

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Commission Investigation Into
Natural Gas Conservation Programs

DOCKET NO. UG-121207

SECOND COMMENTS OF PUBLIC COUNSEL

October 5, 2012

1. Pursuant to the Commission's July 31, 2012, Notice of Opportunity to Comment (Notice), the Public Counsel Section of the Washington State Attorney General's Office (Public Counsel) respectfully submits these additional comments regarding natural gas conservation programs. The Notice invited comments on two questions, and also sought statements of proposed issues addressing what the Commission should consider concerning the planning and implementation of natural gas conservation programs. Public Counsel submits these additional comments, pursuant to the Notice, and responds to some of the comments and issues raised by stakeholders during the initial comment period.

1) What are the appropriate assumptions or factors to include in natural gas avoided cost calculations?

2. Our initial comments, filed August 31, 2012, stated that it would be helpful if each of the four natural gas companies would provide specific information about the factors, elements, and assumptions included in its avoided cost and cost-effectiveness calculations. Public Counsel appreciates the Commission's October 3, 2012, Notice of Opportunity to Comment, requesting that the utilities provide details regarding their avoided cost, Total Resource Cost, and Utility Cost Test methodologies. This will be useful information for this docket, and will allow stakeholders and the Commission to evaluate and compare these methodologies and inputs, so as to better understand any methodological differences, and the end results. We appreciate that PSE provided a detailed narrative describing their methodology for calculating avoided costs of natural gas for assessment of natural gas conservation programs.¹ It would be helpful if companies provide this type of narrative, in conjunction with the spreadsheets and data requested in the October 3, 2012, Notice. Lastly, we believe a technical matrix comparing company methodologies and assumptions would be extremely useful, as recommended by Avista.² This would facilitate a determination as to whether the companies' methodologies are generally consistent. We look forward to reviewing the documents provided by the utilities in response to the October 3, 2012, Notice, and having an opportunity to comment subsequent to that review.
3. *10% Conservation Adder.* It appears that some of the gas companies incorporate a 10% conservation or environmental adder to their avoided cost, while others do not. PSE does not

¹ UG-121207, Comments of Puget Sound Energy, Inc., August 31, 2012, Attachment 1, *Avoided Cost Calculations of Natural Gas Efficiency Programs*, Prepared by Bobette Wilhelm, August 2012.

incorporate such an adder, while Northwest Natural Gas does include a 10% environmental adder. Avista's comments did not specifically discuss their methodologies, but referenced their natural gas IRP released in August, 2012 (Docket UG-111588), and their filing to suspend natural gas DSM programs (Docket UG-121119). Public Counsel understands that Avista's analysis does include a 10% conservation adder or preference. Cascade Natural Gas did not specifically address this issue in their initial comments. We recognize there are currently no statutory or regulatory requirements that natural gas companies incorporate a conservation adder or preference in their avoided cost calculation. At this time, Public Counsel is not yet taking a position on this issue.

4. *Discount Rate.* In its comments, NWECC stated that the avoided cost calculation used in the evaluation of energy efficiency programs should employ a lower-risk, long-term customer/societal cost discount rate rather than the utility's weighted average cost of capital.³ While that assumption might be appropriate for application in a societal cost test, Public Counsel does not believe that it should be applied for the TRC or the UCT. As discussed in a recent NAPEE document, the type of discount rate used depends upon the cost-test used and the perspective of the analysis. Thus, the societal discount rate is appropriate for the societal cost test, which examines costs and benefits from the perspective of society as a whole. However, as

² UG-121207, Comments of Avista Corp., August 31, 2012, p. 2.

³ UG-121207, Comments of Northwest Energy Coalition, August 31, 2012, p. 2.

discussed in the NAPEE document, because the TRC and UCT assess cost-effectiveness from different perspectives, the discount rate is typically the utility's weighted average cost of capital.⁴

2) Should companies use a combination of cost tests in evaluating the cost-effectiveness of natural gas conservation programs?

Total Resource Cost Test

5. In our initial comments Public Counsel observed that the Commission, the utility industry, and the region, have historically looked primarily to the Total Resource Cost (TRC) test, in evaluating the cost-effectiveness of conservation programs. We continue to believe the Commission should look to the TRC. In general, the Commission has required utilities to manage their natural gas conservation programs so that they are cost-effective under the TRC at the portfolio-level.⁵ This allows for certain programs, such as pilot programs, to be pursued even if they are not cost-effective on a program-level basis, while still maintaining an overall standard of cost-effectiveness that must be met in the aggregate.

6. WAC 480-90-238 requires natural gas utilities to meet natural gas system demand with a mix of supply and conservation resources “to meet current and future needs at the lowest reasonable cost to the utility *and its ratepayers*.”⁶ The rule appropriately recognizes costs borne by the utility and those borne by ratepayers. This is consistent with the TRC, which compares the total costs (both program administrator costs and customer costs) to total benefits (utility resource savings) of the conservation portfolio.⁷ The TRC is a comprehensive review that

⁴National Action Plan for Energy Efficiency (2008). *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy Makers*. Energy and Environmental Economics, Inc. and Regulatory Assistance Project. www.epa.gov/eeactionplan, pp.4-7 - 4-8.

⁵ See, e.g., Avista Schedule 190.

⁶ WAC 480-90-238 (2)(a) (emphasis added).

⁷ NAPEE 2008, *Understanding Cost-Effectiveness of Energy Efficiency Programs*, p. 2-2.

considers costs of the utility as program administrator (e.g. labor, evaluation, program marketing), and customer costs (e.g. efficiency measure and installation costs), and then compares those costs to the benefits achieved by the utility and participant (e.g. avoided costs, quantifiable benefits such as water savings). The fundamental question answered by a TRC analysis is: “Will the total costs of energy in the utility service territory decrease?”⁸ Public Counsel continues to believe this is the appropriate question to answer in evaluating whether energy efficiency programs are cost-effective and should be pursued as a least-cost resource.

Utility Cost Test

7. Public Counsel strongly questions the policy rationale for consideration of the Utility Cost Test (UCT) to evaluate cost-effectiveness, as suggested by Cascade Natural Gas, because the UCT excludes ratepayer costs for efficiency measures from the analysis. The UCT is a more narrow analysis that only considers program administrator costs (e.g. administrative costs, incentive payments), but does not consider customer costs. Moreover, as Northwest Natural appropriately points out in their comments, under a UCT analysis, care must be taken to estimate savings directly attributable to the program, and thus a net-to-gross analysis must be undertaken.⁹
8. It is worth noting that in Washington, utilities have historically reported “gross” rather than “net” estimated energy savings from conservation programs. “Gross” savings are estimated energy savings for participants as compared to estimated baseline energy usage. “Net” savings represent the estimated savings attributable to the program, after adjusting for effects of free-

⁸ NAPEE 2008, *Understanding Cost-Effectiveness of Energy Efficiency Programs*, Table 2-2.

⁹ UG-121207, Comments of Northwest Natural Gas, August 31, 2012, p. 4. NWN discusses the need to account for free riders, as well as spillover.

riders, spillover, installation rates, leakage, take-back, or other factors.¹⁰ Since net-to-gross adjustments typically result in decreases to estimated savings, the recent standard practice in Washington would generally be viewed as somewhat generous in estimating potential savings from conservation programs. Under a UCT analysis, a net-to-gross adjustment must be made to ascertain estimated savings attributable to the utility conservation programs.

9. NAPEE has described the net-to-gross (NTG) ratio as follows:

A key requirement for cost benefit analysis is estimating the NTG. The NTG adjusts the cost-effectiveness results so that they only reflect those energy efficiency gains that are attributed to, and are the direct result of, the energy efficiency program in question. It gives evaluators an estimate of savings achieved as a direct result of program expenditures by removing savings that would have occurred even absent a conservation program. Establishing a NTG is critical to understanding overall program success and identifying ways to improve program performance.¹¹

10. Currently, Washington utilities are not required to undertake comprehensive net-to-gross evaluations to inform reported energy savings attributable to natural gas conservation programs. In addition, while the electric companies are required to meet evaluation, measurement, and verification requirements associated with implementation of the Energy Independence Act, there are currently no such standards or requirements for the natural gas companies. Consequently, there is tremendous variability in the extent to which the natural gas companies are evaluating their conservation programs.¹²

¹⁰ NAPEE 2008, *Understanding Cost-Effectiveness of Energy Efficiency Programs*, pp. 4-9 to 4-10.

¹¹ NAPEE 2008, *Understanding Cost-Effectiveness of Energy Efficiency Programs*, p. 4-9.

¹² Cascade Natural Gas, for example, has not recently undertaken any evaluations of its conservation programs.

11. We further believe that Cascade’s proposal to create a new, hybrid test that averages the TRC and UCT would establish yet another test and would likely cause greater confusion to this process.

12. Public Counsel reiterates our previous comment that while recent events understandably lead the Commission and stakeholders to examine natural gas conservation programs more closely, there should not be a presumption that changes to the Commission’s standard practice are warranted.

3) Other issues identified during the initial comment period.

13. Public Counsel also provides comments below regarding some of the issues raised by stakeholders during the initial comment period.

14. *Low Income Weatherization Programs.* Public Counsel agrees with the comments of several stakeholders that low income weatherization programs are unique in many respects, and as the Energy Project points out, many benefits of these programs are not captured under current cost-effectiveness analyses.¹³ In many low-income households, installation of shell measures or new equipment allow the household to heat their home at a comfortable level, and thus natural gas usage may actually increase or remain level, rather than decrease. Other potential benefits of these programs are reduced reliance on bill assistance, and possibly reduced uncollectible expenses. These and other factors raise quantification challenges and policy issues that should be discussed and determined by the Commission.

15. *Possible Additional Cost of Starting and Stopping Natural Gas DSM Programs.* This issue was identified by PSE and also mentioned by Northwest Natural. None of the comments

¹³ UG-121207, Comments of Energy Project, August 31, 2012, pp. 1-2.

discussed this issue in any detail or provided any specific evidence. If this issue is pursued as part of this rulemaking, it would be helpful to require the companies to provide more specific documentation and information. Certainly, there are substantial costs and risks associated with continued operation of cost-ineffective programs. The costs of the programs are significant, with Avista's annual budget of approximately \$5 million in Washington, and PSE's approximately \$13 million for natural gas conservation programs. Cascade Natural Gas and Northwest Natural have conservation budgets of approximately \$3.4 million and \$1.5 million, respectively. In addition to potential imprudence, other risks include erosion of public confidence in conservation programs.

Conclusion

16. In conclusion, we also observe that recent and predicted future low natural gas prices are not the only challenge to natural gas conservation programs.¹⁴ As aptly described by Commission Staff, “the slower evolution and more limited nature of natural gas DSM technologies, the absence of generation infrastructure, as well as the ability to store fuel, all ... make providing cost-effective natural gas DSM significantly more difficult than electric DSM.”¹⁵ The gas market is characterized by fewer end-uses and fewer potential efficiency measures. The adoption of enhanced federal standards or state energy codes, generally the most effective means of achieving conservation savings, can further limit potential utility gas conservation program offerings. In the residential sector, for example, new federal furnace standards are scheduled to

¹⁴ Northwest Natural noted that the Company's Modified 2011 IRP included a sensitivity analysis “that showed that a 39% increase to the avoided cost only increased total DSM achievable potential by 4% -- which represents approximately 0.5% of the Company's total portfolio of resources.” UG-121207, Comments of Northwest Natural, August 31, 2012, p. 3.

¹⁵ UG-121119, Memo of Commission Staff, September 27, 2012, p. 2.

become effective in May, 2013, increasing baseline furnace efficiency from 80% to 90%.¹⁶ This will very likely either eliminate or substantially curtail one of the largest residential gas programs offered by the utilities.

17. We look forward to further participating in this rulemaking. Public Counsel will have representatives attending the October 19, 2012 Workshop.

¹⁶ For details of standards adopted by the U.S. Department of Energy, *see* http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/cacfurn_dfr_final-version.pdf