**2012 DSM “Revised” Business Plan**

Avista Utilities

Revised December 7, 2011

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# I. Executive Summary

Avista‘s 2012 Demand Side Management (DSM) Business Plan contains a snapshot of the planning process for implementing the Company‘s energy efficiency programs, evaluating results, and processing associated issues in 2012.

This Business Plan describes how Avista’s programs are structured and delivered to customers. It provides a “bottom-up” analysis built by measure and/or program. Avista traditionally prepares such a plan annually. With the advent of I-937 in Washington, this Plan is a regulatory requirement and is intended to be responsive to WAC 480-109 and the Washington Utilities and Transportation Commission’s related Order in Docket No. UE-100176 approving Avista’s 2010-2011 Biennial Conservation Plan with conditions.

Avista has continually been providing energy efficiency programs, uninterrupted, since November 1st, 1978. The Company’s planning process builds on previous years’ experiences and addresses a number of challenges in regard to achieving energy acquisition targets, meeting cost-effectiveness criteria and satisfying regulatory reporting requirements. The Plan focuses upon a number of other elements of DSM operations that are required to deliver upon the core mission of providing value to Avista‘s customers. The Company anticipates that the key challenges to be addressed in 2012 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.
* Meeting natural gas acquisition targets established within the most recent Integrated Resource Plan (IRP). This includes maintaining the cost-effectiveness of the natural gas DSM portfolio.
* Considering issues associated with combined-fuel Washington low-income portfolio cost-effectiveness. Continued focus will be applied to how best to analyze realization rates and the role that the low-income portfolio plays within the DSM portfolio.

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:

* 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.
* Ongoing management of net-to-gross issues. An increased proportion of non-incentive expenditures may put pressure on total resource cost sensitivities.
* Monitoring increasing regulatory costs, focusing on operational performance, and reviewing month-to-date results for program modifications will be central to 2012 DSM activities.

This business planning document is intended as a description of a continuous planning process at a particular point in time. 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 2012 are to be expected as part of the task of actively managing the DSM portfolio.

# II. Preface to the 2012 DSM Business Plan

Avista has traditionally performed a comprehensive business planning process for its Washington and Idaho DSM portfolio. In the recent past these have been performed on an annual basis. As of 2011, this exercise became a regulatory requirement subject to a November 1st filing deadline.

Avista views this process as an opportunity to optimize its approach to DSM on a ‘blank slate’ basis in that we do not necessarily take regulatory constraints as a given during this planning exercise. This is even more true in the development of our 2012 DSM Business Plan where we have incorporated the development of our first major revision to the tariffs governing our DSM portfolio in 12 years into this process. The filing of those tariffs is expected to occur by the end of November.

It is the Company’s objective to create a stand-alone business plan document that summarizes Avista’s thought process, conclusions and recommended actions for the following year. We have incorporated, either by reference or within the Appendices attached to this document, other relevant work products. Our emphasis in the planning and writing process has been upon substance rather than style; we always have and still consider this document to be a working document.

External parties charged with an oversight responsibility may want to pay particular attention to the “Issues for Management Focus” section of this document. This section summarizes the critical issues that are expected to be important to the success of the DSM portfolio in the following year and beyond. Generally, the issues noted within this section become, or are expected to become, a significant theme for Avista’s three advisory groups during the next year.

There will, with certainty, be mid-course corrections over the course of the year. This is likely given that the portfolio optimization process that traditionally occurs as part of the business planning process was shortened due to a six-week delay in obtaining a revised Conservation Potential Assessment (CPA) necessary to fulfill expectations for the 2012-2013 Biennial Conservation Plan process. Revisions in program eligibility, incentives, the launch or termination of programs will generate an update to this plan and the Avista Advisory Group.

# III. Reference Guide to Commonly Used Terms

The following common terms are used frequently throughout the business planning and external advisory oversight processes. Though not all terms are applied within the 2012 Business Plan, this guide is intended to provide the reader and the members of Avista’s oversight groups with efficiently referencing definitions.

**Quick Reference Guide to Commonly Used Terms**

The following common terms are used frequently within Avista’s business planning and portfolio management process. The definitions are presented here to provide greater clarity and more constructive discussion throughout the review of the business plan and for the external oversight of Avista’s DSM portfolio in general.

**Advisory Group** (formerly known as the Triple E Board)

Avista’s group of external stakeholders who comment about the Company’s DSM activities.

**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** (Automated 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.

**aMW**

The amount of energy that would be generated by one megawatt of capacity operating continuously for one full year. Equals 8,760 mWhs of energy.

**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.

**BCP – Biennial Conservation Plan**

Referring only to state of Washington; a result of RCW 19.285, Energy Independence Act (also known as Initiative Measure No. 937 or “I-937”) mandate that utility companies obtain fifteen percent of their electricity from new renewable resources such as solar or wind by 2020 and to undertake all cost-effective energy conservation. The Washington State Utilities and Transportation Commission adopted WAC 480-109, *Acquisition of Minimum Quantities of Conservation and Renewable Energy* to effectuate RCW 19.285. The BCP is responsive to the energy efficiency requirements of WAC 480-109 and describes the savings targets, the programs that will achieve the targets and how those energy savings targets will be measured and presented.

**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).

**CPA (**Conservation Potential Assessment)

An analysis of the amount of conservation available in a defined area. Provides savings amounts associated with energy efficiency measures to input into the Company’s Integrated Resource Planning (IRP) process.

**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 useful heat supplied by the condenser 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.

**Council**

See the NWPCC (Northwest Power and Conservation Council).

**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.

**DEER** (Database for Energy Efficient Resources)

A California Energy Commission and California Public Utilities Commission (CPUC) sponsored database designed to provide well-documented estimates of energy and peak demand savings values, measure costs, and effective useful life (EUL) all with one data source. The Company and its third –party evaluators may reference this resource as they compile Technical Resource Manuals or Conservation Potential Assestments.

**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 helping customers use 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 volume 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 composes 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)

EPA 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.

***everylittlebit***

Avista’s Energy Efficiency 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 that the Company/customers will incur over various levels of activities.

**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.

**I-937**

Initiative Measure No. 937 in state of Washington mandate that utility companies obtain fifteen percent of their electricity from new renewable resources such as solar or wind by 2020 and to undertake all cost-effective energy conservation.

**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).

**MAP** (Maximum Acquisition Potential)

The maximum amount of energy savings the Company could achieve under the Biennial Conservation Plan.

**MDM/MDMS (**Meter Data Management System)

Used to organize meter interval data from an automated meter reading system.

**Measure**

A measure is a 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.

**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. The taskforce will work to pull together innovative ideas from successful energy efficiency programs and explore how, through regional collaboration, energy efficiency can be delivered more efficiently. Part of the Northwest Power and Conservation Council.

**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.

**Photovoltanic** (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.

**RAP** (Realistic Acquisition Potential)

The amount of energy savings the Company could realistically achieve under the Biennial Conservation Plan.

**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. The RTF is also responsible for developing a conservation and renewable rate discount (C&RD) for the Bonneville Power Administration. The C&RD program awards rate discounts to customers who have implemented effective energy conservation measures. 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 Program)

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 efficiency 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.

**Technical Advisory Group**

Avista’s group of external stakeholders who comment about the company’s approach to the measures and measurements associated with DSM activities.

**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 the 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).

**TRM** (Technical Resource Manual)

A central document that provides a list energy efficiency measures and their associated savings values. Useful with regards to program management and evaluation, measurement and verification activities.

**Triple-E** (External Energy Efficiency Board – see Advisory Group)

Avista’s group of external stakeholders who comment about the company’s DSM activities.

**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.

(1/U = R-Value)

**UCT** (Utility Cost Test)

One of the four standard practice tests commonly used to evaluate the 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.

**UES** (Unit Energy Savings)

The amount of energy saved per unit of specific conservation measure; referenced in the Technical Resource Manual, Conservation Potential Assessment or Regional Technical Forum documentation

**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.

**8760**

Total number of hours in a year.

# IV. 2012 Reporting and Regulatory Issues

Avista annually produces over 30 reports for external review. In addition to relatively routine updates of regularly tracked DSM metrics and this annual business plan document, the Company also produces an annual update to the EM&V Plan and a DSM Annual Report containing the unaudited acquisition and cost-effectiveness calculations for the prior year’s programs. Summaries of how these commitments will be delivered and applied and a general description of methodologies are outlined below.

As a consequence of other regulatory commitments and resource planning needs, the Company also produces separate electric and natural gas Integrated Resource Plans (IRP) every other year. This planning effort includes projections of cost-effective DSM potential as identified in a Conservation Potential Assessment (CPA).

Avista is also planning on submitting for regulatory approval a substantial revision to the tariffs that govern the implementation of our DSM programs (Schedule 90 for the electric programs and Schedule 190 for the natural gas programs).

The Company must also perform a recalculation of the DSM tariff rider funding requirements contained within Schedules 91 and 191. Annual revision to these tariffs is required within Washington. The Idaho tariffs are revised on an as necessary basis. These calculations are an inherent consequence of the budgeting process and are discussed later in this document.

It is notable that the Company has seen a proliferation of regulatory requirements and reporting obligations in recent years. This has been reflected in the significant percentage increase in labor cost devoted towards regulatory compliance, even beyond the needs associated with independent external third-party EM&V.

In addition to increasing regulatory compliance cost, there is the potential for diversion of management focus and creative energy towards regulatory compliance issues and away from DSM operations. There is a need to ensure that the impacts associated with these regulatory requirements don’t compromise future operational performance. This will require ongoing management attention during the upcoming year.

## Evaluation, Measurement and Verification Commitments

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

A primary responsibility of Avista’s EM&V resources within its Policy, Planning & Analysis team is to support the ongoing activities of the independent third-party EM&V consultants and evaluators performing the various analyses required to substantiate the conservation acquisition. The 2012 EM&V budget provides for independent, third-party EM&V services that provide a comprehensive portfolio evaluation. EM&V results are intended to verify the level at which claimed energy savings have occurred, evaluate the existing internal processes, and suggest improvements to the program and ongoing EM&V processes. These findings are reported in the Annual Report on Conservation Acquisition and include analysis of both program and process impacts for the specific programs reviewed.

In addition to the external evaluations, Avista EM&V resources support internal evaluations of specific measures and programs. The results of these activities are used to inform program management decisions, evaluate program effectiveness and investigate program metrics.

To support planning and reporting requirements, several EM&V documents are maintained and published. These include the Avista EM&V Framework, an annual EM&V Plan and EM&V chapters within other DSM publications. Program-specific EM&V plans are created as required. These documents are reviewed and updated as necessary, serving to improve the processes and protocols for energy efficiency measurement, evaluation and verification. In addition, the development of the Technical Reference Manual (TRM) continues and will be managed as a principal planning and reporting mechanism relative to individual prescriptive measures and their respective unit energy savings (UES).

As a function of new measure development, an EM&V plan will be developed for each new program and will periodically be updated as informed by evaluation findings. Additional EM&V efforts will be applied to evaluating emerging technologies and applications in consideration of potential inclusion in the Company’s energy efficiency portfolio. Avista may spend up to 10 percent of its conservation budget on programs whose savings impact have not yet been measured, if the overall portfolio of conservation passes the Total Resource Cost test as modified by the Council. These programs may include educational, behavior change, and pilot projects. Specific activities can include product and application document reviews, development of Measurement and Verification Plans, field studies, data collection, statistical analysis, and solicitation of user feedback.

Avista and its customers benefit from regional activities and resources in the energy efficiency and conservation domain. To engage with and contribute to the regional efforts, Avista EM&V staff has membership on the Regional Technical Forum (RTF) that serves as an advisory committee to the Northwest Power and Conservation Council. The RTF is a primary source of information relating to the standardization of energy savings and measurement processes for electric applications in the northwest. This knowledge base provides valuation of energy efficiency metrics and references that are suitable for consideration in Avista’s acquisition planning and reporting.

Additional regional activities include engagement with other Northwest utilities and the Northwest Energy Efficiency Alliance (NEEA) in various pilot projects or subcommittee evaluations. A portion of the energy efficiency savings acquired within the region through NEEA’s efforts are attributed to Avista’s portfolio. Plans for 2012 include participation in NEEA’s Regional Building Stock Assessment with coordinated data collection activities.

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

To best serve its customers and other stakeholders, Avista will seek the “best science available” for quantifiable UES values for energy efficiency measures. This encompasses consideration of all data and informational sources that are deemed pertinent to Avista’s programs as delivered including the RTF, NEEA, consultant libraries, ENERGY STAR, Sixth Power Plan, California’s Database for Energy Efficient Resources (DEER), Avista-specific impact analyses and other public sources. The collection of UES values will be subject to rigorous impact evaluations to be performed by a third-party evaluator and available to the Advisory Group for review.

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

## Cost-Effectiveness Evaluation and Reporting

Avista performs four basic cost-effectiveness tests as part of its DSM Annual Report which provides a retrospective of calendar year acquisition, cost-effectiveness, on a gross and net basis, actual to budget performance, tariff rider balances among other highlights. In the past, this annual report was completed using unevaluated savings. However, as stated in the 2012-2013 Biennial Conservation Plan, the 2012 DSM Annual Report will include evaluated savings and will be filed June 1, 2013.

These four basic cost-effectiveness tests include (1) the Total Resource Cost (TRC), (2) the Program Administrator Cost Test (PACT) or the Utility Cost Test (UCT), (3) the Participant test, and (4) the Rate Impact Measure (RIM) or Non-Participant test. Each of these tests evaluates the cost-effectiveness of a DSM program from different perspectives as stated below.

### TRC

The TRC test is a measure of the benefits and costs accruing to the total ratepayer population. This is not a true societal test in that externalities are not quantified, however, influxes of funding to the customer base (e.g. federal or state tax credits) are considered as offsets to the customer incremental cost. Avista provides an additional calculation of the TRC test where the incremental cost is offset by tax credits when the presence of tax credits is known. Avista’s avoided cost incorporates carbon costs. These variations to the TRC provide a calculation that looks more like a full societal test.

The standard practice tests call for the TRC calculation to be based upon only participants who were motivated by the program to adopt the efficiency measure (“net” participants). Avista provides the TRC calculation on both a gross (total participation) and net basis in recognition of varying regulatory requirements, Advisory Group members’ interest as well as for comparison with other utilities.

The cost-benefit analysis of the TRC test provides a comparison of the present value of energy and non-energy benefits versus the customer incremental cost and utility non-incentive program cost. Incentive costs are considered to be a transfer within the ratepayer population and are neither a cost nor benefit.

### PACT

This is a measure of whether the program administrator or utility cost of serving all customers increases or decreases as a result of the program. This test compares the reduction in the cost of providing energy to the customer with the total cost (incentive and non-incentive) of operating the DSM program. The PACT generally yields a higher benefit to cost ratio than TRC since the customer incremental cost is usually significantly higher than the utility incentive and net positive non-energy benefits.

### Participant Test

The participant test provides cost-effectiveness from the perspective of the participating customer. This includes the retail value of the energy savings and non-energy benefits from the project versus the customer project costs. This is a useful measure of potential program adoption levels in that it provides insight into the “traction” that a measure or program may have with prospective participants (subject to several other considerations).

### Rate Impact Measure (RIM) or Non-Participant Test

This indicates the programs’ impact upon retail rates. This test provides a comparison between lost retail revenue versus the incremental reduction in utility cost. If retail rates exceed the avoided cost of energy (inclusive of demand and other impacts), any DSM program is mathematically guaranteed to fail this test. Programs that target “underpriced” energy products (e.g. system load coincident energy usage) may conceivably pass the RIM test. The RIM test does not consider the impact of upon the customer billing determinants (energy usage), and is thus only applicable to program non-participants.

For business planning purposes, 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.

Measures and programs within each annual business plan are screened to eliminate (barring exceptions identified by the program manager) those that have a significant adverse impact upon the portfolio TRC. Last year, Avista filed revisions to Schedule 90 and 190, which govern the implementation of DSM programs, to exclude site-specific projects with energy simple paybacks of over 13 years (or 8 years for lighting) from incentives and from inclusion within the portfolio cost-effectiveness. Due to pre-existing contractual obligations, the full effect of this tariff revision will not occur until this year, 2012. 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 could drive substantial increases in program throughput, but it is nevertheless a cost that 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 allocate these shared costs. Avista allocates based upon the relative avoided cost of the two portfolios.

## Integrated Resource Plans & the Conservation Potential Assessments

Every two years, the Company files an updated electric and natural gas Integrated Resource Plan (IRP). The electric IRP was filed in August 2011 while the natural gas IRP will be filed in August 2012.

### Electric

For this past IRP, Washington Utility and Transportation Commission staff requested that an independent, external Conservation Potential Assessment (CPA) be completed for use in the 2011 Electric IRP. The Company contracted with Global Energy Partners (GEP) to complete this study for its Washington and Idaho electric service territory. The base year was 2009, the most recent full year of data, at the time the study began.

The CPA was prepared consistent with the Council’s methodology and uses end-use modeling according to building characteristics, evaluates the measures from the Council’s supply curves that are appropriate for Avista’s service territory (in addition, measures from other sources were included), incorporates the Total Resource Cost (TRC) test including non-energy benefits, and incorporates the Council’s ramp rates of resulting in 85% of economic potential for non-lost opportunity (approximately 65% for lost opportunity).

Since the electric IRP was filed, additional analyses was completed for I-937 purposes. For example, the effects from naturally occurring conservation were removed from the baseline. This was consistent with Council methodology and GEP worked with the Council in how this change was applied to the model. This change resulted in a 53% (was 48% with the naturally occurring included) growth in electric use over the study period (20 years) and an annual growth rate of 1.9% (was 1.7%).

GEP identified two Achievable Potentials – Realistic and Maximum – which represent a low and high range of achievable potential of conservation that exists within Avista’s service territory. Maximum Achievable Potential (MAP) incorporates the Council’s ramp rates while the Realistic Achievable Potential (RAP) incorporates adjusted ramp rates specific to Avista service territory. In some cases, MAP and RAP ramp rates exceed those of the NPCC.

The following table shows the resulting energy savings (or conservation) for Avista’s Washington and Idaho service territory for 2012 and the cumulative amount at the end of the 20-year IRP planning horizon.

Table 1: Summarization of IRP acquisition projections

|  |  |  |
| --- | --- | --- |
| **Energy Sales Forecast (MWh)** | **2012** | **2031** |
| Baseline | 8,805,759 | 13,009,405 |
| Realistic Achievable | 8,753,571 | 10,665,863 |
| Maximum Achievable | 8,714,574 | 9,842,555 |
| Economic | 8,554,821 | 9,311,028 |
| Technical | 8,469,456 | 7,843,997 |
| **Energy Savings (MWh)** |  |  |
| Realistic Achievable | 52,188 | 2,343,543 |
| Maximum Achievable | 91,186 | 3,166,851 |
| Economic | 250,938 | 3,698,377 |
| Technical | 336,303 | 5,165,408 |
| **Energy Savings (as a % of Baseline)** |  |  |
| Realistic Achievable | 0.6% | 18.0% |
| Maximum Achievable | 1.0% | 24.3% |
| Economic | 2.8% | 28.4% |
| Technical | 3.8% | 39.7% |
|  |  |  |
|  |  |  |

Natural Gas

The natural gas IRP process will be beginning in December 2011. For the past IRP, Washington Utility and Transportation Commission staff requested that an independent, external Conservation Potential Assessment (CPA) be completed for use in the 2012 Natural Gas IRP. The Company contracted with Global Energy Partners (GEP) to complete this study for its Washington, Idaho and Oregon natural gas service territory. The base year will be 2010, the most recent full year of data.

Since the last Natural Gas IRP, market conditions have changed significantly with the introduction of Shale gas. Avista anticipates that this will have approximately a 30 percent decrease in the natural gas avoided costs compared with our 2009 Natural Gas IRP. This would result in significantly lower DSM goals and increased difficulty to acquire cost-effective natural gas DSM resources.

The Technical Advisory Committee (TAC) meetings will begin in January 2012 and will conclude in April 2012. A draft natural gas IRP document will be distributed to the TAC in May 2012. The TAC will have a month to provide comments with a final review meeting in July 2012. The final Natural Gas IRP will be filed on or before August 31, 2012.

## Schedule 90 and 190 Revisions

The tariffs regulating Avista’s DSM operations have been in place without major revisions since 1999. These tariffs were designed with the intent of providing the utility with the ability to make revisions to program details in a timely manner without the need for Commission process. This approach has been successful in facilitating the rapid design or redesign of programs to leverage market opportunities or incorporate changes resulting from updated equipment costs, estimates of energy savings and similar factors.

Current Tariff Description

One of the core elements to the Company’s current tariffs has been a formulaic guideline for efficiency incentives without specific reference to individual measures. Individual measure eligibility and related terms and conditions for participation within programs are also not specifically defined within the tariff. This degree of flexibility has allowed Avista to be more responsive in launching, modifying and/or terminating programs. Historically, this approach has been one of the primary reasons for the success of the DSM portfolio and its ability to respond to rapidly developing technologies and market conditions. The value of this approach was particularly evident in Avista’s emergency response to the western energy crisis of 2001 and is frequently observed on a smaller scale.

Since 1999, several relatively minor modifications have been made to the tariffs themselves. For the most part, these consist of changes to the incentive formula in response to market conditions, resource needs and portfolio cost-effectiveness concerns. The most recent changes became effective in 2011 and consisted of establishing a maximum customer energy simple payback to exclude the incorporation of exceptionally non-cost-effective projects into the DSM portfolio.

The incentive formula contained within Schedules 90 and 190 is applied to site-specific projects in general conformance with a written policy governing the calculation and a standardized spreadsheet model. This approach contributes towards a reasoned, consistent and non-discriminatory application of the tariff and related policies.

With the acknowledgement of Advisory Group stakeholders, the formulaic guidelines are applied in a more general manner in the development of prescriptive programs. Reasonable rounding of incentives, consideration of how incentives may fit within a program continuum (e.g. incentives for 5 horsepower vs. 10 horsepower vs. 20 horsepower etc.), conformance with regional efforts, marketability and interactions with other local or regional programs are considered just cause for modifications to the amount dictated by a strict application of the incentive formula. Program managers have been encouraged to maintain the incentives within 25%, plus or minus, of the strict incentive calculation barring exceptional circumstances.

Traditionally the DSM business planning process includes a calculation of how the incentive formula would apply to each and every measure and sub-measure. That process has not been completed within this business plan in anticipation of the contemplated changes to these DSM tariffs explained in the following section.

Proposed Tariff Revisions

The Company’s revised tariffs (attached as Appendix A) retain the current incentive formula for application to individually assessed site-specific projects. This incentive formula will no longer apply to prescriptive programs, which will now be described within a series of separate tariffs containing general customer and measure eligibility requirements. Specific details required for program participation and the current incentive level for each individual measure will be contained within program plans, price lists and clearly worded plain language descriptions that will be available to customers and actively marketed.

The Company will retain the authority to modify aspects of the programs that are outside of the scope of the tariff itself in a timely manner without the need for specific regulatory process.

This approach will permit Avista the opportunity to continue to rapidly respond to market conditions and relieve the incentive formula constraints imposed upon prescriptive programs by the current tariff. In doing so, it will be possible to set tariffs that are specific to the program plan for each individual measure with full awareness of unique market conditions. These revisions will in general allow the fuller use of incentive pricing as a part of the comprehensive marketing of efficiency measures through the Company’s DSM programs.

# V. DSM Portfolio Overviews

## Residential Portfolio Overview

The Company‘s residential portfolio is composed almost entirely of prescriptive rebate programs. Customers complete the installation of a qualifying energy efficiency measure and then have 90 days to apply to Avista for an incentive. The only efficiency measures that are not prescriptive are for multifamily residential customers where owners/developers may choose to treat entire complexes that affect residential customers. In these unique cases, the projects are treated site-specifically. There are other unique programs that are delivered through 3rd party contractors, for example, refrigerator recycling and regional manufacturer buy-downs for small devices such as CFLs. In-home energy audits are another exception to a typical prescriptive residential application in that, while administered by Avista, subcontractors schedule and complete the in-home audits. There are also residential savings acquired through cooperation with regional market transformation efforts discussed later under the Residential Lighting Program portfolio overview.

The residential market is expected to acquire 15% of electric and 37% of the natural gas savings through Avista’s local programs during 2012. 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 and the impact of the Price of Gas Adjustment (PGA) revisions upon customer decision-making.

The measure-by-measure sub-TRC analysis provides guidance regarding measures at risk for termination in 2012. TRCs will be evaluated as external and internal impact analysis, updated TRM inputs and other factors affect estimated costs and benefits. In 2011 distributed generation projects, for example, failed to meet simple payback requirements for incentives and were in effect suspended until pricing or performance changes significantly. The timing of terminations is dependent upon the need for customer and trade-ally notice as well as approval of proposed tariff changes if applicable.

Residential programs will continue to be subjected to EM&V in 2012 and will be included in impact analysis as well as ongoing process tracking and process evaluations. In addition to a number of general process improvements made in 2011, the effort to automate rebate processing received approval to begin programming. The automation effort may be summarized into three major areas: customer self-service, data transfer and tracking into the customer service system (CSS), and automated file transfer to accounts payable. The first phase of this effort was completed in late 2011 with the launch of new data templates and tracking capabilities in CSS. Business requirements for automation continue to be worked on to complete a second important milestone of launching a web portal for customers to apply for incentives. The web portal will automatically populate the new CSS tracking templates. The final step projected to be complete in 2012 is to automate the transfer of information to accounts payable to allow further streamlining of rebate processing, avoid redundant data entry, reduce the number of checks issued, and make use of a bill credit option to speed up the payment process.

Results from a recently completed third-party natural gas impact evaluation and an electric and natural gas process report have been distributed to the DSM team. Recommendations affecting residential programs will be fully evaluated and considered for implementation in 2012. For example, recommendations affecting 2011 included changes to residential data collection to request additional information from participating customers as appropriate and additional data-gathering on age and size of the home. Also, a data management audit resulted in implementation of multiple recommendations and process improvements related to residential programs. See the Data Tracking section for additional details.

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. NEEA has also begun to consider seeking support for incorporating natural gas into its market transformation portfolio.

Residential programs have benefited from the 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 reduced DSM-led outreach events while maintaining DSM tools for other departments to leverage their engagements with the public. This new approach was well received as DSM-led events reduced from over 50 to less than a dozen but DSM messaging and support is still available to other Avista departments wanting to include energy efficiency awareness in their efforts. Appendix C describes the individual program summaries.

## Low-Income Portfolio Overview

The Company‘s residential low-income portfolio is composed primarily of site-specific programs delivered by local Community Action Partner (CAP) agencies. Avista contracts with six CAP agencies to utilize existing infrastructure. This also leverages similar Federal Weatherization Assistance Programs for customer intake while also screening customers for complimentary energy assistance and other income-qualified programs that often serve as referrals for weatherization services.

Low-income efficiency measures are typically similar to measures offered under the traditional residential prescriptive programs due to cost-effectiveness guidelines. Low-income efficiency measures include other measures, like infiltration improvements, 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 the CAP agencies. CAPs may submit other measures for approval if cost-effectiveness is in question. The approval process is supported by tracking cost-effectiveness in a near real-time basis. The historical mix of measures available to CAP agencies remains basically unchanged. In 2011, changes were made to calculations used to estimate low-income energy savings. This should help improve some noted gaps in savings results that were identified in impact evaluations.

Health and human safety measures which are deemed necessary to ensure the habitability of the home in order for residents to benefit from energy saving investments are also allowed within these low income programs. CAP agencies complete installation of the efficiency measures at no cost to qualified customer through the Avista funding. Administrative fees are paid to the CAP agencies for delivery of all of the programs discussed above.

The residential low-income market is expected to acquire 3% of electric and 4% of the natural gas savings achieved through Avista‘s local programs during 2010.

Low-income programs benefit from the comprehensive *everylittlebit* energy efficiency awareness campaign that is delivered broadly to all residential customers. Another valuable outreach approach for low income customers has been offering energy fairs. Energy fairs are led by the Consumer Affairs department to build awareness of non-weatherization low-income programs. The fairs are a natural fit to also communicate weatherization opportunities for low-income customers.

## Non-Residential Portfolio

The tariffs authorizing Avista‘s DSM programs for non-residential customers allow energy efficiency projects with a simple payback of greater than one year and less than 13 years for non‐lighting technologies and 8 years for lighting measures.

Within the non-residential portfolio, programs are offered through a combination of prescriptive programs geared towards relatively common and uniform measures, applications and energy savings and also a site-specific program for all other efficiency measures and applications.

In the past, Avista has sought to use prescriptive programs to reduce the implementation expense 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. The prescriptive programs that are providing little throughput and/or prove to have hugely variable savings estimates are evaluated annually to decide if they should be continued to be offered prescriptively or would be more appropriately handled on a site-specific basis. Efficiency measures that do not qualify for the Company‘s prescriptive programs can be considered under the site-specific approach. This program does require a pre-project contractual agreement which is done after the project analysis is complete. The analysis will identify the estimated savings opportunity and the estimated incentive payout.

A total of 68% of electric and 59% of natural gas local portfolio acquisition are expected to come from the non-residential segment.

## Regional Market Transformation

Avista’s local portfolio consists of programs and supporting infrastructure designed to enhance and accelerate the penetration of energy efficiency measures through a combination of financial incentives, technical assistance, program outreach and education. It is not feasible for Avista, or any individual utility, to independently have a meaningful impact upon regional or national markets. Attempts to do so would fail by virtue of lack of scale and would suffer from ‘leakage’ of many of the benefits to other utility service territories.

Consequently utilities within the northwest have cooperatively worked together to develop the Northwest Energy Efficiency Alliance (NEEA) to address those opportunities that are beyond the ability of individual utilities to capitalize upon. Avista has been a participating and funding member of NEEA since the 1997 founding of the organization. NEEA is presently operating in a fourth funding cycle (2010 to 2014 inclusive). The current funding cycle has seen a doubling of the contractual funding from $20 million regionally to $40 million with actual expenditures subject to approval by the NEEA Board of Directors. The current funding cycle has also seen Avista’s share of NEEA funding increase from 4.0% to 5.4% due to shifts in the distribution of regional retail end-use load.

Avista’s criteria for funding NEEA’s electric market transformation portfolio calls for the portfolio to deliver incrementally cost-effective resources beyond what could be achieved through the Company’s local portfolio alone. The Company believes that these criteria will continue to be met in the foreseeable future.

The future of NEEA is not without challenges. Many of the benefits derived from the successful transformation of the residential lighting market are past. Though Avista believes that there is no single measure that can replace the success that NEEA has achieved within this market, there are favorable prospects within multiple markets that could collectively continue form the foundation of an ongoing cost-effective portfolio. Avista has a particular interest in the consumer electronics field, a field which in many ways shares the characteristics of markets where NEEA has been very successful in the past. Avista continues to review progress within these markets for potential leveraging through local program efforts.

In order to provide NEEA with the additional flexibility to deliver a high-value portfolio, Avista has taken the position that sector equity (across residential, commercial, industrial and agricultural markets) will not play a significant role in our evaluation of the regional portfolio. Historically NEEA’s success has most frequently been in large markets composed of individually small customers (predominately the residential market). Avista believes that those local utilities that value sector equity are responsible for implementing local programs that, when aggregated with the regional portfolio, meet their desired equity objectives. Avista has a strong non-residential local program founded upon an account executive marketing structure that meets our needs for sector equity should NEEA adopt a strategy of disproportionately pursuing residential markets.

The Company has explicitly communicated with NEEA that the delivery of cost-effectiveness resources to our service territory is our primary criteria for success. This does demand a strong consideration for the geographic equity in the distribution of NEEA benefits throughout the region. This has been a primary focus of Avista since the founding of NEEA and will remain so in 2012.

NEEA continues to work towards improvements in its ability to quantify the distribution of energy savings throughout the region. Avista intends to use the best available methodology for determining the benefits that accrue to Avista customers for purposes of monitoring geographic equity and Avista cost-effectiveness as well as for Washington I-937 acquisition claims and measurement against electric IRP targets within Idaho.

For purposes of the 2012 DSM Business Plan, Avista has assumed that NEEA will quantify 1.2 amW of energy savings (15% of the total Avista portfolio) within the Avista service territory. The jurisdictional distribution of energy savings and expense was estimated to 70% Washington and 30% Idaho. Avista has budgeted $2.16 million for the electric market transformation portfolio, consistent with the full expenditure of $40 million regional equally over the five year contract period and a 5.4% Avista share. Aside from minimal labor expenditures, the NEEA contractual dues are the only anticipated cost for the electric portfolio.

It is important, in 2012 and beyond, for Avista to continue to play an active role in the organizational oversight of NEEA. This is critical to ensure that geographic equity, cost-effectiveness and resource acquisition continue to be the primary foci.

Prospects for a NEEA Natural Gas Market Transformation Portfolio

NEEA has initiated a preliminary investigation of the prospects for a natural gas market transformation portfolio. Avista has actively encouraged that NEEA explore such a role in the past. The Company has participated in and funded a preliminary evaluation of the prospects for a natural gas portfolio during 2011. Despite the challenges that natural gas efficiency currently faces (in terms of lower avoided costs and economic impediments to customer investments created by current macroeconomic conditions) Avista does believe that regional market transformation can be a valuable addition to the tools available to the utility industry in cost-effectively acquiring additional natural gas resources. The addition of this tool during the current challenging market for natural gas efficiency will make success even more valuable.

The preliminary investigation yielded five prospective measures suitable for market transformation. These prospective candidate measures are being evaluated by NEEA (with input from the funding natural gas utilities) to establish the nucleus of a permanent portfolio within the available funding.

Avista will continue to follow and contribute to NEEA’s exploration of a natural gas market transformation portfolio during 2012. Avista’s key criteria for a successful effort are the same as those that have been applied to the electric portfolio for the previous 14 years; a cost-effective augmentation to the DSM portfolio delivering measurable resources to Avista customers with an acceptable geographic equity.

Avista has budgeted $146,000 as a placeholder for a NEEA natural gas funding during 2012, though there has been no contractual commitment to this or any amount. The Company does not anticipate any measurable resource acquisition within 2012, primarily due to the lag inherent in market transformation investments. The inclusion of expenditures without resource acquisition in the first year of the portfolio does not indicate the expectation that the portfolio will not be cost-effective in the long-run, but it does indicate a degree of risk that should be managed through the active participation in this investment.

# VI. DSM Operations Support Functions

## DSM Outreach Program

In September of 2007, Avista increased its promotion of energy efficiency through the *everylittlebit* campaign. Prior to launching the campaign, market research was conducted in an attempt to gauge customer awareness and willingness to participate. Through this research, perceptual barriers were identified which supported the creation of the *everylittlebit* outreach effort. In 2006, Avista processed over 6,500 residential rebates. After slightly over three years of direct promotion, residential rebates processed during 2010 exceeded 34,000. While other factors such as Avista incentive increases and state and federal tax credits certainly contributed to the increase, it is believed that the overall campaign outreach has contributed significantly to residential program participation. As federal and state tax credits diminish in availability and monetary value, so did the overall number of rebates processed as compared to 2010.

### Key Market Research Findings

The *everylittlebit* campaign is built on a foundation of broad reach, multi-media outreach designed to inform customers about general energy efficiency program availability while providing educational energy efficiency messages 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”
* “It doesn‘t make much difference”

The *everylittlebit* theme was chosen to address and overcome these perceptual barriers.

### Driving Customers to Program Participation through General Awareness Building

As a broad reach, multi-media campaign, the *everylittlebit* outreach effort uses multiple channels, including website, web banners, print and broadcast outreach (radio and television), print material (brochures, signage, etc.), outdoor billboards, social media, participation in community events and other methods to reach customers. The intent is to educate and encourage customers to install energy efficient measures and practice energy-conserving behaviors 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.

### Including Targeted Program Participation in General Awareness

During the second and subsequent years the program was designed to become progressively more specific. Decisions regarding target programs are based partly upon the measure and program cost effectiveness calculations as well as the ability to drive additional participation through outreach investments.

### 2011 Updates

Beginning in 2011, traditional media was leveraged and maximized to create shorter versions of the existing television spots. This was due to the increasing need for shorter messages to consumers. In the last few years 15 second TV spots made up a significant portion of national and regional advertising budgets.  A 15 second spot allows for greater exposure within the same budget. Also, a short message that delivers the points quickly is actually preferred by consumers given the attention span of today’s audience of multi-taskers.

### Social Media Channels

Also in 2011, we continued to explore social media channels such as Facebook more frequently and consistently as both a viable and cost effective advertising channel. The latest awareness research conducted at the end of 2010 shows awareness of energy efficiency and Avista’s programs high among audiences aged 45+, while the 18-44 audience remains difficult to reach, given social media, DVR and on-demand opportunities. With this in mind, Avista responded by increasing its focus on programs, such as the CFL direct mail program, the Efficiency Matters Toyota Prius Giveaway program (which increased website traffic 125%), the Power Down Add Up competition for college living groups. Additionally campaigns were developed around the new Aclara Home Energy Advisor product and developing a comprehensive Commercial Industrial energy-efficiency campaign. All of these initiatives were in addition to a general awareness media buy.

### 2012 Campaign Sustains Existing Efforts

The *everylittlebit* campaign will continue into 2012 as a primary means to reach

customers with low-cost/no-cost opportunities for saving energy, to increase customer participation in our energy efficiency programs and to underscore the value of saving energy. Broad reach media will be evaluated and adjusted as more directly targeted campaigns are developed.

### Commercial and Industrial Outreach

Since 2009, we have offered the webpage “Efficiency Avenue”, an online tool which guides business customers to our commercial and industrial rebate programs. The website also maintains a number of low-cost / no-cost efficiency measures that customers can implement to manage their energy use, as well as the ability to sign up for Avista’s online energy efficiency business newsletter, called Energy Solutions for non-residential customers. Since its launch, we have had more than 150 inquiries from customers through the online contact form.

For 2011, we developed a comprehensive print campaign designed to educate business customers about the many prescriptive and site-specific programs available. The focus of the campaign profiles business customers within Avista’s service territory and features the measures they have implemented and the savings they have achieved. This campaign targets the business community and shares the value of energy efficiency and Avista’s energy efficiency incentives from a customer perspective. This campaign launched in late 2011 and will continue into 2012.

### Market Research Updates

Tracking research updated in 2010 indicates there has been an increase from 16% to 28% in the number of customers in all states who said they are participating or have participated in Avista’s energy efficiency program. This is consistent with the trend in residential rebates processed. Customers who are familiar with Avista‘s energy efficiency programs increased, with approximately 8 in 10 (82%) customers who say they 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 *everylittlebit* campaign messages. Approximately 6 in 10 (61%) customers said they are very or somewhat likely to participate in energy efficiency programs in the future.

### In Home Energy Audit Targeted Promotions

In 2010, we introduced the residential In-Home Energy Audit program in Spokane County, co-funded by the American Recovery and Reinvestment Act (ARRA) through municipality partnerships. Municipal partners committed their Energy Efficiency and Conservation Block Grant (EECBG) funding to a joint effort to offer a reduced cost home audit to customers within their jurisdictions. 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, including CFLs and other energy saving items, is left with the homeowner.

date, the In-Home Energy Audit program has performed over 750 audits with 13% of those people also participating in the Avista residential rebate program. This program is scheduled to run through September 2012.

### Multi-Department Collaboration

The outreach effort is coordinated with ongoing updates to sub-TRC analysis by Avista’s Policy, Planning and Analysis team. It is integrated into and directly supports 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 DSM engineering staff, program managers, program outreach specialists and the PPA team. The intent is to maintain a fresh and informative appeal to the overall outreach effort.

The additional throughput that can be obtained from our outreach investments also takes into consideration the opportunity to leverage the growing efficiency messaging in the general media and partnerships with utility and non-utility organizations. The *everylittlebit* campaign is also integrated into earned media opportunities through Avista‘s Corporate Communications Department.

## Rebate Processing and Automation

During 2010 an internal evaluation of the Company’s rebate processing efforts began. The first goal was to utilize “Lean Six Sigma” business management strategies to review the current residential rebating process (from customer application to final rebate payment) and determine if changes could be made to provide for further efficiencies, improved accuracy and cost savings.

A second goal was to identify any areas in the new process that could be automated, thereby reducing the potential for errors. Automation could include moving customer applications to a web-based approach, transmitting electronic customer applications to a customer service database, and streamlining the automated payment requests to the Company’s accounts payable department.

A cross-functional business improvement team was developed to look into these issues. This process continued into 2011. The team consisted of employees from Avista’s Energy Solutions (the DSM team), Customer Service, Accounts Payable, Strategic Project Development, Marketing, Process Improvement and Enterprise Technology departments. The team focused on reviewing the current state of rebate processing, “challenging” each step of the process by reviewing whether a particular process was necessary, accurately controlled, and whether it added value to the customer in the long run. The team scrutinized the amount of time it takes to process residential rebates, the number of touches and steps in the process, and the total number of handoffs for each rebate. The team conducted a thorough review of the residential rebate process.

As it relates to non-residential rebate processing, those rebates continue to be reviewed and processed by the individual program managers in a manner similar to the processing of site-specific energy efficiency incentives. Given that the volume of non-residential rebates is considerably less than the quantity of residential rebates (i.e., hundreds versus tens of thousands), no further review was warranted.

In addition to the business process review discussed above, an independent external review of data management was conducted for the residential, low income and non-residential rebate processes. The audit report was completed in 2011 and recommendations were responded to and implemented with some requiring further evaluation. A summary of the data management audit report is listed further below.

To maximize customer value and minimize inefficiencies and errors, the business improvement team believed that there should be further automation in the processing of residential rebates. The current manually intensive process was established when the number of rebates was considerably less and is not the most ideal system given that the volume of rebates has increased substantially. The manual processing of rebates is time consuming and labor intensive, making it prone to the possibility of errors. Between the manual process and the fact that a notable percentage of all rebates received from customers are either incomplete or inaccurate, it would take approximately 8 minutes to accurately process one rebate. Given that the Company processed over 35,000 rebates in 2010, rebate automation along with improved efficiencies and accuracy was identified as a value-added opportunity for the Company and its customers.

Current year activities have been very productive as programming to implement the first phase of the automation began in the summer of 2011. User acceptance was successful this fall and the necessary updates to the customer service database (CSS) were completed. Programming work is underway for the web portal with completion due near the end of 2011. After successful user acceptance testing, customers will be introduced to the online application process. Further into 2012 the final phase to automatically transfer payment request data to accounts payable will be undertaken.

The business improvement team identified several objectives that could be achieved through the automation of the rebating process.

* Instant crediting to customers’ accounts;
* Self-service automatic verification of customer;
* Accurate input by customers through web-entry allows for confirmation of completed rebate request information;
* Automatic transfer of customer application into CSS;
* Built in eligibility and verification checks;
* Provide for a reduction in number of checks printed and mailed;
* Rebate status updates via email.

Some of the improvements resulting in further rebate accuracy have already been implemented, as described above. However, the majority of the improvements in rebate processing will be achieved through automation. As noted above the company is currently complete with phase one, updates to the CSS system are well into phase two, web-portal design and integration.

Data Management

Avista completed an independent, third‐party evaluation of the data tracking systems and data strategy for its DSM programs in 2011. The review was to examine Avista’s internal operations for data entry, tracking and reporting, along with its systems for ongoing review, oversight and controls to ensure data accuracy.

Key expectations of the review were to gain a perspective of industry best practices regarding data management strategies and examine the appropriateness of documentation requirements for participating customers. The implementation team evaluated and considered the audit report recommendations which resulted in numerous process changes and improvements.

The Moss Adams final report included recommendations, as requested, but also presented favorable findings. Sample selection was based upon the American Institute of Certified Public Accountants (AICPA) Audit Sampling Guide for an expected 1.75% error rate, a 90% confidence level and a 5% tolerable deviation rate. This error rate of 1.75% and the 90% confidence level allows for two errors within the sample set. During their testing and review process, Moss Adams found one error in the rebate amount and therefore the 90% confidence was achieved related to the dollar amount of the rebates. Even though Moss Adams was following generally accepted audit sampling standards, they increased the sample size to make the sample more representative of the population distribution. It is important to note that while Moss Adams identified the DSM rebate processing as extremely manual, the processes in place were deemed effective in that the Company is achieving less than the expected error rate. With a sample size of 105 processed rebates, only one error was identified. This single error extrapolates to 366 representative errors from the more than 38,000 rebates processed, or an error rate of 0.96%. The value of the error was $14.64 and through extrapolation represents less than $5,400 out of the $17.8 million provided in rebates, or an error rate of 0.03%.

The Moss Adams review provided specific findings and recommendations within the structures of Internal Controls, Non-residential Testing, Residential Testing, Low Income Testing and Cut‐off Testing. These findings and recommendations were addressed throughout 2011 with numerous improvements and additional checks and balances implemented to ensure accuracy and sufficient controls as noted above. The automation efforts mentioned above will reduce the manual nature which was an identified area of improvement.

# VII. Analytical Review of 2012 Operations

Fundamentally the analytical review of planned 2012 DSM operations is based upon a compilation of measure characteristics that build towards calculating measure, program and portfolio cost-effectiveness and acquisition levels. This analysis is augmented with the costs associated with infrastructure (labor and non-labor) and EM&V requirements to build an overall budget. This fundamental analysis generally iterates several times as program managers refine programs to optimize program and portfolio performance.

Delays associated with the finalization of modified CPA results reduced the amount of time available for the iterative optimization of the portfolio. This activity will take place as part of the ongoing business planning effort.

To the extent that the portfolio optimization will continue to be analyzed, the outlook presented within this document may be conservative to some degree. However, the major issues, programs, and expected results identified within this document and incorporated within the management recommendations for 2012 are unlikely to be materially different.

## Avista-Specific DSM Methodologies and Practices

Avista has developed a variety of utility-specific methodologies and variations that build upon industry-standard methodologies and improve the value of the analysis within the business planning process. Generally these have become necessary to deal with unique components to Avista’s DSM portfolio or to be responsive to regulatory or external stakeholder requirements. Additionally the Company has established an approach to the aggregation and nomenclature of our portfolio that plays a role in understanding our approach to the planning process.

This section outlines several of these definitional and methodological approaches with the intent to improving the clarity and transparency of the 2012 DSM Business Plan.

Sub-Measures, Measures, Programs and Portfolios

The terminology of the various levels of aggregation of Avista’s DSM portfolio is key to understanding the approach that has taken to the business planning and portfolio optimization process. It is of additional importance in recognition of the Company’s commitment to offer only those measures that are cost-effective as memorialized in the IPUC Staff Memorandum of Understanding and similar commitments to Washington stakeholders.

The Company has established the following definitions:

Sub-Measure: A sub-measure is a component of a measure that is difficult to offer, in an understandable and marketable way, without aggregating it with other sub-measures. An example would be the difficulty that would occur in offering two-pan fryers and four-pan fryers without also offering three-pan fryers. Avista may offer sub-measures that do not achieve normal cost-effectiveness criteria if the overall measure is cost-effective.

Measure: Measures are stand-alone efficiency options that are reasonably independent of other measures within the portfolio. Consequently measures are expected to pass cost-effectiveness criteria barring exceptions. Exceptions include, but are not necessarily limited to, measures with unquantified market transformation effects, other non-energy benefits beyond the ability of Avista to quantify and cooperation participation in regional programs.

Programs: Programs consist of one or more related measures. The relation among the measures may be based upon technology (e.g. an aggregation of efficient lighting technologies) or market segment (e.g. aggregation of efficient food service measures). The aggregation is generally performed to improve the marketability or management of the measures.

Portfolio: Portfolios are composed of aggregations of programs. The aggregating factor will vary based upon the definition of the portfolio. The following portfolios have been defined:

Market segment portfolio: An aggregation of programs within a market segment (e.g. low-income, residential, non-residential, regional).

Fuel portfolio: Aggregating of electric or natural gas DSM programs.

Regular vs. low income portfolios: Separating the income qualified elements of the portfolio from those elements of the portfolio that are not income qualified.

Jurisdictional portfolio: Aggregating programs within either the Washington or Idaho jurisdiction.

Local or Regional portfolio: Aggregating all elements of the local DSM portfolio vs. the regional market transformation portfolio.

Fuel/Jurisdictional portfolio: Aggregating all programs within a given fuel and jurisdiction (Washington electric, Washington natural gas, Idaho electric, Idaho natural gas).

Overall portfolio: Aggregating all aspects of the Washington and Idaho, electric and natural gas DSM portfolio.

Methodology for Allocation of DSM Costs

The DSM portfolio is managed for several objectives, one of which is the maximization of net portfolio TRC benefits. Though this objective is not absolute and does occasionally conflict with other objectives, it is important to establish a methodology for allocating costs that is consistent with achieving that goal.

The Avista methodology for cost-allocation builds from the bottom (measure-level analysis) up to the program and ultimately portfolio analysis. At each level of aggregation those costs that are incremental at that stage of aggregation are incorporated into the cost-effectiveness analysis. Incremental customer cost (which is the vast majority of TRC cost) and benefits are fully incorporated into measure-level analysis. Utility costs may be recognized at the measure, program or portfolio level of aggregation depending on what stage of aggregation those costs are determined to be incremental. For PACT analysis, incentives are always incorporated into the measure-level analysis.

Though absolutely all costs are ultimately incorporated into the cost-effectiveness, whether the costs are recognized at the measure, program or portfolio level can be more subjective. The following are a few illustrations of how the methodology might be applied within the business planning process:

* For a residential measure offered through a third-party contractor (e.g. refrigerator recycling, CFL distributions etc.) the cost of the third-party administration would be considered to be a utility non-incentive cost. Since this is a cost that wouldn’t be borne in the absence of this individual measure, it would be considered to be an incremental cost at the measure level.
* The utility labor associated with a commercial prescriptive lighting program may be considered an incremental cost only at the portfolio level (and not at the measure or program level) if the addition of the program would not impose additional utility labor costs during the business plan period (calendar year 2012).
* An outreach program designed to exclusively enhance throughput of a residential lighting program would be considered an incremental cost at the program level (but not the measure level). However, a general outreach program covering multiple programs would only be considered an incremental cost at the portfolio level.

The level at which these costs are realized have important consequences to building a portfolio that maximizes net TRC value. It is possible that measures that improve the net TRC value of the portfolio could be inappropriately excluded from the portfolio if they are forced to bear costs that are truly fixed at that level of aggregation. By carefully structuring the level of aggregation that these costs are realized it is possible to include measures (or programs) that contribute to the overall portfolio even if those programs are not sufficiently cost-effective to offset the fixed costs that they may be allocated.

Sub-TRC and Sub-PACT Cost-Effectiveness Tests

These modifications to traditional utility standard practice tests are an outgrowth of the cost allocations discussed above and the objective of maximizing portfolio net TRC cost-effectiveness. The sub-TRC and sub-PACT test is a measurement of the TRC tests based only upon the costs and benefits that are incremental to a measure, program or portfolio at that level of aggregation. By evaluating the sub-TRC and sub-PACT tests on a measure-by-measure and program-by-program basis it is possible to determine if that individual measure or program contributes to the net cost-effectiveness of the overall portfolio.

Net-to-Gross Adjustments

Avista reports cost-effectiveness based upon both net participation (those who would not have adopted the measure in the absence of the utility program) and a gross basis (based upon all program participants). It is our objective to offer measures that are cost-effective from a net sub-TRC test perspective, although for many purposes (including Washington I-937 compliance) we report gross acquisition.

To modify the TRC and PACT calculations from a gross to a net basis, the Company excludes the impact (both costs and benefits) of all non-net participants (those who would have adopted the measure in the absence of the program). Utility costs, including incentive costs within the PACT calculation, are not modified.

Fundamentally, the net calculations only allow for the utility costs to be distributed across those who were motivated to adopt the measure by the program instead of all program participants.

The difference between the net and gross TRC cost-effectiveness calculations is minimal when the customer incremental cost is a fairly high percentage of the total TRC cost (composed of both customer incremental cost and utility non-incentive cost). For many years Avista’s DSM strategy was based primarily upon utilizing incentives to drive participation. Under those circumstances the gap between net and gross cost-effectiveness was relatively small. Since approximately 2007 the Company has gradually shifted towards making greater use of outreach efforts, partnerships and infrastructure investments to drive increased throughput of cost-effective measures. These additional costs, in addition to higher EM&V and other costs have significantly increased the percentage of utility costs that are non-incentive in nature. The outreach and infrastructure investments have been successful in that there has been a substantial increase in throughput during that period of time, but they have also increased the proportion of utility non-incentive costs within the total TRC cost and contributed towards a greater gap between net and gross TRC cost-effectiveness.

Though the incentive cost in proportion to the overall utility cost has always been calculated as an important metric, it has become progressively more critical to the management of the DSM portfolio as the gap between net and gross TRC calculations has grown. As a consequence there has been greater ongoing review of the efficacy of fixed non-incentive utility investments.

Until 2011 the Company applied a sensitivity analysis to the annual calculation of portfolio TRC cost-effectiveness for the prior year as well as part of the forward looking planning process for individual programs and measures. Net TRCs were generally calculated based upon the assumption that 100%, 75%, 50% and 25% of participating customers met the criteria for being a “net” customer. As the gaps within this sensitivity analysis have grown the need for a formal net-to-gross study was identified by both Avista and external stakeholders. In 2011 the Company contracted with Cadmus to complete a net-to-gross study for application to the cost-effectiveness analysis and to provide additional information for the program management. The net-to-gross ratios from the Cadmus study have been incorporated into the net TRC cost-effectiveness analysis within this document, with the addition of a few updates obtained as part of subsequent process evaluations.

Treatment of State and Federal Tax Credits

The Company has historically used the California Standard Practice Manual definition of the TRC test. This definition of the test allows for the customer incremental cost to be offset by tax credits (essentially viewing those credits as coming from outside the utility ratepayer population). Within the societal test perspective, these same tax credits are treated as transfer payments and do not offset customer incremental cost.

In response to requests from external stakeholders, the Company also calculates a variant of the TRC test that excludes tax credits as offsets to customer incremental cost.

Until recent years this has been of relatively little importance. However, between 2009 and 2010 these tax credits were sufficiently large to have a significant impact upon program and portfolio TRC costs. The tax credits available in 2012 are much smaller. There is also uncertainty surrounding assumptions of whether customers qualify for and apply for these tax credits. Consequently tax credits have not been applied to reducing the customer incremental cost of measures within the 2012 business planning process.

## Analytical Review of Measures and Programs

The annual DSM business planning exercise is based upon a comprehensive review of the opportunities in the following year without any assumed regulatory or budgetary constraints. As the portfolio is built it is possible to identify barriers to the development of an optimal portfolio. These barriers then become potential points of discussion as part of the business planning process and in the dialogue with Avista’s external stakeholders

A bottom-up approach is used starting with the assessment of individual measures. Those measures that demonstrate themselves to be cost-effective are built into programs and those programs aggregated into portfolios.

In past years measure-level information on energy savings, customer incremental cost, non-energy impacts and measure life was derived from internal Avista engineering estimates. Based upon a request from the Avista Advisory Group, the 2012 DSM Business Plan was delayed to allow for the completion of a revised external electric CPA by Global Consulting including assumptions regarding natural adoption consistent with the Northwest Power and Conservation Council Sixth Power Plan. Though Avista agreed to utilize this as a starting point for the 2012 DSM Business Plan, it was also agreed that the program management staff would have the opportunity to modify these assumptions to more accurately represent the programs that would be offered in conformance with the need for the business plan to serve as an operational planning tool.

It was rapidly discovered that the methodologies commonly employed within CPA assessments of aggregate cost-effective potential are ill-suited for application within an operational business plan. The disaggregation of markets for individual measures by jurisdiction, segment, building type, vintage and so on resulted in a proliferation of measure applications. It was common to find a single measure subdivided into 12 or 16 (or more) applications. If any single one of these applications was cost-effective, that acquisition potential became part of the aggregate acquisition target. Although this can be a useful approach to building an aggregate acquisition target for IRP planning purposes, it does not recognize the need to package measures into marketable programs nor does it incorporate the costs of utility infrastructure (labor, EM&V and administrative costs) necessary to field a viable energy-efficiency program.

As a consequence the program management staff frequently modified the results of the CPA, though these modified inputs generally continued to represent the assumptions implicit within the CPA, the Avista TRM, recent impact analysis and related work.

The commitment to utilize the CPA in the earliest stages of the analysis resulted in an unexpectedly long delay in the initiation of the DSM Business Plan analysis. This, in combination with fixed regulatory deadlines, prevented the degree of iterative optimization that has normally occurred as part of the planning process. As a consequence this business plan is concluding with recommendations for additional review of measures and programs that would have normally been completed as part of the business plan itself. Significant revisions within the portfolio that are beyond those noted within this document will be identified and disclosed to the Avista Advisory Group.

Since the natural gas CPA contracted to Global Consulting remains in-progress, natural gas measure energy savings were drawn from other sources, primarily the TRM and previous external impact evaluations. Internal Avista data on customer incremental cost and quantifiable non-energy impacts were the most frequently used basis for the estimation of customer incremental cost and non-energy impacts, as these were not commonly available though other sources.

Despite the substantial modifications to the Global CPA results, the 2012 DSM Business Plan has maintained the tradition of being built almost entirely upon a measure and program-level analytical foundation.

The DSM Business Plan evaluates the sub-TRC cost-effectiveness of measures, programs and portfolios based upon those costs that were incremental at that level of aggregation. Measure-level analysis is generally defined as the customer incremental cost and any non-incentive utility cost specific to that measure. Feedback from the Avista Advisory Group on the 2011 DSM Business Plan resulted in a revision, after the original Plan was filed, to include the allocation of labor to the measure level. This is essentially assuming that the DSM staff would expand or contract in response to the addition or termination of individual measures. In anticipation of a similar request for 2012, labor was once again allocated down to the measure level and included as a sub-TRC cost. As a consequence, measure level sub-TRCs were lower than they those which would have been observed using the original 2011 methodology.

The process did not allocate the EM&V cost at the measure or program level. EM&V costs, which have become considerable, were allocated exclusively at the portfolio level. This decision was based upon the uncertainty of the methodology that would be employed for assessing the 2012 portfolio. It was not deemed possible to determine the incremental cost attributable to measures or programs in the absence of knowledge of methodologies regarding program aggregation, sampling strategies, process evaluation requirements and other details. Since an RFP for the independent third-party evaluation of the 2012 portfolio has yet to be written it is difficult to speculate upon the methodology that is likely to be selected. Inclusion of this additional cost burden could materially impact the sub-TRC cost-effectiveness and potentially exclude otherwise cost-effective measures from inclusion within the portfolio.

Two lessons that are now clear from the 2012 DSM business planning process that are worthy of noting for future reference include:

1. It is necessary to base the process upon operationally meaningful inputs at even the most detailed levels within the portfolio. Though the CPA methodology is functional as a planning tool for establishing aggregate service-territory level efficiency potential, there are several important misalignments in the definition and segmentation of measures, measure applications and markets that render this approach unsuitable for an operational business plan.
2. There is a need for a discussion and agreement regarding the allocation of costs at different levels of aggregation within the DSM portfolio. The degree to which costs are incremental and can be accurately defined has been touched upon in the review of the business plan by the Avista Advisory Group in the past, but a clear discussion and conclusion is necessary to guide future planning efforts.

## Resource Acquisition Targets

A key requirement of the business planning process is the projection of resource acquisition during the upcoming year. Resource acquisition projections are divided into electric and natural gas as well as Washington and Idaho distinctions.

The projected resource acquisitions are compared to targets established within the previous IRP (electric and natural gas) as well as Washington 2012-2013 Biennial Conservation Plan (BCP) targets and Washington natural gas decoupling targets.

It is recognized that the Company’s core acquisition obligation remains the responsible pursuit of all cost-effective resources and not merely meeting a numerical target. Though the management of the portfolio does tend to focus upon increasing acquisition where there is a shortfall relative to these targets, or to mitigate the adverse impact of the shortfall, this fundamental obligation remains a part of the ongoing management of the DSM portfolio.

### Washington I-937 Requirements

The 2012 DSM Business Plan incorporates the first year of Avista’s 2012-2013 I-937 compliance period. Avista will be filing with the WUTC the resource acquisition target for the 2012-2013 biennium on the same day that this business plan is to be filed. At the time that the analysis behind the business plan was in progress the acquisition level for Avista’s BCP filing had been established based upon the results of a 2011 CPA. The lower limit of this range has been determined to be the ‘realistic achievable potential’ (RAP) and the upper limit is the ‘maximum achievable potential’ (MAP). Failing to achieve the lower boundary of this range will result in the assessment of a $50 per mWh penalty upon the utility. Exceeding the high end of the range as a result of measures where pre-acquisition is possible (which has been proposed to exclude only new construction measure applications) results in a modification to the target in the following (2014-2015) biennium.

For purposes of the 2012-2013 biennium, only measurable Washington electric-efficiency acquisition is incorporated into the target and eligible for meeting that target. Fuel-efficiency (the cost-effective displacement of electric end-use consumption with the direct use of natural gas) is excluded from these calculations. Despite the exclusion from the I-937 acquisition calculations, the Company remains committed to fuel-efficiency programs and they will remain within the Company’s electric DSM portfolio.

The I-937 requirements pertain not only to electric efficiency but distribution efficiencies and improvements in unmetered electric consumption within thermal generating plants as well. These other efficiencies are outside the scope of the 2012 DSM Business Plan and are not incorporated within this business plan. Despite their exclusion from DSM business planning, Avista’s BCP filing defines the BCP target is a single aggregate target. Interdepartmental coordination necessary to meet this target will become a greater focus within the 2013 DSM business planning process based upon a review of results achieved within the biennium to date.

There have been no changes in the market or the general economy in the very short period of time since the electric CPA has been completed. Since that CPA is the foundation of the BCP target, there was not expected to be a significant mismatch between this acquisition target and the 2012 DSM Business Plan acquisition projections. As indicated in greater depth on table 6, the Company anticipates an acquisition level in the upper 64% of that range during 2012.

Though this document is not intended to project beyond 2012, the biennial nature of the BCP target does necessarily create the need for some projection to 2013. As with the Northwest Power and Conservation Council’s 6th Power Plan, Avista’s CPA projects a significant ramp-up in cost-effective potential in 2013 in comparison to 2012 (as indicated in table 7):

The identification of cost-effective potential within a CPA is reached without consideration of the ability of the utility to execute such a ramp-up without undue escalations in cost. Rapid ramp-ups can result in undue escalations in utility cost as well as increasing customer incremental costs for efficiency measures. The result can lead to higher costs and set-backs in the development of markets for efficiency measures. Consequently it is important to consider not only the sufficiency of the 2012 acquisition relative to the 2012 targets, but also whether the consequences that the 2012 achievements have upon 2013 acquisition needs.

For those reasons Avista has incorporated a projection of acquisition levels over the full 2012-2013 biennium under various ramp-up assumptions in comparison to the full 2012-2013 BCP acquisition target. At present it does not appear that a ramp-up of such a magnitude as to create cost-escalation issues will be necessary to meet the BCP acquisition target.

The Washington I-937 compliance requirements are not limited to acquisition targets. Additional reporting requirements and EM&V requirements are outlined in this document and the 2012 EM&V Plan is attached as Appendix B

### Washington Natural Gas Requirements

Avista’s current natural gas fixed cost recovery mechanism includes a tiered trigger based upon independently third-party verified Washington natural gas DSM acquisition. The tier structure (below) requires a minimum resource acquisition of 70% for any fixed cost recovery.

Table 2: Natural gas decoupling mechanism DSM tiered trigger structure

Actual vs. target DSM savings % of tracked cost recovery

Less than 70% 0%

≥ 70% and < 80% 15%

≥ 80% and < 90% 25%

≥ 90% and < 100% 35%

≥ 100% 45%

For reasons elaborated upon later within this document, this business plan is projecting that 2012 acquisition will fall short of the 70% minimum established to qualify for any tracked lost fixed cost recovery.

## Resource Acquisition Projections

Once the process of identifying and characterizing measures and their aggregation into programs and portfolios has been completed, it is possible to begin to assess the overall portfolio resource acquisition projections.

As previously indicated, the time available for the planning process was compressed to the point that there was less opportunity for the iterative optimization of the overall portfolio that normally occurs. As a consequence the portfolio acquisition projections, at of the date of this document, include contributions from programs that have been identified within this plan as sub-TRC cost-ineffective. There are also measures identified within the Global Consulting electric CPA as cost-effective that remain under review for possible future inclusion within the portfolio. Generally it is possible to simultaneously improve the acquisition levels and cost-effectiveness of the portfolio through this iterative optimization process. Thus some degree of improvement would be expected after the date of filing of this document. Avista will report to the Advisory Group progress in this task.

The review of Avista’s acquisition relative to established targets has led to the realization that there are three factors that play a significant role in the Company’s ability to hit these targets. These three key factors are:

Federal Tax Credits

The availability of significant federal tax credits, primarily for residential appliances and selected residential home improvements, added considerable fuel to an already growing residential efficiency portfolio during 2009 and 2010. After that point the credits were phased out but generally not terminated. Since customers were uncertain as to when the credits would terminate most customers took action early during this availability period, contributing towards the increased residential throughput in 2009 and 2010.

The accelerated replacement of end-use equipment carries with it substantial advantages. Given the luxury of time, which is often not the case in replace on burnout applications, replacement of appliances with high-efficiency equipment is a more viable customer option.

It is also generally true that such acceleration generally depletes the technical and economic potential in subsequent time periods to some degree. In the case of the federal tax credits initiated during 2009, some of the accelerated acquisition came at the expense of 2011 and 2012 acquisition. The impact of this acceleration is being observed in Avista’s 2011 year-to-date rebate activity, which is down by approximately 25% from the prior year. This decrease seems to be accelerating and Avista is projecting another decrease of approximately 25% in 2012 throughput.

Macroeconomic Issues

The general economic climate (locally, regionally and nationally) presents a clear challenge to driving customers to voluntarily invest scarce capital funds in efficiency investments. Uncertainty in the economic future induces reduced capital investment, increased risk aversion and higher hurdle rates for those investments. This is applicable to residential, commercial and industrial market segments.

Within this environment it is more difficult to successfully market efficiency investments given the reduced opportunities available and the higher returns demanded by customers.

It is also notable that the general economy is one of several influences upon the avoided cost of energy; reduced demand leads to lower avoided costs. This is one of several factors leading to declines in avoided cost that have played a significant role in the prospect for cost-effective energy efficiency acquisition in 2012 and beyond.

Establishment of the Acquisition Target

Avista’s electric acquisition targets within the 2011 IRP target as well as the Washington BCP target range are based upon a recently completed CPA. Given the timeliness of the current CPA there has been little opportunity for assumptions to change prior to the initiation of this business planning process. Therefore, and not without surprise, the business plan has led to results that are very similar to those contained within the CPA and incorporated into those acquisition targets.

The same is not true of the natural gas acquisition targets. Those targets were developed for the 2009 natural gas IRP and have not been updated. Since that time federal tax credits have come and gradually declined, and general economic conditions have significantly eroded. As a consequence the acquisition targets established based upon what now appear to be optimistic assumptions are unrealistic based upon current expectations of the 2012 market. An external natural gas CPA is now underway and due for completion during 2012 for incorporation into the IRP for that year, but that process will only establish targets for 2013 and beyond.

Beyond the timeliness of the assumptions used to develop the natural gas targets, it is also important to recognize that the targets were developed without the benefit of most of the recent EM&V that has been performed on the gas portfolio. The use of higher unverified acquisition estimates to develop the target is inconsistent with the lower energy savings assumed within the 2012 DSM Business Plan.

A summary of electric and natural gas acquisition by program is detailed in table 3 below.

Table 3: Electric and natural gas acquisition for non-residential programs

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Portfolio | Program | Washington kWhs | Idaho kWhs | Washington therms | Idaho therms | System kWhs | System therms |
| Non-res | Site Specific | 17,500,000 | 7,500,000 | 437,500 | 187,500 | 25,000,000 | 625,000 |
| Non-res | Psc Energy Smart Grocer | 2,698,205 | 1,156,373 | - | - | 3,854,578 | - |
| Non-res | Psc Green Motors | 25,089 | 10,752 | - | - | 35,841 | - |
| Non-res | Psc PC Network Controls | 45,780 | 19,620 | - | - | 65,400 | - |
| Non-res | Psc Clothes Washers | 24,657 | 10,567 | 2,058 | 882 | 35,224 | 2,940 |
| Non-res | Psc Food Service | 329,566 | 141,242 | 18,273 | 7,831 | 470,808 | 26,104 |
| Non-res | Psc Lighting | 10,500,000 | 4,500,000 | - | - | 15,000,000 | - |
| Non-res | Psc Motors | 589,418 | 252,608 | - | - | 842,025 | - |
| Non-res | Psc VFDs | 1,746,780 | 748,620 | - | - | 2,495,400 | - |
| Non-res | Psc Windows/insulation | 117,572 | 50,388 | 19,474 | 8,346 | 167,960 | 27,820 |
| Non-res | Psc HVAC | - | - | 22,523 | 9,653 | - | 32,175 |
| Non-res | Psc standby gen block htr | 63,490 | 27,210 | - | - | 90,700 | - |
| Non-res | RCM | - | - | - | - | - | - |
| Non-residential total |  | 33,640,555 | 33,640,555 | 33,640,555 | 33,640,555 | 33,640,555 | 33,640,555 |

Table 4: Electric and natural gas acquisition for residential programs

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Portfolio | Program | Washington kWhs | Idaho kWhs | Washington therms | Idaho therms | System kWhs | System therms |
| Res home improvement | AS heat pump | 424,320 | 181,851 | - | - | 606,171 | - |
| Res home improvement | Ductless heat pump | 24,200 | 10,372 | - | - | 34,572 | - |
| Res home improvement | VSM | 385,924 | 165,396 | - | - | 551,320 | - |
| Res home improvement | Water heater | 98,999 | 42,428 | 3,302 | 1,415 | 141,427 | 4,717 |
| Res home improvement | E to NG furnaces | 636,208 | 272,660 | - | - | 908,868 | - |
| Res home improvement | E to AS heat pump | 223,021 | 95,581 | - | - | 318,602 | - |
| Res home improvement | E to NG water heat | 193,721 | 83,023 | - | - | 276,744 | - |
| Res home improvement | Insulation | 446,383 | 191,307 | 99,460 | 42,626 | 637,690 | 142,085 |
| Res home improvement | Fireplace damper | 342 | 147 | 47 | 20 | 489 | 67 |
| Res home improvement | NG furnace | - | - | 178,063 | 76,313 | - | 254,376 |
| Res home improvement | In home energy audit | 75,600 | - | - | - | 75,600 | - |
| Res home improvement | Res lighting | 2,100,000 | 900,000 | - | - | 3,000,000 | - |
| Res home improvement | Event CFL distributions | 105,000 | 45,000 | - | - | 150,000 | - |
| Res new construction | AS heat pump | 463 | 198 | - | - | 661 | - |
| Res new construction | Ductless heat pump | - | - | - | - | - | - |
| Res new construction | VSM | 3,377 | 1,447 | - | - | 4,825 | - |
| Res new construction | Water heaters | - | - | 22 | 9 | - | 31 |
| Res new construction | NG furnace | - | - | 8,711 | 3,733 | - | 12,444 |
| Res new construction | Energy Star homes | 190,712 | 81,734 | 17,238 | 7,388 | 272,445 | 24,625 |
| Res new construction | Res multifamily MT | 443,518 | 190,079 | - | - | 633,597 | - |
| Res appliances | Clothes washer | 93,297 | 39,984 | 12,062 | 5,170 | 133,281 | 17,232 |
| Res appliances | Refrigerator/Freezer | 119,524 | 51,224 | - | - | 170,748 | - |
| Res appliances | JACO | 1,693,825 | 725,925 | - | - | 2,419,750 | - |
| Low income | Low income | 1,404,520 | 491,582 | 35,032 | 12,261 | 1,896,101 | 47,294 |
| Residential total |  | 8,662,953 | 8,662,953 | 8,662,953 | 8,662,953 | 8,662,953 | 8,662,953 |
|  |  |  |  |  |  |  |  |
| Local portfolio total |  | 42,303,508 | 42,303,508 | 42,303,508 | 42,303,508 | 42,303,508 | 42,303,508 |

Electric DSM Acquisition

Based upon the final projections available for this business plan the electric acquisition is projected to be on target to achieve IRP targets established within each jurisdiction as well as being within the 2012 acquisition range established within the BCP. Additionally the 2012 acquisition appears to place the Company on a reasonable path towards meeting 2012-2013 BCP targets.

The following tables indicate projected acquisition relative to those targets, including sensitivity analysis surrounding projections of 2012-2013 acquisition.

Table 5: Electric DSM acquisition relative to IRP targets by jurisdiction

2012 IRP target 2012 projected acquisition

Jurisdiction (mWhs)1 (mWhs)2 % of target

Washington 32,762 49,662 152%

Idaho 17,082 21,141 124%

System 49,844 70,803 142%

1. IRP targets and comparable acquisitions include fuel-efficiency measures and exclude distribution efficiency and efficiency within thermal electric generation facilities.
2. Acquisition includes electric-efficiency, fuel-efficiency and NEEA regional electric-efficiency attributed to Avista.

It should be noted that, after the completion of the IRP, subsequent analyses were completed. One in particular, electric to natural gas conversions, were considered to be underestimated. The revised estimate started with current participation rates and ramped up from there. Another subsequent adjustment was the removal of the effects of naturally occurring conservation in order to provide consistency with the Council’s Sixth Plan. The CPA, with these revisions, completed for purposes of establishing a BCP goal is a more current and, subjectively, more reasonable acquisition target for Washington. No such comparable revised acquisition target is available for Idaho.

Table 6: Washington acquisition qualifying towards BCP targets relative to the 2012 target range

2012 WA DSM 2012 WA DSM 2012 WA DSM Placement

BCP RAP1 target BCP MAP2 target projected acquisition within

Category (mWhs) (mWhs) % of target range3

Electric efficiency 34,0414 56,5844 41,0305 64%

Distribution efficiency 32,387 60,147 NA6 NA

EE in thermal generation 0 0 NA NA

1. “RAP” is the realistic acquisition potential as defined within the Global Consulting CPA study. This establishes the lower boundary of the range for the 2012-2013 BCP.
2. “MAP” is the maximum acquisition potential as defined within the Global Consulting CPA study. This establishes the upper boundary of the range for the 2012-2013 BCP.
3. Does not include fuel-efficiency measures.
4. Describing how far the projected acquisition level is up from the lower boundary of the range towards the higher boundary of the range. Less than 0% would indicate short of the lower boundary and above 100% would indicate above the higher boundary.
5. Excluding fuel-efficiency acquisition.
6. Not contained within the 2012 DSM Business Plan.

Table 7: Washington acquisition qualifying towards BCP targets relative to the 2012-2013 target range

Placement

Low ramp High ramp within

RAP1 MAP2 assumption3 assumption4 range5

2012 target 34,041 56,584 48,388 48,388 64%

2013 target 42,161 80,826 48,388 60,486 16% - 47%

2012-2013 tgt. 76,202 137,410 96,777 108,874 34% - 53%

2012-2013 ramp rate 24% 43% 0% 25%

1. “RAP” is the realistic acquisition potential as defined within the Global Consulting CPA study. This establishes the lower boundary of the range for the 2012-2013 BCP.
2. “MAP” is the maximum acquisition potential as defined within the Global Consulting CPA study. This establishes the upper boundary of the range for the 2012-2013 BCP.
3. Assumes the same level of acquisition in 2013 as is projected for 2012.
4. Assumes a 25% increase in acquisition between 2012 and 2013
5. Describing how far the projected acquisition level is up from the lower boundary of the range towards the higher boundary of the range. Less than 0% would indicate short of the lower boundary and above 100% would indicate above the higher boundary.

Figure 1: “RAP” and “MAP” ranges and 2012-2013 acquisition with two ramping assumptions

Acquisition projections are based upon the acquisition that is anticipated to be verified by independent third party impact evaluations at the close of the 2012-2013 BCP period. Measure level savings estimates are based upon the CPA, Avista’s TRM, or in the absence of this guidance, the best available information.

It is also projected that any 2013 ramp-up of acquisition necessary to meet the biennial target is unlikely to be so substantial as to cause undue increases in utility or customer costs.

The distribution of energy acquisition by program is contained within figure 2 (below). This allocation illustrates the expectation of a reduction in residential acquisition as a result of the diminished availability of federal tax credits.

Figure 2: Expected 2012 electric efficiency acquisition by customer segment

Based upon the analysis within the business planning process and reflected in the tables above, Avista anticipates being within expected guidelines for electric DSM acquisition. Despite the projection that the Company will meet this target without the need for further management of the portfolio, the Company will continue to evaluate opportunities to cost-effectively improve acquisition levels and appropriately accelerate adoption throughout 2012.

Natural Gas Acquisition

The prospects for achieving acquisition targets established in the 2009 natural gas IRP and contained within the Washington natural gas fixed cost recovery mechanism are more problematic than those outlined above for the electric portfolio. There assumptions used to establish those targets are much less timely and representative of current markets. The impact of federal tax credits and general economic conditions has had a more detrimental impact upon the natural gas measures, and those impacts are reflected in the 2012 acquisition projections.

Based upon the measures and programs incorporated within the portfolio as of the completion of this business plan the following acquisition levels relative to 2009 IRP acquisition targets are expected.

Table 8: Natural gas DSM acquisition relative to IRP targets by jurisdiction

Acquisition target Acquisition projection Performance

Jurisdiction (therms)1 (therms) vs. target

Idaho 697,135 363,146 52%

Washington 1,739,311 853,764 49%

System 2,436,446 1,216,910 50%

1. Derived from the 2009 natural gas IRP.

The Washington acquisition relative to the 2012 target fails to achieve the 70% level that is necessary to allow for any recovery of decoupling tracked fixed cost recovery.

These projections are clearly disappointments not only in comparison to the 2009 IRP expectations (which are not entirely relevant to current conditions) but also when viewed relative to 2010 unverified actual acquisition claims and 2011 budgeted acquisition. The projections indicate an ongoing slide in the ability to achieve natural gas acquisition targets. It should be recognized that this slide is occurring after an unprecedented growth in natural gas efficiency activity that began in 2002. When viewed in a longer historical perspective the acquisition projections may be viewed as less surprising.

Figure 3: Historical electric and natural gas acquisition

1. The “own-fuel” impact is defined as the electric impact of electric DSM and fuel-efficiency programs and the natural gas impact of natural gas DSM programs. Interactive effects upon other fuels or the natural gas usage of fuel-efficiency programs are not included in these calculations.
2. Avista conducted natural gas programs during 1995 to 1997, but those records were unavailable for inclusion in this graph.

The distribution of natural gas acquisition by customer segment is represented below.

Figure 4: Expected 2012 natural gas efficiency acquisition by customer segment

## Cost-Effectiveness Projections

Portfolio acquisition and cost-effectiveness projections are closely related. The screening of measures and programs to exclude those that are not anticipated to be cost-effective on a net TRC basis (absent reasonable exceptions) clearly have an influence upon acquisition. Shifting cost-effectiveness is most frequently the result of changing technologies, the cost of those technologies, avoided costs, measure life and energy savings.

Avista calculates four standard practice tests as part of the DSM Annual Report; total resource cost, program administrator (or utility cost) test, participant test and non-participant (or rate impact measure) test. For planning purposes the greatest focus is upon the TRC test. With very few exceptions the TRC test is more difficult to pass than the program administrator cost test. The primary use of the participant test is to determine if a measure is likely to generate sufficient customer interest (due to the use of a customer simple payback measure within the Company’s formulaic tariffed incentive guidance, this measure is often used as a substitute metric). Avista has long sought to address the non-participant test by offering broadly applicable programs that allow all customers with the opportunity to benefit, directly or indirectly.

In the past the TRC test has included two scenarios; (1) with and without the inclusion of tax credits as offsets to customer incremental cost and (2) based upon various net-to-gross ratio scenarios. As previously explained, no offsets to customer incremental cost resulting from tax credits have been incorporated into the 2012 DSM Business Plan due to the reduced availability and uncertainty regarding customer receipt of the credit.

The Company has historically evaluated the DSM portfolio based upon varying levels of net-to-gross scenarios. With the compilation of the 2011 Cadmus net-to-gross study it is possible to substitute those estimates into the net cost-effectiveness calculations.

The description of the Company’s sub-TRC analysis (analysis of only those costs and benefits that are incremental at a given level of program aggregation) is summarized in Table 9. A total of 77% of labor expenses are allocated to individual DSM programs with the remainder being related to EM&V, regulatory and regional functions. All utility costs are incorporated within the portfolio cost-effectiveness.

Table 9: TRC cost-effectiveness by measure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Program | Measure package | Overall portfolio gross sub-TRC w/o NIUC | Overall portfolio gross sub-TRC w NIUC | Overall portfolio net sub-TRC w NIUC |
| Non-res | Site-specific | 1.01 | 0.97 | 0.95 |
| Non-res | Psc Energy Smart Grocer | 2.22 | 2.05 | 2.03 |
| Non-res | Psc Green Motors | 1.64 | 1.49 | 1.41 |
| Non-res | Psc PC Network Controls | 1.41 | 1.15 | 1.12 |
| Non-res | Psc Clothes Washers | 0.26 | 0.26 | 0.26 |
| Non-res | Psc Food Service | 1.11 | 1.02 | 1.01 |
| Non-res | Psc Lighting | 5.33 | 4.19 | 4.06 |
| Non-res | Psc Motors | 1.31 | 1.21 | 1.16 |
| Non-res | Psc VFDs | 2.33 | 2.05 | 2.01 |
| Non-res | Psc Windows/insulation | 2.17 | 1.85 | 1.81 |
| Non-res | Psc HVAC | 2.22 | 1.78 | 1.73 |
| Non-res | Psc standby gen block htr | 0.61 | 0.58 | 0.58 |
| Non-res | RCM |  | 0.00 | 0.00 |
| Res home improvement | AS heat pump | 0.70 | 0.68 | 0.66 |
| Res home improvement | Ductless heat pump | 0.96 | 0.92 | 0.89 |
| Res home improvement | VSM | 0.95 | 0.91 | 0.89 |
| Res home improvement | Water heater | 2.41 | 2.07 | 1.83 |
| Res home improvement | E to NG furnaces | 0.96 | 0.91 | 0.88 |
| Res home improvement | E to AS heat pump | 0.49 | 0.48 | 0.47 |
| Res home improvement | E to NG water heat | 1.84 | 1.61 | 1.44 |
| Res home improvement | Insulation | 1.18 | 1.07 | 1.01 |
| Res home improvement | Fireplace damper | 0.13 | 0.12 | 0.12 |
| Res home improvement | NG furnace | 0.83 | 0.74 | 0.70 |
| Res home improvement | In home energy audit |  | 0.68 | 0.68 |
| Res home improvement | Res lighting | 2.06 | 1.75 | 1.60 |
| Res home improvement | Event CFL distributions |  | 11.70 | 11.70 |
| Res new construction | AS heat pump | 0.49 | 0.48 | 0.47 |
| Res new construction | Ductless heat pump |  |  |  |
| Res new construction | VSM | 0.95 | 0.91 | 0.89 |
| Res new construction | Water heaters | 1.17 | 1.00 | 0.89 |
| Res new construction | NG furnace | 0.83 | 0.74 | 0.70 |
| Res new construction | Energy Star homes | 1.01 | 0.95 | 0.93 |
| Res new construction | Res multifamily MT | 1.71 | 1.58 | 1.50 |
| Res appliances | Clothes washer | 0.79 | 0.72 | 0.62 |
| Res appliances | Refrigerator/Freezer | 1.10 | 1.06 | 1.03 |
| Res appliances | JACO |  | 3.48 | 1.81 |
| Low income | Low income | 0.70 | 0.68 | 0.68 |

When aggregated into portfolios and with the inclusion of all utility costs, the cost-effectiveness is as represented below in Table 10.

Table 10: Portfolio gross and net TRC projections

Portfolio definition Gross TRC B/C Net TRC B/C

Regular income electric portfolio 1.42 1.39

Low income electric portfolio 0.80 0.80

Overall electric portfolio 1.37 1.34

Regular income nat. gas portfolio 0.65 0.63

Low income nat. gas portfolio 0.22 0.22

Overall nat. gas portfolio 0.58 0.54

Regular income electric/nat. gas portfolio 1.20 1.18

Low income electric/nat. gas portfolio 0.511 0.511

Overall electric/nat. gas portfolio 1.14 1.11

1. The TRC benefit to cost ratio is 0.71 without the inclusion of non-incentive costs and with projected realization rates.

The results summarized in the table above lead to two obvious conclusions; (1) the natural gas portfolio is cost-effectiveness challenged and (2) the cost-effectiveness of the low income portfolio is in need of attention. The cost-effectiveness of the electric portfolio is clearly cost-effective, and it is the electric portfolio that brings the overall combined fuel portfolio into a favorable cost-effective range.

The cost-effectiveness of the natural gas portfolio is a persistent and difficult issue. Electric avoided costs are over three times higher (between 309% and 340% depending on the seasonality of the therm usage) than a natural gas measure with the same measure life. This clearly erects a significant barrier to making the natural gas portfolio cost-effective.

It is notable that there have been strong indications that the 2012 natural gas IRP will define an avoided cost that is significantly lower. This would clearly exacerbate the issue of the cost-effectiveness of the natural gas portfolio.

This analysis has identified two issues that may be worthy of discussion within the Avista Advisory Group in 2012; (1) should the natural gas portfolio bear only the costs that are incremental to offering that portfolio in addition to the electric portfolio, or should costs be allocated (either on an mmBTU or avoided cost basis) to both portfolios and (2) a review of the methodology used for allocating non-incentive utility costs to measure, program or portfolio aggregation is necessary. Both of these methodological issues come with an inherent degree of uncertainty.

Some degree of sensitivity analysis should be performed prior to this discussion to determine the magnitude of the impact of these alternate directions. Very preliminary evaluation indicates that even the most favorable (in terms of improving portfolio cost-effectiveness) resolutions would not alone be sufficient to move the natural gas portfolio benefit/cost ratio above one, but in the longer term these may make the difference in positioning Avista to offer a viable and cost-effective portfolio.

## DSM Labor Requirements

Labor allocations across the 42 individuals expected to charge to DSM during 2012 were either directly assigned based upon the anticipated duties of those individuals or spread across either residential, non-residential or the entire portfolio based upon the energy savings of the each individual measure. As a consequence, each individual measure that yielded energy savings was required to bear a certain amount of labor cost.

The overall labor allocation for 2012 has increased slightly from a budget of 27.7 FTE in 2011 to 28.6 in 2012 (a 3% increase). The labor budget has decreased by 3% from 2011 in spite of the increase in FTE and an increase in labor overheads from 51% to 60%. This seeming inconsistency is the consequence of a slightly heavier reliance upon lower cost labor classifications (loaded labor cost has decreased by 6% per FTE in comparison to 2011). The cause of increasing FTE during a period of decreasing acquisition is the result rigidities within the implementation task and increasing EM&V activities and regulatory requirements.

Figure 5: FTE of labor attributed to DSM; 2012 vs. 2011

Figure 6: Aggregate DSM loaded labor cost; 2012 vs. 2011

## DSM Budget Projections

Based upon the preceding analysis it is possible to build a total DSM budget projection for 2012 that is consistent with acquisition expectations, projected incentive levels and infrastructure costs. The high-level outcome of these projections is that the expected 2012 DSM expenditures will fall from the 2011 budgeted level of $28.4 million to $23.3 million. This is a $5.1 million reduction, or an amount equal to 18% of the 2011 budget.

Of the total $5.1 budget reduction, $4.3 million (86% of the reduction) is attributable to reduced incentive expenditures. The $4.3 million reduction in the incentive budget represents a 24% reduction in comparison to the 2011 incentive budget. This reduction is driven by an expected 20% decline in electric acquisition and a 39% decline in natural gas acquisition.

The following graph and table illustrate the distribution of the 2012 budget and the comparable 2011 budget.

Figure 7: 2012 and 2011 aggregate budget comparison

Table 11 below details the fuel and jurisdictional breakout of the categorized 2012 utility expenditure budget.

Table 11: 2012 budget by expenditure category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | WA electric | ID electric | WA gas | ID gas | Total |
| Incentives | $ 6,745,679 | $ 2,780,328 | $ 3,093,975 | $ 1,275,667 | $ 13,895,648 |
| Labor | $ 1,358,674 | $ 579,558 | $ 809,842 | $ 345,892 | $ 3,093,967 |
| NL/NI/NEMV1 | $ 3,256,966 | $ 1,068,139 | $ 277,53 | $ 100,925 | $ 4,703,883 |
| External EMV2 | $ 1,012,542 | $ 307,772 | $ 236,511 | $ 87,943 | $ 1,644,768 |
| Total | $ 12,373,861 | $ 4,735,797 | $ 4,418,181 | $ 1,810,427 | $ 23,328,267 |

1. “NL/NI/NEMV” indicates the non-labor, non-incentive and non-external EM&V budget amount.
2. “External EMV” expenditures are those that have been budgeted for the independent third-party review of Avista’s acquisition claims. It does not include internal labor allocated towards EM&V or regulatory functions.

It is notable that the percentage of total utility expenditures dedicated to incentives, 60%, is lower than the 64% incentive expenditures from the 2011 budget and continues the trend towards incentives becoming a decreasing portion of utility expenditures. The 2012 decrease in the proportion of utility funds expended on incentives is largely the result of decreased acquisition and consequentially reduced incentive expenditures without a comparable decrease in the non-incentive budget. Future increases in acquisition, driven perhaps by improvement in general economic conditions, would act to reverse this trend.

The budget issues described above are an example of how portfolio cost-effectiveness can be impacted by variations in energy acquisition when infrastructure costs are relatively fixed in the short-run. A decrease in acquisition that is not matched by a commensurate decrease in infrastructure cost will lead to more demanding infrastructure cost burdens within the portfolio. Given that most infrastructure costs cannot be rapidly ramped up or down without suffering losses in efficiency, and many types of infrastructure costs often have significant economies of scale, reductions in acquisition tend to lead to reductions in portfolio cost-effectiveness. If these acquisition reductions were perceived as long-term it would be appropriate to review these infrastructure commitments, whereas adjusting infrastructure for short-term acquisition challenges may result in unnecessary ramp-up costs at a later date.

Avista is not proposing to extend the Washington guidance of expending 3% to 6% of total DSM expenditures on EM&V activities into 2012. This guidance was memorialized as part of the 2010-2011 BCP conditions and the Company is specifically revising the guidance to be based upon an amount that is sufficient and prudent for the need. Though no commitments have been made, the table below illustrates the status of the 2012 Avista EM&V budget.

Table 12: EM&V expenditures in comparison to the total DSM budget

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | WA electric | ID electric | WA gas | ID gas |
| Non-labor EM&V expenses | $ 1,012,542 | $ 307,772 | $ 236,511 | $ 87,943 |
| Internal EM&V labor | $ 95,690 | $ 40,687 | $ 56,584 | $ 24,068 |
| Total EM&V expense | $ 1,108,233 | $ 348,459 | $ 293,095 | $ 112,011 |
| Total utility expenditures | $ 12,373,861 | $ 4,735,797 | $ 4,418,181 | $ 1,810,427 |
| NL EM&V as a % of total | 8.2% | 6.5% | 5.4% | 4.9% |
|  |  |  |  |  |
|  | Total WA | Total ID | Total system |  |
| Non-labor EM&V expenses | $ 1,249,053 | $ 395,715 | $ 1,644,768 |  |
| Internal EM&V labor | $ 152,274 | $ 64,755 | $ 217,030 |  |
| Total EM&V expense | $ 1,401,327 | $ 460,470 | $ 1,861,798 |  |
| Total utility expenditures | $ 16,792,042 | $ 6,546,225 | $ 23,338,225 |  |
| NL EM&V as a % of total | 7.4% | 6.0% | 7.0% |  |

Notably if the total 2012 DSM expenditures being dedicated to non-labor EM&V expenses was compared to the 2011 budget rather than the lower (by 18%) 2012 DSM budget, this percentage would be 5.8% rather than 7.0%. Thus the increase in EM&V expenditures as a percentage of total expenditures in 2012 is largely the result of decreases in the overall total budget. Nevertheless, the non-labor EM&V system expenditures are projected to increase by $240k (17%) from the same category of expenditures in the prior year.

The tables above also indicate the jurisdictional and fuel allocations of the EM&V expenditures. Avista is continuing the policy of budgeting and allocating DSM expenditures between fuel and jurisdictional portfolios based upon the value that the expenditures have to each category as well as where the regulatory requirements driving the expenditure were initiated. Since many of the specific EM&V requirements are the result of Washington I-937 compliance and Washington natural gas fixed cost recovery mechanisms, those costs shift more towards the Washington jurisdiction than the Company’s typical 70% Washington allocation would otherwise dictate.

A more detailed breakout of the total budget expenditures is contained in tables 13, 14 and 15 below.

Table 13: 2012 electric budget detail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Program | Measure package | System electric incentives | System electric NL/NI | System electric labor | Total electric budget |
| Non-res | Site-Specific | $ 3,250,000 | $ - | $ 628,470 | $ 3,878,470 |
| Non-res | Psc Energy Smart Grocer | $ 539,641 | $ - | $ 96,899 | $ 636,540 |
| Non-res | Psc Green Motors | $ 3,943 | $ - | $ 901 | $ 4,844 |
| Non-res | Psc PC Network Controls | $ 6,540 | $ - | $ 1,644 | $ 8,184 |
| Non-res | Psc Clothes Washers | $ 5,284 | $ - | $ 885 | $ 6,169 |
| Non-res | Psc Food Service | $ 42,373 | $ - | $ 11,836 | $ 54,208 |
| Non-res | Psc Lighting | $ 1,727,795 | $ - | $ 377,082 | $ 2,104,877 |
| Non-res | Psc Motors | $ 117,041 | $ - | $ 21,168 | $ 138,209 |
| Non-res | Psc VFDs | $ 184,660 | $ - | $ 62,731 | $ 247,391 |
| Non-res | Psc Windows/insulation | $ 21,331 | $ - | $ 4,222 | $ 25,553 |
| Non-res | Psc HVAC | $ - | $ - | $ - | $ - |
| Non-res | Psc standby gen block htr | $ 19,954 | $ - | $ 2,280 | $ 22,234 |
| Non-res | RCM | $ - | $ 84,000 | $ - | $ 84,000 |
| Non-residential total |  | $ 5,918,561 | $ 84,000 | $ 1,208,119 | $ 7,210,680 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Program | Measure package | System electric incentives | System electric NL/NI | System electric labor | Total electric budget |
| Res home improvement | AS heat pump | $ 96,750 | $ - | $ 16,426 | $ 113,176 |
| Res home improvement | Ductless heat pump | $ 8,600 | $ - | $ 937 | $ 9,537 |
| Res home improvement | VSM | $ 125,700 | $ - | $ 14,939 | $ 140,639 |
| Res home improvement | Water heater | $ 23,650 | $ - | $ 3,832 | $ 27,482 |
| Res home improvement | E to NG furnaces | $ 66,750 | $ - | $ 24,628 | $ 91,378 |
| Res home improvement | E to AS heat pump | $ 192,800 | $ - | $ 8,633 | $ 201,433 |
| Res home improvement | E to NG water heat | $ 17,400 | $ - | $ 7,499 | $ 24,899 |
| Res home improvement | Insulation | $ 95,750 | $ - | $ 17,280 | $ 113,030 |
| Res home improvement | Fireplace damper | $ 300 | $ - | $ 13 | $ 313 |
| Res home improvement | NG furnace | $ - | $ - | $ - | $ - |
| Res home improvement | In home energy audit | $ 9,000 | $ - | $ 2,049 | $ 11,049 |
| Res home improvement | Res lighting | $ 500,000 | $ - | $ 81,292 | $ 581,292 |
| Res home improvement | Event CFL distributions | $ 25,000 | $ - | $ 4,065 | $ 29,065 |
| Res new construction | AS heat pump | $ 76 | $ - | $ 18 | $ 94 |
| Res new construction | Ductless heat pump | $ - | $ - | $ - | $ - |
| Res new construction | VSM | $ 557 | $ - | $ 131 | $ 687 |
| Res new construction | Water heaters | $ - | $ - | $ - | $ - |
| Res new construction | NG furnace | $ - | $ - | $ - | $ - |
| Res new construction | Energy Star homes | $ 113,589 | $ - | $ 7,383 | $ 120,972 |
| Res new construction | Res multifamily MT | $ 183,600 | $ - | $ 17,169 | $ 200,769 |
| Res appliances | Clothes washer | $ 144,700 | $ - | $ 3,612 | $ 148,312 |
| Res appliances | Refrigerator/Freezer | $ 110,900 | $ - | $ 4,627 | $ 115,527 |
| Res appliances | JACO | $ 56,963 | $ 297,500 | $ 65,569 | $ 420,032 |
| Low income | Low income | $ 1,835,361 | $ 33,988 | $ 14,100 | $ 1,883,449 |
| Residential (including low income) total | | $ 3,607,446 | $ 331,488 | $ 294,200 | $ 4,233,133 |

Table 13 cont’d

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Program | Measure package | System electric incentives | System electric NL/NI | System electric labor | Total electric budget |
| Regional | NEEA | $ - | $ 2,160,000 | $ - | $ 2,160,000 |
| Past performance pgms | Quantum Eng. RFP payments | $ - | $ 325,552 | $ - | $ 325,552 |
| Past performance pgms | WAGA RFP payments | $ - | $ 636,664 | $ - | $ 636,664 |
| Infrastruture- general | EPRI | $ - | $ 80,000 | $ - | $ 80,000 |
| Infrastruture- general | CEE | $ - | $ 6,400 | $ - | $ 6,400 |
| Infrastruture- general | ELB | $ - | $ 560,000 | $ - | $ 560,000 |
| Infrastruture- general | E-Source | $ - | $ 40,000 | $ - | $ 40,000 |
| Infrastruture- general | Travel & training | $ - | $ 40,000 | $ - | $ 40,000 |
| Infrastruture- general | Other expenses | $ - | $ 16,000 | $ - | $ 16,000 |
| Infrastruture- general | CFL recycling | $ - | $ 5,000 | $ - | $ 5,000 |
| Infrastruture- general | SLIP funding | $ - | $ 40,000 | $ - | $ 40,000 |
| Infrastruture- general | Regulatory, PPA functions | $ - | $ - | $ 299,536 | $ 299,536 |
| Infrastructure-EM&V | Cadmus EM&V | $ - | $ 1,083,814 | $ - | $ 1,083,814 |
| Infrastructure-EM&V | RTF dues | $ - | $ 85,000 | $ - | $ 85,000 |
| Infrastructure-EM&V | EM&V equipment | $ - | $ 22,500 | $ - | $ 22,500 |
| Infrastructure-EM&V | Gas CPA | $ - | $ 105,000 | $ - | $ 105,000 |
| Infrastructure-EM&V | EM&V consultiing | $ - | $ 24,000 | $ - | $ 24,000 |
| Infrastructure-EM&V | General EM&V | $ - | $ - | $ 136,378 | $ 136,378 |
| Regional, past programs and infrastructure total | | $ - | $ 5,229,931 | $ 435,914 | $ 5,665,845 |
|  |  |  |  |  |  |
| Total budget |  | $ 9,526,007 | $ 5,645,419 | $ 1,938,233 | $ 17,109,658 |

Table 14: Natural gas budget detail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Program | Measure package | System gas incentives | System gas NL/NI | System gas labor | Total gas budget |
| Non-res | Site-Specific | $ 1,484,375 | $ - | $ 460,350 | $ 1,944,725 |
| Non-res | Psc Energy Smart Grocer | $ - | $ - | $ - | $ - |
| Non-res | Psc Green Motors | $ - | $ - | $ - | $ - |
| Non-res | Psc PC Network Controls | $ - | $ - | $ - | $ - |
| Non-res | Psc Clothes Washers | $ 13,289 | $ - | $ 2,165 | $ 15,454 |
| Non-res | Psc Food Service | $ 36,546 | $ - | $ 19,227 | $ 55,773 |
| Non-res | Psc Lighting | $ - | $ - | $ - | $ - |
| Non-res | Psc Motors | $ - | $ - | $ - | $ - |
| Non-res | Psc VFDs | $ - | $ - | $ - | $ - |
| Non-res | Psc Windows/insulation | $ 48,908 | $ - | $ 20,491 | $ 69,399 |
| Non-res | Psc HVAC | $ 44,176 | $ - | $ 23,699 | $ 67,875 |
| Non-res | Psc standby gen block htr | $ - | $ - | $ - | $ - |
| Non-res | RCM | $ - | $ 21,000 | $ - | $ 21,000 |
| Nonres total |  | $ 1,627,293 | $ 21,000 | $ 525,933 | $ 2,174,226 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Program | Measure package | System gas incentives | System gas NL/NI | System gas labor | Total gas budget |
| Res home improvement | AS heat pump | $ - | $ - | $ - | $ - |
| Res home improvement | Ductless heat pump | $ - | $ - | $ - | $ - |
| Res home improvement | VSM | $ - | $ - | $ - | $ - |
| Res home improvement | Water heater | $ 22,700 | $ - | $ 3,745 | $ 26,445 |
| Res home improvement | E to NG furnaces | $ - | $ - | $ - | $ - |
| Res home improvement | E to AS heat pump | $ - | $ - | $ - | $ - |
| Res home improvement | E to NG water heat | $ - | $ - | $ - | $ - |
| Res home improvement | Insulation | $ 386,200 | $ - | $ 112,808 | $ 499,008 |
| Res home improvement | Fireplace damper | $ 1,200 | $ - | $ 53 | $ 1,253 |
| Res home improvement | NG furnace | $ 981,200 | $ - | $ 201,961 | $ 1,183,161 |
| Res home improvement | In home energy audit | $ 43,800 | $ - | $ - | $ 43,800 |
| Res home improvement | Res lighting | $ - | $ - | $ - | $ - |
| Res home improvement | Event CFL distributions | $ - | $ - | $ - | $ - |
| Res new construction | AS heat pump | $ - | $ - | $ - | $ - |
| Res new construction | Ductless heat pump | $ - | $ - | $ - | $ - |
| Res new construction | VSM | $ - | $ - | $ - | $ - |
| Res new construction | Water heaters | $ 99 | $ - | $ 25 | $ 124 |
| Res new construction | NG furnace | $ - | $ - | $ 9,880 | $ 9,880 |
| Res new construction | Energy Star homes | $ 298,911 | $ - | $ 19,551 | $ 318,462 |
| Res new construction | Res multifamily MT | $ - | $ - | $ - | $ - |
| Res appliances | Clothes washer | $ 143,600 | $ - | $ 13,681 | $ 157,281 |
| Res appliances | Refrigerator/Freezer | $ - | $ - | $ - | $ - |
| Res appliances | JACO | $ - | $ - | $ - | $ - |
| Low income | Low income | $ 864,639 | $ 16,012 | $ 10,304 | $ 890,955 |
| Residential (including low income) total | | $ 2,742,349 | $ 16,012 | $ 372,008 | $ 3,130,369 |

Table 14 cont’d

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Program | Measure package | System gas incentives | System gas NL/NI | System gas labor | Total gas budget |
| Regional | NEEA | $ - | $ 146,167 | $ - | $ 146,167 |
| Past performance pgms | Quantum Eng. RFP pymts | $ - | $ - | $ - | $ - |
| Past performance pgms | WAGA RFP payments | $ - | $ - | $ - | $ - |
| Infrastructure- general | EPRI | $ - | $ 20,000 | $ - | $ 20,000 |
| Infrastructure- general | CEE | $ - | $ 1,600 | $ - | $ 1,600 |
| Infrastructure- general | ELB | $ - | $ 140,000 | $ - | $ 140,000 |
| Infrastructure- general | E-Source | $ - | $ 10,000 | $ - | $ 10,000 |
| Infrastructure- general | Travel & training | $ - | $ 10,000 | $ - | $ 10,000 |
| Infrastructure- general | Other expenses | $ - | $ 4,000 | $ - | $ 4,000 |
| Infrastructure- general | CFL recycling | $ - | $ - | $ - | $ - |
| Infrastructure- general | SLIP funding | $ - | $ 10,000 | $ - | $ 10,000 |
| Infrastructure- general | Regulatory, PPA functions | $ - | $ - | $ 177,141 | $ 177,141 |
| Infrastructure-EM&V | Cadmus EM&V | $ - | $ 270,954 | $ - | $ 270,954 |
| Infrastructure-EM&V | RTF dues | $ - | $ - | $ - | $ - |
| Infrastructure-EM&V | EM&V equipment | $ - | $ 2,500 | $ - | $ 2,500 |
| Infrastructure-EM&V | Gas CPA | $ - | $ 45,000 | $ - | $ 45,000 |
| Infrastructure-EM&V | EM&V consultiing | $ - | $ 6,000 | $ - | $ 6,000 |
| Infrastructure-EM&V | General EM&V | $ - | $ - | $ 80,652 | $ 80,652 |
| Regional, past programs and infrastructure total | | $ - | $ 666,220 | $ 257,793 | $ 924,014 |
|  |  |  |  |  |  |
| Total budget |  | $ 4,369,642 | $ 703,232 | $ 1,155,734 | $ 6,228,608 |

Table 15: Aggregate budget summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Program | Measure package | Electric budget | Gas budget | Total budget |
| Non-res | Site-Specific | $ 3,878,470 | $ 1,944,725 | $ 5,823,195 |
| Non-res | Psc Energy Smart Grocer | $ 636,540 | $ - | $ 636,540 |
| Non-res | Psc Green Motors | $ 4,844 | $ - | $ 4,844 |
| Non-res | Psc PC Network Controls | $ 8,184 | $ - | $ 8,184 |
| Non-res | Psc Clothes Washers | $ 6,169 | $ 15,454 | $ 21,623 |
| Non-res | Psc Food Service | $ 54,208 | $ 55,773 | $ 109,981 |
| Non-res | Psc Lighting | $ 2,104,877 | $ - | $ 2,104,877 |
| Non-res | Psc Motors | $ 138,209 | $ - | $ 138,209 |
| Non-res | Psc VFDs | $ 247,391 | $ - | $ 247,391 |
| Non-res | Psc Windows/insulation | $ 25,553 | $ 69,399 | $ 94,952 |
| Non-res | Psc HVAC | $ - | $ 67,875 | $ 67,875 |
| Non-res | Psc standby gen block htr | $ 22,234 | $ - | $ 22,234 |
| Non-res | RCM | $ 84,000 | $ 21,000 | $ 105,000 |
| Non-residential total |  | $ 7,210,680 | $ 2,174,226 | $ 9,384,906 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Program | Measure package | Electric budget | Gas budget | Total budget |
| Res home improvement | AS heat pump | $ 113,176 | $ - | $ 113,176 |
| Res home improvement | Ductless heat pump | $ 9,537 | $ - | $ 9,537 |
| Res home improvement | VSM | $ 140,639 | $ - | $ 140,639 |
| Res home improvement | Water heater | $ 27,482 | $ 26,445 | $ 53,927 |
| Res home improvement | E to NG furnaces | $ 91,378 | $ - | $ 91,378 |
| Res home improvement | E to AS heat pump | $ 201,433 | $ - | $ 201,433 |
| Res home improvement | E to NG water heat | $ 24,899 | $ - | $ 24,899 |
| Res home improvement | Insulation | $ 113,030 | $ 499,008 | $ 612,038 |
| Res home improvement | Fireplace damper | $ 313 | $ 1,253 | $ 1,567 |
| Res home improvement | NG furnace | $ - | $ 1,183,161 | $ 1,183,161 |
| Res home improvement | In home energy audit | $ 11,049 | $ 43,800 | $ 54,849 |
| Res home improvement | Res lighting | $ 581,292 | $ - | $ 581,292 |
| Res home improvement | Event CFL distributions | $ 29,065 | $ - | $ 29,065 |
| Res new construction | AS heat pump | $ 94 | $ - | $ 94 |
| Res new construction | Ductless heat pump | $ - | $ - | $ - |
| Res new construction | VSM | $ 687 | $ - | $ 687 |
| Res new construction | Water heaters | $ - | $ 124 | $ 124 |
| Res new construction | NG furnace | $ - | $ 9,880 | $ 9,880 |
| Res new construction | Energy Star homes | $ 120,972 | $ 318,462 | $ 439,433 |
| Res new construction | Res multifamily MT | $ 200,769 | $ - | $ 200,769 |
| Res appliances | Clothes washer | $ 148,312 | $ 157,281 | $ 305,593 |
| Res appliances | Refrigerator/Freezer | $ 115,527 | $ - | $ 115,527 |
| Res appliances | JACO | $ 420,032 | $ - | $ 420,032 |
| Low income | Low income | $ 1,883,449 | $ 890,955 | $ 2,774,404 |
| Residential (including low income) total | | $ 4,233,133 | $ 3,130,369 | $ 7,363,502 |

Table 15 cont’d

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Program | Measure package | Electric budget | Gas budget | Total budget |
| Regional | NEEA | $ 2,160,000 | $ 146,167 | $ 2,306,167 |
| Past performance pgms | Quantum Eng. RFP payments | $ 325,552 | $ - | $ 325,552 |
| Past performance pgms | WAGA RFP payments | $ 636,664 | $ - | $ 636,664 |
| Infrastruture- general | EPRI | $ 80,000 | $ 20,000 | $ 100,000 |
| Infrastruture- general | CEE | $ 6,400 | $ 1,600 | $ 8,000 |
| Infrastruture- general | ELB | $ 560,000 | $ 140,000 | $ 700,000 |
| Infrastruture- general | E-Source | $ 40,000 | $ 10,000 | $ 50,000 |
| Infrastruture- general | Travel & training | $ 40,000 | $ 10,000 | $ 50,000 |
| Infrastruture- general | Other expenses | $ 16,000 | $ 4,000 | $ 20,000 |
| Infrastruture- general | CFL recycling | $ 5,000 | $ - | $ 5,000 |
| Infrastruture- general | SLIP funding | $ 40,000 | $ 10,000 | $ 50,000 |
| Infrastruture- general | Regulatory, PPA functions | $ 299,536 | $ 177,141 | $ 476,678 |
| Infrastructure-EM&V | Cadmus EM&V | $ 1,083,814 | $ 270,954 | $ 1,354,768 |
| Infrastructure-EM&V | RTF dues | $ 85,000 | $ - | $ 85,000 |
| Infrastructure-EM&V | EM&V equipment | $ 22,500 | $ 2,500 | $ 25,000 |
| Infrastructure-EM&V | Gas CPA | $ 105,000 | $ 45,000 | $ 150,000 |
| Infrastructure-EM&V | EM&V consultiing | $ 24,000 | $ 6,000 | $ 30,000 |
| Infrastructure-EM&V | General EM&V | $ 136,378 | $ 80,652 | $ 217,030 |
| Regional, past programs and infrastructure total | | $ 5,665,845 | $ 924,014 | $ 6,589,858 |
|  |  |  |  |  |
| Total budget |  | $ 17,109,658 | $ 6,228,608 | $ 23,338,267 |

The overall budget reductions described within this section represent a departure from the typical upward trend in DSM budgets (and acquisition) since the tariff rider returned to an approximately zero balance in 2005. This reduction seems to be reasonable and responsible in that it reflects the reduction in acquisition caused by tax credit cessation and general economic conditions. Since these factors are also anticipated to be relatively short-term in nature it seems inadvisable to impose significant infrastructure cost reductions at this time.

## DSM Tariff Rider Projections

Avista’s DSM operations are funded by Schedule 91 (electric) and Schedule 191 (natural gas). The Company periodically (annually effective approximately July 1 in Washington and on an as-necessary basis in Idaho) adjusts the tariff rider surcharge contained within the DSM component of these two schedules to deliver a funding level that will put the tariff rider balance at an approximately zero balance at the end of the planning period (usually one year).

The Company does not and will not constrain funding for cost-effective DSM based upon the tariff rider balance. “Negative” (customer owes shareholder) balances do occur and the Company continues to fund DSM operations secure in the knowledge that the DSM cost-recovery method allows for reimbursement in a reasonably timely fashion.

The Company does pay interest on “positive” (shareholder owes customer) electric balances in both Washington and Idaho. No such interest provision exists on the natural gas DSM tariff rider. There are no provisions for the Company to receive interest on either tariff rider.

Since the Washington tariff rider revisions become effective at mid-year and require the Company to project expenses over the following year, estimating the mid-2012 revision to the tariff rider revenue requirement involves projecting DSM expenses to mid-2013 (six months beyond the scope of the 2012 DSM Business Plan). For purposes of this projection it is assumed that early 2013 expenses will be 10% above the calendar year 2012 expense level. These calculations are reflected in Table 16 below.

Table 16: Summary of tariff rider revenue requirement projections

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | WA elec | ID elec | | WA gas | | ID gas | |
| End of month September 2011 balance | | $ 3,246,799 | $ 1,056,351 | | $ 254,359 | | $ 1,066,365 | |
| Expected revenues Oct-Dec 2011 inclusive | | $ 4,368,000 | $ 2,081,000 | | $ 2,828,000 | | $ 1,523,000 | |
| Budgeted expend. Oct-Dec 2011 inclusive | | $ 3,753,291 | $ 1,435,640 | | $ 1,361,683 | | $ 547,353 | |
| Projected end of year 2011 balance | | $ 3,861,508 | $ 1,701,711 | | $ 1,720,676 | | $ 2,042,012 | |
| Projected rev. Jan-Jun 2012 inclusive | | $ 8,958,000 | $ 3,899,000 | | $ 4,328,000 | | $ 2,353,000 | |
| Budgeted expend. for Jan-Jun 2012 inclusive | | $ 6,136,285 | $ 2,346,194 | | $ 2,209,091 | | $ 905,214 | |
| Projected end of June 2012 balance | | $ 6,683,223 | $ 3,254,517 | | $ 3,839,585 | | $ 3,489,799 | |
| Projected expenditures for Jul-Dec 2012 | | $ 6,136,285 | $ 2,346,194 | | $ 2,209,091 | | $ 905,214 | |
| *Assumed ramp rate from CY 2012 to Jan-Jun 2013* | | *10%* | *10%* | | *10%* | | *10%* | |
| Projected expenditures for Jan-Jun 2013 | | $ 6,749,914 | $ 2,580,813 | | $ 2,430,000 | | $ 995,735 | |
| Revenue requirement for Jul 2012-Jun 2013 | | $ 6,202,977 | $ 1,672,490 | | $ 799,505 | | $ (1,588,851) | |
| Change in tariff rider rev. vs. that collected in 2011-2012 |  | | |  | |  | |  | |
| -64% | | | -79% | | -91% | | -133% | |

The analysis above indicates that there will be a substantial reduction in revenue requirement for the mid-2012 to mid-2013 time period across all four tariff riders. In the case of the Idaho natural gas DSM portfolio, it appears to be possible to fund that entire twelve-month period without any tariff rider revenue during that period at all. The other three tariff riders (Washington electric and natural gas and Idaho electric) will see reductions in the revenue requirement ranging from 64% to 91% in comparison to the revenue collected in the prior twelve-month period.

This major shift is attributable to several factors:

1. The tariff rider during the prior twelve months has generated substantial revenue, largely to offset prior negative (customer owes shareholder) balances.
2. The expected reduction in early 2012 expenditures will contribute towards a larger balance heading into the mid-2012 recalculation.
3. The expected reduction in late 2012 expenditures will lead to a lower revenue requirement necessary for mid-2012 to mid-2013 operations.

# VIII. Issues for 2012 Management Focus

This annual business planning process concludes with the identification of key issues which are expected to require management focus during the following year. It is also an opportunity for a retrospective review and update of those issues identified in the previous year.

Review of management focus issues identified in the 2011 DSM Business Plan

The 2011 DSM Business Plan identified issues that can be generally categorized as (1) managing the uncertainties associated with the application of realization rates developed after year end to the determination of verified Washington acquisition, (2) natural gas DSM portfolio acquisition and cost-effectiveness challenges and (3) uncertainty in regards to NEEA electric DSM acquisition during a particular calendar year due to the timing of the reports.

The realization rate and consequential Washington acquisition level uncertainties have been successfully addressed to some degree during 2011, though admittedly the uncertainty can never be completed eliminated. Significant factors leading to the reduction in uncertainty include:

1. Adapting the timing of EM&V processes to allow for early indications of realization rates
2. Establishing unit energy savings values for standardized measures that establishes symmetry between the methodology and assumptions used in the development of the acquisition target and the subsequent measurement of the acquisition target.
3. Preliminary indications from external third-party evaluators and year-to-date 2011 participation history indicate lower participation and acquisition.

The ability of the Company to reach natural gas acquisition and cost-effectiveness targets was identified as an issue for 2011 and beyond. This has not only continued to be an issue, but the expected acquisition shortfall (15% in 2011) is expected to be even greater in 2012. Similarly the expected TRC cost-effectiveness has become more of a problem. These issues will be revisited as part of the 2012 review of issues.

Management issues caused by the uncertainties in NEEA electric acquisition related to the timing of the reports have been relayed to NEEA staff. NEEA has provided Avista with non-binding guidance regarding likely acquisition during the 2011 time period. This guidance became incorporated into the projections that led to the launch of the CFL contingency program in late 2011. Avista expects that NEEA staff will remain available to provide their best estimate of claimable acquisition during the 2012-2013 biennium, with the understanding that such projections are be non-binding in nature.

Issues identified for management focus during 2012

The business planning process comprehensively assesses the challenges and opportunities anticipated within the following year. Key elements that are always reviewed with particular attention include resource acquisition and cost-effectiveness. Other operational issues are addressed as appropriate.

As previously described within this document, the cost-effectiveness and acquisition of the electric portfolio seem to be capable of fully meeting expectations. The prospects for similar success within the natural gas portfolio are more problematic. There are additional concerns relating to meeting expectations for the cost-effectiveness of the Washington combined fuel low income portfolio. The composition of the budget also leads to an increasing need to manage the net-to-gross ratio of the portfolio.

Natural Gas DSM Portfolio Cost-Effectiveness and Acquisition

The natural gas DSM portfolio has persistently faced greater cost-effectiveness challenges than its electric counterpart. Natural gas technologies have not advanced as rapidly and the avoided cost (on a per mmBTU basis) is approximately 30% of comparable electric avoided costs. Obtaining customer interest in efficiency investments is more difficult by virtue of the passive nature of most natural gas end-uses and the higher customer satisfaction with the energy value.

As indicated earlier, Avista takes a holistic view of cost-effectiveness in that all standard practice tests (except for the full societal test) are calculated and utilized in measure, program and portfolio development. Additionally other metrics are calculated and applied to the extent that they may offer insight into portfolio performance. In the majority of circumstances it is the TRC test that is the most challenging test to pass, and it is this test that remains the focus of the management of the natural gas portfolio.

Establishing and maintaining a viable and TRC cost-effective natural gas DSM portfolio requires that a reasonable number of incrementally cost-effective individual measures be identified and that those measures be sufficiently cost-effective to fully offset infrastructure costs. Avista’s methodology for assigning incremental non-incentive costs at various levels of measure, program or portfolio aggregation plays an important role constructing an optimal portfolio, but there are subjective issues that merit further discussion.

It is arguable whether the natural gas portfolio’s current share of combined fuel portfolio costs is truly incremental to the natural gas portfolio. These costs could not entirely be excluded if the natural gas portfolio did not exist. Additionally, the allocation of joint non-incentive utility cost has generally been made upon a BTU basis where direct assignment is not possible. For dual-fuel measures (those simultaneously yielding electric and natural gas savings) the assignment of customer incremental cost is also usually based upon a BTU allocation. Allocating those costs based upon avoided cost rather than BTU’s would reflect the resource value more closely and would reduce the burden placed upon the natural gas portfolio. Avista has performed sensitivities surrounding revisions in these allocations in the past and found that it does lead to marginally higher values for the natural gas portfolio. Time limitations prevented the same sort of analysis prior to the completion of this document.

There remains the potential for the redesign or termination of cost-ineffective programs and an increased emphasis on cost-effective measures. It is also likely that additional cost-effective measures not currently incorporated into the portfolio will be identified during the upcoming natural gas CPA scheduled to begin November 2011 and complete early in 2012.

The general economic conditions and the substantial reduction in available tax credits are clearly outside of the control of Avista. Nevertheless the business planning process has identified management actions that may mitigate the adverse impact of the expected 2012 challenges. The cost-effectiveness and acquisition issues are closely related and therefore should be jointly addressed over the course of 2012. The following seven actions identified below have the potential to improve portfolio acquisition or cost-effectiveness.

1. Review all non-cost-effective natural gas measures for redesign or termination. Perform this program management function based upon current impact evaluation results contained within the Avista TRM.
2. Perform an analysis to determine what measures may be cost-effective in the absence of labor cost allocations. For measures that would be cost-effective in the absence of allocated labor, review the short and long-term assumptions associated with that labor allocation and move forward with portfolio optimization as appropriate.
3. Review cost-effective measures and identify those that are of a lost opportunity nature. Initiate a review and discussion of steps that may be taken to maximize the acquisition of these measures in recognition of the long-term resource impacts associated with lost opportunity measures.
4. Analyze the impact of alternative methods of allocating non-incentive utility costs and customer incremental cost for application to both dual-fuel measures and for the distribution of infrastructure costs. Identify where different allocation methodologies may lead to different management or policy decisions.
5. Broach the fundamental question of fixed cost allocation across the electric and natural gas portfolios. Specifically, initiate the discussion of whether the natural gas portfolio should bear only those costs that are truly incremental to that portfolio for purposes of cost-effectiveness calculation with the more robust electric portfolio bearing the remainder of the utility costs.
   1. Also consider whether the allocation of fixed costs for purposes of cost-effectiveness calculations is necessarily the same method as that which is used for cost recovery.
6. Continue to work with NEEA and regional natural gas utilities to establish and launch a regional market transformation tool that can cost-effectively augment the local utility portfolio. Successfully doing so has the potential to simultaneously improve both acquisition and cost-effectiveness.
7. Work closely with the Avista Gas Supply Department to obtain early indications of the avoided cost projections likely to be identified within the 2012 natural gas IRP. Incorporate these projections into the management of the natural gas portfolio as they become available. The most recent guidance indicating a 1/4th reduction in avoided cost could have significant impacts upon the viability of the natural gas portfolio.

Combined Fuel Washington Low Income Portfolio Cost-Effectiveness

Avista recognizes and is committed to fulfilling the obligation to manage all aspects and components of the DSM portfolio to achieve the maximum value possible for Avista’s ratepayers. The Company has made a specific commitment to track and manage the TRC cost-effectiveness of the combined fuel Washington low-income portfolio.

The implementation of the low income portfolio is performed in close cooperation with six community action agencies. These agencies receive annual funding contracts. Though significant flexibility is provided to these agencies, in order to promote the cost-effectiveness of the portfolio some measures require Avista pre-approval.

The 2010 natural gas impact evaluation resulted in a realization rate for the Washington low-income portfolio of approximately 30%. The electric impact evaluation is not yet complete but may result in similar findings. A portfolio cost-effectiveness sensitivity analysis surrounding the realization rate was performed to determine the possible impacts of this uncertainty. If allocated labor is excluded from the cost burden for the low income portfolio a realization rate of 73% is required for the portfolio to achieve TRC cost-effectiveness.

Recommendations for consideration in 2012 include:

1. Comprehensively review the portfolio when the results of the electric impact evaluation are complete. Make revisions to those measures which require Avista pre-approval based upon the need to deliver a cost-effective dual-fuel portfolio.
2. Initiate a discussion of the role that the low income portfolio plays within the DSM portfolio, the meaning of the cost-effectiveness commitments for this customer segment and how these differ from the objectives of the agencies.

Ongoing Management of Net-to-Gross Issues

The projections for 2012 indicate a reduction in acquisition and incentive expenditures without a commensurate reduction in non-incentive expenditures. Though the drivers of this trend, the effect of federal tax credits and economic conditions upon 2012 acquisition, are not long term issues, there remains the need to manage their short term implications upon portfolio performance.

The composition of the 2012 budget calls for increased attention to the management of net-to-gross ratios throughout the portfolio. This is because one of the most significant implications of this 2012 projection is the increased sensitivity between net and gross TRC cost-effectiveness caused by an increased proportion of non-incentive expenditures within the total utility portfolio.

1. It is recommended that program managers review all programs with the intent to develop alternatives for improving net-to-gross ratio performance without undue compromises to other program objectives.

Manage Regulatory Costs and Maintain Focus on Operational Performance

The Company has experienced a dramatic growth in regulatory requirements within the Washington jurisdiction. The impact of this trend upon increasing utility cost, primarily but not restricted to independent third-party EM&V requirements, has been noted previously within the 2012 DSM Business Plan. These additional costs are a major contributor towards the reduction in incentives as a percentage of total utility cost, which in turn increases the sensitivity to the net-to-gross ratios and burdens portfolio cost-effectiveness.

Related to this issue, and potentially more important than long-term operational performance, is the degree to which management focus and innovation is shifting towards regulatory and policy issues at the expense of attention to DSM implementation. Given the cost-effectiveness and acquisition challenges that lie ahead, there is a critical need to prioritize these critical operational efforts that lead to improved portfolio performance.

Continue What Works

The steps taken in 2011 have improved the ability of Avista to plan and manage for meeting acquisition targets that are equitably established and fairly measured. This discussion and progress occurred as part of the development of the 2012-2013 Washington BCP filing.

Also related to the theme of continuing what works, it is advisable to continue to work closely with NEEA with particular attention to (1) ensuring that the organization remains responsive to the needs of Washington investor-owned utilities subject to I-937 acquisition requirements, (2) work towards replacing the gaps that are and will be felt within the regional portfolio as residential lighting markets approach complete transformation, (3) maintain a high degree of awareness in regard to the importance of geographic equity to the long-term success of the NEEA market transformation portfolio and (4) continue to work with NEEA staff to obtain timely estimates of annual acquisition.

Ongoing 2012 Management and Monitoring

Although the 2012 DSM Business Plan is the most visible and documented planning effort that occurs during the year, it is necessary to continue this process throughout the year. The Company has made the commitment to involve the Avista Advisory Group in this process including notifications of program launches or terminations, changes in incentives or changes in eligibility.