BEFORE THE WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

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Exhibit No. 36
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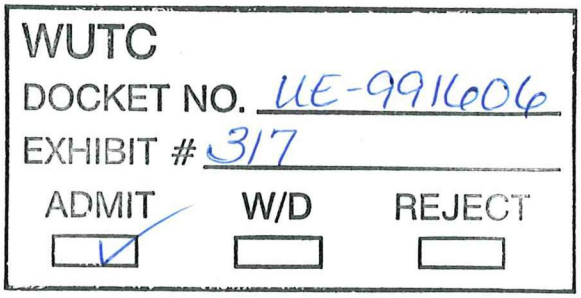

Analytical Methodology

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Overview of Cost-Effectiveness

This attachment provides an overview of the methodology used to obtain the cost-effectiveness calculations provided in this filing. Particular attention has been given to customized approaches necessitated by data issues or specific program issues.

Avista's programs have been evaluated as individual programs and aggregated into regular income and limited income portfolios. Additional alternative treatments of overhead costs are also provided.

Details concerning the treatment of critical factors in the cost-effectiveness calculations are noted in this context. These include the components of utility costs, the treatment of customer measure cost, in-progress projects, customer and societal non-energy benefits and project energy savings.

Cost-effectiveness statistics and energy savings are summarized by program and by portfolio in a tabular format. Detailed descriptive statistics are available in supporting workpapers. A brief description of the four standard practice tests and their interpretation is also provided

All programs that are offered in Washington during the relevant time period have been evaluated in this package.

Calculation of Utility Costs

Avista's accounting systems divides utility Energy Efficiency costs into four categories; (1) non-incentive implementation costs, (2) monitoring, measurement and evaluation (M, M & E) costs, (3) direct incentive costs and (4) overhead costs. The first three of these costs are explicitly assigned to each program. When a charge is made to that program it is given a sub-account designating it as an implementation, M, M & E or incentive expense. Overhead costs are those expenditures that are not directly assignable to any specific program.

In consideration of different uses of this information, we have calculated the individual programs and the regular income and limited income portfolio both with and without overhead costs. This approach allows for the separation of the cost-effectiveness of the technology and program delivery mechanism from the programs' ability to contribute to offsetting the costs incurred for non-program specific general costs.

General, or 'overhead' costs, have been allocated among programs based upon each programs' energy savings. These allocations may change as Avista transitions from a traditional programmatic organization of energy services to a technology and customer segment approach

Treatment of Non-Utility Costs

The tracking of non-utility costs has required more care, effort and interpretation on the part of the analytical staff. These costs are by definition under the control of an external party. Special effort is frequently required to separate the project costs associated with energy efficiency from non-energy related portions of the project. The degree of effort required to obtain quality data on this topic is warranted considering the substantial impact that these costs have upon the total resource and participant cost-effectiveness.

The customer costs that have been quantified for this analysis are almost exclusively associated with the capital cost of the purchase and installation of the end-use equipment. Other customer costs may include design costs, engineering fees, lost productivity during the installation and assorted miscellaneous costs. Avista captures these incremental non-capital customer costs as a non-energy disbenefit.

The objective of the measurement of non-utility costs is to ascertain the costs associated with the energy savings acquired by the efficiency measure. It is of critical importance that the energy savings and the associated costs be based upon consistent assumptions. Ideally these costs would exclude non-quantifiable benefits that are not included in the project benefits (i.e. aesthetics, productivity, comfort etc.). The measure life of the installed end-use system would be equal to that of the base case end-use system, making adjustments for differences in measure life unnecessary. There would be no degradation of energy savings over time. Incremental maintenance savings or costs would be easily identified and quantifiable. The collection of these measure lives would be easily incorporated into the implementation process and accurately relayed to the analyst.

In practice these ideals are difficult to achieve. It is the task of the analyst to craft a means of adapting the realities of program implementation and customer needs to the analytical requirements. The following is a brief description of how these problems have been overcome for purposes of developing meaningful estimates of program cost-effectiveness.

In the past the customer measure cost for many programs has been incorporated into the implementation process and tracked because it was an integral component of the incentive formula (the incentive was capped at 50% of measure costs). Consequently the utility could require multiple bids, would receive copies of those bids and would review and record expenses associated with the energy efficiency measure as opposed to unrelated work.

As Avista transitioned from a primarily grant-dispensing role to expertise-based and market transformation programs the infrastructure established for tracking customer costs has become less critical to program implementation. Additionally, Avista can no longer require bids to be made in a format that distinguishes between energy efficiency-related and non-energy efficiency related amounts. This evolution of Avista's energy efficiency program focus has made the calculation of appropriate customer costs progressively more difficult.

The issues that are specific to technologies and applications will be individually outlined below.

For lighting end-uses the customer measure cost is based upon the total measure cost of the high-efficiency alternative adopted and an engineering estimate of the standard efficiency alternative for that specific adaptation. The engineering estimate is based upon standard vendor pricing data applied as it applies to a specific project. Vendor information regarding the costs of a basecase efficiency system is unreliable for

several reasons, not the least of which is that vendors know that these bids are 'hypothetical' bids when the customer is working with Avista.

Based upon a sampling of actual completed projects it has been determined that the standard efficiency base case lighting system would cost 94.7% of the cost of the high-efficiency system that was actually installed. Consequently, only 5.3% of the cost of the high-efficiency system is associated with the efficiency upgrade. These costs are consistent with the project energy savings.

It has been noted that the high-efficiency scenario is occasionally less costly than the standard efficiency base case. This is indicative of the substantial design efficiency benefits that accrue to some projects as a result of Avista's intervention (i.e. reductions in overlighting, improperly ballasting fixtures etc.).

A similar analysis was performed for electric to natural gas fuel-switching. An engineering estimate was made of the cost of installing electric equipment of similar performance to the natural gas space and/or water heat equipment that was actually installed, including the cost of gas piping. These estimates indicated that the cost of an electric system replacement was 71% of the cost of installing the natural gas system, including all appliances.

In the case of both the lighting and fuel-conversion program it was stated (and confirmed in a review of sample jobs) that the existing end-use equipment was beyond the economic life at the time of replacement.

Customer Non-Energy Benefits

It is frequently the case that the motivating factor behind the customer seeking to retrofit a pre-existing end-use with a higher efficiency alternative, or to opt for a higher than standard efficiency in new construction, is based as much or more upon the non-energy benefits as the energy benefits.

All forms of non-energy benefits are typically difficult to quantify in any reasonably accurate manner. Consequently most cost-effectiveness analyses exclude these substantial benefits. By doing so the analysis may wrongfully conclude that a program is cost-ineffective and, by ignoring these benefits in the analysis, there is little or no attempt to design or implement programs in such a way as to maximize these benefits.

Avista's initial attention in this area was focused on the most significant and most easily quantified components. These include such benefits as the maintenance savings from LED traffic light conversion, the non-energy resource savings associated with the Resource Management Partnership Program (RMPP) and so on. These details are incorporated in the Company's workpapers.

Avista identifies non-energy benefits even when these benefits cannot be quantified with any degree of confidence. This identification of benefits (or, in some instances, disbenefits) will provide us with meaningful, though anecdotal, information concerning the value that the customer places on the investment.

Energy Savings Calculations

The energy savings used in the attached cost-effectiveness evaluation are based upon completed MM&E results when available. When full MM&E data is not available energy savings are based upon project-specific engineering calculations claimed by the Energy Services Department with adjustments made based upon the Energy Delivery Business Analysis Department.

The energy savings include contractual and/or engineering estimates of projects that have reached the internally-defined 'contract' or 'construction' phase of progress. Those projects in the 'contract' phase have 75% of their contracted energy savings included in the total program savings while those in the

'construction' phase have 95% of their savings included. These partial credits are based upon an estimate of the projects that will drop out of the program at each phase. (Reviews made since these dropout rates have been estimated indicate that the original assumptions were unduly conservative. Recalculations of these dropout rates are in progress.)

The customer costs and utility incentives have been extrapolated as appropriate for the inclusion of in-progress energy savings.

For purposes of completing an estimate of the Participant and Non-Participant cost-effectiveness it was necessary to determine billed demand savings for several programs. These claims were based upon an assumption of a 61% customer-coincident load factor for the effected end-uses.

Natural gas usage of fuel-switching programs has been based upon an 80% relative efficiency differential between electric and natural gas systems and applied to the audited claims of electricity savings. Both natural gas savings and incremental use have been fully incorporated in the cost-effectiveness analysis, making the benefit to cost ratios a true all-fuel estimate.

Avoided Costs and Rates

The most recent Washington electric and natural gas avoided costs and Washington customer rates were applied to the calculation of the cost-effectiveness.

Electric line losses and gas distribution losses have not been incorporated into the avoided costs. No additional generation, transmission and distribution capacity values have been included in this analysis beyond what is inherent in the approved Washington avoided costs. Considering that most of the end-uses which are addressed by our programs are generally the same load profiles as the system as a whole, the omission of the capacity costs are of relatively little importance and results in a conservative evaluation of cost-effectiveness.

Descriptive Statistics

Several descriptive statistics are provided in addition to the cost-effectiveness calculations. These statistics are useful in diagnosing successes or failures in particular programs and are actively used for purposes of managing the program over the entire program life cycle.

These statistics include; (1) utility non-incentive cost per first year kWh, (2) utility incentive cost per first year kWh, (3) customer cost per first year kWh and (4) societal cost per first year kWh. In interpreting these results, and particularly when comparing one program to another, it is necessary to realize that these statistics are based upon the first year kWh only and do not consider differences in measure lives between programs. Furthermore, incidental therm savings are not valued in this calculation although they do contribute to the all-fuel cost-effectiveness results of the program.

Calculation and Interpretation of the Four Standard Practice Tests

Energy efficiency programs are typically evaluated upon the basis of four different cost-effectiveness tests. These tests and a brief description are:

Total Resource Cost (TRC) test: This is a societal benefit-cost analysis and indicates what the cost-effectiveness of a project is to the whole of society. In recent years the inclusion of non-energy benefits in this test has become more acceptable. This could include reduced maintenance,

reduced insurance and potentially even the quantified value of reduced emissions and other societal costs of energy generation, transmission and delivery.

Utility Cost Test (UCT): This test indicates whether the utility cost of serving the customer goes up or down as a result of the program. This is not the customer 'energy' cost, which would include end-use equipment and similar costs, it is only the costs incurred by the utility to serve the customer.

Participant test: This is the cost-effectiveness for the participating customer. It includes the value of the energy savings (and other savings) from the project vs. the customer project costs.

Non-Participant test (also known as the Rate Impact, or RIM, test): This indicates if the program will result in a rate increase or decrease.

The results of these tests are presented in a tabular format as part of this filing.

The cost-effectiveness tests calculations for all programs include increased or decreased usage of non-electric fuels as a result of the project. At this time natural gas is the only non-electric fuel impacted by Avista programs. Significant incidental gas savings are obtained as a result of Avista's recommendations. These savings are largely offset with increased gas usage as a result of fuel-switching programs.