

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Commission)	DOCKET UG-121207
Investigation into Natural Gas)	
Conservation Programs)	
)	POLICY STATEMENT ON THE
)	EVALUATION OF THE COST-
)	EFFECTIVENESS OF NATURAL
)	GAS CONSERVATION PROGRAMS
.....)	

1 **Synopsis.** *In this policy statement, the Washington Utilities and Transportation Commission (Commission) describes the method for evaluating the cost effectiveness of natural gas conservation programs. The investigation in this docket was prompted by Avista Corporation’s request that the Commission determine whether its natural gas conservation activities are cost-effective, and if not, whether Avista Corporation should discontinue its natural gas conservation programs temporarily. This policy statement begins by discussing the Commission’s authority to require natural gas utilities to implement cost-effective conservation programs. Any discussion of the Commission’s authority over electric utilities is provided as background information; the guidance in this statement applies only to natural gas utilities.*

2 *This policy statement describes several cost-effectiveness tests that utilities use to evaluate conservation programs, criticisms of each test, and how these tests are applied. After reviewing the history of Avista Corporation’s request and the comments provided to aid this investigation, the Commission states its policy that although it would prefer that utilities use a properly balanced total resource cost test, it recognizes that because of difficult-to-quantify non-energy benefits and conservation’s risk reduction value, such a test may not be easily developed. Therefore, a natural gas utility may analyze, in close consultation with its conservation advisory group, its conservation programs using the utility cost test. Finally, the Commission discusses the standardization of conservation program evaluations.*

Table of Contents

I. Background on conservation cost-effectiveness evaluation.....3

 A. Authority3

 B. Cost-effectiveness screening tests.....4

 1. Total Resource Cost Test5

 2. Utility Cost Test.....6

 3. Participant Cost Test.....7

 4. Societal Cost Test7

 C. At what level should utilities screen the cost-effectiveness of conservation activities?.....8

 D. What discount rate should utilities use when calculating the net present value of the annual costs and benefits of conservation programs?9

II. History of commission proceedings10

 A. Avista Corporation’s natural gas demand-side management programs, Dockets UE-111882, UG-120790, and UG-121119.10

 B. Current rulemaking proceeding, Docket UG-121207.....11

III. Determining the preferred method for the cost-effectiveness evaluation of natural gas demand-side management programs.....13

 A. Gas utilities should use a properly balanced TRC or, if not available, a UCT with the assistance of the utility’s advisory committee.13

 B. A utility should use a discount rate appropriate to the cost-effectiveness test used and to that test’s investment perspective.15

 C. Stakeholders should standardize conservation program evaluations.17

IV. Conclusion.....17

I. Background on conservation cost-effectiveness evaluation

A. Authority

3 The Washington Utilities and Transportation Commission (Commission) requires natural gas utilities subject to its jurisdiction to provide cost-effective conservation (also called demand-side management and energy efficiency) programs to ratepayers.

4 This requirement is based on both the Commission's general and specific statutory authority to regulate natural gas conservation programs. Generally, the Commission is authorized to "[r]egulate in the public interest, as provided by the public service laws" the services and practices of all natural gas companies.¹ This broad delegation of power includes the authority to regulate conservation services provided by natural gas utilities. Specifically, RCW 80.28.303 allows the Commission to adopt and maintain policies and programs to encourage utilities to invest in conservation, and to approve tariffs to fund conservation services.

5 The Commission has defined the method for calculating the cost effectiveness of natural gas conservation programs in our rules regarding integrated resource planning. WAC 480-90-238 states:

(2) Definitions.

(a) "Integrated resource plan" or "plan" means a plan describing the mix of natural gas supply and conservation designated to meet current and future needs at the lowest reasonable cost to the utility and its ratepayers.

(b) "Lowest reasonable cost" means the lowest cost mix of resources determined through a detailed and consistent analysis of a wide range of commercially available sources. At a minimum, this analysis must consider resource costs, market-volatility risks, demand-side resource uncertainties, the risks imposed on ratepayers, resource effect on system operations, public policies regarding resource preference adopted by Washington state or the federal government, the cost of

¹ RCW 80.01.040(3).

risks associated with environmental effects including emissions of carbon dioxide, and the need for security of supply.

* * *

(3) Content. At a minimum, integrated resource plans must include:

* * *

(f) A comparative evaluation of the cost of natural gas purchasing strategies, storage options, delivery resources, and *improvements in conservation using a consistent method to calculate cost-effectiveness.*

(emphasis added).

- 6 Under our rules governing integrated resource planning, gas utilities are required to acquire conservation resources when conservation is the lowest reasonable cost option to meet current and future needs. The discussion in this Policy Statement, and in this proceeding in general, applies only to the cost-effectiveness evaluation of natural gas conservation programs.²

B. Cost-effectiveness screening tests.

- 7 In 2001, the California Public Utility Commission developed a practice manual setting forth several cost-effectiveness tests to evaluate conservation programs' costs and benefits from different perspectives.³ The National Action Plan for Energy Efficiency (NAPEE), a public-private initiative coordinated by the U.S. Environmental Protection Agency, subsequently refined and standardized the

² The Commission has more specific authority for assessing the cost-effectiveness of electric utilities' conservation programs. The Energy Independence Act, RCW 19.285.040(1), requires qualifying electric utilities to pursue "all available conservation that is cost-effective, reliable, and feasible," and to make cost-effectiveness calculations using methodologies consistent with that of the Pacific Northwest Power and Conservation Planning Council (Council). The Council, in turn, relies on the Northwest Power Act to determine its methodologies. 16 U.S.C. §§ 839-839h Pacific Northwest Electric Power Planning and Conservation Act ("Northwest Power Act"). The Energy Independence Act and the Northwest Power Act apply only to electric utilities.

³ California Public Utilities Commission, *California Standard Practice Manual: Economic Analysis Of Demand-Side Programs And Projects* (2001), available at http://www.energy.ca.gov/greenbuilding/documents/background/07-J_CPUC_STANDARD_PRACTICE_MANUAL.PDF.

descriptions of these various tests.⁴ Today, most regulatory commissions which apply cost-effectiveness tests choose from among those set forth in the NAPEE report. A wide variety of literature, including several studies available in the record of this docket, further describes the application of these tests.⁵

- 8 These tests that we consider in this policy statement are the Total Resource Cost Test, Utility Cost Test, Participant Cost Test, and Societal Cost Test, each of which includes a different set of costs and benefits in its calculation.⁶ As we discuss below, there are advantages and concerns associated with each.

1. Total Resource Cost Test

- 9 The Total Resource Cost Test (TRC) is designed to capture all of a conservation program's benefits and costs, regardless of who pays for them. The TRC includes significant non-energy benefits that accrue to the utility and its ratepayers. A properly calculated TRC will account for a variety of benefits, including the hedge value of risk avoidance ("risk reduction value"), downward price pressure from reduced demand, the value of quantifiable non-energy benefits, and a method for including non-energy benefits that are difficult to quantify. A major concern with the TRC is that it typically includes the full costs, but not the full benefits to customers because the risk reduction value of conservation and many non-energy benefits are difficult to quantify. This introduces a potential bias in the TRC against conservation programs.

- 10 Based on historic practice, rather than Commission rule, the TRC has been the Commission's primary test to determine the cost-effectiveness of a utility's portfolio of gas conservation programs.⁷

⁴ National Action Plan for Energy Efficiency, *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers* (2008), available at <http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf>.

⁵ A program is considered "cost-effective" if the ratio of benefits to costs is greater than one.

⁶ The literature also describes the Ratepayer Impact Measure (RIM) test, which we do not discuss here.

⁷ The Commission's first formal acceptance of the TRC for gas conservation programs was the result of a settlement in Puget Sound Energy's 2001 general rate case in Dockets UE-011570 and UG-011571. While use of the TRC was embodied in the settlement accepted by the Commission in those cases, the Commission did not make any formal determination on the merits of the TRC as compared to other tests.

11 The Council, and in turn the Northwest's electric utilities, use a modified version of the TRC.⁸ The Council-modified TRC includes an across-the-board 10 percent adder to the benefits of conservation measures.⁹ Additionally, the Council conducts detailed studies to establish values for many difficult-to-quantify non-energy benefits and conservation's risk reduction benefits. The Council's authority is limited to the electric energy sector, and therefore it does not provide the same studies for the natural gas energy sector. We have not been presented with technical studies that determine the value of many non-energy and risk reduction benefits of natural gas conservation programs.¹⁰ Without a rigorous technical determination of the amount at which the risk reduction value and non-energy benefits should be set, gas companies' TRC analyses are likely incomplete.

2. *Utility Cost Test*

12 The Utility Cost Test (UCT) includes only the costs and benefits that accrue to the utility or program administrator. (Frequently, the UCT is referred to as the Program Administrator Test.) In contrast to the TRC, the UCT does not include costs or non-energy benefits to an individual customer. Accordingly, the UCT does not introduce an internal bias against conservation programs or the need for studies to value non-energy benefits. The UCT compares the utility's avoided cost of energy procurement and supply to the utility's cost of implementing conservation programs.

⁸ When individuals outside of the Pacific Northwest refer to a cost-effectiveness test, they are normally referencing the California Standard Practice Manual version of the test. The Council adopted its own version of the total resource cost-effectiveness test before the California Public Utilities Commission released the California Standard Practice Manual. To avoid confusion, we call the Council's test the Council-modified TRC.

⁹ The Northwest Power Act requires the Council to use a 10 percent conservation adder. 16 U.S.C. § 839a(4)(D). The Energy Independence Act, RCW 19.285.040(1), requires electric utilities to evaluate cost-effectiveness using the Council's methodology, so electric utilities in this state apply a 10 percent conservation adder to TRC calculations. We are not aware of an authority that currently allows the use of a 10 percent conservation adder in the natural gas sector.

¹⁰ Some utilities have included some non-energy benefits, such as water savings, in TRC calculations, but they have not included many other non-energy benefits. *See* Puget Sound Energy, Docket UG-121911, 2012-2013 Biennial Conservation Plan, Exhibit 2: Cost Effectiveness, Tab 3: Calculating the Cost-Effectiveness of Puget Sound Energy's Energy Efficiency Programs (July 2011), at 14.

13 Traditionally utilities in Washington use the UCT to determine the size of conservation incentives (i.e., payments or vouchers) to offer participating ratepayers, the ratepayers that elect to take advantage of a conservation program.¹¹ A primary concern with the use of the UCT is that a utility may create an incentive for activities that are not in a participating ratepayer's economic interest because the UCT considers only the costs and benefits to all ratepayers, not an individual customer of a utility. In other words, the utility's decision to offer a conservation measure and the customer's decision to install a measure, even with a utility subsidy, involve two economic analyses. The UCT only answers the economic question for the utility.

3. *Participant Cost Test*

14 The Participant Cost Test (PCT) measures all costs and benefits that accrue to a participating ratepayer. It does not consider the benefits or costs to the utility, ratepayers who do not participate in the program, or society at large. Due to its limited scope, i.e., the fact that it does not consider impacts to the utility or ratepayers as a class, no jurisdiction uses the PCT as its primary cost-effectiveness test.

15 Conservation programs targeted to benefit low-income individuals typically are funded from a wide variety of sources. Unlike programs targeted to benefit other classes, the funding for which comes exclusively from ratepayers, low-income programs also receive funding from state and federal grants and utility shareholders. In order to allow programs that are partially funded by ratepayers to qualify for federal grants, we allow low-income conservation programs to be evaluated by the Savings-to-Investment Ratio, which is a variation of the PCT defined by the federal Weatherization Assistance Program.¹²

4. *Societal Cost Test*

16 As described above, the PCT reflects a program's impact only on the participant ratepayer, the UCT only on the utility, and the TRC on both ratepayers and the utility. The Societal Cost Test (SCT), by contrast, includes all of these perspectives and the perspective of everyone in the state or region. This broader societal perspective

¹¹ *Utilities & Transp. Comm'n v. Avista Corp.*, Docket UG-120790, Order 02 ¶ 13 n.5 (April 25, 2013).

¹² 42 U.S.C. §§ 6861-6873.

places an economic value on the program's reduction of air and water pollution, reduction in healthcare costs, and national security benefits.

- 17 Several states have adopted the SCT's broad perspective to measure cost-effectiveness.¹³ We acknowledge the appeal of a cost test that comprehensively addresses the environmental, health, and national security benefits of conservation. However, as we discuss further below, we see no need to adopt this test now because the UCT or modified TRC achieves a similar result while providing a more objective accounting of economic costs. Additionally, the SCT is more complex to administer because it requires measuring more non-energy benefits than the TRC, amplifying the challenge of quantifying difficult-to-measure benefits.

C. At what level should utilities screen the cost-effectiveness of conservation activities?

- 18 Utilities evaluate their conservation activities at the measure, program, and portfolio level. An analysis at the measure level means that the cost-effectiveness of each individual component (i.e., a specific piece of equipment, or a specific service) is evaluated. A program-level analysis aggregates several measures targeted at a specific group (i.e., all measures available to residential customers, or all measures available to commercial customers). A portfolio-level analysis aggregates the cost-effectiveness ratios for all programs offered by a particular utility. Direct administrative costs are included at each of these levels as appropriate.¹⁴

¹³ A recent national survey shows that six jurisdictions adopted the SCT as their primary cost-effectiveness test. Martin Kushler, Seth Nowak, & Patti Witte, *A National Survey of State Policies and Practices for the Evaluation of Ratepayer-Funded Energy Efficiency Programs*, American Council for an Energy-Efficient Economy Report No. U122, at 59-60 (February 2012), available at <http://www.aceee.org/node/3078?id=4500>.

¹⁴ For example, a measure-level evaluation of a rebate for the purchase of a high-efficiency gas hot water heater includes the cost of the rebate and the printing of the rebate form. The program-level evaluation includes the cost of processing the rebate because the processing program supports both this hot water heater rebate and other measures that deliver rebates. The portfolio-level evaluation includes the cost of maintaining the website that advertises the rebate, because the website also advertises all of the utility's conservation programs.

19 Traditionally, we have asked utilities to evaluate conservation activities at each level, and to screen the activities' cost-effectiveness at the portfolio level.¹⁵ This means that some specific measures may not be cost-effective when evaluated individually, but can be included in an aggregated portfolio of conservation activities that is cost-effective.

D. What discount rate should utilities use when calculating the net present value of the annual costs and benefits of conservation programs?

20 Another important consideration when evaluating the cost-effectiveness of conservation is the selection of a discount rate. Conservation measures usually require an upfront investment, while the energy savings they create accrue over some number of years. A discount rate calculates the net present value of the annual costs and benefits over the life of a conservation measure. As each cost-effectiveness test portrays a cost-benefit analysis from a specific stakeholder perspective, the rate used to discount future cash flows should correspond to the appropriate stakeholder's perspective.

21 For the UCT, the discount rate is almost universally tied to a utility's weighted-average cost of capital (WACC). However, the discount rate used for the TRC test varies across states. At least 13 states, including Washington, currently use the utility's WACC as the discount rate and at least five states use a discount rate that is lower than the utility's WACC.¹⁶

¹⁵ We have required, and will continue to require, portfolio-level evaluations because we believe utilities should account for those costs that are not included at the measure or program level. For example, a website advertising all of the utility's conservation programs would not be included as a cost to any particular measure or program, but should be included as a cost in the portfolio-level cost-effectiveness evaluation.

¹⁶ For example, Iowa, Maine and Massachusetts use a societal discount rate for the TRC test that ranges from 2 to 5 percent. Evaluators in New York and Oregon use a real discount rate of 5.5 percent and 5.2 percent, respectively. Daykin, E., J. Aiona, and B. Hedman. 2012. "Picking a Standard: Implications of Differing TRC Requirements," *available at* <http://www.cadmusgroup.com/wp-content/uploads/2012/11/Picking-a-Standard.pdf>.

II. History of commission proceedings

A. Avista Corporation's natural gas demand-side management programs, Dockets UE-111882, UG-120790, and UG-121119.

- 22 On February 29, 2012, in Docket UE-111882, Avista Corporation (Avista) filed with the Commission a “Review of Prospects and Strategies for the 2012 Avista Regular Income Natural Gas DSM Portfolio” stating that Avista’s natural gas demand-side management (DSM) portfolio was projected not to be cost-effective under the TRC given the decline in the cost of natural gas. The Commission and the company’s conservation advisory group subsequently met to discuss the cost-effectiveness of Avista’s natural gas conservation programs.¹⁷
- 23 On May 31, 2012, and again on June 5, 2012, in Docket UG-120790, Avista filed revisions to reduce its Public Purposes Rider Tariff, which funds the company’s natural gas conservation programs. That filing is intricately linked with Avista’s subsequent filing on June 29, 2012, in Docket UG-121119, requesting to stop temporarily its natural gas conservation programs. At the Commission’s September 27, 2012, open meeting, there was considerable discussion about the merits of Avista’s request and whether the use of the TRC test that Avista applied accurately captured the true cost-effectiveness of the programs at issue. Accordingly, the Commissioners suggested that the matter be set over for further investigation before Avista ended its conservation programs, and Avista responded by extending the effective date of its tariffs. In another action to create more time for this investigation, on July 27, 2012, in Docket UG-120790, the Commission entered an order allowing Avista to continue offering natural gas conservation programs, suspending its proposed tariff, and allowing the new reduced rates to go into effect on a temporary basis, subject to revision.

¹⁷ Each utility convenes a conservation advisory group comprised of stakeholders including Commission staff, the Public Counsel Section of the Attorney General’s Office, sustainable energy advocates, regional energy efficiency organizations, and local low-income program providers. These advisory groups provide input on the company’s efforts to: (1) evaluate, measure, and verify energy savings; (2) develop conservation potential assessments; (3) perform cost-effectiveness evaluations (the subject of this policy statement); (4) make tariff modifications or mid-course program modifications; (5) set the appropriate level of marketing and customer incentives; and (6) implement conservation programs to low-income customers.

24 The Commission and parties to the various dockets addressing the company's natural gas conservation programs performed extensive investigations, exchanged comments, and discussed Avista's filings. Ultimately, the Commission heard presentations concerning Dockets UG-121207 and UG-121119 at its open meeting on April 11, 2013, and Docket UG-120790 came before the Commission at its regularly scheduled open meeting on April 25, 2013.

25 On April 25, 2013, in Docket UG-120790, the Commission entered Order 02, Order Dismissing Complaint and Order Suspending Tariff; Allowing Tariff Revisions on a Permanent Basis, noting concern with discontinuing programs based on an incomplete TRC analysis and endorsing the use of the UCT as Avista proposed. This order allowed Avista to continue offering natural gas conservation programs that are cost-effective under the UCT and approved by its conservation advisory group.

B. Current rulemaking proceeding, Docket UG-121207.

26 In response to the Avista filings described above, on July 31, 2012, the Commission initiated a rule-making proceeding in Docket UG-121207 by filing a Notice of Opportunity to Comment and a Code Reviser (CR-101) form. In this docket, the Commission said it would consider, among other things, the methods by which the Commission and natural gas utilities should evaluate the cost-effectiveness of conservation programs.

27 On August 31, 2012, the Commission received comments from Puget Sound Energy, Inc. (PSE), Cascade Natural Gas Corporation (Cascade), NW Energy Coalition (NWECA), Northwest Industrial Gas Users (NWIGU), Northwest Natural Gas Company (NW Natural), the Energy Project, Avista and the Public Counsel section of the Washington State Attorney General's Office (Public Counsel). On October 3, 2012, the Commission issued a notice requesting utilities submit the methodologies used to calculate their avoided cost, TRC, and UCT. The Commission subsequently received replies from NW Natural, Cascade, Avista, PSE, Public Counsel, NWIGU, and NWECA. All written comments in this docket are available on the Commission's website at <http://www.utc.wa.gov/121207>.

28 On November 16, 2012, Avista, Cascade, The Energy Project, the Energy Trust of Oregon, NWECA, NW Natural, PSE, Public Counsel and the Washington State Department of Commerce (Commerce) participated in a workshop before Commissioners Jeffrey D. Goltz, Patrick J. Oshie, and Philip B. Jones. The

Commissioners discussed with stakeholders the merits of using the TRC and UCT to compare demand-side and supply-side resources. In addition, the workshop participants agreed on what inputs should be used to calculate the avoided cost of natural gas.

- 29 While there was consensus among the stakeholders present that many conservation benefits are difficult to quantify, there was disagreement on how to account for benefits that are not quantified. Stakeholders discussed the use of an across-the-board adder to the quantified benefits of conservation activities.¹⁸ Cascade, PSE and NWIGU argued that the Commission should not use an adder with an arbitrary value. NWEC and Avista supported using a risk adder because gas prices have been volatile. PSE commented that risk adders are not necessary because all companies' Integrated Resource Plans consider multiple scenarios.
- 30 The workshop participants also agreed that cost-effectiveness should continue to be screened at the portfolio level, excluding low-income programs, which should be evaluated independently. NWEC commented that the use of the WACC as a discount rate is too high for residential customers' investments, while PSE and Avista supported the continued use of the WACC.
- 31 On November 30, 2012, PSE, Commerce, and UCONS, LLC, filed comments in response to the discussion at the workshop. Commerce discussed the need to account for the impact of stopping and starting programs, and societal impacts. PSE argued against the use an adder to quantify risk reduction values, and argued for exempting pilot programs from the cost-effectiveness test. UCONS, LLC discussed the treatment of programs serving manufactured homes.
- 32 On March 22, 2013, the Commission issued a Notice of Opportunity to File Written Comments, asking stakeholders to respond to five issues identified in the notice and providing notice that the Commission would discuss these issues at its April 11, 2013, Open Meeting. On April 8, 2013, the Commission received written comments from Cascade, Public Counsel, Avista, PSE, NW Natural, The Energy Project and NWEC. These comments discussed which cost-effectiveness test utilities should use, what criteria should be met before stopping programs, how to account for program start and stop costs, and the implementation of market transformation and low-income

¹⁸ The Council-modified TRC includes an across-the-board 10 percent adder to the benefits of conservation measures. See footnote 9, above.

programs. The Commission discussed the issues in this docket and the Avista dockets at its open meeting on April 11, 2013, and received additional written comments from Dr. Hugh Gilbert Peach.

III. Determining the preferred method for the cost-effectiveness evaluation of natural gas demand-side management programs.

33 Based upon the record in this proceeding, consideration of past practice and decisions, and additional research, and pursuant to RCW 34.05.230, the Commission decided to issue a policy statement instead of proceeding further with a proposed rule.¹⁹

34 This section describes Commission policy on the use of cost-effectiveness tests for natural gas conservation activities, including the test or tests to apply, the level at which they should be applied, and the appropriate discount rate. We also articulate Commission policy on the need for standardized conservation program evaluations.

A. Gas utilities should use a properly balanced TRC or, if not available, a UCT with the assistance of the utility's advisory committee.

35 After reviewing the methodologies and cost-effectiveness tests proposed by stakeholders, and the comments filed in this docket, the Commission determines that a properly balanced TRC is the most appropriate test available. The TRC accounts for costs and benefits to both ratepayers and the utility, and analyzes the impact of conservation programs on both. Yet, as we noted when dealing with Avista's programs:

A major concern with the TRC is that it typically includes the full costs, but often does not include the full benefits to customers because the [risk reduction] value and many non-energy benefits are difficult to quantify. This introduces a potential bias in the TRC against conservation programs.²⁰

¹⁹ RCW 34.05.230(1) states that “[a]n agency is encouraged to advise the public of its current opinions, approaches, and likely courses of action by means of interpretive or policy statements.” They are intended to be more flexible than rules, though they can be converted into rules after some period of implementation.

²⁰ *Washington Utilities and Transportation Commission v. Avista Corporation*, Docket UG-120790, Order 02, Order Dismissing Complaint and Order Suspending Tariff; Allowing Tariff Revisions on a Permanent Basis, ¶ 11 (April 25, 2013).

- 36 In Docket UG-120790 we expressed discomfort with “ending [Avista’s] gas conservation programs today because of the concerns with the TRC.”²¹ We would prefer that a regional entity with the appropriate technical expertise determine conservation’s risk reduction value, the downward price pressure from reduced demand, and non-energy benefits. With proper quantification of these values, a properly balanced TRC analysis could be possible. Unfortunately, the Council does not provide these values for the natural gas utilities, nor does any other similar entity. And it would be unreasonably expensive for a utility to undertake such a study alone. Thus, we are unwilling to allow utilities to end natural gas conservation programs as a result of an unbalanced or incomplete TRC analysis. Any TRC analysis without these values is potentially biased against conservation programs. Accordingly, the UCT is an acceptable option when a properly balanced TRC is not available.
- 37 We recognize that the UCT is not a perfect test. In addition to claims that it may encourage ratepayers to participate in programs that are against their own economic best-interest, a utility may be able to manipulate the UCT by setting an incentive level that is higher than necessary, or lower than is reasonable, to induce customer participation.
- 38 To guard against the implementation of unreasonable programs, and to address concerns with the UCT, we continue to rely on the natural gas utilities’ conservation advisory groups to scrutinize program designs.²² Conservation advisory groups serve an essential oversight role by examining and critiquing utilities’ conservation activities and cost-effectiveness evaluations. In separate orders approving each utility’s conservation programs, we have required each utility to convene its advisory group regularly. We continue to require consultation with these stakeholders groups.
- 39 We expect the utilities to provide advisory groups an analysis of their conservation activities using both the TRC and UCT. Advisory group members should continue to vet conservation programs, examining each measure closely under both tests and bringing any abnormalities to our attention.²³ Utilities and advisory groups should

²¹ *Id.* at ¶ 13.

²² See footnote 17, above, for a more detailed description of conservation advisory groups.

²³ For example, non-cost-effective measures are sometimes included to serve as “loss leaders” that promote participation in a program that is cost-effective overall. There is a compelling

also examine sector equity to ensure that highly cost-effective programs benefitting a class of ratepayers do not perennially subsidize non-cost-effective programs benefitting a different class of ratepayers.²⁴ Advisory groups should ensure that a utility has a compelling reason for including conservation measures and programs that are individually non-cost-effective, but ultimately we only require that a utility's entire conservation portfolio be cost-effective.²⁵

40 Finally, there may be significant costs associated with discontinuing and then restarting conservation programs a short time later; utilities do not currently consider these costs in cost-effectiveness tests. Accordingly, a utility proposing to stop offering conservation programs should quantify, and include in its cost-effectiveness evaluation, the costs of discontinuing and restarting programs. Specifically, utilities should consider all quantifiable costs of starting and stopping, including, but not limited to the effects on conservation program delivery infrastructure, trade ally networks, workforce skills related to installing energy efficiency measures, administrative costs, and advertising expenses. Evaluating this data will ensure that a utility will account for the cost associated with running an intermittent program.

B. A utility should use a discount rate appropriate to the cost-effectiveness test used and to that test's investment perspective.

41 As each cost-effectiveness test reflects a specific stakeholder's view of conservation investments, each test should use a discount rate that matches that stakeholder's investment perspective. Our conclusions in this section indicate our current thinking on this complex issue, and we are open to revisiting these conclusions as appropriate.

reason for this arrangement because loss leaders induce a higher level of participation in the program as a whole, making the utility's conservation program or portfolio more cost-effective.

²⁴ Examining sector equity means determining whether one class of ratepayers is subsidizing programs offered to another class of ratepayers.

²⁵ Specific measures may fail measure-level cost-effectiveness tests for a variety of reasons. It is important to assess those reasons on a case-by-case basis. If the measure only fails because of the assumed participation rates, where very low participation may cause the measure to be non-cost-effective, but high participation would cause it to be cost-effective, it may be appropriate to include the measure on a pilot basis, or with a plan to increase participation. If, however, the measure is failing because of the low level of energy savings, it is likely not appropriate for inclusion. Additionally, low-income programs that are cost-effective under the PCT variant known as the Savings-to-Investment Ratio, see part I.B.3 above, may be excluded from the analysis of a utility's portfolio of conservation activities.

- 42 The UCT shows the utility's perspective, and therefore it is widely accepted that the cost of capital for the utility, its WACC, is the appropriate discount rate to use for the UCT.²⁶ We agree with that view.
- 43 The TRC, on the other hand, is designed to measure impacts of a program on a utility and its ratepayers. The discount rate used for the TRC should be reflective of both the risk of the investment and the opportunity cost of capital for the stakeholder making the investment decision and benefiting from future reductions in energy costs.
- 44 Regarding risk, the discount rate applied to the stream of future energy efficiency benefits should be reflective of a low-risk investment, regardless of the class of customer making those investments. We believe a risk-free rate of return (e.g., the long term composite interest rate of U.S. Treasury notes) is generally the appropriate rate for discounting these future benefits when using the TRC test.
- 45 We recognize that there may also be opportunity costs associated with the upfront financing of efficiency investments. The opportunity cost of capital can be very different for different classes of conservation program participants. For residential participants, the upfront costs are often small enough so as not to require long-term financing. Accordingly, residential programs evaluated under the TRC should use a discount rate reflective of minimal financing needs and low risk. We determine that the interest rate of U.S. Treasury notes is a reasonable indicator of low-risk investments.
- 46 Unlike residential participants, commercial and industrial program participants typically require a shorter payback period for their investments, which could justify the use of a higher discount rate than a utility's WACC. The potentially high opportunity cost of capital for these customers is somewhat mitigated by the low risk of the investment. Because the low risk of the investment suggests a discount rate that is lower than a utility's WACC, and the high opportunity cost of capital would suggest a rate that is potentially higher than a utility's WACC, we find that a utility's WACC is a reasonable proxy for a composite discount rate for commercial and industrial programs under the TRC.

²⁶ National Action Plan for Energy Efficiency, *supra* note 4 at 4-8, available at <http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf>.

C. Stakeholders should standardize conservation program evaluations.

47 In addition to setting forth the Commission's policy on the use of cost-effectiveness screening tests, we deem it desirable to standardize utility evaluations of conservation programs.

48 We envision a move towards the standardization of conservation program evaluations. We ask that Commission staff, utilities and stakeholders standardize the format of biennial and annual conservation plans, and the schedule of when the utilities file these plans with the Commission, as we have done with conservation reporting in the electric sector. We also ask them to standardize the unit energy savings (UES) values for natural gas measures, as the Council's Regional Technical Forum does for the electric sector.

49 A reasonable first step towards this standardization is for each natural gas utility to file an annual or biennial conservation plan, and for each natural gas utility to publish its technical workbooks supporting the calculation of UES values on the Northwest Energy Efficiency Association's ConduitNW.org website. We encourage utilities and other stakeholders to work with Commission staff to implement these first steps.

IV. Conclusion

50 In the past three years, the price of natural gas declined sharply in a way that few could have imagined. This price drop reduced the cost-effectiveness of conservation programs and prompted our investigation into the appropriateness of various cost-effectiveness tests.

51 This policy statement provides a summary of the Commission's investigation into the use of different cost-effectiveness tests for natural gas conservation programs and measures. Our conclusions indicate our current thinking on these complex issues, and we are open to revisiting these conclusions as appropriate. We expect utilities to continue working closely with their advisory groups to refine their conservation programs, and we will continue to evaluate each utility's conservation activities on a case-by-case basis.

52 While this case-by-case approach provides us with an opportunity to evaluate each utility's activities, we stress the value of standardization in this industry. We encourage utilities and other stakeholders to work with Commission staff to establish a standardized schedule and format of conservation plans, and to publish their technical workbooks supporting cost-effectiveness calculations.

DATED at Olympia, Washington, and effective October 9, 2013.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chairman

PHILIP B. JONES, Commissioner

JEFFREY D. GOLTZ, Commissioner