AVISTA UTILITIES

EVALUATION, MEASUREMENT AND VERIFICATION (EM&V) FRAMEWORK

In response to the Washington Utilities and Transportation Commission's Order from Docket Nos. UE-090134 / UG-090135 and UG-060518, Consolidated

September 1, 2010

ACKNOWLEDGEMENTS

Avista Utilities would like to acknowledge and thank the members of the Collaborative, and by extension the External Energy Efficiency (or "Triple E") Board, for their help in designing this EM&V Framework document. We would also like to thank Steven Schiller from Schiller Consulting, Dr. Chris Ann Dickerson from CAD Consulting, and Dr. Dune Ives for their direction and expertise in this process.

HOW TO USE THIS DOCUMENT

This framework is the overarching document that defines the methods that Avista will use to perform Evaluation, Measurement, and Verification activities for its Demand Side Management programs. This Framework and the draft 2011 EM&V Annual Plan, which has been prepared concurrently, are responsive to the requirements of the Washington Utilities and Transportation Commission's (WUTC) Order No. 10, paragraph 305, in Docket No. UE-090134, UG-090135 and UG-060518 (Consolidated) and clarifies Avista's approach to EM&V for the Idaho Public Utilities Commission Staff Memorandum of Understanding with Avista and other parties. Some of the reporting structure in this Framework is in accordance with the WUTC Order on Avista's Two Year Electric Targets relative to "I-937."

This framework document adopts industry standard definitions of terms, principles of operation, standard best practices, and a Technical Reference Manual (TRM) that will be utilized by Avista or external evaluators to evaluate, verify and document the savings acquired from its efficiency programs and the processes used to acquire those savings. The intended audience for the Framework is Avista management, Avista program staff, Avista staff and external evaluators who will perform evaluations, the Idaho Public Utilities Commission and Washington Utilities and Transportation Commission, and interested parties. The framework guides development of annual EM&V plans and the research plans for specific evaluation activities. It also provides a mechanism for the Commissions and interested parties to understand and comment on Avista's overall evaluation approach.

Multiple documents exist that can be provided upon request. Each year Avista will develop an Annual EM&V Plan which will contain evaluation schedules and budgets for the upcoming year as well as contemplated evaluation activities up to two more years in the

future. Avista will be working closely with the Triple E on the development of the 2011 Annual EM&V Plan.[1] Avista also has available upon request the Avista EM&V Protocol Document that describes in greater detail Avista's methods and procedures for conducting various evaluation, measurement and verification activities. Another resource is the Avista DSM Annual Business Plan, which describes the relationship between DSM program implementation and portfolio, program and measure evaluation. This Business Plan and associated Annual EM&V Plan will be reviewed annually by Avista's Triple E Board.

[1] Avista intends to continue to draw upon the assistance and expertise of Dr. Dune Ives, Steven Schiller, and Dr. Chris Ann Dickerson, to work with the Triple E on the development of the 2011 Annual EM&V Plan.

TABLE OF CONTENTS

DEFINITIONS[2]

Baseline period: The period of time selected as representative of facility operations before the energy efficiency activity takes place.

Baseline: Conditions, including energy consumption, which would have occurred without implementation of the subject project or program. Baseline conditions are sometimes referred to as "business-as-usual" conditions.

Deemed savings: An estimate of an energy savings or energy-demand savings outcome (gross or net savings) for a single unit of an installed energy efficiency measure that (a) has been developed from data sources and analytical methods that are widely considered acceptable for the measure and purpose and (b) is applicable to the situation being evaluated.

Effective useful life (EUL): A term sometimes referred to as measure life and often used to describe persistence. EUL is an estimate of the median number of years that the measures installed under a program are still in place and operable.

Evaluation: The performance of studies and activities aimed at determining the effects of a program (and/or portfolio); any of a wide range of assessment activities associated with understanding or documenting program performance, assessing program or program-related markets and market operations; any of a wide range of evaluative efforts including assessing program-induced changes in energy efficiency markets, levels of demand or energy savings, and program cost-effectiveness.

Evaluation, Measurement and Verification (EM&V): Catch-all term for evaluation activities at the measure, project, program and/or portfolio level; can include impact, process, market and/or planning evaluation. . EM&V is distinguishable from Measurement and Verification (M&V) defined below.

> Impact evaluation: Determination of the program-specific, directly induced changes (e.g., energy and/or demand usage) attributable to an energy efficiency program.
>
> Market effect evaluation: An evaluation of the change in the structure or functioning of a market, or the behavior of participants in a market, that results from one or more program efforts. Typically the resultant market or behavior change leads to an increase in the adoption of energy-efficient products, services, or practices.
>
> Process evaluation: A systematic assessment of an energy efficiency program or program component for the purposes of documenting operations at the time of the examination, and identifying and recommending improvements to increase the program's efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction.

[2] All definitions in this document were either written by the Collaborative participants or taken from the National Action Plan for Energy Efficiency (NAPEE)(2007). Model Energy Efficiency Program Impact Evaluation Guide. Prepared by Steven R. Schiller, Schiller Consulting, Inc. www.epa.gov/eeactionplan. Where they differ from the NAPEE Guide it is for the purpose of defining their distinct use at Avista.

Ex-ante savings estimate –Forecasted savings used for program planning; from Latin for "beforehand."

Ex-post evaluated estimated savings - Savings estimates reported by an evaluator after the energy impact evaluation has been completed. If only the term "ex-post savings" is used, it will be assumed that it is referring to the ex-post evaluation estimate, the most common usage; from Latin for "from something done afterward."

Reported savings: Savings estimates reported by Avista for an annual period. These savings will be based on best available information.

External Evaluators: Independent professional efficiency evaluators retained to conduct EM&V. Consideration will be made for those that are Certified Measurement and Verification Professionals (CMVPs) through the Association of Energy Engineers (AEE) and the Efficiency Evaluation Organization (EVO).

Free Rider: A commonly misused term in the energy efficiency industry erroneously meaning a program participant who would have installed the efficient product or changed a behavior regardless of any program incentive or education received. See definition below for "non-net participants."

Gross savings: The change in energy consumption and/or demand that results directly from program- related actions taken by participants in an efficiency program, regardless of why they participated.

Implementation Team: Avista employees who operate and work within the DSM program, whose responsibilities are directly related to implementation and administration of DSM programs, and who may have energy savings targets as part of their employee goals or incentives.

Internal Evaluation Team: Avista employees who perform analysis and reporting in Demand Side Management but do not have energy savings targets as part of their goals or incentive structure.

Measure (also Energy Conservation Measure or "ECM"): Installation of a single piece of equipment, subsystem or system, or single modification of equipment, subsystem, system, or operation on the customer side of the meter, for the purpose of reducing energy and/or demand (and, hence, energy and/or demand costs) at a comparable level of service.

Measure Life: See *Effective Useful Life (EUL)*

Measurement and Verification (M&V): Data collection, monitoring, and analysis associated with the calculation of gross energy and demand savings from individual measures or projects. M&V can be a subset of program impact evaluation. M&V is defined in the International Performance Measurement and Verification Protocol (IPMVP - available at http://www. evo-world.org).

Net savings: The total change in load that is attributable to an energy efficiency program. This change in load may include, implicitly or explicitly, the effects of free drivers, non-net participants (free riders), energy efficiency codes and standards, changes in the level of energy service, and other causes of changes in energy consumption or demand.

Non-Net Participant: (commonly, but inaccurately, referred to as "Free riders") Indication of energy savings associated with program participants who would have implemented the program measure or practice in the absence of the program. Non-net participants can be total, partial, or deferred.

Portfolio: Collection of similar programs addressing the same market or the entire market.

Program: A group of projects, with similar characteristics and installed in similar applications. Examples are a program to install energy-efficient lighting in commercial buildings and residential energy efficiency weatherization program. Each program is defined by a unique combination of program strategy, market segment, marketing approach and energy efficiency measure(s) included.

Project: An activity or course of action involving one or multiple energy efficiency measures, at a single facility or site.

Realization rate: Ratio of *ex-post* reported savings to *ex-post* evaluated estimated savings. When realization rates are reported, they are labeled to indicate whether they refer to comparisons of 1) *ex-post* gross reported savings to *ex-post gross* evaluated savings, or 2) *ex-post* net reported savings to *ex-post* net evaluated savings.

Reliability: When used in energy efficiency evaluation, this refers to the likelihood that the observations can be replicated.

Rigor: The level of expected reliability. The higher the level of rigor, the more confident one is that the results of the evaluation are both accurate and precise, i.e., reliable.

Spillover: Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover (sometimes referred to as "Free Drivers").

Technical Reference Manual: An Avista-prepared resource document that contains Avista's (*ex-ante*) savings estimates, assumptions, sources for those assumptions, guidelines, and relevant supporting documentation for its natural gas and electricity energy efficiency measures. The TRM will include predetermined *ex-ante* savings estimates and assumptions related to prescriptive measures, as well as appropriate savings estimates, assumptions, and guidelines related to the calculation of savings estimates for custom measures.

Uncertainty: The range or interval of doubt surrounding a measured or calculated value within which the true value is expected to fall within some degree of confidence.

Verification: A component of overall evaluation efforts aimed at verifying installations of energy efficient measures and associated documentation through review of documentation, surveys and/or onsite inspections. It does not include primary research (e.g., billing analysis, metering) for the purpose of determining the energy use/savings of the installed measures. As defined in this document, verification activities are conducted outside of and in addition to inspections and quality assurance reviews undertaken as part of routine program implementation.

ACRONYMS

IPMVP - International Performance Measurement and Verification Protocol

IPUC – Idaho Public Utilities Commission

IRP – Integrated Resource Plan

IRP TAC – Integrated Resource Plan Technical Advisory Committee

kWh – kilowatt hour

M&V – Measurement and Verification

MOU – Memorandum of Understanding

RCW – Revised Code of Washington

RFP – Request for Proposal

RTF – Regional Technical Forum of the Northwest Power and Conservation Council

Schedules 90 and 190 – Rate Schedules that show Demand Side Management programs

Schedules 91 and 191 – Rate Schedules that are used to fund Demand Side Management

Triple E Advisory Board – External Energy Efficiency Board

TRM – Technical Reference Manual

UTC – Washington Utilities and Transportation Commission

WAC – Washington Administrative Code

WUTC – Washington Utilities and Transportation Commission (also "UTC")

EXECUTIVE SUMMARY

The purpose of this document is to describe the process or framework by which Avista Energy Solutions Department ("Avista" or "the Company") will conduct evaluation, measurement and verification (EM&V) activities to determine energy savings and other metrics associated with its demand side management (DSM) activities. The Framework addresses DSM activities funded by Washington and Idaho Schedules 91 and 191 and/or the current cost-recovery mechanisms approved by the Washington Utilities and Transportation Commission (UTC) and/or the Idaho Public Utilities Commission. Evaluations will be performed by independent, external evaluators and Avista's internal evaluation team to determine energy and demand savings resulting from Avista's DSM portfolio. This EM&V Framework is intended to outline a comprehensive EM&V process that results in transparent and accessible documentation (reporting) of Avista's energy efficiency program activities. Thus, the Framework provides an overarching approach to EM&V; principles, objectives, metrics, methods and reporting activities. The Framework and related documents are structured in a modular fashion in order to allow flexibility for evolving EM&V needs and requirements over time, and to allow stakeholder review of overarching EM&V processes, annual EM&V plans, and specific EM&V activities at appropriate junctures. Thus, this initial version of the Framework is very much a "living document" that may require modifications over time. See Table 1, page 22.

Overview of Avista's EM&V Processes

This document describes Avista's approach to evaluations of DSM energy efficiency measures, programs, and portfolio funded by Washington and Idaho Schedules 91 and 191 and/or the current cost-recovery mechanisms approved by the Washington Utilities and Transportation Commission (UTC) and/or the Idaho Public Utilities Commission (IPUC).

a. Evaluations will be planned, conducted and reported in a transparent manner, affording opportunities for Commission and stakeholder review through the Triple E Board mechanism.

   i. An Annual EM&V Plan establishing priorities for evaluation activities, including budgets and schedules, will be prepared each year as part of Avista's Annual DSM Business Plan and filed with the Commissions as noted in Table 1 and Table 3. These plans will include a summary of each scheduled evaluation activity, whether the activity will be performed by an external evaluator or Avista's internal evaluation team and details regarding the evaluation goals, scope, level of effort, budgets as well as the general approaches to be utilized for conducting impact, process, market and cost-effectiveness evaluations. Avista will work closely with the Triple E Board on the development of this annual EM&V Plan.

   ii. Other documents including project scopes, Requests for Proposals, if needed, detailed research plans and draft and final reports will be prepared for each major EM&V activity, for review by the Triple E Board. The detailed research plans will define and address issues related to evaluation metrics and the level of effort, budget, baselines, approaches, sample designs, and certainty and reporting expectations associated with individual evaluation activities.

b. All evaluations will be conducted using best-practices approaches and techniques including those outlined in the National Action Plan for Energy Efficiency (NAPEE) Program Impact Evaluation guide. [3]

c. Avista will develop and maintain a Technical Reference Manual (TRM) in which energy savings assumptions and the sources for those assumptions are documented. Avista will update the TRM annually or more often if needed. The initial draft of the TRM will be reviewed by external evaluators, and periodically as needed thereafter. It is possible that the TRM will be prepared in collaboration with other Northwest entities. Avista anticipates the initial draft of the TRM will be completed by March 1, 2011.

d. Through the EM&V activities, key DSM impact metrics will be determined as follows:

i. Avista's implementation team will estimate energy savings, document installations and prepare savings estimates per measure, project and program, consistent with the TRM.

ii. Avista's internal evaluation team and independent external evaluators will conduct evaluations as outlined in the annual EM&V plan.

(a) Avista's internal Evaluation Team will review the documentation prepared by the implementation team.

(b) External evaluators will be retained to conduct independent impact evaluations of Avista's savings claims. Impact evaluation results developed by an external evaluator will be used to develop realization rates to be applied to Avista's reported annual savings. Typically realization rates will

[3] National Action Plan for Energy Efficiency (2007). Model Energy Efficiency Program Impact Evaluation Guide. Prepared by Steven R. Schiller, Schiller Consulting, Inc. www.epa.gov/eeactionplan

be developed separately for the gas and electric portfolios, for residential and non-residential portfolios, and as appropriate by program and/or key measures. The evaluated savings estimates, including a description of the methods used to develop those estimates, will be reported as specified in Table 2, on page 37.

e. Additional evaluation including impact, process, market and planning activities will be conducted by Avista's evaluation team or external evaluators, according to priorities established with stakeholder input and presented in Avista's Annual DSM Business Plan and Avista's Annual EM&V Plan.

f. Reports from EM&V activities including evaluation of energy and demand savings and cost-effectiveness will be provided to the Triple E Board, and the Washington and Idaho Commissions, consistent with the reporting schedules required by each Commission.

BACKGROUND

Avista Utilities ("Avista" or "the Company") serves customers with broad and deep energy efficiency services and aspires to best practices in all aspects of program offerings, customer outreach, and evaluation. Avista provides a financial incentive to most kWh and/or therm saving measures that have a simple payback of over one year for commercial and industrial customers. Similar offerings, through standard offer programs, are available to residential customers. Approximately 70% of the demand-side management (DSM) budget is provided directly to customers through cash rebates and incentives. An additional portion of the budget provides technical assistance to customers in the form of engineering analyses. Customers use the rebates and incentives to purchase energy efficiency equipment and

weatherization, often provided through an extensive network of trade allies. Over 300 measures and 35 energy efficiency programs are offered to Avista customers. Every Avista qualifying measure and program must have an objective analysis to describe how the kWh and therm savings are expected to be cost-effective, how they will be achieved, and how the expectations will be substantiated after installation.

Avista maintains and uses an external advisory group of stakeholders, the External Energy Efficiency Board or (Triple E Board) to advise the Company on, among other items; 1) development and modification of protocols to evaluate, measure, and verify energy savings in Avista's programs, and 2) guidance to Avista regarding methodology inputs and calculations for updating cost-effectiveness. The Triple E Board meets quarterly at a minimum and represents the non-binding external oversight of Avista's EM&V activities.

On December 21, 2009, Avista entered into a Memorandum of Understanding (MOU) with the staff of the Idaho Public Utilities Commission regarding expectations for EM&V. On December 22, 2009, the Washington Utilities and Transportation Commission (WUTC) required the Company and interested parties to participate in a collaborative related to EM&V and low income issues, as part of a General Rate Case Order in Docket UE-090134/UG-090135.

The Avista EM&V Collaborative (Collaborative) includes Avista's Triple E Board. The Collaborative met throughout the spring and summer of 2010 (on both EM&V and low-income weatherization issues).

The goal of the Collaborative was to meet specific state commission requirements. The purpose of the Collaborative, with respect to EM&V issues, was to develop consistent and accurate EM&V methods and a plan by September 1, 2010 in response to Order No. 10, paragraph 305, in Docket No. UG-090135 for Washington natural gas decoupling:

- Develop "consistent and accurate methods to judge the effectiveness of all energy efficiency programs and measures" and
- "File an EM&V plan for its DSM programs by September 1, 2010. The plan should include a bill verification analysis that examines changes in customer usage as a result of DSM programs" (see Appendix 3 Order No. 1) and Appendix 5 the Collaborative Charter).

This document, the "EM&V Framework," was developed in response to the IPUC Staff MOU and the WUTC Order at paragraph 305 (per above) and is intended to provide overall guidelines including principles, objectives, metrics, responsibilities, methods and reporting requirements to direct Avista's energy efficiency EM&V. The roles for Avista, Triple E Board, External Evaluators, Idaho Public Utilities Commission and Washington Utilities and Transportation Commission are listed in Table 3, Page 42.

Attachments to this document include key regulatory documents, the Collaborative Charter, a list of Triple E Board members, and the draft 2011 EM&V Plan.

Evaluation Principles, Objectives and Metrics

"Evaluation, measurement and verification" (EM&V) is a catch-all term used in energy efficiency literature to represent the determination of both program and project impacts. Evaluation includes the performance of studies and activities aimed at determining the effects of a program.[4] Measurement and verification refers to "Data collection,

[4] National Action Plan for Energy Efficiency (2007). Model Energy Efficiency Program Impact Evaluation Guide, Appendix B: Glossary, B-2. Prepared by Steven R. Schiller, Schiller Consulting, Inc. www.epa.gov/eeactionplan

monitoring, and analysis associated with the calculation of gross energy and demand savings from individual sites or projects. M&V can be a subset of program impact evaluation."[5]

There are two key objectives of evaluations:

1. To document and measure the effects of a program and determine whether it met its goals with respect to being a reliable energy resource[6].
2. To help understand why those effects occurred and identify ways to improve or discontinue current programs, and select future programs.[7]

Energy efficiency evaluations should develop retrospective estimates of energy savings attributable to a program in a manner that is defensible in regulatory proceedings that are conducted to ensure that funds are properly and effectively spent. In addition, evaluation should go beyond documenting savings to actually improving programs and providing a basis for future savings estimates.[8]

Thorough evaluations result in programs that are more cost-effective and better managed.

There are three different types of evaluations:

1. **Impact evaluations** determine the impacts (e.g., energy and demand savings) and co-benefits (e.g., avoided emissions, health benefits, job creation, energy security, transmission/distribution benefits, and water savings) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.
2. **Process evaluations** assess program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what worked, what did not work, constraints, and potential improvements. Timeliness in identifying opportunities for improvement is essential to making corrections along the way.
3. **Market effects evaluations** estimate a program's influence on encouraging future energy efficiency projects because of changes in the energy marketplace. These evaluations are

[5] Id.
[6] Id.
[7] Id.
[8] Id.

primarily, but not exclusively, used for programs with market transformation elements and objectives.[9]

This Framework, and the industry as a whole, focuses on impact evaluations and the measurement and verification of demand and energy savings associated with specific programs. The results of impact evaluations will follow through to cost-effective analysis which is typically an extension of impact evaluation. Process and market effects evaluations are very important, both for prudent management and to assess prudency, and will be performed as necessary to create best practice portfolio planning, implementation, and evaluations.

Transparency

Sound evaluation of energy efficiency programs requires transparency and independence. This results in high quality information on which business/policy decisions can be made. Within customer confidentiality constraints, output from any EM&V activity is available to Avista's external stakeholders.

As a means of facilitating transparency in its internal processes, Avista develops and maintains thorough documentation of its processes and related activities. Avista also follows the International Performance Measurement and Verification Protocol (IPMVP) Protocol[10] for site-specific analyses.

[9] Id.

[10] The International Performance Measurement and Verification Protocol is available at: http://www.evo-world.org/ .

Budget

The EM&V budget includes reasonable costs for market, process, and impact evaluations including evaluations conducted both by internal Avista staff and by external evaluators. Allocation of annual EM&V budgets (efforts) between market, process and impact analyses (and internal and external activities) will be described in each year's Annual EM&V Plan.

A full report on EM&V expenditures and activities for the prior year will be part of the Annual Report on Energy Efficiency Acquisition. This information will include a description of the EM&V studies completed and/or underway during the reporting cycle with reporting of the type of evaluations, whether they were conducted by internal staff or external evaluators, the program or programs studied, and the evaluation budgets and scopes.

In Washington, Initiative 937 (I-937), the Energy Independence Act, and subsequent Commission Order in Docket UE-100176 dictate budget requirements. Avista has committed to spending between three (3) and six (6) percent of each two-year I-937 compliance period conservation budget on evaluation, measurement, and verification (EM&V), including reasonable expenses for external EM&V (see Appendix 3 - I 937 Conditions).

The budget in Idaho will be determined based on reasonable and prudent evaluation needs.

Goals

The goal of evaluation planning is to spend the least money necessary in order to adequately ascertain the highest value savings estimates and mitigate the risk of either under or over-reporting savings. Evaluation planning identifies the types of evaluation information that is crucial to different stakeholders. Avista intends to prioritize EM&V resources based on consideration of the following issues:

a. Size of the project or program: (e.g. a site-specific project with an incentive payment over $50,000.00 or a prescriptive program that provides more than 25% of the savings for a particular sector would increase the EM&V prioritization);

b. Uncertainty regarding the results: Resource characteristics that are known within relatively tight confidence intervals are less of a priority for EM&V efforts than those that are relatively uncertain, for instance the certainty of a hard wired measure change may be high for the kW reduction effect but may be low for the hours of operation variable;

c. Criticality of the resource characteristic: The sensitivity (or insensitivity) of a resource characteristic to particular factors like load, operating hours, operating time, weather, or seasonality of operation can be important considerations;

d. Impact upon regulatory processes or regulatory oversight: Information necessary for regulatory oversight will receive a higher EM&V priority than information that is not necessary for that purpose, all else being equal;

e. Timing: Information that would have value in improving an ongoing program would have higher precedence;

f. Cost of measurement: Cost of EM&V should be optimized. Alternative approaches should be considered when the value of incrementally better data is less than the cost of that data; and,

g. Timeliness is an important consideration for planning evaluations. EM&V should be undertaken in a manner that is designed to provide important information in a timely fashion for regulatory reporting, program planning and/or improvement, and other needs.

External evaluators will be retained to perform impact evaluations. These evaluations will be performed at a minimum of every two years for each fuel for the entire portfolio, or as directed by the Commissions. External consultants may be retained to evaluate Avista's processes and market conditions. The RFPs for external evaluations will be reviewed by the Triple E Board.

In addition, when choosing and planning evaluations the following guiding principles will be taken into consideration:

a. Leverage secondary research as appropriate with modifications as deemed necessary and useful;
b. Expert review of evaluation design throughout the planning and implementation of these activities;
c. All key assumptions used by program planners will be documented and eventually verified in evaluations;
d. The procurement process used to select evaluation contractors is timely, flexible and transparent;
e. Prioritize evaluation dollars and efforts on areas of largest savings and/or greatest uncertainty; and,
f. Over time, evaluations are used to refine input assumptions used in savings estimation and resource analysis in order to improve program delivery.

Captured Data/Metrics

Critical portfolio metrics to be evaluated are as follows:

a. Annual energy acquisition (gross and net savings), kWh and therms, to include, where possible and necessary, savings seasonality, load shape, system and customer capacity, system coincident kW, measure life, non-energy benefits, energy savings degradation, existing conditions, etc.;

b. Costs and benefit data for cost-effectiveness analyses including total project cost, incremental project cost, etc.; and,

c. Other metrics or combinations as requested by Commissions, such as:

   i. Market characterization and transformation attributes for measures and programs that may include, but are not limited to, product price and availability, trade ally assessments, market saturation, customer satisfaction, customer participation, incremental costs, and the effects of codes, standards and prices; and,

   ii. Other information necessary for portfolio management including technology assessments, measure persistence, lost opportunities, geographic equity, customer class equity, budget targets, targets per customer class, number of customers served, and information useful for system planning.

Evaluation Cycle

As described in this EM&V Framework, Avista will perform EM&V annually on a multi-year schedule of selected programs such that all major programs are covered appropriately over time.

The following is the hierarchy of documents outlining planning steps for each evaluation cycle (see Table 1, page 22).

a. EM&V Framework – This document is designed to remain in place until superseded by regulatory modifications or changed by Triple E Board processes.

b. DSM Annual Business Plan – This document will be prepared annually, providing operational plans, budgeting, staffing, etc., for individual programs within various customer segments. The Annual DSM Business Plan will include an "annual EM&V Plan" section indicating which major evaluation activities (e.g., updating baselines, updating deemed savings values and describing planned program evaluations) will be conducted during the year, including the specific budget and allocation between programs/measures/segments/jurisdictions as applicable, and a current 3-year evaluation schedule (See Appendix 1, the draft 2011 EM&V plan).

c. The annual EM&V Plan (embedded in the Annual Business Plan) will include summaries of each scheduled evaluation activity, whether the activity will be performed by an external evaluator or Avista's internal evaluation team and details regarding the evaluation goals, scope, level of effort, budgets as well as the general approaches to be utilized for conducting impact, process, market and cost-effectiveness evaluations. Avista will work closely with the Triple E on the development of the annual EM&V plan.

d. Detailed Research Plans -- These will be created for each EM&V evaluation activity planned in a given cycle (impact, process and market effects evaluations). New DSM programs will include a detailed research plan at launch of the program. The detailed research plans will define and address issues related to evaluation metrics and the level of effort, budget, baselines, approaches, sample designs, and certainty and reporting expectations associated with individual evaluation activities.

Table 1: HIERARCHY OF EM&V PLANNING CYCLES/DOCUMENTS

	EM&V Framework*	Annual EM&V Plan	Planning and Oversight Documents for Specific EM&V Activities
Document(s)	EM&V Framework	Included as a section in Avista's Annual DSM Business Plan	• TRM • Work scopes • RFPs (as needed) • Research Plans (including detailed sampling and analysis plans) • Key issues requiring oversight • Draft and Final Reports • EM&V Protocols
Contents	The overarching structure and process for EM&V • Objectives and Principles • Baseline Definition • Evaluation Approaches • Certainty • External Evaluation	EM&V activities proposed for a given cycle: • High level summary description of each major scheduled activity detailing the scale, scope and anticipated approach to determine savings • EM&V-based program changes -- summary • Budgets • Schedule	Details regarding specific EM&V projects or activities including impact, process, market and planning studies. The TRM will be a resource document, containing all savings estimates and assumptions for all DSM measures.
Schedule	The Framework remains in place indefinitely, but is a "living document" that can be updated as needed	Prepared annually, submitted with the Business Plan by November 1 of each year.	Prepared for each significant EM&V activity and/or prepared as a resource document
Reviewers**	Collaborative	Triple E Board	Triple E Board
Filed with Commission	Yes	Yes	No

*This document.

**See Table 3, page 37 for more details on roles and responsibilities.

Impact Evaluation Methods and Key Assumptions

Ex-Ante versus Ex-Post

Impact evaluations focus on determining the amount of energy and demand savings the program actually creates. Estimates of actual savings are ex-post[11] savings, program savings that can be documented after program implementation. The initial design and review of prospective programs will be based upon ex-ante savings[12], the savings that are *expected* to be delivered by the program. After implementation of the program, annual savings are based on ex-post evaluations, the estimated energy savings that are actually caused by the program. These savings may change over time. Ex-post savings, documented via an impact evaluation, can vary significantly from projected ex-ante savings. Over time, impact evaluations will help refine ex-ante savings estimates to improve their accuracy.

Evaluation Standards

The primary purpose of impact evaluations is to obtain the most accurate and unbiased estimate of energy and demand savings due to a program. Avista's specific evaluation methods will be founded on industry best practice, based on applicable industry reference documents (e.g., NAPEE Guide, IPMVP). Avista will observe the following principles in its oversight of impact evaluations:

i. Evaluators should be impartial in their work and not have their compensation tied to evaluation results.

[11] ***Ex-post* evaluation estimated savings:** Savings estimates reported by an evaluator after the energy impact evaluation has been completed. (From Definitions section)

[12] ***Ex-ante* savings estimate:** Forecasted savings used for program and portfolio planning purposes. (From Definitions section)

ii. Evaluators are expected to follow ethical guidelines (as documented in the American Evaluation Association's *Guiding Principles for Evaluators,* which call for: systematic inquiry, competence, integrity and honesty, respect for people, and responsibility for general and public welfare.)[13]

iii. Transparent methods to estimate savings and impacts will be reviewed in various forums to increase quality and reliability. These include: Triple E Board, Integrated Resource Planning Technical Advisory Committee (IRP TAC), RTF, and similar forums which will be used to review methods.

iv. All key assumptions used by program planners are eventually verified in evaluations.

v. Majority of evaluation dollars and efforts are in areas of greatest importance or uncertainty.

Approaches for Determining Savings

Impact savings will be determined using one of the following approaches:

a. Measurement and verification (M&V) - Four IPMVP options are used to determine savings from selected projects and the resulting savings may be applied to an entire population or program using statistical analyses.

b. Statistical analyses of large volumes of metered energy usage data. (e.g., bill analyses)

c. Deemed Savings – use of an estimate of savings developed by data sources and analytical methods that are widely considered acceptable in the industry (as documented for example by the Regional Technical Forum or in the Avista TRM). This approach is only valid for projects with fixed operating conditions and proven history of substantiated evaluations.

[13] American Evaluation Association (AEA), Guiding Principles for Evaluators, http://www.eval.org.

Irrespective of which of the above approaches are utilized for EM&V, all measures will be available for inspection by external evaluators to confirm their installation. In some cases measures will be inspected to confirm that they were not only installed, but also installed per specification and that they are properly operating. Also, in some cases, such as large-scale custom measures/projects, baseline inspections will also be conducted.

Baseline

Net and/or gross savings are determined by comparing energy use and demand after a program is implemented (the reporting period) with what would have occurred had the program not been implemented, i.e. the baseline. A common set of conditions (e.g., weather, operating hours, building occupancy) are used for estimating net and gross energy savings. These conditions are then adjusted so that only program effects are considered when determining savings.

Considerable care needs to be taken in determining the baseline used for impact evaluations. The baseline is key to determining the savings achieved. Evaluators will use or determine baselines based on common practice, or codes and standards. Baselines can be defined as follows:

i. Project-Specific Baseline: defined by specific technology or practice that would have been pursued, at the site of individual projects if the program had not been implemented which tends to be existing equipment for early replacement programs.

ii. Performance Standard Baseline: defined to avoid project specific determinations, and thus avoid most non-net participant issues, and tends to be codes, standards, or

common practice instead of trying to ensure the overall addition of quantified energy and demand savings, and /or avoided emissions. [14]

iii. In its TRM, Avista will include baseline information in the detailed impact evaluation research plans as well as for deemed savings values, e.g., for certain prescriptive measures.

Uncertainty

Uncertainty is defined for our purposes as the range or interval of doubt surrounding a measured or calculated value within which the true value is expected to fall within some degree of confidence.[15] EM&V resources will be deployed in a manner that provides the best value in terms of information that is required for oversight, market assessment, program targeting and improvement, and overarching planning. The level of investment put towards the evaluation process usually has a direct correlation to the amount of certainty achieved. One of the trade offs in impact evaluations is thus between the costs expended and the uncertainty level. Results from an impact evaluation will be reported with the level of uncertainly or error rate defined and explained. There are two types of errors reported, systematic and random, which can include the following:

i. Systematic errors are those that are subject to decisions and procedures developed by the evaluator and are not subject to "chance." These include:

   a. Measurement errors, arising from meter inaccuracy or errors in recording an evaluator's observations;

   b. Non-coverage errors, which occur when the evaluator's choice of a sampling frame excludes part of the population;

[14] Schiller Consulting
[15] Id

c. Non-response errors, which occur when some refuse to participate in the data collection effort; and,

d. Modeling errors, due to the evaluator's selection of models and adjustments to the data to take into account differences between the baseline and the test period.

ii. Random or Sampling errors[16], those occurring by chance, arise due to sampling rather than taking a census of the population. In other words, even if the systematic errors are all negligible, the fact that only a portion of the population is measured will lead to some amount of error. Random errors are sometime called sampling errors.

Evaluators are expected to control for systematic error through best practices and control random error by striving for a 90/10 confidence and precision level (using a two-tailed test[17]) and requiring an 80/20 confidence level if sampling requirements can be shown to be unrealistic. Deviations from these specifications may be permitted with justification and review by the Triple E. The Evaluation report will discuss all aspects of uncertainty and the decision process that determined sample size and confidence/precision level achieved.

Persistence

Persistence is how long the energy savings are expected to last once an energy efficiency activity has taken place.[18] A component of an impact evaluation should consider whether the savings from the project change over time. These changes can be attributable to

[16] Id

[17] Two-tailed tests require larger sample sizes than one-tailed tests as assessing two directions at the same time requires a greater investment. A one-tail test can be used only when there is strong proof that it is appropriate to do so, e.g., only ensuring that values of concern are not over estimated, versus under-estimated, is important.

[18] Id

retention and performance degradation, codes or standards, and "market progression." [19] Effective useful life (EUL) is a term often used to describe persistence. EUL is an estimate of the median number of years that the measures installed under a program are still in place and operable.[20]

In most cases, persistence of savings will be determined using historical and documented persistence data, such as manufacturer's studies or values contained in the Regional Technical Forum database. However, if deemed necessary, Avista may also utilize laboratory and field testing of the performance of energy-efficient and baseline equipment, field inspections over multiple years, and/or other various methods such as telephone surveys and interviews, analysis of consumption data, or use of other data (e.g., data from a facility's energy management system).

Net Savings

When net savings are determined for a program or portfolio, both non-net participants and participant and non-participant spillover will usually be considered. Non-net participants, often referred to as "free riders," are those who would have implemented the same or similar efficiency projects, or a portion of the projects without the program now or in the near future. Thus non-net participants can be full, partial or deferred.

---

[19]Market progression is when the rate of naturally occurring investment in efficiency increases and can be considered to erode the persistence of earlier first year savings. An example of a cause of market progression is energy price effects—higher energy costs resulting in higher levels of efficiency. Model Energy Efficiency Program Impact Evaluation Guide. Prepared by Steven R. Schiller, Schiller Consulting, Inc. www.epa.gov/eeactionplan

[20] Model Energy Efficiency Program Impact Evaluation Guide. Prepared by Steven R. Schiller, Schiller Consulting, Inc. www.epa.gov/eeactionplan

Non-participant spillover is defined as savings from efficiency projects implemented by those who did not directly participate in a program, but which nonetheless occurred due to the influence of the program. Participant spillover is defined as additional energy efficiency actions taken by program participants as a result of program influence, but actions that go beyond those directly subsidized or required by the program.

When required, net savings may be determined using one or more of the following approaches:

- Self-reporting surveys in which information is reported by participants and non-participants without external verification or review
- Enhanced self-reporting surveys in which self-reporting surveys are combined with interviews and documentation review and analysis
- Statistical models that compare participants' and non-participants' energy and demand patterns
- Customer adoption models applied to specific markets
- Stipulated net-to-gross ratios (ratios that are multiplied by the gross savings to obtain an estimate of net savings) that are based on historic studies of similar programs

Cost Effectiveness

Avista's cost-effectiveness evaluations compare program (and portfolio) benefits and costs, showing the relationship between the value of a program's outcomes and the costs incurred to achieve those benefits. The findings are used to help program managers judge whether to retain, revise, or eliminate program elements and provide feedback on whether

efficiency is a wise investment as compared to energy generation and/or procurement options. The methodologies and definitions contained in the California Standard Practice Manual (SPM) are utilized for determining cost-effectiveness by Avista. A primary test for the WUTC is the Total Resource Cost (TRC) test as modified for electric programs by the Northwest Power & Conservation Council. The TRC test measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participants' and the utility's non-incentive costs. The TRC ratio equals the benefits of the program, in terms of value of energy and demand saved plus non-energy benefits, divided by the net total resource costs. Avista calculates the ratio on a life-cycle basis considering savings and costs that accrue over the estimated lifetime of installed energy efficiency equipment and systems. Avista also calculates the Program Administrator Cost test, Participant cost test, Non-Participant test and Rate Impact Measure test.

Process Evaluations

Process evaluations of Avista programs will involve systematic assessments of programs or internal operations for the purposes of documenting program operations at the time of the examination, and identifying and recommending improvements to increase the program's efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction. The primary mechanisms used for process evaluations are data collection via surveys, questionnaires, and interviews to gather information and feedback from administrators, designers, participants (e.g., facility operators or residential customers), implementation staff (including contractors, subcontractors, and field staff), and key policy makers. Other elements of a process evaluation can include workflow and productivity

measurements, reviews, assessments, and testing of records, databases, program-related materials, and tools.

Market Effects Evaluations

Market effect evaluations are systematic assessments of changes in the structure or functioning of a market, or the behavior of participants in a market, that result from one or more program efforts or due to other factors. Market effects evaluations will usually consist of surveys, reviews of market data, and analysis of the survey results and related data.

Technical Reference Manual (TRM)

Avista will develop and maintain a publicly-available TRM documenting the energy savings assumptions, and the sources for those assumptions. The TRM will be maintained and updated annually, or more frequently as needed, with opportunities for Triple E Board review.

The TRM will contain two general categories of information:

- Specific predetermined *ex-ante* savings estimates- predetermined energy savings and demand reductions values and calculation assumptions for specific natural gas and electricity efficiency measures and, when such values can be defined with sufficient certainty, including applicability conditions. For example, this approach would be used for Avista's prescriptive residential furnace program.
- Guidelines for calculation of custom *ex-ante* savings estimates - custom measure protocols consisting of standard engineering calculations and/or other methods that are used for determining energy savings estimates and/or peak demand reductions for natural gas and electricity efficiency measures which do not have applicable predetermined savings values. For example, this approach would be used for a custom project.

For the two general categories outlined above, the TRM will include:

i. Descriptions of the base and more efficient technologies (or systems), including engineering and/or calibrated engineering assumptions and applicability conditions;

ii. kWh, kW and/or therm savings;

iii. Hours of operation;

iv. Measure life;

v. Information required for cost-effectiveness tests including incremental measure costs, avoided costs of generation and transmission, transmission loss estimates, etc.; and,

vi. Descriptions of estimation approaches and applicability conditions for the deemed savings values and calculations.

External evaluators will review the TRM during the initial evaluation cycle covered by this EM&V Framework, and periodically thereafter as determined by EM&V priorities outlined in Avista's Annual EM&V Plans.

Predetermined *ex-ante* savings estimates and custom calculated *ex-ante* savings estimates will be documented and employed as follows.

i. Where appropriate, i.e., verifiably applicable, Avista will use the Avista TRM's or the Regional Technical Forum's (RTF) deemed savings and deemed calculated savings values for natural gas and electricity measures. The RTF maintains a Web site at http://www.nwcouncil.org/energy/rtf/.

ii. If Avista utilizes deemed savings values for prescriptive or custom program measures that have not been established in the Avista TRM or by the RTF, such estimates must be based on a documented modification of existing estimates using reliable primary or secondary sources and/or rigorous Avista impact evaluation results. An example of another possible reliable resource is the Database for Energy Efficient

Resources (DEER), jointly sponsored by the California Energy Commission and California Public Utilities Commission (CPUC) and designed to provide well-documented estimates of energy and peak demand savings values, measure costs, and effective useful life (EUL) all with one data source. (http://www.energy.ca.gov/deer/)

Roles and Responsibilities for Conducting and Managing EM&V

EM&V will be conducted both by internal Avista staff and external evaluators. External work is defined as work performed by entities outside of Avista. The implementation group is defined as anyone at Avista who has acquisition of energy efficiency targets incorporated into their performance appraisal or goals. The Avista Evaluation Team does not have the achievement of energy savings goals as part of their performance goals.

In general, work done for Avista EM&V falls into three categories:

a. Avista Implementation Team
    i. Ex-ante savings estimates
    ii. Reported savings estimates
    iii. Process tracking
    iv. Data management
    v. Redacting customer information from reporting
    vi. Verification for purposes of incentive payments or program reporting
b. Avista Evaluation Team
    i. Impact evaluations to determine *ex-post* evaluated savings and prepare cost effectiveness analysis; determine realization rates
    ii. Verification activities
    iii. Review of EM&V plans

iv. Design of RFP's for external evaluators

v. Preparation of evaluation reporting

vi. Internal process and market evaluations

c. External Evaluators

i. Impact evaluations to determine ex-post evaluated savings and prepare cost effectiveness analysis; determine realization rates

ii. Verification activities

iii. External process and market evaluations

iv. Review of internal analysis and evaluations

v. Portfolio level energy savings verifications

vi. Establish and report realization rates

vii. Review of TRM and TRM updates as needed.

d. Peer Review – Selected Regional Utilities, NEEA, RTF, ETO, etc.

i. Review of Evaluation methodologies

ii. Review of M&V Plans as necessary

iii. Review of RFP plans as necessary

iv. Review of TRM and TRM updates as needed.

Management of External Evaluators

The following processes will be used to select and manage external evaluators:

a. External evaluators may be chosen by the Avista Evaluation Team with input from the Triple E Board.

b. Avista's Evaluation Team may serve as the day-to-day project manager for external evaluators.

c. Members of the Triple E Board may express interest in decisions regarding particular EM&V projects, or may elect to receive updates at regular Triple E Board meetings. Members seeking involvement with certain EM&V activities must provide timely review and feedback in accordance with EM&V schedules and timelines.

d. External evaluator reports will be delivered to the Triple E Board upon completion and filed as part of the Annual Report on Energy Efficiency Acquisition.

Data Management

There are three data sources used to keep customer-related data for Avista. All of the Avista DSM databases are managed with standard information systems security and redundancy in multiple locations and versions.

a. Avista's CSS database - customer information and billing system

b. Avista's Customer Solutions SalesLogix database – For Contacts and historical project information.

c. Avista's Tracker system for real-time project, scheduling, process and responsibility tracking.

Avista also maintains three other database/filing systems for interveners with data that has been scrubbed of customer information

a. Avista Technical Reference Manual – a spreadsheet/database with predetermined *ex-ante* savings estimates and guidelines regarding calculation of *ex-ante* savings estimates for custom measures with associated background information, assumptions, and source documentation.

b. Avista's DSM files – files of current and past business plans, reports, EM&V plans, annual change summaries, budget documents and performance reports.

c. Avista's EM&V evaluation schedule – updated at least annually showing a 3-year schedule of evaluation with background.

Avista will have an external evaluator conduct a data management evaluation in 2011.

Reporting Cycles and Schedule

The program implementation cycle operates on a calendar year basis, from January 1-December 31 each year. EM&V reporting cycles vary by fuel, by year and are different for the Washington and Idaho Commissions. Table 2 on the following page, indicates a preliminary reporting schedule. A final schedule with contents of each report will be reviewed with the Triple E Board as part of their review of the Annual Plan.

Table 2: EM&V Reporting Schedule

Report	Description	Distribution Date	Distribution List
DSM Business Plan (includes EM&V Plan)	Forward looking. Program-level expected savings, adjustments, major changes, EM&V (Avista *ex-ante* forecast)	November 1st	EEE, WUTC, IPUC
Annual Energy Efficiency Report	Backward looking. Preliminary Reported Program level savings, adjustment, changes, comprehensive report on EM&V activities of the prior year (Avista *ex-post* reported savings)	March 31st – Pending Revision to June 30th	EEE, WUTC, IPUC
Tariff Changes	Request any Schedule 91 and 191Tariff changes with an effective date of July 1st	May 1st	EEE, WUTC, IPUC
Decoupling Evaluation Report	Impact evaluation of gas savings for the previous calendar year with Realization rate by External Evaluators	September 1st	EEE, WUTC, IPUC
Midyear Acquisition Report	Midyear acquisition report comparing actual to budgeted savings values	August 15th	EEE, WUTC, IPUC
Biennial Conservation Plan	A Biennial Conservation Plan including revised program details and program tariffs, together with identification of the 10 year achievable conservation potential, by November 1, starting in 2011, requesting effective date of January 1, the following year.	November 1st	EEE, WUTC, IPUC, Washington Dept of Commerce
Biennial Acquisition Report	A report on conservation program achievement by June 1, filed every two years starting in 2012.	June 1st	EEE, WUTC, IPUC, Washington Dept of Commerce

Application of EM&V Results

Performance in Washington EM&V activities will be reported on the basis of gross savings, and net savings will be used to understand program targeting and design. Gross savings and net savings will be reported for Idaho. The granularity of the results will be determined in the portfolio, program, measure, and project specific EM&V or M&V research plans which will be reviewed by the Triple E Board. Transmission and Distribution savings

due to the effects of the DSM program may be counted toward goal. This Framework and Annual EM&V Plans do not include T&D efficiency projects that are not retail metered.

As currently structured, following the close of each program year, Avista provides an annual report of program and portfolio accomplishments based on unverified savings on March 31, per the schedule presented in Table 2. Subsequent to this annual report, realization rates based on a combination of Avista and external EM&V will be developed for the Decoupling Audit Report (gas) or the Biennial Acquisition Report (electricity), and may be used to adjust Avista's reported program accomplishments. Avista plans to file a revision from the March 31st annual due date to a June 30th annual due date to allow the use of evaluated realization rates in the Annual Report.

EM&V efforts that result in changes to predetermined *ex-ante* savings estimates, *ex-ante* savings calculations (for custom measures), and/or algorithms used to calculate savings for custom measures will in most cases be applied prospectively, taking effect in subsequent evaluation cycles (beginning January 1), as appropriate. Such changes will be documented as changes to the TRM.

External Review and Oversight

External review serves to ensure that the EM&V process is thorough, transparent, and conducted according to the proper standards. Avista relies on the Triple E Board for external review, and will seek additional review from the RTF, Northwest Energy Efficiency Alliance (NEEA), and other peer reviewers as appropriate. Avista's Triple E Board of stakeholders will advise the Company on the topics described below.

a. Development and modification of protocols to evaluate, measure, and verify energy savings in Avista's programs.

b. Guidance to Avista regarding savings estimates in the TRM, including methodology inputs and calculations for updating cost-effectiveness.

c. Consideration of the need for tariff modifications or mid-course program corrections.

d. Review appropriate level of and planning for:

   i. Marketing conservation programs.

   ii. Incentives to customers for measures and services.

e. Consideration of issues related to conservation programs for customers with limited income.

f. Comparing program achievement results with annual and biennial targets.

g. Review of energy efficiency program budgets and review of actual expenditures compared to budgets.

The Triple E Board will meet quarterly at a minimum. Any member may request an additional meeting of the Board with reasonable notice. The Triple E Board will make recommendations to Avista concerning Avista's specific EM&V plans, custom and prescriptive efficiency programs, including confidence and precision levels, sampling plans, timeline, and overall approach. The Triple E Board will review and advise Avista on Avista's deemed savings estimates and/or parameters and calculation methodologies included in the TRM, and may review and comment upon savings claims and other EM&V results prepared by Avista and/or external evaluators. Avista will work with the Triple E during the coming months to develop a new Charter for the Triple E. The Charter will include, among other things, clarification regarding timelines for the distribution and review of draft relevant EM&V documents, such as the Annual EM&V Plan and proposed evaluation scope of work documents, to ensure all members have reasonable opportunity to review and prepare timely comments for Avista.

Approval/Authorization

Table 3: Evaluation, Measurement and Verification (EM&V), Data Tracking and Reporting Activities: Roles and Responsibilities for Avista Staff, Triple E Board, External Evaluators, Idaho Public Utilities Commission, Washington Utilities and Transportation Commission, and Peer Reviewers

X - Responsible for party to do O – Optional for party to do per Avista request

Task and/or Deliverable	Avista	Triple E Board	External EM&V Evaluators	Peers (e.g., PSE, PacifiCorp, Idaho Power, NEEA, ETO, etc.)
EM&V Framework				
Prepare Initial EM&V Framework (with Collaborative)	X			
Review Initial EM&V Framework (w/Collaborative)		X	X	O
Update EM&V Framework, as needed	X			
Review Updates to EM&V Framework, as needed		X	O	
File EM&V Framework with Commission (IPUC & WUTC)	X			
EM&V Plans (Overall Budget, Overall Schedule, Individual Evaluation Approach Summary (what, why, who, when, how much))				
Prepare EM&V Annual Plans	X		O	
Review EM&V Annual Plans		X		
File EM&V Annual Plans with Commission (IPUC & WUTC)	X			
Technical Reference Manual				
Prepare Initial Technical Reference Manual (TRM)	X			
Update TRM, as needed	X		O	
Review Initial TRM		X	X	O
Review Updated TRM		X	O	O
Protocols				
Prepare Initial Protocols	X			
Update Protocols, as needed	X			
Review Initial Protocols		X		O
Review Updated Protocols		X		O
EM&V Reports				
Process/Market/Impact Evaluation Reports	X		X	
Annual DSM summary Report creation (Idaho MOU)	X		X	
Review Summary Reports		X		
File Annual DSM Summary Report with Commission (IPUC & WUTC)	X			
EM&V Planning				
Individual Evaluation Plans (Internal to Programs)	X			O
Impact, Process, Market and Planning Evaluation review (Internal)	X	X		O
Impact Evaluation Conducted by External Evaluators			X	
Annual Due-Diligence Impact Evaluation			X	
Additional Process and Market Evaluations (external)			X	

Attachments:

Appendix 1 - Draft 2011 Annual EM&V Plan

Appendix 2 - Idaho staff MOU

Appendix 3 - Pertinent order sections of Washington Commission Orders

Appendix 4 - List of Triple E Members

Appendix 5 - Collaborative Charter Document

Appendix 1

2011 Draft EM&V Annual Plan

Background

This draft 2011 Evaluation Measurement &Verification (EM&V) Annual Plan in combination with the Avista EM&V Framework are intended to be responsive to the requirements of the Washington Utilities and Transportation Commission's Order No. 10, paragraph 305, in Docket No. UG-090135 and clarifies Avista's approach to EM&V for the Idaho Public Utilities Commission (IPUC) Memorandum of Understanding with Avista and other parties. The purpose of this document is to make transparent and easily accessible the planned evaluation, measurement and verification that is to be performed in the next year to adequately inform and operate our energy efficiency programs at Avista. A focus of this document is how the budget for EM&V will be split by fuel, sector, program, jurisdiction and reviewer type. This Plan is shaped and reviewed by Avista's Triple E Board as described in the WUTC Order on Avista's Two Year Electric Targets relative to "I-937". Protocols for evaluation selection criteria and RFP selection and rewarding are available upon request.

Overview

Avista's 2011 EM&V Annual Plan identifies contemplated evaluation activity for the coming year. The plans are created by Avista with Triple E Board input. An overview and definitions are shown in Avista's EM&V Framework, a companion document to this Plan. Highlights of this Plan include:

- Several programs are slated for evaluations that have not been evaluated in the recent past.
- The entire gas portfolio will be evaluated as part of the annual decoupling requirement which includes external evaluators to evaluate, measure and verify the savings acquired from natural gas efficiency programs.
- The first two year cycle for I-937 compliance will be complete at the end of 2011, requiring an evaluation of the electric portfolio which includes external evaluators to evaluate, measure and verify the savings acquired from electric efficiency programs.
- Although the electric evaluation will confirm savings results for 2010 and 2011 it will be started in 2011 to provide adequate time for the audit report by June 2012.
- This planning document will not be construed as pre-approval by any commission.

There may be additional evaluations that are not in this document. These will typically be instigated by an issue of timeliness or opportunity that will arise during the evaluation period. In these instances the master schedule will be updated to reflect the additional activity and the Triple-E Board will be notified. Nothing will be removed from the plan without Triple E Board notification and input.

Table of Contents

Overall EM&V budget for 2011

Overall 2011 EM&V Budget in $(000)	2011	WA	ID
Internal Evaluations	9	6	3
External Evaluations	530	371	159
1 FTE fully loaded EM&V	123	86	37
Ongoing External impact, process etc evaluations	126	88	38
Misc. EM&V physical equipment	25	18	8
RTF fees	85	60	26
EM&V portion of Regular Engineering time - 1 FTE	123	86	37
	1,021	715	306
Total DSM budget	$29,700	$20,790	$8,910
% of DSM budget expended on EM&V	3.4%	3.4%	3.4%

Budget/Evaluation List[1]

Program	Evaluation Type	Budget	Start Date	Workgroup
Residential Refrigeration Recycling	Process	$5,000	2/1/11	Avista Team
Limited Income Shell and HVAC	Impact/Process	$20,000	6/1/11	External Evaluators
RCM	Process	$2,000	10/1/11	Avista Team
Prescriptive Non-res clothes washers	Impact/Process	$2,000	3/1/11	Avista Team
Portfolio Level Data Management	Process	$115,000	2/1/11	External Evaluators
Prescriptive non-residential lighting	Impact/Process/ Market	$150,000	4/1/11	External Evaluators
Natural gas Decoupling Evaluation	Impact/Process	$150,000	4/1/11	External Evaluators
Electric Portfolio Evaluation	Impact/Process	$50,000[2]	6/1/11	External Evaluators
TRM Review	Process	$45,000[3]	11/1/10	External Evaluators
Total		**$539,000**		

[1] All of these values are estimates and have not been fully vetted with Avista, Industry Experts, or stakeholders.
[2] This represents only ¼ of the estimated cost of a two year study, but the portion that will be performed in 2011.
[3] A portion of this money may possibly be spent in 2010.

Evaluation Details[4]

Residential Refrigeration Recycling

Why was this selected for Evaluation?

The Residential Refrigeration Recycling program was selected for a process evaluation to determine if the current procedures provide the proper safeguards to ensure the claimed level of energy savings as well as proper handling procedures by the third-party operator.

Why was it chosen to be internal or external?

Although this program has a large number of savings, it's still small in percentage in relation to the entire residential portfolio. The amount of savings associated with this program coupled with low risk warranted the selection of lower cost internal evaluation.

What went into this budget approximation?

Used earlier like study costs as an example.

Brief Program Description

Retiring a second refrigerator or freezer can result in savings of up to $100 a year on energy bills. Many customers continue to use their older refrigerators and freezers when they buy a new one. While today's units are much more energy efficient, refrigerators and freezers manufactured before 1990 can use as much as 1500 kilowatt hours (kWh) a year, or 20 percent of the 7,200 kWh used by the average customer annually.

Evaluation Objectives

This process evaluation will verify that the reporting process adequately documents the chain of possession of the refrigerator up to the point of recycling. In addition to documenting the state the refrigerator was found in.

Are these refrigerators finding their way back into the market?
Are these refrigerators in working order? How verified?
Are the program requirements clear to the customer?

The actionable information will result in better documentation in which to verify savings as well as improve the program implementation from a customer's perspective.

Evaluation Approach

To evaluate the process a combination of customer surveys, site visits, and ride alongs will be used. A survey tool will be used to determine the customers understanding of the program and the status of the refrigerator when it was picked up.

[4] Evaluation details are for example purposes only and will be fully vetted prior to the final version.

The customer survey will be designed to get the customer's perspective on the process as well as their impression of the final status of the refrigerator (was it being used when picked up? Was it replaced? With what?).

A site visit will be conducted at the recycling center(s) and a comparison of paperwork will be made so as to verify the # of drop offs equal the number of pickups.

A ride along will be scheduled to understand the process that the field personnel go through while picking up the units and dropping them off at the recycler.

This approach will use statistical sampling techniques to characterize the program. The initial sample will be pulled to achieve a 90/10 confidence/precision interval.

Timeline – Market/process study details complete by Avista and to the Triple-E by Dec. 2010

Limited Income Shell and HVAC

Why was this selected for Evaluation?

Limited Income Shell and HVAC have seen annual increases in spending and an initial billing analysis seems to indicate much lower realization rates due possibly due to overlapping measures (double-counting) then claimed savings meriting further analysis and evaluation.

Why was it chosen to be internal or external?

This program was already targeted for external evaluation, however, as a condition of the Washington General Rate Case Settlement, the Company agreed to independent, third-party impact evaluation of electric low income programs as part of Docket UE-100467, UG-100468 and UE-100176.

What went into this budget approximation?

Used earlier like study costs as an example.

Brief Program Description

The limited income CAP agencies focus primarily on shell measures and HVAC improvements. They offer ceiling/attic, wall, floor and duct insulation. The complete blower door tests to assess infiltration opportunities and complete extensive infiltration measures as applicable. When infiltration measures are completed a post-blower door test is also completed to estimate savings. The savings for HVAC is based on the existing system vs. the proposed system. In some cases, if the customer's existing system is no longer functioning or very close to the end of its life, then the savings would be based on the difference between a new standard code system and the proposed high efficiency model.

Energy Star windows measures are also completed for single pane or broken windows.

Evaluation Objectives

In 2009 a new process was implemented to more closely manage TRC performance for the limited income portfolio. Additionally, certain measures that are typically cost-effective are encouraged and allowed without prior approval. All other measures require written permission to complete. The new process evaluates measures not specifically on the list and if they are cost-effective they are approved. This evaluation will verify that the reporting process adequately documents the installation of insulation and equipment through the TRC calculation including incremental costs and savings estimated by the CAP agencies.

Also in 2010 a census regression of all of the LI Shell and HVAC measures showed under realized savings predictions. The savings predictions for each system has been changed for 2011 ex-ante calculations, but this study will further refine that earlier impact analysis.

The actionable information will result in better documentation in which to verify savings as well as improve the program implementation from a customer's perspective.

Evaluation Approach

Ecotope, the third-party evaluator selected for the 2009 Independent Natural Gas Savings Impact Evaluation, is currently retained for four other impact analyses in 2010 that should be completed by year end. Due to their recent evaluation, this third-party has familiarity with the limited income program as well as our current processes and procedures. In an effort to leverage this experience, we have requested that they proceed with this limited income impact analysis after the completion of their other four analyses. This should provide some cost savings since another third party evaluator won't have to duplicate this initial ground work already done by Ecotope.

Timeline – anticipated start date of January 2011.

Resource Conservation Manager (RCM)

Why was this selected for Evaluation?

The RCM program is a new offering in Avista's program offerings so it is appropriate to perform a process evaluation to capture and correct any implementation issues that may limit resource acquisition and ensure processes in place are functioning properly.

Why was it chosen to be internal or external?

This was chosen to be an internal evaluation because developers/implementers would be best positioned to evaluate current processes based on their front-line experience, customer feedback and overall operation of the current program.

What went into this budget approximation?

Used earlier like study costs as an example.

Brief Program Description

This program would motivate certain large-scale utility customers in Washington to employ dedicated energy resource conservation managers at sites of concentrated (and currently largely unmanaged) energy usage of large public and private campuses and campus-like facilities.

Evaluation Objectives

At the time of this writing the RCM program is being developed and should be offered in the calendar year 2010.This evaluation assumes that the program will be up and running through 2011.

Is timely information being collected to perform EM&V? Baselines?

Are costs being captured and allocated correctly?

What amount of time is the RCM spending on electrical and gas savings?

The actionable information will result in better documentation in which to verify savings as well as improve the program implementation from a customer's perspective.

Evaluation Approach

The process by which the RCM evaluates document and implements energy efficiency measures will be observed and verified to match the initial program requirements. A critical evaluation of those processes and the collected data will occur to assess the potential for EM&V and acquisition improvements.

Timeline – Report to Triple-E by Sept. 2011.

Prescriptive Non-residential clothes washers

Why was this selected for Evaluation?

The Prescriptive Non-residential clothes washer program was selected for process evaluation because of the relative newness of the offering and to determine if the program is being implemented in the most optimal manner. The impact analysis is being performed to verify that the national savings figures for this measure from Energy Star and CEE is appropriate for our service territory.

Why was it chosen to be internal or external?

This is a fairly small non-residential program with low savings claims and a small percentage of incentives in comparison with the entire non-residential segment. Due to the lower risk and the scale, it seems reasonable for this program to be evaluated on an internal basis.

What went into this budget approximation?

Used earlier like study costs as an example.

Brief Program Description

In October 2008 we launched a prescriptive clothes washer program. Commercial clothes washers that are certified Energy Star or CEE (Consortium for Energy Efficiency) are eligible for a rebate upon installation. Savings and rebate amounts were determined based on information from Energy Star and CEE regarding savings over standard models. Having a streamlined prescriptive approach will allow us to target Laundromats and multi-family laundry areas which are typically difficult to handle through our site specific program. We have budgeted $5,730 in electric incentives and $4,270 in natural gas incentives. This program is marketed through account executives, vendors, contractors and other outreach material. There is a Non-Energy Benefit (NEB) of $364 associated with these measures for water savings and detergent costs.

Evaluation Objectives

This impact/process evaluation will determine the realization rate of the program for both gas and electric fuels and determine any non energy benefits. In addition to program impacts, the program implementation will be critically examined for improved delivery methods and documentation.

What is the typical washer being replaced? What is the typical run time?

What is the typical life of a washer? Typical cost(regional)?

Are commercial customers aware of the program?

Are the program requirements clear to the customer?

The actionable information will result in an accurate claimed savings as well as more throughput due to improved program presentation and customer awareness.

Evaluation Approach

A survey tool and selected sub metering will be used to evaluate impact and process characteristics of the program.

Timeline – Market/process study details complete by Avista and to the Triple-E by Feb. 2011

Portfolio Data Management Evaluation

Why was this selected for Evaluation?

In 2009 we had a few customer rebates that were overpaid. While they accounted for less than 0.3% of our portfolio, they caused some concern among our stakeholders. That concern included a settlement agreement for this portfolio study.

Why was it chosen to be internal or external?

Everything we have done we have built here at Avista. The best way for us to get a good view of how we might change our process is to allow industry experts to review and assess our operating conditions and policies.

What went into this budget approximation?

We asked our consultants for an estimated budget for such an evaluation and used the figure they gave us. It may be different after the RFP is fully developed.

Brief Program Description

Within our programs, we process thousands of request for energy advise, savings reports, and rebates in our programs. All of the data we keep and the channels of data gathering are critical to us performing our best in every area of DSM.

Evaluation Objectives

This process evaluation will determine the how efficient our program processes are at data management and process control. It should give us both an idea of what we can change and possibly the software tools that are available to us to better perform our programs.

The actionable information will result in an accurate claimed savings as well as more throughput due to improved processes.

Evaluation Approach

To evaluate the program, a third party evaluator will be hired to perform a process evaluation. An RFP will be created encompassing all of the deliverables we would like to see in the process evaluation including the expertise in not only process, but software solutions available to solve any problems that may be pointed out.

Timeline – Market/process study details complete by March 2011.

Prescriptive non-residential lighting

Why was this selected for Evaluation?

In 2009, a run-time analysis was performed on prescriptive non-residential lighting and it was determined that actual unit consumption needed to be evaluated to verify assumptions used in the prescriptive savings calculations for this program.

Why was it chosen to be internal or external?

The Prescriptive non-residential lighting program is a larger program which contributes a considerable amount of savings to the non-residential portfolio. However, in spite of the amount of savings, there is a huge amount of regional analyses available around lighting. Therefore, a lower cost internal evaluation was selected to evaluate this program.

What went into this budget approximation?

An estimation was made given earlier consulting work in a similar area.

Brief Program Description

There is significant opportunity for lighting improvements in commercial facilities. Avista has been offering site specific incentives for qualified lighting projects for many years. In an effort to streamline the process and make it easier for customers and vendors to participate in the program we developed a prescriptive approach several years ago. This program provides for many common retrofits to receive a pre-determined incentive amount. Incentive amounts were calculated using a baseline average for existing wattages and replacement wattages. Actual savings are calculated based on customer run times using the averages as calculated for incentive amounts.

This program is available to all non-residential retail electric customers in Washington and Idaho.

The prescriptive lighting program makes it easier for customers, especially smaller customers and vendors to participate in the program. We have seen a substantial increase in the number of projects that have been completed since this approach was instituted.

Evaluation Objectives

This impact/process evaluation will determine the realization rate of the program. In addition to program impacts, the program implementation will be critically examined for improved delivery methods and documentation.

The actionable information will result in an accurate claimed savings as well as more throughput due to improved program presentation and customer awareness.

Evaluation Approach

To evaluate the program, a third party evaluator will be hired to perform impact and process evaluation. Due to Ecotope's recent exposure to our programs, processes and procedures

during the 2009 Independent Natural Gas Savings Impact Evaluation, we would like to leverage this experience to do this impact evaluation.

Timeline – Market/process study details complete by March 2011.

Natural Gas DSM

Why was this selected for Evaluation?

For both the needs of the programs and for compliance with the decoupling order, we perform a portfolio level assessment of our gas programs. This evaluation represents 100% of the gas programs and allows the evaluators the flexibility to review specific programs of concern with us as well as those of most interest to them.

Why was it chosen to be internal or external?

This is an external evaluation for both compliance reasons as well as allowing for more peer review by external professionals. It is

What went into this budget approximation?

Used earlier study costs.

Brief Description

This portfolio is designed to acquire natural gas resources from residential, limited income and commercial customers through incentivized capital projects.

Evaluation Objectives

This impact/process evaluation will determine the realization rate of the portfolio for the previous year.

Are we following our own processes?

Are the measures installed?

Are we collecting the correct information?

The actionable information will result in an accurate claimed savings that will be reported to stakeholders and used for decoupling purposes. In addition, programs may be modified to facilitate improved evaluations in the future.

Evaluation Approach

To evaluate the programs, an external evaluator will be hired to perform an evaluation of the portfolio. In an effort to leverage the experience of Ecotope and save ratepayer funds, we recommend using Ecotope for a second year.

Timeline – anticipated start date of April 2011.

Electric DSM

Why was this selected for Evaluation?

For both the needs of the programs and for compliance with the decoupling order, we perform a portfolio level assessment of our electric programs. This evaluation represents 100% of the electric programs over a two year timeframe and allows the evaluators the flexibility to review specific programs of concern with us as well as those of most interest to them.

Why was it chosen to be internal or external?

This is an external evaluation for both compliance reasons as well as allowing for more peer review by external professionals.

What went into this budget approximation?

Used earlier like study costs as an example.

Brief Description

This portfolio is designed to acquire electric energy resources from residential, limited income and commercial customers through incentivized capital projects.

Evaluation Objectives

This impact/process evaluation will determine the realization rate of the portfolio for the previous year.

Are we following our own processes?

Are the measures installed?

Are we collecting the correct information?

The actionable information will result in an accurate claimed savings that will be reported to stakeholders and used for I-937 purposes. In addition, programs may be modified to facilitate improved evaluations in the future.

Evaluation Approach

To evaluate the programs, an third party evaluator will be hired to perform an evaluation of the portfolio. In an effort to leverage the experience of Ecotope and save ratepayer funds, we recommend using Ecotope for the savings evaluation of the first two-year reporting period of 2010-2011. After this time, another third party evaluator will be retained for the next two-year reporting cycle.

Timeline –anticipated start of March, 2011.

Technical Reference Manual (TRM) Review

Why was this selected for Evaluation?

It was suggested by the EM&V Collaborative and our EM&V consultants that we create and externally evaluate our TRM.

Why was it chosen to be internal or external?

We had never had a technical reference manual before and felt it was necessary to adequately vet our assumptions through an external evaluation.

What went into this budget approximation?

The consultants used for the EM&V process estimated the cost would be between $30,000 and $50,000 for an adequate review. We used $45,000 as an estimate.

Brief Description

The technical reference manual describes the deemed savings values and simple savings calculation assumptions for Avista programs. This tool brings in one place the technical review of savings values for all programs for the purposes of transparency and ease of updating.

Evaluation Objectives

There are several objectives for this TRM review:

- Ensure that the savings values are calculated correctly and cover the measures currently promoted in the Avista Energy Efficiency programs;
- Identify any significant issues regarding the calculated savings that may affect the savings that may be claimed for program years 2011 and 2012;
- Develop recommendations for addressing any significant issues identified, including:
    - Recommending alternative values for immediate use based on secondary sources
    - Identifying research that needs to be done by the program administrator to improve the savings values and/or underlying parameters
    - Identifying fieldwork or other research that the evaluation team should do to improve the savings values.

Evaluation Approach

We will turn our present savings values and calculation methods over to a consultant to critically review their validity.

Timeline – TRM study details complete by Avista and to the Triple E by Oct. 2010.

Schedule of Evaluations and Related Activities

	Program Name	Description	Planned Savings (kWh)	Planned Savings (Therms)	kWhr %IRP	Therm %IRP	Evaluation Type	Base Year	Internal or External
2012	Multifamily	Direct use, heat, water	1,301,684	NA	2%	NA	Impact	2011	TBD
	Site Specific: Lighting	Non Prescriptive Lights	6,337,231	NA	10%	NA	Impact	2011	TBD
					0%	0%			
					0%	0%			
TBD	P VFDs	HVAC motor VFDs	2,053,264	NA	3%	NA			
	LI appliances	Energy Star Refrigerator	24,360	NA	0%	NA			
	LI water heating efficiency	HE Electric and Gas H2O heater	940	110	0%	0%			
	Solar	Generation	20,000	NA	0%	NA			
	Wind	Generation	20,000	NA	0%	NA			
	Res lighting	PECI CFL Program	4,800,000	NA	7%	NA			
	Nonres traffic lights	Retrofit LEDs	67,035	NA	0%	NA			
	Nonres vending machines	Vending Miser	9,000	NA	0%	NA			
	P new equipment upgrades	Refrigerated Warehouse	NA	NA	NA	NA			
	P retrofit equipment upgrades	Refrigerated Warehouse	243,831	NA	0%	NA			
	Steam Trap Replacement	Steam trap w/ strainer	NA	9,151	NA	0%			
	Green Motors	Green Motor rewind contract	17,245	NA	0%	NA			
	Side Stream Filtration	Evaporative cooler water treatment	381,000	NA	1%	NA			
	Demand Controlled Ventilation	HVAC IAQ	7,892	608	0%	0%			
	Trees	Shade trees	2,088	NA	0%	NA			

Appendix 2

MEMORANDUM OF UNDERSTANDING
FOR PRUDENCY DETERMINATION OF DSM EXPENDITURES

This Memorandum of Understanding ("MOU") is entered into on this ___ day of December 2009 between Idaho Power Company ("Idaho Power"), Avista Utilities, PacifiCorp (d/b/a Rocky Mountain Power) (collectively "the Utilities" and individually as "the utility"), and the Staff of the Idaho Public Utilities Commission ("Staff"). All of the above-named entities are hereinafter sometimes referred to collectively as "Parties" or individually as "Party."

WITNESSETH:

A. The Parties agree that there exists a need for the Utilities and Staff to develop a common understanding of the basis upon which prudency of demand-side management ("DSM") expenditures can be determined for purposes of cost recovery.

B. The Parties attended a workshop on October 5, 2009, to discuss the contents of a more comprehensive utility annual DSM report that would demonstrate a commitment to, and accomplishment of, objective and transparent evaluation of DSM efforts. The agreed-upon principles ("guidelines") stemming from that workshop are set out below.

C. A copy of Staff's expectations for DSM prudency review is included as Attachment No. 1. Although Utilities will make a good faith effort to address Staff's expectations in following these guidelines, Staff expectations are informational and the Utilities will not be bound by them in the context of this Memorandum of Understanding.

D. The Parties recognize that implementation of the DSM prudency guidelines and evaluation framework described below will not automatically result in

DSM prudency findings. Instead, even with their implementation, future DSM prudency findings will require the preparation of a formal filing with the Commission.

NOW, THEREFORE, in consideration of the foregoing, the parties agree as follows:

Utility DSM Annual Report Requirements

1. Template. Idaho Power's *2008 Demand-Side Management Annual Report* will be used as a starting point template for enhanced reports beginning with reports for 2009 DSM operations and results. Elements like those found in Idaho Power's 2008 report will be included in each Utility's annual report for Idaho programs that reporting year, clearly identifying Idaho-specific data and narratives. The DSM annual reports may be filed as stand-alone documents or as a combination of documents (e.g., combined with a DSM business plan) that together fulfill the agreements in this MOU.

2. Table of Contents. Each annual DSM report will contain a table of contents that references all items specified below, including the appendix where the Cost-Effectiveness and Evaluation Table can be found.

3. Highlights or Introduction Section. Each annual DSM Report will include an initial overview of:

a. Process evaluations begun or completed during the previous year, modifications to DSM processes that resulted from those evaluations, and planned process evaluations and modifications for the coming year.

b. Impact evaluations begun or completed during the previous year, modifications to DSM programs that resulted from those evaluations, and planned

impact evaluations for the coming year. This section will also highlight updates of assumptions or reference reports used in assessing cost-effectiveness during the past year and those expected to be reviewed in the coming year.

4. Cost-Effectiveness Section. Each DSM annual report will include a Cost-Effectiveness section and table listing individual programs/measures and the basis for estimates of their cost-effectiveness, i.e., formulas, data inputs and assumptions, and source/rationale for each datum and assumption, including the date of the source.

5. Evaluation Section. Each DSM annual report will include an Evaluation section and table showing the schedule for evaluations, including impact assessment, assumptions, source review, the schedule for field impact measurement, and completion date. If this schedule is not included, a reasonable explanation for why such a schedule, in whole or in part, is not necessary will be included.

a. It is anticipated that over a reasonable frequency cycle (e.g., 2 to 3 years), all substantial programs will have undergone process and impact evaluations. However, Staff agrees that the initial evaluation cycles may be longer for 2008 and 2009 programs until these guidelines are fully implemented.

b. A copy of each DSM evaluation completed since filing the previous DSM annual report will be included as an appendix to the annual DSM report, as well as any confidential cost information that are not included. The utility will supplement its DSM report with any confidential cost information once the Staff has signed a protective agreement with the utility.

6. Program Specific Section. Program-specific sections of the annual DSM Report will be reported by sector or by customer class, with a description of each

individual program offered in the sector or customer class, and will include a list of measures within each program.

a. Process Evaluation. Each program-specific section will have a process evaluation description that includes:

i. Program implementation modifications undertaken during the course of the year and the rationale behind the change(s).

ii. Other process issues identified during the course of the year.

iii. Any formal process evaluation undertaken during the year.

iv. Total process evaluation cost, inclusive of both utility-provided and contract-provided services, and names of primary outside evaluators conducting process evaluations and titles of internal evaluators. The DSM Report will indicate which cost information is considered confidential; each utility will supplement its DSM report with any program evaluations containing confidential proprietary information once the Staff has signed a protective agreement with the utility.

v. Process changes completed or planned during the upcoming year, if any.

b. Impact and Cost-effectiveness Evaluation. Each program-specific section will include an impact and cost-effectiveness evaluation description including:

i. Primary assumptions and source (with year source was produced) used in the initial determination of cost-effectiveness.

ii. Primary assumptions and source (with year source was produced) used to determine post implementation impact and cost-effectiveness.

iii. Any changes from initial determination (or last evaluation) used for current cost-effectiveness evaluation and the reason for the change (such as updated assumptions, sources or field measurement).

iv. Planned cycle for reassessment of cost-effectiveness assumptions or measurement.

v. Total impact evaluation cost, inclusive of both utility-provided and contract-provided services, and names of primary outside evaluators and titles of inside evaluators. The DSM Report will indicate which cost information is considered confidential; each utility will supplement its DSM report with any program evaluations containing confidential proprietary information once the Staff has signed a protective agreement with the utility.

vi. Changes in program due to evaluation results.

c. Market Effects Evaluations. Each program-specific section will describe any market effects evaluations that have been planned or completed by or for the utility, including those planned or completed by the Northwest Energy Efficiency Alliance that are pertinent to any programs for which the utility is claiming electricity savings or other impacts.

7. Expenses Without Direct Energy Savings. As discussed in the October 5 workshop, the Utilities have expenses associated with DSM-related activities for which they do not claim energy savings. Expenses associated with non-quantifiable energy saving programs and initiatives, including but not limited to, infrastructure, education, outreach, and research, will be identified in the DSM annual reports and may be considered reasonable and necessary expenses for a broad based DSM portfolio.

Reasonable evaluations of such programs and efforts, commensurate with their costs, will be accomplished and reported. The Utilities will include these expenses in the calculations which determine a cost-effective DSM portfolio.

Prudency Determination

8. A utility may request a DSM prudency review at any time.

9. The Parties recognize that planning, implementing, and evaluating DSM programs are not a precise science; they require the application of judgment and experience. Utilities are encouraged to continually review these programs and make appropriate program improvements.

10. Within that context, review of utility demand-side management expenses for prudency shall take into consideration utility compliance with the planning, evaluation, and reporting guidelines listed above. A showing by the utility that it made a good faith effort to reasonably perform within these guidelines will constitute *prima facie* evidence that the utility's DSM expenses were prudently incurred for cost recovery purposes. By its performing within these guidelines, assuming there is no evidence of imprudent actions or expenses, the utility can reasonably expect that in the ordinary course of business Staff will support full cost recovery of its DSM program expenses.

Treatment of 2008 and 2009 Expenditures

11. Recognizing that their 2008 DSM reports have already been filed, the Utilities need not amend those reports, but instead will combine evaluation reporting for 2008 with 2009 in their 2009 reports to be filed in 2010. Because it is not possible to comply exactly with the requirements listed above for the historical expenses of 2008 and 2009, Parties agree to include as many components as possible in the 2010 Annual

DSM Report. Staff agrees to provide reasonable and necessary leeway for the implementation of the guidelines described in this MOU for the 2010 DSM reports.

12. Staff agrees that Avista Utilities may re-file its 2008 DSM prudency requests that were deferred in AVU-E-09-01 and AVU-G-09-01 as full-year prudency requests that will not be opposed by Staff.

Commission Not Bound by This Memorandum of Understanding

13. The parties to this Memorandum of Understanding acknowledge that the Commission Staff binds only itself and has no explicit or implicit authority to bind the Idaho Public Utilities Commission.

IN WITNESS WHEREOF, the Parties hereto have caused this Memorandum to be executed in their respective names on the dates set forth below.

Dated this ____ day of December 2009.

IDAHO PUBLIC UTILITIES COMMISSION STAFF

By:_____
Randy Lobb
Representing the Idaho Public Utilities Commission Staff

Dated this ____ day of December 2009.

IDAHO POWER COMPANY

By:_____
Representing Idaho Power Company

Dated this 21st day of December 2009.

AVISTA UTILITIES

By:_____
David J. Meyer
Representing Avista Utilities

Dated this ____ day of December 2009.

ROCKY MOUNTAIN POWER

By:_____
Representing Rocky Mountain Power

ATTACHMENT NO. 1

Staff Expectations for Cost-Effectiveness Tests, Methods and Evaluations

1. Cost Effectiveness Measurements. As stated at the October 5, 2009, DSM evaluation workshop, Staff believes that prudent DSM management requires that cost-effectiveness be analyzed from a wide variety of perspectives, including the ratepayer impact perspective, and that all programs and individual measures should have the goal of cost-effectiveness from the total resource, utility, and participant perspectives. (See IPUC Order No. 22299 issued January 27, 1989, and Order No. 28894 issued November 21, 2001.) If a particular measure or program is pursued in spite of the expectation that it will not, itself, be cost-effective from each of those three perspectives, then the annual DSM report should explain why the measure or program was implemented or continued.

2. Net-to-Gross Adjustments. The net-to-gross issue was also discussed at the evaluation workshop. Some of the references that the utilities assert that they use, such as the *California Standard Practice Manual*, actually require that all tests be done on a net savings basis. Staff continues to assert that most programs and measures have a significant number of participants who would have installed the measure or changed their behavior in the absence of the utility program. Absent new evaluation research to provide a basis for the net-to-gross adjustments used by each utility, the utility has the burden of explaining the source of its net savings adjustments or lack thereof. Staff will continue to assess whether utility cost-effectiveness estimates sufficiently and prudently include net-to-gross adjustments.

3. Third-Party Evaluators. Independence of evaluators from program and portfolio management is another important issue that was discussed at the evaluation workshop. While it was generally agreed that not all evaluations need to be performed by third-party evaluators, Staff believes such evaluations tend to be perceived as being more objective and transparent, and thus more credible, than evaluations performed by utility staff, all other factors being equal. While Staff will review all evaluations and may

review any evaluation in depth, utilities should expect that their self-evaluations may be scrutinized more closely than third-party evaluations, as may the programs themselves.

4. Estimating Non-Energy Benefits. Non-energy benefits are important and prudent factors to assess in analyzing cost-effectiveness and determining incentive levels, but Staff cautions against creating confusion by subtracting the estimated value of non-energy benefits from program and measure costs when reporting DSM costs on a cents per kWh basis.

5. Contractor Costs. After DSM reports are filed in 2010, Staff may reconsider whether to require inclusion of specific contract amounts paid to contractors in subsequent DSM reports.

6. Suggested Resources. In addition to the several evaluation, measurement, and cost-effectiveness manuals that were discussed at the workshop, Staff suggests it may be useful for utilities to generally follow the guidelines in the National Action Plan for Energy Efficiency's *Model Energy Efficiency Program Impact Evaluation Guide*, released November 2007. Another of NAPEE's reports titled *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers* may also be useful.

Appendix 3

parties to address whether the program should recover DSM-related lost margin from all rate schedules in Avista's next general rate case.

b. Measurement of DSM Achievement

304 It is obvious from the record that the parties have struggled to determine the actual impact of the Company's conservation program.[428] Testimony relates this problem in part to the lack of evaluation, measurement and verification (EM&V) techniques for conservation programs. Public Counsel's analysis, while a sampling, indicates significant shortcomings in the Company's EM&V methods.[429] Staff recommends the Company work with interested parties in a collaborative process to design a consistent and accurate measurement method. The Coalition supports this idea.[430] On rebuttal, the Company agrees there is a need to improve measurement and verification of DSM savings, stating that it is in the process of developing a revised measurement and verification approach for review by its Triple-E board. After review the Company will incorporate the revised approach into its 2010 DSM Business Plan.[431]

305 We recognize that the cost-effectiveness and therefore prudence of programmatic DSM expenses and lost margin recovery under any decoupling or incentive mechanism rests on the evaluation, measurement and verification of energy savings achieved. Furthermore, we agree with the parties that Company's EM&V efforts need to be improved. We require the parties to join in the collaborative planned for this subject, and expect them to participate in the development of consistent and accurate methods to judge the effectiveness of all energy efficiency programs and measures. We also require the Company to file an EM&V plan for its DSM programs

---

[428] Various intervenors question the accuracy of the therm savings claimed by the Company during the decoupling pilot program. *See* Reynolds, Exh. DJR-1T at 8:7-14; Kimball, Exh. MMK-1T at 2:9 – 3:11; Glaser, Exh. NLG-5T at 1:9-15.

[429] Kimball, Exh. MMK-1T at 2:9-3:11.

[430] Glaser, Exh. NLG-5T at 1:9-13.

[431] Powell, Exh. JP-1T at 8:1-2.

by September 1, 2010. The plan should include a bill verification analysis that examines changes in customer usage as a result of DSM programs.

c. Low-Income Conservation Achievement

306 The Company's low-income conservation achievement during the decoupling pilot is particularly disappointing. As the program's impact on low-income customers remains a key issue, we direct the Company, working in collaboration with the parties, to explore new approaches to promote low-income conservation, to identify barriers to its development, and to address the issues raised by The Energy Project. The Company shall report its conclusions to the Commission at the same time it submits the EM&V report.

d. Deferrals Made from July 1, 2009, to the Effective Date of This Order

307 In our order granting the Company an interim extension of its pilot program, we deferred consideration of the issue of how the decoupling program would operate from the end of the pilot until the effective date of this Order.[432] The Company agreed in its extension request to adjust deferral accounts to reflect modifications to the mechanism that the Commission required. Therefore, we now order the application of the conditions of this order to deferrals calculated on or after July 1, 2009.

e. Risk Reduction and Modified Return on Equity (ROE)

308 We decline here to adopt a modification to the Company's return on equity. We acknowledge that reducing a Company's risk can result in a reduction of its return on equity. However, the testimony supporting such a reduction does not address the modifications we have made to the mechanism. The only evidence presented was an adjustment sponsored by Public Counsel and ICNU based on the Company's recovery of 90 percent of the deferred margin.[433] As reflected herein, we have reduced the recovery amount to 45 percent. We believe this reduction to be a substantive change

---

[432] Dockets UE-090134, UG-090135 & UG-060518, Order 07, ¶¶ 13, 16, 17.

[433] Gorman, MPG-1T at 5:15-17 and 7:20-22.

344 (6) Avista Utilities is authorized to continue its decoupling mechanism, as modified by the terms of this Order. Deferrals recorded since June 30, 2009, are required to be adjusted as if deferred under the modified mechanism and are subject to recovery on that basis.

345 (7) Avista Utilities must convene a collaborative to discuss evaluation, measurement and verification (EM&V) methodology for its DSM programs and file a plan in accordance with this Order by September 1, 2010.

346 (8) Avista Utilities must also file by September 1, 2010, a separate report investigating the impact of its decoupling mechanism on low-income customers.

347 (9) The Commission Secretary is authorized to accept by letter, with copies to all parties to this proceeding, such filings as Avista Utilities makes to comply with the terms of this Order.

348 (10) The Commission retains jurisdiction to effectuate the terms of this Order.

Dated at Olympia, Washington, and effective December 22, 2009.

WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

JEFFREY D. GOLTZ, Chairman

PATRICK J. OSHIE, Commissioner

PHILIP B. JONES, Commissioner

54 (11) After reviewing Avista's Revised Ten-Year Achievable Conservation Potential and Biennial Conservation Target Report filed on April 16, 2010, and giving due consideration to all relevant matters and for good cause shown, the Commission finds it is in the public interest to approve with conditions Avista's Ten-Year Achievable Conservation Potential and Biennial Conservation Target identified in the Company's Revised Report, as authorized by RCW 19.285.040 (1)(e) and WAC 480-109-010(4).

55 (12) The Commission finds that it is not appropriate to consider Staff's proposal for a conservation collaborative until after the Commission has completed review of the pending conservation target filings of the other investor-owned utilities. When those reviews are complete, Staff may renew its proposal, taking into account the other demands on Commission staff resources.

56 (13) This matter came before the Commission at its regularly-scheduled meeting on April 29, 2010. The Commission orally approved Avista's ten-year conservation potential and biennial conservation target at that time. This final Order was presented to the Commission for consideration at its regularly-scheduled meeting on May 13, 2010.

ORDER

THE COMMISSION ORDERS:

57 (1) Avista Corporation's Ten-Year Achievable Conservation Potential and Biennial Conservation Target, as identified in the Company's Revised Report filed on April 16, 2010, are approved with conditions pursuant to RCW 19.285.040(1)(e) and WAC 480-109-010(4)(c). This approval is subject to the Conditions described in Paragraphs (2) through (11) below.

58 (2) **Company Retains Responsibility.** Nothing within this Order relieves Avista of the sole responsibility for complying with RCW 19.285, which requires Avista to use methodologies consistent with those used by the Pacific Northwest Electric Power and Conservation Planning Council ("Council"). Specifically, the Conditions regarding the need for a high degree of transparency, and communication and consultation with external stakeholders, diminish neither

Avista's operational authority nor its ultimate responsibility for meeting the biennial conservation target approved herein.

59 (3) **Advisory Group.**

(a) Avista must maintain and use an external conservation Advisory Group of stakeholders to advise the Company on the topics described in subparagraphs (i) through (x) below. To meet this condition, Avista may continue to use its External Energy Efficiency Board created under Docket UE-981126, and its Integrated Resource Planning Technical Advisory Committee created under WAC 480-100-238. The Advisory Group shall advise on the following:

(i) Development and modification of protocols to evaluate, measure, and verify energy savings in Avista's programs.

(ii) Development of conservation potential assessments under RCW 19.285.040(1)(a) and WAC 480-109-010(1).

(iii) Guidance to Avista regarding methodology inputs and calculations for updating cost-effectiveness.

(iv) Review of data sources and values used to update supply curves.

(v) Consideration of the need for tariff modifications or mid-course program corrections.

(vi) Review appropriate level of and planning for:

(1) Marketing conservation programs.

(2) Incentives to customers for measures and services.

(vii) Consideration of issues related to conservation programs for customers with limited income.

(viii) Comparing program achievement results with annual and biennial targets.

(ix) Review of conservation program budgets and actual expenditures compared to budgets.

(b) The Advisory Group should meet quarterly at a minimum. Avista must permit any member to request an additional meeting of the Advisory Group with reasonable notice.

60 (4) **Annual Budgets and Energy Savings.**

(a) Avista must submit annual budgets to the Advisory Group and to the Commission no later than November 1 of each year. The submissions

must include reasonable program detail that shows planned expenses and the resulting projected energy savings. In odd-numbered years, the annual budget may be submitted as part of the Biennial Conservation Plan required under Paragraph 8(f) below. In even-numbered years, the annual budget may be submitted as part of the DSM Business Plan required under Paragraph 8(b) below.

(b) Avista must provide its proposed budget in a detailed format with a summary page indicating the proposed budget and savings levels for each electric conservation program, and subsequent supporting spreadsheets providing further detail for each program and line item shown in the summary sheet.

61 (5) **Program Details**. Avista must maintain its conservation tariffs, with program descriptions, on file with the Commission. Program details about specific measures, incentives, and eligibility requirements must be filed as tariff attachments or as revisions to the Company's DSM Business Plan. Avista may propose other methods for managing its program details in the Biennial Conservation Plan required under Paragraph 8(f) below, after consultation with the Advisory Group as provided in Paragraph 9(b) below.

62 (6) **Approved Strategies for Selecting and Evaluating Energy Conservation Savings.**

(a) Avista has identified a number of potential conservation measures as qualifying measures in its Revised Report filed on April 16, 2010, in this Docket. The Commission is not obligated to accept savings identified in the Revised Report for purposes of compliance with RCW 19.285. Avista must demonstrate the prudence and cost-effectiveness of its conservation programs to the Commission after the savings are achieved. *See RCW 19.285.040(1)(d).*

(b) Except as provided in subparagraph (6)(c), Avista must use the Council's Regional Technical Forum's ("RTF's") "deemed" savings for electricity measures. As of the date of this Order, the RTF maintains a Web site at http://www.nwcouncil.org/energy/rtf/.

(c) If Avista utilizes savings amounts for prescriptive programs that have not been established by the RTF, such estimates must be based on a rigorous

impact evaluation that has verified savings levels, and be presented to the Advisory Group for comment.

(d) When Avista proposes a new program, it must present it to the Advisory Group for comment with program details fully defined. After consultation with the Advisory Group in accordance with Paragraph 3 above, Avista must file a revision to its DSM Business Plan in this Docket. The revision may be acknowledged by placement on the Commission's No Action Open Meeting agenda.

(e) Avista must provide opportunities for the Advisory Group to review and assist with the development of evaluation, measurement and verification protocols for conservation programs. See Paragraph 3(a)(i) above.

(f) Avista must spend between three (3) and six (6) percent of its conservation budget on evaluation, measurement, and verification (EM&V), including a reasonable proportion on independent, third-party EM&V. Avista must perform EM&V annually on a multi-year schedule of selected programs such that, over the EM&V cycle, all major programs are covered. The EM&V function includes impact, process, market and cost test analyses. The results must verify the level at which claimed energy savings have occurred, evaluate the existing internal review processes, and suggest improvements to the program and ongoing EM&V processes. An annual independent, third-party EM&V report involving analysis of both program impacts and process impacts must be part of the Annual Report on Conservation Acquisition described in Paragraphs 8(c) and (g) below. Avista may ask the Commission to modify this spending band following full Advisory Group consultation.

63 (7) **Program Design Principles**

(a) All Sectors Included — Avista must offer a mix of tariff-based programs that ensure it is serving each customer sector, including programs targeted to the limited-income subset of residential customers. Modifications to the programs must be filed with the Commission as revisions to tariffs or as revisions to Avista's DSM Business Plan, as appropriate.

(b) Outreach on Programs — Avista must establish a strategy and proposed implementation budget for informing participants about program opportunities in the relevant market channels for each of its energy efficiency programs. Avista must share these strategies and budgets with

the Advisory Group for review and comments, and provide updates at Advisory Group meetings.

(c) Incentives and Conservation Program Implementation — Avista must offer a cost-effective portfolio of programs in order to achieve all available conservation that is cost-effective, reliable, and feasible. Programs and incentives may be directed to consumers, retailers, or trade allies, as appropriate for measures that save energy. Incentive levels and other methods of encouraging energy conservation need to be periodically examined to ensure that they are neither too high nor too low. Incentive levels and implementation methods should not unnecessarily limit the acquisition of all achievable energy conservation.

(d) Conservation Efforts without Approved EM&V Protocol — Avista may spend up to ten (10) percent of its conservation budget on programs whose savings impact has not yet been measured, as long as the overall portfolio of conservation passes the Total Resource Cost (TRC) test as modified by the Council. These programs may include educational, behavior change, and pilot projects. The Company may ask the Commission to modify this spending limit following full Advisory Group consultation. As of the date of this Order, an outline of the major elements of the Council's methodology for determining achievable conservation potential, including the Total Resource Cost test, is available on the Council's Web site at http://www.nwcouncil.org/energy/powerplan/6/supplycurves/I937/CouncilMethodology_outline%20_2_.pdf.

64 (8) **Required Reports and Filings**

Avista must file the following:

(a) Six-Month Report on Conservation Acquisition, comparing budgeted to actual kWh's and expenditures, by August 15, 2010.

(b) 2011 DSM Business Plan, containing any changes to program details and an annual budget by November 1, 2010.

(c) 2010 Annual Report on Conservation Acquisition, including an evaluation of cost effectiveness and comparing budgets to actual, by March 31, 2011.

(d) Revisions to cost recovery tariff by May 1, 2011, with requested effective date of July 1, 2011.

(e) Six-Month Report on Conservation Acquisition, comparing budget to actual kWh's and dollar activity, by August 15, 2011.

(f) Biennial Conservation Plan including revised program details and program tariffs, together with identification of 2012-2021 achievable conservation potential, by November 1, 2011, requesting effective date of January 1, 2012. This filing will satisfy the requirement in WAC 480-109-010 to file 10-year Achievable Conservation Potential and Biennial Conservation Target on or before January 31.[9]

(g) 2011 Annual Report on Conservation Acquisition, including an evaluation of cost-effectiveness, by March 31, 2012.

(h) Two-year report on conservation program achievement by June 1, 2012. This filing is the one required in WAC 480-109-040(1) and RCW 19.285.070, which require that the report also be filed with the Washington Department of Commerce.

65 (9) **Required Public Involvement in Preparation for the 2012-2013 Biennium**

(a) By July 1, 2011, Avista must consult with the Advisory Group to facilitate completion of a 10-year conservation potential analysis by November 1, 2011. *See* RCW 19.285.040(1)(a); WAC 480-109-010(1). This must be based on a current conservation potential assessment study of Avista's service area within Washington State. This may be conducted within the context of Avista's integrated resource plan. If Avista chooses to use the supply curves that make up the conservation potential in the Council's Northwest Power Plan, the supply curves must be updated for new assumptions and measures.

(b) Avista must consult with the Advisory Group between July 1, 2011, and October 31, 2011, to identify achievable conservation potential for 2012-2021 and set annual and biennial targets for the 2012-2013 biennium, including necessary revisions to program details. *See* RCW 19.285.040(1)(b); WAC 480-109-010(2) and (3).

(c) During the consultation described in subparagraph 9(b) above, Avista must review with the Advisory Group whether standard-efficiency fuel

[9] The Commission recognizes that this deadline is not the same as the rule. This is acceptable because Avista has agreed to the earlier deadline. A change to Chapter 480-109 WAC may be considered after we complete our evaluation of the conservation filings by Pacific Power & Light Company and Puget Sound Energy.

conversion savings should be included in the 2012-2013 Biennial Conservation Target.

66 (10) **Cost Effectiveness Test is the Total Resource Cost Test**

(a) The primary cost effectiveness test IS the Total Resource Cost (TRC) test as modified by the Council. The Council-modified calculation of TRC includes quantifiable non-energy benefits, a risk adder, and a 10 percent conservation benefit adder that increases the avoided costs by 10 percent. The Council does not include a net-to-gross adjustment. As of the date of this Order, an outline of the major elements of the Council's methodology for determining achievable conservation potential, including the Total Resource Cost test, is referenced in paragraph (7)(d).

(b) In addition to the Council-modified TRC, Avista must provide calculations of the Program Administrator Cost test (also called the Utility Cost test), Ratepayer Impact Measure test, and Participant Cost test described in the National Action Plan for Energy Efficiency's study "Understanding Cost-effectiveness of Energy Efficiency Programs." As of the date of this Order, the study is available on the Web site of the United States Environmental Protection Agency at http://www.epa.gov/cleanenergy/documents/cost-effectiveness.pdf.

(c) Overall conservation cost-effectiveness must be evaluated at the portfolio level. Costs included in the portfolio level analysis include conservation-related administrative costs. Avista must continue to evaluate measure and program level cost tests.

67 (11) **Recovery Through an Electric Tariff Rider**

(a) Annual Filing — Avista's annual tariff rider filing, required under paragraph (8)(d), will recover the future year's budgeted expenses and any significant variances between budgeted and actual income and expenditures during the previous period.

(b) Scope of Expenditures — Funds collected through the rider must be used on approved conservation programs and their administrative costs.

(c) Recovery for Each Customer Class — Rate spread and rate design must match Avista's underlying base volumetric rates.

DATED at Olympia, Washington, and effective May 13, 2010.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

JEFFREY D. GOLTZ, Chairman

PATRICK J. OSHIE, Commissioner

PHILIP B. JONES, Commissioner

Appendix 4

External Energy Efficiency Board
(Triple E Board)
Member List

Deborah Reynolds
Washington Utilities and Transportation Commission

David Nightingale
Washington Utilities and Transportation Commission

Lynn Anderson
Idaho Public Utilities Commission
Utilities Section

Lisa Labolle (never attended)
Idaho Office of Energy Resources

Mary Kimball
Office of the Attorney General
Public Counsel Section

Stefanie Johnson
Office of the Attorney General
Public Counsel Section

Lea Daeschel
Office of the Attorney General
Public Counsel Section

Nancy Hirsh
NW Energy Coalition (NWEC)

Chuck Murray
WA State Department of Commerce

Tom Eckman
Northwest Power and Conservation Council

Paula Pyron
Northwest Industrial Gas Users

Chris Davis
SNAP

Michael Shepard
E SOURCE, Inc.

Sheryl Carter (has not attended since 2002)
Natural Resources Defense Council, Inc.

Phil Kercher
Sacred Heart Medical Center

Michael Early (never attended Triple E but part of Collaborative)
Industrial Customers of
Northwest Utilities

Claire Fulenwider
Northwest Energy Efficiency Alliance

Jeff Harris
Northwest Energy Efficiency Alliance

Nick Beamer
Aging and Long Term Care of Eastern Washington

Chuck Eberdt
The Energy Project
Opportunity Council

John Kaufmann (retired?)
Oregon Office of Energy

Moshrek Sobhy (new to commission – never attended a Triple E)
Public Utilities Commission of Oregon

Ron Oscarson (invited in 2009 - never attended)
Spokane County

Dan Baumgartner (invited in 2009 - has attended once - not expecting him in the future)
Community Minded Enterprises

Appendix 5

AVISTA UTILITIES
THE COLLABORATIVE'S CHARTER

BACKGROUND

Electric and natural gas energy efficiency services for Avista's Washington and Idaho customers have seen renewed interest by stakeholders in several areas. Avista's compliance with Washington's Renewable Portfolio Standards (RCW 19.285 and WAC 480-109) requires establishing electric savings acquisition targets and verification procedures. In a recently concluded general rate case, the Washington Utilities and Transportation Commission ordered the Company and interested parties to participate in a collaborative to examine specified evaluation, measurement and verification (EM&V) and low-income issues. The Idaho Public Utilities Commission Staff recently entered into a "Memorandum of Understanding (MOU) for Prudency Determination of DSM (Demand Side Management) Expenditures" with Avista (and the Idaho Power Company and Rocky Mountain Power). The IPUC Staff is examining low-income service delivery for Avista's Idaho customers.

The discussion with interested stakeholders on these issues in a unified and structured approach will facilitate a thorough and efficient review of key issues. Avista has in place an established stakeholder advisory group, the External Energy Efficiency Board (Triple E), which provides non-binding oversight to the Company's energy efficiency programs and includes representatives from Washington, Idaho, and Oregon. This Collaborative, however, is being established to respond to direction from the Washington Utilities and Transportation Commission (UTC) provided in its Final Order in Avista's 2009 General Rate Case (UG-90135). The existence of the Collaborative neither diminishes Avista's operational authority nor its ultimate responsibility to provide EM&V as required.

PURPOSE

The Collaborative will address the following issues outlined below, with the priority on the EM&V and low-income issues raised by the UTC:

1) Develop best practices on demand side management (DSM) EM&V by September 1, 2010 to include:
   - Response to Order No. 10, paragraph 305, in Docket No. UG-090135 for Washington natural gas decoupling
     - To develop "consistent and accurate methods to judge the effectiveness of all energy efficiency programs and measures" and
     - To "file an EM&V plan for its DSM programs by September 1, 2010. The plan should include a bill verification analysis that examines changes in customer usage as a result of DSM programs."

   - Establishing the basis for DSM annual reports pursuant to the Idaho Memorandum of Understanding
     - This is a ten page document identifying several DSM analyses to-be-provided,
     - Parties to this agreement include Avista, the IPUC Staff, Idaho Power Company, and Rocky Mountain Power. However, it is understood—per the MOU--that each utility will determine its own methodology and process for its annual reporting

2) Review of electric and natural gas low-income issues to include:
   - Response to Order No. 10, paragraph 306, in Docket No. UG-090135 for Washington natural gas decoupling
     - "In a collaborative with the Parties, Avista is to 'explore' new approaches to low-income conservation, identify barriers to its development, and address the Energy Project's concerns."
     - The conclusions must be filed by September 1, 2010,
   - The Idaho Commission's low-income review
     - Reporting
     - Process evaluation

Avista's Oregon natural gas DSM team will be monitoring this process but any application to Oregon will be pursued separately due to structurally different cost-recovery protocols.

Discussion will have the goal of reaching a consensus on issues. However, the parties agree that any consensus is not meant to be a substitute for the judgment of the respective Commissions. In addition, any consensus will have a well-documented and understood basis and will not simply be a "black box" agreement.

DELIVERABLES

1) The work of the Collaborative on EM&V issues will result in an EM&V Plan, composed of the following deliverables:
   - EM&V Framework, which will describe and outline Avista's EM&V practices and processes;
   - EM&V schedule for Avista's electric and natural gas DSM programs. The schedule is anticipated to reflect at least a three-year period, and will establish a proposed timeline and priorities for impact evaluations and process evaluations, as well as market assessments. The schedule will further indicate if an evaluation will be conducted by an independent third-party.

2) The work of the Collaborative on low-income issues will result in the following deliverable:
   - Low-Income Concept paper discussing conclusions with respect to new approaches to low-income conservation, barriers to its developments and the concerns of the Energy Project.

MEMBERSHIP

Pursuant to the UTC's Final Order in UG-90135, parties to that case are expected to participate in the Collaborative. Those parties include: Avista, WUTC Staff, the Energy Project, Industrial Customers of Northwest Utilities (ICNU), the Northwest Industrial Gas Users (NWIGU), the Northwest Energy Coalition (NWEC), and the Public Counsel section of the Attorney General's Office. Avista will also extend an invitation to other members of Avista's External Energy Efficiency (Triple E) Board. Current membership of the Triple E is as follows:

- Aging and Long-Term Care of Eastern Washington (ALTCEW)
- Avista Utilities
- Community Minded Enterprises (CME)
- E-Source
- Idaho Office of Energy Resources (OER)
- Idaho Public Utilities Commission (IPUC)
- Industrial Customers of Northwest Utilities (ICNU)
- Natural Resources Defense Council (NRDC)
- Northwest Energy Coalition (NWEC)
- Northwest Energy Efficiency Alliance (NEEA)
- Northwest Industrial Gas Users (NWIGU)
- Northwest Power and Conservation Council (NPPC)
- Oregon Department of Energy (ODOE)
- Providence Sacred Heart Medical Center and Children's Hospital
- Public Utility Commission of Oregon (OPUC)
- SNAP (Spokane Neighborhood Action Partners)
- Spokane County
- The Energy Project
- Washington Attorney General, Office of Public Counsel (Public Counsel)
- Washington Department of Commerce (Commerce)
- Washington Utilities and Transportation Commission Staff (WUTC)

Some members of the Triple E may desire to take a passive role in the Collaborative. They will notify Avista and not be included in "consensus" agreements unless they desire to do so at a later time.

THE COLLABORATIVE OPERATING PRINCIPLES AND GUIDELINES

To promote open and inclusive discussion, certain principles and guidelines will be followed:

- all parties agree to participate through attendance and/or review of documents and later sharing of opinion,
- general Collaborative meeting notes will be taken but exact transcriptions and attributions will be avoided unless germane to the recommended action for next steps,
- a dissenting position by any participant will be specifically identified in the meeting notes, either at the time of the meeting or upon review of the meeting minutes,
- no party is bound to follow the majority,
- positions dissenting from consensus decisions are acceptable as long as that rejection is clearly articulated and noted in the meeting notes, or through a letter or e-mail,
- on any issue, all parties reserve the right to take independent positions in formal regulatory proceedings,
- any dissenting member has the obligation to make their position clear to all members of the Collaborative,

- all parties have an equal say in discussions and the goal of all discussions is consensus, but the responsibility for filing with the Commission(s) is ultimately borne by Avista,
- members commit to be actively involved as evidenced by consistent attendance, providing opinions on discussion topics, reviewing meeting notes, and responding with affirmation or proposed modifications to meeting notes on a timely basis,
- members are spokespersons for their individual organizations and will endeavor to represent their organizations to the best of their abilities even though they may not be able to formally represent each of their members or sign official documents, e.g., the WUTC, IPUC, OPUC Staffs and the NPPC
- on certain issues Collaborative members may need to consult their respective organizations before committing to an action or position,
- Collaborative members are committed to developing a sound basis for proposed actions,
- Collaborative members may determine that the process and/or deliverables would benefit from review, guidance, or consultation by an independent third party with relevant expertise. Collaborative members, including Avista, will work in good faith to consider these requests, and to identify qualified independent experts to be retained by the Collaborative.
- most communications will be by e-mail (with attachments and links) so as to reduce use of resources,
- Avista will seek to provide information to Collaborative members, both proactively and upon request, to provide appropriate context and background. All information will be provided in summary form in response to inquiry from various members will be provided to all members of the collaborative,
- the Collaborative will consider providing travel assistance when appropriate, and
- the parties agree to make a good faith effort to examine all issues by September of 2010,
- Avista will share with the Collaborative the development of Request for Proposals (RFP) related to the evaluation, measurement, or verification of its electric or natural gas DSM programs, and will share a draft of any such RFP with the Collaborative, providing a reasonable opportunity for review and comment on the proposed scope of work or any other issues.
- Communications related to the deliverables of the Collaborative between Avista and any contractor will be conducted in an open and transparent manner using best efforts to accommodate participation by the Collaborative.

Adopted June 23rd, 2010 by all Collaborative members present as documented in the June 23, 2010 Collaborative Meeting #4 meeting notes.