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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)
OF IDAHO POWER COMPANY FOR) CASE NO. IPC-E-05-05
AUTHORITY TO INSTITUTE A)
PERFORMANCE-BASED PILOT) APPLICATION
DEMAND-SIDE MANAGEMENT)
INCENTIVE PROGRAM.)
_____)

COMES NOW, Idaho Power Company ("Idaho Power" or the "Company"), and in accordance with RP 052 and RP 201, *et. seq.*, hereby applies to the Commission for authority for Idaho Power to institute a pilot program intended to remove the disincentives that hinder the Company's pursuit of cost-effective Demand-Side Management ("DSM") resources. In support of this Application, the Company submits the following:

I.

Introduction

Commission Order No. 29558 established Docket No. IPC-E-04-15 and approved a schedule of workshops for the purpose of assessing the financial disincentives that discourage Idaho Power from investing in energy efficiency. During

the fall and early winter of 2004 several workshops were held with interested parties to investigate this issue. During the fifth and final workshop held on December 13, 2004, it was agreed to by all parties that Idaho Power and the Idaho Public Utilities Commission Staff ("Staff") would collaborate in the development of a performance-based pilot incentive program ("Pilot"). The purpose of the Pilot is to test the effects of two mechanisms designed to remove the disincentives that hinder the Company's pursuit of cost-effective DSM resources. In the Pilot, fixed-cost lost-revenue recovery, combined with a performance incentive mechanism will be tested on two of the Company's currently operating DSM programs. This application provides the general implementation plan for the Pilot, describes in detail the proposed mechanisms for fixed-cost lost-revenue recovery and performance incentives, and provides an estimate of the financial impact of the proposed mechanisms. The Pilot is proposed to be in effect during the calendar year 2005.

II.

DSM Programs Proposed for Inclusion in the Pilot

A. ENERGY STAR® Homes Northwest. The ENERGY STAR® Homes Northwest program is the program currently operated by the Company to acquire the resources identified in the Residential New Construction Option in the 2004 Integrated Resource Plan ("IRP") and is proposed as a program for this Pilot. This program was developed by the United States Environmental Protection Agency/Department Of Energy, the Northwest Energy Efficiency Alliance ("the Alliance") and Pacific Northwest electric utilities. The Company piloted this program with the Alliance in 2004. There are

three implementation partners for this program in the Company's service territory; the Alliance, the State of Idaho Energy Division ("IED") and Idaho Power.

The essential feature of this program is a prescriptive building standard, also called a builder option package or BOP that establishes building standards that will result in approximately 30% greater energy efficiency than would be the case under existing Idaho residential building codes. The Company provides a standard incentive of \$750 to the builder for each home built to the higher standard and provides marketing for the program. IED qualifies that homes are built to the standard and conducts a quality assurance process. The Alliance provides the builder outreach and training components of the program.

The ENERGY STAR® Homes Northwest program costs for 2005 are estimated at \$502,400 and will be funded through the Idaho Energy Efficiency Rider ("Rider"). The annual energy savings goal for the program in 2005 is 1,070 megawatt-hours ("MWh"), including line losses. A home constructed to the ENERGY STAR® standard in Idaho will save on average 2,078 kilowatt-hours ("kWh") annually as measured at the meter or 2305 kWh including line losses. At the stated base energy savings level, the Company will have to achieve a participation level of approximately 515 homes in order to meet the 2005 energy savings goal. This target number of homes takes into account the assumed 50 homes that IED would have completed through its former residential new construction program had Idaho Power not implemented the ENERGY STAR® Homes Northwest program. Idaho Power will not recognize the energy savings associated with these 50 homes in determining the total energy savings for this program.

B. Rebate Advantage. It was suggested at the December 13, 2004 Workshop that the Pilot be expanded to include other aspects of residential new construction, including the manufactured housing market. The Company has examined the issues surrounding the inclusion of the Company's existing Rebate Advantage for New Manufactured Homes DSM program into the Pilot and supports the recommendation. The addition of this program will bring added value to the learning objectives of the project.

The goal of the Rebate Advantage program is to help buyers purchase Super Good Cents/ENERGY STAR® manufactured homes and to encourage salespeople to discuss energy efficiency. Customers who purchase a Super Good Cents/ENERGY STAR® manufactured home and site it in Idaho Power's service territory are eligible for a \$300 incentive payment. In addition, the salesperson receives a \$75 incentive payment.

Idaho Power relies on the Northwest Energy Efficiency Manufactured Homes Program (NEEM) for the specifications and quality control associated with the Program. NEEM is a consortium of manufacturers and state energy offices in the Northwest. In addition to specifications and quality control, NEEM tracks the production and performance of Super Good Cents/ENERGY STAR® homes.

Program costs in 2005 for Rebate Advantage are estimated to be \$74,320 and will be funded through the Bonneville Power Administration (BPA) Conservation and Renewable Discount (C&RD) program. The annual energy savings goal for Rebate Advantage in 2005 is 503 MWh, including line losses. Based on past program performance, the estimated average meter-level energy savings per qualified manufactured home in Idaho is 3,130 kWh, or 3,471 kWh including line losses. At this

assumed energy savings per home, the Company will have to attract approximately 145 program participants in 2005 in order to meet the energy savings target.

III.

Peer Review Group

As part of the Pilot operation, the Company will assemble a collaborative, peer review group ("Peer Review Group") that will participate throughout the Pilot process. The Peer Review Group will be a sub-group of the Company's existing Energy Efficiency Advisory Group ("EEAG") and will consist of members of EEAG who have expertise in the areas of residential construction, residential energy management, and marketing and may also include non-EEAG members chosen specifically for their technical knowledge. This group will also include representatives from both the Company and Staff.

The first meeting of the Peer Review Group will be held as soon as possible after the Commission issues an order approving the Pilot. The first meeting will be an informational session with the purpose of presenting the Pilot design and establishing the group's role. Members will become knowledgeable of the Pilot design, DSM program assumptions, and DSM Alternative Costs approved by the Commission in its order. During the first meeting, members will also discuss the assumptions behind the program estimates and determine the evaluation studies or surveys needed to validate the energy savings following the Pilot.

IV.

Establishing and Verifying Savings

A. Original Savings Estimates. The Original Savings Estimates represent the established energy savings amount per home that will be used in the calculation of the Company's performance level in 2005. The estimates are measured in kWh per year per qualified home and represent the average estimated reduction in energy usage between a home constructed under the Pilot specifications and a home constructed under the typical standard. The Original Savings Estimate for ENERGY STAR® Homes Northwest is 2,078 kWh per home, as measured at the meter. This estimate is based on an engineering simulation study, conducted for the Company in early 2004 by Ecotope Consulting to determine the program's savings potential in Idaho. Rebate Advantage has an Original Savings Estimate of 3,130 kWh per home, as measured at the meter, that is based on savings estimates developed by the Northwest Power and Conservation Council's Regional Technical Forum ("RTF"). The RTF is responsible for developing the energy savings estimates for programs operated under the BPA's C&RD program.

B. Validated Savings Estimates. At the end of 2005, the energy savings associated with each of the programs included in the Pilot will be estimated using evaluation study and survey findings. The Peer Review Group will meet to discuss findings of the Pilot evaluation and to review the Validated Annual Energy Savings. The Validated Annual Energy Savings will be used in the lost revenue recovery calculation for the Pilot. Should the Pilot be extended or become a permanent program the

Validated Savings Estimates would be used as the basis for calculating the performance incentive beyond 2005.

V.

Fixed-Cost Revenue Recovery

Monthly energy savings will be determined by spreading the Validated Energy Savings over the 12 months of 2005 using an estimated annual usage curve. Lost revenue will be calculated only for the specific months that the house is occupied. The occupancy date of a home will be tracked in Idaho Power's customer information system and will be equal to the date that a new homeowner initiates service. The monthly energy savings will be multiplied by the residential fixed-cost revenue requirement per MWh to determine the revenue losses. For example, if a participating customer takes occupancy of a home on November 1, 2005, the percentage of savings that is estimated to occur in November and December, as determined by the annual usage curve, will be multiplied by the residential fixed-cost revenue requirement per MWh to determine the recoverable revenue. Currently, the residential fixed-cost revenue requirement per MWh is \$30.14 based upon the residential revenue requirement effective June 28, 2004 as approved by Order No. 29547. Fixed-cost revenue losses will be recovered even if program goals that would trigger a performance incentive are not met.

VI.

Performance Incentive Mechanism

The proposed performance incentive is a shared savings mechanism designed to incent the Company to vigorously pursue and sustain cost-effective DSM

programs without creating any perverse incentives. This performance incentive design uses a sliding scale approach that increases the incentive amount as program performance increases. The energy savings target threshold for ENERGY STAR® Homes Northwest is equal to the energy estimate for the New Residential Construction Program included in the 2004 IRP. The Company has an energy savings target established for Rebate Advantage in 2005, which will also serve as the target threshold for the Pilot. Program performance for the Pilot will be determined by multiplying the number of program participants for each program by its respective Original Savings Estimate. Each program included in the Pilot will be evaluated individually in the calculation of the performance incentive.

The incentive is calculated as a percentage of the present value life-cycle net benefits of the program from a Total Resource Cost perspective. A program's net benefit represents the difference between the present value life-cycle gross benefits of the efficiency measures installed and the Total Resource Cost. Gross benefits are determined by the DSM Alternative costs included in Table 2 by multiplying the annual savings amount for a given program by the associated DSM Alternative Cost.

Program costs funded by the Rider and the C&RD program include the cost of planning, developing, implementing, monitoring and evaluating DSM programs included in the Pilot. Evaluation costs of the programs in the Pilot are not to exceed 5% of program costs and will be included in the cost-effectiveness calculation. The Total Resource Cost, which includes the cost to a customer for participating in the program in 2005, is estimated to be \$685,600 for ENERGY STAR® Homes Northwest and \$256,200 for Rebate Advantage.

The graduated design for incentive thresholds detailed below is believed to provide a strong incentive to motivate the most positive behavior from a DSM acquisition perspective. As can be seen from the detail in Table 1 below, a performance incentive would be awarded when the energy savings achieved exceeds 100% of the savings target. The incentive amount awarded would increase for each percentage of energy savings achieved above the target up to 110% of the targeted savings.

Table 1: Performance Incentive Thresholds											
Percent of MWh Target Achieved	100% or less	101%	102%	103%	104%	105%	106%	107%	108%	109%	110% and Greater
Utility Share of Net Benefits (TRC)	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%

VII.

DSM Alternative Cost

The DSM Alternative Costs in Table 2 represent the present value avoided cost of the next best resource alternative on a per MWh basis for the specific programs listed. Attachment 1 details the calculation of the DSM Alternative Costs. The DSM Alternative Cost per unit of energy varies depending upon the load shape associated with the efficiency measures encouraged by a particular program. The Alternative Energy Costs listed in Table 2 are applicable only to energy savings associated with residential DSM measures installed in 2005 and should not be used as avoided costs for any other resource valuation applications. The DSM Alternative Costs are the same as those used to pre-screen DSM programs for the Company's 2004 IRP. A detailed

description of the DSM Alternative Costs can be found in the Demand Side Resource Data section of the 2004 IRP Technical Appendix.

Table 2: 2005 DSM Alternative Costs*
(Present value based on a 30 Year Measure Life)

	<u>Alternative Energy Cost (\$/annual MWh)</u>	
ENERGY STAR® Homes NW	\$	1017.1
Rebate Advantage	\$	791.3

* Costs include line losses of 10.9%.

VIII.

Potential Pilot Results

Tables 3 and 4 detail the possible effects of the proposed Pilot as applied to the ENERGY STAR® Homes Northwest and Rebate Advantage program energy targets for 2005. The estimated incentive amounts shown in Tables 3 and 4 are for illustration purposes only. Actual incentive amounts will vary depending upon actual program performance. The gray areas in each table show the estimated fixed-cost revenue recovery and performance incentive amounts at various energy savings performance levels. For example, to find the estimated performance incentive amount assuming the Company achieves 105% of its energy savings target for Rebate Advantage, refer to Table 4, Column E, Row 2. The Customer Share of Net Benefit shown in Column F on each table represents the estimated present value decrease in net power supply costs at various program energy savings performance levels that would be passed through to customers over the life of the efficiency measures.

Table: 3 Pilot Analysis Potential Lost Revenue & Incentive Amounts At Various Performance Levels							
ENERGY STAR® Homes NW <i>Energy Savings Target: 1070 MWh</i>							
	A	B	C	D	E	F	G
	% of MWh Target Achieved	Energy Savings in MWh	Fixed Cost Lost Revenue	% of Net Benefit Earned	Utility Share of Net Benefit (Incentive)	Customer Share of Net Benefit	B/C Ratio (TRC)
1	101%	1,083	\$ 29,446	1.00%	\$ 3,012	\$ 298,146	1.43
2	105%	1,131	\$ 30,736	5.00%	\$ 15,863	\$ 301,406	1.44
3	110%	1,190	\$ 32,349	10.00%	\$ 33,741	\$ 303,669	1.45
4	115%	1,250	\$ 33,962	10.00%	\$ 35,755	\$ 321,795	1.45

Notes:

(B) Column B includes line losses of 10.9%.

(C) Column C is calculated as follows: $(B \div 1.109 * \$30.14)$

Fixed-cost lost revenue will likely be less in 2005 since most homes will not achieve a full year of energy savings by December.

(E) Column E is calculated as follows: $((B \div 1.109 * \text{DSM Alternative Cost}) - \text{Total Resource Cost}) * D$

(F) Column F is calculated as follows: $((B \div 1.109 * \text{DSM Alternative Cost}) - \text{Total Resource Cost}) * (1-D)$

(G) Column G is calculated as follows: $((B \div 1.109 * \text{DSM Alternative Cost}) \div \text{Total Resource Cost})$

Table: 4 - Pilot Analysis Potential Lost Revenue & Incentive Amounts at Various Performance Levels							
Rebate Advantage <i>Energy Savings Target: 503 MWh</i>							
	A	B	C	D	E	F	G
	% of MWh Target Achieved	Energy Savings in MWh	Fixed Cost Lost Revenue*	% of Net Benefit Earned	Utility Share of Net Benefit (Incentive)	Customer Share of Net Benefit	B/C Ratio (TRC)
1	101%	508	\$ 13,816	1.00%	\$ 1,040	\$102,955	1.40
2	105%	528	\$ 14,363	5.00%	\$ 5,406	\$102,707	1.40
3	110%	554	\$ 15,047	10.00%	\$ 11,326	\$101,935	1.40
4	115%	579	\$ 15,731	10.00%	\$ 11,841	\$106,569	1.40

Notes:

(B) Column B includes line losses of 10.9%.

(C) Column C is calculated as follows: $(B \div 1.109 * \$30.14)$

Fixed-cost lost revenue will likely be less in 2005 since most homes will not achieve a full year of energy savings by December.

- (E) Column E is calculated as follows: $((B \div 1.109 * \text{DSM Alternative Cost}) - \text{Total Resource Cost}) * D$
(F) Column F is calculated as follows: $((B \div 1.109 * \text{DSM Alternative Cost}) - \text{Total Resource Cost}) * (1-D)$
(G) Column F is calculated as follows: $((B \div 1.109 * \text{DSM Alternative Cost}) \div \text{Total Resource Cost})$

IX.

Recovery of Lost Revenue and Incentive Amounts

The total fixed-cost revenue requirement and incentive amounts will be quantified at the conclusion of the Pilot and submitted for Commission review in a timely manner that will allow for recovery of these amounts over a 12-month period beginning June 1, 2006.

X.

Notices

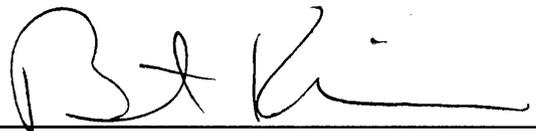
Communications with reference to this Application should be sent to the following:

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WHEREFORE, Idaho Power respectfully requests that the Commission issue its Order under modified procedure authorizing Idaho Power to implement the pilot program described above.

DATED at Boise, Idaho, this 18th day of February, 2005.


BARTON L. KLINE
Attorney for Idaho Power Company

ATTACHMENT 1

Calculation of DSM Alternative Cost

Idaho Power Company

Inputs					
Discount Rate	7.852%				
Escalation Rate	2.52%				
Line Losses	10.90%				
Seasons	<u>Summer (Jun. 1 - Aug. 31)</u>			<u>Non-summer (Sept. 1 - May 31)</u>	
Costing Periods	<u>On-Peak</u>	<u>Mid-Peak</u>	<u>Off-Peak</u>	<u>Mid-Peak</u>	<u>Off-Peak</u>
Hours per Costing Period	512	960	736	3616	2936
Energy Savings per Costing Period					
Energy Star® Homes NW	14.13%	23.38%	11.47%	32.82%	18.19%
Rebate Advantage	6.49%	10.84%	5.52%	45.85%	31.30%

**DSM Alternative Cost
Combined Capacity and Energy \$/kWh**

<u>Year</u>	<u>Summer (Jun. 1 - Aug. 31)</u>			<u>Non-summer (Sept. 1 - May 31)</u>		
	<u>On-Peak</u>	<u>Mid-Peak</u>	<u>Off-Peak</u>	<u>Mid-Peak</u>	<u>Off-Peak</u>	
2005	\$0.186	\$0.036	\$0.030	\$0.036	\$0.029	
2006	\$0.188	\$0.037	\$0.031	\$0.037	\$0.030	
2007	\$0.189	\$0.068	\$0.035	\$0.038	\$0.031	
2008	\$0.191	\$0.073	\$0.037	\$0.040	\$0.033	
2009	\$0.193	\$0.077	\$0.038	\$0.040	\$0.034	
2010	\$0.195	\$0.079	\$0.038	\$0.043	\$0.036	
2011	\$0.197	\$0.082	\$0.040	\$0.046	\$0.037	
2012	\$0.199	\$0.084	\$0.041	\$0.047	\$0.038	
2013	\$0.201	\$0.086	\$0.042	\$0.048	\$0.039	
2014	\$0.203	\$0.088	\$0.043	\$0.049	\$0.040	
2015	\$0.206	\$0.091	\$0.044	\$0.051	\$0.041	
2016	\$0.208	\$0.093	\$0.045	\$0.052	\$0.042	
2017	\$0.210	\$0.095	\$0.046	\$0.053	\$0.043	
2018	\$0.213	\$0.098	\$0.047	\$0.055	\$0.044	
2019	\$0.215	\$0.100	\$0.048	\$0.056	\$0.046	
2020	\$0.217	\$0.103	\$0.050	\$0.057	\$0.047	
2021	\$0.220	\$0.105	\$0.051	\$0.059	\$0.048	
2022	\$0.223	\$0.108	\$0.052	\$0.060	\$0.049	
2023	\$0.225	\$0.111	\$0.053	\$0.062	\$0.050	
2024	\$0.228	\$0.114	\$0.055	\$0.063	\$0.052	
2025	\$0.231	\$0.116	\$0.056	\$0.065	\$0.053	
2026	\$0.234	\$0.119	\$0.057	\$0.067	\$0.054	
2027	\$0.237	\$0.122	\$0.059	\$0.068	\$0.056	
2028	\$0.240	\$0.125	\$0.060	\$0.070	\$0.057	
2029	\$0.243	\$0.129	\$0.062	\$0.072	\$0.058	
2030	\$0.246	\$0.132	\$0.064	\$0.074	\$0.060	
2031	\$0.250	\$0.135	\$0.065	\$0.075	\$0.061	
2032	\$0.253	\$0.139	\$0.067	\$0.077	\$0.063	
2033	\$0.256	\$0.142	\$0.068	\$0.079	\$0.065	
2034	\$0.260	\$0.146	\$0.070	\$0.081	\$0.066	
30-Year Present Value (Mid-Year)	\$2.438	\$1.004	\$0.511	\$0.586	\$0.479	
Weighted* DSM Alt. Cost in \$/kWh (includes losses)						<u>Total</u>
Energy Star® Homes NW	\$0.382	\$0.260	\$0.065	\$0.213	\$0.097	<u>\$1.017</u>
Rebate Advantage	\$0.176	\$0.121	\$0.031	\$0.298	\$0.166	<u>\$0.791</u>

Notes:

* DSM Alternative Costs are weighted by the percentage of energy that is expected to occur within each costing period according to the values shown in the Inputs section under the heading "Energy Savings per Costing Period."