Exhibit No. ___ (BJH-2)

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

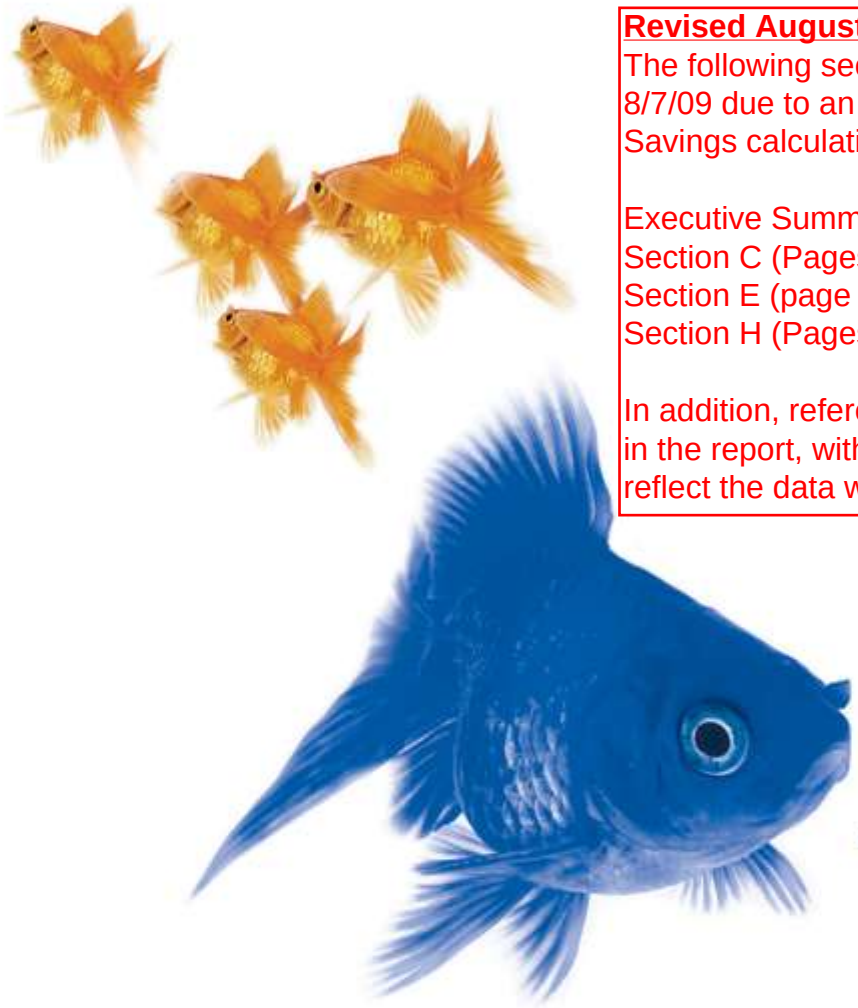
DOCKET NOS. UE-090134, UG-09135 & UG-060518

EXHIBIT NO._____(BJH-2)

BRIAN J. HIRSCHKORN

REPRESENTING AVISTA CORPORATION

REVISED AUGUST 10, 2009



Revised August 10, 2009
The following sections/pages were revised by Titus on 8/7/09 due to an error in the 2008 Verified DSM Savings calculation summary document:

Executive Summary (Pages 2-5)
Section C (Pages 10-34)
Section E (page 45)
Section H (Pages 53-64)

In addition, references to "Confidential" are included in the report, with Strike throughs made by Avista, to reflect the data which is no longer confidential.

Evaluation of Avista Natural Gas Decoupling Mechanism Pilot

Final Report to
Avista and the Stakeholder Advisory Group

March 30, 2009

Executive Summary

Avista Corporation, ("Avista" or "Avista Utilities"), and the Stakeholder Advisory Group ("Advisory Group") selected Titus with WeatherWise USA as subcontractor to provide an evaluation of Avista's Gas Decoupling Mechanism ("Mechanism") pilot program in accordance with the Washington State Utilities and Transportation Commission ("WUTC" or the "Commission") Docket UG-060518, Order 04.

The scope of this report is to evaluate Avista's Gas Decoupling Mechanism Pilot and respond to specific questions in the Evaluation Plan developed in a collaborative approach by Avista and the Advisory Group to "allow the Commission, Advisory Group members and interested parties to fully examine the Mechanism."[1] This report does not evaluate the appropriateness of decoupling in general, the design of the Mechanism, or the validity of the positions or opinions of the Advisory Group members on individual aspects of the Mechanism.

This report evaluates the Mechanism according to Commission ordered rate structure and answers each question in the Evaluation Plan based on the facts at hand. Titus takes no position for or against the arguments of any party.

In addition to completing the Evaluation Questions in the main report, Titus summarizes certain key issues and data as follows:

Avista Decoupling Revenue and DSM Lost Margin Summary

A summary comparing the Decoupling Revenue and the DSM Lost Margin is shown below.

Table 1 Decoupling Revenue and DSM Lost Margin

	2007	2008	Total
WA Decoupling Deferrals	$938,329 [2]	$673,508	$1,611,837
WA Schedule 101 DSM Lost Margin	$90,429	$162,661	$253,089
Total WA DSM Lost Margin	$174,898	$204,934	$379,832

The DSM lost margins in Tables 1 are the first-year lost margins and do not reflect the multi-year impact of the DSM measures. The DSM Lost Margin will be incurred annually until a new general rate case ("GRC") updates the customer usage baseline year usage and incorporates the DSM Savings and the DSM Lost Margin into the new gas rates.

[1] Evaluation Plan for Avista's Natural Gas Decoupling Mechanism, Page 1
[2] The DSM Test reduced the 2007 Recoverable Revenue to $900,119.

Verified DSM Therm Savings Summary

Verified savings from Avista's programmatic DSM measures generally exceeded the Mechanism's goals as set in Avista's Natural Gas Integrated Resource Plans.[3] Differences between what was submitted by Avista and what was calculated during this Evaluation are small and do not impact the Mechanism results.

Table 2 DSM Verified WA/ID Savings (therms) versus Goals	2006	2007	2008
IRP DSM Savings Goal	1,062,000	1,062,000	1,425,070
Avista Verified DSM Savings	1,052,390	1,455,678	1,821,298
% of Goal	99.1%	137.1%	127.8%
Titus Verified DSM Savings	1,060,467	1,445,130	1,752,330
% of Goal	99.9%	136.1%	123.0%

Tables 3-5 show relevant DSM history for 2004-2008.

Table 3 WA DSM Summary	2004	2005	2006	2007	2008
WA DSM Savings (therms)	429,076	1,016,766	693,354	1,166,544	1,053,244
WA DSM Expenditures	$679,909	$2,103,419	$2,025,641	$2,569,606	$4,393,712

Comparing the 2004-2005 averages with the 2007-2008 averages, WA DSM Savings have increased 54% and DSM Expenditures have increased 150%, indicating expenditures are increasing faster than savings and resulting in a higher cost for each therm saved.

Table 4 WA Schedule 101 DSM Summary	2004	2005	2006	2007	2008
DSM Savings (therms)	136,405	267,938	282,110	456,192	747,921
DSM Expenditures	$311,045	$820,036	$965,424	$1,400,939	$3,213,344

Comparing the 2004-2005 averages with the 2007-2008 averages, DSM Savings have increased 198% and DSM Expenditures have increased 308%, indicating WA Schedule 101 Savings and Expenditures are growing faster than the overall WA DSM growth.

Table 5 - WA Limited Income DSM Summary	2004	2005	2006	2007	2008
DSM Savings (therms)	5,012	110,788	57,503	58,549	71,983
DSM Expenditures	$184,784	$496,534	$492,477	$436,032	$536,338

Comparing the 2004-2005 averages with the 2007-2008 averages, DSM Savings have increased 13% and DSM Expenditures have increased 43%, indicating the WA Limited Income DSM growth is slower than both the overall DSM growth and the WA Schedule 101 DSM growth.

[3] From Table H3.

Average WA Schedule 101 Customer Bill Impact Summary

The average monthly bill impact for an average WA Schedule 101 Customer is estimated below:

Table 6 - Average Schedule 101 Customer Monthly Bill Impact

	2004	2005	2006	2007	2008
DSM Tariff	$0.79	$0.62	$0.52	$1.24	$1.27
Decoupling Tariff	$0.00	$0.00	$0.00	$0.54	$0.40

The combined average monthly bill impact of the DSM and Decoupling Tariffs for an average Schedule 101 Customer has increased from $0.70 in 2004/2005 to $1.72 in 2007/2008, an increase of 144%. The average monthly Decoupling Tariff cost of $0.47 represents 0.55% of an average Schedule 101 customer's monthly bill.[4]

Summary of Impact of Decoupling Calculation Factors

The Mechanism is designed to return up to 90% of the calculated margin lost from usage reduction after adjusting for new customers added to the system and weather differences. This approach does not capture changes in the customer base from customers switching rate schedules, customers closing accounts, rebillings and other anomalies. These differences accounted for approximately 10% of the 2007 decoupling revenue recovery and approximately 7% after accounting for customer migration.[5]

The cumulative mathematical factors affecting the decoupling calculations for 2007 through 2008 are totaled from the quarterly decoupling reports and summarized below.

Table 7 - Cumulated Decoupling Calculation Factors 2007-2008

	Therms	Therms
Current Year Schedule 101 Billed Therms	235,646,095	
New Customer Usage Adjustment	(13,078,565)	
Net Unbilled Difference	4,808,283	
Weather Correction Adjustment	(34,463)	
Current Year Schedule 101 Adjusted Billed Therms		227,341,351
Test Year Schedule 101 Billed Therms		235,969,723
Usage Difference		(8,628,372)

The New Customer Adjustment and an abnormally large unbilled usage imbalance significantly impacted the decoupling deferral calculations. Standard practice includes a monthly adjustment for unbilled usage. Unbilled usage is estimated, added to the billed usage and then subtracted from the next month's usage to provide a "running" estimate of total monthly usage. For 2007-2008, the net unbilled usage equals the difference between the unbilled usage for December 2006 and December 2008. Abnormal weather conditions in December 2008 increased usage and delayed meter reading, contributing to the large unbilled usage imbalance in Table 7.

[4] Using the current $5.75 per month customer charge and $1.15288 per them usage charge.
[5] See Section I and Exhibit I-1 Unaccounted Customers for additional details.

Titus DSM Verification Audit Suggested Review

The DSM Savings Verification Audits were performed as required. The assumptions made, methods used and results of the report appear reasonable.[6] While considerable effort was invested to review back office operations and engineering calculations, no actual energy measurement or post-installation bill verification was performed by the DSM Savings Verification auditor.[7] Additionally, the verification process was performed after the evaluation period was over, incentives were paid and opportunity to make proactive, current-year adjustments in response to the audit was lost. Lastly, the verification auditor reviewed independent measures without providing any comprehensive DSM summary connecting the individual measure review to overall program results.

Titus DSM Reporting Suggested Review

Some DSM data was not readily available. Considerable effort was required to assemble data from numerous data sources and address inconsistencies in the data (year-to-year, report-to-report, etc.). The practice of updating the DSM database in response to the verification audits and identified data entry errors further hindered the Evaluation process as documented savings became a "moving target."

General DSM Decoupling Mechanism Summary

The following general DSM issues stood out during the evaluation:

- The DSM Tariff rider has an increasingly negative balance.
- WA expenditures per therm saved have approximately doubled since 2004-2005.
- The WA Limited Income DSM growth rate is much slower than the overall growth rate.
- All reported DSM Savings are 1st year savings and do not reflect any multi-year impact.

In addition, "incidental DSM savings" (electric usage change from gas programs and vice versa) are not included in reported natural gas DSM savings. In 2006, increases in gas usage from electric DSM programs offset 30% of the gas DSM savings.

Report Exclusions

Items related to the Mechanism that were not directly measured include:

- The impact of Avista's general DSM awareness advertising.
- The impact of electric DSM programs on gas usage and vice versa.
- The impact of price elasticity.
- The impact of "free ridership".
- The impact of the economy on usage and DSM program participation.

During the evaluation process, questions and concerns brought up by Avista and the Advisory Group outside of the scope of this evaluation were captured, summarized and included in this report as Exhibit 11 - Additional Questions and Concerns.

[6] See Section H for details.

[7] Titus proposed a proprietary analysis of DSM participant usage during the RFP process and a non-proprietary analysis after being chosen as the Mechanism evaluator. These proposals were rejected by Avista in a non-consensus decision because the Evaluation Plan did not include an additional DSM savings audit. See Exhibit 10 Communication Log.

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Introduction

"Decoupling is a ratemaking and regulatory tool intended to break the link between a utility's recovery of fixed costs and a consumer's energy consumption by reducing the impact of energy consumption on a utility's recovery of its fixed costs."[8]

In the Order approving the decoupling mechanism pilot, the Commission stated:

> Promoting energy conservation is a goal that we strongly support, and provides a highly appealing rationale for decoupling on its face. Our state's laws and policies encourage us to look with favor upon incentives to stimulate increased energy conservation as well.[9] Our statutory responsibility to regulate in the public interest, however, requires us to look beyond the abstract and examine the specific evidence to determine whether the facts support this rationale for Avista. [10,11, 12]

UG-060518, Order 04 included a provision for Avista to file a request to continue the Mechanism beyond its initial term. "That filing would include an evaluation of the Mechanism and any proposed modifications of the Company."[13] The Mechanism evaluation plan[14] was developed through a collaborative process by Avista and a Stakeholder Advisory Group, which consists of representatives from the Staff of the Washington Utilities and Transportation Commission, the Public Counsel Section of the Washington State Attorney General's Office, the Northwest Industrial Gas Users, The Energy Project, and The Northwest Energy Coalition.

Titus with WeatherWise USA (as subcontractor) was selected to perform the independent evaluation of the decoupling mechanism pilot. This evaluation report follows the Evaluation Plan sequentially with each question immediately followed by the response.

[8] Exhibit 2 Docket UG-060518, Order 04, Paragraph 8
[9] See RCW 80.28.024, RCW 80.28.025, and RCW 80.28.260.
10 The Commission has determined that it is not desirable to take a blanket approach to decoupling. "The Commission believes that the wide variety of alternative approaches to decoupling make it more efficient to address these issues in the context of specific utility proposals included in general rate case filings rather than through a generic rulemaking." Rulemaking to Review Natural Gas Decoupling, Docket UG-050369, Notice of Withdrawal of Rulemaking (October 17, 2005). This is the third in a recent series of decoupling proposals we have considered, including one for Puget Sound Energy, Inc., WUTC v. Puget Sound Energy, Inc., Order 08, Dockets UE-060266 and UG-060267 (2007), and the other for Cascade Natural Gas, WUTC v. Cascade Natural Gas, Order 05, Docket UG-060256 (2007). Each proposal has unique qualities and a unique setting which has shaped our analysis and determined our decision.
[11] Exhibit 2 Docket UG-060518, Order 04, Paragraph 10
[12] For additional statements from the Commission on decoupling, see Docket UE-050684, Order 04, par. 108-110; Dockets UE-060266 and UG-060267, Order 08, paragraphs 54, 55, 61-68; Docket UG-060256, Order 05, paragraphs 72-79, 85.
[13] Exhibit 3 Docket UG-060518, Settlement Agreement, 6.J
[14] See Exhibit 1 Evaluation Plan for Avista's Natural Gas Decoupling Mechanism

The main features of this pilot Decoupling Mechanism include the following:

- **Term**: Recording of deferred revenue began on January 1, 2007 and will end on June 30, 2009. However, the amortization period began on November 1, 2007 and will end on October 31, 2010, resulting in 2 ½ years of deferrals and 3 years of recoveries. Consequently, the first year of recoveries (November 2007 to October 2008) applied to six months of deferrals (January 2007 to June 2007). The remaining two years of recoveries (November to October) applied to a full year of deferrals (July to June).
- **Application**: It applied only to schedule 101 (residential and small commercial customers).
- **New Customer Adjustment**: It removed the usage associated with new customers added since the corresponding month of the test year.
- **The Deferral Amount**: It deferred 90% of the margin difference, either positive or negative, for later recovery (or rebate) subject to:
  - *An earnings test* – Avista could not earn more than its authorized rate of return.
  - *A demand side management (DSM) test* – recovery based on Avista achieving specific conservation targets.

Actual vs. Target DSM Savings	Amount Deferred
< 70%	0%
> 70% and < 80%	60%
> 80% and < 90%	70%
> 90% and < 100%	80%
100%	90%

  - *Carryover* – Any funds not deferred due to the "earnings" and/or the "DSM" test were not carried over to the next period. [15]
  - *Interest* - Interest was not recorded on deferrals until such time as the deferrals were approved for recovery by the Commission.[16]

- **Review of DSM Savings**: The Company retained an independent third party to audit the results of DSM savings reported for decoupling purposes.
- **Annual Rate Changes**: The Mechanism limited annual rate increases due to the Mechanism to 2% annually.
- **Decoupling Evaluation:** Prior to filing a request to continue the Mechanism beyond its initial term, the Company must evaluate its results.

[15] Exhibit 2 Docket 060518, Final Order, Paragraph 48.
[16] Exhibit 2 Docket 060518, Final Order, Paragraph 48.

Report Standards

Unless otherwise noted, all revenue, DSM savings and expenditures in this report are limited to Avista's natural gas operations.

All weather-normalized usage in this report follows the UG-070805 Weather Normalization Methodology outlined in Exhibit D-10 Weather Correlation Method. This methodology was accepted for use during the Mechanism. For this report, weather normalization for periods preceding the adoption of this methodology were recalculated using the UG-070805 methodology for consistency.

DSM expenditures lacking jurisdictional allocations are allocated with 70% to Washington and 30% to Idaho in accordance with Avista's traditional jurisdictional allocation methodology. For 2004-2008, WA's portion of the WA/ID DSM Savings ranged from 61% to 85% while WA's portion of WA/ID DSM Expenditures ranged from 63% to 87%. The traditional jurisdictional split is based on derated DSM savings, not the completed savings used for this Evaluation.

All DSM lost margin calculations are exclusive of revenue related expenses (uncollectible accounts expense, commission fees, and Washington excise tax[17]) to provide for proper comparison with the Mechanism's deferral calculations.

All DSM savings in this report are programmatic DSM savings as Avista does not claim potential savings from non-programmatic efforts.

DSM Savings in this report reflect the 1st year savings. Although savings will be realized throughout the life of the DSM measure, this report does not attempt to establish a methodology for recognizing and accounting for the multi-year impact of DSM savings because no methodology has been established by WUTC for Avista's WA natural gas operations.

This plan evaluates DSM program savings from projects that are both complete and starting with 2006, independently verified. The DSM savings in this report will not match Avista's DSM savings detailed in their Triple-E reports because of the independent verification adjustments and Avista's derated methodology used for site specific projects in the Triple-E reports. This methodology is described in detail in Exhibit 6 - 2006 Triple-E report.

Avista identified in 2009 that the new customer adjustment in the decoupling deferral report was incorrect. Avista corrected this error with a journal entry in January 2009 which decreased the decoupling deferral by $22,567. This report does not include this adjustment except for analysis of the New Customer Adjustment in Section I and the Executive Summary.

For all Decoupling Deferrals in the report, positive numbers represent decoupling deferral amounts Avista may collect in the future resulting from calculated lost margin from reduced consumption. Negative numbers indicate a calculated usage increase leading to a rebate of deferred decoupling funds to ratepayers from Avista.

[17] From Avista's response to Data Request 2, Question 14.

C Evaluation of Avista DSM Programs and Savings from 2006 – 2008

Since the DSM Target for the Pilot Mechanism is based on DSM savings in Washington and Idaho, all data in this section, responding to the questions below, should provide disaggregated results for Washington and Idaho, as well as combined totals.

1) a) Based on the results of the independent DSM audits, by what amounts did the Company change its DSM program expenditures and its resulting natural gas therm savings through Company-sponsored programs over the term of the Mechanism, relative to the 2004 – 2005 pre-decoupling period?

The DSM savings and expenditure totals for 2004 through 2008 are shown below. The chart reflects a growth pattern in both savings and expenditures with the expenditure increase outpacing savings resulting in an increase in the cost per therm of savings.[18]

Table C1-A DSM Savings and Expenditures Summary

		2004	2005	2006	2007	2008
Total	Savings (therms)	590,220	1,199,842	1,060,467	1,445,130	1,752,330
	Expenditures	$1,081,665	$2,419,693	$2,809,496	$3,627,890	$6,288,959
	$/therm	$1.83	$2.02	$2.65	$2.51	$3.59
WA	Savings (therms)	429,076	1,016,766	693,354	1,166,544	1,053,244
	Expenditures	$679,909	$2,103,419	$2,025,641	$2,569,606	$4,393,712
	$/therm	$1.58	$2.07	$2.92	$2.20	$4.17
ID	Savings (therms)	161,144	183,076	367,113	278,586	699,086
	Expenditures	$401,757	$316,274	$783,856	$1,058,284	$1,895,247
	$/therm	$2.49	$1.73	$2.14	$3.80	$2.71

2004 & 2005 DSM savings are unaudited. Expenditures were not reviewed in the annual DSM Savings Verification Audits.

[18] Savings are from Table C1-C. Expenditures are from Table C9-A.

b) What were the annual audited DSM savings (completed project basis) for 2006-2008, by customer class, by DSM program and by rate schedule, compared to achieved therm savings in the 2004 – 2005 (completed project basis) pre-decoupling period?

The DSM savings by rate schedule, customer class and DSM program are shown below.[19]

Table C1-B DSM Savings (therms) by Rate Schedule with % of Total											
		2004		2005		2006		2007		2008	
Total	101	226,960	38%	369,959	31%	556,646	52%	621,455	43%	1,058,962	60%
	111/112	360,147	61%	809,906	68%	493,480	47%	758,177	52%	627,974	36%
	121/122	3,113	1%	19,977	2%	10,342	1%	65,498	5%	65,394	4%
WA	101	136,405	32%	267,938	26%	282,110	41%	456,192	39%	747,921	71%
	111/112	289,558	67%	728,851	72%	400,902	58%	645,004	55%	300,990	29%
	121/122	3,113	1%	19,977	2%	10,342	1%	65,348	6%	4,332	0%
ID	101	90,555	56%	102,021	56%	274,536	75%	165,263	59%	311,041	44%
	111/112	70,589	44%	81,055	44%	92,578	25%	113,173	41%	326,984	47%
	121/122	0	0%	0	0%	0	0%	150	0%	61,061	9%

Table C1-C DSM Savings (therms) by Customer Class with % of Total						
		2004	2005	2006	2007	2008
Total	Commercial Industrial	459,181	908,362	586,107	1,074,513	932,982
		78%	76%	55%	74%	53%
	Limited Income	16,705	115,207	64,128	69,242	77,361
		3%	10%	6%	5%	4%
	Residential	114,334	176,273	410,232	301,376	741,986
		19%	15%	39%	21%	42%
	Total	590,220	1,199,842	1,060,467	1,445,130	1,752,330
WA	Commercial Industrial	344,031	787,808	463,447	886,936	429,104
		80%	77%	67%	76%	41%
	Limited Income	5,012	110,788	57,503	58,549	71,983
		1%	11%	8%	5%	7%
	Residential	80,034	118,170	172,404	221,059	552,157
		19%	12%	25%	19%	52%
	Total	429,076	1,016,766	693,354	1,166,544	1,053,244
ID	Commercial Industrial	115,150	120,554	122,661	187,577	503,878
		71%	66%	33%	67%	72%
	Limited Income	11,694	4,419	6,625	10,692	5,379
		7%	2%	2%	4%	1%
	Residential	34,300	58,103	237,828	80,316	189,829
		21%	32%	65%	29%	27%
	Total	161,144	183,076	367,113	278,586	699,086

[19] See Exhibit C-1 DSM Savings Calculations for details.

In general, DSM Savings are growing. The 2006 Commercial/Industrial (C/I) DSM Savings decrease reveals the impact of the initial DSM savings verification audit where documentation and engineering assumption discrepancies resulted in the disqualification of some non-residential site specific savings estimates.

Table C1-D DSM Savings (therms) by Program with % of Total

		Appli-ances	HVAC	Indust-rial Process	LEED Certifi-cation	Prescrip-tive Food Service	Pre-Rinse Sprayer	Resource Manage-ment	Rooftop Service	Shell	Total
Total	2004	8,951	248,888	10,855	0	0	0	146,738	11,418	163,370	590,220
		2%	42%	2%	0%	0%	0%	25%	2%	28%	
	2005	31,160	427,556	5,596	0	0	0	393,379	20,486	321,665	1,199,842
		3%	36%	0%	0%	0%	0%	33%	2%	27%	
	2006	18,124	593,678	0	2,914	0	23,496	71,634	-17,523	368,145	1,060,467
		2%	56%	0%	0%	0%	2%	7%	-2%	35%	
	2007	24,655	770,921	50,785	12,023	2,745	41,888	0	45,917	496,198	1,445,130
		2%	53%	4%	1%	0%	3%	0%	3%	34%	
	2008	55,815	796,759	9,173	16,206	5,325	0	0	175,746	693,305	1,752,330
		3%	45%	1%	1%	0%	0%	0%	10%	40%	
WA	2004	6,639	150,056	3,122	0	0	0	146,738	0	122,522	429,076
		2%	35%	1%	0%	0%	0%	34%	0%	29%	
	2005	28,374	320,585	5,596	0	0	0	393,379	0	268,832	1,016,766
		3%	32%	1%	0%	0%	0%	39%	0%	26%	
	2006	13,392	329,768	0	2,914	0	22,836	71,634	-17,284	270,093	693,354
		2%	48%	0%	0%	0%	3%	10%	-2%	39%	
	2007	20,093	660,981	17,965	12,023	2,087	21,736	0	23,869	407,791	1,166,544
		2%	57%	2%	1%	0%	2%	0%	2%	35%	
	2008	40,362	414,701	0	10,932	3,970	0	0	56,350	526,929	1,053,244
		4%	39%	0%	1%	0%	0%	0%	5%	50%	
ID	2004	2,312	98,833	7,733	0	0	0	0	11,418	40,848	161,144
		1%	61%	5%	0%	0%	0%	0%	7%	25%	
	2005	2,786	106,971	0	0	0	0	0	20,486	52,833	183,076
		2%	58%	0%	0%	0%	0%	0%	11%	29%	
	2006	4,731	263,910	0	0	0	660	0	-239	98,052	367,113
		1%	72%	0%	0%	0%	0%	0%	0%	27%	
	2007	4,562	109,940	32,820	0	658	20,152	0	22,048	88,407	278,586
		2%	39%	12%	0%	0%	7%	0%	8%	32%	
	2008	15,454	382,059	9,173	5,274	1,354	0	0	119,396	166,376	699,086
		2%	55%	1%	1%	0%	0%	0%	17%	24%	

c) For any electric or gas DSM programs sponsored by Avista that may produce combined electric and gas savings, or increased gas or electric usage, what assumptions or methods are used to allocate savings to the gas therm values provided in response to this question?

Some DSM measures have an "incidental" impact on electric or gas usage. The term "incidental" is used in the Triple-E reports to account for gas usage changes from an electric savings project or electric usage changes from a gas savings project. Avista's engineers are responsible for identifying "incidental" usage changes. Avista's Account Executives are responsible for documenting these savings. These "incidental" usage changes are included in the cost effectiveness calculations in the Triple-E reports but are not included in the Mechanism's DSM savings target and consequently, are not included in the DSM savings verification reports.

The "incidental" gas savings resulting from electric DSM programs are shown below.[20] Negative numbers indicate usage was increased (negative savings).

Table C1-E Gas Savings (therms) Attributable to Electric Programs						
		2004	2005	2006	2007	2008
Total	Commercial/Industrial	(105,783)	(105,868)	(214,685)	(85,560)	(108,000)
	Limited Income	0	0	1,523	75	910
	Residential	(8,133)	(14,720)	(83,653)	7,441	7,828
	Total	(113,916)	(120,588)	(296,815)	(78,044)	(99,262)
WA	Commercial/Industrial	(74,048)	(85,473)	(141,843)	(65,191)	(64,013)
	Limited Income	0	0	1,523	75	796
	Residential	(5,693)	0	(84,248)	3,940	18,462
	Total	(79,741)	(85,473)	(224,568)	(61,176)	(44,756)
ID	Commercial/Industrial	(31,735)	(20,395)	(72,842)	(20,369)	(43,987)
	Limited Income	0	0	0	0	114
	Residential	(2,440)	(14,720)	595	3,501	(10,634)
	Total	(34,175)	(35,115)	(72,247)	(16,868)	(54,507)

As can be seen above, gas usage is added to the system each year as a result of electric DSM programs although the recent trend shows an increase in "incidental" savings (a decrease in "incidental" usage). In 2006, over 30% of the gas savings from Washington's natural gas DSM programs were added to the system by electric DSM programs. The majority of this added gas usage comes from HVAC and lighting programs. In general, a reduction of the amount of heat added to a facility through electric energy consumption will result in a need for additional heat during the heating season. This will increase gas energy consumption if the primary source of heat for that facility is natural gas.

These "incidental" savings (and usage increases) are tracked and noted in the Triple-E reports but are not included in the Mechanism or the DSM Verification Report.

[20] From 2004-2008 Triple-E Reports, Table 6E (Exhibits 4-8). C/I Savings is on a "derated basis".

d) What assumptions or methods are used to allocate any kWh savings or increased electric consumption, and what were the amounts of kWh savings or increased electric consumption from any Avista sponsored gas DSM program? The response to this question should make clear that the 2004-2005 completed project DSM data provided by Avista has not been audited.

"Incidental" electric usage savings from gas programs are shown below.[21] Negative values indicate usage increased (no savings).

Table C1-F Electric Savings (kWh) Attributable to Gas Programs						
		2004	2005	2006	2007	2008
Total	Commercial/Industrial	(3,135)	(133,264)	(150,740)	8,173	83,640
	Limited Income	0	0	12,701	15,761	4,147
	Residential	8,719	135,974	1,091,902	1,636,584	1,292,907
	Total	5,584	2,710	953,863	1,660,518	1,380,694
WA	Commercial/Industrial	(3,135)	(138,968)	72,055	97,867	316,951
	Limited Income	0	0	12,701	11,882	4,147
	Residential	8,719	110,466	831,681	1,310,571	131,312
	Total	5,584	(28,502)	916,437	1,420,320	452,410
ID	Commercial/Industrial	0	5,704	(222,795)	(89,693)	(233,311)
	Limited Income	0	0	0	3,879	0
	Residential	0	25,508	260,221	326,013	1,161,595
	Total	0	31,212	37,426	240,199	928,284

In general, "incidental" electric savings are increasing. The bulk of the savings are attributable to air conditioning energy savings on gas residential shell measures.[22] Shell measures are treated as a gas DSM measure unless the primary heat source is electric resistance heat.

These "incidental" savings (increased usage) are tracked and noted in the Triple-E reports but are not included in the Mechanism or the DSM Verification Report.

[21] From 2004-2008 Triple-E reports, Table 5G (Exhibits 4-8). C/I Savings is on a "derated basis".
[22] From Avista's response to Data Request #8, Question 2.

2) What is the proportion of therm savings from Company-sponsored DSM programs compared to overall weather normalized sales volumes, in total, and by customer class and/or rate schedule for each year 2004, 2005, 2006, 2007 and 2008?

DSM savings by customer class and rate schedule are compared to the weather normalized sales volume below.[23] Limited Income savings are part of the Residential savings and are not shown separately because there is no actual measurement of Limited Income usage.

Table C2-A DSM Savings (therms) Compared to Usage (therms) by Customer Class

			2004	2005	2006	2007	2008
Total	Residential	DSM Savings	131,039	291,480	474,360	370,617	819,348
		Usage	146,927,288	148,642,856	150,314,758	149,647,983	153,406,904
		Savings %	0.09%	0.20%	0.32%	0.25%	0.53%
	Commercial Industrial	DSM Savings	459,181	908,362	586,107	1,074,513	932,982
		Usage	95,763,287	96,603,147	97,596,487	97,118,536	98,690,288
		Savings %	0.48%	0.94%	0.60%	1.11%	0.95%
WA	Residential	DSM Savings	85,045	228,958	229,907	279,609	624,140
		Usage	103,807,833	104,648,917	105,096,604	104,097,941	105,970,216
		Savings %	0.08%	0.22%	0.22%	0.27%	0.59%
	Commercial Industrial	DSM Savings	344,031	787,808	463,447	886,936	429,104
		Usage	69,012,052	69,686,273	69,831,299	69,826,592	70,390,489
		Savings %	0.50%	1.13%	0.66%	1.27%	0.61%
ID	Residential	DSM Savings	45,994	62,522	244,453	91,009	195,208
		Usage	43,119,455	43,993,939	45,218,154	45,550,043	47,436,688
		Savings %	0.11%	0.14%	0.54%	0.20%	0.41%
	Commercial Industrial	DSM Savings	115,150	120,554	122,661	187,577	503,878
		Usage	26,751,236	26,916,873	27,765,187	27,291,945	28,299,799
		Savings %	0.43%	0.45%	0.44%	0.69%	1.78%

The overall increase in the percentage of DSM Savings compared to weather normalized usage indicates that the growth of DSM Savings outpaced weather-normalized customer usage growth from 2004 to 2008.

[23] From Exhibit C-1 DSM Savings Calculations, Exhibit C-8 DSM Cost Calculations and Exhibit J-1 Weather Normalized Usage

Table C2-B DSM Savings (therms) Compared to Usage (therms) by Rate Schedule							
			2004	2005	2006	2007	2008
Total	101	Usage	170,055,872	171,875,996	174,758,128	172,798,089	177,190,550
		Savings	226,960	369,959	556,646	621,455	1,058,962
		%	0.13%	0.22%	0.32%	0.36%	0.60%
	111/112	Usage	61,789,402	64,199,866	63,500,246	65,418,274	67,691,431
		Savings	360,147	809,906	493,480	758,177	627,974
		%	0.58%	1.26%	0.78%	1.16%	0.93%
	121/122	Usage	11,324,531	9,615,591	10,077,982	8,972,557	7,725,141
		Savings	3,113	19,977	10,342	65,498	65,394
		%	0.03%	0.21%	0.10%	0.73%	0.85%
WA	101	Usage	116,290,878	118,063,888	119,437,787	117,629,476	120,268,826
		Savings	136,405	267,938	282,110	456,192	747,921
		%	0.12%	0.23%	0.24%	0.39%	0.62%
	111/112	Usage	48,214,226	49,248,773	48,247,655	49,712,845	50,203,746
		Savings	289,558	728,851	400,902	645,004	300,990
		%	0.60%	1.48%	0.83%	1.30%	0.60%
	121/122	Usage	8,757,937	7,428,378	7,625,266	6,957,269	6,347,855
		Savings	3,113	19,977	10,342	65,348	4,332
		%	0.04%	0.27%	0.14%	0.94%	0.07%
ID	101	Usage	53,764,995	53,812,108	55,320,341	55,168,613	56,921,723
		Savings	90,555	102,021	274,536	165,263	311,041
		%	0.17%	0.19%	0.50%	0.30%	0.55%
	111/112	Usage	13,575,176	14,951,093	15,252,591	15,705,428	17,487,685
		Savings	70,589	81,055	92,578	113,173	326,984
		%	0.52%	0.54%	0.61%	0.72%	1.87%
	121/122	Usage	2,566,594	2,187,213	2,452,716	2,015,288	1,377,286
		Savings	0	0	0	150	61,061
		%	0.00%	0.00%	0.00%	0.01%	4.43%

While DSM savings increased for all rate schedules, a larger portion of usage was saved in WA Schedule 111/112 than in WA Schedules 101 and 121/122.

3) What were the associated lost margins from Company sponsored DSM, by customer class and by rate schedule for each year 2004, 2005, 2006, 2007 and 2008?

The lost margins for each rate schedule were calculated as described below:

1. Average customer usage profiles for each rate schedule were created showing the estimated percentage of annual usage for each month using historical data in the annual revenue runs.[24]
2. The annual DSM savings were applied to these profiles to obtain the estimated monthly savings for each rate schedule by month.
3. A random sample of 73 Schedule 111/112 DSM participants provided by Avista was used to create a profile of the highest billable tier for each month of the year.[25]
4. This monthly customer profile tier usage was applied to the monthly Schedule 111/112 savings profile to obtain a monthly Schedule 111 tiered savings profile for each month.
5. The Schedule 121 sample we received from Avista showed the customer's highest usage in Tier 4 in all but one month. Therefore, Tier 4 margins were used for all Schedule 121 savings.
6. To estimate Avista's lost margin, margin rates for each rate schedule tier[26] were multiplied by the estimated usage for each month with mid-month changes prorated by the number of days in the month.

The lost margins for WA are shown below by rate schedule. [27]

Table C3-A WA DSM Lost Margin by Rate Schedule

		2004	2005	2006	2007	2008
101	Savings (therms)	136,405	369,959	282,110	456,192	747,921
	Lost Margin	$ 22,596	$ 51,545	$ 54,683	$ 90,429	$162,661
	% of Lost Margin	43%	36%	52%	52%	79%
111	Savings (therms)	289,558	809,906	400,902	645,004	300,990
	Lost Margin	$ 29,746	$ 88,971	$ 49,143	$ 80,410	$ 41,948
	% of Lost Margin	57%	63%	47%	46%	20%
121	Savings (therms)	3,113	19,977	10,342	65,348	4,332
	Lost Margin	$ 153	$ 1,219	$ 634	$ 4,060	$ 325
	% of Lost Margin	0%	1%	1%	2%	0%
Total	Savings (therms)	429,076	1,199,842	693,354	1,166,544	1,053,244
	Lost Margin	$ 52,495	$141,735	$104,460	$174,898	$204,934

The DSM savings and lost margins in Tables C3-A and C3-B are the first-year lost margins and do not reflect the multi-year impact of the DSM measures.

[24] See Exhibit C-3 Customer Usage Profile.
[25] See Exhibit C-4 DSM Participant Usage Sampling for sample methodology and tier summary.
[26] See Exhibit C-2 GRC Margin Rates from Avista's response to Data Request 2, Question 4.
[27] See Exhibit C-5 Lost Margin Calculations.

The lost margins for WA are shown below by Customer Class.[28]

Table C3-B WA DSM Lost Margin by Customer Class						
		2004	2005	2006	2007	2008
Commercial/ Industrial	Savings (therms)	344,031	787,808	463,447	886,936	429,104
	Lost Margin	$38,407	$97,689	$59,896	$119,473	$69,194
	% of Lost Margin	73%	69%	57%	68%	34%
Limited Income	Savings (therms)	5,012	110,788	57,503	58,549	71,983
	Lost Margin	$830	$21,313	$11,146	$11,606	$15,655
	% of Lost Margin	2%	15%	11%	7%	8%
Residential	Savings (therms)	80,034	118,170	172,404	221,059	552,157
	Lost Margin	$13,258	$22,733	$33,418	$43,819	$120,085
	% of Lost Margin	25%	16%	32%	25%	59%
Total	Savings (therms)	429,076	1,016,766	693,354	1,166,544	1,053,244
	Lost Margin	$52,495	$141,735	$104,460	$174,898	$204,934

4) During the 2004 – 2008 time period, did the Company change the scope or magnitude of any of its DSM programs in the following areas:

Changes to individual DSM programs are detailed in Question 5. Avista's responses to general DSM program changes are shown below.

> During the 2002 to 2005 time period the Company was recovering from a large negative balance in the DSM tariff rider incurred as a result of our emergency response to the 2001 western energy crisis. During this time programs were not curtailed, but were not expanded either. The tariff rider balance was eventually returned to zero through stringent short-term cost control measures. As each of the individual tariff riders (Washington and Idaho, electric and natural gas) began to return to zero (which began to occur in 2005) the potential for expansions of the portfolio were considered. [29]

To prevent a similar reduction in DSM programs in the future, all parties agreed in the Settlement Agreement for UG-070805 that Avista would examine the sufficiency of the DSM tariff rider during the next rate case and request annual adjustments to ensure sufficient DSM funding to support the increased target levels set in the Company's 2007 IRP.[30] Avista recently filed UG-090052 to address this need.[31]

[28] See Exhibit C-5 Lost Margin Calculations.
[29] From Avista's original Data Submission for Question C4.
[30] See UG-070805, Order 05 *Consolidated*, Page 6
[31] See Exhibit 9 UG-090052 DSM Tariff Changes.

A chart summarizing the progression of Washington's gas DSM tariff rider balance is shown below: [32]

Table C4-A WA DSM Tariff Rider Balance History

		2001	2002	2003	2004
Revenue	Electric	$3,982,823	$4,386,478	$4,358,910	$4,981,596
	Gas	$528,548	$654,861	$941,498	$1,970,728
	Total	$4,511,371	$5,041,339	$5,300,408	$6,952,324
Expense	Electric	($11,863,246)	($2,032,147)	($2,891,858)	($2,441,405)
	Gas	($982,231)	($942,531)	($1,369,560)	($708,214)
	Total	($12,845,477)	($2,974,678)	($4,261,418)	($3,149,619)
Net Change	Electric	($7,880,423)	$2,354,331	$1,467,052	$2,540,191
	Gas	($453,683)	($287,670)	($428,062)	$1,262,514
Balance	Electric	($8,296,691)	($5,942,360)	($4,475,308)	($1,935,117)
	Gas	($464,394)	($752,064)	($1,180,126)	$82,388
	Total	($8,761,085)	($6,694,424)	($5,655,434)	($1,852,729)
		2005	**2006**	**2007**	**2008**
Revenue	Electric	$4,387,492	$4,683,069	$5,054,298	$9,132,541
	Gas	$1,640,633	$734,222	$2,823,620	$2,917,720
	Total	$6,028,125	$5,417,291	$7,877,918	$12,050,261
Expense	Electric	($3,443,234)	($5,045,345)	($8,256,702)	($10,496,439)
	Gas	($1,895,890)	($2,089,961)	($2,819,110)	($4,191,693)
	Total	($5,339,124)	($7,135,306)	($11,075,812)	($14,688,132)
Net Change	Electric	$944,258	($362,276)	($3,202,404)	($1,363,898)
	Gas	($255,257)	($1,355,739)	$4,510	($1,273,973)
Balance	Electric	($990,859)	($1,353,135)	($4,555,539)	($5,919,437)
	Gas	($172,869)	($1,528,608)	($1,524,098)	($2,798,071)
	Total	($1,163,728)	($2,881,743)	($6,079,637)	($8,717,508)

The 2001-2004 Triple-E reporting contain some inconsistencies identified during this evaluation. These inconsistencies were eliminated starting in 2005.

[32] From Avista's data submission from Data Request 10-17.

a) natural gas DSM programs

> Within the natural gas portfolios there were limited expansions beginning in 2006 in conjunction with a much larger ramp-up in electric programs. In early 2008 the customer incentives for natural gas were significantly increased (see the Schedule 190 history) to achieve increasing IRP acquisition targets. [29]

The 2008 incentive increases are likely a driving factor behind the higher DSM acquisition costs and lower savings (therms) returned from that investment (increasing $/therm values in Table C1-A).

b) natural gas or electric DSM programs that may produce combined gas and electric savings-

> The increased activity on electric DSM measures also provided an enhanced opportunity for Avista DSM engineers to audit customer facilities and incorporate natural gas recommendations into their report. Given these two effects, the net effect of the electric ramp-up on natural gas is not clear. [29]

The incidental savings from combined natural gas and electric DSM projects are detailed in Tables C-1E and C-1F. In general, electric DSM programs are <u>increasing</u> gas usage and gas DSM programs are <u>reducing</u> electric usage.

c) electric DSM programs that may produce changes in gas usage?

> This expansion of electric programs was focused on a wide variety of measures to include measures that result in an increase in natural gas usage (e.g. efficient lighting, electric-to-natural gas conversions). The increased activity on electric DSM measures also provided an enhanced opportunity for Avista DSM engineers to audit customer facilities and incorporate natural gas recommendations into their report. Given these two effects, the net effect of the electric ramp-up on natural gas is not clear. [29]

An electric-to-natural gas conversion for an existing gas customer will decrease the decoupling deferral as the current year usage increases without any change to the base year. For a "new" gas customer, there will be no impact on the decoupling deferral as the usage is removed from the analysis.[33]

[33] See Section G for details on "new" customer designation.

5) a) What incremental program changes or expansions were implemented, and when, during 2004 – 2008, for the three categories of DSM programs described above in question 4? Identify and describe each new, revised or expanded programmatic change by customer class (residential, commercial, industrial) and corresponding rate schedule.

Avista's response is below.

Residential prescriptive offerings have been on-going since the fall of 2001. Programs are reviewed periodically to incorporate new savings, code changes, avoided costs or customer costs. Since 2004, these reviews have resulted in changes to the prescriptive offerings in Feb 2004, September 2005, September 2007, and March 2008. The following is a summary of changes in program offerings and incentives (newer programs are represented as n/a, as applicable. Limited Income programs have had no changes in the offerings; however, in 2006 the budgets restrictions added greater natural gas flexibility by allowing a change from 50% expenditures on natural gas and electric to up to 75% expenditures on natural gas: [34]

Residential

The following chart summarizes the residential incentive modifications.[35]

Table C5-A Residential DSM Incentive History					
Equipment Incentives	**Feb-04**	**Sep-05**	**July-07**	**Sep-07**	**March-08**
HE Gas Furnace/Boiler	$150	$200			$400
HE Gas Boiler	$150	$200			$400
NG Tankless Water Heater					$200
HE NG Water Heater	$50	$25			$50
Attic insulation	$0.12 /ft^2	$0.14 /ft^2			$0.25 /ft^2
Wall insulation	$0.12 /ft^2	$0.14 /ft^2			$0.50 /ft^2
Floor insulation	$0.12 /ft^2	$0.14 /ft^2			$0.50 /ft^2
Duct insulation	$0.75 /ft	disc.			
Energy Star Windows - Retro		$0.70 /ft^2			$3 /ft^2
Energy Star Windows - New		$0.70 /ft^2			disc.
Variable Speed Motor		$100			
Energy Star Homes - New		$500			$650
Energy Star Clothes washer			$25		$50
Energy Star Dishwasher			$25		
Multifamily Energy Efficiency Program					
Low Flow Aerators - MFH				free direct install	
Low Flow Showerheads - MFH				free direct install	
Pipe Wrapping - MFH				free direct install	
Attic Insulation - MFH				free direct install	
Floor insulation - MFH				free direct install	
Energy Star Windows - MFH				$10 /ft^2	

The large increase in Residential incentives is one likely source for the 2008 surge in Residential DSM Savings.

[34] From Avista's original Data Submission for Question C5 - Residential.
[35] From Avista's original Data Submission for Question C5 - Residential.

Limited Income

The following limited income DSM programs have provided 100% of the installation cost (plus up to 15% for health and human safety) plus a 15% administration fee since February 2004.[36]

Table C5-B Limited Income Gas DSM Incentives
High Efficiency Space Heat
High Efficiency Water Heat
Attic Insulation
Wall Insulation
Floor Insulation
Duct Insulation
Infiltration
Energy Star Windows
Energy Star Doors

Non-deemed (non-prescriptive) and standard residential measures are also available to limited income customers; however, participation in standard residential programs is unknown but presumed to be minimal for natural gas DSM.

Commercial/Industrial

Avista provided the following summary.[37]

> As mentioned in the response to Question C4, in early 2008 the customer incentives for natural gas were significantly increased (see the Schedule 190 history). The new incentive levels applied to any qualifying commercial/industrial energy efficiency project. In addition to these incentive level changes, the following programmatic changes were made:
>
> Demand Controlled Ventilation-Installation of controls on existing facilities to use carbon dioxide levels to measure occupancy and modify the percentage of outside air based on variable levels. Prescriptive program launched 3/15/07. Incentive was .32 per sq. ft. for spaces with air conditioning and .25 for spaces with no air conditioning. Offer modified 3/1/08 to .25 per conditioned sq. ft.
>
> Food Service Equipment- Installation of high efficiency cooking equipment. Original launch was 10/1/06. Some modifications were made on 3/1/08.
>
> - Natural gas fryer $500
> - Natural gas steam cooker
>   - 3-pan $500
>   - 4-pan $540
>   - 5-pan $590
>   - 6-pan $630
> - Vent hood variable speed control w/natural gas space heat- $400 per kCFM. Modified to $650 per kCFM on 3/1/08.

[36] From Avista's original Data Submission for Question C5 - Residential.
[37] From Avista's original Data Submission for Question C5 – Non-Residential.

- Natural gas convection oven $460 each, modified to $500 each on 3/1/08.
- Natural gas combination oven-$500 each, modified to $1000 each on 3/1/08.
- Natural gas rack oven-$500 each, modified to $1000 each on 3/1/08.
- Natural gas griddle-$250 each.
- Natural gas char-broiler-$400 each.
- High efficiency natural gas water heater 75,000 BTU/hr or less-$40 each, modified to $50 each on 3/1/08.
- High efficiency natural gas water heater 75,000 BTU/hr or greater-added 3/1/08 $1000-$2000 each.
- Point of use water heater-$50 each, modified to $60 each on 3/1/08.
- Time clock control of natural gas water heater circulating pump-$30 each, modified to $40 on 3/1/08.
- Energy Star dishwashers added 3/1/08, $250-$2000 each.

AirCare Plus-Enhanced maintenance service for rooftop HVAC units. $25 paid for thermostat modifications. Program launched in 2004. Service facilitated through 3rd party contract.

Pre-rinse Sprayer Installation- Free installation of efficient pre-rinse dishwasher sprayers to eligible customers. Program was available September 2006 – October 2007.

LEED Certification- Incentive for eligible customers that achieve LEED Certification. Originally launched 9/04. Incentive is $1.25 per square foot of conditioned space. Modified in 9/07 to $1.25 for LEED-NC and .50 for LEED-EB.

Steam Trap Repair/Replacement – Rebates available for the repair or replacement of failed steam traps. Prescriptive program initially offered 7/07. Rebates are $120-$350 depending on pipe size.

The following incentive chart is from Avista's Schedule 190 tariff sheet.

Measures	Simple Pay-Back Period	Incentive Level (dollars/first year therm saved) (Minimum measure life of 10 years*)
Natural Gas Efficiency	1 to 2 years	2.00
	2 to 4 years	2.50
	4 to 6 years	3.00
	Over 6 years	3.50

* Measures with an energy savings life less than 10 years may receive an incentive amount not to exceed the full incremental cost of the measure.

Incentives are capped at 50% of the incremental project cost with several listed exceptions that allow up to 100% of incremental cost for Limited Income, small measures, and market transformation.

6 a) Were there any changes in Avista's avoided costs during the Pilot Period that may have contributed to any changes in customer participation and savings for Company sponsored DSM programs?

Avoided cost estimates from the 2003, 2006 and 2007 Avista Gas Integrated Resource Plans are shown below.[38]

Table 6 - Avoided Costs (Nominal Dollars per Dekatherm)				
		2003 IRP	2006 IRP	2007 IRP
1-Year 2007-2008	Winter	$ 48.30	$ 64.50	$78.60
	Annual	$ 42.50	$ 56.70	$72.90
10-Year Total	Winter	$ 526.30	$ 623.90	$623.06
	Annual	$ 461.20	$ 548.10	$564.98

Avoided costs increased rapidly from 2003 to 2006. From 2006 to 2007, the one-year avoided cost for November 2007 through October 2008 increased approximately 25% but the 10-year total of forecasted avoided costs remained about the same. These increases in avoided costs allow more measures to qualify as cost-effective and may increase the amount of incentives offered while still being cost-effective. This may increase the overall investment cost per therm as a higher return (therms with a higher avoided cost) justify higher initial investment (DSM expenditures).

b) Identify any other factors that may have contributed to an increase in DSM savings and/or new or expanded DSM program offerings.

The 2006 IRP noted that Avista formally acknowledged that sustaining site specific DSM programs was feasible. Previously the Company had been skeptical that site specific DSM was viable in the long-term because of a lack of historical success.[39]

In the 2007 IRP, Avista committed to increasing DSM Savings 11% annually with a corresponding commitment to increase resources to support this growth. The report also noted that the Schedule 191 Tariff will most likely need to increase to fund this growth.[40]

Avista stated:

> Avista's revisions to our natural gas avoided cost are driven by the completion of our natural gas IRP process. Since 2006 we have completed two natural gas IRP's. The dates of those completions are March 31st, 2006 and December 31st, 2007. In addition to identifying updated natural gas avoided costs, the IRP's also identify a goal for cost-effective DSM acquisition. Naturally increasing avoided costs would, all else being equal, lead to higher levels of cost-effective DSM being identified within the plan. In addition to increasing avoided costs and acquisition targets, escalating retail rates have

[38] From Avista's response to Data Request 2, Question 17. See Exhibit C-9 Avoided Cost Calculations for details.
[39] 2006 Avista's Gas Integrated Resource Plan, Pages 3-9 and 3-10.
[40] 2007 Avista's Gas Integrated Resource Plan, Page 3.20.

increased customer demand for efficiency assistance. The desire to meet this customer need has also driven the Company to enhance the natural gas DSM portfolio.[41]

7) a) What new or revised customer educational, informational and marketing programs related to DSM were implemented by the Company during 2006-2008?

In 2006, Avista launched its Every Little Bit campaign to promote consumer energy efficiency through education and outreach. Every Little Bit is targeted to residential and small commercial customers in both Washington and Idaho service territories and focuses on low cost and no cost measures. Messages are conveyed through television, radio and print ads along with the program-dedicated website, www.everylittlebit.com.

Television
The Power to Conserve is a 30-minute television program hosted by Meteorologist Tom Sherry and Avista Program Manager Christine McCabe airing on local networks in the Avista service territory. The Power to Conserve offers viewers do-it-yourself household improvement demonstrations and tips for increasing their energy efficiency and lowering their energy costs.

Ten second television commercials offer suggestions on increasing efficiency by furnace maintenance, thermostat adjustment, window caulking and ENERGY STAR appliances.

Radio
Avista informs customers in their service territories of the conversion to natural gas as a cleaner energy and the benefits of using natural gas as an alternative to other fuels in two 30 second radio spots. These ads also direct consumers to contact Avista for information on the advantages of installing high efficiency equipment in their home and the various incentives and rebates offered by the Company.

Website
The Every Little Bit website serves as the portal for all of Avista's energy efficiency information. Consumers have access to details on rebates, coupons, incentives and programs offered by Avista in each service territory. Interactive tools such as the home energy analyzer, energy use calculator and bill analyzer allow consumers to have a customized view of their energy usage. The website also provides low-cost, no-cost and do-it-yourself energy saving projects.

[41] From Avista's original Data Submission for Question C6.

The table below shows the outreach impact of the Every Little Bit campaign for each year by state.[42]

Table C7-A WA & ID Energy efficiency campaigns: DSM Education & Every Little Bit	2004	2005	2006	2007
Gross impressions TV	n/a	3,665,000	See 2005*	6.2M***
Gross impressions Radio	n/a	2,049,300	See 2005*	n/a
Gross impressions Print	n/a	1,109,000	See 2005*	6.2M***
Reach % TV	n/a	88%	See 2005*	96.5%
Reach % Radio	n/a	64%	See 2005*	n/a
Reach % Print	n/a	59%	See 2005*	n/a
Average frequency TV	n/a	10.2	See 2005*	9.9
Average frequency Radio	n/a	14	See 2005*	n/a
Average frequency Print	n/a	4.6	See 2005*	n/a
Web traffic (ELB site)**	n/a	n/a	n/a	15,000
*campaign stats reflect run covering December 2005 and January 2006				
**web traffic is for all three states.				
****cumulative across all three states, including TV, print & web*				
"Impressions" is the sum of all advertising "exposures" (the number of people reached).				

Print

Avista provides a variety of printed literature for distribution. Avista has made efforts to encourage commercial and industrial customers to implement efficiency improvements through informational brochures, rebate forms and a monthly electronic newsletter. Brochures highlight the financial benefits of increased efficiency and provide tips on decreasing usage to reduce Company costs. They also direct businesses to contact their Avista account executive for more information on rebates and incentives and assistance in identifying and incorporating reduction measures. Simplified rebate forms facilitate processing. Commercial and industrial customers also have the option to sign up for a monthly electronic efficiency newsletter that includes articles and information on recent topics affecting businesses.

Other Outreach

> Avista Utilities is working with Northwest Sustainable Energy for Economic Development (Northwest SEED) to develop the infrastructure necessary to establish a self-sustaining energy-efficiency program within the residential and non-residential facilities of the Spokane Tribe of Indians. The funding provided by Avista leverages a US Department of Agriculture grant. The long-term strategy is to enhance the ability to realize cost-effective energy-efficiency opportunities for the Company's regular and limited income portfolio in the future.[43]

Avista charged $10,000 to WA/ID natural gas for part of a $50,000 payment to Northwest SEED in May 2007.[44]

[42] From Avista's original Data Submission for Question C7 – Ad Metrics.
[43] From Avista's 12/29/2008 email.
[44] From Avista's response to Data Request 2, Question 27.

b) What were the primary messages and estimated costs of each of these programs?

There are 2 primary messages of the Every Little Bit program. "One is a call-to-action to look at our rebates on our website and use them; and secondly an understanding for an emerging efficiency consciousness relating to energy and sustainability" (Folsom & NEEA, 2008).

This program was covered by the DSM tariff riders as follows.[45]

Table C7-B Every Little Bit Program Costs				
		2006	2007	2008
Gas	WA	$56,158	$98,125	$144,567
	ID	$24,068	$43,983	$62,548
	Total	$80,226	$142,108	$207,115
Electric	WA	$74,744	$313,045	$369,075
	ID	$32,034	$134,704	$158,332
	Total	$106,778	$447,749	$527,407
Totals		$187,004	$589,857	$734,522

c) Were any therm savings attributed to such programs in the independent DSM audit, and if so, how much, and using what assumptions or studies?

These programs were not credited for any documented DSM savings; therefore these programs were not included in the scope of the DSM Savings Verification Reports.

8) a) What were the annual revenues collected from ratepayers under the gas tariff rider (Schedule 191), by rate schedule, to fund gas DSM programs for 2004-2008?

The portion of Schedule 191 tariff revenue for DSM program funding is shown below[46] and reveals significant increases in 2007 and 2008.

Table C-8A WA Schedule 191 Tariff Revenue by Rate Schedule						
		2004	2005	2006	2007	2008
101	Revenue	$1,228,031	$ 986,607	$ 856,269	$2,074,732	$2,155,115
	% of Total	70%	71%	71%	70%	71%
111/112	Revenue	$ 447,314	$ 357,788	$ 304,777	$ 763,674	$ 793,488
	% of Total	25%	26%	25%	26%	26%
121/122	Revenue	$ 78,072	$ 48,055	$ 42,387	$ 102,533	$ 93,120
	% of Total	4.4%	3.4%	3.5%	3.5%	3.1%
131/132	Revenue	$ 6,135	$ 4,098	$ 3,506	$ 9,195	$ 8,955
	% of Total	0.3%	0.3%	0.3%	0.3%	0.3%
	Total	$1,759,552	$1,396,549	$1,206,939	$2,950,134	$3,050,678

The above DSM revenues are gross revenues and includes additional pass through revenue collected for excise fees, franchise fees, commission fees, etc. and will not match Table C4-A revenues.

[45] From Avista's 3/20/09 updated Data Submission for Data Request 10, Question 14.
[46] See Exhibit C-6 WA Schedule 191 DSM Tariff Revenue Calculations.

b) What was the gas tariff rider (Schedule 191) surcharge for the years 2004-2008?

The Schedule 191 DSM Tariff surcharge history is shown below.[47] The surcharge was significantly increased in 2007, explaining the revenue increase in Table C8-A.

Table C8-B WA Schedule 191 Tariff Surcharge History ($ per therm)						
Effective Date	**09/11/03**	**5/2/2004**	**2/14/2005**	**1/1/2006**	**11/1/2006**	**1/1/2008**
Revision	**Third**	**Fourth**	**Fifth**	**Fifth[48]**	**Sixth**	**Seventh**
101	$ 0.01119	$ 0.01119	$ 0.00790	$ 0.00412	$ 0.01795	$0.01795
111/112	$ 0.00965	$ 0.00965	$ 0.00682	$ 0.00355	$ 0.01580	$0.01580
121/122	$ 0.00893	$ 0.00893	$ 0.00631	$ 0.00329	$ 0.01479	$0.01479
131/132	$ 0.00862	$ 0.00862	$ 0.00609	$ 0.00317	$ 0.01429	$0.01429

Although Schedule 191, Fifth Revision reduced the DSM Tariff surcharge on 2/14/2005, natural gas funding was not reduced. UG-050483 increased Limited Income DSM by $200,000, LIRAP funding by $600,000 and required no decrease in other DSM programs. This was accomplished through use of tax rebate funds and a transfer of Schedule 91 DSM funds.[49]

The reduction on 1/1/2006 was due to the retirement of a temporary DSM surcharge from Schedule 191, Third Revision that was effective until December 31, 2005.[50]

The surcharge increase starting 11/1/2006 was from UG-061529 and was requested to fund ongoing DSM operations consistent with the increased DSM savings goals and to amortize a deficiency DSM tariff rider balance resulting from higher than expected customer demand for DSM services.[51]

9) a) What were actual yearly DSM expenditures for 2004-2008?

Total DSM expenditures are shown below and reveal increased DSM expenditures.[52]

Table C9-A DSM Expenditures by Jurisdiction					
	2004	***2005***	***2006***	***2007***	***2008***
Total	$1,081,665	$2,419,693	$2,809,496	$3,627,890	$6,288,959
WA	$679,909	$2,103,419	$2,025,641	$2,569,606	$4,393,712
% Expenditures	**63%**	**87%**	**72%**	**71%**	**70%**
% Savings	73%	85%	65%	81%	61%
ID	$401,757	$316,274	$783,856	$1,058,284	$1,895,247
% Expenditures	**37%**	**13%**	**28%**	**29%**	**30%**
% Savings	27%	15%	35%	19%	39%

[47] Exhibit C-7 Schedule 191 Tariff Rider Adjustments.
[48] The temporary DSM tariff of 0.46% from the Third Revision was effective through December 31, 2005.
[49] See UG-050483, Order 05, Paragraphs 141-147.
[50] See Exhibit C-7 Schedule 191 Tariff Rider Adjustments
[51] See UG-061529 Cover Letter dated September 29, 2006.
[52] See Exhibit C-8 DSM Cost Calculations. DSM Savings are from Table C1-A.

b) How were such amounts spent each year by customer class (residential, limited income, non-residential) and rate schedule?

The distribution of expenditures by customer class is shown below.[53]

Table C9-B DSM Expenditures by Customer Class

		2004	2005	2006	2007	2008
Total	Commercial Industrial	$ 619,421 57%	$ 1,520,443 63%	$ 1,622,903 58%	$ 2,265,537 62%	$ 2,725,890 43%
	Limited Income	$ 263,978 24%	$ 516,340 21%	$ 558,372 20%	$ 501,566 14%	$ 592,484 9%
	Residential	$ 198,267 18%	$ 382,911 16%	$ 628,221 22%	$ 860,787 24%	$ 2,970,585 47%
	Total	$ 1,081,665	$ 2,419,693	$ 2,809,496	$ 3,627,890	$ 6,288,959
WA	Commercial Industrial	$ 433,594 64%	$ 1,350,188 64%	$ 1,262,475 62%	$ 1,502,950 58%	$ 1,658,904 38%
	Limited Income	$ 184,784 27%	$ 496,534 24%	$ 492,477 24%	$ 436,032 17%	$ 536,338 12%
	Residential	$ 61,530 9%	$ 256,696 12%	$ 270,689 13%	$ 630,623 25%	$ 2,198,471 50%
	Total	$ 679,909	$ 2,103,419	$ 2,025,641	$ 2,569,606	$ 4,393,712
ID	Commercial Industrial	$ 185,826 46%	$ 170,254 54%	$ 360,428 46%	$ 762,587 72%	$ 1,066,986 56%
	Limited Income	$ 79,193 20%	$ 19,805 6%	$ 65,895 8%	$ 65,534 6%	$ 56,147 3%
	Residential	$ 136,737 34%	$ 126,215 40%	$ 357,533 46%	$ 230,164 22%	$ 772,115 41%
	Total	$ 401,757	$ 316,274	$ 783,856	$ 1,058,284	$ 1,895,247

Historically, approximately 60% of the WA Expenditures was invested in commercial/industrial projects while 40% was invested in residential DSM measures (including Limited Income); however, it appears the portion of DSM expenditures in the WA Residential customer class is growing rapidly. At the same time, the rate of growth in Limited Income DSM expenditures is not growing as fast and the Limited Income DSM portion of investment is shrinking. In 2004 through 2006, one in four DSM dollars was invested in the Limited Income customer class. This ratio dropped to one in six in 2007 and one in eight in 2008.

[53] See Exhibit C-8 DSM Cost Calculations.

Expenditures by rate schedule are shown below and again reveal increasing expenditures.[54]

Table C9-C DSM Expenditures by Rate Schedule						
		2004	2005	2006	2007	2008
Total	101	$587,183	$1,020,798	$1,498,963	$2,105,184	$4,286,887
		54%	42%	53%	58%	68%
	111	$490,607	$1,365,190	$1,291,706	$1,405,292	$1,856,023
		45%	56%	46%	39%	30%
	121	$3,875	$33,704	$18,827	$117,414	$146,049
		0%	1%	1%	3%	2%
WA	101	$315,575	$818,995	$978,135	$1,419,029	$3,213,344
		46%	39%	48%	55%	73%
	111	$360,458	$1,250,719	$1,028,679	$1,045,763	$1,163,619
		53%	59%	51%	41%	26%
	121	$3,875	$33,704	$18,827	$104,814	$16,749
		1%	2%	1%	4%	0%
ID	101	$271,607	$201,803	$520,828	$686,155	$1,073,542
		68%	64%	66%	65%	57%
	111	$130,149	$114,471	$263,027	$359,530	$692,404
		32%	36%	34%	34%	37%
	121	$0	$0	$0	$12,600	$129,300
		0%	0%	0%	1%	7%

The proportion of WA Schedule 101 DSM expenditures has steadily increased from 2005 to 2008.

[54] See Exhibit C-8 DSM Cost Calculations.

c) Identify the total expenditures directly distributed to customers (by customer class), and the total expenditures for the administration of the programs.

Incentive and non-incentive expenditures are shown below.[55] The non-incentive expenditures are comprised of Labor & Expenses and General Expenses. Labor & Expenses are those expenditures that are allocated to a specific DSM program. General Expenses are not allocated to specific DSM program and are allocated across all programs by their portion of DSM savings. Note that the CAP agency 15% administration cost for the Limited Income programs is not included in the non-incentive costs.

Table C9-D Total DSM Expenditures by Customer Class						
		2004	2005	2006	2007	2008
Total	Incentives	$941,147 87%	$1,950,373 81%	$2,179,621 78%	$2,674,679 74%	$5,085,264 81%
	Labor & Expenses	$238	$405,733	$427,296	$704,972	$613,843
	General	$49,297	$63,587	$202,581	$248,238	$589,853
	Total	$1,081,665	$2,419,693	$2,809,498	$3,627,889	$6,288,959
Commercial Industrial	Incentives	$487,422 79%	$1,213,566 80%	$1,213,031 75%	$1,600,120 71%	$2,145,013 79%
	Labor & Expenses	$119	$259,256	$288,050	$486,687	$257,086
	General	$40,897	$47,621	$121,822	$178,730	$323,791
	Total	$619,421	$1,520,443	$1,622,903	$2,265,537	$2,725,890
Limited Income	Incentives	$260,582 99%	$495,343 96%	$522,661 94%	$460,420 92%	$548,902 93%
	Labor & Expenses	$0	$14,686	$21,922	$27,704	$11,579
	General	$3,395	$6,311	$13,789	$13,442	$32,003
	Total	$263,978	$516,340	$558,372	$501,566	$592,484
Residential	Incentives	$193,143 97%	$241,464 63%	$443,929 71%	$614,139 71%	$2,391,349 81%
	Labor & Expenses	$119	$131,791	$117,324	$190,581	$345,178
	General	$5,005	$9,656	$66,969	$56,066	$234,059
	Total	$198,267	$382,911	$628,222	$860,786	$2,970,585

The percentage of DSM expenditures being directly returned to customers in the form of incentives decreased each year from 2004 to 2007 but was back above 80% in 2008.

[55] See Exhibit C-8 DSM Cost Calculations.

Table C9-E WA DSM Expenditures by Customer Class						
		2004	2005	2006	2007	2008
Total	Incentives	$581,546	$1,715,891	$1,595,891	$1,911,703	$3,572,073
		86%	82%	79%	74%	81%
	Labor & Expenses	$63,855	$332,698	$293,965	$486,573	$422,397
	General	$34,508	$54,830	$135,785	$171,329	$399,243
	Total	$679,909	$2,103,419	$2,025,641	$2,569,606	$4,393,712
Commercial Industrial	Incentives	$341,195	$1,077,675	$943,630	$1,061,515	$1,305,398
		79%	80%	75%	71%	79%
	Labor & Expenses	$63,771	$230,225	$224,077	$322,867	$156,455
	General	$28,628	$42,288	$94,767	$118,569	$197,051
	Total	$433,594	$1,350,188	$1,262,475	$1,502,950	$1,658,904
Limited Income	Incentives	$182,408	$476,343	$460,981	$400,262	$496,886
		99%	96%	94%	92%	93%
	Labor & Expenses	$0	$14,123	$19,335	$24,084	$10,482
	General	$2,377	$6,069	$12,162	$11,686	$28,970
	Total	$184,784	$496,534	$492,477	$436,032	$536,338
Residential	Incentives	$57,943	$161,873	$191,280	$449,926	$1,769,789
		94%	63%	71%	71%	81%
	Labor & Expenses	$83	$88,350	$50,553	$139,622	$255,459
	General	$3,504	$6,473	$28,856	$41,075	$173,222
	Total	$61,530	$256,696	$270,689	$630,623	$2,198,471

Growth in Residential DSM Incentives has outpaced both Commercial/Industrial and Limited Income DSM growth, especially from 2007 to 2008. One likely reason for this large increase in 2008 is the large increase in Residential DSM incentives.[56]

[56] See DSM Program changes in Question 5a, Page 24.

Table C9-F ID DSM Expenditures by Customer Class		2004	2005	2006	2007	2008
Total	Incentives	$359,601	$234,482	$583,729	$762,976	$1,513,191
		90%	74%	74%	72%	80%
	Labor & Expenses	$27,366	$73,035	$133,331	$218,399	$191,446
	General	$14,789	$8,757	$66,796	$76,909	$190,610
	Total	$401,757	$316,274	$783,856	$1,058,284	$1,895,247
Commercial Industrial	Incentives	$146,227	$135,891	$269,400	$538,605	$839,615
		79%	80%	75%	71%	79%
	Labor & Expenses	$27,331	$29,031	$63,973	$163,820	$100,630
	General	$12,269	$5,332	$27,055	$60,161	$126,740
	Total	$185,826	$170,254	$360,428	$762,587	$1,066,986
Limited Income	Incentives	$78,175	$19,000	$61,680	$60,158	$52,017
		99%	96%	94%	92%	93%
	Labor & Expenses	$0	$563	$2,587	$3,620	$1,097
	General	$1,019	$242	$1,627	$1,756	$3,033
	Total	$79,193	$19,805	$65,895	$65,534	$56,147
Residential	Incentives	$135,200	$79,591	$252,648	$164,214	$621,559
		99%	63%	71%	71%	81%
	Labor & Expenses	$36	$43,441	$66,771	$50,959	$89,719
	General	$1,502	$3,183	$38,113	$14,992	$60,837
	Total	$136,737	$126,215	$357,533	$230,164	$772,115

10) How did Avista's natural gas Integrated Resource Plan (IRP) conservation achievement goal(s) compare to the verified/audited DSM savings each year?

Avista's WA and ID combined IRP savings goals and achieved savings from the DSM Savings Verification Reports are shown below.[57]

Table C10-A WA/ID DSM Savings (therms) versus Goals			
	2006	2007	2008
IRP DSM Savings Goal	1,062,000	1,062,000	1,425,070
Verified DSM Savings	1,052,390	1,455,678	1,821,298
% of Goal	99.1%	137.1%	127.8%

The initial year of the DSM verification audit, significant post-year disqualifications by the auditor resulted in a reduction of Avista's claimed DSM Savings below the goal. Otherwise, Avista significantly exceeded the IRP goal.

There are minor differences between Avista's jurisdictional DSM verification report summaries, Avista's combined WA/ID DSM verification report summaries, Triple-E report savings and Titus' calculated DSM Savings as described in Exhibit C-1 DSM Savings Calculations. These differences do not impact the results of the Mechanism.

[57] 2006 & 2007 Goals from 2006 Avista Natural Gas IRP, Page 1-4, 2008 Goal from 2007 Avista Natural Gas IRP, Page 1.7.

D Revenue Deferred and Collected Under the Mechanism

Section D Introduction

Understanding the timing of the pilot decoupling mechanism is essential in evaluating its impact. Decoupling deferrals are recorded from January 1, 2007 until June 30, 2009, a period of 2 ½ years. Recoveries for those deferrals are collected from November 1, 2007 until October 31, 2010, a period of 3 years. Therefore, care must be exercised when using and comparing these values. The first year of recoveries are based on 6 months of deferrals. In addition, recoveries cannot be directly used for comparison in the year they are collected because they actually recover deferrals based on calculated lost margin in a previous period.

1) What was the monthly, annual, and cumulative amount of revenue deferred and recovered through the decoupling mechanism during 2007 and 2008, before and after any percentage adjustments to reflect the 90% deferral limitation, as well as any percentage adjustments due to the DSM Test or the Earnings Test?

The monthly, annual and cumulative deferrals are shown below.[59]

Table D1 2007 Decoupling Mechanism Deferrals

	100% Deferral		90% Deferral		With Test Exclusions	
		Cumulative		Cumulative		Cumulative
Jan-07	$126,606	$126,606	$113,945	$113,945	$101,284	$101,284
Feb-07	($31,372)	$95,234	($28,235)	$85,710	($25,097)	$76,187
Mar-07	$193,671	$288,905	$174,304	$260,014	$154,937	$231,124
Apr-07	$93,518	$382,423	$84,166	$344,181	$74,815	$305,939
May-07	$76,847	$459,270	$69,162	$413,343	$61,477	$367,416
Jun-07	($77,174)	$382,096	($69,456)	$343,886	($61,739)	$305,677
Jul-07	$38,507	$420,603	$34,656	$378,542	$34,656	$340,333
Aug-07	$33,953	$454,556	$30,558	$409,100	$30,558	$370,891
Sep-07	($88,875)	$365,681	($79,988)	$329,113	($79,988)	$290,903
Oct-07	$264,463	$630,143	$238,016	$567,129	$238,016	$528,919
Nov-07	$278,510	$908,653	$250,659	$817,788	$250,659	$779,578
Dec-07	$133,934	$1,042,587	$120,541	$938,329	$120,541	$900,119
2007	**$1,042,587**		**$938,329**		**$900,119**	

[59] See Exhibit D-1 Decoupling Quarterly Reports for calculation details.

Table D2 2008 Decoupling Mechanism Deferrals						
	100% Deferral		90% Deferral		With Test Exclusions	
		Cumulative		Cumulative		Cumulative
Jan-08	$136,242	($906,346)	$122,617	($815,711)	$122,617	($777,502)
Feb-08	($369,207)	($1,275,552)	($332,286)	($1,147,997)	($332,286)	($1,109,788)
Mar-08	$405,409	($870,143)	$364,868	($783,129)	$364,868	($744,919)
Apr-08	$20,877	($849,266)	$18,789	($764,340)	$18,789	($726,130)
May-08	($107,591)	($956,858)	($96,832)	($861,172)	($96,832)	($822,962)
Jun-08	$7,128	($949,730)	$6,415	($854,757)	$6,415	($816,547)
Jul-08	($50,996)	($1,000,726)	($45,897)	($900,654)	($45,897)	($862,444)
Aug-08	($32,464)	($1,033,190)	($29,218)	($929,872)	($29,218)	($891,662)
Sep-08	$43,362	($989,828)	$39,026	($890,846)	$39,026	($852,636)
Oct-08	$90,656	($899,172)	$81,590	($809,256)	$81,590	($771,046)
Nov-08	$225,463	($673,709)	$202,917	($606,339)	$202,917	($568,130)
Dec-08	$379,465	($294,244)	$341,519	($264,820)	$341,519	($226,611)
2008	$748,344		$673,508		$673,508	

The noticeable reductions in deferral amounts in 2008 compared to 2007 were the result of the UG-070805 General Rate Case which took effect January 1, 2008.[60] The earnings test did not impact the level of deferred revenue recovery in any year.[61] The DSM test's only impact was in response to the audited 2006 DSM savings when the level of deferred revenue recovery was reduced from 90% to 80% of the lost margin, decreasing the amount of revenue recovered by ($38,210).[62] The monthly, annual and cumulative recoveries are shown below.[63]

Table D3 Decoupling Mechanism Recoveries					
		Cumulative			Cumulative
Jan-07		$0	Jan-08	$57,146	$142,281
Feb-07		$0	Feb-08	$47,503	$189,784
Mar-07		$0	Mar-08	$38,172	$227,956
Apr-07		$0	Apr-08	$27,815	$255,771
May-07		$0	May-08	$12,299	$268,070
Jun-07		$0	Jun-08	$8,867	$276,938
Jul-07		$0	Jul-08	$5,596	$282,534
Aug-07		$0	Aug-08	$5,985	$288,519
Sep-07		$0	Sep-08	$12,809	$301,328
Oct-07		$0	Oct-08	$18,462	$319,790
Nov-07	$34,615	$34,615	Nov-08	$65,159	$384,949
Dec-07	$50,520	$85,135	Dec-08	$131,838	$516,787
2007	$85,135		2008	$431,652	

[60] See Section F for details.
[61] See Exhibit D-2 UG-071863.
[62] See Question D-5 for details.
[63] From Avista's data submission for Question D-1 and Data Request 10, Question 3.

2) Has Avista made any changes to its methods or calculations of the decoupling deferral over the course of the pilot, as reflected in the quarterly deferral reports? Describe any such changes, their purpose and impact on the deferral.

Revenue-related cost gross-up adjustment

Docket No. UG-071863 was the tariff revision request to implement the surcharge to recover the January – June, 2007 decoupling deferrals. This was the first filing for decoupling recoveries under the pilot mechanism and was closely scrutinized.

Public Counsel Data Request #219 identified that the revenue-related gross-up factor was included in both the deferral calculations and the tariff surcharge calculations. It was agreed that the revenue-related gross-up factor should only be included in the recovery surcharge rate to reflect the cost and income at relatively the same time. However, decoupling deferral calculations for January through June, 2007 already included the revenue related gross-up adjustment. An agreement was reached to remove the revenue-related gross-up factor from the UG-071863 tariff surcharge for November 1, 2007 through October 31, 2008. [64] When compared to recalculating the decoupling deferrals without the revenue-related gross-up factor, the approved method resulted in a reduction in the estimated decoupling recoveries of ($1,223).[65]

Moving forward, the 2007 3rd Quarter decoupling report was adjusted to offset the revenue-related gross-up factor for July 1, 2007 through September 30, 2007 and the gross-up factor was not included in decoupling deferral calculations beginning October 1, 2007. The UG-081601 tariff surcharge for November 1, 2008 through October 31, 2009 intended to recover lost margin between July 1, 2007 and June 30, 2008 includes the revenue-related gross-up factor.

New GRC

New rates effective January 1, 2008 per UG-070805 changed the margin rate, changed the base year for comparison of usage in the deferral calculations and changed the weather normalization methodology to reflect seasonal weather sensitivity. This change in weather normalization methodology changed the decoupling deferral calculation weather adjustment. The new base year is used for both the GRC and the Mechanism and reduces the impact of the new customer adjustment in the Mechanism deferral calculations because some of the "pre-GRC" Mechanism usage difference (and the associated margin difference) is reflected in the GRC instead of the Mechanism.[66]

New Customer Adjustment

> Avista discovered an error in the program used to determine the new customer adjustment. The program was repaired prior to publishing the 2008 4th quarter decoupling report and a journal entry was entered in January 2009 to correct the $22,567 error that occurred in December 2007.

[64] See Exhibit D-2 UG-071863 Summary
[65] See Exhibit D-3 Avista's Data Submission for Question D-2.
[66] See Section F for details.

3) Were there any issues that arose regarding the methodology or input values for calculation of the accounting journal entries which implemented the decoupling deferral? Explain and quantify the impact of any changes in methodology or input values.

> In response to the revenue-related cost gross-up decision in [Question] D.2, an accounting adjustment of $576 was made in October of 2007 to restate the July through September deferrals exclusive of revenue related expenses.[67]
>
> Interest was improperly calculated in the amortization schedule for account [number] 182328 for December 2007 and January 2008. Originally, a full month of interest on the beginning balance was added to one half month interest on the ending balance. This was corrected to add one half month of interest on the change in balance over the month to one full month of interest on the beginning balance. In addition, an interest rate of 8.25% was used for January 2008 in lieu of the new rate of 7.76%. A correcting adjustment of ($1,712.60) was entered in February 2008.[68]

The 3rd quarter 2007 Report GL Accounts included the following footnote:[69]

> (1) At the time that the first pilot period balance was transferred from Account 186328 to Account 182329 to await approval for recovery, the associated accumulated deferred income tax was inadvertently eliminated as the journal only looked at the change in Account 186328. There was an offsetting Schedule M error resulting in no net income impact. Similarly, when the 90% to 80% write-down occurred in September, the change in the 182329 balance was not picked up as either a Schedule M item or a deferred FIT entry. In October an adjustment will be made to correct the July and September Schedule M and Deferred FIT errors.
>
> For UG-081601, Avista originally submitted a rate of return of 6.97% but subsequently submitted a revision after submitting a corrected Commission Basis Report for its 2007 gas operations that excluded several pro forma adjustments, including the annual revenue associated with the January 1, 2008 rate increase. This revision did not impact the earnings test or the decoupling deferral recovery surcharge.[70]

Because of the error in the new customer adjustment program, the January 2009 journal contains an entry with the following adjustments for December 2007:[71]

New Customer Usage	1,421,829
New Customer Count	10,818
Decoupling Deferral Reduction	($22,567)

[67] From Avista's Data Submission for Question D-3.
[68] From Avista's Data Submission for Question D-3.
[69] From Avista's Data Submission for Question D-3.
[70] See Exhibit D-11 UG-081601.
[71] From Avista's response to Data Request 10.

4) How do the annual recorded decoupling deferral amounts compare to the Company's estimate of $600,000-$700,000 developed prior to implementation of the Mechanism, as described in Paragraph 24 of the Commission's Order 04?

$900,119 was deferred in 2007 while $673,508 was deferred in 2008. 2007 exceeded Avista's estimated deferral range and 2008 was within the estimated range. The 2007 GRC is one of the factors that reduced the 2008 decoupling deferrals as it updated the baseline customer base, lowered the new customer adjustment and reduced the calculated deferrals. The 2007 GRC also changed the weather normalization methodology.

5) What was the mathematical result of the earnings test and the DSM test for 2006 and 2007, used for and provided in the September 2007 and 2008 rate adjustment filings, respectively?

2006 – All results below are taken from UG-071863 in Exhibit D-2.

DSM Test - UG-071863, Exhibit 2 shows the 2006 DSM test resulted in an adjustment of the recoverable lost margin as shown below.

Avista Utilities
Calculation of Recoverable Lost Margin from Decoupling Surcharge
Based on Audited DSM Savings for 2006
Nov. 1, 2007 Surcharge / Jan. - June 2007 Lost Margin

2006 DSM Therm Savings(1)		1,052,390
Divided by: 2006 DSM Target(1)		1,062,000
% of Target Achieved		99.1%
Level of Recoverable Lost Margin(2)		80%
Times: Jan. - June 2007 Lost Margin(3)	$	382,096
Recoverable Lost Margin	**$**	**305,677**
Less: 90% Revenue deferred Jan. - June	$	343,886
Deferred Revenue Write-off	$	38,209

Earnings Test – The earnings test did not impact the level of recoverable lost margin as the rate of return of 7.81% did not exceed the authorized level of 9.11%.

2007 All results below are taken from UG-081601 in Appendix D-11.
DSM Test – The audited 2006 DSM test did not impact the level of recoverable lost margin as the audited DSM savings of 1,455,678 therms exceeded the target level of 1,062,000 therms.
Earnings Test – The earnings test did not impact the level of recoverable lost margin as the rate of return of 7.79% did not exceed the authorized level of 8.20%. Avista originally submitted a rate of return of 6.97% but subsequently submitted a revision after submitting a corrected Commission Basis Report for its 2007 gas operations that excluded several pro forma adjustments, including the annual revenue associated with the January 1, 2008 rate increase. This revision did not impact the earnings test or the decoupling deferral recovery surcharge.

2008 Avista exceeded the 2008 DSM target by 36%. The initial rate of return for WA gas operations in UG-090324 was 7.437%. Therefore, neither the DSM Test nor the Earnings Test is expected to affect the level of recoverable lost margin when filed.

6) a) What was the pretax margin and net income impact resulting from the recoverable revenue deferrals for 2007 and 2008 as a result of the pilot?

2007 The decoupling revenue deferral recoveries in 2007 increased net income before tax by $900,119, from $13,071,380 to $13,971,499 and increased the pretax margin by 6.89%.[72]

2008 The decoupling revenue deferral recoveries in 2008 increased net income before tax by $673,508, from $15,297,953 to $16,644,969 and increased the pretax margin by 4.40%.[73]

b) What percentage of total pretax margins and net income for the Company's Washington Gas operations is represented?

2007 The decoupling deferral recoveries represented 6.44% of the pre-tax net income and 1.40% of the pretax margin in 2007.[74]

2008 The decoupling deferral recoveries represented 4.05% of the pre-tax net income and 0.98% of the pretax margin in 2008.[75]

[72] See Exhibit D-4 Decoupling Margin Impact.
[73] See Exhibit D-4 Decoupling Margin Impact.
[74] See Exhibit D-4 Decoupling Margin Impact.
[75] See Exhibit D-4 Decoupling Margin Impact.

7) What was Avista's Schedule 101 recorded gas margin revenue and recorded gas margin revenue per customer for 2006-2008, before and after decoupling deferrals?

The impact of the decoupling deferral revenue on margin is shown below.[76]

Table D7 Mechanism's Revenue Impact				
Year	Margin Revenue	Margin Revenue with Decoupling	Margin Revenue per Customer	Margin Revenue per Customer with Decoupling
2006	$31,482,311	$31,482,311	$230.80	$230.80
2007	$31,973,949	$32,874,068	$229.23	$235.69
2008	$36,532,378	$37,205,886	$257.48	$262.23

8) What was the total amount of decoupling surcharge revenue collected from ratepayers each month from November 2007 through December 2008?

The deferred revenue recovery is shown below.[77]

Table D8 Decoupling Revenue	Surcharge Revenue
Nov-07	$34,615
Dec-07	$50,520
2007 Total	**$85,135**
Jan-08	$57,146
Feb-08	$47,503
Mar-08	$38,172
Apr-08	$27,815
May-08	$12,299
Jun-08	$8,867
Jul-08	$5,596
Aug-08	$5,985
Sep-08	$12,809
Oct-08	$18,462
Nov-08	$65,159
Dec-08	$131,838
2008 Total	**$431,652**

[76] See Exhibit D-5 Decoupling Margin Impact per Customer.
[77] From Avista's Data Submissions for Question D-8 and Data Request 10-3.

9) a) What is the monthly customer bill impact of the decoupling rate adjustment for customers during the three year recovery period?[78] The bill impact analysis should provide actual data for the period November 2007 through October 2008, and anticipated bill impact for the periods November 2008 through October 2009, and November 2009 through October 2010, using the latest available cost of gas and billing determinants. The bill impact analysis shall examine annual usages typical of customers having: a) natural gas space heat, b) water heat, c) both space and water heat, as well as d) the average Schedule 101 levels of annual usage. This should be expressed as an average monthly dollar amount collected and percentage based on the total decoupling amount to be collected divided by total estimated revenue for Schedule 101 customers for the November 2007-October 2008 and estimated for the November 2008-October 2009 and November 2009 through October 2010 periods.

Typical customer usage is defined as the expected (or typical) usage of a customer with gas heat only, gas water heat only and both gas heat and gas water heat. Average customer usage is simply the total usage for that class divided by the number of customers.

Avista's estimates for usage by typical customers are detailed in Exhibit D-6. Schedule 159 Decoupling Recovery future surcharges are estimated using Avista's forecast.[79] The estimated bill impact by the Mechanism is shown below.[80]

~~CONFIDENTIAL per Protective Order in WUTC Docket UG-060518~~

Table D9-A Impact of Schedule 159 Decoupling Recovery on Typical Customer

		Annual Usage	11/07 - 10/08	11/08 - 10/09	Estimated 11/09 - 10/10
Average 101 Monthly Bill	Space Heat	759	$60	$58	$50
	Water Heat	214	$22	$22	$20
	Both Space and Water Heat	973	$77	$75	$65
	Average Schedule 101		$70	$67	$57
Schedule 159 Impact	Space Heat Only	759	$0.16	$0.37	$0.02
	% of Average Monthly Bill		0.27%	0.64%	0.04%
	Water Heat Only	214	$0.05	$0.11	$0.01
	% of Average Monthly Bill		0.22%	0.49%	0.05%
	Both Space and Water Heat	973	$0.21	$0.48	$0.02
	% of Average Monthly Bill		0.27%	0.64%	0.03%
	Average 101 Customer		$0.19	$0.42	$0.02
	% of Average Monthly Bill		0.27%	0.63%	0.04%

[78] This bill analysis should make clear that while decoupling deferrals are allowed for 2 years and 6 months, the recovery period is longer (three years).
[79] See Exhibit D-7 Schedule 159 Impact Calculations
[80] Direct annual comparison is not possible. The first year of recoveries is for 6 months of deferrals while the other periods recover a full year of deferrals. Additionally, UG-070805 GRC took effect 1/1/08, reducing deferrals and subsequent recoveries.

The estimated future recoveries are based on estimated deferrals using Avista's natural gas forecast, V4.1. For the period 11/09 to 10/10, the estimated deferral recovery is **Begin ~~CONFIDENTIAL~~ ~~per Protective Order in WUTC Docket UG-060518~~** $37,213 **~~End CONFIDENTIAL~~**.

b) Estimate the bill impact of the deferrals from July 2008 through February 2009.

The estimated bill impact on typical customers for the deferrals from July 2008 to February 2009 is shown below.[81]

~~CONFIDENTIAL~~ ~~per Protective Order in WUTC Docket UG-060518~~

Table D9-B Impact of Schedule 159 Decoupling Recovery on Typical Customer

		Annual Usage	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
Average 101 Monthly Bill	Space Heat	759	$10	$5	$7	$26	$69	$151	$167	$176
	Water Heat	214	$26	$26	$26	$26	$25	$25	$26	$26
	Both Space and Water Heat	973	$30	$25	$28	$47	$88	$170	$187	$196
	Average Schedule 101	879	$28	$23	$25	$43	$80	$154	$169	$178
Schedule 159 Impact	Space Heat Only	759	$0.01	$0.00	$0.00	$0.05	$0.34	$0.79	$0.85	$0.90
	% of Average Monthly Bill		0.10%	0.00%	0.00%	0.19%	0.50%	0.52%	0.51%	0.51%
	Water Heat Only	214	$0.05	$0.05	$0.05	$0.05	$0.11	$0.11	$0.11	$0.11
	% of Average Monthly Bill		0.19%	0.19%	0.19%	0.19%	0.44%	0.44%	0.43%	0.43%
	Both Space and Water Heat	973	$0.06	$0.04	$0.05	$0.09	$0.45	$0.89	$0.96	$1.01
	% of Average Monthly Bill		0.20%	0.16%	0.18%	0.19%	0.51%	0.52%	0.51%	0.51%
	Average 101 Customer	879	$0.05	$0.04	$0.04	$0.08	$0.40	$0.81	$0.86	$0.91
	% of Average Monthly Bill		0.18%	0.17%	0.16%	0.19%	0.50%	0.52%	0.51%	0.51%

[81] See Exhibit D-8 Decoupling Deferral Calculations.

10) What was the total amount of interest accrued under the Mechanism for each month and for the period November 2007-December 2008?

The interest accrued on the decoupling deferrals is shown below.[82]

Table D10 Decoupling Interest	*Interest*
Nov-07	$1,983
Dec-07	$2,642
2007 Total	**$4,625**
Jan-08	$2,126
Feb-08	($766)
Mar-08	$665
Apr-08	$398
May-08	$287
Jun-08	$229
Jul-08	$148
Aug-08	$123
Sep-08	$82
Oct-08	$13
Nov-08	$1,238
Dec-08	$3,525
2008 Total	**$8,066**

Note: Feb-08 includes correction for Dec and Jan.

[82] From Avista's data submissions for D-10 and Data Request 10, Question 3.

E Proportion of Margin Lost to Company-Sponsored DSM Relative to the Amount Subject to Recovery

Section E Introduction

Paragraph 26 of the Commission's Order No. 4 states that the Commission will "closely scrutinize" the proportion of margin lost to Company-sponsored DSM relative to the amount subject to recovery. This information is therefore a key part of the Evaluation.

1) The timing of base rate changes will affect recoveries of lost margins through base rates. The evaluation should therefore identify recoveries of margin through updating of baseline values in rate cases, as well as the deferrals booked under the decoupling authorization.

2) What was the annual amount of estimated lost margin due directly to Company DSM programs/installations for Schedule 101 customers during 2007 and 2008 compared to the annual amount of lost margin calculated (and subject to recovery) under the Mechanism (at both the 100% and 90% levels)? This analysis should compare the estimated annual reduction in customer usage (therms) and margin ($) directly attributable to Avista's programmatic DSM for Schedule 101 customers to the total annual reduction in (weather-corrected) customer usage/margin as calculated under the deferral Mechanism, as well as additional margin revenues provided by Schedule 101 customers as a result of new rates taking effect.

The lost margin due to DSM programs and the decoupling deferrals for 2007 and 2008 are shown below.[82]

Table E-2 WA DSM Lost Margin versus Decoupling Deferrals	2007	2008
WA Schedule 101 DSM Lost Margin	$90,429	$162,661
100% Decoupling Deferrals	$1,042,587	$748,344
90% Decoupling Deferrals	$938,329	$673,509
100% Decoupling Deferrals (No GRC)	$1,042,587	$1,438,714
90% Decoupling Deferrals (No GRC)	$938,329	$1,294,843

The DSM lost margins in Table E-2 are the first-year lost margins and do not reflect the multi-year impact of the DSM measures.

The 2007 GRC reduced the 2008 deferrals as a portion of the reduced customer usage was transferred to the GRC rate in lieu of the decoupling deferrals. Additionally, the weather normalization methodology was modified as described in Exhibit D-10 UG-070805 Weather Correlation Method.

[82] See Exhibit D-9 DSM Lost Margin and Deferrals

F Impact of General Rate Cases During Implementation of the Pilot Mechanism

1) Did Avista file any rate cases during the pilot period? If so, when?

UG-070805 was filed on April 26, 2007. UG-080417 was filed on March 4, 2008.

2) To the extent new base rates took effect during the pilot period, when did those new rates take effect and what impact did that have on the methods and mechanics of the deferral calculations? Please include changes to base therm sales, weather adjustments, and rate of return.

UG-070805 took effect January 1, 2008. The base year was changed from 2004 to 2006. With the update of the decoupling baseline to a more recent year, some of the margin required to offset potential reduced usage per customer is shifted from the Mechanism to the GRC. This impacts the Mechanism by reducing both the Schedule 101 usage reduction and the New Customer adjustment in the deferral calculations. This results in a lower decoupling tariff with the difference being picked up in the GRC tariff adjustment. The weather correction method was changed to use ten years of historical data, add a third test for checking the correlation of the regression analysis and account for seasonal impact by making most of the weather adjustments for gas usage in the winter. These changes were implemented to produce weather correlations that more closely match historical usage.[84] The margin rate was increased to produce a 1.65% average revenue increase.[85] The rate of return was changed from 9.11% to 8.20%.[86]

UG-080417 took effect January 1, 2009. The base year was changed from 2006 to 2007[87]. With a more recent base year, the Schedule 101 usage reduction, new customer adjustment and resulting decoupling tariff will be reduced. The margin rates will be increased to produce a 2.40% increase in gas revenues.[88] The rate of return will be changed from 8.20% to 8.22%[89].

[84] Exhibit D-10 UG-070805 Weather Correlation Method
[85] Docket UG-070805, Order 05, Appendix 5 Page 12.
[86] Docket UG-070805, Order 05, Appendix 5 Page 11.
[87] Docket UG-080417, Order 08, Appendix A Page 12, Item 7.
[88] Docket UG-080417, Order 08, Appendix A Page 1.
[89] Docket UG-080417, Order 08, Appendix A Page 10.

G New Customer Usage and Adjustment Under the Mechanism

1) a) What was the impact of the new customer adjustment?

For 2007 and 2008 combined, the new customer usage adjustment significantly impacted the deferral calculations, representing 5.6% of Schedule 101 usage and 152% of the calculated decoupling deferral baseline usage reduction in the decoupling quarterly reports.[90]

b) For 2007 and 2008, what were the monthly and annual sales volumes deducted for new customer usage, and how do they compare to total sales volumes (both actual and weather normalized sales volumes)?

The usage for new customers is compared with the total 101 sales volume below.[91] Base Customers are defined as Schedule 101 Customers less the New Customers.

Table G1-A 2007 Customer Usage (therms)

	January	February	March	April	May	June
New Customers	1,620,408	1,565,117	1,001,608	706,395	412,954	269,857
All Schedule 101 Customers	21,292,599	21,234,566	14,472,322	9,724,124	6,113,562	3,664,833
% of New Customers to All Customers	7.6%	7.4%	6.9%	7.3%	6.8%	7.4%
Base Customers	19,672,191	19,669,449	13,470,714	9,017,729	5,700,608	3,394,976
% of New Customers to Base Customers	8.2%	8.0%	7.4%	7.8%	7.2%	7.9%
Weather Normalized Base Customers	19,165,089	16,206,445	12,390,188	6,743,352	4,611,932	2,609,969
% of New Customers to WN Base Customers	8.5%	9.7%	8.1%	10.5%	9.0%	10.3%

Table G1-B 2007 Customer Usage (therms)

2007 Customer Usage (therms)	July	August	September	October	November	December
New Customers	180,683	141,329	161,990	277,602	613,037	1,548,327
All Schedule 101 Customers	2,462,636	2,010,203	2,332,936	4,484,817	9,398,517	18,392,852
% of New Customers to All Customers	7.3%	7.0%	6.9%	6.2%	6.5%	8.4%
Base Customers	2,281,953	1,868,874	2,170,946	4,207,215	8,785,480	16,844,525
% of New Customers to Base Customers	7.9%	7.6%	7.5%	6.6%	7.0%	9.2%
Weather Normalized Base Customers	1,880,406	2,265,550	2,679,347	7,384,858	14,081,220	19,111,813
% of New Customers to WN Base Customers	9.6%	6.2%	6.0%	3.8%	4.4%	8.1%

[90] From Exhibit 12 Decoupling Calculation Summary.
[91] From Exhibit D-1 Decoupling Quarterly Reports and Avista's data submission for Question G-1.

Table G1-C 2008 Customer Usage (therms)	January	February	March	April	May	June
New Customers	840,804	933,547	590,323	544,390	304,416	134,597
All Schedule 101 Customers	20,755,627	22,514,347	14,859,076	13,629,159	8,714,627	4,232,714
% of New Customers to All Customers	4.1%	4.1%	4.0%	4.0%	3.5%	3.2%
Base Customers	19,914,823	21,580,800	14,268,753	13,084,769	8,410,211	4,098,117
% of New Customers to Base Customers	4.2%	4.3%	4.1%	4.2%	3.6%	3.3%
Weather Normalized Base Customers	20,211,913	17,438,077	12,822,146	8,553,642	5,356,859	2,946,657
% of New Customers to WN Base Customers	4.2%	5.4%	4.6%	6.4%	5.7%	4.6%

Table G1-D 2008 Customer Usage (therms)	July	August	September	October	November	December
New Customers	82,104	66,736	78,849	127,362	276,318	599,812
All Schedule 101 Customers	2,763,613	2,223,233	2,487,966	3,933,329	8,603,159	15,345,278
% of New Customers to All Customers	3.0%	3.0%	3.2%	3.2%	3.2%	3.9%
Base Customers	2,681,509	2,156,497	2,409,117	3,805,967	8,326,841	14,745,466
% of New Customers to Base Customers	3.1%	3.1%	3.3%	3.3%	3.3%	4.1%
Weather Normalized Base Customers	2,095,446	2,262,192	2,729,397	7,399,504	13,354,707	20,519,028
% of New Customers to WN Base Customers	3.9%	3.0%	2.9%	1.7%	2.1%	2.9%

Table G1-E New Customer Usage (therms)	2007	2008
New Customers	8,499,307	4,579,258
All Schedule 101 Customers	115,583,967	120,062,128
% of New Customers to All Customers	7.35%	3.81%
Base Customers	107,084,660	115,482,870
% of New Customers to Base Customers	7.94%	3.97%
Weather Normalized Base Customers	109,130,169	115,689,568
% of New Customers to WN Base Customers	7.79%	3.96%

After the GRC took effect and updated the base year for the decoupling calculations, the portion of the new customer adjustment compared to weather normalized base customers was reduced by nearly one half in 2008 compared to 2007.

2) a) Did Avista's methods to identify, track, and remove new customer usage appear reliable and accurate?

The following computer programming summary[92] appears to be capable of providing a reliable and accurate accounting of new customer usage between the base year and the current year.

Gas Decoupling Report (DWWPA0RO)

1. All Washington 101 gas meters are extracted from the Usage Point table on the database.

2. The next step reads metered history for each meter and determines if the first period of billable usage for the service occurred since the current revenue month in 2006. Those services are written to a flat file which is used as input into the next step. The number of services is accumulated and reported. To clarify:

    - The decoupling job is run after cycle day 19 has finished processing. Cycle day 19 for October 2008 runs on 10/28/08. This step creates a file of "new" meters since 2006 by looking for the first billable period of history for the meter to be on or after 11/01/2006. If the first billable period of history is on or after that date, the meter (usage point) is written to a file which is input into the next step.

3. The last step of the Decoupling job produces a report of accumulated usage for the current month for the meters identified in the previous step (those Washington meters with a rate-schedule of 101 that have had billable usage at some time since 11/01/2006 (using the example above) by reading metered history for the revenue month just completed.
4. The next two steps repeat steps 2 & 3 above to create a Decoupling Report for 2004 comparison. Metered History is read for each meter and determines if the first period of billable usage for the service occurred since the current revenue month in 2004. Those services are written to a flat file which is used as input into the next step to accumulate current month usage for the meters which are "new" since 2004.

b) Did Avista implement any changes to this methodology during the course of the pilot?

Avista identified an error in the December new customer adjustment calculations caused by a "hard-coded value" that selected new customers from January 2004 instead of January 2005. Avista corrected the programming error before submitting the 2008 4th quarter report and recorded a decoupling deferral reduction of ($22,567) in the January 2009 journal.[93] No other changes were implemented.

[92] From Avista's data submission for Question G-2.
[93] See the response for Question D-3 for details.

3) If the Mechanism did not include a new customer adjustment, what would have been the impact on the decoupling deferral for 2007 and 2008, at both 100% and 90% levels?

The monthly calculated decoupling deferrals with and without the new customer adjustment are shown below:[94] Negative numbers indicate a deferred rebate in lieu of deferred income.

Table G3 Decoupling Deferrals - New Customer Adjustment Impact		100% Deferral		90% Deferral	
		With New Customer Adjustment	Without New Customer Adjustment	With New Customer Adjustment	Without New Customer Adjustment
2007	January	$126,606	($204,083)	$113,945	($183,675)
	February	($31,372)	($308,279)	($28,235)	($277,452)
	March	$193,671	($5,721)	$174,304	($5,149)
	April	$93,518	($38,434)	$84,166	($34,590)
	May	$76,847	$16,505	$69,162	$14,854
	June	($77,174)	($115,571)	($69,456)	($104,014)
	July	$38,507	$10,123	$34,656	$9,111
	August	$33,953	($2,464)	$30,558	($2,217)
	September	($88,875)	($153,438)	($79,988)	($138,094)
	October	$264,463	$160,616	$238,016	$144,554
	November	$278,510	$95,607	$250,659	$86,047
	December	$108,860	($195,975)	$97,974	($176,377)
2007 Totals		$1,017,513	($741,113)	$915,762	($667,002)
2008	January	$136,242	($45,121)	$122,617	($40,609)
	February	($369,207)	($540,995)	($332,286)	($486,895)
	March	$405,409	$296,876	$364,868	$267,188
	April	$20,877	($61,008)	$18,789	($54,908)
	May	($107,591)	($145,412)	($96,832)	($130,871)
	June	$7,128	($6,772)	$6,415	($6,095)
	July	($50,996)	($80,096)	($45,897)	($72,087)
	August	($32,464)	($46,793)	($29,218)	($42,114)
	September	$43,362	$20,802	$39,026	$18,722
	October	$90,656	$29,593	$81,590	$26,634
	November	$225,463	$130,909	$202,917	$117,818
	December	$379,465	$221,971	$341,519	$199,774
2008 Totals		$ 748,343	$ (226,047)	$ 673,509	$ (203,442)

In Table G3, positive numbers represent decoupling deferral amounts Avista may collect in the future resulting from reduced consumption. Negative numbers indicate a usage increase leading to a rebate of deferred decoupling funds to ratepayers from Avista. The above approach completely removes the new customer adjustment from the deferral calculations, changes the number of customers in the weather correction to equal the current year and reports the results. By eliminating the new customer adjustment, the calculated margin losses are eliminated. There were other interpretations of how to answer this question that are not included in this report.

[94] See Exhibit G-1 New Customer Adjustment Impact for Details.

4) What were the monthly numbers of customers served, by rate schedule, in 2006, 2007 and 2008?

The monthly quantity of customers served during 2006, 2007 and 2008 are shown below.[95]

Table G4 Quantity of Customers Served						
Month	Schedule 101	Schedule 111/112	Schedule 121/122	Schedule 131/132	Schedule 146	Special Contract
Jan-06	135,510	2,188	31	1	26	8
Feb-06	135,699	2,225	30	1	26	10
Mar-06	135,789	2,221	33	1	26	8
Apr-06	135,775	2,218	32	1	26	7
May-06	135,938	2,212	32	1	26	7
Jun-06	135,719	2,203	33	1	26	8
Jul-06	135,822	2,184	31	1	27	8
Aug-06	136,128	2,199	33	1	27	7
Sep-06	136,466	2,189	32	1	26	8
Oct-06	137,302	2,197	31	1	27	8
Nov-06	138,036	2,200	30	1	27	8
Dec-06	138,667	2,240	34	1	26	7
Jan-07	138,804	2,218	32	1	27	7
Feb-07	139,210	2,268	33	1	27	8
Mar-07	139,055	2,257	33	1	28	7
Apr-07	139,113	2,267	32	1	27	7
May-07	139,012	2,252	31	1	32	8
Jun-07	138,838	2,251	31	1	28	7
Jul-07	138,877	2,235	32	1	29	7
Aug-07	139,096	2,228	30	1	29	8
Sep-07	139,568	2,212	32	1	29	8
Oct-07	140,039	2,214	31	1	29	8
Nov-07	140,930	2,256	31	1	29	7
Dec-07	141,242	2,252	30	1	31	7
Jan-08	141,580	2,262	32	1	31	8
Feb-08	141,745	2,271	30	1	30	8
Mar-08	141,763	2,272	33	1	31	8
Apr-08	141,662	2,286	30	1	31	8
May-08	141,566	2,268	29	1	32	8
Jun-08	141,413	2,255	35	1	32	8
Jul-08	141,354	2,246	32	1	33	7
Aug-08	141,399	2,235	32	1	33	7
Sep-08	141,829	2,247	33	1	33	9
Oct-08	142,135	2,246	33	1	32	8
Nov-08	142,818	2,248	33	1	32	7
Dec-08	143,336	2,259	29	1	32	7

[95] From Avista's 2006, 2007 and 2008 natural gas revenue runs.

5) For 2007 and 2008, what was the actual average annual usage for "new" Schedule 101 customers, as excluded from the monthly deferral calculation compared to the actual average annual usage for existing Schedule 101 customers?

The average annual usage for new and average Schedule 101 customers is shown below.[96]

Table G-5 New Versus Existing Customer Usage (therms)	*2007*	*2008*
New Customer Usage	8,499,307	4,579,258
Average # of New Customers	10,033	5,532
New Customer Average Usage	**847**	**828**
Existing (Base) Customer Total Usage	107,084,660	115,482,870
Average # of Current Customers	139,482	141,883
Less Average # of New Customers	-10,033	-5,532
# of Existing Customers = Base Customers in G1	129,449	136,351
Existing Customer Average Usage	**827**	**847**

The new customer average usage is higher than existing customers in 2007 and lower in 2008. Although equipment efficiencies should be higher with new customers, the customer make-up (percentage of commercial and industrial versus residential) and the size of residences (new versus existing) is unknown. Therefore, the reasons behind any usage difference are unknown.

6) Based on the average annual usage for existing Schedule 101 customers determined above, would the inclusion of margins earned from serving new customers in the monthly deferral calculation have increased or decreased annual deferrals and surcharge revenues during 2007 and 2008, and by how much? The average therm use per customer for new customers will be compared with the average use per customer for existing customers in the determination of the impact on the monthly deferral calculations.

The average use per customer in the current year does not directly impact the decoupling deferral calculations. The impact of adding new customers to the deferral calculations is shown in Table G3.

7) In this section, please also refer to and discuss the data regarding total sales volumes and total gas margin revenues, provided in response to questions J1 and J2 below.

Tables J1 and J2 show increases in both sales volumes (+1.3%) and margins (+1.6%) from 2006 to 2007 while weather normalization usage decreased -3.3% indicating the new customer adjustment exceeded the weather normalization adjustment in 2007, accounting for 8% of the 2007 usage. The weather normalized 2008 usage cannot be directly compared to previous years because UG-070805 changed the weather normalization base year to 2006.

[96] See Exhibit G-2 New versus Existing Usage

H DSM Verification

1) Was the DSM Verification analysis performed, as required by the pilot Mechanism? By whom, and when?

The independent verification of Avista's Washington and Idaho natural gas DSM acquisition was completed by Research Into Action and their partner for this project, Nexant. The reports are included in this report. The exhibit number and completion date for each report are shown below.

Table H1 Annual DSM Savings Verification Report Summary		
Year	Exhibit	Completion Date
2006	H-1	August 20, 2007
2007	H-2	July 11, 2008
2008	H-3	February 28, 2009

2) What was the cost of the DSM verification analysis, for each year (2006, 2007 and 2008)?

The costs for the DSM verification analysis are shown in the chart below. These costs are direct vendor costs and do not include internal costs.

Table H2 DSM Savings Verification Costs			
Accounting Period	Vendor Number	Vendor Name	Cost
2006 Total	24265	RESEARCH INTO ACTION INC	$54,291
2007 Total	24265	RESEARCH INTO ACTION INC	$66,107
2008 Total	24265	RESEARCH INTO ACTION INC	$17,015[96]

The 2008 cost data is incomplete as all invoices had not been received when this report was published. Avista completed internal accounting adjustments to limit the charge against the DSM tariff rider to $35,000 annually as directed in Docket UG-060518, Order 4, Page 8 Settlement Agreement.[97]

[96] Reflects costs incurred as of 3/20/09 and does not reflect the total 2008 costs.
[97] See Exhibit H-4 Avista's response to Data Request 8, Question 3 and Data Request 10, Question 10.

3 a) For each year, what were the verification analysis results?

The 2006, 2007 and 2008 DSM savings verification result summaries are below.[98]

Table H3-A Summary of Avista's 2006 DSM Verification Report (Washington only)					
Project	**Therms contained within verification sample**	**Therms in related WA population**	**Therms independently verified**	**% of claimed therms verified**	**Adjusted therm claim**
Residential projects					
High Efficiency Furnaces	1,728	61,920	1,728	100.0%	61,920
Windows	1,080	66,135	884	81.9%	54,133
Other Res Sampled	2,463	39,650	3,684	149.6%	59,306
Limited Income					
Air Infiltration	2,052	14,270	1,709	83.3%	11,885
Insulation	4,485	52,723	3,815	85.1%	44,847
Other LI Sampled	1,022	3,968	591	57.8%	2,295
Large Non-Res site-specific					
Spokane Athletic Club	110,558	110,558	37,608	34.0%	37,608
Spokane Public School-Dist 81	71,731	71,731	71,731	100.0%	71,731
Spokane Public Facilities District	54,332	54,332	15,477	28.5%	15,477
East Valley School District 361	29,651	29,651	21,134	71.3%	21,134
Huntwood Industries	20,228	20,228	21,056	104.1%	21,056
Other non-res site-specific	30,238	210,878	30,149	99.7%	210,256
Pre-rinse sprayers	7,920	88,941	7,920	100.0%	88,941
Rooftop Program	4,215	65,850	0	0.0%	0
	0	890,835	0		700,588
Original Avista estimate of savings		890,835			
	(190,247)	Adjustment in claimed therm savings			
	700,588	Revised claim			

[98] From Avista's DSM Verification Data Submission.

Table H3-B Summary of Avista's 2006 DSM Verification Report (Idaho only)					
Project	**Therms contained within verification sample**	**Therms in related WA population**	**Therms independently verified**	**% of claimed therms verified**	**Adjusted therm claim**
Residential projects					
High Efficiency Furnaces	1,728	144,642	1,728	100.0%	144,642
Windows	1,080	21,387	884	81.9%	17,506
Other Res Sampled	2,463	48,621	3,684	149.6%	72,724
Limited Income					
Air Infiltration	2,052	1,195	1,709	83.3%	995
Insulation	4,485	3,489	3,815	85.1%	2,968
Other LI Sampled	1,022	4,612	591	57.8%	2,667
Large Non-Res site-specific					
Triple Play	27,193	27,193	21,754	80.0%	21,754
Kootenai Medical Center	19,095	19,096	0	0.0%	0
Other non-res site-specific	30,238	40,167	30,149	99.7%	40,049
Pre-rinse sprayers	7,920	2,751	7,920	100.0%	2,751
Rooftop Program	4,215	665	0	0.0%	0
	0	313,818	0		306,055
Original Avista estimate of savings		313,818			
	(7,763)	Adjustment in claimed therm savings			
	306,055	Revised claim			

Table H3-C Summary of Avista's 2007 DSM Verification Report (Washington only)

Project	Therms contained within verification sample	Therms in related WA population	Therms independently verified	% of claimed therms verified	Adjusted therm claim
Residential projects					
High Efficiency Furnaces	782	85,556	686	87.7%	75,053
Windows	3,244	105,260	2,924	90.1%	94,877
Other Res Sampled	4,388	57,153	3,880	88.4%	50,536
Limited Income					
Air Infiltration	1,341	11,931	1,277	95.2%	11,362
Insulation	2,567	53,944	1,994	77.7%	41,903
Windows/Doors	1,395	2,882	1,738	124.6%	3,591
Furnaces/Water heaters	1,430	1,957	1,238	86.6%	1,694
Large Non-Res site-specific					
Odessa Memorial Hospital	39,297	39,297	43,728	111.3%	43,728
Saranac Building	36,059	36,059	50,775	140.8%	50,775
Spokane Valley Mall	31,723	31,723	80,915	255.1%	80,915
Spokane Public Facilities District	49,553	49,553	10,243	20.7%	10,243
SYTECH	25,884	25,884	26,251	101.4%	26,251
Other non-res site-specific	40,682	499,884	50,817	124.9%	624,419
Pre-rinse sprayers	220	24,376	220	100.0%	24,376
Rooftop Program	15,088	94,377	4,468	0	27,948
	0	1,119,836	0		1,167,670
Original Avista estimate of savings		1,119,836			
	47,834	Adjustment in claimed therm savings			
	1,167,670	Revised claim			

Table H3-D Summary of Avista's 2007 DSM Verification Report (Idaho only)

Project	Therms contained within verification sample	Therms in related WA population	Therms independently verified	% of claimed therms verified	Adjusted therm claim
Residential projects					
High Efficiency Furnaces	782	44,627	686	87.7%	39,148
Windows	3,244	28,018	2,924	90.1%	25,254
Other Res Sampled	4,388	18,668	3,880	88.4%	16,507
Limited Income					
Air Infiltration	1,341	1,715	1,277	95.2%	1,633
Insulation	2,567	2,710	1,994	77.7%	2,105
Windows/Doors	1,395	4,167	1,738	124.6%	5,192
Furnaces/Water heaters	1,430	2,036	1,238	86.6%	1,763
Large Non-Res site-specific	0	0	0		
Other non-res site-specific	40,682	116,383	50,817	124.9%	145,377
Pre-rinse sprayers	220	21,120	220	100.0%	21,120
Rooftop Program	15,088	74,453	4,468	29.6%	22,048
	0	313,897	0		280,147
Original Avista estimate of savings		313,897			
	(33,750)	Adjustment in claimed therm savings			
	280,147	Revised claim			

Table H3-E Summary of Avista's 2008 DSM Verification Report (Washington only)

Project	Therms contained within verification sample	Therms in related WA population	Therms independently verified	% of claimed therms verified	Adjusted therm claim
Residential projects					
High Efficiency Furnaces	615	208,434	615	100.0%	208,434
Insulation	6,281	133,253	7,213	114.8%	153,026
Windows	4,238	156,219	4,327	102.1%	159,500
Other Res Sampled	308	25,852	308	100.0%	25,852
Limited Income					
Air Infiltration	1,341	17,705	1,277	95.2%	16,860
Insulation	2,567	70,597	1,994	77.7%	54,838
Windows/Doors	1,395	5,941	1,738	124.6%	7,402
Furnaces/Waterheaters	1,430	3,608	1,238	86.6%	3,124
Large Non-Res site-specific					
Avista Corp	19,647	19,647	17,238	87.7%	17,238
Mead School District 354	14,703	14,703	14,171	96.4%	14,171
Mountain Gear	14,305	14,305	14,305	100.0%	14,305
Other non-res site-specific	39,593	463,600	31,810	80.3%	372,468
Nonres prescriptive programs	8,917	20,899	4,660	52.3%	10,922
	115,340	1,154,763	100,894		1,058,139
	1,154,763	Avista estimate of savings			
	1,058,139	Revised claim			

Table H3-F Summary of Avista's 2008 DSM Verification Report (Idaho only)					
Project	Therms contained within verification sample	Therms in related WA population	Therms independently verified	% of claimed therms verified	Adjusted therm claim
Residential projects					
High Efficiency Furnaces	615	86,310	615	100.0%	86,310
Insulation	6,281	34,124	7,213	114.8%	39,187
Windows	4,238	43,054	4,327	102.1%	43,958
Other Res Sampled	308	13,256	308	100.0%	13,256
Limited Income					
Air Infiltration	1,391	2,197	840	60.4%	1,327
Insulation	2,732	3,718	2,079	76.1%	2,829
Windows/Doors	1,843	5,203	1,717	93.2%	4,847
Furnaces/Waterheaters	1,469	784	1,432	97.5%	764
Large Non-Res site-specific					
Intermountain Community Bancorp	25,771	25,771	24,033	93.3%	24,033
Kellogg School District 391	23,894	23,894	8,550	35.8%	8,550
Avista Corp	18,679	18,679	18,682	100.0%	18,682
City of Post Falls	18,315	18,315	12,659	69.1%	12,659
Kellogg School District 391	14,303	14,303	26,003	181.8%	26,003
Other non-res site-specific	141,244	439,124	132,291	93.7%	411,289
Non-res prescriptive programs	3,318	4,158	2,124	64.0%	2,662
	264,401	732,890	242,873		696,357
	732,890	Avista estimate of savings			
	696,357	Revised claim			

The summary chart from Question C-10 is repeated below for convenience:

Table H-3 WA/ID DSM Savings (therms) versus Goals			
	2006	2007	2008
IRP DSM Savings Goal	1,062,000	1,062,000	1,425,070
Verified DSM Savings	1,052,390	1,455,678	1,821,298
% of Goal	99.1%	137.1%	127.8%

There are minor differences between Avista's WA/ID summary charts, Avista's jurisdictional summary charts above and this report's summary charts; however, these differences do not impact the Mechanism. Some minor differences are explained in Exhibit C-1 resulting from the current need to combine Triple-E report data, C/I completed savings data and summary data from the independent verification audit prepared by Avista. Avista's jurisdictional DSM verification audit summaries totalize each measure separately while the combined WA/ID summary charts fail to use a weighted average for the adjustment.

b) Were Avista's assumed savings levels increased or decreased?

Avista's assumed savings levels were increased and decreased for individual components of the portfolio ranging from complete disqualification of a site specific project and the rooftop maintenance program in 2006 to allowing 255% of the assumed savings on a site specific project in 2007. In general, prescriptive measures were verified at 75% to 125% of Avista's assumed savings levels. In 2006 and 2008, the net impact was a reduction of the savings levels while the 2007 net impact was an increase in assumed savings as a result of the verification process.

4) a) Were there any changes in the methodologies used in the independent verification of DSM savings that would have changed the overall audit results during the 2006-2008 time period?

After reviewing the 2006 audit results, the auditor adjusted the target precision level of the analysis. In the 2007 DSM Savings Verification Report, the auditor stated:

> The primary consideration that informed our sampling approach was that each sample should have sufficient statistical power to produce estimates of audit measurements with good precision and confidence levels over the three-year course of the evaluation. In the report of the 2006 audit, we indicated a goal of achieving ±5% and 95% confidence. These levels were based on the assumption of a very low rate of documentation error. However, based on the results of the 2006 audit, achieving these highly stringent precision/confidence levels would require significantly larger samples. Since these levels go beyond industry standards (typically ±10% precision and 90% confidence) and were not mandated by WUTC, we have relaxed them slightly to ±10% precision and 95% confidence.[99]

Changing the precision level from 5% to 10% decreases the likelihood that a second sampling audit would produce the same results; however, missing, inaccurate and unsubstantiated documentation would have required a high sampling rate to obtain a higher level of precision.

> In 2006, "New Windows" was in "Other Measures" and "Replacement Windows" was a separate category. Starting in 2007, "New Windows" and "Replacement Windows" were combined in the "Windows" category. After 2006, insulation was removed from "Other Measures" and given its own [category]. Therefore, direct comparison of Insulation, Windows, Replacement Windows and Other Measures categories from 2006 to other years is not possible. Because New Windows and Insulation were both high volume, consistent measures, removing them from Other Measures will improve the results of the Other Measures sampling analysis in 2007 and 2008.[100]

[99] See Exhibit H-2 Avista 2007 DSM Savings Verification Report, Page 9
[100] See Exhibit H-2 Avista 2007 DSM Savings Verification Report, Pages 12 and 13.

The high reliability of the "High Efficiency Furnace" results in 2006 motivated the auditor to minimize the sample size for this measure starting in 2007.[101] This should not impact the results of the report.

b) What was the resulting impact, if any, on the deferral amount subject to recovery?

The audited 2006 DSM savings was 1,052,390 therms, which was 99.1% of the IRP targeted savings of 1,062,000; therefore, the level of recoverable lost margin was subsequently reduced to 80% in lieu of 90%, resulting in a reduction in the decoupling deferral of $38,209[102]. The DSM audit results used in the Mechanism's DSM test[103] had no further impact on the recovered lost margin in 2007 and 2008.

5) a) Based upon the Evaluator's review of the DSM Verification Final Reports, did the Evaluator become aware of any problems or potential inaccuracies within any of the DSM Verification (audit) analyses that were performed, and if so, what is the nature and potential importance of each problem or potential inaccuracy, and would each problem or potential inaccuracy have had any significant impact on the verified results?

For each annual DSM report, the auditor validated or adjusted savings measures through sampling. The sampling methodology concept presented in each of the reports appears sound with the following caveats: 1) no significant review was performed on the stratification methodology; 2) the confidence interval and other detailed calculations were not checked; 3) the differences between the independent consultants' preferred engineering values and Avista's engineering values were not explored in any significant detail.

Despite re-evaluation to increase sample size and relax the precision level, the audit only met the auditor's precision goal for residential DSM. Documentation issues with the CAP agencies on Limited Income DSM projects and engineering assumption differences on non-residential DSM projects resulted in higher than expected discrepancies.[104] This means the reliability of the audit is lower than desired by the auditor; however, it is doubtful that additional work to increase the precision level would impact the Mechanism.

The verified effect reported in the audit is not "measured" energy savings. The auditor verified the engineering estimates and the corresponding assumptions and documentation but did not perform any post-installation measurement or analysis. A non-typical example of where this approach is lacking is the pre-rinse sprayer program. In 2006, the auditor accepted Avista's stipulated savings of 176 therms per unit.[105] After Avista identified the uncertainty of the claimed savings with this measure, Avista completed measurement and verification (M&V) on the measure, the auditor accepted the new stipulated savings of 44 therms per unit and noted the savings may be conservative.[106] This represents a difference representing approximately 6% of the total 2006 DSM savings and approximately 9% of the total 2007 DSM savings.

[101] See Exhibit H-2 Avista 2007 DSM Savings Verification Report, Page 13.
[102] See Exhibit D-2 UG-071863.
[103] See Exhibit 2 Docket 060518 Order 04, Pages 4-5
[104] See Exhibit H-3 2006-2008 Avista DSM Savings Verification Report
[105] See Exhibit H-1 Avista 2006 DSM Savings Verification Report, Page V
[106] See Exhibit H-2 Avista 2007 DSM Savings Verification Report, Page VIII & Page 68

The largest DSM projects were individually evaluated and most were modeled using building simulation software. During these individual project evaluations, when missing or inappropriate data was identified, the associated savings were often disallowed if a resolution was not available. This resulted in large variations between Avista's estimated savings and the auditor's. Approximately 10% of the 2006 DSM targeted savings were disqualified because of lack of information. Further investigation and follow-up on these measures could have produced a conclusion and potentially partial savings instead of disqualifying entire measures, resulting in Avista possibly meeting their 2006 IRP DSM savings goal. In 2007, over 5% of the annual targeted savings was added to Avista's estimated DSM savings because of differences in assumptions; however, this would not have impacted the level of estimated lost margin eligible for recovery as Avista cleared the target by 36%. A large reduction in 2008 did not impact the Mechanism because Avista exceeded the target by 36% after adjustment.

The DSM savings verification reports looked at individual measures and did not include a summary of claimed and verified savings by jurisdiction. The Avista provided summaries provided for the Mechanism DSM test and the Avista provided jurisdictional summaries did not match; however, the differences were small and did not impact the Mechanism results.

Additionally, Avista inserted verification results into their DSM database after the verification reports were received. This produced a "moving target" effect while performing the Mechanism evaluation. Titus' verified savings calculations and Avista's verified savings differ as follows:

Table H-4 DSM Verified WA/ID Savings (therms) versus Goals

	2006	2007	2008
IRP DSM Savings Goal	1,062,000	1,062,000	1,425,070
Avista Verified DSM Savings	1,052,390	1,455,678	1,821,298
% of Goal	99.1%	137.1%	127.8%
Titus Verified DSM Savings	1,060,467	1,445,130	1,752,330
% of Goal	99.9%	136.1%	123.0%

These differences did not materially impact the Mechanism.

b) In that regard, please identify any judgmental assumptions, allocations or methodologies that materially impacted the conclusions that were reached?

Avista missed the 2006 DSM savings goal by 0.9% using the results of an audit with a statistical confidence level exceeding ± 10% and significant disqualification of savings because of documentation errors and differences in assumptions. It seems likely to Titus that Avista would have met the 2006 DSM savings goal with additional investigation into the disqualified measures.

Although the potential difference in the pre-rinse sprayer program is large, adjusting either the 2006 or 2007 stipulated savings would not impact the decoupling deferrals.

Verification Options

The vast majority of the DSM savings verification audit consisted of reviewing paperwork, recalculating savings and performing extensive statistical analysis. Although this approach is not necessarily wrong, alternate approaches to consider include:

- Incorporating verification of estimated savings into the large site specific project process to increase the likelihood that the estimated DSM savings will be realized. Options to accomplish this include:

    - Certified savings estimates from independent Professional Engineers (PE) or Certified Energy Managers (CEM) could be used to provide verified savings for incentive calculations and program management.
    - Usage audits performed pre and/or post installation or weather-normalized bill audits could increase the confidence that the estimated savings are being realized.
    - Pre and/or post installation energy consumption measurement or on-site operational review of procedures, equipment and/or control algorithms may be justified on projects with large incentives.

    The following statement in Appendix A of Avista's 2006 Triple-E Report provides a potential baseline for expansion of M&V requirements:

    > Projects with an incentive amount of $50,000 or more, with uncertain savings and where post-completion tracking can provide improved project commissioning and evaluation are subject to a performance contract. Typically the performance period is one year after the project has completed a commissioning period. Revisions to non-performance contracts occasionally occur after post-verification also occasionally occur as a result of improved information based upon measurement, evaluation, project commissioning or account follow-up activities. Revisions may be increase or decrease any of the project characteristics.

- Minimizing audit requirements on prescriptive savings measures. Options to accomplish this include:

    - Determine prescriptive savings in advance. The DSM auditor disagreed with some of the claimed prescriptive savings after the year was over. This discussion could take place before the year begins.
    - Create a "no-tolerance" documentation policy by requiring all documentation to be complete, accurate and properly entered into the database before paying any incentive to reduce verification requirements.
    - Perform post installation monitoring by reviewing the weather-normalized usage of prescriptive program participant's pre and post installation.[107]

[107] Titus proposed a proprietary analysis of DSM participant usage during the RFP process and a non-proprietary analysis after being chosen as the Mechanism evaluator. These proposals were rejected by Avista in a non-consensus decision because the Evaluation Plan did not include an additional DSM savings audit. See Exhibit 10 Communication Log.

- Physically check random projects and installers to verify the measures were actually installed.

The DSM Savings Verification Reports lack a summary of the audited savings and their impact on the Mechanism. The reports include calculations and a paperwork audit of numerous samples and projects but a summary of the findings was not provided. For 2006-2008, Avista provided a summary for Titus' review.[108] Titus feels the DSM Savings Verification auditor should be responsible for summarizing and providing the verified savings in a format suitable for use in the Mechanism.

[108] Avista's response to Data Request 4, Question 1 and Data Request 10, Question 9.

I Customer Migration Between Rate Schedules 101 and 111

Schedule 101 (General Service – Firm - Washington) is available for residential and low usage commercial customers that use less than 200 therms per month. Schedule 111 (Large General Service – Firm - Washington) is generally a commercial rate schedule that consists of a higher minimum charge and is based on usage greater than 200 therms per month.

1) What was the monthly number of customer migrations (schedule shifting) between schedules 101 and 111 during the time of the pilot?

The monthly quantities of customer migrations from Schedule 101 to Schedule 111 are shown below.[110]

Table I1 Schedule 101 to 111 Customer Migrations by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2005	17	2	6	0	2	2	0	4	0	2	0	0	35
2006	16	2	1	0	0	7	0	0	0	1	0	8	35
2007	6	1	8	2	2	0	0	1	1	2	1	3	27
2008	0	7	5	3	2	1	3	1	8	8	3	13	54

2) Based on the answer to #1 above, did customer migration have any impact upon the decoupling deferrals since initiation of the pilot? Furthermore, what is the actual (or estimated if actual data is not readily available) therm usage resulting from customer migrations between schedules 101 and 111.

The estimated adjustment to Schedule 101 usage from customer migration is shown below. Avista's methodology for estimating the usage impact on Schedule 101 from customer migration between rate schedules is detailed in Exhibit H-5 Schedule Migration Tracking Methodology.

Table I2 Customer Migration 101 Usage Impact

Deferral Year	Migration	Customers	Usage
2007	101 to 111	-96	-477,556
	111 to 101	78	404,019
	101 Impact	**-18**	**-73,537**
2008	101 to 111	-107	-485,124
	111 to 101	50	210,696
	101 Impact	**-57**	**-274,428**

The net impact of customer migration was a reduction in Schedule 101 usage. Accounting for customer migration during the pilot mechanism would have reduced the 2007 decoupling deferral by approximately $13,600 and the 2008 decoupling deferral by approximately $50,000.

[110] From Avista's response to Data Request 10, Question 5. See Exhibit H-5 for details.

3) Does the Company periodically audit or verify Schedule 101 customer eligibility? If so, describe the timing and procedures for such audits.

Avista stated, "Each month, the company runs a program that calculates the annual bill for Schedule 101 and 111 customers based on their most recent twelve months usage. If the customer's annual bill would have been 5% or $300 less on the other schedule, they are switched to the other schedule."[111]

Additional Analysis

The assumption in the current decoupling deferral calculation methodology is that the new customer adjustment captures all changes in the customer base. When the number of new customers is combined with the number of customers switching rate schedules, the difference in the number of customers in the revenue runs is not accounted for.

In 2007, the average difference between the revenue runs and the new customer adjustment after accounting for customer migration is 90 customers, or 0.9% of the new customer adjustment. Although this seems like a small difference, when the monthly differences are applied to the average Schedule 101 monthly usage profile, this difference accounts for 4.3% of the new customer usage adjustment and approximately 7.1% of the decouple deferral calculated lost margin.[112]

[111] See Exhibit H-5 Schedule Migration Tracking Methodology, Page 1.
[112] See Exhibit I-1 Unaccounted Customers

J Related Rate and Customer Usage Information (Actual and Forecasted)

1) What were total therm sales (and transportation) volumes by rate schedule, before and after weather normalization in 2006, 2007 and 2008?

A summary table of usage for both sales and transportation is shown below.[113,114]

Table J1 – WA Total Annual Usage Summary						
	2006		2007		2008	
Rate	Usage	Weather Normalized Usage	Usage	Weather Normalized Usage	Usage	Weather Normalized Usage
101 Total	113,401,760	119,437,787	114,857,170	117,629,476	124,922,190	120,268,826
111 Total	46,532,298	48,247,655	48,916,038	49,712,845	51,561,175	50,203,746
121 Total	7,625,266	7,625,266	6,957,269	6,957,269	6,347,855	6,347,855
131 Interruptible	644,022	644,022	643,460	643,460	626,691	626,691
146 Transportation	23,678,883	23,678,883	24,697,818	24,697,818	25,662,466	25,662,466
148 Special Contract Transportation	42,785,407	42,785,407	44,948,309	44,948,309	46,866,774	46,866,774
Total WA	234,667,636	242,419,020	241,020,064	244,589,178	255,987,151	249,976,358

Although the UG-070805 weather normalization methodology is used consistently throughout this report, the unbilled usage in Table J1 above is different than the unbilled usage in the decoupling deferral calculations. This difference is described in detail in Exhibit J-5 Unbilled Usage.

2) What were total gas margin revenues by rate schedule, before and after weather normalization in 2006, 2007 and 2008?

Margin revenue for 2006-2008 is shown below with and without weather normalization.[115]

Table J2 Impact of Weather Normalization on WA Margin Revenues						
	2006		2007		2008	
Schedule	Recorded Margin	Weather Normalized Margin	Recorded Margin	Weather Normalized Margin	Recorded Margin	Weather Normalized Margin
101	$31,089,858	$32,286,319	$31,572,651	$32,122,178	$36,128,983	$35,116,969
111/112	$6,145,189	$6,315,078	$6,416,686	$6,495,601	$7,480,394	$7,326,814
121/122	$639,016	$639,016	$587,310	$587,310	$630,605	$630,605
131/132	$45,870	$45,870	$45,810	$45,810	$52,991	$52,991
146	$1,510,964	$1,510,964	$1,638,835	$1,638,835	$1,839,932	$1,839,932
148	$990,831	$990,831	$1,057,890	$1,057,890	$1,118,870	$1,118,870
Total	$40,421,727	$41,788,078	$41,319,182	$41,947,624	$47,251,775	$46,086,182

[113] From 2006, 2007 and 2008 Revenue runs provided in Avista Data Submission for Question C2.
[114] All weather normalization in this section follows Exhibit D-10 UG-070805 Weather Correlation Method.
[115] See Exhibit J-1 Weather Normalized Usage

For Table J2, the block (tier) revenue usage levels were adjusted to match the Company's revenue runs to account for an ongoing inconsistency between the two systems. Additionally, the last block (tier) margin rate was applied to both unbilled and weather normalized volumes. From the limited sampling provided for DSM savings lost margin calculations, it could be more accurate to use lower blocks (tiers) for most months and customers.[116] This would move usage from blocks (tiers) with lower margins to blocks (tiers) with higher margins[117] which would increase the estimated lost margin from DSM savings.

3) a) What was the rate of average annual gas customer growth by rate schedule from 2006-2008?

The historical customer growth rates are shown below.[118]

Table J3-A Change in # of WA Customers					
Schedule	2004	2005	2006	2007	2008
101	2.5%	2.5%	2.7%	2.3%	1.7%
111	-4.0%	-3.1%	0.2%	1.6%	0.7%
121	13.0%	-9.3%	-8.6%	-1.0%	0.8%
131	-33.3%	-25.0%	0.0%	0.0%	0.0%
146	-3.3%	3.4%	5.3%	9.2%	10.7%
147	25.0%	13.3%	0.0%	-14.7%	-13.8%
148	16.7%	-12.9%	-1.6%	0.0%	13.3%

b) How does this compare to Avista's historical levels of gas customer growth in the 2004-2005 period?

Although the percentage differences are larger in Schedules 131 through 148, the quantities are quite small.[119] In general, the number of customers has steadily increased in Schedule 101, Schedule 111 remains about the same and Schedule 121 lost customers in 2005 and 2006 but the number of Schedule 121 customers remained about the same in 2007 and 2008.

[116] See Exhibit J-1 Weather Normalized Usage for details.
[117] See Exhibit C-2 GRC Margin Rates for block (tier) margin rates.
[118] See Exhibit J-3 Change in Number of Customers
[119] See Table J3-C Quantity of Customers.

c) What is the Company's forecast for future customer growth?

The forecasted customer growth is shown below.[120]

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Table J3-B Forecasted Number of WA Customers					
Schedule	2009	2010	2011	2012	2013
101	1.9%	1.9%	2.3%	2.5%	2.4%
111	3.4%	2.8%	2.7%	2.7%	2.2%
121	6.0%	3.0%	5.8%	2.7%	2.7%
132	0.0%	0.0%	0.0%	0.0%	0.0%
146	-2.7%	0.0%	0.0%	0.0%	0.0%
148	5.9%	0.0%	0.0%	0.0%	0.0%

d) What were the average annual customer count totals by rate schedule for the period 2006-2008?

The historical quantity of customers by rate schedule is shown below.[121]

Table J3-C Quantity of WA Customers					
Schedule	2004	2005	2006	2007	2008
101	129,659	132,870	136,404	139,482	141,883
111	2,272	2,202	2,206	2,243	2,258
121	38	35	32	32	32
131	1	1	1	1	1
146	24	25	26	29	32
147	3	3	3	2	2
148	6	5	5	5	6
Total	132,004	135,142	138,678	141,793	144,214

4) a) What proportion of Schedule 101 customers were residential versus commercial during the pilot.

The portion of Schedule 101 customers that are residential is shown below.[122]

Table J4-A Proportion of WA Schedule 101 Residential Customers by Quantity			
	2006	2007	2008
# of WA Schedule 101 Customers	136,404	139,482	141,883
# of WA Schedule 101 Residential Customers	124,996	127,844	130,071
% of WA Schedule 101 Residential Customers	91.6%	91.7%	91.7%

[120] From Avista's Confidential Gas 2009-2013 Forecast version 4.1.
[121] From 2004 - 2008 Revenue runs provided in Avista's data submission for Question C-2.
[122] From 2004 - 2008 Revenue runs provided in Avista's data submission for Question C-2.

Schedule 101 consists primarily of residential customers with the remainder consisting of small commercial and industrial customers. Some larger customers remain on Schedule 101 if it is cost-effective due to seasonal usage and other factors.[123]

b) What proportion of Schedule 101 usage was residential versus commercial during the pilot?

The portion of Schedule 101 residential customer usage is shown below. Because the average commercial customer usage exceeds the average residential customer usage, the proportion of residential usage is less than the proportion of residential customers.[124]

Table J4-B Proportion of WA Schedule 101 Residential Customers by Usage	*2006*	*2007*	*2008*
Usage of WA Schedule 101 Customers	112,564,912	116,310,764	115,202,066
Usage of WA Schedule 101 Residential Customers	95,018,947	98,420,777	96,903,055
% of WA Schedule 101 Residential Customers	**84.4%**	**84.6%**	**84.1%**

5) On a rate schedule basis, how has both actual and weather normalized annual gas use per customer changed during 2006-2008?

Historical usage is shown below and illustrates that usage per customer is generally decreasing except for Schedule 148.[125]

Table J5 WA Annual Gas Usage per Customer	*2006*		*2007*		*2008*	
Rate	*Usage Per Customer*	*Weather Normalized Usage Per Customer*	*Usage Per Customer*	*Weather Normalized Usage Per Customer*	*Usage Per Customer*	*Weather Normalized Usage Per Customer*
101 Total	831	876	823	843	880	848
111 Total	21,090	21,868	21,813	22,168	22,836	22,235
121 Total	239,537	239,537	220,866	220,866	199,932	199,932
131 Interruptible	644,022	644,022	643,460	643,460	626,691	626,691
146 Transportation	899,198	899,198	859,055	859,055	806,151	806,151
148 Special Contract	8,557,081	8,557,081	8,989,662	8,989,662	8,270,607	8,270,607

The Schedule 101 usage in Table J5 shows the changes in usage per customer. When new rate cases are approved, these changes accounted for. The chart above also shows that the weather normalized usage is different than the actual usage. From 2006 to 2007, usage per customer decreased 8 therms while the weather normalized usage decreased 33 therms. From 2007 to 2008, actual usage per customer increased 57 therms while the weather normalized usage increased 5 therms.[126]

[123] From Avista's response to Public Counsel's 2/24/09 request for information.
[124] From 2004 - 2008 Revenue runs provided in Avista's data submission for Question C-2.
[125] From 2004 - 2008 Revenue runs provided in Avista's data submission for Question C-2.
[126] See Exhibit J-5 Unbilled Usage for details on the unbilled methodology used for Section J weather normalized usage.

6) a) What has been the change in the Company's natural gas delivered average monthly price per therm by rate schedule during 2006-2008? Provide a detailed incremental chronological listing (including Docket #) and price per therm impact of all rate adjustments (commodity, general rate case, decoupling, etc.) during the 2006 – 2008 time period.

Exhibit J-4 Gas Rate Summary details all price adjustments from 2006 through 2008.

b) What was the cumulative impact factoring in all rate adjustments from the beginning of 2006 to the end of 2008?

The cumulative impact of all rate adjustments including base rates and applicable tariffs is shown below.[127]

Table J6 WA Rate Adjustment Summary				
Rate	Charge	1/1/2006	11/1/2008	% Change
101	Basic Chg	$ 5.50	$ 5.50	0.0%
	Cost per Therm	$ 1.15926	$ 1.14747	-1.0%
111	Min Chg =	$ 131.13	$ 135.07	3.0%
	+ Therms times	$ 0.52917	$ 0.49152	-7.1%
	200	$ 1.18482	$ 1.16687	-1.5%
	201-1000	$ 1.11767	$ 1.09530	-2.0%
	1001+	$ 1.05214	$ 1.02882	-2.2%
121	Min Chg =	$ 319.59	$ 329.43	3.1%
	+ Therms times	$ 0.51438	$ 0.49085	-4.6%
	1st 500	$ 1.15356	$ 1.14971	-0.3%
	501-1000	$ 1.10306	$ 1.09481	-0.7%
	1001-10,000	$ 1.03753	$ 1.02777	-0.9%
	10,001-25,000	$ 0.99600	$ 0.98566	-1.0%
	over 25,000	$ 0.98465	$ 0.97415	-1.1%
131	Minimum	$42,500.00	$36,177.50	-14.9%
	1st 10,000	$ 1.02624	$ 1.01652	-0.9%
	10,001-25,000	$ 0.98550	$ 0.97520	-1.0%
	25,001-50,000	$ 0.97550	$ 0.96506	-1.1%
	over 50,000	$ 0.97220	$ 0.96171	-1.1%
146	Minimum	$14,950.00	$15,900.00	6.4%
	Customer Charge	$ 200.00	$ 200.00	0.0%
	1st 20,000	$ 0.06906	$ 0.07142	3.4%
	20,001-50,000	$ 0.06170	$ 0.06360	3.1%
	50,001-300,000	$ 0.05584	$ 0.05738	2.8%
	300,001-500,000	$ 0.05181	$ 0.05310	2.5%
	over 500,000	$ 0.03951	$ 0.04003	1.3%

The details in Exhibit J-4 show that prices have varied over the Decoupling Mechanism pilot period. Comparing beginning to ending costs, Schedule 146 costs have increased while the remaining rate schedules decreased slightly.

[127] See Exhibit J-4 Gas Rate Summary for details.

7) a) What has been the natural gas commodity cost embedded in the average monthly price per therm values by rate schedule in the previous question and how did margin revenues (excluding recovery of gas commodity cost) change during 2006-2008? Provide a detailed incremental chronological listing (including Docket #) and impact of all commodity adjustments during the 2006 – 2008 time periods.

The commodity gas cost factors are shown below.[128]

Table J7A WA Commodity Gas History					
	Demand	Commodity	WACOG	Amortized Gas Cost	Total Commodity
11/1/2005		Docket No. UG-051372			
Schedule 101	$ 0.09851	$ 0.82428	$ 0.92279	$ 0.02584	$ 0.94863
Schedule 111	$ 0.09676	$ 0.82428	$ 0.92104	$ 0.02667	$ 0.94771
Schedule 121	$ 0.09352	$ 0.82428	$ 0.91780	$ 0.02615	$ 0.94395
Schedule 131	$ 0.08653	$ 0.82428	$ 0.91081	$ 0.02688	$ 0.93769
Schedule 146	$ 0.00057	$ -	$ 0.00057	$ 0.00190	$ 0.00247
11/1/2006		Docket No. UG-061531			
Schedule 101	$ 0.09824	$ 0.79561	$ 0.89385	$ 0.06455	$ 0.95840
Schedule 111	$ 0.09546	$ 0.79561	$ 0.89107	$ 0.06451	$ 0.95558
Schedule 121	$ 0.07919	$ 0.79561	$ 0.87480	$ 0.06621	$ 0.94101
Schedule 131	$ 0.06025	$ 0.79561	$ 0.85586	$ 0.07310	$ 0.92896
Schedule 146	$ 0.00056	$ -	$ 0.00056	$ 0.00187	$ 0.00243
11/1/2007		Docket No. UG-071864			
Schedule 101	$ 0.09640	$ 0.78906	$ 0.88546	$ (0.00300)	$ 0.88246
Schedule 111	$ 0.09365	$ 0.78906	$ 0.88271	$ -	$ 0.88271
Schedule 121	$ 0.07768	$ 0.78906	$ 0.86674	$ 0.01087	$ 0.87761
Schedule 131	$ 0.05862	$ 0.78906	$ 0.84768	$ 0.00664	$ 0.85432
Schedule 146	$ 0.00056	$ -	$ 0.00056	$ 0.00008	$ 0.00064
11/1/2008		Docket No. UG-081672			
Schedule 101	$ 0.09695	$ 0.83818	$ 0.93513	$ (0.04653)	$ 0.88860
Schedule 111	$ 0.09416	$ 0.83818	$ 0.93234	$ (0.04417)	$ 0.88817
Schedule 121	$ 0.07816	$ 0.83818	$ 0.91634	$ (0.03005)	$ 0.88629
Schedule 131	$ 0.05962	$ 0.83818	$ 0.89780	$ (0.02923)	$ 0.86857
Schedule 146	$ 0.00056	$ -	$ 0.00056	$ 0.00008	$ 0.00064

[128] From Avista's data submission for question J-7.

b) What was the total impact factoring in all adjustments from the beginning of 2006 to the end of 2008?

The total impact of the gas commodity cost factors from Table J7-A is shown below.

Table J7-B WA Natural Gas Commodity Cost Impact			
Schedule	11/1/2005	11/1/2008	% Change
101	$0.94863	$0.88860	-6.3%
111	$0.94771	$0.88817	-6.3%
121	$0.94395	$0.88629	-6.1%
131	$0.93769	$0.86857	-7.4%
146	$0.00247	$0.00064	-74.1%

8) (a) What is the Company's most recently available five year forecast for natural gas rates/prices?

The rate forecast summary is shown below.[129]

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Table J8-A WA Rate Forecast Summary							
Rate	Charge	Nov-08	Jan-09	Nov-09	Nov-10	Nov-11	Nov-12
101	Customer Charge	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$ 5.50	$5.50
	Cost per Therm	$ 1.14747	$ 1.14943	$ 0.97821	$ 1.07542	$ 1.10054	$1.10517
111	Customer Charge	$ 135.07	$ 135.07	$ 135.07	$ 135.07	$ 135.07	$135.07
	200	$ 0.49152	$ 0.49322	$ 0.32764	$ 0.42278	$ 0.44790	$0.45253
	201-1000	$ 1.09530	$ 1.09700	$ 0.93142	$ 1.02656	$ 1.05168	$1.05631
	1001+	$ 1.02882	$ 1.03052	$ 0.86494	$ 0.96008	$ 0.98520	$0.98983
121	Customer Charge	$ 329.43	$ 329.43	$ 329.43	$ 329.43	$ 329.43	$329.43
	1st 500	$ 0.49085	$ 0.49243	$ 0.32684	$ 0.40787	$ 0.43298	$0.43761
	501-1000	$ 1.09481	$ 1.09639	$ 0.93080	$ 1.01183	$ 1.03694	$1.04157
	1001-10,000	$ 1.02777	$ 1.02935	$ 0.86376	$ 0.94479	$ 0.96990	$0.97453
	10,001-25,000	$ 0.98566	$ 0.98724	$ 0.82165	$ 0.90268	$ 0.92779	$0.93242
	over 25,000	$ 0.97415	$ 0.97573	$ 0.81014	$ 0.89117	$ 0.91628	$0.92091
131	Customer Charge	$ -	$ -	$ -	$ -	$ -	$ -
	1st 10,000	$ 1.01652	$ 1.01805	$ 0.85246	$ 0.93267	$ 0.95779	$0.96242
	10,001-25,000	$ 0.97520	$ 0.97673	$ 0.81114	$ 0.89135	$ 0.91647	$0.92110
	25,001-50,000	$ 0.96506	$ 0.96659	$ 0.80100	$ 0.88121	$ 0.90633	$0.91096
	over 50,000	$ 0.96171	$ 0.96324	$ 0.79765	$ 0.87786	$ 0.90298	$0.90761
146	Customer Charge	$ 200.00	$ 200.00	$ 200.00	$ 200.00	$ 200.00	$ 200.00
	1st 20,000	$ 0.07142	$ 0.07142	$ 0.07134	$ 0.07134	$ 0.07134	$0.07134
	20,001-50,000	$ 0.06360	$ 0.06360	$ 0.06352	$ 0.06352	$ 0.06352	$0.06352
	50,001-300,000	$ 0.05738	$ 0.05738	$ 0.05730	$ 0.05730	$ 0.05730	$0.05730
	300,001-500,000	$ 0.05310	$ 0.05310	$ 0.05302	$ 0.05302	$ 0.05302	$0.05302
	over 500,000	$ 0.04003	$ 0.04003	$ 0.03995	$ 0.03995	$ 0.03995	$0.03995

[129] From Avista's Confidential Gas 2009-2013 Forecast version 4.1.

(b) What is the Company's most recently available five year forecast for numbers of customers by rate schedule?

The forecasted number of customers is shown below.[130]

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Table J8-B Forecasted Number of WA Customers					
Schedule	2009	2010	2011	2012	2013
101	144,648	147,399	150,750	154,451	158,152
111	2,335	2,401	2,467	2,533	2,588
121	34	35	37	38	39
132	1	1	1	1	1
146	33	33	33	33	33
148	6	6	6	6	6

(c) What is the Company's most recently available five year forecast for numbers of customers for usage per customer by rate schedule?

The forecasted usage per customer is shown below.[131]

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Table J8-C WA Forecasted Annual Usage per Customer (therms)					
Schedule	2009	2010	2011	2012	2013
101	859	852	832	818	803
111	22,280	21,779	21,444	21,207	20,960
121	216,791	215,085	206,606	205,206	203,820
132	653,657	653,657	653,657	653,657	653,657
146	799,017	800,393	819,655	838,988	853,335
148	7,698,545	7,785,217	7,872,210	7,958,937	8,036,292

[130] From Avista's Confidential Gas 2009-2013 Forecast version 4.1.
[131] From Avista's Confidential Gas 2009-2013 Forecast version 4.1.

(d) What is the Company's most recently available five year forecast for numbers of overall therm volumes and margin revenues by rate schedule in each available projected future period?

The forecasted usage and margin revenue are shown below.[132]

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Schedule	Table J8-D WA Annual Forecasted Usage (therms)				
	2009	2010	2011	2012	2013
101	124,238,093	125,535,197	125,496,271	126,269,048	126,978,848
111	52,029,766	52,297,879	52,907,656	53,721,748	54,249,084
121	7,298,644	7,456,290	7,575,551	7,729,437	7,881,055
132	653,657	653,657	653,657	653,657	653,657
146	26,367,555	26,412,963	27,048,616	27,686,604	28,160,071

Table J8-E WA Annual Forecasted WA Margin Revenue					
Schedule	2009	2010	2011	2012	2013
101	$41,613,242	$41,621,708	$41,806,666	$42,247,105	$42,671,556
111/112	$9,556,597	$9,827,158	$9,986,170	$10,171,175	$10,301,063
121/122	$907,085	$931,112	$951,066	$970,862	$991,057
132	$71,403	$71,403	$71,403	$71,403	$71,403
146	$2,040,200	$1,747,568	$1,787,007	$1,826,698	$1,856,213

[132] From Avista's Confidential Gas 2009-2013 Forecast version 4.1. Margin includes revenue gross-up factor.

K Impact on Washington Limited Income Customers

1) What is the estimated number of limited income customers in Avista's service territory? In evaluating this question, the evaluator may rely on census data, participation in government programs, and other reliable, public information. Describe the methodology used to develop the estimate.

This report considers limited income customers to be those customers with a household income equal to or below 125% of the federal poverty guideline, which matches Washington's primary basis to qualify for LIHEAP assistance. The estimated number of limited income customers in Avista's service territory is shown below.

Table K1 Limited Income Customers in Avista's Territory

Threshold	Customer Type				
	Gas-Only	Combo Gas-Electric	Total Gas Customers	Electric-Only	Total
125% of Poverty	2,324	15,324	17,648	13,267	30,915
Total Avista Residential Population	15,986	95,067	111,053	67,510	178,563
Proportion of Residential Population	14.5%	16.1%	15.9%	19.7%	17.3%

The 17.3% estimate is developed using zip code level estimation and aggregating to an Avista value. Avista's current service count by zip code was multiplied by a factor developed for each zip code which was generated by scaling the 2000 census data for each zip code to the 2007 American Community Survey results to most accurately reflect the regional demographics of the service territory. The 2000 Census data was used because it contains zip code specific data. Because only relatively highly populated county data is included in the 2007 ACS, adjustments were made between data stored as "families in poverty" to "households" and missing data was filled with averages. Cubic splines (a curve-fitting methodology) were generated from the known data points to provide a fine grained breakdown of the results. For details of this methodology, please see Exhibit K-1 Methodology of Avista Poverty Statistics.

The estimates for Avista's customer population are limited to residential accounts that were open all of 2007.[133] This minimizes the risk of transient customers artificially inflating the population estimate but may also artificially lower the population estimate. Approximately 13% of both gas and electric residential meters were excluded by this limitation.

In comparison, The Applied Public Policy Research Institute for Study and Evaluation (APPRISE) estimated 17% of Avista's customer population is limited income.[134] APPRISE also estimates there are 139,000 residential natural gas customers and 196,000 residential electric customers in Avista's Washington territory.[135] This leads to a limited income customer population of approximately 33,300 in Avista's territory which is 8% higher than the estimate in Table K-1.

[133] See Exhibit K-5 Avista Population Estimate from Avista's response to Data Request 6, Question 1.
[134] Exhibit K-2 APPRISE, Washington State Energy Needs Final Report, December 2007, Page 13.
[135] Exhibit K-2 APPRISE, Washington State Energy Needs Final Report, December 2007, Page 9.

2) a) Based on the results of the independent DSM Verification audits, did the Company change its natural gas therm savings through Company-sponsored limited income programs for the 2006 – 2008 time period, as compared with 2004 – 2005?

The audited limited income DSM savings for 2006-2008 and the unaudited limited income DSM savings for 2004-2005 are shown below. The savings for 2004 and 2005 vary from the Triple-E reports because the adjustments resulting from review by the Triple-E board in 2005 for the 2004 report are applied to 2004 in this report in lieu of 2005.[136]

Table K2-A WA Limited Income DSM Savings (therms)				
2004	**2005**	**2006**	**2007**	**2008**
5,012	110,788	57,503	58,549	71,983

b) What were the annual audited limited income DSM savings (completed project basis) for 2006-2008 for Company sponsored limited income?

The audited limited income DSM savings for 2006-2008 from Table K2-A are shown below:

Table K2-B WA Limited Income DSM Savings (therms)		
2006	**2007**	**2008**
57,503	58,549	71,983

3) What is the proportion of therm savings from Company-sponsored limited income DSM programs compared to estimated sales volumes to limited income customers taking service under Schedule 101?

The proportion of limited income DSM savings to limited income usage is shown below.[137]

Table K3 2007 % Limited Income DSM Savings to Usage	
Number of Limited Income Gas Customers	17,648
Average Annual Usage per LI Customer (therms)	696
Limited Income Usage (therms)	12,283,008
Limited Income DSM Savings (therms)	58,549
% Limited Income DSM to Usage	0.48%

[136] See Exhibit C-1 DSM Savings Calculations for details.
[137] LI Customers from Table K-1, Average Usage from Table K-10 and DSM Savings from Table C-1C.

4) What were the associated lost margins from Company sponsored limited income DSM programs?

The savings and lost margins from limited income DSM programs are shown below.[138]

Table K4 WA Limited Income DSM Lost Margin					
	2004	2005	2006	2007	2008
Savings (therms)	5,012	110,788	57,503	58,549	71,983
Lost Margin	$830	$21,313	$11,146	$11,606	$15,655

5) Did Avista make any commitments to program funding, or program changes or expansions as part of any rate cases or other regulatory proceedings during 2004 to 2008? Identify the regulatory proceeding, and provide the program funding, or program changes or expansions Avista made in response.

UG-050483 effective January 1, 2006 increased the limited income DSM budget by $200,000 and flexibility in limited income DSM programs was improved by increasing the allowable percentage of gas projects from 50% to 75%.[139]

UG-080416 effective January 1, 2009 increased limited income DSM funding by $70,000.[140] The CAP agencies will now have a list of "deemed" projects that may be implemented without authorization from Avista. All other measures will need approval. The limit for health and human safety investments will now be 15% of the total expenditures of a given CAP agency under contract to Avista in lieu of 15% of improvements made on an individual dwelling. Finally, quarterly enhanced reporting will be provided to the Triple-E board.[141]

[138] From Table C3-B.
[139] See UG-050483, Order 05, Settlement Agreement, Pages 6-7. Does not apply to Klickatat CAP which only serves Avista's natural gas customers.
[140] See Exhibit K-11 – UG-080416, Settlement Agreement Appendix 05.
[141] See UG-080416, Order 08, Multiparty Settlement Stipulation, Page 14

6) What program funding or program changes or expansions were implemented during the 2006 – 2008 time period for gas, shared savings, or electric efficiency with natural gas impact (either savings or increased usage) on limited income DSM programs as compared with the 2004 – 2005 time period? Identify each new, revised or expanded programmatic change including scope and funding.

Avista stated:

> Limited income DSM funding is delivered through contracts with local community action partners (CAP). This has been the approach for both the 2004-2005 and 2006-2008 time period. The main change from the 04-05 period to the 06-08 period was increased flexibility given to the CAP agencies. Emphasis was given to encourage CAP agencies to complete high efficiency upgrades for existing natural gas customers as well as the weatherization and electric to natural gas conversions. Also, previously the CAP agencies were allowed to split their DSM budget 50% to electric saving measures and 50% to natural gas. Additional flexibility was added during the 2006-2008 period to allow CAP agencies to spend up to 75% on natural gas.[142]

The Limited Income DSM incentives have remained the same as shown below:[143]

Table K6 Limited Income Gas DSM Incentives	
Limited Income HE Space Heat	100% + 15% Admin fee
Limited Income HE Water Heat	100% + 15% Admin fee
Limited income attic insulation	100% + 15% Admin fee
Limited income Wall insulation	100% + 15% Admin fee
Limited income Floor insulation	100% + 15% Admin fee
Limited income duct insulation	100% + 15% Admin fee
Limited income infiltration	100% + 15% Admin fee
Limited income Energy Star windows	100% + 15% Admin fee
Limited Income Energy Star doors	100% + 15% Admin fee

Non-deemed (non-prescriptive) and standard residential measures are also available to limited income customers; however, participation in standard residential programs is unknown but presumed to be minimal for natural gas DSM.

[142] Avista's data submission for Question K-6.
[143] Avista's data submission for Question C-5.

7) a) Were there any changes in Avista's avoided costs during the Pilot Period that may have contributed to any changes in customer participation and savings for Company sponsored limited income DSM programs?

Since there has been no change to the limited income DSM incentives over the period of the decoupling pilot, it is assumed the increase in avoided costs identified in Question C-6 has not significantly impacted limited income DSM programs yet; however, it is possible that new measures will be added to the limited income DSM portfolio as the increased avoided costs impact Avista's cost effectiveness calculations.

b) Identify any other factors that may have contributed to an increase in limited income DSM savings and/or new or expanded limited income DSM program offerings.

Avista stated,

> Avista's limited income portfolio leverages Community Action Program agencies to reach this particular customer segment. Avista contracts with six such agencies on an annual basis through this program. Though the therm acquisition from this portfolio has never been a large percentage of the overall natural gas DSM portfolio acquisition, Avista and key stakeholders believe that this augmentation to our residential program is necessary to address the barriers that customers within this customer segment face. As retail rates increase there have been increasing concern for the disproportionate adverse impact borne by this customer segment and, as a result, this has driven increased effort within this customer segment. This has included commitments to higher levels of expenditure as part of regulatory proceedings.[144]

8) What limited income DSM customer educational, informational and outreach programs were implemented by the Company during 2006-2008? What were the primary messages, including dates of publication or broadcast, and estimated costs of each of these programs? Were any therm savings attributed to such programs in the independent DSM verification (audit) referenced above in Section (C), and if so, how much, and using what assumptions or studies?

Avista stated,

> Avista's natural gas DSM outreach effort was initiated with broad messages regarding efficiency and has gradually been revising that focus towards specific program availability. This messaging has been through print, electronic and internet media efforts. There has not been a specific limited income focus to this message. Program recruitment for the enhanced residential programs available to the limited income segment is better achieved through the Community Action Program agencies with whom Avista contracts for the delivery of these programs.

[144] Avista's data submission for Question K-7.

> Through its LIRAP program, Avista designates a 5.92% of the funding to be used for conservation education. Energy efficiency kits have been designed with the use of this funding that includes energy efficiency materials such as window plastic, rope caulk, v-seal, etc. Low cost, no cost energy savings tips are also included in the kit. The kit is given to every Avista customer that receives a LIHEAP or LIRAP Heat grant.
>
> Included in LIRAP is the Wattson Energy Conservation Outreach program for children. It is designed to develop long-term, lifestyle behavioral changes for the efficient and wise use of energy. It features the character of Wattson and primarily targets children ages 4 – 8 with an emphasis on reaching low income children and their families.[145]

No therm savings were specifically attributed to any of the educational, informational and outreach programs in the independent DSM verification.

9) What information is captured and retained by Avista to track service provided to limited income customers in the normal course of business, including monitoring of participation in DSM and rate assistance programs?

Payment codes of LIHEAP and LIRAP heat grants are recorded in the system.

Limited income DSM expenditures are tracked by measure and entered on customer accounts in Avista's customer service database. Data includes the CAP agency performing the energy efficiency measure, description of the measures, deemed kWh or therms savings, cost of the measure (including admin fee) and any health and human safety measures.[146]

10) What is Avista's estimate of average usage per customer for customers that have participated in the limited income DSM, LIHEAP and LIRAP programs, in comparison to all Schedule 101 customers, and how was such estimate derived?

The average usage of limited income customers and Schedule 101 customers is shown below.

Table K10 Average Customer Usage (therms)	*Annual*	*Monthly*
LIHEAP/LIRAP	696	58
Limited Income DSM	696	58
Schedule 101[147]	828	69

[145] Avista's data submission for Question K-8.
[146] Avista's data submission for Question K-9.
[147] From 2006 & 2007 Revenue Runs.

Both LIHEAP/LIRAP and Limited Income DSM average customer usage was calculated using data provided by Avista in their original data submission for Question K-10. Customers with fewer than 300 days of history or no usage were excluded.

The limited income customer average usage is approximately 16% less than the average Schedule 101 customer. When compared to the average Schedule 101 **residential** customer (63.5 therms per month)[148], the difference is approximately 9%. The factors behind the reduced usage are unknown but may include residence size, behavior (temperature settings), non-payment shut-offs and customer profile (heat only, water heat only, gas and water heat).

11) a) At the average per customer usage levels for limited income customers provided in response to question #10, what is the approximate cost to a typical limited income customer for funding of DSM programs and for recovery of decoupling deferrals?

The estimated average annual customer cost for decoupling deferral recovery via the Schedule 159 tariff is shown below.[149]

~~CONFIDENTIAL per Protective Order in WUTC Docket UG-060518~~

Table K11-A Estimated DSM Decoupling Deferral Recovery Cost

			LIHEAP/LIRAP			Limited Income			Schedule 101		
Annual Usage			696			696			828		
Period			11/07 -10/08	11/08 -10/09	Estimated 11/09 -10/10	11/07 -10/08	11/08 -10/09	Estimated 11/09 -10/10	11/07 -10/08	11/08 -10/09	Estimated 11/09 -10/10
Surcharge			0.0026	0.0059	0.0003	0.0026	0.0059	0.0003	0.0026	0.0059	0.0003
101 Usage Profile	Nov	8.3%	$0.15	$0.34	$0.02	$0.15	$0.34	$0.02	$0.18	$0.41	$0.02
	Dec	15.8%	$0.28	$0.65	$0.03	$0.28	$0.65	$0.03	$0.34	$0.78	$0.04
	Jan	17.9%	$0.32	$0.74	$0.04	$0.32	$0.74	$0.04	$0.38	$0.88	$0.04
	Feb	16.8%	$0.30	$0.69	$0.04	$0.30	$0.69	$0.04	$0.36	$0.82	$0.04
	Mar	13.0%	$0.23	$0.53	$0.03	$0.23	$0.53	$0.03	$0.28	$0.64	$0.03
	Apr	9.4%	$0.17	$0.39	$0.02	$0.17	$0.39	$0.02	$0.20	$0.46	$0.02
	May	5.7%	$0.10	$0.23	$0.01	$0.10	$0.23	$0.01	$0.12	$0.28	$0.01
	Jun	3.3%	$0.06	$0.14	$0.01	$0.06	$0.14	$0.01	$0.07	$0.16	$0.01
	Jul	2.2%	$0.04	$0.09	$0.00	$0.04	$0.09	$0.00	$0.05	$0.11	$0.01
	Aug	1.8%	$0.03	$0.07	$0.00	$0.03	$0.07	$0.00	$0.04	$0.09	$0.00
	Sep	2.1%	$0.04	$0.09	$0.00	$0.04	$0.09	$0.00	$0.04	$0.10	$0.01
	Oct	3.8%	$0.07	$0.16	$0.01	$0.07	$0.16	$0.01	$0.08	$0.19	$0.01
Totals			$1.79	$4.13	$0.21	$1.79	$4.13	$0.21	$2.13	$4.91	$0.25
				$6.12			$6.12			$7.29	

Estimates for 11/09 through 10/10 are based on Avista's Natural Gas Forecast, V 4.1 and are not used for analysis elsewhere in the report due to the uncertainty of their accuracy.

[148] From 2006 and 2007 Revenue Runs.
[149] See Exhibit D-7 Schedule 159 Impact Calculations

The estimated average annual customer cost for DSM programs via the Schedule 191 tariff is shown below. [150]

Table K11-B WA Schedule 191 Annual DSM Tariff Revenue	2004	2005	2006	2007	2008
LIHEAP/LIRAP	$7.79	$6.10	$5.16	$12.49	$12.49
Limited Income DSM	$7.79	$6.10	$5.16	$12.49	$12.49
Schedule 101	$9.26	$7.26	$6.14	$14.86	$14.86

b) How does the average cost for recovery of decoupling deferrals compare to the estimated average savings for customers in the limited-income DSM program?

The average annual Schedule 159 limited income customer cost over the period November 2007 to October 2010 is compared with the estimated average annual limited income DSM savings spread across all limited income customers during the period 2006 – 2007 below.

Table K11-C Limited Income Customer Annual Averages			
Average Schedule 191 DSM Cost	Average Schedule 159 Decoupling Cost	Average LI DSM Savings (therms)	Average LI DSM Cost Savings
$10.05	$4.74	3.29	$3.77

The estimated annual costs and savings in Table K11-C are not directly comparable. The DSM Cost Savings is a single year estimated savings that will be realized every year for the life of the measure. Even though DSM costs are also experienced annually, each year's savings are repeated for the life of the measure producing compound savings. The Average Schedule 159 Cost was calculated by dividing the average Table K12 deferral cost by the limited income gas customer population estimate in K-1. The Average Limited Income DSM Savings is calculated by dividing the average 2006-2007 Limited Income DSM Savings from Table C1-C by the limited income gas customer population estimate in K-1 (17,648). The Average Limited Income DSM Cost Savings is calculated by multiplying the average savings by the 2008 Schedule 101 cost of $1.14747 per therm.

[150] See Exhibit K-4 Schedule 191 DSM LI Tariff Calculations

12) Using the estimate of limited income customers from Question #1, and the estimate of limited income usage in Question #10, what is the estimated proportion of the total amount of decoupling deferrals borne by limited income customers for 2007 and 2008?

Estimates of the decoupling deferral recoveries borne by limited income customers are shown below: [151]

Table K-12 Limited Income Decoupling Deferral Cost	*2007*	*2008*
Limited Income	$95,655	$71,573
Schedule 101	$900,119	$673,508
Proportion of Schedule 101	**10.6%**	

Note that the proportion of **residential** gas customers from Question K-1 cannot be used to directly compare with the proportion of recoveries borne by Limited Income customers in Table K-12 which are based on the proportion of **all Schedule 101** customer usage.

13) Identify and summarize any further information or data available that would assist in the determination of whether or not decoupling has a disproportionate impact on limited income customers?

The DSM expenditures and savings for limited income customers and non-limited income residential customers for the 2004-2005 time period are compared with the 2007-2008 time period below.

K-13A Data - DSM Expenditures		*2004/2005*		*2007/2008*	
	Customers	*Total*	*Per Customer*	*Total*	*Per Customer*
Limited Income	17,648	$340,659	$19.30	$486,185	$27.55
Schedule 101 Residential	93,405	$159,113	$1.70	$1,414,547	$15.14

Table K13-B DSM Savings (therms)		*2004/2005*		*2007/2008*	
	Customers	*Total*	*Per Customer*	*Total*	*Per Customer*
Limited Income	17,648	57,900	3.3	65,266	3.7
Schedule 101 Residential	93,405	99,102	1.1	386,608	4.1

From 2004/2005 to 2007/2008 Limited Income DSM savings have increased 13% and DSM expenditures have increased 43%. At the same time, the average Schedule 101 Residential DSM savings have increase 290% and expenditures have increased 789%. This is an indicator that Residential DSM is growing faster than Limited Income DSM and that Limited Income DSM measures with a lower savings (therms) return are being funded. Although this may be cost effective because of higher avoided costs, this trend should be monitored.

[151] See Exhibit K-6 Limited Income Decoupling Deferrals.

The utility cost per therm of DSM savings is higher for limited income customers because Limited Income DSM incentives fund 100% of the measure's cost rather than a portion of the cost. Therefore, the lower return (DSM savings) per dollar invested for Limited Income DSM is expected.

The following additional funding was provided through litigation:

Funding for natural gas energy efficiency improvements provided from other sources includes a February 28, 2005 settlement that penalized Qwest Corporation for failing to file interconnection contracts with rival carriers who use Quest's phone network. $6.7 million was allocated to low income heat assistance as part of direct legislation, SHB 2370. Of these funds, approximately $90,000 to $95,000 was used for limited income natural gas DSM measures for Avista's customers and $1,178,184 was used for limited income natural gas bill assistance in 2006.[152]

As a result of litigation by the Washington State Attorney General's office with The Williams Pipeline (and others) for pipeline manipulation, approximately $87,000 was used for limited income bill assistance. Funding was distributed through the Seattle Foundation.[153]

[152] Exhibit K-3 Qwest Penalty Funds
[153] See Exhibit K-9 Williams Pipeline Settlement

14) a) What were the total limited income DSM expenditures for 2006, 2007, and 2008?

The total Limited Income DSM expenditures for 2006-2008 are shown below.[154]

Table K14-A WA Limited Income Expenditures	2006	2007	2008
Incentives	$460,981	$400,262	$496,886
Labor & Expenses	$19,335	$24,084	$10,482
General	$12,162	$11,686	$28,970
Total	**$492,477**	**$436,032**	**$536,338**

The CAP agencies have flexibility to move funding between gas and electric DSM; therefore, a full summary of Limited Income DSM should include electric DSM; however, for the purposes of this report, only gas expenditures are included in Table 14-A.

b) Did Avista make any commitments regarding funding levels as part of any rate cases or other regulatory proceedings?

The response from Question K-5 is repeated below:

UG-050483 effective January 1, 2006 increased the limited income DSM budget by $200,000 and flexibility in limited income DSM programs was improved by increasing the allowable percentage of gas projects from 50% to 75%.[155]

UG-080416 effective January 1, 2009 increased limited income DSM funding by $70,000. The CAP agencies will now have a list of "deemed" projects that may be implemented without authorization from Avista. All other measures will need approval. The limit for health and human safety investments will now be 15% of the total expenditures of a given CAP agency under contract to Avista in lieu of 15% of improvements made on an individual dwelling. Finally, quarterly enhanced reporting will be provided to the Triple-E board quarterly.[156]

[154] From Table C9-E.
[155] See UG-050483, Order 05, Settlement Agreement, Pages 6-7.
[156] Exhibit K-11 UG-080416, Order 08, Multiparty Settlement Stipulation, Page 14 and Appendix 05.

c) What is Avista's best estimate of the proportion of limited income participation in each of its conservation programs and how were such estimates were derived?

Avista provided an estimate by applying Spokane County census data to their entire service area using a threshold income of $25,000 to obtain a limited income population estimate of 77,000, resulting in the following rough participation estimates:[157]

LIHEAP	LIRAP	DSM	Combined
23.4%	8.6%	.58%	27.1%

This evaluation's estimates of limited income population participation in DSM programs and payment assistance for the May 1, 2006 to April 30, 2007 heating season are shown below.[158]

Table K14-B Limited Income DSM/Bill Assistance Participation					
	LI Customers	LIHEAP	LIRAP	DSM	Combined
Participants	17,648	2,664	2,740	215	5,560
Proportion of LI Population		15.1%	15.5%	1.2%	31.5%

Customers who receive LIHEAP funding are not eligible for LIRAP funding; therefore, an estimated 30.6% of Avista's limited income gas customer population is receiving payment assistance.

15) a) What was the total distribution of LIRAP funds to limited income customers for 2006, 2007, and 2008?

The distribution of LIRAP funds for 2006-2008 is shown below:[159]

Table K15-A WA LIRAP Distribution by Year		
2005-2006	2006-2007	2007-2008
$2,471,836	$3,423,265	$2,641,834

LIRAP grants are limited to customers receiving one LIHEAP or LIRAP grant per heating season. Because grants are accounted for by heating season, Table K15-A values are for heating season, not calendar year.

[157] From Avista's data submission for Question K-14.
[158] See Exhibit K-7 DSM and Bill Assistance Participation.
[159] See Exhibit K-8 LIRAP Distribution.

b) Did Avista make any commitments regarding funding levels as part of any rate cases or other regulatory proceedings?

The LIRAP surcharge history is shown below.[160]

Table K15-B WA Schedule 191 LIRAP Funding		
Revision	Effective Date	Surcharge
4	5/2/2004	$ 0.00920
5	2/14/2005	$ 0.00650
7	1/1/2008	$ 0.00808
8	1/1/2009	$ 0.00962

UG-050483 became effective January 1, 2006 and increased LIRAP funding $600,000 per year for two years and was financed through a combination of tax credits and a reallocation of Schedule 191 DSM funds to LIRAP.[161] In 2004, $300,000 was transferred to DSM funding as part of a tax rebate. In 2006, $300,000 was then transferred from DSM to limited income funding.

UG-070805 became effective January 1, 2008 and increased LIRAP funding in an attempt to offset the overall increase in retail sales from this order.[162]

UG-080417 became effective January 1, 2009 and increased LIRAP funding $318,000, which is a 25% increase in funding.[163]

[160] From Schedule 191 Public Purpose Tariff Adjustments.
[161] See UG-050483, Order 05, Settlement Agreement, Pages 6-7.
[162] UG-070805, Order 05, Appendix 1, Item 10.
[163] UG-080416, Order 08, Multiparty Settlement Stipulation, Page 13

c) What is Avista's best estimate of the proportion of limited income participation in this program and how was this estimate derived?

This evaluation's estimate of limited income gas customer population participation in LIRAP is 15.5% from Table K14-B. This value was derived by dividing the number of LIRAP participants provided by Avista for the 2007-2008 heating season by the limited income gas customer population estimate in Question K-1.[158] Avista provided an estimate by applying Spokane County census data to their entire service area using a threshold income of $25,000 to obtain a limited income population estimate of 77,000, resulting in a rough participation estimate of 8.6%.[157]

16) a) What was the total distribution of LIHEAP funds to limited income customers for 2006, 2007, and 2008?

Washington's LIHEAP distribution is shown below by heating year.

Table K16-A WA LIHEAP Distribution by Heating Year		
2005-2006	*2006-2007*	*2007-2008*
$6,545,962	$6,355,767	$5,996,084

b) What is Avista's best estimate of the proportion of limited income participation in this program and how such estimates were derived?

This evaluation's estimate of limited income population participation in LIHEAP is 15.1% from Table K14-B. This value was derived by dividing the number of LIHEAP participants provided by Avista for the 2007-2008 heating season by the limited income gas customer population estimate in Question K-1.[158] Avista applied Spokane County census data to their entire service area using a threshold income of $25,000 to obtain a limited income population estimate of 77,000 resulting in a participation proportion of 23.4%.[157]

17) Based on a sampling of those customers who receive LIHEAP or LIRAP funds, what was the estimated average surcharge for November 2007 – October 2008 and the estimated impact for November 2008 – October 2009?

The average Schedule 159 surcharge costs for LIRAP/LIHEAP participants are shown below:[164]

Table K-17 Average LIRAP/LIHEAP Participant Schedule 159 Surcharge		
Nov '07 to Oct '08	$	1.79
Nov '08 to Oct '09		$4.13

[164] See Exhibit K-10 Average LIRAP-LIHEAP Participant Schedule 159 Surcharge.

18) What is the approximate cost to the limited-income customer population to fund 1) the DSM programs and 2) the recovery of the decoupling deferrals if each of the average usage figures above were applied to the estimated limited income population derived in Section K, Question #1?

The approximate costs for DSM funding and decoupling deferral recovery surcharges are shown below:

Table K-18 LIRAP & LIHEAP Participant Annual DSM & Decoupling Surcharges

Surcharge	Average Limited Income Customer Cost	Limited Income Population Cost
DSM	$10.05	$177,304
Decoupling Deferral	$4.74	$83,614

The DSM cost is the average Limited Income Schedule 191 DSM cost for 2006-2008 from Table K11-B. The Decoupling Deferral cost is the average 2007-2008 Limited Income deferral cost from Table K11-C.

L Other Information

1) Was the decoupling pilot Mechanism in Washington recognized in any public reports issued by credit rating agencies or financial analysts? If so, provide a copy of the report.

One analyst publication on Avista's decoupling pilot is in Exhibit L-1 DAD 110206.

Exhibit L-2 Avista Press Release regarding Avista's decoupling pilot mechanism in Washington was posted on the following financial/investor web pages:
www.spokanejournal.com
www.istockanalyst.com
www.portfolio.com
www.sharebuilder.com
www.duedee.com
www.reuters.com
www.bloomberg.com
www.biz.yahoo.com

Avista's decoupling pilot mechanism is also recognized in *The Research Magazine Guide to Natural Gas Investing 2008.*

No other references to Avista's decoupling pilot mechanism could be found in any public reports issued by credit rating agencies or financial analysts.

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