BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

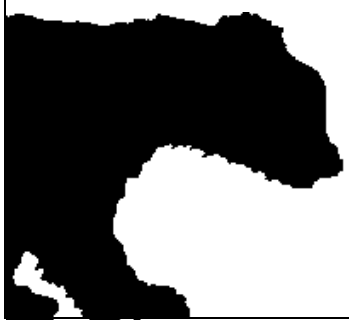
UG 221

In the Matter of	)
NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL,	)
Request for a General Rate Revision	)

OPENING TESTIMONY OF THE

CITIZENS' UTILITY BOARD OF OREGON

May 3, 2012



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Our names are Bob Jenks and Gordon Feighner, and our qualifications are listed in CUB Exhibit 101.

I. Introduction

CUB was frankly shocked by some of the proposals in NW Natural's General Rate Case Testimony. This shock came not so much from the proposals themselves—CUB has come to expect that strange things will surface during infrequent rate cases—but from the fact that the Company did not apparently take on board any of the comments and questions posed during the preparatory stakeholder meetings held in the year prior to the filing of its General Rate Case.

Given that all of the proposals floated at the preparatory stakeholders meetings remain on the table, CUB finds itself addressing all myriad of issues, from the need to write a treatise on marginal costs studies to the idea that NW Natural, ignoring Oregon

policy, believes there can be such a thing as too much conservation—or conservation beyond "the optimal level."[1]

In the end, CUB is left with the opinion that NW Natural likes energy efficiency programs that allow it to build load. It does not, however, like customers investing in efficiency to reduce their usage. NW Natural is still thinking like a utility of the 1990s.

With all of the above in mind, CUB recommends that the Commission:

- deny NW Natural's request for a new rate design and reaffirm that the customer charge can only be used to recover the direct costs of that customer, not the shared cost of the distribution system;
- deny NW Natural's request to raise the reconnect charge;
- require that future rate design proposals be vetted in IRP proceedings if those proposals are expected to have a significant effect on energy efficiency;
- reiterate that decoupling was designed to protect the utility from the loss of fixed cost recovery as customers invested in energy efficiency and not, as requested in this General Rate Case, to protect NW Natural from the known consequences of a misguided rate design;
- reduce the Company's Research and Development expenditures by $61,000;
- remove 100% of officer bonuses, 75% of performance-based non-officer bonuses, and 50% of merit-based non-officer bonuses from rates;

[1] NWN/1100/Feingold/63.

- remove working gas inventory from NW Natural's rate base in the test year, an adjustment of $35.326 million, and in addition,
- order that all of the adjustments in Mr. Hugh Larkin's testimony also be made. CUB, jointly with the Northwest Industrial Gas Users (NWIGU), is sponsoring the testimony of expert witness Hugh Larkin of Larkin & Associates, PLLC.

II. NW Natural's Marginal Cost Study Overstates Customer-Related Costs

In this section, CUB will address the marginal cost study and how it relates to the Company's proposed rate design. The following section will discuss the rate design itself. Because the rate design is grounded in the marginal cost study, it is an important starting point for understanding how NW Natural's proposal is inconsistent with the PUC's historic practice.

A. NW Natural Equates Design Demand with Customer-Related Costs

Marginal cost studies attempt to identify whether costs vary with the number of customers, the energy used, the demand or capacity put on the system, and, in some cases, the design demand that is engineered into the system. While prices that are charged to customers are designed to collect the embedded costs that are contained in the utility's revenue requirement, Oregon has historically used marginal costs to guide the allocation of costs between classes of customers and as a factor to consider when designing rates.

At the core of NW Natural's argument in support of its proposed rate design is its claim that nearly all its costs, other than the commodity, are related to the number of

customers and not to demand or capacity.[2] NW Natural arrives at its conclusion by treating the engineered design demand as if it is identical to customer-related costs, when in fact the distribution system is engineered to supply the capacity of gas that the designer expected on the coldest days of the year. It is the peak demand that drives the design of the distribution system because this is the volume that the system needs to carry, regardless of the number of customers on the system.

Marginal cost studies were controversial for electric utilities in the 1990s, and much of the Commission precedent related to marginal cost came from that era.[3] CUB's analysis is largely based on that precedent because CUB believes that the same principles apply to both the electric and natural gas industries.

i. NW Natural Applies a New Minimum System Approach to Change the Allocation of Distribution Mains

CUB is concerned about NW Natural's desire to apply a new minimum system approach to change the allocation of distribution mains. CUB's concern arises from the fact that NW Natural uses the minimum system approach to separate customer-related costs from demand- or capacity-related costs and to then determine that all costs of distribution mains are customer-related. In the past, distribution mains (the pipes that serve most neighborhoods) were classified as capacity-related, sometimes also called demand-related. Now, with NW Natural's new proposal, the designation would be changed to customer-related for residential and small commercial customers.[4]

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[2] NWN/1101/Feingold/9.
[3] *E.g. In. re: Investigation Of Methods For Estimating Marginal Cost Of Service For Electric Utilities,* Docket UM 827.
[4] NWN/1100/Feingold/22-23.

NW Natural states that it wants to change the designation because the actual demand customers place on the system has little impact on these facilities.

> The investment costs associated with the category of distribution mains is separated between customer-related costs (based on NW Natural's minimum gas distribution system) and demand-related costs (based on the investment costs above the minimum system costs for non-residential customers). In the previous LRIC Study, a minimum system approach was not used so these investment costs were treated only as demand-related costs. This enhancement is consistent with the factual basis for utility system expansion and with the economies of scale in gas distribution systems discussed above.
>
> Since NW Natural's minimum gas distribution system will serve essentially all residential customers, there is no capacity-related LRIC cost for distribution mains for residential customers in its current LRIC Study.[5]

NW Natural uses the minimum system approach to separate customer-related costs from demand- or capacity-related costs, and this causes the Company to determine that all costs of distribution mains are customer-related. The Company believes that this approach fits with how the system is designed:

> The distribution assets of a gas utility do not vary with the level of throughput in the short run. In the long run, main costs vary with either growing design day demand or a growing number of customers.
>
> As I discuss in greater detail later in my testimony, the minimum size of distribution main installed by NW Natural will serve the design day demands (at standard operating pressure and average system density) of its residential and small commercial customers. For this reason, the customer component of distribution mains represents the total LRIC for distribution mains.[6,7]

While CUB agrees that "distribution assets of a gas utility do not vary with the level of *throughput* in the short run," CUB also notes that distribution assets of a gas

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[5] *Id*.
[6] NWN/1100/Feingold/7.
[7] LRIC is the acronym for Long Run Incremental Costs.

utility do not vary with the *number of customers* in the short run. But this ignores the LR in "LRIC," which stands for "long-run". In the long run, the distribution system is sized to carry a particular capacity.

There is a demand- or capacity-related component to distribution mains. To examine the marginal cost of demand requires looking at the costs or savings associated with the change of one unit of demand, regardless of whether that change is an increase or a decrease. NW Natural's residential and commercial customer classes show declining use per customer, and their declining use is reducing their use of the capacity of the distribution system. This reduction in their use of capacity allows for new loads to be added without the need to upgrade the distribution system. For example, both of Mr. Jenks's neighbors have added natural gas service to their homes in the last 5 years, but the addition of these new customers did not cause NW Natural to invest in the distribution main that serves his neighborhood. There was enough capacity available to accommodate the additional loads without new investment. This suggests that there is value in the additional capacity that is freed up when customer usage goes down. NW Natural agrees with this notion, but concludes that this simply shows that all distribution costs are customer-related:

> NW Natural's residential and commercial service customers exhibit declining use per customer due to the availability and promotion of energy conservation measures and the resulting improved efficiency of capital stock replacement and improvements to the thermal envelope. This trend in declining use per customer creates additional design day capacity within the utility's existing gas system to serve new loads. As a result, the growth in transmission and distribution plant for gas customers reflects the growth in the number of customers using gas service. For existing customers, the marginal distribution and transmission capacity related cost is actually zero.[8]

However, since a new customer's cost to be added to the system depends in part on whether the existing customers have reduced their usage and therefore added capacity to their segment of the distribution main, this really shows that distribution mains are—on the margin—neither fully customer-related nor capacity-related.

In order to identify all of the cost of the distribution mains as customer-related, NW Natural has oversized its minimum system needed to serve customers. The classic definition of a minimum system is a hypothetical system that is designed to connect all customers, but is sized to serve little or no demand. One of the key controversies in the minimum-system approach is sizing the minimum system based not on the utility's actual practice, but instead on the hypothetical system necessary to serve customers with little load. NARUC describes this controversy as it relates to electric utilities:

> When applying this approach, it is necessary to take care that the minimum size equipment being analyzed is, in fact, the minimum-sized equipment available, and not merely the minimum size stocked by or usually installed by the company.[9]

By beginning with the minimum-sized mains that NW Natural installs rather than focusing on a hypothetical system intended to serve customers with little capacity, NW Natural has oversized its minimum system. NW Natural's minimum system is not

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[8] NWN/1100/Feingold/11.
[9] Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, January 1992, page 138.

a hypothetical system designed to carry little capacity; it is instead an actual system that is designed to carry design day demand.

ii. NW Natural's Description of Its Distribution System Fits the Facilities Approach

> The critical issue for a gas system such as NW Natural's is that the system provides sufficient capacity to meet the design day load requirements of customers. For residential and the smallest general service customers, the smallest distribution pipe installed on the system will serve the design day capacity of these customers. As a result, the distribution cost to serve the individual customers in these classes is the same regardless of their design day demand.[10]

NW Natural is describing a system that is sized not to the number of customers or to the actual (current) overall demand, but is instead engineered to meet the maximum load that can be expected on the design day. This sounds nearly identical to demand design:

> PGE's marginal cost study recognizes three categories of distribution costs: customer, demand, and design demand…
>
> The design demand category recognizes a unique category of distribution costs that are neither customer related nor (metered) demand related. The facilities design approach, as used by PGE, attempts to track the utility's actual distribution planning process in the marginal cost study. To calculate marginal costs, the investigator asks distribution planners how they design the system, what criteria they use, and what the costs are of components they specify in the plans. The facilities design approach is used to calculate the cost of distribution elements that are sized to serve maximum expected loads (design demand) of the customers in the area over the life of the equipments.[11]

But design demand, unlike the cost of metering and billing individual customers, cannot be assigned to an individual customer:

> PGE expresses the facilities costs in terms of $/kW of design demand (not $/customer) and multiplies them by the total design demand for each class (not the number of customers) to obtain marginal revenues

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[10] NWN/1100/Feingold/15.

[11] *In re: Investigation Of Methods For Estimating Marginal Cost Of Service For Electric Utilities*, Docket UM 827, Order No 98-374 at 5 (Sept. 11, 1998).

> from the class. PGE properly related the costs of distribution lines and transformers to design demands instead of assigning them to the customer or (measured) demand components. The facilities approach should be preferred to the minimum system and zero-intercept approaches, which do not directly link line and transformer costs to the characteristic that determines those costs – design demand.[12]

Under this policy, demand design costs cannot be assigned to individual customers as part of a customer charge, but are instead assigned to a customer class where they are recovered through volumetric energy charges.

B. Oregon PUC Policy is to Limit the Customer Charge to Direct Customer Costs, not Design Demand or Minimum Systems

Just as design demand costs are not considered customer costs and cannot be assigned to customers as part of a customer charge, costs associated with a theoretical minimum system also are not assigned to customer charges. The customer charge is limited to the direct impact of that individual customer. Each individual customer requires a meter and a bill, but each individual electric customer does not require a line transformer or feeder line; those items are instead common costs billed to the customer class through volumetric rates. Each individual gas customer likewise requires a meter and bill, but does not require a dedicated distribution main. The policy of the Oregon PUC that has been established since the marginal cost fights of the 1990s is that the customer charge is limited to the direct impact of each customer. PacifiCorp, for example, does not use the demand design approach, so its distribution costs are divided between customer dollars per year of customer related costs and customer dollars per kWh of demand related costs. PacifiCorp's current marginal cost study is before the

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[12] *In. re: Investigation Of Methods For Estimating Marginal Cost Of Service For Electric Utilities*, Docket UM 827, Staff Opening Brief at 1-2 (May 18, 1998).

PUC in docket UE 246. PacifiCorp identifies marginal costs of $445/customer-year for residential customers. Some of this cost represents the direct customer costs of meters and bills and some represents the indirect customer costs of transformers and feeders.[13] These costs translate into approximately $37/month, but PacifiCorp is only seeking an increase in its customer charge to $9.50. The reason for this discrepancy is that current policy does not allow electric utilities to recover the costs of the line transformers and distribution feeders through the customer charge; only the costs directly related to individual customers can be collected through the customer charge.

III. NW Natural's Rate Design Would Effect a Radical Change

NW Natural is proposing to recover all fixed costs through a customer charge (that would grow to nearly $30 per month), while simultaneously reducing the volumetric charge so that the Company would recover only the variable cost of the gas commodity. This would effect a radical change in rate design. The unidentified, and extremely harmful, effect of these actions will be to decrease the incentive for customers to make investments in energy efficiency. What NW Natural seems to be claiming is that customers are being inefficient by over-investing in efficiency!

The rate design being proposed here has serious implications for Oregon's energy policy and for the IRP planning process. NW Natural's rate design is not well thought-out. It would have severe, unintended but known consequences.

[13] *In re PacifiCorp*, Docket UE 246, Exhibit PAC/1207/Paice/Tab 2.7, Oregon Marginal Cost Study.

A. The $30 per Month Customer Charge Requires That Distribution Mains Be Included as Customer Costs

NW Natural's witness, Mr. Feingold, claims that the $30 customer charge is valid based on the service line, meter, regulator and accounting costs:

> If we simply calculate the out-of-pocket costs for customer service, the meter, regulator, and service line, a $5.00 or $6.00 per month charge is still far below the indicated LRIC of over $30 per month. The supporting costs are presented in NWN/1101, Feingold/9, with the monthly cost computed by summing the annual cost of the service line, meter and regulator, and accounting costs, which totals on average approximately $366.00, and dividing that amount by 12.[14]

However, NW Natural's Exhibit 1101 is not consistent with this methodology. The only way to get to an annual charge of more than $300 is to include the distribution mains as customer costs. Without the distribution mains, the costs associated with the meter, regulator and service line are as follows:[15]

Rate Schedule	Services	Meters and Regulators	accounting	total
1R	131	51	46.76	228.76
1C	137	85	50.2	272.2
2R	162	59	46.76	267.76

Adding distribution mains will add $110 to the long run marginal cost for each of these classes. If the service line is not included then a customer charge should be limited to $8 to cover the direct costs of meters and accounting. This is in the range of the monthly customer charge for most utilities regulated by this Commission.

[14] NWN/1100/Feingold/38.
[15] NWN/1101/Feingold/9.

B. NW Natural's Claim That Conservation Is Related to Short-Term Marginal Costs Conflicts With IRP Planning and Oregon Regulatory History

According to NW Natural, the shift to an increased customer charge and reduced volumetric charge will reduce the incentive to conserve to its "optimal" level, making it clear that the Company believes its customers are currently conserving beyond the "optimal level":

> **Q. Does the reduction in the commodity charge associated with moving to full cost-based Customer Charges reduce the incentive for energy conservation?**
>
> No. Conservation is not the absolute reduction in use. Rather, it is the efficient use of a resource. From economic theory we know that efficient use comes from setting prices equal to short-run marginal cost. For natural gas, short-run marginal cost is determined in the market as the commodity cost of gas. The purpose of a sound rate design with respect to conservation has two dimensions—discourage wasteful use and to encourage efficient use. Unfortunately, volumetric rates produce the opposite result of conservation. Volumetric rates encourage the wasteful use of resources to reduce gas use and discourage efficient uses of natural gas. Full cost-based Customer Charges promote efficient use of all resources related to gas consumption and, thus, result in optimal conservation.[16]

It is important to note that while Mr. Feingold answers the question "no," his actual answer is "yes," as he acknowledges that the change will reduce the incentive for investment in energy conservation. He attempts to redefine conservation by describing the "wasteful use of resources to reduce gas." In other words, the conservation we are incentivizing is the conservation of investment meant to conserve the use of gas. This is silly semantics at best, and sophistry at worst. However, what is not silly, and simply wrong, is Mr. Feingold's claim that economic theory says that the short-term marginal cost that is determined by the market for the gas commodity is the proper and efficient

[16] NWN/1100/Feingold/63.

price signal for conservation. This is not how IRPs are conducted in Oregon, and this is not the philosophy that has enabled Oregon to be so successful in energy efficiency.

Short-term marginal costs do not relate well to long-term utility investments. Last year, NW Natural made a 30-year investment in gas supply and added that expense to the Company's rate base. That investment had a cost that was above the short-term marginal cost of gas, but CUB supported NW Natural's investment. At the time, it was expected to be below the cost of gas over the life of the contract, and it was considered a good hedge against the price of gas going higher in future years. Last fall, Mr. Jenks weatherized his gas-heated home. The cost of his weatherization would not be considered cost-effective based on the short-term marginal cost of gas, but his investment is expected to be less than the cost of gas over the life of his weatherization (the insulation in the walls, for example, has a very long life). Mr. Jenks's investment is also a good long-term hedge against the price of gas going up. The NARUC cost allocation manual captures this:

> There is considerable difference of opinion as to whether short-run or long-run marginal cost is appropriate for use in cost allocation. In competitive markets, prices tend to reflect short-run marginal costs, suggesting that this may be the appropriate basis for cost allocation. However, long-run marginal costs tend to be more stable and may send better price signals to customers making capital investments decisions than do short-run marginal costs.[17]

When NW Natural calls for short-term marginal cost signals, it is specifically referring to price signals related to conservation. However, Oregon's history tells us that short-term marginal costs should not be used to reduce energy efficiency investments. As wholesale electric prices fell in the 1990s, Oregon's electric utilities

[17] Electric Utility Cost Allocation manual, National Association of Regulatory Utility Commissioners, January 1992, page 110.

slashed energy efficiency spending. The utilities claimed that while energy efficiency was still a cost-effective resource in the long run, because short term market costs were so low, they should only have been required to acquire energy efficiency that would otherwise become a lost opportunity. All other energy efficiency could be put off.

As a result of this shift in philosophy, conservation budgets and programs were slashed. When the Western Energy Crisis hit, all of the conservation that had been cost-effective in the long run but was put off by the utilities was suddenly cost effective again in months or even weeks, but Oregon no longer had the mechanisms in place to acquire it. Instead, Oregon customers spent large sums of money acquiring power on the market at prices that were unheard of to make up for the conservation that could have been acquired at a much lower price.[18]

Over the last 10 years, Oregon has decided that tying energy efficiency to boom and bust cycles related to short-term market costs makes little sense. This cycle makes it difficult to develop a good, skilled network of energy efficiency providers and ensures that Oregon customers get little benefit from energy efficiency as a hedge against future price excursions.

In IRPs, utilities are required to compare the long-term cost effectiveness of energy efficiency to the long-term cost effectiveness of supply-side resources. This recognizes that the cost-effectiveness of energy efficiency should be based on the long-run. Rate design should be consistent with this principle. It makes little sense to have an IRP conclude that a certain level of energy efficiency is cost effective, but then design rates under a theory that says that the IRP level is above the "optimal" level.

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[18] *E.g. In re PGE,* Docket UE 115; *In re PacifiCorp, Docket* UE 116.

Turning down a thermostat as a conservation measure is a short-term measure. Energy efficiency investments, on the other hand, have very long lives. As noted earlier in this testimony, Mr. Jenks recently added insulation to the walls of his 1926 house. His house had no insulation for 80 years, but will now have wall insulation for decades. NW Natural believes what he did was wrong and inefficient. NW Natural believes that he misallocated his money and that society is worse off because of it. Mr. Jenks now knows that his home is more comfortable and that his energy costs will be lower for decades.

Hethie Parmesano, of the National Economic Research Association, addressed this issue more than a decade ago. While she recommends using short-run marginal costs for marginal cost studies, she recognizes that for price signals related to energy efficiency, long-run marginal costs make more sense:

> When deciding whether or not to install electric versus gas heat for example, the consumer will want to take into account future prices of electricity and gas. Thus, a price based on the LRMC [Long Run Marginal Cost] may provide an appropriate price signal to consumers making long-lived purchase decisions…[19]

C. Energy Demand Is Decreasing, and CUB Thinks This Is a Good Thing

At the heart of NW Natural's complaint about current rate design is a simple fact—the average use per household is declining. The same phenomenon is occurring on the electric utility side. Average household demand for energy, both electric and

[19] Hethie S. Parmesano, Vice President, National Economic Research Associates, A Workshop on the NERA Marginal Cost Method for Electric Utilities, Sponsored by Portland General Electric, February 8, 1995, page7.

natural gas, is declining.[20] Unlike NW Natural, CUB believes that this is a good thing and that it is a sign of a successful state energy policy.

The State of Oregon has taken a series of public policy steps that encouraged, and continue to encourage, investment in energy efficiency. These policies include:

- Strong State energy codes
- BETC and RETC programs which offer tax credits for energy efficiency
- Statewide Greenhouse gas goals
- The Energy Trust of Oregon
- On bill financing of energy efficiency investments

The success of these public policies was reflected in the recent words of Governor Kitzhaber at the Future of Energy Conference:

> We know what other regions have yet to learn:
>
> That the cleanest form of energy is the energy we don't use and that there is tremendous economic potential in significantly scaling up investment in energy efficiency and conservation;
>
> That the real potential of our extraordinary natural assets lies not in their exploitation, but in their restoration; and
>
> That the global market is hungry for technologies, products and services that get things done more efficiently and at a lower cost -- the keys to a clean economy.[21]

It would make little sense for the OPUC to permit NW Natural to change the way it prices energy, so as to reduce the incentive to invest in energy efficiency as a way to reduce energy efficiency spending down to its "optimal" level, when the State of Oregon is making energy efficiency the centerpiece of its official energy policy.

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[20] http://www.puc.state.or.us/puc/docs/statbook2010.pdf.
[21] Governor Kitzhaber delivers keynote address to Future Energy Conference. April 25, 2012**,** http://governor.oregon.gov/Gov/media_room/speeches/s2012/future_energy_conference_042512.shtml.

D. NW Natural Argues That Customers Invest Too Much in Conservation

According to NW Natural, gas customers are investing too much in conservation:

> Q. Please describe the inability of NW Natural's current volumetric rate design to provide economically efficient price signals.
>
> A. When fixed costs are recovered volumetrically, customers who conserve save costs (*i.e.*, experience reduced gas bills) that the utility does not save. This can cause more frequent rate cases and from an economic perspective wastes resources. An economically efficient price signal matches the reduction in cost for the utility with the reduction in cost for the consumer. In the case of NW Natural, the cost reduction from conservation is in the form of lower gas commodity-related costs. Any customer savings in excess of the cost of gas overstates the monetary savings of conservation and results in investments by the customer that do not save the level of societal resources expected based on the reduction in customers' gas bills, and creates cross-subsidies among customers.[22]

NW Natural is arguing that price incentives to conserve should be limited by the price of the commodity, which is currently at historic lows. According to NW Natural, anything beyond this encourages customers to overspend on conservation, which creates a misallocation of social resources.

There are many problems with NW Natural's position. First, on its face, NW Natural argues against energy conservation programs such as those run by the ETO, even though it is not proposing to reduce those programs. NW Natural claims that offering customers incentives on top of the bill saving associated with the commodity will "overstate the monetary savings of conservation" and create the same social economic inefficiency generated by current rate design. Second, NW Natural ignores the fact that society, through its government institutions, provides input in the allocation of resources.

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[22] NWN/1100/Feingold/42-43.

Oregon has a statewide energy policy. Oregon has determined that its citizens desire greenhouse gas emissions reductions as a matter of state policy. Oregon has also decided, as a matter of state tax policy, that energy efficiency investments will be incentivized beyond the level of short-term marginal energy costs. These policies represent the collective wisdom of Oregon's leadership and citizens. CUB agrees with Oregon's state policy. CUB does not believe that these policies represent economic inefficiency, nor does CUB believe that energy efficiency is economically inefficient.

E. If NW Natural Intends to Reduce the Conservation Incentive, It Should First Reexamine Its IRP Goals

NW Natural's recent IRP established goals for energy efficiency based on long-term cost effectiveness. Now, NW Natural is trying to reduce the short-term incentives for energy efficiency in order to reduce the supposed inefficiency of too much conservation. Any such reduction in short-term incentives for energy efficiency will, of course, affect the ability of NW Natural to meet its IRP targets. Not surprisingly, the Company declined to include a rate design study in its last IRP. It is CUB's position that the Commission should reject rate designs that potentially have a significant effect on IRP actions unless those actions have been presented and considered in an IRP.

CUB believes that this is also the position of the Commission. In the straw proposal issued in docket UM 1415, the Commission recognized the link between rate design and energy efficiency. In the straw proposal, utilities were directed to examine the conservation potential of time-of-use rates in an IRP:

> We will sponsor Commission-directed workshops at the beginning of utility Integrated Resource Plan (IRP) processes to identify a limited number of time-varying rate structures that utilities will thoroughly evaluate as part of the IRP. The utility evaluation will assess all factors

> listed above in detail, plus any others identified during the Commission workshops. The evaluation of the costs and benefits of the rate structures will be included in the IRP and subject to review by all parties.[23]

CUB agrees with the Commission and believes that when a new rate design is proposed with the goal of influencing energy efficiency investment by changing customer incentives, that rate design should be examined in the context of an IRP. In this case, the proposed rate design might well have the effect of preventing NW Natural from meeting its IRP energy efficiency goals. CUB believes that this rate design should have been considered in the Company's IRP so there could be a better understanding of the effect it could have on supply and demand before it was considered in a rate case. CUB does not believe that the proposed rate design should be allowed to go forward until after it has been considered in NW Natural's next IRP, and only then if it is found to have merit.

F. NW Natural Is Only Opposed to Some Conservation Programs

The ETO has recently eliminated its incentive on high-efficiency gas furnaces.[24] CUB understands that the incentive has been eliminated because the market for furnaces has been transformed and there is no longer a need to incentivize consumers to purchase high-efficiency gas furnaces. NW Natural has publicly complained about the ETO eliminating this incentive in the past, but now the Company is arguing that there is too much efficiency.

Apparently, NW Natural now believes that its customers are investing in too much energy efficiency and reducing their usage beyond what is optimal for society.

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[23] *In re Investigation into Cost Methods for Use in Developing Electric Rate Spreads,* Docket UM 1415, Order No 11-255, Appendix A, page 1 (July 8, 2011).
[24] http://energytrust.org/library/forms/HES_DOC_Incentive_Grid.pdf.

Since NW Natural really liked the ETO furnace incentive program when it was in place, CUB suspects that there is more to this dispute than meets the eye. The furnace program must have had an additional benefit for NW Natural—the benefit of being a good marketing tool for trying to convert electric or oil heat customers to natural gas.[25] CUB thinks this is the real bottom line for NW Natural's change of heart. CUB has noticed that NW Natural likes energy efficiency programs that allow it to build load, but doesn't like customers investing in efficiency to reduce their usage. NW Natural is thus still thinking like a utility of the 1990s.

G. NW Natural Acknowledges That Its Proposed Rate Design Will Have Unintended but Known Consequences

NW Natural acknowledges that a significant number of customers have gas heat as their only use of gas and that the rate design being proposed here will likely create a seasonal disconnect problem:

> Understanding the types of low use bills will provide insights into how certain residential customers will respond to NW Natural's rate design proposal and the extent to which NW Natural should make other rate design changes to ensure fixed distribution costs are fairly recovered from the customers causing such costs to be incurred. Like other customers, low-use customers will respond to the price signal associated with full cost-based Customer Charges. Typically, zero use and other low-use customers respond by attempting to avoid the higher fixed monthly charge. For example, heat-only customers could turn gas service off during the summer and reestablish service in the first cold month. This approach serves as an attempt to avoid paying the actual cost of service, and can be addressed by the gas utility in one of two ways. Under the first option, the gas utility would reflect the fixed costs of distribution access as an annual charge so that when a customer terminates gas service, the remainder of the annual charge is due for payment by the customer as a termination charge. In addition, there should be a charge for both turn-off and turn-on service based on the

[25] http://www.nwnaturaloffers.com/offers/furnace-a-c-offer/

> actual cost of each service. Under the second option, the charge would be established on a monthly basis, but for customers who reestablish service at the same location in fewer than 12 months, the service establishment charge would be the cost-based turn-on charge plus the monthly charge times the number of months during which the service was turned off. The turn-off charge should also be included in this option as part of the customer's final bill.[26]

While NW Natural admits that the policy it is proposing will cause winter heat only customers to disconnect for the summer, the Company is not *at this time* proposing policies to address this issue, beyond a small increase in the reconnect charge, which will not be enough to discourage seasonal disconnections. But what the Company's testimony makes clear is that the Company knows that *in the future* it will need to implement much more severe policies. One potential solution could be a $360 annual charge that would be collected over the course of 12 months, but would be due immediately if a customer left the system before the year was out. Or, in the alternative, "the charge would be established on a monthly basis, but for customers who [disconnect and] reestablish service at the same location in fewer than 12 months, the service establishment charge would be the cost-based turn-on charge plus the monthly charge times the number of months during which the service was turned off."[27] Both of these alternatives would additionally include either shut off and/or reconnection fees.

CUB understands why the Company is not proposing the $360 rate structure at this time. Requiring a customer to pay $100, $200, or even more as a termination fee in order to have their service disconnected will likely not be popular! Both of these policies will likely create opposition and will create a significantly higher burden for

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[26] NWN/1100/Feingold/61.
[27] *Id.*

low-income families who are dealing with disconnections and reconnections, not to avoid NW Natural's rate design, but to simply manage their bills.

H. Decoupling Will Shift the Consequences of Seasonal Disconnections to Other Customers

NW Natural will lose revenue associated with fixed costs for customers who seasonally disconnect. The Company's decoupling mechanism, however, will true-up fixed cost recovery on a per-customer basis, so that in effect NW Natural will not really lose any revenue. Not surprisingly, NW Natural is proposing that decoupling continue during the 3-year transition time that it will take for the Company to fully incorporate its proposed new rate design. CUB cannot support that.

CUB has been willing to support decoupling in exchange for good energy efficiency programs, and is willing to continue to support decoupling in exchange for continued good energy efficiency programs. But, CUB cannot support a decoupling plan that encourages certain customers to disconnect for the summer and requires other customers to make up that cost to keep NW Natural whole.

The bottom line is that with decoupling overlaid on NW Natural's new rate design, NW Natural will not have to address the unintended consequences of seasonal disconnections, even though it is a known result of the rate design. The Company has testified that disconnections will be a clear result of its preferred rate design, but the Company is not proposing a mechanism to deal with this problem. This is because decoupling has shifted the risk of less-than-full-fixed cost recovery to customers. CUB cannot support this. Decoupling was designed to protect the utility from the loss of fixed cost recovery as customers invested in energy efficiency. Here, it would be used

to protect NW Natural from the known consequences of a misguided rate design. This is not acceptable to CUB.

If the Commission grants NW Natural its proposed rate design, the Commission should ensure that the Company assumes total responsibility for the risks associated with seasonal disconnect and not allow the Company to use decoupling as a means to shift that risk to other customers.

I. If the Commission Changes Its Policies in the Way NW Natural Is Requesting, Other Utilities Will Want to Avail Themselves of This Change As Well

Finally, CUB notes that reversing long-held principles about rate design for the benefit of NW Natural will only encourage other utilities to seek the same benefit. For example, electric utilities do not have anything equivalent to NW Natural's WARM tariff, so they take the risk that mild weather will result in an under-recovery of fixed costs. A rate design that permitted electric utilities to shift the risk of weather to customers would certainly be inviting to the electric utilities.

IV. CUB's Adjustments

A. Research and Development

NWN Natural proposes to increase funding for research and development (R&D) in the test year from $350,000 to $750,000.[28] This number is in excess of the industry standard for utilities of 0.1 percent of gross sales revenues.[29] CUB proposes that NW Natural's R&D expenditures be reduced to conform to the utility industry

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[28] NWN/600/Yoshihara/19, line 16.

[29] "Research and Development in Natural Gas Transmission and Distribution". American Gas Foundation, March 2007. http://www.gasfoundation.org/ResearchStudies/AGFINGAAR&DFinalStudy.pdf.

standard. NW Natural's projected gross sales revenues for the test year are $699 million,[30] 0.1 percent of which is $699,000. CUB therefore requests that the Commission reduce the Company's Research and Development expenditures by $61,000.

B. Incentive Compensation

NW Natural assigns the cost of a number of incentive compensation expenses to ratepayers. Commission precedent in Order Nos. 99-033, 97-171, and 99-697 suggests that these expenses should instead be assigned largely to shareholders. CUB therefore respectfully requests that 100% of officer bonuses, 75% of performance-based non-officer bonuses, and 50% of merit-based non-officer bonuses be removed from rates. CUB Exhibit 102 details CUB's calculations regarding this adjustment. The total amount CUB is proposing to remove from rates, based upon proposed reductions in NW Natural's staffing levels set forth in UG 221/NWIGU-CUB/Larkin/100/page 45, is $3.282 million in the test year.

C. Working Gas Inventory

NW Natural Exhibit 310 lists the Oregon share of the Company's stored gas inventory as roughly $48 million. This inventory is the combined total of working gas inventory and base gas, i.e. cushion gas. The base gas volume is essentially a carrying cost for the Company, as it is this volume of gas that must remain in the storage facility as permanent inventory in order to maintain adequate pressure in the system. Base gas is not, therefore, financially liquid. Working gas inventory, on the other hand, is gas that is available to be delivered to customers and contract holders.

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[30] NWN/307/McVay-Siores/1.

NW Natural proposes to include in base rates the average value of its stored gas inventory as calculated over a 13-month period. However, the Company is already guaranteed to recover the cost of this gas through its Purchased Gas Adjustment (PGA) mechanism, through which the costs are passed directly through to customers. There is thus no capital investment required by the Company to maintain its working gas inventory. The working gas portion of the inventory should be removed from rate base, as it is essentially inventory that will either be sold to customers at the volumetric rate or will be sold in the wholesale market. CUB proposes to retain the cost of base gas in rates.

CUB Exhibit 103 details CUB's calculations regarding this adjustment. CUB respectfully requests that the Commission remove working gas inventory from NW Natural's rate base in the test year, an adjustment of $35.326 million.

V. CUB'S Conclusions

CUB found itself having to address a myriad of issues in this testimony, from the need to write a treatise on marginal costs studies, to the potential impact of the proposed radical changes to rate design, to the idea that NW Natural, ignoring Oregon policy, believes customers are investing too much in conservation—conservation beyond "the optimal level." In the end, CUB is left with the opinion that NW Natural likes energy efficiency programs that allow it to build load, but does not like customers investing in energy efficiency in their own homes. This case is like "déjà vu all over again"[31]—NW Natural is still thinking like a utility of the 1990s.

With all of the above in mind, CUB respectfully requests that the Commission:

[31] With kudos to Yogi Berra for a great witticism.

- deny NW Natural's request for a new rate design and reaffirm that the customer charge can only be used to recover the direct costs of that customer, not the shared cost of the distribution system;
- deny NW Natural's request to raise the reconnect charge;
- require that future rate design proposals be vetted in IRP proceedings if those proposals are expected to have a significant effect on energy efficiency;
- reiterate that decoupling was designed to protect the utility from the loss of fixed cost recovery as customers invested in energy efficiency and not, as requested in this General Rate Case, to protect NW Natural from the known consequences of a misguided rate design;
- reduce the Company's Research and Development expenditures by $61,000;
- remove 100% of officer bonuses, 75% of performance-based non-officer bonuses, and 50% of merit-based non-officer bonuses from rates;
- remove working gas inventory from NW Natural's rate base in the test year, an adjustment of $35.326 million; and in addition,
- order that all of the adjustments in Mr. Hugh Larkin's testimony also be made.

WITNESS QUALIFICATION STATEMENT

NAME: Bob Jenks

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TITLE: Executive Director

ADDRESS: 610 SW Broadway, Suite 400
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EDUCATION: Bachelor of Science, Economics
Willamette University, Salem, OR

EXPERIENCE: Provided testimony or comments in a variety of OPUC dockets, including UE 88, UE 92, UM 903, UM 918, UE 102, UP 168, UT 125, UT 141, UE 115, UE 116, UE 137, UE 139, UE 161, UE 165, UE 167, UE 170, UE 172, UE 173, UE 207, UE 208, UE 210, UG 152, UM 995, UM 1050, UM 1071, UM 1147, UM 1121, UM 1206, UM 1209, and UM 1355. Participated in the development of a variety of Least Cost Plans and PUC Settlement Conferences. Provided testimony to Oregon Legislative Committees on consumer issues relating to energy and telecommunications. Lobbied the Oregon Congressional delegation on behalf of CUB and the National Association of State Utility Consumer Advocates.

Between 1982 and 1991, worked for the Oregon State Public Interest Research Group, the Massachusetts Public Interest Research Group, and the Fund for Public Interest Research on a variety of public policy issues.

MEMBERSHIP: National Association of State Utility Consumer Advocates
Board of Directors, OSPIRG Citizen Lobby
Telecommunications Policy Committee, Consumer Federation of America
Electricity Policy Committee, Consumer Federation of America

WITNESS QUALIFICATION STATEMENT

NAME: Gordon Feighner

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EDUCATION:

Master of Environmental Management, 2005
Duke University, Durham, NC

Bachelor of Arts, Economics, 2002
Reed College, Portland, OR

WORK EXPERIENCE: I have previously provided testimony in dockets including UE 196, UE 204, UE 207, UE 208, UE 210, UE 213, UE 214, UE 216, UE 217, UE 219, UE 227, UE 228, UE 233, UM 1355, UM 1431, and UM 1484. I have also completed the Annual Regulatory Studies Program at the Institute of Public Utilities at Michigan State University in 2010.

Between 2004 and 2008, I worked for the US Environmental Protection Agency and the City of Portland Bureau of Environmental Services, conducting economic and environmental analyses on a number of projects. In November 2008 I joined the Citizens' Utility Board of Oregon as a Utility Analyst and began conducting research and analysis on behalf of CUB.

Incentive Compensation Adjustment

	Included in TY (per DR 392)	Factor allocation (per NWN/312)	Included in OR test year	FTE adjustment % (see above box)	Subtotal	Nonutility adjustment % (see above box, 100% - 1.78%)	Subtotal	Sharing % allowance	Subtotal	Adjustment (OR)
Officers	$ 339,000	90.10%	$ 305,439	94.78%	$ 289,491	98.22%	$ 284,338	0%	$ -	$ 305,439
NBU non-officers based on employee merit	$ 3,781,000	90.10%	$ 3,406,681	94.78%	$ 3,228,810	98.22%	$ 3,171,337	50%	$ 1,585,669	$ 1,821,012
NBU non-officers based on Company performance	$ 558,000	90.10%	$ 502,758	94.78%	$ 476,508	98.22%	$ 468,026	25%	$ 117,006	$ 385,752
BU non-officers based on employee merit	$ 1,016,000	90.10%	$ 915,416	94.78%	$ 867,620	98.22%	$ 852,176	50%	$ 426,088	$ 489,328
BU non-officers based on Company performance	$ 407,000	90.10%	$ 366,707	94.78%	$ 347,560	98.22%	$ 341,374	25%	$ 85,343	$ 281,364
	$ 6,101,000		$ 5,497,001		$ 5,209,989		$ 5,117,252		$ 2,214,107	**$ 3,282,894**

Per DR 96	Labor Expense Allocation	
0.96%	Merchandise	
0.82%	Other	
1.78%		

FTE per NWN		1130
FTE per CUB		1071
%		94.78%

NW Natural
Oregon Jurisdictional Rate Case
Gas Storage Inventory Balances
Test Year Twelve Months Ended October 31, 2013
Base Year Twelve Months Ended December 31, 2011
($000)

	TEST YEAR		Portland LNG (Gasco)	Newport	Jackson Prairie (SGS)	Plymouth (LS)	Mist	Total Working	Cushion Gas	Total Storage Inventory
1	October	2012	2,607	3,844	4,123	2,107	47,777	60,458	14,068	74,526
2	November	2012	2,568	3,780	4,166	2,107	47,777	60,399	14,068	74,466
3	December	2012	1,462	2,239	3,237	975	39,627	47,540	14,068	61,608
4	January	2013	1,422	1,025	2,500	801	27,210	32,957	14,068	47,025
5	February	2013	1,386	965	157	-	11,295	13,803	14,068	27,870
6	March	2013	1,346	899	-	-	6,642	8,886	14,068	22,954
7	April	2013	1,307	835	-	-	7,673	9,815	14,068	23,883
8	May	2013	1,267	769	-	-	17,466	19,501	14,068	33,569
9	June	2013	1,532	1,404	1,642	306	28,872	33,757	14,068	47,824
10	July	2013	1,815	2,066	1,642	829	37,670	44,023	14,068	58,090
11	August	2013	2,097	2,725	3,749	1,350	44,550	54,471	14,068	68,538
12	September	2013	2,375	3,373	4,700	1,862	47,157	59,468	14,068	73,535
13	October	2013	2,638	4,029	4,700	2,356	50,964	64,688	14,068	78,755

						Working	Base
14	13 month average - System	37,266	14,068	51,334	37,266	$14,068
		42,656.65				
15	Production Area Storage 13 month average - System (WP 310 Production Area Storage)			$1,920	$1,920	
16	Total Gas Inventory for Test Year Rate Base - 13 month average - System			53,253	39,186	14,068
17	Storage Gas Allocation Factor: Firm Delivered Volumes			90.15%	90.15%	90.15%
18	Total Gas Inventory for Test Year Rate Base - 13 month average - Oregon			48,008	$35,326	$12,682
				CUB Adjustment	$12,681.98	

UG 221 – CERTIFICATE OF SERVICE

I hereby certify that, on this 3rd day of May, 2012, I served the foregoing **OPENING TESTIMONY OF THE CITIZENS' UTILITY BOARD OF OREGON** in docket UG 221 upon each party listed in the UG 221 Service List by email and, where paper service is not waived, by U.S. mail, postage prepaid, and upon the Commission by email and by sending one original and five copies by U.S. mail, postage prepaid, to the Commission's Salem offices.

(W denotes waiver of paper service)

(C denotes service of Confidential material authorized)

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