

Avista Utilities

2013

Energy Efficiency  
Evaluation, Measurement  
and Verification  
Annual Plan

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# 2013 Energy Efficiency Evaluation, Measurement and Verification Annual Plan

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## Background

This 2013 Energy Efficiency Evaluation Measurement and Verification (EM&V) Annual Plan, in combination with the Avista EM&V Framework, is intended to identify the evaluation, measurement and verification activities that are planned to be performed in 2013 in order to adequately inform, operate, and assess energy efficiency programs at Avista. This evaluation effort is not only retrospective in order to verify savings estimates of the 2012 program year, but also prospective to be used for program design and improved marketing of programs. This document also provides the 2013 EM&V budget allocations by fuel, sector, program, jurisdiction, and review type.

## Overview

Avista's 2013 EM&V Annual Plan identifies evaluation activities intended to be performed during 2013 on the 2012 energy efficiency portfolio. The components of this Plan were presented to Avista's Advisory Group via a webinar on July 31, 2012 and during the Company's Fall Advisory Group meeting on September 25, 2012. An overview and definitions are shown in Avista's EM&V Framework, a companion document to this Plan.

Key aspects of this Plan include:

- The Company continues to pursue a portfolio approach for Impact and Process Analyses, insuring a comprehensive annual review of all programs, to the degree necessary, based on the magnitude of savings and uncertainty of the related unit energy savings (UES) values.
- Portfolio impact evaluations will be conducted for all electric and natural gas programs at predetermined levels. For programs with a majority of savings or particular aspects of interest, such as a high level of uncertainty, impact evaluations will consist of detailed impact evaluations using approaches from the International Performance Measurement and Verification Protocol (IPMVP) and other industry-standard techniques for measuring and estimating program-level impacts.
- Due to the suspension of natural gas Demand Side Management (DSM) in Idaho, the pending suspension of natural gas DSM in Washington and the corresponding scope reduction for the natural gas portfolio, the planned evaluation will consist of a desk

review of the natural gas program savings for both the 2012 and 2013 program years. This option is considered to be the most efficient use of evaluation resources in consideration of the natural gas DSM program plans.

- Energy efficiency acquisition achieved during 2012 will contribute to the biennial savings for I-937 compliance, which will complete its second biennium at the end of 2013.<sup>1</sup> Billing analysis will be incorporated as appropriate.
- A final evaluation of the electric programs deployed during 2012 and 2013 will be initiated prior to the end of 2013 in order to meet the filing deadline in 2014.
- This planning document will not be construed as pre-approval by the Washington or Idaho Commissions.
- Evaluation resources will be focused on these primary segment activities:
  - Residential
    - Impact verification will be conducted through phone surveys, benefitting from the high verification results obtained in the 2010-2011 evaluations of the residential programs. These surveys will be supplemented with a review of a sample of incentive documentation. In addition, billing analysis will be performed on fuel efficiency conversions with the pre- and post-installation data informing both the UES values and interactive impacts of natural gas from conversions.
    - Interviews of Avista staff and third-party implementers will be completed, along with customer surveys and a review of program manuals, tracking databases, marketing materials and quality assurance documents.
    - A general population survey will be conducted in order to enhance the understanding of saturation, key demographics, housing characteristics, energy use awareness, attitudes and behaviors.
    - Net-to-gross (NTG) will only be evaluated on residential programs due to the significant increase experienced between 2010 and 2011. This is a follow-up to past NTG studies to identify the saturation trend of the residential programs.
  - Low Income
    - An internal process review will be led by Avista Policy, Planning and Analysis team staff with contributions from the Implementation team.
    - For the impact analysis, billing analysis on the census of measures, including conversions, will be conducted. In addition, a comparison group, possibly consisting of Low Income Home Energy Assistance Program (LIHEAP) or Low Income Rate Assistance Program (LIRAP) participants, will be incorporated into the analysis.

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<sup>1</sup> Washington Initiative 937 was approved by voters on November 7, 2006. Codified as RCW 19.285 and WAC 480-109, the energy efficiency aspects of this law became effective on January 1, 2010.

- Nonresidential
  - A study on Variable Frequency Drives (VFDs) will be conducted to inform the current UES value. Prior impact evaluations indicated the current UES values were very conservative.
  - Interviews of Avista staff and third-party implementers will be conducted, along with customer surveys and a review of program manuals, tracking databases, marketing materials and quality assurance documents.
  - Comparative “best practice” reviews of several other utilities will be completed.
- For market research, a trade ally panel study with residential and nonresidential trade allies will be held where the participants represent implementers of some of Avista’s largest measures such as nonresidential lighting and heating, ventilation and air conditioning (HVAC). From this study, saturation and penetration levels will be determined, coupled with attribution from Avista’s programs. Depending on the findings, this may be supplemented with focus groups.
- Most of Avista’s current portfolio of electric energy efficiency offerings has been in place since 1995. For the natural gas portfolio, most programs have been available since 2001.
- In lieu of Process Evaluation reports, summary presentations will be provided for the 2013 program year. A Process Evaluation report will be delivered as part of the 2014 EM&V Plan.

## External EM&V Budget for 2013 Evaluations

For 2013, the total budget for external evaluation is estimated to be \$935,000. The following table identifies individual evaluation activities that are anticipated to occur in 2013 including an approximate allocation of the total incremental budget of each effort.

Individual Evaluations	Evaluation Type	Contractor	Budget (System)	WA expense	ID expense
2012 Residential Portfolio	Impact and Process	Cadmus	\$199,000	\$139,300	\$59,700
2012 Nonresidential Portfolio	Impact and Process	Cadmus	337,000	235,900	101,100
2012 Low Income Portfolio	Impact	Cadmus	48,000	33,600	14,400
Trade Ally Panel Study	Market	Cadmus	66,000	46,200	19,800
Distribution Efficiency Initiative	Impact	NEEA	150,000	150,000	0
Electric Conservation Potential Assessment	Market	EnerNOC	<u>135,000</u>	<u>94,500</u>	<u>40,500</u>
<b>Total Budget for Individual Evaluations</b>			<b>\$935,000</b>	<b>\$699,500</b>	<b>\$235,500</b>

The budget above does not include the costs associated with individual internal evaluation-related activities, as these costs are captured in the overall EM&V budget found in the table below. This includes both internal labor and physical equipment shared in common with other evaluations or Avista's DSM operations.

## Overall 2013 EM&V Budget

The table below captures the individual evaluations specifically identified in the previous table in aggregate and augments them with the associated expenses necessary to manage EM&V activities, perform internal EM&V evaluations, acquire physical EM&V equipment and actively participate in and fund the activities of the Regional Technical Forum (RTF).

Activity	Budget (WA/ID system)	Internal budget	External budget	WA expense	ID expense
Individual evaluations previously specified	\$935,000		\$935,000	\$699,500	\$235,500
1.2 FTE (loaded) EM&V analyst/engineer	166,400	\$166,400		116,480	49,920
EM&V Consulting	30,000		30,000	21,000	9,000
Regional Technical Forum dues	83,000		83,000	58,100	24,900
EM&V physical equipment	25,000	25,000		17,500	7,500
<b>Total</b>	<b>\$1,239,400</b>	<b>\$191,400</b>	<b>\$1,048,000</b>	<b>\$912,580</b>	<b>\$326,820</b>
Expected total DSM budget	<b>\$20,203,811</b>			<b>\$14,712,717</b>	<b>\$5,491,094</b>
EM&V as a % of total DSM budget <sup>2</sup>	<b>6.13%</b>			<b>6.20%</b>	<b>5.95%</b>

## EM&V External Evaluation Contract

In preparation for the independent evaluation on the 2010-2011 Biennium, the Company issued a “mega” RFP for EM&V on 2010-2011 electric and natural gas DSM programs in November 2010. Cadmus was selected and retained to complete this body of work. Since Cadmus recently completed the 2010-2011 evaluation, they are very familiar with Avista’s DSM programs, systems and tracking databases as well as individual areas where additional research and study is necessary to provide maximum benefit to ongoing program implementation. Therefore, engaging Cadmus for the 2012-2013 biennium will provide continuity, leverage existing evaluation and analysis tools, and take advantage of previously collected data, saving considerable time, effort and money when compared to other resources.

<sup>2</sup> While EM&V expenditures will be directly assigned where appropriate, this illustrates the anticipated allocation of estimated EM&V expenditures

The components of this work plan, including the individual evaluation activities delineated in the budget above and discussed in more detail later within this plan, were presented to Avista's Advisory Group via webinar on July 31, 2012 as well as at the Company's Fall Advisory Group meeting on September 25, 2012.

### **Internal EM&V Activities**

Within its DSM portfolio, Avista incorporates Evaluation, Measurement and Verification activities as a key process to validate and report energy savings related to its measures and programs. EM&V protocols serve to represent the comprehensive analyses and assessments necessary to supply salient information to stakeholders that adequately determines the prudence of Avista's DSM Programs. EM&V includes Impact, Process, Market and Cost Test analyses and taken as a whole are analogous with other industry standard terms such as Portfolio Evaluation or Program Evaluation.

A primary responsibility of Avista's EM&V resources within its Policy, Planning and Analysis team is to support the ongoing activities of the independent third-party EM&V consultants and evaluators performing the various analyses required to substantiate the conservation acquisition. The 2013 EM&V budget provides for independent, third-party EM&V services that provide a comprehensive portfolio evaluation. EM&V results are intended to verify the level at which claimed energy savings have occurred, evaluate the existing internal processes, and suggest improvements to the program and ongoing EM&V processes. These findings are reported in the Annual Report on Conservation Acquisition and include analysis of both program and process impacts for the specific programs reviewed.

In addition to the external evaluations, Avista EM&V resources support internal evaluations of specific measures and programs. The results of these activities are used to inform program management decisions, evaluate program effectiveness and investigate program metrics. These activities would serve to enhance the Company's knowledge base relating to its programs and energy efficiency offerings throughout its service territory.

To support planning and reporting requirements, several EM&V documents are maintained and published. These include the Avista EM&V Framework, an annual EM&V Plan and EM&V chapters within other DSM publications. Program-specific EM&V plans are created as required.



These documents are reviewed and updated as necessary, serving to improve the processes and protocols for energy efficiency measurement, evaluation and verification. In addition, the development of the Technical Reference Manual (TRM) continues and will be managed as a principal planning and reporting mechanism relative to individual prescriptive measures and their respective unit energy savings.

In support of new measure development, an EM&V plan will be developed for each program and will periodically be updated as informed by evaluation findings.<sup>3</sup> Additional EM&V efforts will be applied to evaluating emerging technologies and applications in consideration of potential inclusion in the Company's energy efficiency portfolio. Avista may spend up to ten percent of its conservation budget on programs whose savings impact has not yet been measured, if the overall portfolio of conservation passes the Total Resource Cost test as modified by the Council. These programs may include educational, behavior change, and pilot projects. Specific activities can include product and application document reviews, development of Measurement and Verification Plans, field studies, data collection, statistical analysis, and solicitation of user feedback.

Avista and its customers benefit from regional activities and resources in the energy efficiency and conservation domain. To engage with and contribute to the regional efforts, Avista EM&V staff has membership on the Regional Technical Forum that serves as an advisory committee to the Northwest Power and Conservation Council. The RTF is a primary source of information relating to the standardization of energy savings and measurement processes for electric applications in the northwest. This knowledge base provides valuation of energy efficiency metrics and references that are suitable for consideration in Avista's acquisition planning and reporting. Other data and informational sources that are deemed pertinent to Avista's programs as delivered in addition to the RTF include Northwest Energy Efficiency Alliance (NEEA), consultant libraries, ENERGY STAR, Sixth Power Plan, California's Database for Energy Efficient Resources (DEER), Avista-specific impact analyses and other public sources. The UES values contained in Avista's TRM will be subject to rigorous impact evaluations to be performed by a third-party evaluator and available to the Advisory Group for review.

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<sup>3</sup> In 2010, the Policy, Planning and Analysis team was created within Avista's DSM organization to provide independent analysis and EM&V support and services for the implementation and evaluation of DSM programs.

Additional regional activities include engaging with other Northwest utilities and NEEA in various pilot projects or subcommittee evaluations. A portion of the energy efficiency savings acquired within the region through NEEA's efforts are attributed to Avista's portfolio. Plans for 2013 include continued participation in NEEA's Residential Building Stock Assessment with coordinated data collection activities.

Avista's commitment to the critical role of EM&V is supported by the Company's continued focus on the development of best practices for its processes and reporting. Application of the principles of the International Performance Measurement and Verification Protocol serves as the guidelines for Measurement and Verification Plans applied to Avista programs. The verification of a statistically significant number of projects using IPMVP techniques is often extrapolated to verify and perform impact analysis on complete portfolios within reasonable standards of rigor and a reasonable degree of conservatism. This will serve to insure that Avista will manage the DSM portfolio in a manner consistent with utility and public interests.

Within Avista's Advisory Group, a Technical Committee subgroup serves primarily within the scope of EM&V applications and currently assists Avista with the development of EM&V protocols and related conservation program considerations. These activities include providing recommendations and guidance on functional aspects of implementation and evaluation. Principal interaction with Avista includes meetings, webinars and direct interchanges. In addition, Avista provides opportunities for the Technical Committee to review the evaluation, measurement and verification protocols.

As part of the 2013 EM&V review, a process evaluation specific to the Idaho Low Income program will be coordinated by Avista Policy, Planning and Analysis staff. The intention is identify topics or areas of improvement specifically related to cost effective delivery of identified measures.

## **Summary of Individual Evaluations**

Provided below is a summary of each of the external evaluation activities anticipated to occur in 2013. All savings estimates, calculations, assumptions and recommendations will be the work product of the independent evaluator in conjunction with the respective portfolio impact, process, or market evaluation component.

### **2012 Residential Portfolio Impact Evaluation**

The residential impact evaluation will be based on data collected primarily through the use of phone surveys. The justification for this method is due to the high measure verification rates identified in the 2010 and 2011 evaluation cycles, which was based on a combination of phone surveys and site visits. Verification of natural gas estimated savings from 2012 and 2013 will be performed through a document review of the participant project files.

The surveys will be designed to provide Avista with specific information on key measure parameters. Participants will be asked for responses to a few questions specific to the installed measures, with their responses used to determine measure qualification and to calculate evaluated deemed savings values. To supplement the phone survey verification process, a review of sample of incentive documentation will also be completed.

During the evaluation cycle of the previous biennium, billing analysis of high efficiency natural gas furnace participants from 2010 program year was used to determine the deemed savings associated with this conversion measure. In this evaluation cycle, a billing analysis considering both pre-and post-consumption data for electric and natural gas systems of fuel conversion participants will be completed to quantify the achieved reduction in electric consumption and the corresponding increase in natural gas consumption. The analysis will begin with a census of the 2012 program year participant population and will use 2011 consumption as the pre-installation data and 2013 consumption as the post-installation data. Furnace-only conversions, water heater-only conversions, and dual-measure groups will be analyzed as separate populations.

Recent evaluation work identified several unexpected results regarding the installation of heat pumps and natural gas furnaces. To further characterize current equipment configurations, heat pump installation practices will be explored during the Trade Ally Panel Study discussed more fully below. Contractor sales, installation practices, actual equipment settings and types will also

be explored during the panel study. These findings are intended to inform future program design of heat pump measure offerings.

### **2012 Residential Portfolio Process Evaluation**

To identify program changes and areas of interest, brief interviews will be employed to gather relevant information. Key participants in the interview process will include Avista Implementation staff, Policy, Planning and Analysis staff, and if necessary, third-party implementation staff and trade allies.

To inform the residential process evaluation, telephone surveys will be conducted with program year 2012 and 2013 participants and 2013 nonparticipants. A random digit dial survey will also be conducted in 2012 to gather market-characterization data on the general population of Avista residential customers. Sample frames will be constructed using all participants in the tracking databases with complete and reasonable contact information. Discovery Research Group, a Cadmus subcontractor for survey data collection, will use a randomization procedure to select contacts from the sample frame to complete the surveys.

A review of communication and participant materials will be employed on critical program documents with new or updated materials, including program tracking databases, program manuals, marketing materials and quality-related documents. The program materials will be evaluated against industry best practices for their adequacy, clarity, and effectiveness. Where appropriate, feedback will be provided to support the development of new or enhancement of existing program materials.

During the evaluation of the 2012 program year, a review the residential energy-efficiency program offerings from at least four other utilities in North America, including examples in the Pacific Northwest, is expected to be conducted. The intent is to gather information about new program ideas and technologies, assess best practices, and benchmark similar program components (such as trade ally networks, outreach strategies, and program performance in the context of market transformation).

A market characterization study will be conducted to expand on previous evaluation findings in order to establish a stronger understanding as to the saturation of core energy efficiency measures, key demographic and housing characteristics, and energy efficiency awareness in

conjunction with attitudes and behaviors. The primary market research activity will consist of a random digit dial telephone survey with a stochastic sample of the residential customer population. The goal of this general population survey is to characterize residential customers and provide the ability to identify demographic and geographic areas with particularly accessible energy saving potential. This research will supplement the Company's ongoing geographic information system analysis, with assistance provided as needed to enhance the research efforts in this area.

To provide timely feedback relative to net-to-gross results, related parameters will be collected at the program and sector levels in 2012 and 2013 using a participant self-report method. The collected data will be used to calculate these factors based on a series of NTG questions included in the participant surveys.

### **2012 Nonresidential Portfolio Impact Evaluation**

Metered data associated with the 2010-2011 evaluation of prescriptive HVAC variable frequency drive (VFD) projects indicated that the deemed savings estimates were conservative, having been based on a third-party study from 1995. In this evaluation, the metering sample size for VFD projects is planned to be increased to achieve results from a greater proportion of these projects. The intention is for this study to produce updated estimated savings values using project data from 2010 through 2012 for various applications. The expectation is to obtain meter data for two weeks of pre-installation usage in addition to the requisite post-installation metering. The experiment design is expected to achieve 90% confidence and 10% precision by metering an additional 10 VFD projects from the primary sampling already in place for verification. In addition, other VFD post-installation metering studies, such as for the New England Energy Partnership, may be used to supplement the data from the Avista evaluation.

The analysis of the 2010-2011 HVAC projects, both electric and natural gas, revealed that many energy efficiency projects had actual consumption that varied significantly from the expected deemed or calculated energy efficiency estimates. Although HVAC heating projects typically achieve a 90% realization rate, this measure is an ideal target for additional study due to the multiple factors that may contribute to the variances identified in the prior evaluation cycle.

As a continuation of tasks performed in late 2011, incentive forms and calculators will be reviewed to identify forms and calculators that may require updates. The review will be based on priority measures, such as those identified by a program manager or with significant throughput. Updates for demand controlled ventilation, food service, lighting, and premium efficiency motors were completed in the fourth quarter of 2011. Measures under consideration for this task may include LED lighting, exterior lighting, nonresidential clothes washers, Green Motors Rewind, site-specific insulation, and personal computer controls.

Site and metering visits will support project verification and gather necessary data for energy savings engineering calculations. Sample sizes for each type of fuel were based on the combined two-year projected project count. Coefficients of variation from the 2010-2011 evaluation were used in the new sampling, effectively reducing the sample size in measure categories with less uncertainty, and increasing the sampling for those measures with greater variation. Natural gas projects from 2012 and 2013 program years will undergo a document review, and will only receive site visits if discrepancies are identified.

### **2012 Nonresidential Portfolio Process Evaluation**

To identify program changes and areas of interest, brief interviews will be employed to gather relevant information. Key participants in the interview process will include Avista Implementation staff, Policy, Planning and Analysis staff, and if necessary, third-party implementation staff and trade allies.

Participant surveys for the 2013 evaluation will be used to assess the differences in customer experiences with various components of the Site-specific, Prescriptive, and EnergySmart Grocer programs. These participant surveys will focus on the participant's decisions, attitudes, barriers, and behaviors regarding Avista's programs.

Nonparticipant surveys will also be conducted for the 2013 evaluation. Reasons for nonparticipation, decisions, attitudes, and behaviors regarding energy efficient equipment installations will be identified. Questions relating to nonparticipant spillover may be included in the nonresidential surveys, but these are intended to only supplement prior research.

To address communication materials and the associated participant database, a materials review will be employed on critical program documents with new or updated material, including program tracking databases, program manuals, marketing materials and quality assurance methodologies and procedures. The program materials will be evaluated against industry best practices for their adequacy, clarity, and effectiveness. Where appropriate, feedback will be provided to support the development of new or enhancement of existing program materials.

During the evaluation of the 2012 program year, a review of the commercial and industrial energy-efficiency portfolios from at least four other utilities in North America, including examples in the Pacific Northwest, is expected to be conducted. The intent is to gather information about new program ideas and technologies, assess best practices, and benchmark similar program components such as trade ally networks, outreach strategies, T12 replacement programs, audits and energy assessments, and programs targeted to small commercial customers. Findings and conclusions from this research may inform the scope of additional research to be performed in the 2013 evaluation.

### **2012 Low Income Portfolio**

Similar to the evaluation for 2010-2011, billing analyses will be conducted to identify the electric and natural gas impacts of the Low Income Weatherization Program. The analyses will be performed on the census of program participants and will estimate savings by state, fuel type, and overall program levels. For this evaluation cycle, savings estimates will be evaluated through a combined approach of billing and engineering analysis, as well as developing net savings estimates by measuring the effects of a comparison group. The primary electric billing analysis will take place in 2014, to ensure a full year of pre and post data for the 2012 program year and possibly participants in 2011 as well. As a mid-evaluation update, electric savings values from the 2010-2011 evaluation will be applied to the 2012 participant population.

For the Low Income comparison group study, there are two feasible approaches for selecting a comparison group. One method would be to identify nonparticipants from data on Avista customers that receive energy assistance payments such as LIHEAP or LIRPA, but do not participate in a Low Income Weatherization Program. A second method would be to consider

using future program participants. The best approach will be identified as the timeline and available data are considered.

Additional participant phone surveys could provide a better understanding of certain topics, such as primary and secondary heating sources, equipment functionality prior to replacement, customer behaviors and take-back effects, participant non-energy benefits such as increased comfort or improved health, and other building or equipment characteristics.

### **Trade Ally Panel Study**

The Trade Ally Panel Study will consist of up to 120 residential and nonresidential trade allies who are familiar with Avista programs and have sales data beneficial to the study. For this study, it is proposed to have an annual panel whereby businesses would be offered an incentive of \$300 in exchange for two rounds of data collection. The key data set would be comprehensive sales information on their last 50 unit sales of key measures. Requested details would include manufacturer data, efficiency levels, size, price, installation date, installation location, program incentive eligibility, and an assessment of the programs' impacts on incented and non-incented measures.

The objective of this study is to obtain reliable, reproducible data, with a confidence of 90 percent and a precision of  $\pm 10$  percent, to document the saturation of high priority measures, the penetration of efficient versions of those high priority measures, the penetration of those efficient measures attributable to Avista's programs, the market share of efficient measures, and the share of high priority measures receiving rebates.

This effort is expected to yield the most reliable information on standard market practices, and through an ongoing annual update, to provide context for tracking ongoing program impacts and market effects specific to Avista's service territory.

This study will provide market insights and the context for tracking ongoing program impacts or market effects. The panel study offers the advantage of gathering a large set of data that would aid in determining differences in sales between trade allies engaged with Avista's programs and less-engaged trade allies, changes in sales patterns of key measures over time, the effect of



Avista's DSM programs on the sales and saturation of efficient equipment, and trade ally perceptions of the programs' influences. These insights will allow Avista to make decisions regarding program design, measure offerings, and incentive levels.

### **Distribution Efficiency Initiative**

NEEA initiated a Distribution Efficiency Initiative (DEI) in 2004 seeking to demonstrate the feasibility and cost effectiveness of improving the efficiency of energizing customer applications through improved voltage control on distribution circuits. NEEA's initial market transformation strategy was based on a series of pilots throughout the region, including an Avista pilot, to measure and demonstrate the effectiveness of various approaches for voltage control. Since the completion of that initial pilot, Avista has proceeded with two major efforts designed to improve the efficiency and reliability of the distribution system. During the 2012-2013 biennium, the Spokane SmartCircuit project and the Pullman SmartGrid Demonstration Project will contribute significant efficiency improvements.

The Washington Utilities and Transportation Commission (WUTC) Order No. 1 in Docket No. UE-111882 requires that the Company perform measurements consistent with RTF protocols through an independent third-party to support any I-937 distribution efficiency acquisition claim. Avista is working with NEEA to fund the reactivation of the DEI venture in order to fulfill the evaluation requirements specified by the WUTC. For 2013, Avista has incorporated \$150,000 into the EM&V budget as a placeholder for this effort.

### **Electric Conservation Potential Assessment**

Pursuant to Washington's I-937 ten conditions, an electric Conservation Potential Assessment (CPA) is required every two years.<sup>4</sup> This study began in 2012 and will complete in early 2013. This CPA will be used to inform the Company's Conservation section of its 2013 Electric Integrated Resource Plan (IRP) that will be filed August 2013. Prior to I-937, Avista had regularly performed an internal potential assessment leading to the development of a conservation supply curve.

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<sup>4</sup> See Washington Utilities and Transportation Commission Docket No. UE-111882, Order No. 1.

Avista's Washington natural gas decoupling and I-937 processes establish the appropriateness of an external CPA. Global Energy Partners (GEP) was selected to conduct this work for the prior IRP. GEP has since been acquired by EnerNOC, which has now been retained by the Company to provide an update to its electric CPA for the upcoming IRP. The ability to leverage the prior body of work from the same contractor will result in considerable cost-savings when compared to initiating a new study by another consultant. In addition, EnerNOC has completed several CPAs for Washington utilities and is familiar with the methodologies, ramp rates and assumptions used in the Northwest Power and Conservation Council's (NPCC) Sixth Power Plan.

Based on the level of effort applied to the recent electric and natural gas CPAs, the total budget for the electric CPA is projected to be \$135,000.

The CPA is an evaluation of a wide variety of potential efficiency measures including cost characteristics, energy savings and market potentials for each measure. From this analysis, a conservation supply curve is constructed, cost-effective measures are identified, and an estimate of the aggregate portfolio acquisition is established. This information is subsequently evaluated in great detail and incorporated into the operational planning processes of the DSM business plan. The objective is to establish a foundation for the identification of the cost-effective resource potential within Avista's service territory and to provide sufficient detail on those measures likely to be cost effective to support the 2013 Electric IRP and the 2014 DSM business plan.

EnerNOC will be applying their existing models and segmentation from Avista's previous CPA. Base-year market profiles will be updated with the most recent industry studies such as the Residential Energy Consumption Survey (RECS), Residential Building Stock Assessment (RBSA), Commercial Energy Consumption Survey (CBECS) and Manufacturing Energy Consumption Survey (MECS). Measures will be updated using Avista's Technical Reference Manual, the RTF's measure list and UES values as well as the NPCC's Sixth Power Plan workbooks. Other key assumptions, such as retail rates and customer growth, will also be updated. The NPCC's ramp rates will be used, adjusted for the Company's program history.

In order to provide better alignment with the Company's TRM, an additional cost-effectiveness screening will be conducted at the measure or program level consistent with program delivery. Additional information regarding the TRM is provided in the following section.