(N)
(N)