2011 DSM Business Plan

Avista Utilities

Energy Solutions Team

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2011 Washington / Idaho DSM Business Plan

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Preface to the 2011 DSM Business Plan

In prior years the Avista DSM Business Plan has been a means of disseminating and documenting the annual planning process that Avista engages in as part of the ongoing management of the demand-side management portfolio. As such the document has been a relatively informal working document completed over a four month planning horizon. This timeline facilitates the step-by-step development of the plan starting from the smallest components and moving upward.

The 2011 Avista DSM Business Plan is the first such plan that is required to be formally filed with the Washington Utilities and Transportation Commission (WUTC), per the "I-937 conditions" agreed to by the Company and attached as Appendix E.[1] These conditions require Avista to produce planning documents outlining strategies for the following year's operations by November 1st. This forward-looking Business Plan is in addition to a retrospective Annual Report evaluation of the prior year operations, filed by March 31st.

Within Avista's Idaho jurisdiction, the Company's Memorandum of Understanding (MOU) with the Idaho Public Utilities Commission (IPUC) Staff, attached to this document as Appendix F, also establishes general expectations for topics to be outlined as part of the annual report and/or business plan documents.[2] Though most of the requirements of that MOU are elements to be contained within the Company's Annual Report after the close of the year, other elements relate to planning for process and impact evaluations (contained within sections 3a and 3b of the MOU). The schedule of evaluations for the following year (required per section 5) are to be satisfied through the 2011 Evaluation, Measurement and Verification (EM&V) Plan contained as Appendix D of this Plan.

In addition to the DSM Business Plan and the DSM Annual Report, the Company meets external communication expectations through periodic meetings of the External Energy Efficiency ("Triple-E") Board, Triple-E conference calls and periodic written updates to the Triple-E Board.

The business planning process is not confined to the annual process documented within this Business Plan. Updates to the Plan will be identified and implemented, as appropriate, during 2011. Modifications to the plan lead to the Plan will be filed with the Washington and Idaho Commissions during the course of the year.

The Company continues to view the Business Plan as a working document summarizing the annual comprehensive evaluation of DSM planning issues. As such, greater emphasis is placed upon the quantitative calculations, identification and planning around key issues for the following year rather than the formality of the document itself. This plan is also the basis for the beginning of a discussion with external stakeholders as well as the foundation for the Company's strategies in 2011.

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[1] Reference will be made to the "I-937 conditions" throughout this document. The formal description of the relevant WUTC case is Docket No. UE-100176, Avista's "Ten-Year Achievable Conservation Potential And Biennial Electric Target Under RCW 19.285.040 and WAC 480-109-010," citing to Order 01, dated May 13, 2010.

[2] See "Memorandum of Understanding For Prudency Determination of DSM Expenditures" entered into between the Idaho Power Company, Avista Utilities, PacifiCorp (dba Rocky Mountain Power and the Staff of the Idaho Public Utilities Commission, dated December 21, 2009

Executive Summary

Avista's 2011 DSM Business Plan contains a snapshot of the planning process that Avista has initiated to prepare the Company's energy efficiency programs for a changing environment in 2011 and beyond. These changes require the Company to address a number of challenges in regards to achieving energy acquisition targets, meeting cost-effectiveness criteria and satisfying regulatory reporting requirements. The Plan must focuses upon a number of other elements of demand-side management (DSM) operations that are required to deliver upon the DSM core mission of providing value to Avista's customers. The Company anticipates that the key challenges to be addressed in 2011 involve:

- Managing for the uncertainties created by the timing of the completion and delivery of several key determinants to Avista's energy acquisition claim. These uncertainties relate to the realization rates resulting from external independent electric and natural gas impact and process analyses and the completion of energy savings attributed to Avista based upon our participation in the Northwest Energy Efficiency Alliance. Those uncertainties create challenges in Avista's ability to plan for meeting electric acquisition targets established under Washington's I-937 and Washington natural gas decoupling requirements.
- Meeting natural gas acquisition targets established within the most recent Integrated Resource Plan.
- Maintaining the cost-effectiveness of the natural gas DSM portfolio.
- Fully meeting the evaluation, measurement and verification (EM&V) expectations established as a result of the Idaho Memorandum of Understanding, the Washington "Initiative 937 conditions" established by the Washington Utilities and Transportation Commission and the results of Avista's 2010 EM&V Collaborative.

Recognizing that success requires more than simply meeting the challenges of the future but also demand that opportunities are recognized and pursued, the Company has also established the objective of achieving progress within the following areas:

- Make the best possible use of the success that Avista has had in substantially reducing tariff rider balances by exploring the potential for expansions of cost-effective DSM programs and/or reductions in the tariff rider levels, or a combination of the two.
- Accelerate efforts to work with regional partners to improve the opportunities for natural gas efficiency acquisition through regional cooperation including, but not necessarily limited to, market transformation efforts.
- Leverage the increased interest in energy efficiency to enhance the success of our DSM programs. This may include making the use of expertise and skills of individuals and organizations outside the normal scope of utility interaction and the expansion and improvement in the forums used to obtain and make use of this input.
- Continue to track innovative approaches to helping our customers realize the benefits of energy efficiency through the adoption of energy efficient behaviors as well as the installation of efficient end-use equipment.

This business planning document is intended as a description of a continuous planning process at a particular point in time. As such, this process has no well-defined beginning or end. To

maintain, and enhance, the degree of meaningful external involvement within this process over the course of the following year, revisions and updates to the plans for 2011 are to be expected as part of the task of actively managing the DSM portfolio.

Quick Reference Guide to Commonly Used Terms

The following common terms are used frequently throughout the business planning process and in this document. For the reader's benefit, these definitions and background are presented as follows.

Avoided Cost
Theoretical costs that the Company would not incur by selecting an alternative path or option. Avoided costs, as defined by the Public Utility Regulatory Policies Act (PURPA), are incremental energy or capacity or both which but for the purchase from qualifying facilities the utility would either generate itself or purchase from another source.

AFUE (Annual Fuel Utilization Efficiency)
The measure of seasonal or annual efficiency of a furnace or boiler. It takes into account the cyclic on/off operation and associated energy losses of the heating unit as it responds to changes in the load, which in turn is affected by changes in weather and occupant controls.

AMI (Advanced Metering Infrastructure)
Systems that measure, collect and analyze energy usage, from advanced devices such as electricity meters, gas meters and/or water meters through various communication media on request or on a pre-determined schedule.

AMR (Advanced Meter Reading)
The technology of automatically collecting data from energy metering devices and transferring that data to a central database for billing and/or analyzing.

ANSI (American National Standards Institute)
A source for information on national, regional, international standards and conformity assessment issues.

ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers
To advance "technology to serve humanity and promote a sustainable world. Membership is open to any person associated with the field."

Base Load Generation
Electric generating facilities that are operated to the greatest extent possible to maximize system mechanical and thermal efficiency and minimize system operating costs.

Black Scholes Model
An option-pricing model derived in 1973 for securities options. It was later refined in 1976 for options on futures (commonly referred to as the Black 76 or simply "Black model"). The Black model is widely used in the commodity arena to value commodity options. The model can also be used to distinguish between underlying certain equivalent value of an asset and the risk premium associated with price volatility.

Btu (British Thermal Unit)
The amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit. It is used to compare the heat producing value of different fuels. Natural gas futures and forward contracts typically are traded in mmBtu's (million of Btu's).

CAP (Community Action Partnership)
General term for Community Action Programs, Community Action Agencies, and Community Action Centers that through federal and state and other funding sources (e.g. utility constitutions) provide services such as low-income weatherization.

Capacity
Electricity: The rated load-carrying capability of a power generating unit or transmission line, typically expressed in megawatts. Some forward power contracts will specify the amount of capacity available that the purchaser pays a demand charge on the right to call on this amount of energy when needed. Many capacity contracts are analogous to a call option. Also, the maximum generation capability of an electric generating plant in any given hour.
Natural Gas: The rated transportation volume of natural gas pipelines, typically expressed in mmBtu's. Also, the maximum amount of Dth that can pass through a pipeline in any given day.

Capacity Charge
In natural gas or electricity markets, a price set based on reserved capacity or measured demand and irrespective of energy delivered. Also know as a demand charge.

CEE (Consortium for Energy Efficiency)
Consortium of efficiency program administrators from across the U.S. and Canada who work together on common approaches to advancing efficiency. Through joining forces, the individual efficiency programs of CEE are able to partner not only with each other, but with other industries, trade associations, and government agencies. By working together at CEE, administrators leverage the effect of their funding dollars, exchange information on effective practices and, by doing so, achieve greater energy efficiency for the public good.

CFL (Compact Florescent Lamps)
CFLs use between one fifth and one third of the power of equivalent incandescent lamps. While the purchase price of an integrated CFL is typically 3 to 10 times greater than that of an equivalent incandescent lamp, the extended lifetime and lower energy use will compensate for the higher initial cost.

CNG (Compressed Natural Gas)
The compression of natural gas in storage vessels to pressures of 2,400 to 3,600 pounds per square inch, generally for use as a vehicle fuel.

COB (California Oregon Border)
Area where utilities in the Northwest connect to those in California and a very common trading hub or pricing point for forward electricity contracts.

Coincidence Factor
The ratio of the maximum simultaneous total demand of a group of customers to the sum of the maximum power demands of the individual customers comprising the group (in percent).

COP (Coefficient of Performance)
The coefficient of performance of a heat pump is the ratio of the output of heat to the supplied work or COP = Q/W ; where Q is the heat transferred by the system and W is the work consumed by the compressor.

Cost of Service
The actual costs of providing service to individual customers, groups of customers, or an entire customer base. In the energy industry, cost-of-service analyses are performed at all stages of the supply chain from generation through billing. Utilities use these studies to determine how to spread the rate increase to customer classes such as residential, commercial, industrial, and irrigation end-users.

Critical Energy
The average energy produced under coordinated operation during the critical or highest-use period.

Customer/Customer Classes
A category(ies) of customer(s) defined by provisions found in tariff(s) published by the entity providing service, approved by the PUC. Examples of customer classes are residential, commercial, industrial, agricultural, local distribution company, core and non-core.

DCU (Digital Control Unit)
Load control switch usually associated near end-use equipment (e.g. on an exterior wall of a home to control a hot water tank).

Decoupling
In conventional utility regulation, utilities make money based on how much energy they sell. A utility's rates are set based largely on an estimation of costs of providing service over a certain set time period, with an allowed profit margin, divided by a forecasted amount of unit sales over the same time period. If the actual sales turn out to be as forecasted, the utility will recover all of its fixed costs and its set profit margin. If the actual sales exceed the forecast, the utility will earn extra profit.

Degree-Day
A measure of the variation of one day's temperature against a standard reference temperature. There are both cooling degree-days (CDDs) and heating degree-days (HDDs). Utilities typically use degree days as a common measure of the trend amount of electric power to be consumed based on the heating or cooling demand. The difference between the mean daily temperature and 65 degrees Fahrenheit. A general measure of the need for heating (negative) or cooling (positive).

Demand
The load that is drawn from the source of supply over a specified interval of time (in kilowatts, kilovolt-amperes, or amperes). Also, the rate at which natural gas is delivered to or by a system, part of a system or piece of equipment, expressed in cubic feet, therms, BTUs or multiples thereof, for a designated period of time such as during a 24-hour day.

Demand Factor
The ratio of the maximum demand to the total connected load for a defined part of the electric system (in percent).

DG (Distributed Generation)
Electricity that is generated from many small energy sources usually at the end-use or customer site.

Distribution
The portion of the utility system from the transformer in the substation to the Point of Delivery for the customer. The Distribution System is the "last stage" in providing service to the customer. It is typically the (lower voltage) circuits that are rated for 13.8 kV in Avista's system. These are the "lines behind your house" and can be underground as well as overhead.

DR (Demand Response)
Mechanisms to manage the demand from customers in response to supply condition; for example, having electricity customers reduce their consumption at critical times or in response to market prices. Passive DR is employed to customers via pricing signals, such as inverted tier rates, time of use (TOU) or critical peak pricing (CPP).

DREE Project (Distribution Reliability and Energy Efficiency Project)
DREEP is Avista's Living Lab for Smart Grid testing that analyzes many aspects of the distribution system in order to evaluate how the system can become more efficient. It includes 12 measures; one being Demand Response.

DSM (Demand Side Management)
The process of assisting customers in using energy more efficiently. Used interchangeably with Energy Efficiency and Conservation although conservation technically means using less while DSM and energy efficiency means using less while still having the same useful output of function.

Dth (Decatherm)
A measure of gas heating content equal to one million mmBtu's.

EF (Energy Factor)
The measure of overall efficiency for a variety of appliances. For water heaters, the energy factor is based on three items: 1) the recovery efficiency, or how efficiently the heat from the energy source is transferred to the water; 2) stand-by losses, or the percentage of heat lost per hour from the stored water compared to the content of the water: and 3) cycling losses.

Electric PCA, ERM
The Purchase Cost Adjustment (PCA) and Energy Recovery Mechanism (ERM) are regulatory accounting mechanisms designed to recover/rebate deferred power supply costs associated with such things as abnormal stream flow conditions and changes in the wholesale market prices.

Electric Trading Time Frames
1) Heavy Load or Peak: Standard time frame for purchase/sale of electricity, 16 hours per day, Monday through Saturday, hours 0700 through 2200.
2) Light load or Off-Peak: Standard time frame for purchase/sale or electricity, Monday through Saturday, hours 0100 through 0600, 2300 and 2400, and all 24 hours on Sunday. All Hours of Flat - 24 hours, every day of the time period. Forward electric transactions – Trade in standard time frames of balance of the month, forward individual months, calendar quarters – January- March, April - June, July - August and October – November, and calendar years. All forward transactions can be peak, off-peak or flat.
3) Real -Time or Hourly: Electricity is purchased and sold every hour.
4) Pre-Schedule - Electricity Heat Rate Swap: Selling gas and purchasing electricity or purchasing gas and selling electricity in proportions to roughly equate if generating at a specific plant with an estimated heat rate. Transaction is made to take economic advantage of changing relationship between electric and gas prices.

EM&V (Evaluation Measurement & Verification)
This is composed of impact analysis (the measurement of the impact of the installation of an efficiency measure), process analysis (the evaluation of a process with the intent of developing superior approaches through obtaining a better understanding of the process itself), market analysis (evaluating the interaction between the market and measure to include the estimation of net-to-gross ratios, technical, economic and acquirable potentials) and cost analysis (the estimation of the cost characteristics of a measure with particular attention to incremental cost and the influence that a program may have upon those cost characteristics).

EPA (United States Environmental Protection Agency)
The EPA is the Federal government agency that leads the nation's environmental science, research, education and assessment efforts. The mission of the Environmental Protection Agency is to protect human health and the environment.

ERM
See Electric PCA, ERM

ERV (Energy Recovery Ventilator)
An energy recovery ventilator saves energy and helps to keep indoor humidity within a healthy range. It transfers heat and moisture between the incoming and outgoing air.

Every Little Bit
Avista's Energy Efficiency Outreach Campaign. "When it comes to energy efficiency, every little bit adds up."

FERC
Federal Energy Regulatory Commission

Firm Power
Power or power-producing capacity intended to be available at all times during the period covered by a commitment, even under adverse conditions.

Firm Service
Natural gas or electricity service offered to customers that anticipates no planned interruption.

Firm Transportation
Natural gas transportation services for which facilities have been designed, installed and dedicated to a certified volume. Firm transportation services takes priority over interruptible service.

Fixed Costs
Costs incurred by the Company that do not vary with changes in overall customer usage. Typically, fixed costs for electric and natural gas service include the cost of meters, distribution service, meter reading, and billing.

GAMA (Gas Appliance Manufacturer's Association)
Represents manufacturers of appliances, components and products used in connection with space heating, water heating and commercial food service.

Heat Rate
The quantity (expressed as a ratio) of fuel necessary to generate one kWh of electricity, stated in British thermal units (Btu). A measure of how efficiently an electric generator converts thermal energy into electricity (i.e. the lower the heat rate, the higher the conversion efficiency).

HRV (Heat Recovery Ventilator)
A ventilation system that recovers the heat energy in the exhaust air, and transfers it to fresh air as it enters the building. HRV provides fresh air and improved climate control, while also saving energy by reducing the heating (or cooling) requirements.

HSPF (Heating Seasonal Performance Factor)
The measure of the heating efficiency of a heat pump. The HSPF is a heat pump's estimated seasonal heating output in Btu's divided by the amount of energy that it consumers in watt-hours.

HVAC (Heating, Ventilation, and Air Conditioning)
Sometimes referred to as climate control, the HVAC is particularly important in the design of medium to large industrial and office buildings where humidity and temperature must all be closely regulated whilst maintaining safe and healthy conditions within.

IAQ (Indoor Air Quality)IAQ is a measure of the content of interior air that could affect health and comfort of building occupants.

IHD (In Home Display)
A device used to provide energy usage feedback to a customer on a real or near-real time basis.

IOU (Investor-Owned Utility)
A utility whose stock is publically traded and owned by private shareholders.

IPUC (Idaho Public Utilities Commission)
The IPUC regulates investor-owned utilities within the state of Idaho.

IRP (Integrated Resource Plan)
An IRP is a comprehensive evaluation of future electric or natural gas resource plans. The IRP must evaluate the full range of resource alternatives to provide adequate and reliable service to a customer's needs at the lowest possible risk-adjusted system cost. These plans are filed with the
state public utility commissions on a periodic basis.

IRP TAC (Technical Advisory Committee)
Internal and external advisory committee for the IRP process.

Interruptible Service
Natural gas or electricity sales that are subject to interruption for a specified number of days or hours during times of peak demand or in the event of system emergencies. In exchange for interruptibility, buyers pay lower prices. Also for natural gas transportation or sales service which is subject to interruption at the option of any of the involved parties (seller, pipeline, LDC, buyer) because of energy shortages, capacity constraints, or economic considerations.

Kilowatt (kW)
One thousand watts. A watt is 1/746 horsepower (kW = 1.34 horsepower) or the power produced by a current of one ampere across a potential difference of one volt.

Kilowatt-Hour (kWh)
One thousand watts operating for one hour. Energy over time becomes work or 1.34 horsepower operating for one hour.

LDC (Local Distribution Company)
A natural gas utility providing service to customers.

Line Losses
The amount of electricity lost or assumed lost when transmitting over transmission or distribution lines. This is the difference between the quantity of electricity generated and the quantity delivered at some point in the electric system.

LIHEAP (Low Income Home Energy Assistance Program)
Federal energy assistance program, available to qualifying households based on income, usually distributed by community action agencies or partnerships.

LIRAP (Low Income Rate Assistance Program)
LIRAP provides funding (collected from Avista's tariff rider) to CAP agencies for distribution to Avista customers who are least able to afford their utility bill.

LMS (Load Management System)
LMS is used by Avista to send load control signals to Demand Response equipment to cycle and/or curtail customer appliances.

LNG (Liquefied Natural Gas)
Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure. It remains a liquid at minus 116 degrees Fahrenheit and 673 psig. In volume, it occupies 1/600 of that of the vapor.

Load
The amount of power carried by a utility system at a specified time. Load is also referred to as demand.

Load Factor
The ratio between average and peak usage for electricity and gas customers. The higher the load factor, the smaller the difference between average and peak demand. The average load of a customer, or group of customers, or entire system, divided by the maximum load can be calculated over any time period. For example, assuming 3650 therms of natural gas usage over a year, the average daily load is 3650/365 or 10 therms. If the peak day load or maximum load was 20 therms, the load factor was 50 percent.

Load Growth
This is the change, +/-, in the total therms (natural gas) and kWh (electric) that is consumed by retail customers from year to year. The amount the peak load or average load in an area increases over time (usually reported as an annual load growth in some percentage).

MDM/MDMS (Meter Data Management System)
Used to organize meter interval data from an automated meter reading system.

Measure
A measure is an energy-efficiency product or service that can be offered relatively independently of other similar products or services.

MEF (Modified Energy Factor)
A new equation that replaced Energy Factor as a way to compare the relative efficiency of different units of clothes washers. The higher the Modified Energy Factor, the more efficient the clothes washer is.

Megawatt (MW)
One million watts, or one thousand kilowatts. Forward power contracts are normally traded in megawatts.

Megawatt-hour (MWh)
One million watts operating for one hour, energy over time becomes work or 1,340 horsepower operating for one hour. A MWh is an average megawatt produced or consumed for one hour.

MERV (Minimum Efficiency Reporting Value)
MERV ratings are used to rate the ability of an air conditioning filter to remove dust fro, the air as it passes through the filter. MERV is a standard used to measure the overall efficiency of a filter.

Mid-Columbia (Mid-C)
Electricity transacting hub or point, and point-of-connection to the transmission lines of the Columbia River hydro-generation facilities. The most common and liquid electricity trading point in the Northwest.

mmBtu
A unit of heat equal to one million British thermal units. Natural Gas contracts are typically traded in mmBtu's. One futures contract is 10,000 mmBtu's/day.

NARUC
National Association of Regulatory Utility Commissioners is an association representing the State public service commissioners who regulate essential utility services, such as electricity, gas, telecommunications, water, and transportation, throughout the country. As regulators, their members are charged with protecting the public and ensuring that rates charged by regulated utilities are fair, just, and reasonable.

Native Load
The retail customer load in which Avista has responsibility to plan and provide electric supply (includes scheduled losses incurred by Avista's systems; and does not include scheduled losses incurred by other parties wheeling of power on Avista's system).

Natural Gas
A naturally occurring mixture of hydrocarbon and non-hydro carbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

NEB (Non-Energy Benefits)
Benefits (or costs) resulting from the installation of an efficiency measure that are unrelated to the energy resource. This may any value or cost but is most commonly the impact of changes in water usage, sewage cost, reduced maintenance cost, etc. Values or costs which cannot be reasonably quantified (such as security, safety, productivity) are not included in Avista's measurement of non-energy benefits

NEEA
The Northwest Energy Efficiency Alliance is a non-profit organization working to encourage the development and adoption of energy-efficient products and services. NEEA is supported by the region's electric utilities, public benefits administrators, state governments, public interest groups and efficiency industry representatives. This unique partnership has helped make the Northwest

region a national leader in energy efficiency. NEEA operates programs in Idaho, Montana, Oregon and Washington. It is funded by leading Northwest electric utilities as well as Energy Trust of Oregon and the Bonneville Power Administration, which pays on behalf of its electric utility customers. This money is pooled and used to fund projects approved by our Board of Directors.

NEET
Northwest Energy Efficiency Taskforce was formed to bring together a group of high-level leaders to focus and improve the efficiency of electricity use throughout the Pacific Northwest for a discrete time period, since expired. The taskforce considered innovative ideas from successful energy efficiency programs and explored how, through regional collaboration, energy efficiency could be delivered more efficiently.

NERC
North American Electricity Reliability Council Their mission is to ensure the reliability of the bulk power system in North America by developing and enforcing reliability standards; assess reliability annually via 10-year and seasonal forecasts; monitor the bulk power system; evaluate users, owners, and operators for preparedness; and educate, train, and certify industry personnel. NERC is a self-regulatory organization, subject to oversight by the U.S. Federal Energy Regulatory Commission and governmental authorities in Canada.

NPCC (Northwest Power and Conservation Council)
The Council was established by the Northwest Power Act in 1980 to provide the electric customers of Washington, Idaho, Oregon and Montana with regional electric power planning coordination.

Off Peak
Times of low energy demand, typically nights and weekends. Off-peak hours in the Western U.S. are typified as the time from 10 p.m. to 8 a.m. Monday through Saturday, and all day Sunday. Forward contracts typically trade as on-peak, off peak, or flat (24 hours).

On Peak
Times of high-energy demand when it is at its peak. On-peak varies by region. In the Western United States, it is typically 6 a.m. to 10 p.m. Monday through Saturday. 0600 - 2200 Monday through Saturday, excluding NERC holidays.

OPUC (Public Utility Commission of Oregon)
The agency that regulates investor-owned utilities in Oregon.

Participant Test
One of four standard practice tests developed in California as a means to evaluate the cost-effectiveness of demand side management programs from the perspectives of different participants. The Participant Test shows the cost-effectiveness for the “participating” customer. It includes the value of the energy savings among other things from the project vs. the customer project cost.

PCA
See Electric PCA, ERM

PCT (Programmable Communicating Thermostat)
A load controlling thermostat that can communicate with a utility's load management system by internet protocol or radio frequency (RF).

Peak Load
Maximum demand, Peak demand. The greatest of all demands that have occurred during a given period.

Peaking Capability
Generating capacity normally designed for use only during maximum load period of a designated interval.

PGA (Purchase Gas Adjustment)
The Purchase Gas Adjustment is a mechanism that is periodically filed with the Utility Commissions and designed to recover or rebate the deferred changes in the cost of natural gas purchased to service customer loads.

Photovoltaic (PV)
Technology and research related to the application of solar cells for energy by converting sunlight directly into electricity.

Power Plan
The Northwest Power and Conservation Council is required to complete a regional Power Plan every five years. The Plan includes both supply-side (generation) and conservation resources. (Per the definition of "conservation" in the Northwest Power Act, electric-to-natural gas conversions are not considered to be "conservation" within the Plan). The Sixth Power Plan is currently nearing approval by the Council.

PPA (Power Purchase Agreement)
A legal contract between an electricity generator and a purchaser of energy or capacity.

Prescriptive
A prescriptive program is a standard offer for incentives for the installation of an energy efficiency measure. Prescriptive programs are generally applied when the measures are relatively low cost and are employed in relatively similar applications.

Program
A program is an aggregation of one or more energy-efficiency measures into a package that can be marketed to customers.

PUC (Public Utility Commission)
State agencies that regulate the tariffs (pricing) of investor-owned utility companies.

PUD (Public Utility District)
A political subdivision with territorial boundaries greater than a municipality and sometimes larger than a county for the purpose of generating, transmitting and distributing electric energy and/or other utility commodities.

Rate Base
The capital investment (plant assets on the balance sheet) that regulatory commissions deem to be prudent and, therefore, allow to be recovered from customers. Further, it is the only utility cost that is allowed to have a profit component (return on equity) imputed upon it. All other costs are only returned dollar for dollar at the time of a rate case.

Rate Design
The manner in which retail prices are structured to recover the cost of service from each customer class. Rate design includes pricing components such as basic charges, demand charges and energy charges.

Ratepayer Impact
This concept is applied to analyses of projects to determine if the project will increase, decrease or be neutral to existing rates that customers currently are charged. This impact can be interpreted in total over the life of the project or year-by-year during the project's duration.

RGI (Renewable Generation Incentive)
Avista's distributed renewable incentive in Washington.

RIM (Rate Impact Measure Test)
One of four standard practice tests developed in California as a means to evaluate the cost-effectiveness of demand side management programs from the perspectives of different participants. The RIM Test (aka the "non-participant test") indicates if the program will result in a rate increase or decrease. The non-participating customer bears the cost of the rate increase without obtaining any program benefits.

RTF (Regional Technical Forum)
An advisory committee established in 1999 to develop standards to verify and evaluate conservation savings. Members are appointed by the Council and include individuals experienced in conservation program planning, implementation and evaluation. Part of the Northwest Power and Conservation Council.

R-Value
A measure of thermal resistance used in the building and construction industry. The bigger the number, the better the building insulation's effectiveness. R value is the reciprocal of U factor.

Schedules 90 and 190
These tariffs authorize Avista to operate electric-efficiency (Schedule 90) and natural gas efficiency (Schedule 190) programs within Washington and Idaho. Electric to natural gas conversions are considered electric-efficiency programs, subject to achieving a specified net BTU efficiency.

Schedules 91 and 191
These tariffs establish a surcharge levied upon retail electric (Schedule 91) and natural gas (Schedule 191) sales to fund electric and natural gas-efficiency portfolios respectively.

Seasonality
The seasonal cycle or pattern refers to the tendency of market prices to move in a given direction at certain times of the year. Generally, seasonality refers to the changing supply and demand over various times of the year.

SEER (Seasonal Energy Efficiency Factor)
Performance Rating of Air-Conditioning and Air-Source Heat Pump Equipment. The higher the SEER rating of a unit, the more energy efficient it is. The SEER rating is the Btu of cooling output during a typical cooling-season divided by the total electric energy input in watt-hours during the same period.

Site Specific
A non-residential program offering individualized calculations for incentives upon any electric or natural gas-efficiency measure not incorporated into a prescriptive program.

SNAP (Spokane Neighborhood Action Programs)
A Spokane organization that provides financial, housing, and human services assistance to low-income customers.

Societal Test
The societal test is one of four standard practice tests developed in California as a means to evaluate the cost-effectiveness of demand-side management programs from the perspectives of different participants. This is a true societal cost-benefit test in that all transfer payments are excluded and externalities are fully incorporated into the calculations.

T-5
Usually most efficient Tubular Type, 5/8 inch diameter fluorescent lighting.

T-8
More efficient Tubular Type, 1 inch diameter fluorescent lighting.

T-12
Tubular Type, 12/8 inch diameter fluorescent lighting.

Tariff Rider
The surcharge on retail electric and natural gas sales that provides the funding for Avista's DSM programs. This surcharge is authorized under Schedule 91 (for electric programs) and Schedule 191 (for natural gas programs).

T&D (Transmission and Distribution)
Transmission is the portion of the utility plant used to transmit electric energy in bulk to other principal parts of the system. Distribution is the portion of the utility system from the transformer

in the substation to the Point of Delivery for the customer. These are the "lines behind your house" and can be underground as well as overhead.

Therm
A measure of the heat content of gas equal to 100,000 Btu.

Throughput
Related to natural gas load change, but usually referenced to the energy use per customer/premises/meter from year to year.

TRC (Total Resource Cost Test)
One of the four standard practice tests commonly used to evaluate that cost-effectiveness of DSM programs. The TRC test evaluates the cost-effectiveness from the viewpoint of all customers on the utility system. The primary benefits include the avoided cost of energy and non-energy benefits in comparison to the customer incremental cost and non-incentive utility expenditures. The California standard practice allows for tax credits to be considered offsets to the customer incremental cost (though Avista calculates the TRC test with and without this offset).

Triple-E (External Energy Efficiency Board)
Avista's demand-side management stakeholder advisory group.

U-Factor
U-Factor measures the heat transfer through a window, door, or skylight and tells you how well the product insulates. The lower the U-Factor, the greater resistance to heat flow (in and out) and the better its insulation value.
(U = 1/R-Value)

UCT (Utility Cost Test)
One of the four standard practice tests commonly used to evaluate that cost-effectiveness of DSM programs. The UCT evaluates the cost-effectiveness based upon a programs ability to minimize overall utility costs. The primary benefits are the avoided cost of energy in comparison to the incentive and non-incentive utility costs. Also referred to as the Program Administrator Cost Test.

WACOG (Weighted Average Cost of Gas)
The price paid for natural gas delivered to an LDC's city gate, purchased from various entities, such as pipelines, producers or brokers, based on the individual volumes of gas that make up the total quantity of supplies to a certain region.

Weather Normalized
This is an adjustment that is made to actual energy usage, stream-flows, etc., which would have happened if "normal" weather conditions would have taken place.

WUTC (Washington Utilities and Transportation Commission)
The agency that regulates investor-owned utilities in Washington.

Avista-Specific DSM Terminology and Methodologies

Over the years, Avista's Demand-Side Management (DSM) portfolio has evolved through several phases and, during that time, certain Company-specific terminology and methodologies have developed. Modifications to the business planning process have been made to establish a consistency with the business planning task and the provisions of the Idaho Public Utility Commission (IPUC) staff Memorandum of Understanding (MOU). In order to proceed with an improved degree of clarity, the following new and/or unique definitions are briefly defined before proceeding into our planning process.

Measures, Programs and Portfolios

For purposes of disaggregating our energy-efficiency efforts into comprehensive packages, both for marketing them to customers as well as for analysis and planning, the Company has adopted general rules for the definitions of different levels of aggregation. From the bottom (most specific) up to the top (most aggregated) the general definitions are as follows:

Measure: An individual efficient product or service and its delivery service. A product may have multiple delivery mechanisms, for example residential CFL's, and therefore be the basis for multiple measures within the portfolio.

Program: One or more related (e.g. lighting, shell) measures that are aggregated into a program for purposes of establishing implementation responsibilities, evaluation or to improve their marketability to customers.

Portfolio: Aggregations of programs around a specific characteristic.

- Market Segment Portfolio: An aggregation of programs within a specific market segment (residential, limited income, non-residential, regional etc).
- Fuel Portfolio: All programs within a fuel (electric or natural gas).
- Jurisdictional Portfolio: All programs within a jurisdiction (Washington or Idaho).
- Local or Regional Portfolio: Distinguishing between Avista's local programs and our participation in regional programs.
- Fuel/Jurisdictional Portfolio: A combination of the two aggregations above.
- Overall Portfolio: A combination of all Avista DSM efforts.

The application of these definitions to the business planning analysis can occasionally be subjective. Avista has considered several alternate approaches to defining various packages of efficiency options and have yet to find one that fully meets our need for both individually assessing measures as well as recognizing the frequent interdependence of measures. These definitions are expected to continue to evolve over time to meet the business planning needs at that time.

"Sub-TRC" and "sub-UCT" tests

The IPUC Staff MOU has formalized Avista's historical practice of evaluating the contribution of each individual measure to the portfolio Total Resource Cost (TRC) test and/or Utility Cost Test (UCT) as appropriate. Avista has committed to offering only those measures or programs that are expected to contribute to the overall cost-effectiveness of our overall DSM effort, absent reasonable and documented exceptions.

In the past, the Company has employed what we have termed a “sub-TRC” and “sub-UCT” test to evaluate the contributions of an individual measure or program to the TRC or UCT cost-effectiveness of the overall portfolio. These tests include the costs and benefits that a measure or program *incrementally* contributes to the portfolio.

Generally it is the case that all of the benefits of a measure or program are incremental (e.g. if the measure were excluded the portfolio would not obtain the avoided cost or non-energy benefit value). But costs become progressively incremental as the degree of aggregation increases from measures progressing upwards to the overall portfolio.

Customer incremental cost and direct incentives are always incremental costs even at the lowest levels of portfolio disaggregation. Non-incentive utility costs (labor, outreach etc) that are not materially changed by the exclusion of a particular measure are not considered incremental costs at the measure level. As measures are aggregated into programs it is generally true that more of these costs become incremental.

This approach to evaluating measures and programs enhances the cost-effectiveness of the overall portfolio by allowing for the inclusion of those components that positively contribute to cost-effectiveness but may not be able to bear an allocation of fixed infrastructure costs.

Avista has historically used this analytical approach, and most frequently the sub-TRC test, to evaluate the individual contributions of measures being considered for addition or termination from the portfolio. It is also used to target outreach efforts, to evaluate the value of the incremental throughput of outreach efforts and to establish ‘break-even’ levels of additional throughput necessary to make such efforts cost-effective.

The sub-UCT test is much less frequently applied. It is nearly always the case that the sub-TRC test will be the more difficult test to pass and therefore will be the constraint upon the measure or programs contribution to the portfolio. This is generally the case because the customer incremental cost (incorporated within the TRC but not the UCT) is nearly always higher than the customer direct incentive (which is included in the UCT but not the TRC). Avista’s programs operate under an incentive that is capped at 50% of the customer incremental cost, thus this relationship between the TRC and UCT test has only rare exceptions.

In order to meaningfully incorporate the commitment to offering only TRC cost-effective programs (or justifiable exceptions) Avista has included within the analysis leading to this business plan an individual evaluation of the sub-TRC of over 500 measures and over 40 programs. The result of this analysis has been incorporated within the program plans presented within this document. References to the practical rigidities involved in measure or program termination (e.g. contractual obligations, program sunset dates, measure packaging etc.) are also included as necessary.

Net-to-Gross Adjustments

Additional adjustments to the sub-TRC calculations to exclude the impact of programmatic participation by customers who would have installed the efficiency measure even in the absence of the utility program are performed on at a measure, program and portfolio level. These adjustments symmetrically exclude both the benefits (energy and non-energy) and costs of the non-net customer participants (those who would have adopted the measure without utility intervention). Essentially this approach excludes the ability to assign fixed infrastructure costs to those customers whose behavior was not influenced by the program.

The sensitivity of the cost-effectiveness calculations to various net-to-gross ratios is strongly influenced by the proportion of these fixed costs. In the case of the TRC test the primary driver of sensitivity to net-to-gross ratios is the proportion of fixed (not variable with additional customer throughput) non-incentive utility cost within the program.

As Avista's approach to marketing DSM services becomes increasingly reliant upon program outreach and technical services, and with increases in EM&V costs, non-incentive utility costs are gradually increasing and causing increased sensitivity to the net-to-gross ratio. This net-to-gross sensitivity is weighed against the benefits of these expenditures as part of the ongoing success of the portfolio. The proportion of non-incentive costs to overall DSM expenditures is tracked as an indicator of these trends, but there is not an analytically determinable optimum level that can be defined.

As of the time that the 2011 business planning process was being concluded the Company does not have a completed study of net-to-gross ratios for any of the program or portfolios being evaluated. An RFP has been issued and proposals received, but the completion of the study is not expected until the first quarter of 2011. Consequently the Company has continued to rely upon a sensitivity analysis approach to incorporating net-to-gross considerations within the business plan. All measures, programs and portfolios have been evaluated based upon 100%, 75%, 50% and 25% net-to-gross ratios.

Treatment of State and Federal Tax Credits

In response to requests from the Triple-E Board, Avista incorporates within the sub-TRC analysis scenarios that include the use of state and federal tax credits to offset the customer incremental cost of a measure and alternative calculations where those offsets are not included.

Many of the state and federal tax credits are expected to begin expiring, due to the depletion of available funding, in late 2010 and early 2011. These tax credits currently impact several residential appliance and shell measures as well as distributed renewable generation.

Prescriptive and Site-Specific

Avista's tariffs establish the criteria for eligible measures and incentives that Avista may grant for those measures. To establish a means by which the Company can consistently and efficiently implement the provisions of these tariffs, a series of written protocols and documented

business practices has arisen over the years. One of these practices relate to the degree to which generalizations can and should be made in the implementation of efficiency measures.

The “prescriptive” term is applied to programs for which generalizations have been made as part of the program design. Programs that are “site-specific” are based upon project-specific information rather than references to typical or average applications of a measure.

Prescriptive programs allow for the program implementation to be streamlined, thus reducing cost and administrative burden. It also often improves the marketability of the program to customers and trade allies due to the ability to refer to fixed or easily calculated incentives rather than to the esoteric regulatory formulas governing the site-specific program. Properly applied prescriptive approaches can lead to significant enhancements to program throughput and cost-effectiveness. Prescriptive programs also generally exempt a customer from the requirement of signing a contract prior to the installation of the measure, thus reducing the administrative burden upon the customer.

A downside of “prescriptivizing” a program is the loss of individual accuracy in the calculation of the customer incentive. This can to some degree be addressed by careful segmentation of the market to maximize the uniformity of each category within a prescriptive program.

As a general rule, prescriptive programs are only applied in circumstances where the benefit of enhanced marketability and implementation cost-efficiencies outweigh the loss of accuracy in individualized calculations. The best prospects for prescriptive treatments are for small measures that are used in the same manner in the majority of their applications.

The calculation of energy savings for purposes of establishing Avista’s acquisition claim is unaffected by the prescriptive or site-specific treatment of a program. Through the EM&V process estimates of actual savings are made and incorporated into these claims without regard to the implementation approach used for the program.

The incentives offered for both prescriptive and site-specific programs are governed by Avista’s Schedule 90 and 190 tariffs (attached as Appendix B to this plan). The results of these formulas may be rounded to enhance marketability or adjusted to fit within a continuum of measures when applied to a prescriptive program. The incentive calculations are evaluated upon any noted significant change in incentive determinants. They are also periodically evaluated as part of the program manager responsibilities. Incentives for all measures were calculated as part of this business planning process and program managers consider adjustments as necessary.

Measures which are incorporated into a prescriptive program may only be pursued through that prescriptive program. Non-residential customers installing an efficiency measure which is not included in these programs may apply for a site-specific contract. Contracts are necessary prior to the installation of the measure implemented through the site-specific. Any non-residential efficiency measure not covered within the prescriptive programs qualifies for the site-specific program regardless of project size or cost-effectiveness. The Company does carefully target the program for cost-effective applications. The Company is proposing revisions to the incentive structures defined within Schedule 90 and 190 that will eliminate incentives for projects with very long energy simple paybacks.

The Planning Process

Avista's business planning process serves as an annual opportunity to comprehensively review the prospects for the following year, survey key objectives and develop plans for achieving and measuring those objectives.

The Company approaches this process with a 'blank slate' in that we consider most elements of our future environment to be within the scope of the planning process. Within the context of the 2011 Business Plan we do consider our commitments to achieving our Washington I-937 and natural gas decoupling objectives, the IPUC Staff MOU and agreements made as a consequence of Avista's EM&V and low-income collaborative processes to be firm planning objectives. Beyond these core commitments the strategy and tactics of how we meet those objectives are fully within the scope of the planning process.

Within this section several key elements of the planning process and the outcomes of that process will be described. The predominately descriptive findings, in conjunction with other topical issues to follow, will provide the background ultimately leading towards the final section of this Business Plan, "Issues Identified for 2011 Management Focus".

Prescriptive Measure Analysis

The foundation of the annual business planning process is a review of each and every prescriptive measure currently offered as well as prospective measures. Prospective measures may be derived from those identified in prior Integrated Resource Plan (IRP) analysis or they may be opportunities identified by Avista staff between IRP's.

Each individual measure is subjected to the previously described sub-TRC analysis. This analysis is repeated at the program and portfolio level. Scenarios with and without the application of tax credits and at various levels of net-to-gross ratios are incorporated within each one of these evaluations. Since there is generally little non-incentive utility cost considered to be incremental to individual measures, individual measures are typically fairly insensitive to the net-to-gross adjustments. At higher levels of aggregation, where more of the non-incentive utility costs are considered to be incremental, the net-to-gross sensitivity increases.

Measures which are significantly cost-ineffective under these sub-TRC test evaluations are reviewed by the assigned program manager. Several measures have been scheduled for termination in 2011 as a result of this analysis. Measures that are continued in spite of failing the sub-TRC analysis are generally retained due to their interaction with other measures, for example if their termination would leave a gap that would adversely impact the marketability of a larger package of measures which collectively pass the sub-TRC test. Support of market transformation efforts may also be considered as reasons to include what would otherwise be non-cost-effective measures.

The incentive levels for Avista's prescriptive programs are based upon the incentive guidelines provided in Schedules 90 and 190 and the typical characteristics of the specific measure. As part of the annual business planning process these incentive levels are recalculated based upon updated inputs. Significant deviations between current (or proposed) incentive levels and this calculation are noted to program managers for action. In order to retain the marketability of programs it is necessary to permit a degree of rounding in incentive levels and some flexibility to provide for a sensible continuum in the incentives of related measures (e.g. efficient motor incentives by horsepower).

Site-Specific Program Analysis

Avista's site-specific program is available for any non-residential efficiency measure which is not otherwise served through a prescriptive program. These programs are inherently unique to some degree and consequently cannot be evaluated in aggregate in the same manner that described for prescriptive programs. The incentives for these projects are individually determined based upon the incentive guidelines prescribed in Avista's Schedule 90 and 190 tariffs. The Company utilizes an Excel model and associated series of written policies to ensure the consistent and non-discriminatory application of the tariff to the site-specific program.

Incorporated into Avista's 2011 business planning is the presumption that Avista's filing for revisions to the incentive guidelines within Washington and Idaho Schedule 90 and 190 tariffs will be approved with an effective date very early in 2011. These incentives exclude any measure with an energy simple payback of over 13 years (eight years in the case of lighting measures) from receiving incentives under the program and from being incorporated within the cost-effectiveness of the DSM portfolio. (The revisions are more fully explained later in this section).

The exclusion of projects from receiving utility incentive payments or being incorporated within the portfolio cost-effectiveness does not necessarily exclude the ability of Avista to claim the documented installation of efficiency measures within Avista's service territory towards meeting the requirements of the 2010-2011 I-937 electric-efficiency acquisition target. This is consistent with the use of the Northwest Power and Conservation Council (NPCC) 6th Power Plan as the foundation for Avista's approved I-937 target. The NPCC methodology does not rest upon the prerequisite of utility intervention in the establishment of the efficiency target, thus it is inappropriate to exclude any documentable efficiency measures installed within Avista's service territory from being applied towards that target.

The approach used to incorporate expectations for the site-specific program into the 2011 business plan is based upon historical experience with modifications for the planned launch of two new prescriptive programs (that were previously part of the site-specific program), load growth, price elasticity and customer-specific expectations taken into consideration.

Electric Efficiency Acquisition Expectations

It is Avista's intent to develop a business plan that simultaneously achieves acquisition targets identified within our 2010-2011 Washington I-937 filing and Idaho electric IRP targets

as well as meeting non-acquisition objectives such as cost-effectiveness criteria, customer service expectations and general prudence requirements.

The 2010 and 2011 claimed local DSM acquisition achievements will be subject to revision based upon an external independent audit, per the requirements of Avista's I-937 conditions (attached within Appendix E). Avista's planning process is based upon the assumption that both the electric and natural gas audits will result in a 100% realization factor. Naturally the actual realization factor may be more or less than 100%. Unfortunately the timing of these audits (with a likely completion in the second quarter of 2012) prevent the Company from taking any management actions to address the issues identified within the audit during the year, nor does it give the Company the opportunity to take steps to increase acquisition to meet I-937 targets.

Several approaches have been identified to partially address the additional uncertainty imposed by the external independent audit process. These include scheduling a separate 2010 external evaluation of calendar year 2010 electric acquisition to be delivered in, approximately, the 2nd quarter of 2011 to give the Company some opportunity to modify programs prior to the end of the 2010-2011 I-937 compliance period. Measures which are easily verifiable and subject to relatively low realization rate uncertainty have been identified and targeted for ramp-up in 2011. It is also expected that improved internal EM&V processes (and adjustments to claims made as a result of the 2009 external independent audit of natural gas activities) will decrease any differences between Avista's claimed savings and the final result of the audit.

The 2011 Business Plan projections are for electric acquisition levels to lead to a 2010-2011 claim that are 14% above the comparable target. This projection is based upon the following calculation:

Washington I-937 Acquisition Calculations
2010-2011 Compliance Period
(all calculations are for the Washington jurisdiction only, units are 1st year kWh's)

	CY 2010	CY 2011	2010-2011
Local DSM acquisition (pre-audit)	76,000,000	52,793,234	128,793,234
Northwest Energy Efficiency Alliance	7,358,400	7,358,400	14,716,800
Transmission and distribution acquisition	-	-	-
Thermal generation efficiency acquisition	3,400,000	-	3,400,000
	86,758,400	60,151,634	146,910,034
Claimed I-937 compliant acquisition	146,910,034		
I-937 target	128,603,000		
Favorable (unfavorable) variance in kWh's	18,307,034		
Favorable (unfavorable) variance in %	14%		

Notably, a realization rate below 87.5% would result in failing to achieve the I-937 target under the current plan. This is well within the range of uncertainty for the 2011 electric portfolio realization rate.

The calculations above include estimates of Northwest Energy Efficiency Alliance (NEEA) acquisition of 1.2 amW for Avista's Washington and Idaho service territory (with a 70% share of that amount falling within Washington). The analysis leading to the measurement and regional distribution of these efficiency savings are not known until significantly after the close of the calendar year. However, NEEA is actively working with utilities to provide non-binding estimates of these amounts during the year to improve the ability for utilities to plan for meeting their targets.

Avista is involved in a SmartGrid pilot within the Pullman, Washington area as well as a series of distribution efficiency measures expected to be installed in the Spokane area. At the time that this planning process was completed the timing of these installations are uncertain, but is uncertain to what extent, if any, they will fall within the 2010-2011 I-937 compliance period. The Company has 3.4 million first-year kWh's of identified quantifiable efficiencies relating to operations at the Coyote Springs generating station that may fall within the scope of the conservation portion of I-937.

Electric efficiency acquisition within Idaho is expected to fall significantly short of 2011 IRP target. This shortfall is projected to be 29% based upon an assumption of a 100% realization rate and a 100% net-to-gross factor. The difference between the Washington and Idaho projections is largely attributable to the difference between a one-year and two-year target and the favorable variance expected in 2010 local acquisition.

The Company has a long-held and strong desire to maintain consistency between Idaho and Washington programs to the maximum extent possible due to the overlaps existing in metropolitan areas, trade allies and communications. At this point it appears that managing to meet the two-year Washington I-937 target will not necessarily be sufficient to also meet the one-year (2011) Idaho IRP target.

Idaho IRP Acquisition Calculations
Calendar Year 2011
(all calculations are for the Idaho jurisdiction only, units are 1st year kWh's)

Local DSM acquisition (pre-audit)	22,177,194	
Northwest Energy Efficiency Alliance	3,153,600	
TOTAL	25,330,794	
Idaho IRP target	35,805,624	
Favorable (unfavorable) variance in kWh's	(10,474,830)	
Favorable (unfavorable) variance in %		-29%

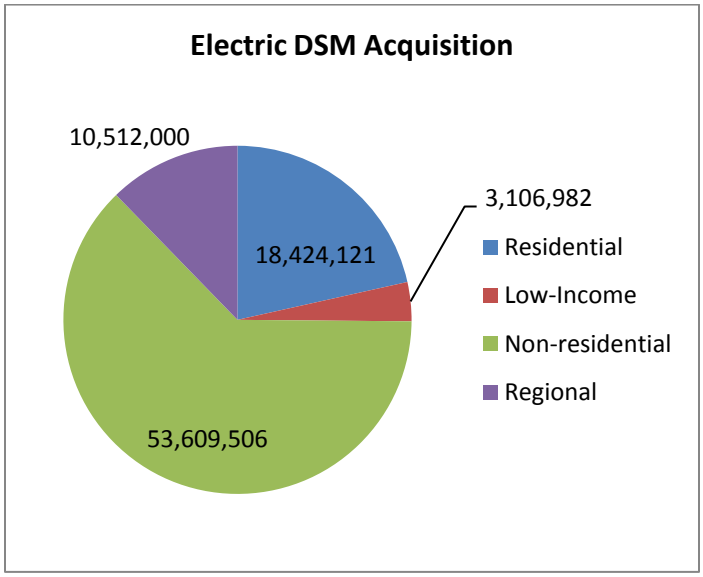
The mix of electric acquisition across the four market segment portfolios (residential, non-residential, low-income and regional) is expected to change in 2011 in comparison to the expected final results of 2010. The expected expiration of funding for many of the state and

federal tax credits for residential appliance and shell measures is expected to occur at the end of 2010 or in early 2011. Not only will 2011 acquisition not benefit from the credits in 2011, it is likely that the termination of the credits in 2010 advanced the acquisition of these measures from 2011 into 2010. Thus a significant decline in 2011 residential throughput is anticipated. Additional focus and refinement of the residential outreach program may mitigate this impact to some extent, but a significant decline in the throughput of the measures impacted by the tax credits is considered to be realistically unavoidable.

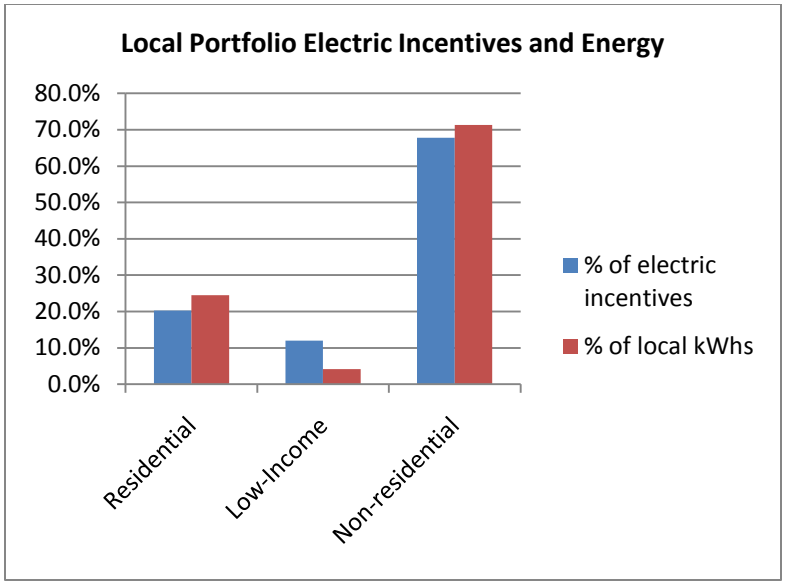
The Company has identified a contingency plan for increasing 2011 acquisition that can be launched upon short notice. The contingency plan consists of establishing another avenue for the distribution of residential CFL's through a direct-mail campaign. Based upon current 2011 expectations residential CFL's are less than 2 million 1st year kWh's, or 2.3% of the total DSM portfolio. This leaves considerable potential for ramping up CFL distribution in the fall residential lighting season to address acquisition shortfalls with reliable and highly cost-effective measure without over saturating that market.

Due to the availability of this acquisition contingency plan there were no further modifications within the 2011 Business Plan to address the Idaho acquisition shortfall. The issue does call for close monitoring of the actual acquisition levels during 2011 that are sufficient to reach a mid-year decision regarding the direct-mail CFL distribution. A decision by this date would be adequate to deliver the CFL's to customers during the back-to-school period when residential lighting purchases peak.

The mix of measures across the portfolio, for the Washington and Idaho jurisdiction combined, is illustrated below.



Additional breakouts of acquisition and incentive funding are represented in the chart below. Non-incentive funds occur primarily at the overall portfolio level and are not a significant component of individual market segment portfolios.



A more detailed listing of programs, energy acquisition and related budget is outlined in the table below.

2011 DEMAND-SIDE MANAGEMENT BUDGET

Program	Portfolio	Total Expenditure by type Incentives	NI/NL	Labor	Total of all expenditures	WA/ID kWhs	WA/ID therms
Residential programs							
Electric to NG Water Heater Conversion	Residential	$ 16,250	$ -	$ -	$ 16,250	361,855	-
Energy Conservation Schools Program	Residential	$ 7,315	$ -	$ -	$ 7,315	112,000	-
Geographic saturation	Residential	$ 20,900	$ -	$ -	$ 20,900	320,000	-
Multifamily	Residential	$ 300,000	$ -	$ -	$ 300,000	1,295,850	-
Res appliances	Residential	$ 471,500	$ -	$ 6,652	$ 478,152	1,171,250	20,358
Res Energy Star Home	Residential	$ 108,550	$ -	$ 6,652	$ 115,202	368,650	16,548
Res fuel conversion	Residential	$ 74,000	$ -	$ 6,652	$ 80,652	889,250	-
Res HVAC efficiency	Residential	$ 1,989,550	$ -	$ 6,652	$ 1,996,202	6,046,445	358,914
Res lighting	Residential	$ 180,000	$ 22,500	$ -	$ 202,500	1,530,000	-
Res refrig recycling	Residential	$ 75,000	$ 275,000	$ -	$ 350,000	1,447,500	-
Res shell	Residential	$ 1,694,225	$ -	$ 3,326	$ 1,697,551	4,161,207	432,150
Res water heating efficiency	Residential	$ 47,000	$ -	$ 3,326	$ 50,326	118,910	7,182
Trees	Residential	$ 1,800	$ -	$ -	$ 1,800	2,088	-
Res outsourced program	Residential	$ -	$ -	$ -	$ -	-	-
Home Energy Audit	Residential	$ -	$ 35,860	$ -	$ 35,860	599,116	15,211
Residential total		**$ 4,986,090**	**$ 333,360**	**$ 33,260**	**$ 5,352,710**	**18,424,121**	**850,363**
Low-Income programs							
LI appliances	Low Income	$ 69,043	$ 10,357	$ -	$ 79,400	9,462	-
LI fuel conversion	Low Income	$ 437,070	$ 65,560	$ -	$ 502,630	1,082,484	-
LI HVAC efficiency	Low Income	$ 33,750	$ 5,062	$ -	$ 38,812	-	1,044
LI shell	Low Income	$ 1,646,759	$ 247,014	$ -	$ 1,893,773	1,843,404	115,313
LI water heating efficiency	Low Income	$ 23,199	$ 3,480	$ -	$ 26,679	1,450	97
H&HS	Low Income	$ 138,100	$ 20,715	$ -	$ 158,815	-	-
Low-Income total		**$ 2,347,921**	**$ 352,188**	**$ -**	**$ 2,700,109**	**2,936,800**	**116,454**
Non-Residential programs							
Demand Controlled Ventilation	Non-Residential	$ 6,500	$ -	$ -	$ 6,500	27,212	2,425
Energy Smart Grocer Program	Non-Residential	$ 793,101	$ 560,700	$ -	$ 1,353,801	7,000,000	-
Green Motors	Non-Residential	$ 9,010	$ 3,795	$ -	$ 12,805	75,893	-
Nonres rooftop maintenance	Non-Residential	$ -	$ -	$ -	$ -	-	-
Nonres traffic lights	Non-Residential	$ 30,420	$ -	$ -	$ 30,420	218,354	-
Nonres vending machines	Non-Residential	$ 900	$ -	$ -	$ 900	9,000	-
P food service	Non-Residential	$ 64,545	$ -	$ -	$ 64,545	393,678	23,831
P network computers	Non-Residential	$ 29,250	$ -	$ -	$ 29,250	351,000	-
P new equipment upgrades	Non-Residential	$ -	$ -	$ -	$ -	-	-
P Non-res clotheswashers	Non-Residential	$ 10,000	$ -	$ -	$ 10,000	31,013	850
P Nonres lighting	Non-Residential	$ 2,432,943	$ -	$ -	$ 2,432,943	14,316,667	-
P retrofit equipment upgrades	Non-Residential	$ 49,905	$ -	$ -	$ 49,905	121,135	12,250
P VFDs	Non-Residential	$ 143,643	$ -	$ -	$ 143,643	2,053,264	-
Premium Efficiency Motors	Non-Residential	$ 49,436	$ -	$ -	$ 49,436	330,000	-
Resource Conservation Manager	Non-Residential	$ -	$ 25,000	$ -	$ 25,000	238,977	16,415
Side Stream Filtration	Non-Residential	$ 54,000	$ -	$ -	$ 54,000	381,000	-
Steam Trap Replacement	Non-Residential	$ 7,140	$ -	$ -	$ 7,140	-	12,811
Small Commercial HVAC	Non-Residential	$ 37,500	$ -	$ -	$ 37,500	-	30,770
Commercial Shell	Non-Residential	$ 62,000	$ -	$ -	$ 62,000	175,950	11,700
LEED	Non-Residential	$ 405,588	$ -	$ -	$ 405,588	-	-
Site-Specific	Non-Residential	$ 6,723,995	$ 69,318	$ 267,589	$ 7,060,902	27,886,363	907,515
Non-Residential total		**$ 10,909,877**	**$ 658,812**	**$ 267,589**	**$ 11,836,278**	**53,609,506**	**1,018,567**
Regional programs							

NEEA		$ -	$ 2,160,000	$ -	$ 2,160,000	10,512,000	-
Regional total		**$ -**	**$ 2,160,000**	**$ -**	**$ 2,160,000**	**10,512,000**	**-**
Renewable programs							
Solar	Renewable	$ -	$ -	$ -	$ -	-	-
Wind	Renewable	$ -	$ -	$ -	$ -	-	-
Renewable total		**$ -**	**$ -**	**$ -**	**$ -**	**-**	**-**
Non-Incentive / Non-Labor expenses							
EPRI		$ -	$ 100,000	$ -	$ 100,000	-	-
CEE		$ -	$ 8,000	$ -	$ 8,000	-	-
ELB		$ -	$ -	$ -	$ -	-	-
E-Source		$ -	$ 50,000	$ -	$ 50,000	-	-
Travel & training		$ -	$ 50,000	$ -	$ 50,000	-	-
Other expenses (Triple-E mtgs etc)		$ -	$ 20,000	$ -	$ 20,000	-	-
CFL recycling		$ -	$ 5,000	$ -	$ 5,000	-	-
SLIP funding		$ -	$ 50,000	$ -	$ 50,000	-	-
NWEC		$ -	$ 40,000	$ -	$ 40,000	-	-
Idaho LI outreach funding		$ -	$ 40,000	$ -	$ 40,000	-	-
Quantum Engineering RFP payments		$ -	$ 325,552	$ -	$ 325,552	-	-
WAGA RFP payments		$ -	$ 636,664	$ -	$ 636,664	-	-
NI / NL total		**$ -**	**$ 1,325,217**	**$ -**	**$ 1,325,217**	**-**	**-**
EM&V expenses							
Other external impact evaluations		$ -	$ 40,000	$ -	$ 40,000	-	-
EM&V - 2010 Electric audit		$ -	$ 550,000	$ -	$ 550,000	-	-
EM&V - 2011 Electric audit		$ -	$ -	$ -	$ -	-	-
EM&V - 2010 Gas audit		$ -	$ 250,000	$ -	$ 250,000	-	-
EM&V - 2011 Gas audit		$ -	$ -	$ -	$ -	-	-
Compilation of EM&V resources		$ -	$ 75,000	$ -	$ 75,000	-	-
RTF dues		$ -	$ 85,000	$ -	$ 85,000	-	-
EM&V equipment		$ -	$ 25,000	$ -	$ 25,000	-	-
Internal EM&V evaluations		$ -	$ -	$ 257,250	$ 257,250	-	-
External EM&V evaluations		$ -	$ 285,000	$ -	$ 285,000	-	-
Conservation Potential Assessment		$ -	$ 95,000	$ -	$ 95,000	-	-
EM&V total		**$ -**	**$ 1,405,000**	**$ 257,250**	**$ 1,662,250**	**-**	**-**
Portfolio labor total		**$ -**	**$ -**	**$ 2,207,682**	**$ 2,207,682**	**-**	**-**
	OVERALL AVISTA DSM EXPENSE	$ 18,243,888	$ 6,234,577	$ 2,765,780	$ 27,244,244	85,482,428	1,985,384

Natural Gas Efficiency Acquisition Expectations

Planning for 2011 natural gas efficiency acquisition involves dealing with many of the same challenges as are represented within the electric portfolio. There is an external independent audit completed annually to determine the final DSM acquisition claim for purposes of complying with Avista's Washington natural gas decoupling mechanism. This process has been extended to Idaho to meet the general expectations established as part of the IPUC Staff MOU. The results of this audit process, like the comparable electric process, are not known until after the close of the year and therefore there are few or no opportunities to adjust the management of the 2011 DSM portfolio as a result of the 2011 audit.

Several means similar to those identified for the electric portfolio are under consideration to reduce the adverse impact of this uncertainty and timing. Most notably these include advancing impact evaluations that will affect the 2011 acquisition to earlier in the year to the extent possible. (A significant portion of the impact evaluation completed by the external independent auditors is likely to be based upon prior experience with the same program. Under those circumstances key portions of the impact evaluation can be completed within the audited year).

There are fewer opportunities to increase reliance upon externally deemed measures to reduce natural gas acquisition uncertainty, primarily because there is no natural gas equivalent of the RTF. There are also inherent uncertainties regarding, for example, heat load that make natural gas measures more difficult to incorporate within deemed values. Avista does have the advantage of four previous external natural gas audits, three within the decoupling pilot period and one intended for the permanent decoupling mechanism. These

prior audits do provide some guidance regarding expectations of future claims and are being incorporated into the Company's Technical Reference Manual (TRM). This should lead to less uncertainty in the realization rate over time.

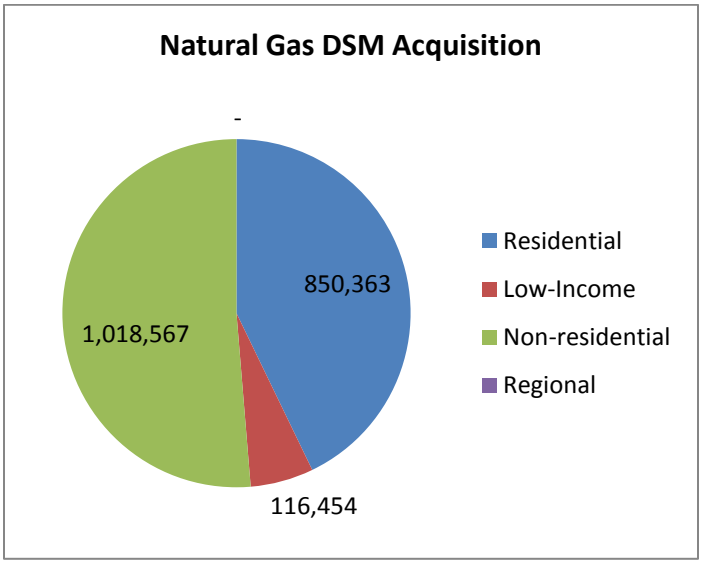
Based upon the assumption of a 100% realization rate and the projections contained within this business plan, the Company expects to fall 15% short of the Washington IRP target and 16% short of the Idaho IRP targets as outlined in the table below.

	Natural Gas Acquisition projections (all calculations are for the Washington jurisdiction only, units are 1st year therm's)		
	Washington	Idaho	assuming 100% realization
Estimated acquisition	1,399,076	586,307	
2011 IRP target	1,639,317	697,224	
Favorable (unfavorable) variance in therms	(240,241)	(110,917)	
Favorable (unfavorable) variance in %	-15%	-16%	

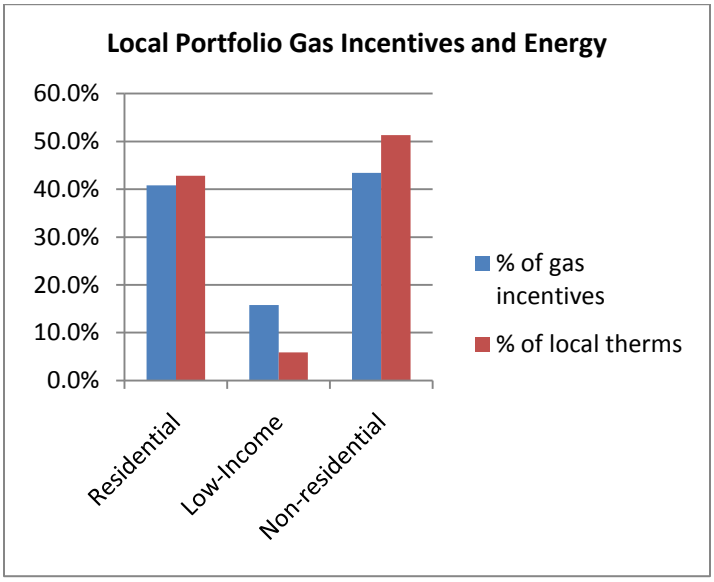
These projected shortfalls in acquisition could potentially be managed within 2011 with the portfolio of programs incorporated with this Plan through increased outreach and other strategies to ramp-up throughput. It is also not uncommon for the Company's actual therm acquisition levels to exceed those budgeted within the prior year by more than the projected shortfall indicated above. However the Company is now adding the significant uncertainty associated with the external independent audit into this calculation. If 2009's 83% realization rate was applied to these projections the acquisition shortfall would increase from 15% and 16% (for Washington and Idaho respectively) to 29% and 30% (respectively). This amount stretches the limits of the ability to manage towards higher acquisition during 2011 using actual feedback on claimed acquisition over the course of the year and targeted ramp-ups of programmatic efforts.

Searches for contingency plans to address potentially significant acquisition shortfalls using conservative expectations of realization rates were less productive than the comparable electric exercise that led to the direct-mail CFL contingency plan. The most attractive potential programs for launch or ramp-up during 2011 appear to be a rooftop HVAC maintenance/thermostat program, a third-party recommissioning program and a radiant heat program. These prospective programs are or will soon be under review for technical performance and cost-effectiveness impact with potential launch dates that could be within 2011.

Based upon the programs incorporated within the business plan, the distribution of natural gas acquisition across the various portfolios is as illustrated below.



The allocation of incentive funds and natural gas acquisition across portfolio is contained in the chart below.



Cost-Effectiveness Expectations

Avista performs four basic cost-effectiveness tests as part of Annual Report retrospective of each calendar year. These tests include (1) the total resource cost (TRC) test, (2) the utility cost test (UCT) or program administrator test (PACT), (3) the participant test and (4) the rate impact measure (RIM) or non-participant test. Each of these tests view the cost-effectiveness of a DSM program from different perspectives (as described in Appendix H to this document).

During business planning the primary focus is upon the TRC test (and variations upon that calculation based upon net-to-gross and tax credit treatment as well as the sub-TRC test methodology previously described). This is because, in nearly all cases, the TRC test will be a more stringent test than the UCT given Avista's limitation of incentives to 50% of

customer incremental cost, with exceptions for small devices, low-income programs and market transformation efforts. It is Avista's general cost-effectiveness objective to maximize the net TRC benefits of the DSM portfolio, and in managing towards those ends will generally lead to the appropriate management for the remaining three standard practice tests, and in particular the UCT. Adaptations to this TRC focus are made when programs with unusual characteristics (such as the Company's refrigerator/freezer recycling program) require evaluation.

Measures and programs are screened to eliminate (barring exceptions identified by the program manager) those that have a significant adverse impact upon the portfolio TRC. Additionally Avista will be filing a request for revising Schedule 90 and 190 (governing the implementation of DSM programs) to exclude site-specific projects with energy simple paybacks of over 13 years (8 years for lighting) from incentives and from inclusion within the portfolio cost-effectiveness. (This requested revision will not take full effect in 2011 due to pre-existing contractual obligations). Despite this level of individual measure, program and project screening, when evaluated at the aggregate level the incorporation of the fixed utility infrastructure costs represents an additional cost burden without offsetting benefits. Consequently it is possible to assemble a menu of cost-effective program components that result in a cost-ineffective portfolio if those fixed utility infrastructure costs are more than the programs can cost-effectively bear.

In recent years Avista has been shifting towards an approach that places greater emphasis upon implementation methods with higher fixed infrastructure cost, particularly increased program outreach and increased technical services. There is ample cause to believe that these investments have been driving much of the substantial increase in program throughput that Avista has seen during this time period, but it is nevertheless a cost that must is predominantly borne at the portfolio level. Thus it is not adequate for individual measures and projects to be cost-effective; they must be collectively cost-effective by a sufficient amount to offset fixed portfolio costs.

Since Avista operates both an electric and natural gas DSM portfolio, and many of these fixed infrastructure costs are jointly shared by the two portfolios, it is often necessary to assign these shared costs. Avista is shifting towards an assignment based upon the relative avoided cost of the two portfolios in place of the previously used distribution by mmBTU content. This will increase the assignment of the fixed portfolio costs to the portfolio that is better able to withstand those costs based upon the avoided cost benefits received. Relative to the previous methodology, fewer costs are assigned to natural gas and more cost are assigned to the electric DSM portfolio.

The TRC cost-effectiveness of the electric DSM portfolios is summarized below under scenarios (a) with and without the inclusion of state and federal tax credits, (b) at various net-to-gross ratios and (c) with and without a 10% conservation preference adder applicable to all TRC benefits.

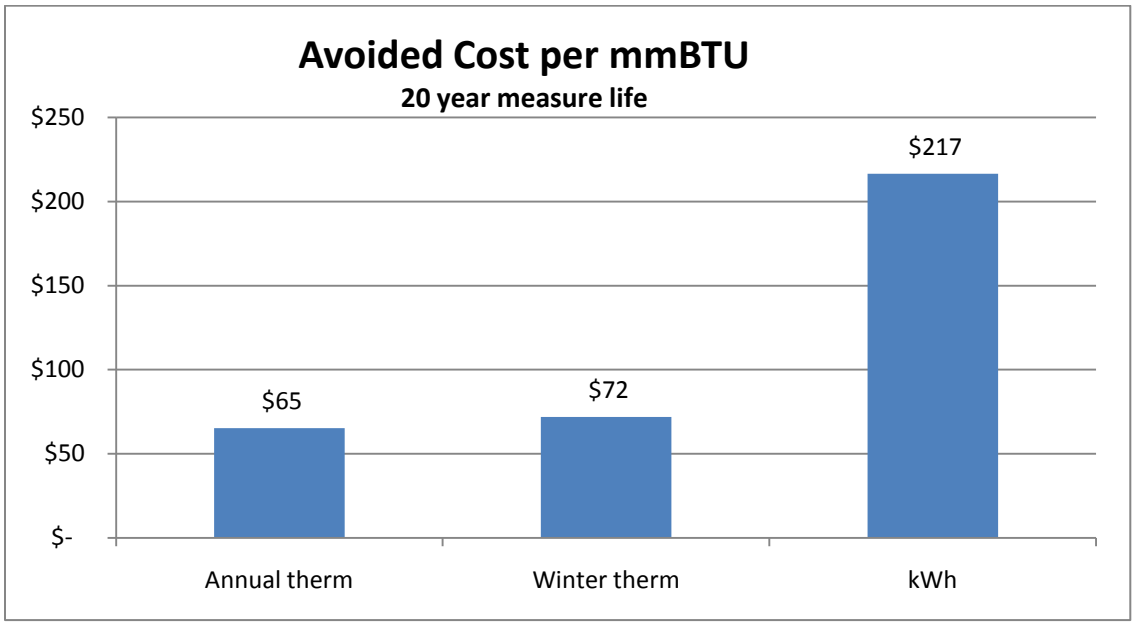
Electric DSM Portfolio TRC Projections

Net to Gross ratio	**100%**	**75%**	**50%**	**25%**
Electric avoided costs	$ 45,262,551	$ 33,946,913	$ 22,631,276	$ 11,315,638
Gas avoided costs	$ (510,433)	$ (382,825)	$ (255,217)	$ (127,608)
Non-energy benefits	$ 1,987,732	$ 1,490,799	$ 993,866	$ 496,933
TOTAL TRC BENEFITS	$ 46,739,849	$ 35,054,887	$ 23,369,925	$ 11,684,962
Customer incremental cost	$ 23,883,501	$ 17,912,626	$ 11,941,751	$ 5,970,875
State and federal tax credits	$ (1,428,026)	$ (1,071,020)	$ (714,013)	$ (357,007)
Non-incentive utility costs	$ 5,906,865	$ 5,906,865	$ 5,906,865	$ 5,906,865
TOTAL TRC COSTS	$ 28,362,340	$ 22,748,471	$ 17,134,603	$ 11,520,734
Without 10% adder to TRC benefits				
Including tax credits				
NET TRC BENEFITS	$ 18,377,510	$ 12,306,416	$ 6,235,322	$ 164,228
TRC BENEFIT/COST RATIO	1.65	1.54	1.36	1.01
w/o the inclusion of tax credits				
NET TRC BENEFITS	1.57	1.47	1.31	0.98
TRC BENEFIT/COST RATIO	$ 16,949,483	$ 11,235,396	$ 5,521,309	$ (192,778)
With 10% adder to TRC benefits				
Including tax credits				
NET TRC BENEFITS	$ 23,051,494	$ 15,811,905	$ 8,572,315	$ 1,332,725
TRC BENEFIT/COST RATIO	1.81	1.70	1.50	1.12
w/o the inclusion of tax credits				
NET TRC BENEFITS	$ 21,623,468	$ 14,740,885	$ 7,858,301	$ 975,718
TRC BENEFIT/COST RATIO	1.73	1.62	1.44	1.08

The TRC calculations above indicate that there is unlikely to be any difficulty in fielding a TRC cost-effective electric DSM portfolio under of the scenarios outlined above. Contingency plans for 2011 CFL distributions would further enhance these portfolio TRC's.

Gas DSM Portfolio TRC Projections				
Net to Gross ratio	**100%**	**75%**	**50%**	**25%**
Electric avoided costs	$ 265,535	$ 199,151	$ 132,768	$ 66,384
Gas avoided costs	$ 15,384,026	$ 11,538,019	$ 7,692,013	$ 3,846,006
Non-energy benefits	$ 232,498	$ 174,374	$ 116,249	$ 58,125
TOTAL TRC BENEFITS	$ 15,882,059	$ 11,911,544	$ 7,941,030	$ 3,970,515
Customer incremental cost	$ 14,511,139	$ 10,883,354	$ 7,255,569	$ 3,627,785
State and federal tax credits	$ (1,954,899)	$ (1,466,174)	$ (977,449)	$ (488,725)
Non-incentive utility costs	$ 1,324,244	$ 1,324,244	$ 1,324,244	$ 1,324,244
TOTAL TRC COSTS	$ 13,880,484	$ 10,741,424	$ 7,602,364	$ 4,463,304
Without 10% adder to TRC benefits				
Including tax credits				
NET TRC BENEFITS	$ 2,001,575	$ 1,170,120	$ 338,666	$ (492,789)
TRC BENEFIT/COST RATIO	1.14	1.11	1.04	0.89
w/o the inclusion of tax credits				
NET TRC BENEFITS	1.00	0.98	0.93	0.80
TRC BENEFIT/COST RATIO	$ 46,677	$ (296,053)	$ (638,784)	$ (981,514)
With 10% adder to TRC benefits				
Including tax credits				
NET TRC BENEFITS	$ 3,589,781	$ 2,361,275	$ 1,132,769	$ (95,738)
TRC BENEFIT/COST RATIO	1.26	1.22	1.15	0.98
w/o the inclusion of tax credits				
NET TRC BENEFITS	$ 1,634,883	$ 895,101	$ 155,319	$ (584,462)
TRC BENEFIT/COST RATIO	1.10	1.07	1.02	0.88

The natural gas DSM portfolio, as is typically the case, is less cost-effective than the electric portfolio. This is generally attributable to an avoided cost that is approximately 1/3rd of the comparable electric avoided cost on an mmBTU basis (graphically illustrated below).



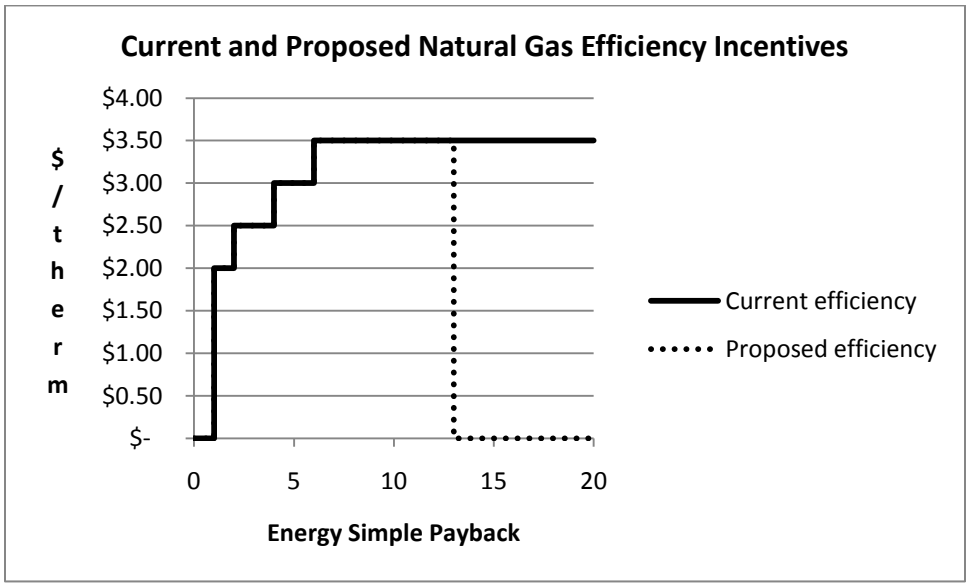
Despite the avoided cost challenges, the natural gas DSM portfolio remains cost-effective under most scenarios with net-to-gross ratios of 50% or more. The potential launch of three programs currently under study with possible significant potential natural gas impact (rooftop HVAC maintenance/programmable thermostat, third-party recommissioning and radiant heat program) in 2011 to address potential acquisition shortfalls would benefit the overall portfolio TRC's as well.

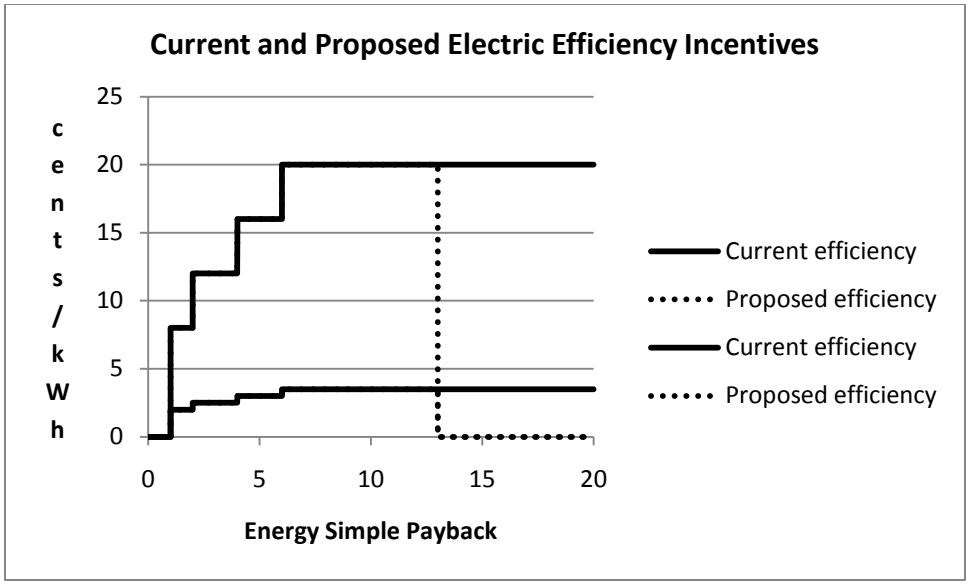
Schedule 90 and 190 Provisions

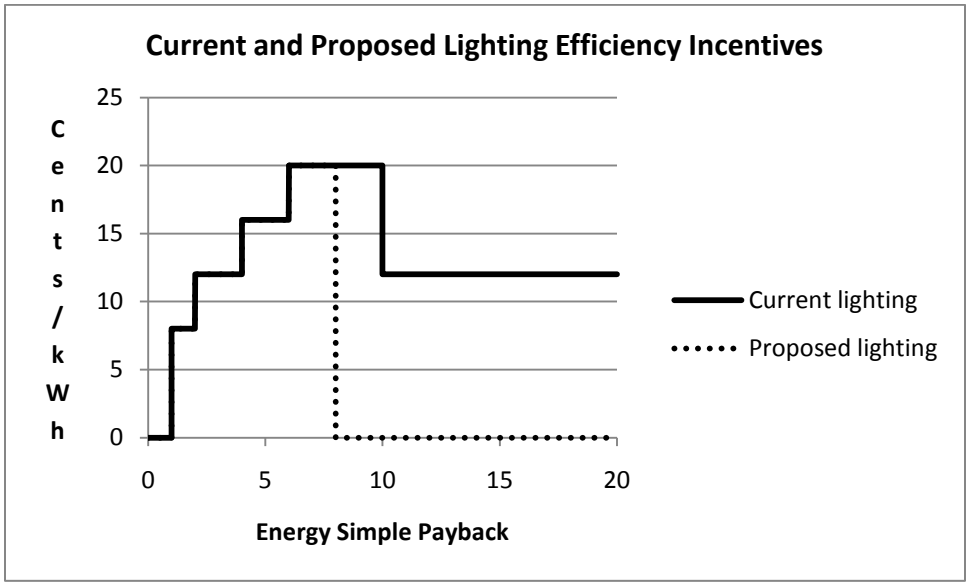
Avista's current tariffs establish incentive guidelines that are applied to both prescriptive and site-specific programs. Currently those incentive tiers provide for direct financial assistance of measures with energy simple paybacks of one year or more based upon a tiered structure outlined below. When applied to the site-specific program, these incentive tiers potentially allow for incentives for TRC cost-ineffective projects, although the incentive payments were limited to the amount of energy savings. Despite the low percentage of the project cost funding coming from utility incentives, the full cost of the project must be incorporated into the TRC calculations of the DSM portfolio. On occasion a few large projects, receiving only a small share of their funding from incentives, can significantly and adversely affect the TRC ratio of the entire portfolio.

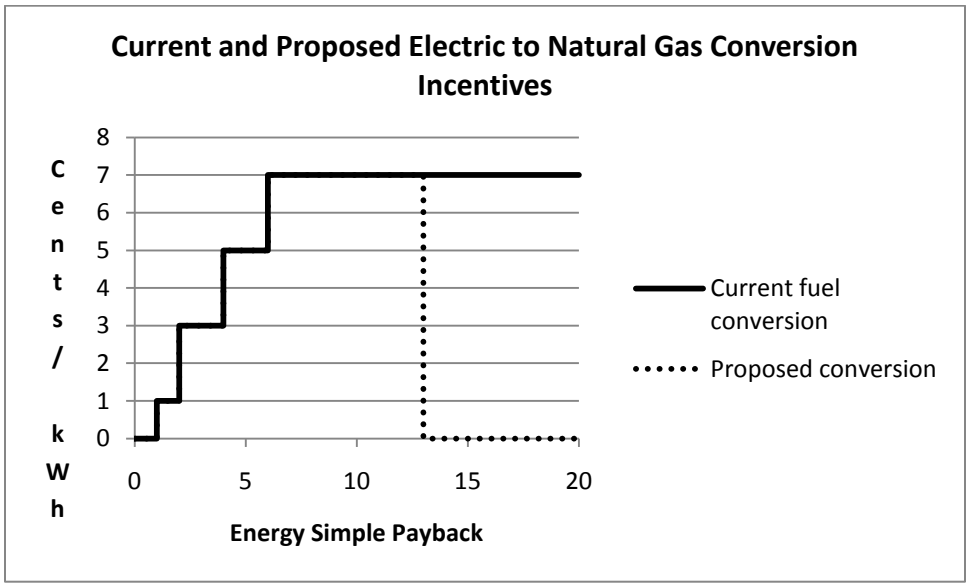
The Company will be proposing a revision to the incentive tiers incorporated within Schedule 90 and 190 that will terminate the provision of incentives to projects with energy simple paybacks of over 13 years (or over 8 years in the case of lighting measures). Projects with energy simple paybacks in excess of this level are rarely TRC cost-effective.

A graphical representation of the current and proposed incentive tiers for (a) natural gas efficiency projects, (b) electric efficiency projects, excluding lighting measures, (c) lighting efficiency projects and (d) electric to natural gas conversions are graphically represented below.




Current and Proposed Electric Efficiency Incentives
cents/kWh
25
20
15
10
5
0
0
5
10
15
20
Energy Simple Payback
Current efficiency
Proposed efficiency
Current efficiency
Proposed efficiency


Current and Proposed Lighting Efficiency Incentives
Cents/kWh
25
20
15
10
5
0
0
5
10
15
20
Energy Simple Payback
Current lighting
Proposed lighting

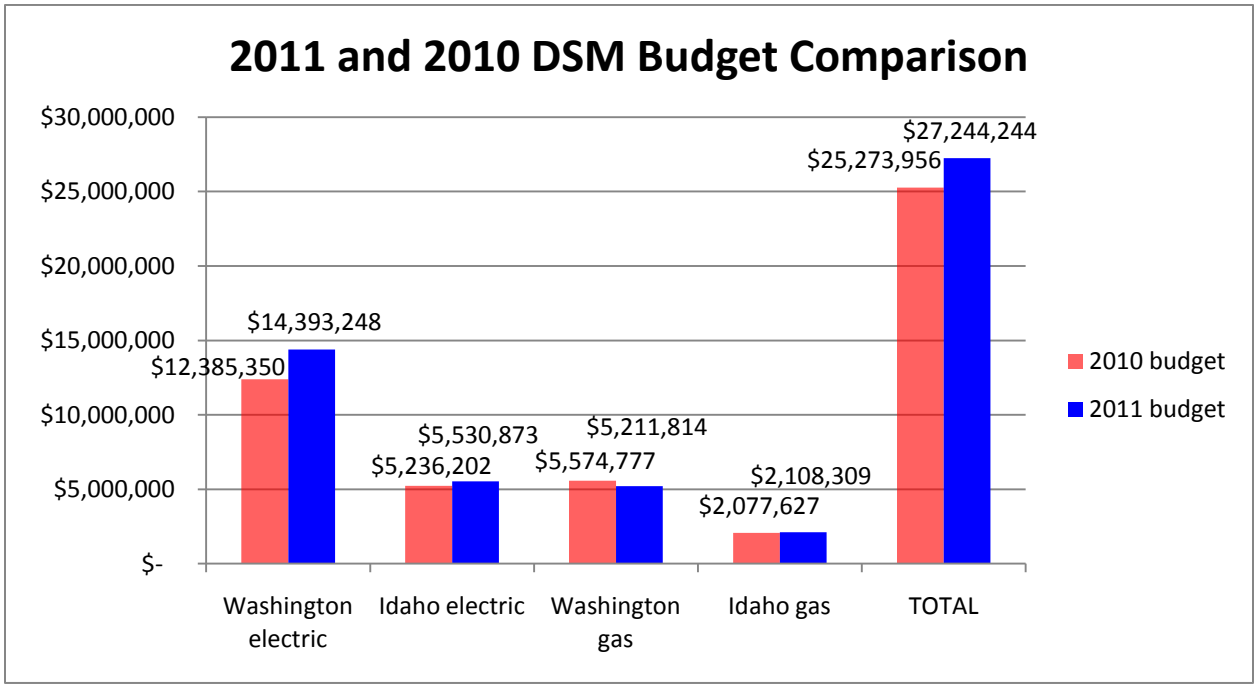

Current and Proposed Electric to Natural Gas Conversion Incentives
Cents/kWh
8
7
6
5
4
3
2
1
0
0
5
10
15
20
Energy Simple Payback
Current fuel conversion
Proposed conversion

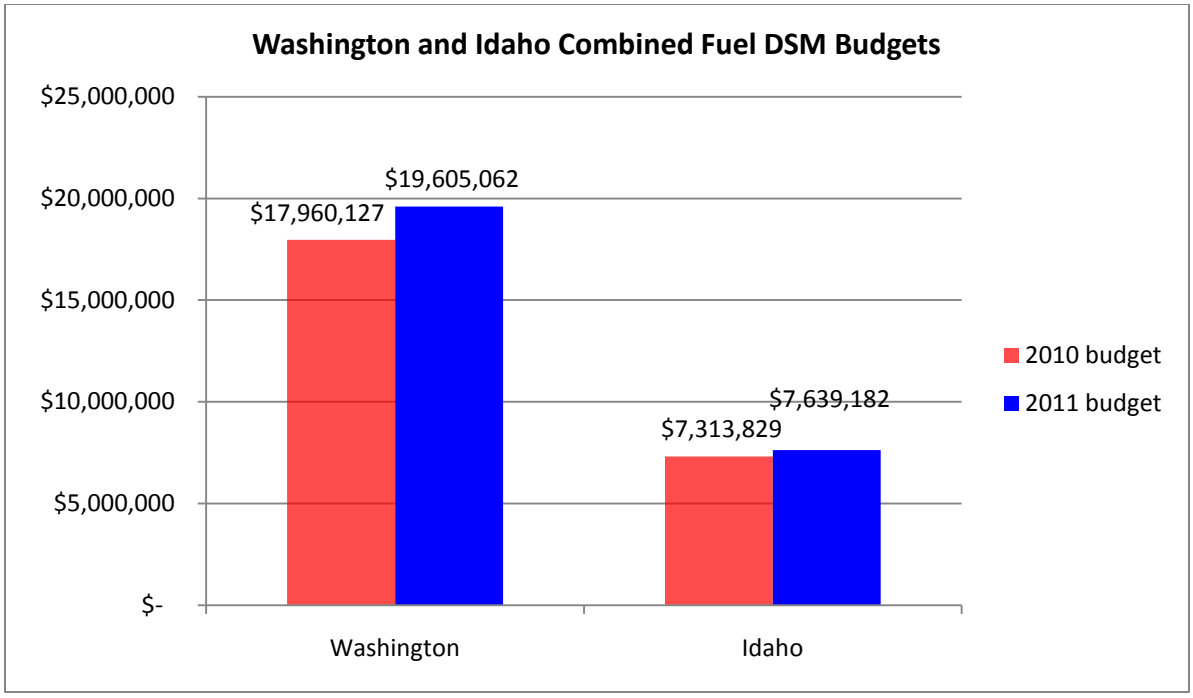
The cost-effectiveness and acquisition calculations within this document are based upon the assumption that these proposed revisions will become effective at a date very early in 2011. Despite that effective date the impact of these changes will not be fully effective during 2011 due to the contractual obligations incurred under the site-specific program prior to that effective date. It is anticipated that the full effect of the revisions upon portfolio cost-effectiveness and acquisition will not be evident until calendar year 2012.

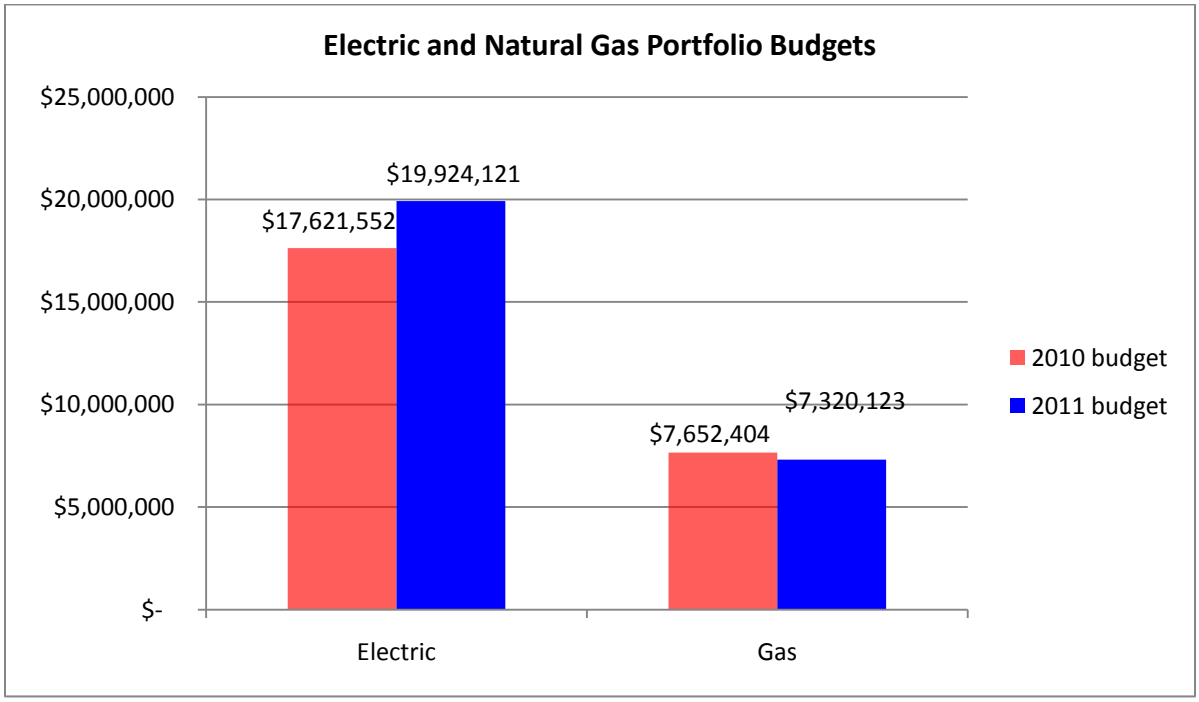
It is likely that the proposed revisions to the tariff will also favorably impact the net-to-gross ratio of the portfolio as well due to the small proportion of incentive funding within these large cost-ineffective projects. This impact is also only expected to partially impact 2011 results with the full effects not felt until 2012.

DSM Expenditures

Avista's total DSM budget for 2011 is an 8% increase from the budget filed for 2010. The increase is not evenly distributed across the four independent tariff riders. The greatest increase falls upon the Washington electric tariff rider partially due to the expanded EM&V costs, the later expected end dates for residential tax credits and the Washington Home Energy Audit program. The expanded EM&V requirements for the natural gas portfolio was largely incorporated into the 2010 year to fund the 2009 external independent audit of the natural gas portfolio.



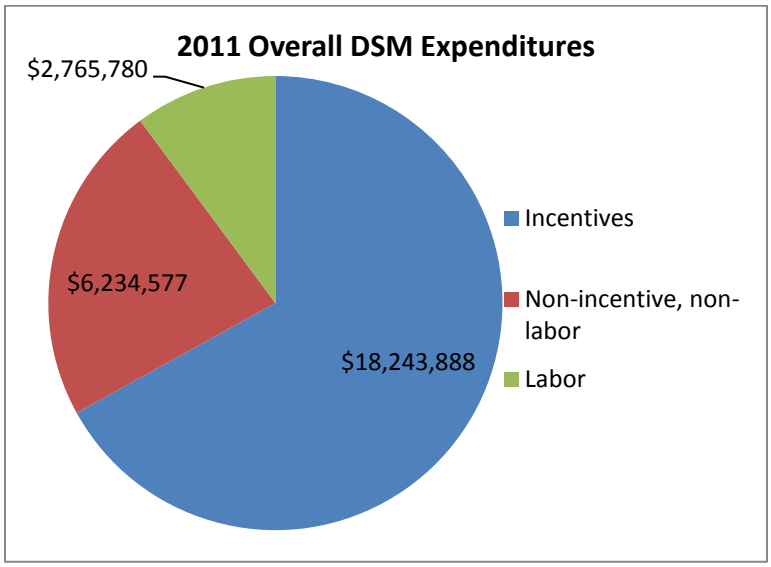


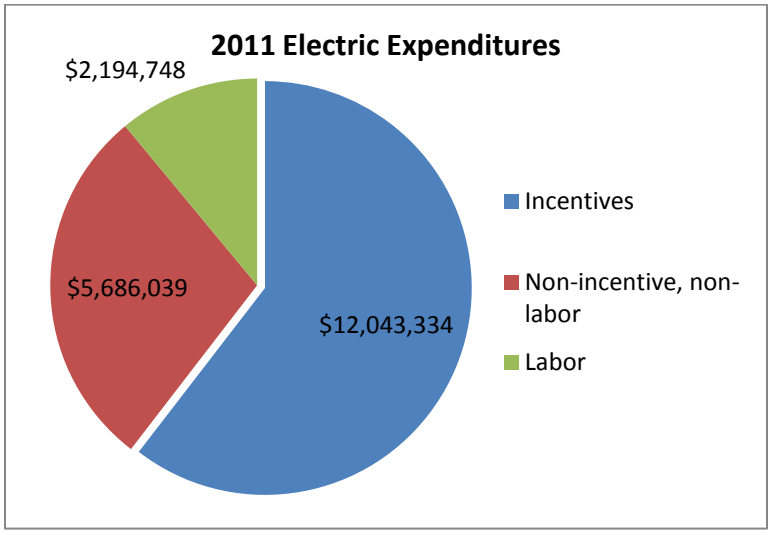


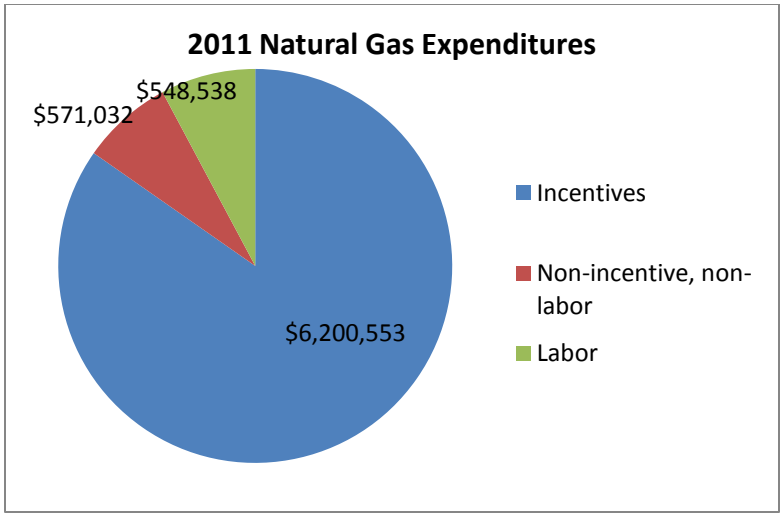
An allocation of DSM expenditures by function (incentives, labor and non-labor/non-incentive expenditures) is illustrated below (in aggregate and by individual tariff rider).

The functional allocation of budgeted expenditures indicates a modest increase in the share of non-incentive expenditures (from 31.3% of the total budget to 33.0% of the total budget) due to the influence of EM&V expenditures net of reductions in other categories of non-

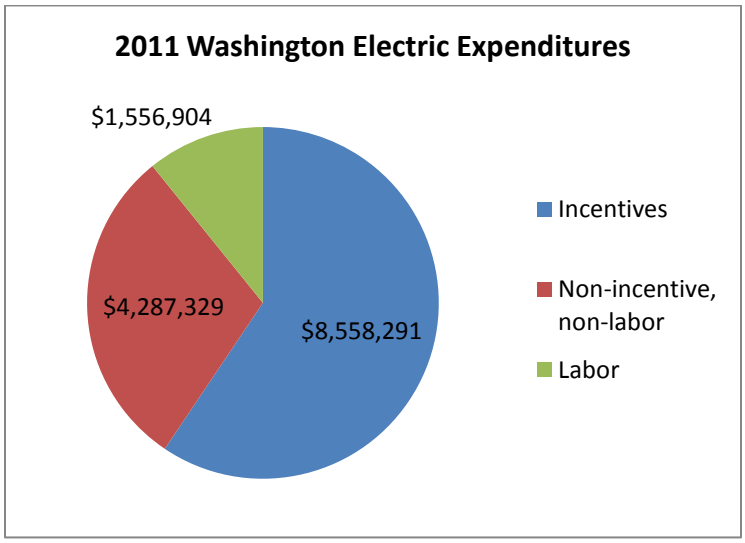
incentive expenses. As was expected to be the case, the proportion of non-incentive funding within the electric portfolio is higher than that attributed to that natural gas portfolio. This is primarily driven by the allocation of shared infrastructure costs based upon the avoided cost of the two portfolios as well as the generally higher infrastructure cost unique to the electric portfolio.

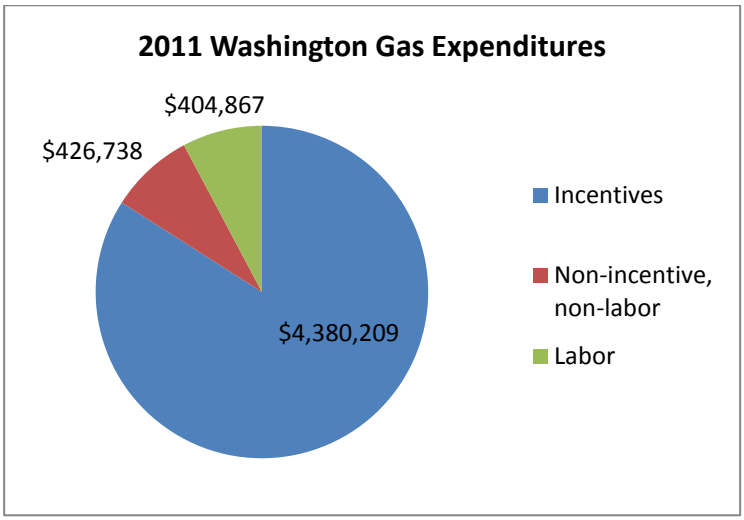


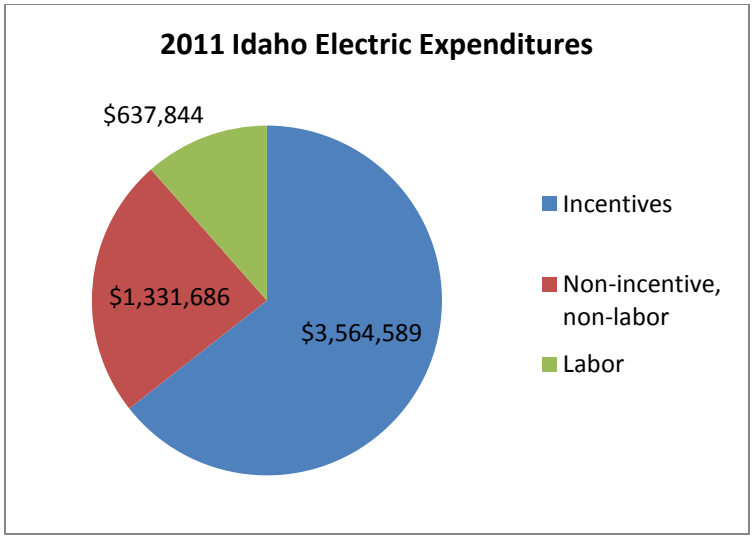


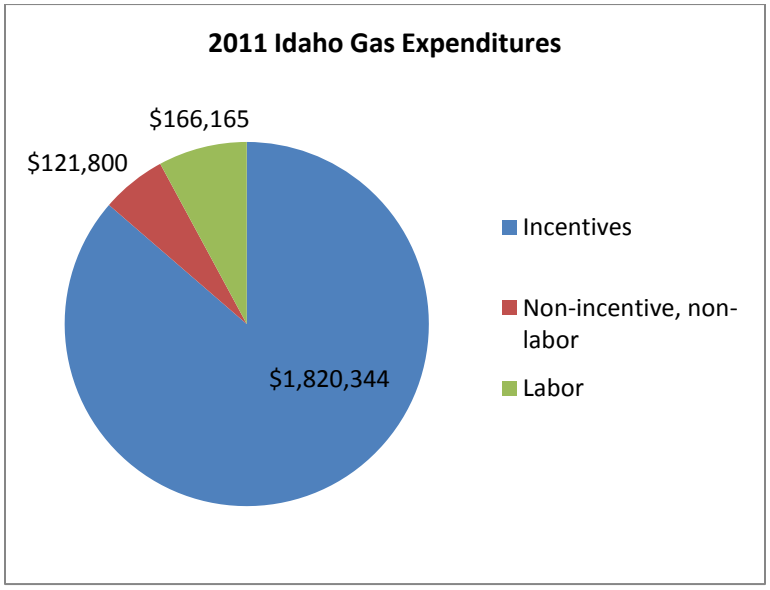


The same categorical breakout of expenditures by function by individual tariff rider is represented below.









A more detailed listing of expenses by line item is contained in the 2011 DSM budget detail table presented earlier in this section as part of the explanation of electric portfolio acquisition.

Tariff Rider Balances

Avista entered calendar year 2010 with significant "negative" (defined as "customer owes shareholder") tariff rider balances. Increased tariff rider levels were enacted to allow for the recovery of those negative balances without adversely affecting the Company's ability to continue the funding of cost-effective DSM measures.

Those increased tariff rider levels have proven to be effective at reducing the tariff rider balances in each of the four individual funds. The Washington electric tariff rider is expected to end 2010 with a positive balance. The remaining three funds will all reach a zero balance at approximately the same timeframe; February to March of 2011.

The Company has committed to filing revised Washington tariff rider levels in May of each year with an effective date of July. Idaho filings for revisions are likely to be made at the same time. Based upon these projections it will be possible to increase funding of DSM programs, decrease the tariff rider or some combination of those two alternatives.

Due to the significant differences in the magnitude of each of the four tariff riders, Avista often puts the tariff rider balances into a comparable context by stating each balance as a percentage of average monthly tariff rider revenue. Lacking any revisions to the tariff rider within 2011, the tariff rider balances of all four funds would have balances equal to approximately three to four months of average revenues by the close of 2011.

These expectations regarding tariff rider balance projections do not incorporate the potential cost of the identified electric and natural gas contingency plans that may be necessary to address Idaho electric and system natural gas acquisition shortfalls. In the event that these shortfalls are realized during early 2011 based upon the tracking of actual results it is likely that there will be increased costs associated with managing to higher acquisition levels whether that is done through the ramping-up of existing programs or the launches of the identified contingency programs. If that is the case the additional cost should be reasonably well known when the May 2011 filing of revisions to the Schedule 91 and 191 tariff riders is required to take place in Washington.

DSM Avoided Costs (Electric and Natural Gas)

Electric Avoided Cost Enhancement

In 2007, during the Heritage Project (a comprehensive review of the Company's energy-efficiency and load management programs) the avoided costs for evaluating DSM projects were analyzed to ensure that energy-efficient measures were evaluated consistently and transparently against supply side resources. A team of analysts quantified seven resource value components: avoided cost of energy, avoided carbon emission costs, reduction in cost volatility, value of avoided transmission and distribution losses, the value of deferred generation capacity and the value of deferred transmission and distribution capital investments.

Avoided cost of Energy

The avoided cost of energy was calculated using the electric price forecast from the 2009 Integrated Resource Plan. This market cost was calculated with AURORA^{XMP} using 300 iterations of varying load, hydro, wind, forced outages, emissions, and natural gas prices in the Western Interconnect for the period from 2010 to 2029. Renewable portfolio standards and potential emissions costs are included in the market prices. The model chooses the most economic resources available to satisfy projected load obligations plus a planning margin. The values presented here are those that the Company could avoid paying for new resources if energy efficiency, load management, distribution improvement, and distributed generation projects through the Heritage Project were undertaken.

Avoided Carbon Emissions Cost

New thermal resources produce a variety of emissions that have associated costs through taxes or cap and trade programs. The four main emissions with costs included in the base case market forecast are carbon dioxide (CO_2), sulfur dioxide (SO_2), nitrogen oxide (NO_x), and mercury (Hg). There are some caveats to consider concerning emissions because of the inherent uncertainty in emissions markets and legislation. SO_2 costs are the most predictable because a national market-based cap and trade system already exists for SO_2. The NO_x prices are less certain because the national cap-and-trade program does not begin until 2010, but the forecasted costs are generally well accepted. Mercury costs are more problematic than the first two emissions categories because several western states have decided to opt out of the federal mercury standards so they can apply more stringent mercury standards. The avoided mercury costs are based on the active and proposed mercury guidelines for each state using blended price forecasts from a variety of sources.

CO_2 costs are the most problematic category of emissions to model because of the fragmented nature of CO_2 legislation in the US. There are many state level and regional initiatives that are competing with a multitude of cap and trade proposals at the national level. The 2009 IRP includes CO_2 costs based on a probability distribution that uses the National Commission on Energy Policy (NCEP) as the mean value starting in 2015. The NCEP case is a comprehensive climate change risk reduction program that was released in December 2004. There are many unknown factors regarding projected costs of CO_2 emissions because there is considerable state and federal legislative activity with a wide range of potential costs. The NCEP case is at the low end of the projected costs when compared to recent federal proposals. Carbon emissions costs may differ significantly from this analysis depending on which, if any, of the federal or state laws are passed. The start date of the legislation will also play an important role in emissions costs.

Avoided Generation Capacity

Another component of Heritage Project value is avoided generation capacity. The value of avoided generation capacity is coincident with system peaks in December, January, and February. Avoided generation capacity is valued by the difference in resource cost versus the market, not considering any portfolio risk reduction. This is the value of meeting your capacity needs at the least overall cost, which is calculated as the premium paid above market costs to obtain a mix of Company-owned resources.

Reduction in Energy Cost Volatility

The next component of avoided cost is the risk premium. Risk, in this analysis, refers to the volatility in the electric market forecast. The types of conservation measures being considered by the Heritage Project avoid the intrinsic market volatility because they do not rely upon any of the variable components.

Several different methodologies to compute risk have been considered. Originally, the risk portion of the analysis assumed that ratepayers would be willing to pay a premium that was quantified by the difference between the expected value of the 300 AURORA^{XMP} iterations and

the 95% confidence interval of those iterations. The analytics team decided that this methodology was not robust enough for the Heritage Project analytics exercise. The second methodology used the intrinsic value of a price cap using the Black-Scholes model. There were concerns with this methodology because of its theoretical nature and because it was not tied in with the IRP methodology. Continued discussions resulted in a third and final approach to the valuation of a risk premium that relies on the PRiSM model used in the 2009 IRP. This method separated the value of avoided winter peak generation capacity from the volatility value, which is covered in the next section. All three methodologies resulted in similar values, but the PRiSM model method was deemed to be most consistent with the IRP, appropriate, and defendable.

The risk premium over market value is based on results from the PRiSM model developed for the IRP process. The PRiSM model uses a linear programming model routine to determine the optimal amount and timing of future resource acquisitions and their associated costs. There is a capacity value, which was discussed in the previous section, and a risk reduction component. After our capacity needs have been met, there are ways to lower power cost volatility. The volatility reduction strategy generally involves adding resources with high capital and low variable costs. These resources increase expected costs, but decrease expected risk.

Reduction in Transmission and Distribution Energy Losses

A precise estimate of transmission and distribution (T&D) system impacts is difficult to quantify for Heritage Projects. Geography, season, time-of–day, and other considerations can impact these calculations in a manner that is not easily translated into assumptions regarding a specific resource option. Nevertheless, a generalized estimate of the impact of a reduction in end-use demand upon T&D losses is required for any resource analysis. Presently the analyst team applies a 6.5% average loss factor for T&D projects.

Discussions are underway to improve the quality of the analysis by incorporating separate estimates of T&D losses for a summer peak (based upon a space cooling-driven peak scenario) and a winter peak (based upon a space heating-driven peak). This will incorporate assumptions of both demand and ambient temperatures into the analysis of evaluated resource options.

Based upon the estimates of the avoided cost of energy, emissions and risk reduction valuation above (using the flat load assumptions) an adder of $3.98 per MW is incorporated into the energy avoided cost, as illustrated in the table below.

Deferred Generation Capacity

The pure capacity value of $300 per kilowatt is the remaining capital cost of a combustion turbine that is not offset by the value of the energy produced by the turbine and that is sold into the short-term energy market. The value is calculated by subtracting the present value of the energy sales over the turbine's economic life from the present value of the revenue requirements associated with the installed capital cost of the turbine. Table 6 illustrates how the pure capacity value (no energy value) is derived. The initial installed capacity cost of the turbine is $450 per kilowatt. When the turbine is dispatched against the short-term electricity market it generates margins (electric revenue less fuel and O&M costs) to offset $150 per kilowatt of the

initial installed cost. The remaining $300 per kilowatt of capacity cost not offset by the value of energy sales is the pure capacity cost.

Natural Gas Avoided Cost

The avoided cost of natural gas was determined using the natural gas price forecast from the 2009 Natural Gas Integrated Resource Plan. This market commodity cost was calculated using SendOut which provides a detailed assessment of the entire supply portfolio along with operational and economical constraints and parameters while evaluating the impact of potential operating weather and price conditions. This was completed for the period from 2010 to 2029. In response to potential "Cap & Trade" legislation at the time, consideration for carbon costs were added to the avoided cost that were included in the 2009 Integrated Resource Plan.

There has been discussion for the enhancement of the natural gas avoided cost, specifically, including an adder for risk. This would provide for a premium for energy efficiency in that exposure to market volatility is reduced. Currently, there is no adder to the natural gas avoided costs for this component. This issue is being considered as part of the current natural gas IRP planning process.

Evaluation, Measurement and Verification Collaborative

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, per Order No. 10 in Docket Nos. UE-090134 and UG-090135 (i.e., Avista's 2009 General Rate Case).

The Avista EM&V Collaborative (Collaborative) included interested parties in the 2009 General Rate Case and Avista's Triple E Board. The Collaborative's first meeting was held on March 10th and concluded with a meeting on August 12th, 2010. 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 as summarized in Order No. 10, at 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".

An "EM&V Framework" was developed in response to the IPUC Staff MOU and the WUTC Order at paragraph 305 (per the 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.

Attachments to the "EM&V Framework" include the relevant Commission requirements, the Collaborative Charter, a list of the Collaborative members, and the draft 2011 EM&V Plan.

In March 2010, Avista and a team of stakeholders referred to as "the Collaborative" started working on guiding documents for Avista to use for performing Evaluation, Measurement and Verification of energy savings and processes. The Collaborative met six times in person, once per month, in Seattle from March 10th through August 12th, with two conference calls. Beginning with the June 23rd meeting, the Collaborative engaged Dr. Dune Ives to facilitate the meetings and contracted with Steven Schiller and Dr. Chris Ann Dickerson to provide external expertise on EM&V matters. The June 23rd meeting included a presentation by Mr. Schiller and Dr. Dickerson on a suggested approach to EM&V guidelines and plans. Key documents in this process included 1) the Collaborative Charter, 2) an initial EM&V Framework presented at the May 20th meeting (based on the Model Energy Efficiency Program Impact Evaluation Guide, a resource of the National Action Plan for Energy Efficiency, November 2007), and 3) the final EM&V Framework filed with the WUTC on September 1st, 2010. The EM&V Framework was intended to be an overview of EM&V and is expected to be relatively long-lived with minimal changes from year-to-year. The EM&V Framework is accompanied by an annual EM&V plan (appended to this document as Appendix D) which will inform each year's EM&V efforts and, therefore, will be modified each year.

Development of the EM&V Framework and other necessary document occurred as Avista continued to do the regular EM&V work required for current practice for existing programs. Announced in early July and effectuated on August 23rd, Avista reorganized the DSM department by separating the DSM Implementation team from a newly structured EM&V team. The EM&V team will be responsible for impact, process, market and other studies related to claimed savings and process improvements.

The following is a list of people who took part in the Collaborative for whom Avista is thankful for their input and assistance in the creation of the Framework and Annual EM&V Plan documents:

Dune Ives, Milepost Consulting, Facilitator
Steve Schiller, Schiller Consulting
Chris Ann Dickerson, CAD Consulting
Bruce Folsom, Avista Utilities
Linda Gervais, Avista Utilities
Tom Lienhard, Avista Utilities
Jon Powell, Avista Utilities
Lori Hermanson, Avista Utilities
Rachelle Humphrey, Avista Utilities
Kerry Shroy, Avista Utilities
Mary Kimball, Public Counsel
Lea Daeschel, Public Counsel
Sarah Zubair, Public Counsel
Nancy Hirsh, Northwest Energy Coalition
Lynn Anderson, Idaho Public Utilities Commission
Beverly Barker, Idaho Public Utilities Commission
Gary Grayson, Idaho Public Utilities Commission

Deborah Reynolds, Washington Utilities and Transportation Commission
Kathryn Breda, Washington Utilities and Transportation Commission
Tom Eckman, Northwest Power and Conservation Council
Chris Davis, Spokane Neighborhood Action Programs
Rob Russell, Northwest Energy Efficiency Alliance
Jeff Harris, Northwest Energy Efficiency Alliance
Paula Pyron, Northwest Industrial Gas Users
Chuck Eberdt, The Energy Project
Michael Early, Industrial Customers of Northwest Utilities
Moshrek Sobhy, Oregon Public Utility Commission
Matt Elam, Idaho Public Utilities Commission
Renee Coelho, Avista Utilities
Mike Dillon, Avista Utilities
Damon Fisher, Avista Utilities
Ryan Dyer, Washington Utilities and Transportation Commission
Carrie Dolwick, Northwest Energy Coalition
Larry Stuckart, Spokane Neighborhood Action Programs

Low-Income Collaborative

As a result of a series of issues raised during the Company's 2006-2009 natural gas decoupling pilot, the Washington Utilities and Transportation Commission ordered Avista to convene a collaborative process to (a) identify the barriers to success of DSM programs within the low-income customer segment, (b) explore new approaches to this segment and (c) address the issues raised by The Energy Project during the natural gas decoupling proceedings.

In March 2010 the Company assembled the Low-Income Collaborative for purposes of addressing these issues as part of a comprehensive discussion of Avista's approach to the Low-Income DSM portfolio. The parties consisted of regulatory staff, governmental and non-governmental stakeholder groups and customer representatives. The six-month process included ten face-to-face meetings as well as a number of conference calls and additional electronic discussion. The final report of the Collaborative was delivered by the September 1, 2010 deadline called for in the Commission order.

The Collaborative reached the following resolutions that will guide the Company's future low-income DSM efforts.

<u>Definition of the low-income customer class</u>:

- A definition of the low-income customer segment will be consistent with the Department of Commerce, which is currently defined as those at or below 200% of the federal poverty level with a commitment to providing a greater level of assistance to those in the lower income strata is appropriate guidance for the low-income energy efficiency portfolio.
- Between 17% and 32% of Avista's residential customers fit within these various definitions of low-income.

Defining success and identifying the barriers to success of low-income energy efficiency programs:

- The primary barriers to acquiring energy efficiency resources from this and providing meaningful energy assistance to this customer segment is the lack of disposable income on the part of the customer, the landlord/tenant disconnect, home repair issues that must be addressed prior to efficiency measure installation and the difficulty in installing efficiency issues within certain dwelling types disproportionately used by low-income customers.
- There is the need to increase the number of low-income households served by through the programs in meaningful ways, particularly those in customer niches that have been difficult to reach in the past, e.g. those living in multifamily housing and manufactured homes.
- Comprehensive treatment of the home is an important long-term objective of the program as a means of avoiding the stranding of otherwise cost-effective measures. At the same time it is also recognized that this must be weighed against the preference for providing some benefits rather than no benefits at all to individual customers, especially those in niches where comprehensive treatment is unlikely to occur.

Metrics for success:

- It is important for the low-income portfolio to remain cost-effective under the total resource cost test. The methodology for the determination of cost-effectiveness should include all quantifiable non-energy benefits within the calculation and an identification of non-quantifiable benefits for review by the Commission in reaching decisions regarding portfolio cost-effectiveness.

Low-income energy efficiency delivery mechanisms and funding:

- Maximizing the benefits to the low-income households and meeting cost-effectiveness objectives are best served by the selection of delivery mechanisms that are the most appropriate to the measure and customer niche. Obtaining the greatest amount of cost-effective energy savings through the safe and high-quality installation of appropriately selected measures are the criteria that should be used for the selection of the delivery mechanism.
- The Community Action Agencies are a critical part of the infrastructure upon which Avista has and will rely upon for a substantial portion of their program implementation. It is important to provide stable funding to ensure the continuation of infrastructure needed for the prudent and cost-effective delivery of low-income programs and in recognition of the long-term investments that the Agencies make to establish and maintain this capacity.
- The establishment of annual funding levels should be based upon Avista's prudent commitment to work in partnership with other entities and funding sources to deliver low-income energy efficiency programs with consideration of the proportionality of these programs to the overall efficiency portfolio and the customer population, cost-effectiveness, funding stability, the effect upon the retail rates on other customer classes, the cost of achieving utility acquisition objectives and the effect of low-income funding on the energy burdens of the overall customer population.

Management and external consultation of Avista's low-income portfolio:

- The evaluation and continuous improvement of the low-income portfolio will be aided by the results of Avista's commitment to improved Evaluation, Measurement and Verification processes.
- The Triple-E Board is the entity best positioned to provide meaningful ongoing review and input into the management of Avista's low-income efficiency portfolio.

The Company was also engaged in a Washington general rate case process during much of this period. During that negotiation the Company committed to increasing funding for low-income programs within Washington from $1.5 million to $2.0 million in 2011. Similar commitments in an earlier Idaho general rate case process led to commitments for $700k in annual funding of Idaho low-income programs and a $40k allotment for program outreach.

The 2011 business planning process fully incorporated the funding levels committed to as part of these negotiations as well as the resolutions of the Low-Income Collaborative into the 2011 expectations.

2010 Evaluation, Measurement and Verification Highlights

Background

This 2010 Evaluation Measurement & Verification (EM&V) Summary is intended to make transparent and easily accessible the evaluation, measurement and verification that has been performed in 2010 in order to adequately inform and operate energy efficiency programs at Avista.

Overview

Avista's 2010 EM&V Summary identifies evaluation activities which occurred in the last year. This group of evaluations was performed by both internal and external evaluators, and includes process evaluation reports for normal DSM activities. The work plans were created and managed by Avista with Triple E Board and some outside stakeholder input. Definitions are shown in Avista's EM&V Framework, a companion document to all Avista EM&V activities. These are highlights of the studies only and are shown segmented by external impact analyses, internal impact analyses, and internal process analyses.

External Analysis

Savings Verification of Avista's 2009 Natural Gas Demand-Side Management Programs

This report summarizes the process and results of a detailed first-year verification of natural gas savings claims under Avista's 2009 energy efficiency programs. These programs are designed to support the "Decoupling" order providing rate treatment for energy savings programs in both the states of Idaho and Washington. Ecotope was contracted to review these savings claims by assessing the reported accomplishments in each of the Avista programs. While there are several separate programs, the verification divided the energy efficiency into eight separate verifications, each with a separate sampling and engineering review:

1. **Commercial /Industrial Programs**: The commercial/industrial (C/I) programs were largely based on custom engineering calculations applied to each individual account. Even where prescriptive measures were used, the documentation is assembled for each customer and often includes a mix of custom and prescriptive measures. For this verification the entire C/I program was combined into a single program. The individual measures were then collapsed into the customer accounts where they actually occurred. This process resulted in a total of 288 unique sites. These sites were sampled using a random sample with a stratification design. Each site received a detailed engineering analysis of savings and onsite verification.
2. **Residential Limited-Income**: This program was the result of contracts with social service agencies that provide support to limited-income clients. Avista contracts with these agencies to design and manage the programs. The gas savings claims are reported to the utility and have been used as claimed savings for these programs. A separate sample and audit protocol was developed for this set of programs. In addition, the engineering review applied to these programs was largely consistent with the review developed for the Avista operated residential programs.
3. **Residential Weatherization**: This program was designed and administered by the utility. It is composed of several measures designed to upgrade the thermal integrity of single-family homes in the Avista service territory. The program offers incentives to homeowners who insulate components of their homes and/or install replacement or new windows. Private contractors are hired by the homeowners and provide documentation of their work. The documentation is reviewed by the utility and a standardized rebate is returned to the homeowner. Savings from this program are derived from a standard set of calculations developed by the utility and adapted to the particular measures installed in the home.
4. **Residential Products and Appliances**: The utility offers a rebate to certain energy-efficient appliances and equipment. The rebates focus on clothes washing machines and dishwashers certified under the national Energy Star appliance efficiency ratings. The review of these products was focused on the list of certified products corresponding to the actual receipts submitted by the customers. Also included in this program were several Energy Star domestic hot water (DHW) appliances generally installed by plumbers. These receipts were also reviewed to ensure compliance with the standards.
5. **Residential Heating Equipment**: This program offered rebates to condensing furnaces and boilers used in heating single-family residences. The savings for this program were calculated using an assumed space heating load for all homes in the Avista service territory. The review was designed to assess the actual heating load (derived from billing analysis) and apply the documented efficiency of the equipment rebated to that load.
6. **Multi-Family Shell Measures**: This program was operated by an independent contractor. The contract was similar to the contracts used in the Limited-Income program. The gas savings from this contract were derived from retrofit insulation and windows applied to multi-family clients. The savings claims were developed by the contractor and approved by the utility. These claims were not consistent with the utility's methodology. The review of this program included both the engineering calculations used and the actual measure verification in a sample of the sites affected by this program.

7. **Ground Source Heat Pumps (GSHP)**: This measure is based on the assumption that if an electric GSHP is installed that meets this standard, the savings in gas would be equivalent to the overall gas use for space heating in the home. The verification for this program focused on determining whether the home had, or could have had, gas supplied by the utility. In reviewing a sample of these applications, no conditions were found in which gas heat was offset or could have been offset.
8. **Energy Star New Construction: T**his program is operated regionally by the Northwest Energy Efficiency Alliance (NEEA). The verification rate for this program was taken as the ratio between the evaluated savings done for the entire program (adjusted for Spokane climate), and the claimed savings derived from NEEA tables and use by the utility in its savings claims.

The components of the verification were similar across the program groups:

- A sample of each of these major programs was developed using a 90/10 sampling criteria. Only the Energy Star New Construction program did not involve a sample in the final verification ratio.
- An engineering review was conducted on most programs. Only the appliance rebates and the Energy Star program did not get a custom engineering review.
- Most programs received a field review on virtually all the applications in the sample. The field review typically consisted of verification of the installed measures, and in the C/I program, the veracity of the custom engineering applied to each site. The appliance rebate and heating equipment rebate programs did not receive a field verification review.

Verification ratios were calculated from each of the eight programs. These verifications included all of the claimed natural gas savings under the Avista energy efficiency programs. Table 1 summarizes the results of this review for each program. As shown in the table, the overall verification rate was determined to be 83.4% of the utility's overall claim.

Table 1. Summary of Verification Ratios, All Programs

Program	Verification Ratio	T-statistic	Program Claimed Savings	Program Verified Savings
Limited Income Residential	0.676	-2.76	95,251	64,390
UCONS Multi-Family	1.000	0.00	35,290	35,290
Residential Weatherization	0.792	-2.55	545,180	431,544
Residential Products and Appliances	0.908	-2.99	48,666	44,172
Residential Heating Equipment	0.879	-2.62	395,076	347,018
Energy Star New Construction	0.528		18,124	9,569
Ground Source Heat Pumps, Conversions	0.000		15,740	0
All Residential Programs	0.808		1,153,327	931,983
All Commercial/Industrial Programs	0.868	-2.45	890,313	772,659
Total, All Claims	0.834		2,043,640	1,704,642

Table 2 and
Table 3 summarize the verification results for the states of Washington and Idaho respectively. These tables use a single overall verification ratio for each separate program. The overall verification ratio is the weighted average of the separate programs. This weighting results in small differences in the verification ratio between the two states due to differences in the individual program claims between the states.

Table 2. Washington Program Verification

Program	Verification Ratio	Program Claimed Savings	Program Verified Savings
Limited Income Residential	0.676	83,178	56,228
UCONS Multi-Family	1	17,548	17,548
Residential Weatherization	0.792	418,529	331,475
Residential Products and Appliances	0.908	24,669	22,399
Residential Heating Equipment	0.879	269,001	236,452
Energy Star New Construction	0.528	13,002	6,865
Ground Source Heat Pumps, Conversions	0	9,444	0
All Residential Programs	0.803	835,371	670,968
All Commercial/Industrial Programs	0.868	608,004	527,747
Total, All Claims	0.830	1,443,375	1,198,715

Table 3. Idaho Program Verification

Program	Verification Ratio	Program Claimed Savings	Program Verified Savings
Limited Income Residential	0.676	12,073	8,161
UCONS Multi-Family	1	17,741	17,741
Residential Weatherization	0.792	126,651	100,308
Residential Products and Appliances	0.908	9,141	8,300
Residential Heating Equipment	0.879	128,075	112,578
Energy Star New Construction	0.528	5,122	2,704
Ground Source Heat Pumps, Conversions	0	6,296	0
All Residential Programs	0.819	305,099	249,792
All Commercial/Industrial Programs	0.868	282,309	245,044
Total, All Claims	0.842	587,408	494,837

Four other impact analyses being performed by Ecotope are not yet complete.

Internal Impact Analyses

Residential Electric to Natural Gas Heating Conversion - Electric Energy Savings

Project Description: A billing regression analysis was used to determine the heat energy for each home in the sample. This is an appropriate method as the saving is expected to be significant and the participants are well defined. Normalized annual consumption (NAC) was used to determine pre measure heating energy. Two years (24 Months) of Pre-measure monthly usage data was normalized to heating degree days (HDD). Energy use and HDD days were taken from Avista's Workplace system. The method was a modified time series comparison. Only data prior to the measure was be analyzed. Post measure will be analyzed in early 2011. The population of measures was 115 accounts. For a confidence of 95/15 n was taken as 31. The sample was random from the accounts that submitted their rebate forms in 2009. Since this analysis is only pre-measure, it will represent the typical savings available. Each account was taken as is and unadjusted for obvious supplemental heat. It will be assumed that the percentage of supplemental heat in the sample persists in the population.

The analysis showed that Avista's current claimed savings is over stated. This preliminary report found that the realization rate for savings was 47%. The claimed savings for each program participant is 18,458 kWh/year. This evaluation determined that the value is more closely 8,655 kWh/year.

Start Date: 02/2010

Status: Completed

Completion Date: 03/2010

Actions Taken: The claimed residential fuel switch ex-ante savings amount was immediately changed to 8655 kWhr/yr by the program manager. The results were given to the external evaluators for the 2009 decoupling evaluation. A process change for 2011 will include changes in the rebate forms to account for findings of this and other impact analysis.

Residential Solar Thermal Water Heating Production - Electric Energy Savings

Project Description: In an IPMVP Option B Solar Water heating study, 3 customers/employees were chosen who had previously created their hot water using electric resistance water heaters. Electric resistance heaters where chosen because they have the highest cost of operation of standard water heating systems. The proposed change was to install a commercially made solar powered thermal water heating system to supplement the present electric resistive heating system. The test subjects were instrumented with water flow and BTU meters as well as energy usage by the hot water tank to discover the actual usable hot water production from the two solar collectors installed on the roof as well as the losses during non-run times. This study was performed to determine the efficacy of Solar Hot water systems in tour services territory as well as the viability of offering programs or incentives on the systems.

This limited analysis showed that the average installation cost of the system was $5850. The data suggested an annual average consumption of 48,000 gallons of heated water and the Solar Panels created savings of 2500 kWhrs per year over straight electric resistance heat. This gave a sub TRC of under .4 and suggests the measure savings may not be applicable to I-937 on a cost test basis.

Start Date: 11/2007

Status: Completed

Completion Date: 05/2010

Actions Taken: No incentives are planned for solar water heating applications. While the costs and benefits are favorable compared to other distributed renewables, there are not enough installations to look at establishing programs. The study led to some preliminary information that called for the residential water heating study that will be performed in 2011.

Commercial Hospitality Bathroom Fan Control Study - Electric Energy Savings

Project Description: In an IPMVP Option A limited study for a single hospitality customer was conducted to ascertain the savings from changing the bathroom light/fan control sequence. The study was done in response to the customer request. The normal situation was that a light switch controlled both the 90 cfm fan in the bathroom as well as a light. It was thought that the clients were leaving the fan and light on at night as a night light or forgetting to shut it off. The customer wanted to change the light which was secondary to the illumination over the sink to an occupancy sensor controlling the fan and setting the time limit to 30 minutes. Four rooms were instrumented for runtime of the fan. In two control rooms, the situation was left as usual. In two other rooms, the light was replaced with an occupancy sensor which controlled the fan runtime. The rooms were kept fully occupied during the one month test period.

The results showed a 35.5% reduction in fan runtime, with extrapolated annual kWhr savings in exfiltration and lighting reduction of 226.1 kWhrs. The customer cost was given at $60.

Start Date: 3/2010

Status: Completed

Completion Date: 06/2010

Actions Taken: The customer is still considering implementation in their entire facility. More work will be necessary to determine if there is an opportunity to use similar applications in other hospitality units. The customer's savings, if they proceed, will be reduced to compensate for their actual annual room occupancy rate.

Site Specific Natural Gas Impact Evaluation

Project Description: The goal of this evaluation was to determine the realization rates across a sample of site specific natural gas project population. The total measure population is 164 so for a 95/15 confidence the sample size would be 35. To ensure an adequate sample size with potential billing or redundancy issues 80 measures will be selected. The sample will be random from the projects that completed in 2009. The population of the sample was numbered 1 – 164 and then a random number generator was performed and the top 80 measures were taken. Normalized annual consumption

(NAC) will be used to determine pre measure heating energy. One year (12 Months) of Pre-measure monthly usage data will be normalized to heating degree days (HDD). Energy use and HDD days will be taken from Avista's Workplace system. The baseline period will consist of calendar year 2007 with a performance period of calendar year 2009. If there are issues with the baseline a different period will be selected and the new baseline period and issues will be noted. If the regression yields a negative intercept the regression will be rerun with the intercept fixed to zero.

Start Date: 07/2010

Status: After accounting for billing and redundancy issues the total sites included in the analysis were 52. The claimed therm savings for those 52 sites was 101,877 therms with 94,964 verified therms for a realization rate of 93.2%. 5 sites were excluded from the analysis that had calculations performed on them. One was a greenhouse where the R squared was .01 and the customer was contacted for production data but none has been provided to date. Two sites were low outliers (both an Idaho School District) with the lack of hog fuel not being able to offset their gas load. An Idaho retailer was a high outlier removed because of a low R squared of 0.3. A Washington publishing company was another high outlier that was removed. If these projects were included the 56 sites would have a claimed savings of 199,496 therms and a verified 181,660 therms for a realization rate of 91.1%.

Expected Completion Date: Fall 2010

Actions Taken: We will determine if adjustments need to be made to how we calculate our site specific HVAC projects when we receive the third party evaluators impact analysis in conjunction with the one we performed.

Residential (average) Heating Energy Consumption

Project Description: This regression analysis was performed to determine the average energy consumed, in therms and kWh, to heat homes in Avista's service territory. A randomly generated sample of 136 homes, 68 customers know to heat with gas and 68 customers known to heat with electric, was taken from the overall population of 26,113, 12,609 electric heat and 13,504 gas heat, that filed for a rebate during 2009. Usage data, therms or kWh consumer and HDD per billing cycle, was then pulled for two periods; 2007-2008, and 2009-2010.

Two regressions were run; one for the period before the measures were installed (2007-2008), and one for the period after (2009-2010).

The analysis showed definite savings, a 5% reduction for electric heat customers and a 13% reduction for gas heat customers, between the two test periods for the sample population.

Start Date: 05/2010

Status: Completed

Completion Date: 05/2010

Actions Taken: The analysis yielded an average home energy consumption (for heating) that was lower than Avista's previous numbers. As a direct result the ongoing ex-ante savings for several residential rebates programs based on heating were reduced in the gas and electric calculations.

Commercial Steam Trap Program Savings Analysis

Project Description: This regression analysis was performed to determine the actual savings associated with replacing steam traps. Eleven customers who have replaced steam traps in the last three years were selected. Gas usage history was collected for two years prior to the new steam traps and also for the two years after install. The regression was run on the data from the two years prior.

To determine actual savings we calculated theoretical usage, using the equation from the regression and HDD data from the period after the steam trap install, and then subtracted the actual usage from the period after the install. Some savings were seen for customers who use their steam systems for heat, but we have not had a chance to go through our calculations to determine the realization of savings for these customers.

Start Date: 9/2010

Status: In process; all sites that have usage based on production and not weather (Laundromats and mills) still need to have regression done. We are waiting on production data.

Expected Completion Date: Spring 2011

Actions taken: None taken, waiting for completion of analysis.

Site Specific Insulation Savings Analysis

Project Description: To calculate realization rates of site specific insulation projects though regression analysis. Any projects that don't show correlation between HDD & energy consumption through regression analysis method will be discarded. The population is composed of randomly selected site specific shell projects that were assumed to be completed at the start of the 2007 year until the end of 2008 year. Projects from 07-08 were selected in order to have at least two years of previous energy & HDD data from the assumed date of measure implementation and to have one full year of Post energy & HDD data. The sample population is composed of only the site specific shell projects that claimed to have saved more than 10% of their existing energy consumption. Realization rates will need to take into account any other EEMs implemented within the energy & HDD data used for the regression analysis. The claimed energy savings listed in Evaluation reports from any other EEMs analyzed are taking into account completely vs. actual (unknown) savings from those measures. Thus, it should be noted realization rates calculated may not be entirely accurate because Actual savings from other EEMs can greatly impact whether the realization rate is above or below the claimed savings from the shell measure. Following completion, realization rate results will be evaluated in an effort to determine potential changes/adjustments that can be made to the site specific insulation calculation method in order to achieve realization rates closer to 100%.

Start Date: Spring 2010

Status: In progress; have to determine if additional energy efficiency measures have been implemented at each project address as they can have significant impacts on realization rates. Will adjust accordingly once measures & their claimed savings have been identified.

Expected Completion Date: TBD

Actions Taken: None at this time. Looking at asking for specific new addition or changes to heating area questions on forms to clarify savings estimates.

Roof Top Unit (RTU) EM&V summary

Project Description: Monitor, measure and log key performance indicators of two identical RTUs collocated at the same facility for (1) year. One of the RTUs will act as a baseline unit, the other RTU will be serviced by a HVAC professional following a (13) point HVAC maintenance checklist which includes cleaning the fan(s) and condenser/evaporator coils, changing the filter and inspecting the drive belts. Following (1) years worth of operational testing, the data will be correlated, compared, analyzed, and evaluated in an effort to determine the effect servicing has on energy savings.
Start Date: 05/2009
Status: In process; several sites are part of testing, all sites will not complete logging until fall 2010, at which point evaluation of the data can begin.
Expected Completion Date: Winter 2010- Spring 2011
Actions Taken: To be determined.

Pump Driven Engine Block Heater EM&V summary

Project Description: Monitor, measure, log and evaluate performance of thermo-siphon and pump driven style engine block heaters. Test goals focused on measurement of energy use in varying ambient temperatures to simulate outdoor environmental conditions. Ambient temperature controlled and maintained via environmental test chamber. Resulting analysis of this project's data, has verified the energy, and some non-energy, benefits of employing pump driven heating systems. This information is currently being leveraged for projects within the site specific program to determine annual energy savings.
Start Date: 04/2010
Status: Testing and analysis completed; results of effort are currently being leveraged to evaluate customer EEM projects
Completed Date: 10/2010
Actions Taken: The effort revealed that the pump driven engine block heaters do result in energy savings over thermo-siphon driven system. Application of the data obtained during this effort simplifies evaluation of projects undertaken by customers under the site specific program. It also laid ground work for a prescriptive program to be implemented in the near future.

Internal Process Analyses

Evaluation Report Quality Assurance Process Analysis

Analysis participants: Tom Lienhard, PE, CMVP; Pat Dever, Avista IS; Andrea Sewright, Avista IS; All members of Avista DSM engineering Team; Teresa Carter, Avista Internal Auditing
Process Reviewed: Energy Efficiency Measure Evaluation Reports and DFIC's
Purpose of the review: To reduce the risk of incorrect, poorly written, or non-compliant reports and provide a documented review process for engineering reports and duel fuel

incentive calculations. To remind staff to look for and address conflict of interest while performing calculations and reports.

Programs affected: All programs which use evaluation reports for customer education and confirmation of the incentive offering. Primarily affects Site Specific evaluations, but also any evaluation that contains engineering calculations.

Summary of findings: A mechanism to create consistent evaluations was designed using an existing Avista database product called Tracker. Tracker was adjusted to allow the following of projects through the various people and departments necessary to handle the project incentive calculation and reporting request. One particular part of tracker used for this need is the task approval request function. The engineering staff will now ask for an approval from one of the other engineering members prior to releasing the report to the Account Executive for dispersal to the customer. This system was instated in early December 2009 and has been in use for review by the engineering supervisor for all of 2010.

Disposition – Complete 1/2010

Energy Efficiency Measure Evaluation Tool Update Analysis

Analysis participants: All members of Avista DSM engineering Team

Process Reviewed: Energy Efficiency Measure Evaluation Tool Update Process

Purpose of the review: To establish an updated protocol for the analysis tools used to calculate the benefits of completing energy efficiency measures. To establish a documentation process for changes made within analysis tools.

Programs affected: Affects all programs that contain engineering calculations.

Summary of findings: Each analysis tool will be assigned a member of the engineering team to make revisions. Each year the team member assigned will be rotated such that no team member will review the same tool two years in a row. New worksheets will be added to each analysis tool and will include details of the calculations performed and of the revision history of the tool. All analysis tools will be housed exclusively in the _DSM folder on the common drive.

Disposition – Complete 2/2010

Energy Efficiency Measure Base Efficiency Increase, Life and Disposal Analysis

Analysis participants: Tom Lienhard, PE, CMVP; All members of Avista DSM engineering Team; Ceil Orr, Senior Contract Manager, Purchasing

Process Reviewed: Energy Efficiency Measure Base Efficiency Increase, Life and Disposal

Purpose of the review: To reduce the risk of providing incentives for no gains in efficiency in new equipment, to reduce the chance of poor equipment being used again in service, and to create an incentive to supply the customer with accurate information for their equipment change decision.

Programs affected: All programs which include equipment change where the cause of the change is either reduced effectiveness of the present equipment or increased efficiency of new equipment. Primarily affects Site Specific communication and evaluations, but also any evaluation that contains engineering calculations dealing with equipment and equipment life.

Summary of findings: A policy was created to provide consistent treatment to all customers asking for efficiency evaluations for equipment change. The policy was adjusted to allow for the following guidelines:

1. No incentive will be paid if the new equipment has the same nameplate efficiency as the old equipment.
2. No incentive will be paid if the new equipment does not meet the minimum applicable code standard at the time of analysis.
3. Old equipment must be rendered inoperable or otherwise disposed of in a manner that will not allow its reintroduction into the market.
4. No incentive will be calculated or paid on used equipment.
5. Avista Energy Solutions will create an incentive to find the actual efficiency of burner tip devices through the use of flue gas analysis using systems of vendors to perform analysis. Until that system is in place, the lowest efficiency that may be used for burner devices claimed to be inefficient without the benefit of a flue gas analysis will be 10% under nameplate.

Disposition – Complete 3/2010

Rebate processing for Energy Efficiency Incentives Process Analysis

Analysis participants: Rachelle Humphrey, Avista DSM; Chris Drake, Avista DSM; Tom Lienhard, Avista DSM; Karen Urion, Avista IS; Mary Inman, Avista IS

Process Reviewed: Rebate processing for Energy Efficiency Incentives for Existing and New Construction Residential Homes

Purpose of the review: To reduce the risk of data entry error and excessive time spent on processing residential rebates as well as the time spent speaking to customers over the phone about the status of their rebate.

Programs affected: Energy Efficiency Incentives for Existing Homes, Energy Efficiency Incentives for New Construction Homes, Fireplace Damper Rebates, Energy Star Home Rebates, as well as the Energy Star Appliance rebates that are unable to be processed when the quantity of the others is all-consuming.

Related documents:

- Energy Efficiency Incentives for Existing Residential Homes Rebate form
- Energy Efficiency Incentives for New Construction Homes Rebate form
- Energy Star Home Rebate form
- Fireplace Damper Rebate form

Summary of findings: We will need to develop a mechanism that reduces the risk of error during rebate processing as well as cutting down on the time that is spent per rebate. The tool would automate residential rebates to an online form for customers to complete rather than for Avista employees to hand verify and processing each one individually. The goal is to take the information for each measure from the customer (and/or dealer) and, after they input the measures installed into an online rebate form, have the information dumped into CSS that in turn can be updated and/or deleted after we receive and review their supporting documentation. After the information is accepted by the appropriate rebate personnel, the customer name and mailing address as well as the rebate amount and project/task numbers will printed out on a report CS – Res Energy Eff Rebate Check Request Report WA6PAR60.

Disposition – Ongoing with external review planned in 2011

Conservation Potential Assessment

As part of our most recent Electric and Natural Gas Integrated Resource Plan (IRP) planning process, an action item was added to have an external electric and natural gas Conservation Potential Assessment (CPA) done prior to the filing of our next IRPs. Consequently, Global Energy Partners (Global) has been retained to complete an electric and natural gas CPA for use in our 2011 Electric and 2012 Natural Gas IRPs. The CPA is on the IRP schedule which does not correlate well with business planning and the November 1, 2010 Business Plan filing date. Also, in line with the IRP schedules, Global is addressing the electric portion of the CPA first, with the natural gas portion to follow in 2011. Therefore, this Plan will only include a summary of efforts to date and cannot include estimates of technical, economic or achievable potentials that will ultimately result from this study.

The CPA will be a 20-year potential study for both electric and natural gas energy efficiency and demand response and will provide data on demand-side management resources for the electric and natural gas IRPs. This study will encompass our energy efficiency efforts in Washington, Idaho and Oregon. The CPA will account for impacts of existing Avista DSM programs, Avista's load forecasts and load shapes, impacts of codes and standards, technology developments and innovation, the economy and energy prices, and finally, naturally-occurring energy savings. This study will also analyze cost-effective energy efficiency and demand-response potentials in accordance with the 6th Power Plan and Washington I-937 requirements for electric resources. Global will provide supply curves showing incremental costs associated with achieving higher levels of energy efficiency and demand response as well as a stacking of resources by cost. Finally, various market penetration rates associated with technical, economic and achievable and naturally occurring potentials estimates will be analyzed.

Avista provided Global with market characterization information based on the Company's actual 2009 operational performance results to include sales, number of customers and peak demand by rate schedules and state. This information was used to establish a baseline market characterization which would serve as a starting point for conducting the energy efficiency and demand response potential assessments. These characteristics will be presented by sector, customer segment, and end use. Global defined a set of market segments (building types, end-uses and other dimensions) that are relevant in the Avista service territory. The segmentation framework intended to be employed for the electric portion of this project is represented in the table below.

Market Dimension	Segmentation Design	Dimension Examples
Dimension 1	Geographic Region	Washington, Idaho
Dimension 2	Rate Class	Residential, Commercial/Industrial (General Service, Large General Service, Extra Large General Service), Pumping
Dimension 3	Building Type	Residential (single-family, multi-family, mobile home, limited income), no further segmentation of C/I or pumping
Dimension 4	Vintage	Existing and new construction (as appropriate for residential and commercial sectors)
Dimension 5	End Uses	Cooling, lighting, water heat, motors, etc (as appropriate by sector)
Dimension 6	Appliances/End Uses and Technologies	Cooling, lighting, water heat, motors, etc (as appropriate by sector) Technologies such as types of lamps, chillers, color TVs, etc
Dimension 7	Equipment Efficiency Levels	Old, standard (minimum standard), maximum efficiency

To develop a baseline forecast for Avista's residential sector, Global used existing Avista billing data, U.S. Census data, and other sources (the Eastern Washington University Energy Burden Study and the Titus report) to segment Avista's residential customers. Figure 1-4 shows segmentation of the market by housing type based for both states.

Fig. 1 Washington, % of Sales, 2009

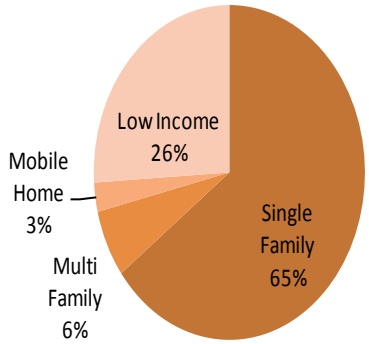


Fig. 2 Washington, % of Customers, 2009

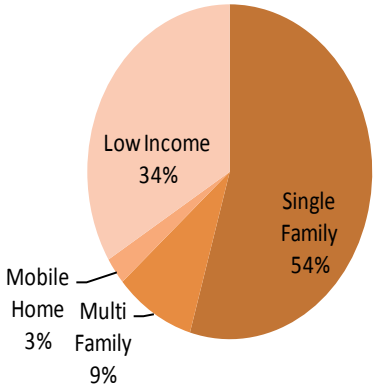


Fig. 3 Idaho, % of Sales, 2009

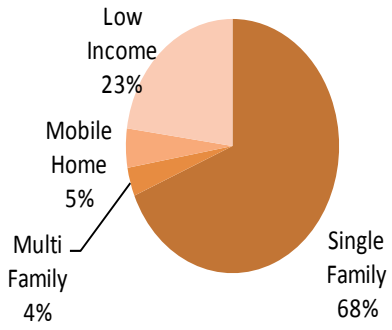
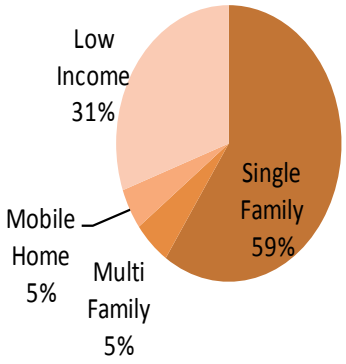


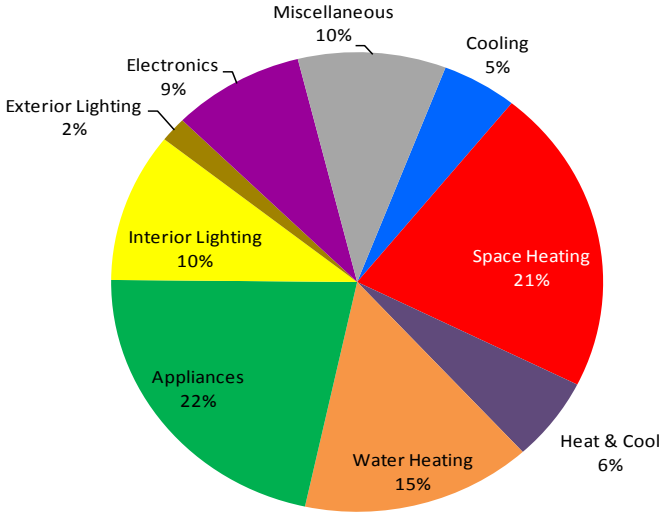
Fig. 4 Idaho, % of Customers, 2009



Market profiles characterize electricity use in terms of sector, customer segment, end-use and technology for the base year. The base-year market profiles are the basis for developing a forecast of annual energy use by customer segment and end use with the elements being market size, saturation, unit energy consumption, intensity and total energy use. Market size is the number of customers. Saturation embodies saturation of appliances or equipment and the share of homes using electricity (e.g. homes with electric space heat). Unit Energy Consumption describes the amount of electricity consumed by a specific technology in a home with that technology. Intensity represents the average use for the end use/technology across all homes. Two sets of market profiles were developed for each segment (housing type). The *Average Home* profile represents existing homes while the *New Units* profile represents new construction.

The following figure summarizes the results of the residential market profile for both Washington and Idaho in the base year.

Residential Market Profile



At this point the baseline market segmentation and the market profiles are developed and Global can then evaluate energy efficiency and demand response potential for a given set of energy efficiency and demand response measures and/or programs. The following table lists the individual residential, commercial and industrial measures and technologies that will be evaluated.

Sector	Measure/Technology
C&I	100-249 HP Machine Drive
C&I	250-499 HP Machine Drive
C&I	25-99 HP Machine Drive
C&I	500 and more HP Machine Drive
C&I	5-24 HP Machine Drive
C&I	Advanced New Construction Designs
C&I	Central Chiller
C&I	Chiller - Chilled Water Reset
C&I	Chiller - Chilled Water Variable-Flow System
C&I	Chiller - Condenser Water Temprature Reset
C&I	Chiller - High Efficiency Cooling Tower Fans
C&I	Chiller - Turbocor Compressor
C&I	Chiller - VSD
C&I	Commissioning - Comprehensive
C&I	Commissioning - HVAC
C&I	Commissioning - Lighting
C&I	Compressed Air - Compressor Replacement
C&I	Compressed Air - System Controls
C&I	Compressed Air - System Maintenance
C&I	Compressed Air - System Optimization and Improvements
C&I	Cooking - Exhaust Hoods with Sensor Control
C&I	Cooling - Economizer Installation
C&I	Custom Measures
C&I	Desktop Computer
C&I	Dishwasher
C&I	Electric Resistance
C&I	Electrochemical Process
C&I	Energy Management System
C&I	Exterior Lighting - Cold Cathode Lighting
C&I	Exterior Lighting - Daylighting Controls
C&I	Exterior Lighting - Daylighting Controls
C&I	Exterior Lighting - Induction Lamps
C&I	Exterior Lighting - Photovoltaic Installation
C&I	Exterior Screw-in Lighting
C&I	Fan System - Controls
C&I	Fan System - Maintenance
C&I	Fan System - Optimization

C&I	Fans - Energy Efficient Motors
C&I	Fans - Variable Speed Control
C&I	Fans - VFD Installation
C&I	Food Prep
C&I	Fryer
C&I	Furnace
C&I	Glass Door Display
C&I	Heat Pump
C&I	Heat Pump - Maintenance
C&I	HID
C&I	HID
C&I	Hot Food Container
C&I	Icemaker
C&I	Industrial Process Improvements
C&I	Insulation - Bare Suction Lines
C&I	Insulation - Ceiling
C&I	Insulation - Ducting
C&I	Insulation - Radiant Barrier
C&I	Insulation - Wall Cavity
C&I	Interior Fluorescent - Bi-Level Fixture w/Occupancy Sensor
C&I	Interior Fluorescent - Delamp and Install Reflectors
C&I	Interior Fluorescent - High Bay Fixtures
C&I	Interior Lighting - Central Lighting Controls
C&I	Interior Lighting - Hotel Guestroom Controls
C&I	Interior Lighting - Occupancy Sensors
C&I	Interior Lighting - Photocell Controlled T8 Dimming Ballasts
C&I	Interior Lighting - Time Clocks and Timers
C&I	Interior Screw-in
C&I	Interior Screw-in - Task Lighting
C&I	Laptop Computer
C&I	Laundry - High Efficiency Clothes Washer
C&I	LED Exit Lighting
C&I	Less than 5 HP
C&I	Linear Fluorescent
C&I	Linear Fluorescent
C&I	Miscellaneous
C&I	Miscellaneous - Energy Star Water Cooler
C&I	Monitor
C&I	Motors - Magnetic Adjustable Speed Drives
C&I	Motors - Variable Frequency Drive
C&I	Non-HVAC Motor
C&I	Office Equipment - Energy Star Power Supply

C&I	Office Equipment - Plug Load Occupancy Sensors
C&I	Open Display Case
C&I	Other Miscellaneous
C&I	Oven
C&I	POS Terminal
C&I	Printer/copier/fax
C&I	Process Cooling/Refrigeration
C&I	Process Heating
C&I	PTAC
C&I	Pumping System - Controls
C&I	Pumping System - Maintenance
C&I	Pumping System - Optimization
C&I	Pumps - Variable Speed Control
C&I	Refrigeration - Anti-Sweat Heater/Auto Door Closer
C&I	Refrigeration - Door Gasket Replacement
C&I	Refrigeration - Floating Head Pressure
C&I	Refrigeration - High Efficiency Case Lighting
C&I	Refrigeration - Night Covers
C&I	Refrigeration - Strip Curtain
C&I	Refrigeration - System Controls
C&I	Refrigeration - System Maintenance
C&I	Refrigeration - System Optimization
C&I	Repair and Sealing - Ducting
C&I	Retrocommissioning - Comprehensive
C&I	Retrocommissioning - HVAC
C&I	Retrocommissioning - Lighting
C&I	Roofs - Green
C&I	Roofs - High Reflectivity
C&I	RTU
C&I	RTU - Evaporative Precooler
C&I	RTU - Maintenance
C&I	Server
C&I	Solid Door Refrigerator
C&I	Steam Trap Repair or Replacement
C&I	Thermostat - Clock/Programmable
C&I	Vending Machine
C&I	Vending Machine - Controller
C&I	Ventilation
C&I	Walk in Refrigeration
C&I	Water Heater
C&I	Water Heater - Faucet Aerators/Low Flow Nozzles
C&I	Water Heater - High Efficiency Circulation Pump
C&I	Water Heater - Hot Water Reset
C&I	Water Heater - Hot Water Saver

C&I	Water Heater - Hot Water Storage
C&I	Water Heater - Tank Blanket/Insulation
C&I	Water Heater - Thermostat Setback
C&I	Windows - High Efficiency
Residential	Advanced New Construction Designs
Residential	Air Source Heat Pump
Residential	Air Source Heat Pump - Maintenance
Residential	Attic Fan - Installation
Residential	Attic Fan - Photovoltaic - Installation
Residential	Ceiling Fan - Installation
Residential	Central AC
Residential	Central AC - Early Replacement
Residential	Central AC - Maintenance and Tune-Up
Residential	Clothes Dryer
Residential	Clothes Washer
Residential	Devices and Gadgets
Residential	Dishwasher
Residential	Doors - Storm and Thermal
Residential	Electric Furnace
Residential	Electric Resistance
Residential	Electronics - Reduce Standby Wattage
Residential	Energy Efficient Manufactured Homes
Residential	Energy Star Homes
Residential	Exterior Lighting - Photosensor Control
Residential	Exterior Lighting - Photovoltaic Installation
Residential	Exterior Lighting - Timeclock Installation
Residential	Freezer
Residential	Freezer - Early Replacement
Residential	Freezer - Remove Second Unit
Residential	Furnace Fan
Residential	Geothermal Heat Pump
Residential	High Intensity/Flood
Residential	Home Energy Management System
Residential	Insulation - Ceiling
Residential	Insulation - Ducting
Residential	Insulation - Foundation
Residential	Insulation - Infiltration Control
Residential	Insulation - Radiant Barrier
Residential	Insulation - Wall Cavity
Residential	Insulation - Wall Sheathing
Residential	Interior Lighting - Occupancy Sensor
Residential	Linear Fluorescent
Residential	Microwave
Residential	Miscellaneous

Residential	Personal Computers
Residential	Photovoltaics
Residential	Pin-based
Residential	Pool - Pump Timer
Residential	Pool Pump
Residential	Refrigerator
Residential	Refrigerator - Early Replacement
Residential	Refrigerator - Remove Second Unit
Residential	Repair and Sealing - Ducting
Residential	Roofs - High Reflectivity
Residential	Room AC
Residential	Room AC - Removal of Second Unit
Residential	Screw-in
Residential	Second Refrigerator
Residential	Stove
Residential	Supplemental
Residential	Thermostat - Clock/Programmable
Residential	Trees for Shading
Residential	TVs
Residential	Water Heater
Residential	Water Heater - Drainwater Heat Reocvery
Residential	Water Heater - Faucet Aerators
Residential	Water Heater - Hot Water Saver
Residential	Water Heater - Low Flow Showerheads
Residential	Water Heater - Pipe Insulation
Residential	Water Heater - Tank Blanket/Insulation
Residential	Water Heater - Thermostat Setback
Residential	Water Heater - Timer
Residential	Whole-House Fan - Installation
Residential	Windows - High Efficiency/Energy Star
Residential	Windows - Reflective Film

Global will use this comprehensive list of energy efficiency for assessing the energy savings impacts associated with this broad range of measures. Global's approach will be to consider the effects of future energy efficiency measures since many of these measures might not pass the economic screens today but may in the future. Consequently, it is important to monitor the feasibility of technologies that are currently in the demonstration stages (i.e., heat pump water heaters, super-efficient air conditioners, and cutting-edge LED lighting technologies). Measure assessment takes into consideration that these technologies may ultimately be part of the energy efficiency program portfolio.

Once this list is assembled, energy savings characteristics are considered. The core approach for doing this is to use Global's Building Energy Simulation Tool (BEST). BEST is a derivative of the Department of Energy's 2.2 building simulation model that has been customized for Global to forecast energy efficiency and demand response measure impacts.

The next step in the process will be to estimate the technical potential. Technical potential is the upper boundary of energy efficiency potential—all feasible measures are adopted by customers regardless of cost-effectiveness or acceptance. To this, an economic screen will be applied to test every individual measure for economic viability in the context of Avista's circumstances. In order to accomplish this, a catalog of relevant data for every measure will be developed. This would include technical description of what the measures are anticipated to accomplish, identification of energy and demand savings attributable to the measure, incremental costs associated with the measures, and useful lives of the measure.

After completing the economic screen, the economic potential will be calculated. This assumes that only the cost-effective energy efficiency measures are adopted by customers. Economic potential still does not take into consideration the acceptance of these measures by customers.

Finally, the achievable potential levels will be established. For this project, a maximum achievable potential, consistent with the Council's definition of achievable potential, will be developed. Specifically, that 85% of the economic potential will be met by the end of the 10-year time horizon. That being the high, Global will also develop estimates of medium and low based on specific circumstances that Avista faces in delivering specific measures and programs to its customers. It is likely that the potentials will be the same for some measures, but will differ for others.

The three potentials estimates, technical, economic and achievable, will be presented as annual energy saved (kWh), peak demand reduction (MW) by market segment, end use and measure type.

Natural gas analysis will follow a similar process. There will be some differences in the demand response analysis in that the segmentation approach will be modified somewhat. The rate classes analyzed will be residential, commercial/industrial and pumping, with no additional break down of commercial/industrial.
Avista anticipates a final report on both the CPA in April 2011, with some deliverables being provided earlier, in line with the IRP schedules.

Net-to-Gross Study

Net-to-Gross (NTG) is a factor applied to gross savings in order to adjust for free-ridership and spillover. Estimating free-ridership and spillover are among some of the most controversial issues in DSM evaluation. Since most free-ridership estimates are a product of customer self-reports through surveys or interviews, they are subject to inherent reliability issues associated with self reports (such as memory, respondent bias, and wanting to provide socially acceptable responses).

Free-riders are participants in energy efficiency regardless of the utility program. Free-riders would have participated without the utility rebate to entice them to participate. Therefore, the utility would have paid more in rebates than was necessary since these participants would have participated without the incentive.

Spillover is when a participant installs more energy efficiency measures than they were incented for, therefore, the utility under-claims the amount of savings impact that its DSM programs induced. Another example of spillover would be the change in behavior of manufacturers, distributors, retailers and other trader allies in the market that leads to the increase in the adoption of energy efficient technologies.

The Company committed in a Memorandum of Understanding (MOU) with the Staff of the Idaho Public Utilities Commission (IPUC) that we would provide both gross and net savings attributable to our DSM programs. In late 2010, the Company issued a Request for Proposals (RFP) for an external NTG evaluation to be complete in time for our 2010 Annual Savings/Expenditures Report to be filed March 31, 2011.

Two proposals were received and at the time this business plan was being develop, no decision had been made as to which would be selected for the evaluation. The Company's intent is that the selected bidder would aid us in providing a reliable, transparent and straight forward approach that the Company could continue to apply in the future.

Residential Portfolio Overview

The Company's residential portfolio is composed almost entirely of prescriptive programs. The only efficiency measures that are not prescriptive are for multifamily residential customers or distributed generation. In these unique cases the projects are treated site-specifically. Otherwise, efficiency measures not incorporated within one of the prescriptive programs are not available for residential customers. This is necessitated by the large number of small projects that characterize the residential customer segment.

The residential market is expected to acquire 25% of electric and 43% of the natural gas savings achieved through Avista's local programs during 2011. This amount, and particularly the natural gas acquisition, is subject to a significant amount of uncertainty due to the gradual discontinuation of state and federal tax credits, the continued ramp up of the residential audit program and the impact of the Price of Gas Adjustment (PGA) revisions upon customer decision-making.

The measure-by-measure sub-TRC analysis will lead to the termination of residential efficiency measures as appropriate during 2011, specifically electric straight resistance to air source heat pump. Similarly, distributed generation projects may not meet proposed simple payback requirements for incentives and could be in effect suspended until pricing or performance changes significantly. The timing of those terminations is dependent upon the need for customer and trade ally notice as well as approval of proposed tariff changes in the case of new simple payback requirements.

Results from the 3rd party natural gas decoupling audit are being distributed and digested by the DSM team. Recommendations affecting residential programs will be implemented. Specifically additional information requests from customers to further tier savings on programs as appropriate such as additional details on age and size of home and type of existing windows for applicable programs. Also audit results should confirm or modify savings estimates.

Residential programs will be heavily involved in EM&V in 2011. Residential programs will be included in impact analysis as well as ongoing process tracking and process evaluations.

Residential programs have a strong presence and coordination with regional efforts such as those offered by the Northwest Energy Efficiency Alliance (NEEA). There is a separate section for NEEA but programmatically speaking there are regional efforts underway for Energy Star Homes, Consumer Electronics, Ductless Heat Pumps, and standard improvements for new heat pump water heating technologies.

An exciting process improvement effort began in 2010 and will continue into 2011. An effort to automate rebate processing is underway. First a process improvement review was completed of the existing residential rebate processing to avoid automating waste. Business requirements for automation have been established along with potential savings metrics. Prioritization for programming is next. The automation effort may be summarized into three major areas, one is customer self-service, two is data transfer and tracking into the customer service system (CSS), and third is automated file transfer to accounts payable to avoid redundant data entry or enhancing the use of credits to accounts to speed up payment and reduce checks cut.

Residential programs have benefited from a sustained and significant customer awareness campaign, everylittlebit to encourage customers to take advantage of energy savings programs from Avista. Outreach efforts have included broad media, online, print and participation at several events. In 2011 Avista will be evaluating the right fit of DSM-led outreach events while maintaining DSM tools for other departments to leverage in their engagements with the public. Another valuable approach has been offering energy fairs.

Appendix G describes the individual program summaries.

Limited Income Portfolio Overview

The Company's residential limited income portfolio is composed primarily of site-specific programs delivered by local Community Action Partner (CAP) agencies. Avista contracts with up to six CAP agencies to deliver energy efficiency programs to limited income qualified customers. CAP agencies utilize existing infrastructure and leverage similar Federal Weatherization Assistance Programs for customer intake processes. CAPs are also screening customers for complimentary energy assistance and other income-qualified programs that often serve as referrals for weatherization.

Limited income efficiency measures are typically similar to measures offered under residential prescriptive programs due to cost-effectiveness guidelines. Limited income efficiency measures do include some measures, like infiltration, that have not been included in the residential programs but are well-suited to a site-specific approach. A list of approved measures with a high predictability of adequate cost-effectiveness is provided to CAP agencies. Other measures may be submitted for approval if cost-effectiveness is in question. Health and human safety measures that are necessary to ensure the habitability of the home in order for residents to benefit from energy saving investments are allowed under these programs. CAP agencies

complete installation of efficiency measures at no cost to qualified customer through this Avista funding. Administrative fees are paid to the CAP agencies for delivery of these programs.

The approval process mentioned above is supported by limited income programs tracking cost-effectiveness in a near real-time basis. Even measures that are marginally cost-effective may be approved based on the overall portfolio performance. Also at the time of business plan publication results from 3rd party natural gas decoupling audits may recommend an even greater prescriptive approach to limited income programs. It should not reduce the historical mix of measures but initial audits are showing CAP audit modeling to be optimistic in its estimate of savings.

The residential limited income market is expected to acquire 4% of electric and 6% of the natural gas savings achieved through Avista's local programs during 2010.

Appendix G describes the individual program summaries.

Non-Residential Portfolio

The tariffs authorizing Avista's DSM programs have been sufficiently broad to allow for the inclusion of any measure saving electric or natural gas energy. Avista will propose to the Washington and Idaho Utility Commissions a revision in the incentive levels for energy efficiency improvements. Currently, incentives are paid on qualifying energy efficiency projects with a simple payback of 1 year or more. The new proposal limits incentive/rebate dollars to eligible projects with a simple payback of less than 13 years for non-lighting technologies and 8 years for lighting measures. The simple payback level cap is to assist Avista and our customers in selecting the most cost-effective energy efficiency projects to install for their business. The 2011 Business Plan is based upon the assumption of a January 1, 2011 effective date for this tariff.

Within the non-residential portfolio the implementation of this authority is achieved through a combination of prescriptive programs geared towards relatively common and uniform measures and a site-specific program for all other efficiency measures.

In the past Avista has sought to use prescriptive programs to streamline the implementation process and reduce expenses as well as to simplify the communications to trade allies and customers. Though the general intent is to only use prescriptive programs for measures with significant throughput, the cost of fielding and implementing a prescriptive program is very minimal relative to serving the same customer demand through the site-specific program. Consequently there has been little reluctance to design and field prescriptive programs with the intent to stimulate customer demand, even with the knowledge that not all of these programs will succeed. The prescriptive programs that are providing little throughput are being evaluated annually to decide if they should be continued to be offered or just handled on a site specific basis.

Efficiency measures that do not qualify for the Company's prescriptive programs can be incentivized through the site-specific program. This program does require a pre-project

contractual agreement which is done after the project analysis is complete. The analysis will identify the savings opportunity and the incentive payout.

A total of 72% of electric and 51% of natural gas local portfolio acquisition are expected to come from the non-residential segment.

Appendix G describes the individual program summaries.

Regional Portfolio

Avista's current regional portfolio consists exclusively of our participation in the Northwest Energy Efficiency Alliance (NEEA, www.nwalliance.org). NEEA is funded by the regional investor and publically utilities as well as BPA to acquire energy efficiency resources through the mechanism of market transformation.

Market transformation has come to be defined as an approach for influencing markets to accelerate and/or enhance the ultimate saturation of cost-effective energy-efficient practices. Experience within the northwest has indicated that market transformation is a tool best applied as part of a regional cooperative effort. The regional approach favorably applies a greater economy of scale and addresses cross-utility 'leakage' issues prevalent in local programs. The result is a higher probability of success and enhanced cost-effectiveness.

Avista has been an active and funding partner in the application of the tools of market transformation to energy efficiency since NEEA was founded in 1996 to serve that purpose within the region. Within the current 2010-2014 NEEA funding cycle Avista funds 5.4% of the organization (up from 4.0% in prior funding cycles). This funding cycle is the fourth such series of funding contracts since the inception of the organization. Avista's participation has been based upon the finding that (1) NEEA has proven to be both a cost-effective means of acquiring resources that Avista, acting alone, could either not acquire or not acquire as cost-effectively and (2) that where NEEA's efforts and local efforts overlap, NEEA is a cost-effective enhancement to a purely local effort.

NEEA's history of providing extraordinarily low cost efficiency resources (approximately 10 mills per NEEA's analysis) has rested largely upon a small number of highly successful and predominately residential efficiency measures, and in particular CFL's. As the CFL market becomes increasingly considered to be baseline energy performance, and in particular in regards to non-specialty CFL's, the prospects for the continuance of large and inexpensive acquisitions from NEEA has diminished. Despite these challenges Avista does have confidence that the basic foundation upon which the Company's participation in NEEA is based is sound and will persist.

Within the current funding cycle Avista's share of NEEA expenses has increased from 4.0% to 5.4%. Additionally the funding level increased from $20 million in the prior funding cycle to $40 in the current funding cycle (with expenditures subject to Board approval). As a consequence Avista's funding for NEEA is expected to be approximately 270% of the pre-2010 levels.

As part of the agreement relating to the current funding cycle a commitment to greater measurement and precision in the allocation of energy savings throughout the region was reached. This methodology towards allocation of regional energy savings displaces the prior default allocation by funding share. Thus NEEA has taken on the responsibility to complete, with input from regional stakeholders including Avista, the analysis necessary to estimate the actual energy savings that accrue within Avista's Washington and Avista's Idaho service territories.

Estimates of the likely acquisition from NEEA activities is thus subject to both significant degradation from prior funding cycles and increased uncertainty based upon the methodology for allocating regional energy savings. Based upon discussions with NEEA staff and recent history Avista has incorporated within this business plan the expectation of 1.2 amW from NEEA with a 70%/30% split between the Company's Washington and Idaho service territories. This is a significant decrease from prior years and is primarily related to the transition of CFL-driven NEEA energy savings and towards a number of other ventures, many of which are yet to fully mature.

NEEA has proactively sought the input of their funding utilities regarding the format, timing and other needs for these reporting requirements. Input from Avista has included concerns regarding the timing of the receipt of NEEA's acquisition claims. The earlier and more accurate the estimates of Avista's allocation of energy savings are, the less uncertainty that exists in planning for meeting Washington I-937 acquisition requirements. As of the date of this Business Plan it appears likely that a process for providing periodic non-binding estimates of NEEA acquisition attributable to individual utilities may be available in 2011.

Avista also continues to work towards the long-term objective of laying a foundation for regional market transformation efforts for natural gas-efficiency opportunities. Based upon the proven model that NEEA has established regarding the approach to market transformation as well as the funding and organization of the infrastructure to carry out those activities, Avista believes that regional natural gas utilities can work together towards establishing a new approach for achieving efficiency acquisition. Efforts to move towards realizing this objective are part of Avista's 2011 regional strategy.

Within NEEA's current portfolio there are several market transformation ventures that generate significant natural gas energy savings, e.g. the residential window (fenestration) venture. Avista will continue to work with NEEA to identify the savings that have fallen within the Company's service territory for purposes of meeting natural gas acquisition goals. At present the Company has taken the conservative approach of not including any such estimate within 2011 acquisition expectations.

Demand Response

The Company's prior experience with demand response or load management was primarily during the 2001 Western Energy Crisis. Avista responded with an All-Customer Buy-Back program, an Irrigation Buy-Back program, bi-lateral agreements with large industrial customers, as well as commercial and residential enhanced energy efficiency programs. These methods were effective and enabled Avista to reduce its need for purchases in a very high cost Western

energy market. In July 2006 a one day pricing spike required the Company to invoke immediate demand response options. Through a media request and a large customer reduction offer, the Company was able to reduce same day load by an estimated 50 MW. Lastly, Avista conducted a small residential energy management pilot in north Idaho that concluded December 31st, 2009. This pilot was initiated to examine customer and operational issues associated with demand response on Avista's system.

In general, however, the Pacific Northwest has witnessed a low on-peak/off-peak price differential, averaging less than one cent/kWh. Going forward, peak prices are expected to be significantly higher than average prices. For example, the Company's Integrated Resource Plan (IRP) forecast shows average highest day prices are two to three times higher ($80 to $100/MWh) than average day prices. In addition, the highest prices can be an additional two to three times the average of those prices, consistent with the $200+ prices experienced during the summer of 2006. Those summer events of 2006 have emphasized localized cost impacts of the Western regional market. While this is not likely the beginning of an annual occurrence, it remains to be seen whether this was an anomaly or a five- or ten-year event.

As part of a regional Smart Grid Demonstration Project, Avista will be providing demand response options to customers in Pullman, Washington. Design and planning are underway with a program start date Q3 2012 and concluding December 31st, 2014.

Program Outreach

Avista increased its promotion of energy efficiency through the "Every Little Bit" campaign beginning in September 2007. Prior to launching the campaign, market research was conducted to gauge customer awareness and willingness to participate. Through this research, perceptual barriers were identified which supported the creation of the "Every Little Bit" outreach effort. In 2006, 6,589 rebates had been processed. At the end of 2010, after only a little more than three years of direct promotion, annual rebate processing had exceeded 28,000.

This multi-media effort was initiated with a general communication campaign to inform customers of both general efficiency program availability as well as providing educational energy efficiency messages to customers with the intent of driving increased participation. The genesis of this campaign came from market research in which customers indicated their concerns about energy efficiency practices were generally "it costs too much," "I've done all I can," and "it doesn't make much difference." The Every Little Bit theme was chosen as a vehicle to address these concerns.

The "Every Little Bit" outreach effort is designed to use multiple outreach channels, including website, web banners, print and broadcast outreach, print material (brochures, signage, etc.), participation in community events and other methods to reach customers. The intent is to educate and encourage customers to install energy efficient measures with the "call to action" being a visit to the Company's website (www.everylittlebit.com) to get more information or download a rebate form. During the second and

Sample of DSM print advertising.

subsequent years the program was designed to become progressively more specific. Decisions regarding target programs are based partly upon the program sub-TRC (the TRC cost-effectiveness calculation less any utility costs that are fixed in the short-run) and the additional participation that we believe can be driven by investments in outreach as well as overall portfolio cost-effectiveness (although this remains calculated based on overall portfolio cost-effectiveness). The additional throughput that can be obtained from our outreach investments also takes into consideration the opportunity to leverage the growing efficiency messages in the general media and partnerships with utility and non-utility organizations. The Every Little Bit campaign is integrated into earned media opportunities through Avista's Corporate Communications Department.

In 2009, we added an "Efficiency Avenue" tool (to complement the residential "House of Rebates") on the website which guides customers to our commercial rebate programs. The website also maintains a number of low-cost / no-cost efficiency measures that customers can take to manage their energy use.

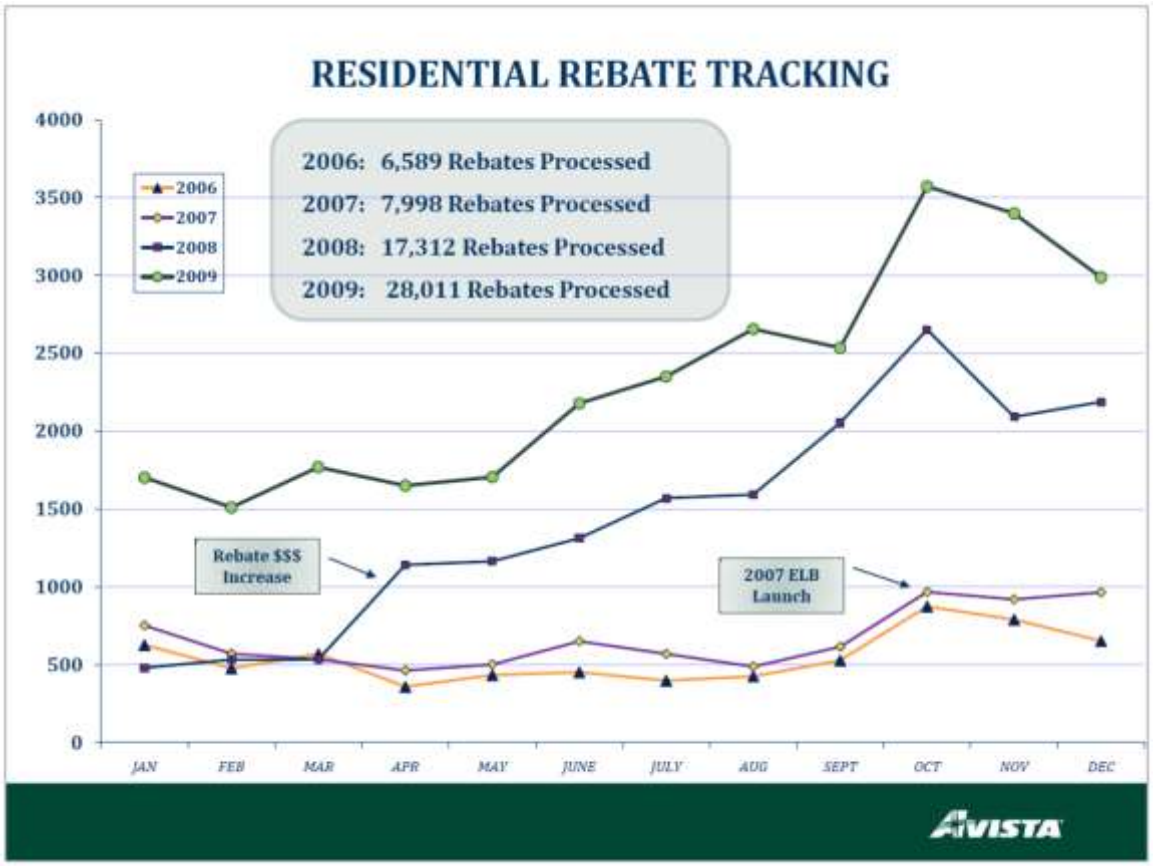
The outreach effort is coordinated with ongoing updates to sub-TRC analysis and integrated into the long-term program management planning process. Efficiency messages that are not associated with individual programs come out of an internal collaborative process incorporating input from efficiency engineer staff, program managers and program outreach specialists. The intent is to maintain a fresh and informative appeal to the overall outreach effort.

Tracking research updated in 2010 indicates there has been an increase from 16% to 28% in the number of customers who said they are or have participated in Avista's energy efficiency program, with an increase from all states. This clearly tracks with our rebate data. Customers are familiar with Avista's energy efficiency programs with approximately 8 in 10 (82%) customers who say that are at least "somewhat " familiar (36% are "very" or "extremely" familiar). Customers are most familiar with the weatherization incentives and the high efficiency equipment Incentives. Both of these initiatives were featured in the Every Little Bit campaign messages. Approximately 6 in 10 (61%) customers said they are very or somewhat likely to participate in energy efficiency programs in the future.

Web banner promoting Avista's In-Home Energy Audit.

Also new in 2010 are the American Recovery and Reinvestment Act (ARRA) co-funded residential in-home energy audits where Avista will provide energy audits to Avista customers in Spokane County. The audit includes both internal and external inspections as well as diagnostic tests including a blower door test to detect outside air infiltration, pressure pan test for heating system duct leakage and a combustion zone test for natural gas fired furnaces, water heaters and ovens. Some minor energy efficiency measures will be installed and an energy efficiency kit, with additional energy saving items, is left with the homeowner. This program, and its subsequent support, will continue in 2011.

The Every Little Bit campaign will be continued into 2011 as a primary means to reach customers with low-cost/no-cost opportunities for saving energy as well as increasing customer usage of our efficiency rebates, and to underscore the value of saving energy. Broad reach media will be evaluated and adjusted as more directly targeted campaigns are developed.



Tracking from 2006-2010 shows the sustained increase in residential rebate program participation.

Implementation Policies

Written Policy

Incentives for energy efficiency projects are calculated using the methodology as outlined in Tariff Schedules 90 and 190 in both Washington and Idaho. To maintain consistency with how the final incentive is determined the "Dual-Fuel Incentive Calculator" is used for all pre-project and post-project analysis. This tool takes into account the energy savings associated with both fuels, with the appropriate rate schedule in the designated state. There are four types of incentives the customer could be eligible for: electric efficiency improvement, natural gas efficiency improvement, electric to natural gas improvement and a dual-fuel efficiency improvement. The first three improvements use one-to-one fuel calculation to determine the projects simple-payback and applied to the corresponding incentive tier level outlined in Schedule 90 or 190. The dual-fuel incentive calculation, takes into account both kilowatt-hour and therm savings, converted to BTU's in order to determine the appropriate allocation of incentive dollars by fuel, as well as the simple-payback and is again applied to the corresponding tier level as mentioned above.

The calculator includes a policy outline that outlines how costs are captured for the purpose of an incentive analysis and cost-effective analysis. The policy also lists the types of projects that are considered eligible for incentive consideration. The policy and the calculator itself are updated whenever there is a change in rates or a change in the incentive tiers; otherwise, a yearly review is conducted. Prescriptive programs (both in the residential and commercial/industrial portfolios) each utilize dual-fuel incentive calculator as part of the program development.

For Oregon, incentive calculation is based on the description outlined in Schedule 492 and an Oregon specific incentive calculator has also been developed to maintain consistency in evaluation.

Policy Guidelines

For energy efficiency programs, policy is established whenever there is a modification to the tariff language, or change to a program/service offering. Tariff pages serve as the documentation for past and present incentive levels and program/service offerings. In 2010 the methodology to track changes to the various programs or service offerings are housed by program under the _DSM file on a common drive that is exclusive to the Energy Solutions Department. This repository contains e-mail documentation or final write-ups about decisions that affect the beginning or termination of a service/program, updates about requirements for eligibility, etc. Before the information is incorporated into this folder discussion occurs among the DSM Manager, Analysts, Program Managers, Engineers and Account Executives to determine the best course of action to take for the issue at hand.

Implementation and customer focus are just a few of the many components considered when evaluating a new or existing policy. Final communication of the policy is presented in the weekly Department Staff meeting with a subsequent e-mail. In some cases, the policy also

appears as part of the Dual-Fuel Incentive Calculator mentioned above, or is housed in the department's SalesLogix database that tracks primarily commercial/industrial efficiency projects. Whenever contact with the customer is necessary as a result in a change in policy, a variety of communication tactics are implemented to provide updated information. They may include but are not limited to a combination of the following: direct contact from the customer's Account Executive in the form of a visit, e-mail, phone call, or letter advising of the change; article in the bi-monthly Energy Solutions newsletter distributed by Questline; bonus Questline coverage highlighting the specific change; refreshed information on the Avista Utilities website; meetings and/or collateral information provided to the Company's Call Center and Construction Representatives in both local and outlying areas; letters or phone calls to appropriate vendors and other trade allies that might benefit or be affected by the change in program/service.

Policy Guideline Update

Avista intends to convene an internal meeting with representatives of all of the key organizations that contribute to DSM implementation in early 2011 to comprehensively review the existing policies and consider revisions as necessary.

Issues Identified for 2011 Management Focus

The environment that Avista's DSM programs function within has experienced several fundamental changes during 2010, and which will become evident in 2011. These changes are generally the result of increased attention to and valuation of the utility's role in advancing energy efficiency. During 2010 Avista has fundamentally changed several of the processes for planning and measuring our DSM performance. Even the organization of Avista's DSM function has changed to accommodate these new demands. It is the task of Avista's annual business planning process to foresee the changes that will be required to deliver upon these new and enhanced expectations and to plan for meeting them as efficiently and effectively as possible.

Over the course of the planning process several key challenges have been identified. Although many of these challenges interact with each other, generally in ways that make the simultaneous achievement of Avista's objectives more difficult, it is useful to outline each of them in isolation before proceeding to the recommendations for addressing these issues in 2011.

Key Challenges for 2011

Uncertainty in and timing of independent external audits for Washington I-937 compliance and Idaho IRP targets:

Avista's Washington I-937 conditions call for an independent external audit of energy savings claims after the close of a two-year performance period. The year for which Avista is currently planning is the latter of the first I-937 compliance period.

In previous periods Avista was able to actively manage the DSM portfolio over the course of the year to include timely revisions to energy savings claims made as a result

of internal EM&V processes. Reductions to claimed savings were known with sufficient time to modify portfolio management to address these issues. Under the I-937 conditions the acquisition levels resulting from the independent audit will not be known until approximately May of 2012, too late for any management changes to address 2010-2011 acquisition deficiencies.

Avista's lack of past experience with independent external audits of the electric portfolio adds to this uncertainty. As of the close of 2010 we have completed four independent external audits of our natural gas portfolio, but it is unclear if the realization rates from that process will be representative of the electric portfolio.

At present the level of 2010-2011 I-937 qualifying acquisition is expected to be 14% over the target, based upon an assumed 100% realization factor. This is a thin margin given the uncertainties that exist.

Even more concerning is the significant shortfall, 29% in comparison to the IRP target, in Idaho electric acquisition levels. The substantial mismatch between the Company's performances between the two jurisdictions is driven by the use of a two-year target (including nine months of actual but as yet unaudited 2010 acquisition that is significantly above projections) within Washington versus a single and entirely forecasted year for Idaho. If the favorable variance of the actual year-to-date 2010 results continue into 2011 it will significantly reduce the shortfall in Idaho acquisition.

Avista has adopted several actions to address this challenge to include:

- Closely monitor actual vs. budgeted acquisition levels to determine if the trend for significant favorable variances is likely to continue. Revise acquisition projections as necessary based upon this analysis.
    - It appears that a significant portion of the 2010 favorable variance is related to the greater than expected response to state and federal tax credits for residential measures. The funding available for these programs is likely to be exhausted in early 2011, thus the favorable variance experienced during 2010 may not occur during 2011.
- Planning for an external independent impact and process evaluations of 2010 electric portfolio programs in early 2011, thus providing some limited opportunity to modify the management of the Washington electric portfolio in mid- to late-2011 based upon those results.
- Increasing the reliance upon RTF-deemed values within the electric portfolio.
- Solidifying understandings regarding the use of revisions to prescriptive per-unit-energy savings (what NEEA has termed "widget-based" projects) for future I-937 compliance periods only to ensure symmetry between the methodology used for establishing targets and for measuring acquisition against that target.
- Placing an increased emphasis upon improving internal process through:
    - Creating and maintaining a Technical Reference Manual for Avista's technical staff. This document will be closely tied to the findings of previous EM&V activities and will thus act to reduce the uncertainty involving the realization rate over time.

    - Placing a greater emphasis upon screening claims through internal independent evaluators on a routine and timely basis.
- Possibly seeking to identify a single external independent auditor for an entire two-year (I-937) period to allow for the possibility of obtaining critical EM&V information in time to modify management of the portfolio.
- Working with the independent external evaluator to advance key impact evaluations that will impact 2010-2011 acquisition into 2011 to the extent possible.
- Continuing to review a number of measures to identify those that have deemed or low-risk acquisition claims, comfortable sub-TRC cost-effectiveness and scalable opportunities among Avista's customer base. These measures create a contingency plan for 2011 action in the event that there are early indications that the expected I-937 acquisition will fall short of the target. At present the most attractive of these options is the ramping up of the distribution of residential CFL's or the enhancement of existing residential CFL distribution programs.
    - It is recognized that 2011 is the last year that non-specialty residential CFL's will be eligible for energy efficiency savings. This is clearly not a long-term solution to the issue of the timing and uncertainty of the external independent evaluation process.
    - The current 2011 Business Plan relies upon residential CFL's for only 2.3% of the total electric acquisition, without incorporating the contingency plan of increases in CFL distribution. This leaves considerable opportunity for ramping up this measure without over saturating the market.
- Monitoring the veracity of behavioral savings programs in operation throughout the nation and within our region.

Extending the management options identified above for meeting Washington I-937 requirements to Idaho may not be sufficient to fully meet Idaho IRP targets as well. Jurisdictional targeting of contingency plan CFL distributions may address this mismatch. Substantial additional information regarding the actual unaudited performance of Avista's programs during 2011 will be available before it is necessary to make this decision.

<u>Uncertainty in and timing of independent external evaluation for Washington natural gas decoupling acquisition target</u>:

Many of the same issues identified above in regards to the timing and uncertainty of electric acquisition towards the I-937 target also apply to the external independent audit process for the natural gas portfolio and the Washington natural gas decoupling target.

The results of the external independent evaluation are generally expected in the 2nd quarter of the following year; too late for Avista to take management action to address deficiencies identified by that audit. Unlike the I-937 requirements, Avista is required to meet the acquisition target in each year and not on a two-year basis.

Avista's planned response is similar to those planned for the companion electric issue:

- Placing an increased emphasis upon improving internal process through:
    - Creating and maintaining a Technical Reference Manual for Avista's technical staff.
    - Placing a greater emphasis upon screening claims through internal independent evaluators on a routine and timely basis.
        - This should include increased benchmarking of Avista's claims to those of other external sources to minimize the uncertainty associated with the initial acquisition claim.
- Possibly seeking to identify a single external independent auditor for an entire two-year (I-937) period to allow for the possibility of obtaining critical EM&V information in time to modify management of the portfolio by advancing key impact evaluations to the year under study.
- Solidifying understandings regarding the use of revisions to prescriptive per unit energy savings to ensure symmetry between the methodology used for establishing IRP targets and for measuring acquisition against those goals.
- Continuing to seek opportunities for adopting new sub-TRC cost-effective measures into the natural gas DSM portfolio during 2011 with an emphasis on those measures with relatively certain energy savings and scalable acquisition opportunities.
    - The Company has been investigating the potential for three programs not currently included within this Business Plan (rooftop HVAC maintenance/programmable thermostat, third-party recommissioning, radiant heat) for launch in 2011.
- Continuing to work with regional partners to advance the concept of cooperative efforts for regional market transformation efforts similar to those that have proven successful within electric markets.
- Working with NEEA to identify natural gas savings that accrue within Avista's service territory as a consequence of NEEA-funded market transformation ventures, many of which yield both natural gas and electric savings.
- Monitoring the veracity of behavioral savings programs in operation throughout the nation and within our region.

<u>Uncertainty in and timing in Avista's Northwest Energy Efficiency Alliance activities</u>:

As part of the current (2010-2014) NEEA funding cycle there has been an increased commitment to identifying the geographic location of the energy savings resulting from market transformation ventures. This is an inherently difficult process given that the recipients of the benefits of market transformation are not as clearly identifiable as those who have participated in local incentive-based efficiency programs.

To the local utility, and specifically a utility relying upon NEEA acquisition to meet part of the I-937 acquisition target, this compounds the difficulty of not knowing what NEEA's total acquisition will be with the additional uncertainty of how that regional acquisition will be allocated throughout the northwest. Given the relative newness of this requirement and the analytical challenges that are involved this is a significant factor.

This issue compounds the recent reduction in NEEA acquisition levels due to the expiration of many of the benefits of past CFL market transformation efforts. Avista's funding share of NEEA has increased from 4.0% to 5.4% in the current funding cycle, though under the current methodology for the regional allocation of energy savings this will not influence Avista's claim.

The current 2011 Business Plan is based upon a projection of 1.2 amW in net market effects from NEEA in 2011 with a 70% / 30% split between Washington and Idaho. The issue of the quantity of baseline energy savings estimates that should be claimed for consistency with the Northwest Power and Conservation Council's Power Plan remains under discussion. This may lead to a higher level of acquisition than has been assumed within the Avista's 2011 Business Plan.

To address this issue Avista has:

- Entered into discussions with NEEA in regards to the need for early non-binding estimates of Avista's Washington acquisition on a timelier basis.
    - NEEA is discussing the possibility of delivering timelier, possibly quarterly, estimates of NEEA acquisition throughout the year.
- Resolved to maintain our existing active involvement in the NEEA Cost-Effectiveness and amW Savings Committee to obtain information as early as possible and address any issues that might affect Avista's ability to claim NEEA benefits.
- Encouraged NEEA to proactively seek the opinions of Washington utilities regarding the formatting, timing and assumptions of acquisition claims made for purposes of I-937. These issues are likely to be discussed within the Cost-Effectiveness and aMW Savings Committee in late 2010 and thereafter. This discussion is expected to include the appropriateness of claiming savings within the NEEA baseline for purposes of I-937.

<u>Evaluation, Measurement and Verification activities</u>:

The degree of interest in and the process through which Avista performs EM&V activities has been greatly altered as a result of the establishment of Avista's Washington natural gas decoupling mechanism, approval of Washington I-937 conditions, signing of the IPUC MOU and the 2010 EM&V Collaborative. The Company has taken several steps as part of these processes to address the enhanced EM&V requirements and expectations. These steps include:

- Establishing a process for an annual independent external evaluation of natural gas DSM acquisition. This will impact the acquisition applied to the DSM acquisition triggers within the Washington decoupling mechanism and will be incorporated into cost-effectiveness calculations.
- Establishing a process for an external independent evaluation of electric DSM acquisition upon which acquisition against the Washington I-937 target will be verified. Although the I-937 compliance period is based upon two-year periods (2010-2011) it is the Company's intent to perform an audit of 2010 separately to

allow for some opportunity to make timely adjustments to the management of the portfolio.

- Working with the Triple E Board to allow for the combination of all EM&V activities within an I-937 compliance period (both electric and natural gas) to be sourced to a single external independent auditor to minimize the cost by working along a more production portion of the learning curve of the consultant, to allow for planning over a two-year horizon rather than a one-year horizon, to potentially allow for more timely results and to increase the flexibility in the timing and completion of impact evaluations.
- Organizationally separating the internal responsibility for managing EM&V activities from the DSM implementation staff. Those who are responsible for EM&V are explicitly exempt from any responsibility for achieving acquisition targets.
    - The Company earlier established a dedicated EM&V analyst position. This position is currently vacant but has been posted and is anticipated to be filled in the very near future.

Based upon current projections, it is likely that Avista's EM&V expenditures will be at the upper end of the 3% to 6% expenditure guideline recommended within the Washington I-937 conditions. The current projection of Washington expenses is 6.0% of total 2011 Washington DSM expenses. This amount includes substantial budget increases for external EM&V efforts.

Expectations regarding EM&V expenditures are much less specific within the Idaho jurisdiction. The EM&V budget outlined in this Plan has been allocated between the two jurisdictions based upon the share of benefits accruing to the ratepayers of each jurisdiction and the cost of meeting specific regulatory requirements. Decisions regarding actual jurisdictional splits will be made over the course of 2011 based upon the direct jurisdictional assignment of EM&V expenses.

Tariff rider balance management:

Avista began 2010 with a negative ("customer owes shareholder") aggregate tariff rider balance of $10.8 million. Projections are the Company will start 2011 with a negative balance of only $1.3 million. If the current tariff rider levels were to be maintained throughout 2011, the Company would end 2011 with a projected $13.1 million positive ("shareholder owes customer") balance. Each of the four individual tariff riders would have a positive balance of approximately 3 to 4 months of average revenue.

This level of funding leaves considerable room for a ramping up of Avista's DSM activities, a reduction in the tariff rider or some combination thereof.

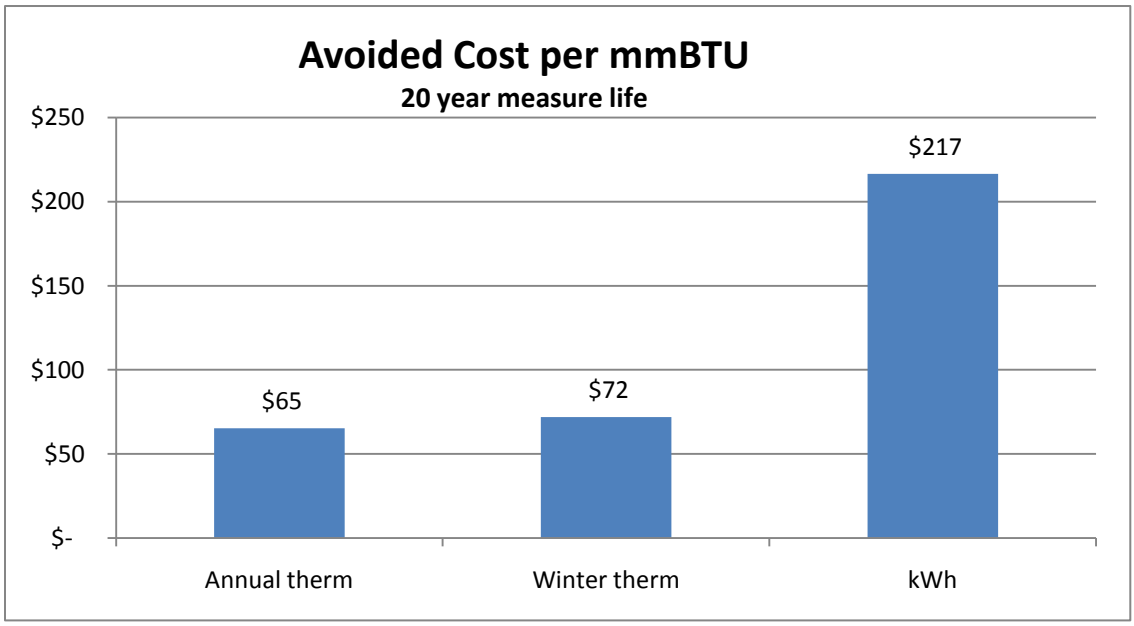
Regardless of the favorable prospects for the tariff rider balances there is always a need to carefully manage these funds. The management actions identified for 2011 include:

- Meet the Washington I-937 deadline for filing and effective dates of revisions to Washington Schedule 91.

- Continue to track projections of the tariff rider balances, with seasonal adjustments to both expenditures and revenues, on a monthly basis over the course of 2011.
- Take into consideration, among many other issues, the utility cost for energy acquisitions as a metric for meeting Avista's DSM obligations at the lowest possible ongoing customer cost.

Natural gas DSM portfolio cost-effectiveness:

Natural gas energy efficiency measures are generally less cost-effective than their electric counterparts. This is largely attributable to the lower avoided cost per BTU of energy. As illustrated below, Avista's electric avoided cost is over three times natural gas avoided costs.



It is also notable that utility cost control cannot materially improve the TRC cost-effectiveness of the natural gas portfolio. Customer incremental costs are 92% of the sum of customer incremental cost and utility cost (this amount goes even higher when tax credits are permitted to offset customer incremental cost). Thus it simply is not feasible for a utility to achieve TRC cost-effectiveness through utility cost control only.

This has been a persistent issue with Avista's natural gas DSM portfolio and is similarly troublesome for other natural gas utilities. Avista will be initiating a natural gas Integrated Resource Planning process in 2011 with a 2012 completion date that will result in a new estimate of the natural gas avoided cost stream. Current indications are that the new avoided cost is likely to be lower than those that will be applied to 2011 programs. Thus it is even more important to seek means of maximizing the portfolio TRC cost-effectiveness in preparation for the future.

The present projections indicate that Avista's 2011 natural gas portfolio will achieve a 1.3 gross TRC benefit-to-cost ratio including tax credits as offsets to customer

incremental cost and a 10% conservation preference. Using quite conservative assumptions of a 50% net-to-gross ratio, without the inclusion of tax credits and without a conservation preference the TRC benefit-to-cost ratio would fall to 0.9.

Ongoing and planned management actions include:

- Continue the screening of natural gas measures for their sub-TRC cost-effectiveness (measuring the contribution that an individual measure brings to the overall portfolio).
- Enhance efforts to identify the quantifiable non-energy impacts associated with natural gas DSM projects.
    - There is also a need to increase the effort put into identifying the incidence and nature of non-quantifiable non-energy benefits. As a non-quantifiable benefit this will not impact the cost-effectiveness calculation, but given the precarious nature of individual measures and programs it is necessary to provide all information that may be of consequence in reaching decisions to continue or terminate components of the portfolio.
- Continue to review measures and programs and, where feasible, focus efforts to increase throughput on those with the highest net sub-TRC benefits.
    - Currently the net sub-TRC is summarized on an annual or more frequent basis for incorporation into outreach targeting.
    - The development of cost-effective natural gas programs would improve portfolio cost-effectiveness. Three such programs (rooftop HVAC maintenance/programmable thermostat, third-party recommissioning and radiant heat) are or will soon be under evaluation.

Natural gas DSM acquisition:

Closely related to the issue of natural gas DSM acquisition is the level of natural gas DSM adoption. To a significant degree this is the result of the nature of residential natural gas end-use equipment, which is typically more passive (requires less user interaction) and thus relatively invisible to the customer, as well as the lower participant cost-effectiveness of the measures. Additionally natural gas end-use equipment is typically only considered as a replace-on-burnout option, and when burnout does occur the customer is often in a heat-out (space or water) situation and their options are thus largely limited to whatever equipment is immediately available.

Non-residential natural gas efficiency opportunities largely suffer from the same cost-effectiveness hurdles as their residential counterparts. The passive nature and replace-on-burnout issues are less of a difficulty, but the production downtime and uncertainties of changes in processes can become an issue in industrial applications.

At present Avista's natural gas acquisition for 2011 is projected to be 15% and 16% short of meeting the 2011 IRP target in Washington and Idaho respectively, presuming a 100% realization rate. The Company must plan for the contingency of a less than 100% realization rate (the timing that this realization rate will be known is an issue that has previously been covered). Additionally it is imperative that any new measures added to

the natural gas portfolio favorably contribute to net TRC cost-effectiveness (for reasons also previously covered).

The Company has outlined the following management options to address this issue:

- Closely monitor the claimed (unaudited) natural gas acquisition over the course of the year to determine to what degree acquisition will be short of the IRP target under various realization rate scenarios.
- Use the work currently being performed within the Conservation Potential Assessment to identify additional cost-effective measures that can be launched in 2011 rather than waiting until after the 2012 date of the natural gas IRP filing.
- Continue to work towards completing the evaluation and potential launch of the currently identified contingency programs that may significantly impact the shortfall in natural gas acquisition.

Steps taken to manage towards achieving the Washington natural gas decoupling target, based upon the Washington share of the most recent natural gas IRP, are projected to be sufficient to meet the Idaho natural gas IRP targets as well. This will allow the Company to continue to offer essentially the same programs in both jurisdictions.

The monitoring of these challenges and the consideration of the options described will be a key part of designing the metrics reported over the course of 2011. Based upon these metrics, including sensitivity analysis around key components such as uncertainty in net-to-gross ratios, realization rate and NEEA acquisition, it will be possible to manage those challenges and uncertainties.