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.

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[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.