

1 **A. Please state your name.**

2 A. I am Francis P. Ferguson; I am the same Francis Ferguson who filed
3 NWN Exhibits 7, 8, 9, and 10, and Supplemental Exhibits 9 and 10.

4 **Q. What is the purpose of your testimony?**

5 **A. The purpose is to address some general issues raised by the**
6 **Northwest Industrial Gas Users (NWIGU) in their fully allocated cost**
7 **of service testimony and also assess specific NWIGU objections to**
8 **the company's study. I also propose a compromise solution to what**
9 **is clearly a general problem with attempting a traditional fully**
10 **allocated cost of service study on NW Natural's Washington service**
11 **area. Finally, I address one disagreement I have with the**
12 **Washington Utility Commission Staff's (WUTC) demand charge**
13 **allocation.**

14 **Q. What are the general issues raised by NWIGU that you wish to**
15 **address?**

16 **A. NWIGU asserts that the prevalence of special contracts on the**
17 **company's system results from the company's "refusal to offer cost**
18 **based transportation rates." (DWS-T3) pages 5-6, 9-10. This**
19 **assertion is simply not true. Customers negotiate special contracts**
20 **by threatening to bypass the company's distribution system. The**
21 **customer's ability to leave the distribution system derives directly**

1 **from the FERC’s policies favoring bypass, not from a lack of**
2 **appropriate transportation rates on the company’s distribution**
3 **system. System-wide, the rates the company has negotiated with**
4 **special contract customers have been very low. The Oregon average**
5 **is about 2.7 cents per therm. These rates are achieved by very large**
6 **customers for whom direct connection to the pipeline is a real,**
7 **economic option. For customers with this ability, negotiated rates**
8 **are a good solution for all concerned. The customer gets rates that**
9 **match his competitive options, and the company and other**
10 **ratepayers receive the maximum possible contribution toward**
11 **revenue requirements. Transportation rates are simply not an issue,**
12 **because generally available rates are always presented as the**
13 **“average,” and bypass-candidate customers can usually beat the**
14 **average. Essentially, NWIGU seems to suggest that the Commission**
15 **provide bypass avoidance rates for all industrial customers on NW**
16 **Natural’s system, regardless of the size of the customer and**
17 **regardless of that customer’s competitive alternatives.**

18 **Q. Do you have any other general issues to address respecting**
19 **NWIGU’s testimony?**

20 **A. Yes. Mr. Schoenbeck claims that the most important reason that**
21 **there are so few customers on the company’s Schedule 90 and 91**

1 **rates is that the rates are too high. (DWS-T3) page 5, lines 26, 27. At**
2 **the time these rates were introduced in Washington (at the request**
3 **of Washington industrial customers), they were identical to the**
4 **company's Oregon Schedule 90 and 91 rates. As of July, 2000**
5 **Oregon has fifteen Schedule 90 customers using 29 million therms**
6 **annually, and fifty-six Schedule 91 customers using 128 million**
7 **annual therms. This was roughly the case in June 1999 when the**
8 **Oregon Schedule 90 and 91 rates were introduced in Washington. If**
9 **these rates are too high, one certainly can not tell it from the**
10 **behavior of Oregon customers on these schedules.**

11 There are, in fact, several reasons why Washington Schedules 90
12 and 91 have few customers, and none of them have anything to do with
13 the rate being too high. One reason why Washington customers have
14 been slow to adopt Schedule 90 is due to the deal agreed to among
15 company, industrial customers, public counsel, and WUTC staff about
16 how to introduce the new schedules. In that deal, the parties agreed that
17 for the first year after its initiation in Washington, customers choosing
18 Schedule 90 would pay back to core customers the entire difference
19 between the Schedule 90 margin and the margin they would have paid on
20 their previous schedule. This was a phase-in approach to introducing the
21 schedule. But, the phase-in meant that the vast majority of the benefits

1 the customers could gain by going to Schedule 90 were not immediately
2 available. It is clear that some potential customers were waiting until the
3 phase- in expired before signing up for the rate schedule.

4 The reason that no customers have opted for Schedule 91 is the
5 relatively small size of Washington industrial customers when compared
6 to Schedule 91 customers system-wide. The company's existing
7 Washington Schedule 55 rate is quite competitive with Schedule 91 over
8 the range of consumption that Washington industrial customers typically
9 achieve.

10 **Q. What problems do the Northwest Industrial Gas Users see in NW**
11 **Natural's Fully Allocated Cost (FAC) study?**

12 **A. NWIGU argues first that the company has ignored the Commission's**
13 **directive to directly assign costs to large customers in constructing**
14 **the FAC study. NWIGU feels that the company should have directly**
15 **allocated the costs of the ten Washington customers currently taking**
16 **transportation in order to assess the costs of Rate Schedules 90 and**
17 **91. NWIGU further argues that the company has used inappropriate**
18 **load factor data to assign costs to Schedule 90.**

19 **Q. Did the company ignore the Commission directive to directly assign**
20 **the costs of facilities serving large customers?**

21 **A. No. The company actually did directly allocate meter costs for the larger**

1 Washington customers.

2 **Q. Why didn't the company directly allocate costs for NWIGU's ten**
3 **transportation customers (six Schedule 55 customers, the three**
4 **special contract customers, and the one Schedule 90 customer)**
5 **when developing its FAC study?**

6 A. Several factors drove this decision. Primary among them is the lack of
7 useful data for Washington large industrial customer costs. As NWIGU
8 notes, there are only ten industrial transporters on NW Natural's system in
9 Washington. Direct assignment of costs does not generally presume that
10 an entire rate schedule would be developed on 10 customers and 13
11 meters. Instead, the customers for whom costs are directly assigned
12 would normally form a part of a larger rate schedule or class into which
13 their particular cost characteristics would blend. The result would be a
14 more accurate assignment of costs to a class of service, a class usually
15 much larger than the few direct assignment customers themselves. In the
16 present instance, these customers do not blend into a larger whole; they
17 are the whole. The results of direct assignment based on this very small
18 group are simply not plausible. One source of the implausibility is the
19 customers' diversity.

20 The ten customers (and 13 meters) range in size from an annual
21 volume of about 175,000 therms to roughly 3.8 million therms a year.

1 Their investment costs are similarly diverse, ranging from \$9,000 to
2 \$900,000. To try and assess such a range of usage and investment costs
3 as this with only 13 observations is folly. If, in other words, all of the
4 customers NWIGU has examined were very similar to one another, then
5 perhaps 13 observations could provide some useful guidance for
6 constructing a rate schedule. Given the wide divergence in customer
7 characteristics, direct assignment provides results that are patchy at best.
8 They cannot be regarded as reasonable and representative.

9 Another factor influencing the company's decision to not directly
10 assign costs in developing Schedule 90 is the fact that the most of the ten
11 customers NWIGU selects would not, themselves, be candidates for
12 Schedule 90 or 91. Schedules 90 and 91 have been approved and
13 tarified in Washington since June 1, 1999. To date, only one customer
14 has taken service on either schedule. Schedule 55 customers in
15 Washington take service on a rate that has a first block at 8.5 cents per
16 therm for the first 750,000 therms and 2.9 cents per therm thereafter.
17 Given the relatively small size of Washington Schedule 55 customers
18 (both sales and transportation), none of them have found the Schedule 90
19 or 91 rate more attractive than Schedule 55.

20 The three special contract customers are not appropriate to use in
21 an analysis of cost-based rates. These customers have negotiated

1 special agreements reflecting their own, very real, competitive bypass
2 options. Where customers have realistic bypass opportunities, they can
3 take service directly from the interstate pipeline. Because these customer
4 are not held “captive” in any way by the local distribution company (LDC),
5 they do not need the protection of regulation. They can, and do, hammer
6 out their own competitive agreements with the LDC—or, failing that, they
7 bypass. The LDC has no “monopoly power” over them, but is, instead,
8 simply another energy supplier. As such, the LDC is no more obligated to
9 offer cost-based service to them than are their office supplies providers.
10 Because of their real competitive alternatives, special contract customers
11 have placed themselves outside of the realm of cost-based regulation.
12 For this reason, data on special contract customers should not be used to
13 construct regulated, cost-based tariffs.

14 The final factor underlying the company’s decision not to directly
15 assign costs from NWIGU’s list of customers is the company’s vision of
16 the purpose of this analysis. NW Natural undertook this FAC study to
17 assess the reasonability of its existing Washington rates. It was not, as
18 NWIGU seems to suggest, undertaken to design a new transportation
19 rate. Given that Schedules 90 and 91 are existing, currently tariffed,
20 WUTC-approved rates and given that none of the Schedule 55 or special
21 contract customers NWIGU selected are on (or have evinced interest in)

1 the schedules in question, it is not appropriate to use them for the analysis
2 of these schedules.

3 **Q. Does NWIGU's direct assignments yield reasonable results?**

4 A. In my opinion they do not. The rate itself is unreasonable. According to
5 Mr. Schoenbeck's testimony, NWIGU has calculated an average cost of
6 service for the ten transportation customers of 2.4 to 2.7 cents per therm,
7 and this for a collection of ten customers with an average but highly
8 variable use of about 1.4 million therms a year. Washington special
9 contract customer rates are about 5.9 cents per therm for customers using
10 about 3.5 million therms a year. Oregon special contract customers pay
11 about 2.7 cents a therm and use an average of nearly 12 million therms a
12 year. It is simply not credible that the small group of relatively small
13 Washington customers merits a rate lower than the bypass avoidance rate
14 negotiated by NW Naturals largest industrial customers—customers that
15 are, *on average*, more than three times larger than the *largest* customer in
16 the sample NWIGU chose for it's analysis.

17 NWIGU's investment costs are also not reasonable. According to
18 the NWIGU study, the transportation class carries a total rate base of
19 \$646,882. This is what remains of a gross plant figure of \$1,640,792. As
20 a class, then, 58% of the transportation gross plant has been "eaten
21 away" by depreciation. There is, at present, only one customer on

1 Schedule 90, and none on Schedule 91. The sole customer on Schedule
2 90 has a gross investment of \$126,369 with accumulated depreciation of
3 \$19,690. For this customer, only sixteen percent of the investment has
4 been consumed by depreciation. What NWIGU has done is to add to
5 Schedule 90 a mix of firms whose annual consumption exceeds the level
6 achieved by the customer actually on Schedule 90, and whose investment
7 is much more fully depreciated than the that of the customer already on
8 the schedule. The result is a very low cent-per-therm rate.

9 **Q. Why did NW Natural assign the load factor associated with industrial**
10 **firm customers as a class to Schedule 90?**

11 **A. As explained in my original testimony, customers choosing**
12 **Schedule 90, a firm schedule, want gas arriving at the city gate to be**
13 **assured of arriving at their meter. These customers, then, require of**
14 **the company the same degree of system “robustness” that firm**
15 **sales customers require. The ability of the company’s distribution**
16 **system to move gas from the city gate to individual customers is**
17 **most taxed on days where demand is greatest: on peak days, in**
18 **other words. Load factor is a measure of a customer’s contribution**
19 **to peak day loads, and indicates the degree to which customers will**
20 **tax the distribution system. The degree to which customers tax the**
21 **system is a measure of the share of system costs they should**

1 **absorb. Since Schedule 90 is a firm schedule, current firm sales**
2 **customers are the most likely to be attracted to it. Since it is from**
3 **this group that Schedule 90's customers are likely to come, it is they**
4 **that should be looked to for future customer characteristics. Clearly**
5 **none of the interruptible transporters would be interested.**

6 **Q. Since only one customer currently takes service under Schedule 90,**
7 **why didn't NW Natural use that customer's load factor to assign the**
8 **costs of firm service on system?**

9 **A. In one sense, the company did use this customer's load factor to**
10 **assign costs. In computing the load factor for industrial firm**
11 **customers, the total volume in that class was used. This historical**
12 **data included a period in which the customer on Schedule 90 was an**
13 **industrial firm sales customer. Still, that customer's use patterns**
14 **were included with those of other firm customers, not used alone.**
15 **Obviously, it would be a bad idea to design a rate schedule using the**
16 **usage characteristics of one customer. Other customers can be**
17 **expected to adopt this schedule over time, and the rate should be**
18 **structured to fit the anticipated characteristics of customers most**
19 **likely to migrate there. Those customers are current industrial sales**
20 **customers who desire firm service; i.e., industrial firm customers.**

21 **////**

1 **Q. Why didn't the company's FAC study contain any assessment of the**
2 **Washington Schedule 91 rate?**

3 **A. Most of the allocators used in FAC studies presume some degree of**
4 **usage and revenue on a given rate schedule. In the case of**
5 **Schedule 91, there are no customers, hence, no usage or revenue.**
6 **Since there is no data to use to allocate costs (peak day demand,**
7 **share of total customers, share of total sales, share of total revenue**
8 **or margin) it is nearly impossible to allocate costs to the schedule.**
9 **Indeed, NWIGU's cost study in effect allocates to Schedule 91 the**
10 **specific costs and usage levels of customers who are not on that**
11 **schedule.**

12 **Q. What do you conclude about NWIGU's criticism of the company's**
13 **FAC study?**

14 **A. NWIGU's efforts to construct a transportation rate based on ten**
15 **customers, and the company's efforts to assess the cost of service**
16 **for Schedule 90 both, run into the same basic difficulty—a lack of**
17 **data. Washington has simply too few industrial customers to**
18 **develop a reliable cost analysis for the higher volume industrial**
19 **group. While the company much prefers its use of accepted, general**
20 **allocators to NWIGU's direct assignment method for assigning costs**
21 **in the present case, it is clear that problems exist both in the**

1 **company's and in NWIGU's approach to cost allocation in this area.**
2 **Because neither party has produced a problem-free cost analysis of**
3 **either Schedules 90, 91, or NWIGU's hypothetical transportation rate,**
4 **the company proposes that Schedules 90 and 91 charges be set**
5 **equal to the current Oregon tariffed 90 and 91. Copies of the tariffs**
6 **are attached as pages 1 and 2 of my exhibit. This will achieve rate**
7 **homogeneity between jurisdictions, and will tend to align these**
8 **schedules to cost analyses that may occur from time to time in**
9 **Oregon, a service territory in which ample industrial cost data can be**
10 **found. This solution is further recommended by the fact that the**
11 **resulting rates would be fairly close to the Schedule 90 and 91**
12 **charges requested by Washington customers and approved by the**
13 **WUTC less than 18 months ago.**

14 **Q. Are the rates suggested by NWIGU equal to the current Oregon**
15 **Schedule 90 and 91 rates?**

16 A. No. Despite Mr. Schoenbeck's recommendation that there be uniform
17 rates between states (DWS-T3, page 10), NWIGU's proposed Schedule
18 90 and 91 rates differ from Oregon's.

19 **Q. Do NWIGU's proposed Schedule 90 and 91 rates result from their**
20 **FAC study?**

21 A. Not as far as one can tell. It is clear from simple inspection that the rates

1 NWIGU proposed would not yield the 2.4 to 2.7 cent per therm charge
2 which Mr. Schoenbeck claims his FAC study supports. NWIGU does not
3 appear to present any analytical basis for the rate they propose. The
4 rates seem to be those that NWIGU proposed in NW Natural's last
5 Oregon general rate case (Docket No. UG 132).

6 **Q. Were the Schedule 90 and 91 rates that NWIGU proposes be adopted**
7 **in this docket also adopted in Oregon in Docket No. UG 132?**

8 A. No, they were not.

9 **Q. Mr. Schoenbeck claims that, since there is but one Washington**
10 **customer on Schedule 90 and none on 91, the NWIGU rate structure**
11 **can be put in place without "causing an undue burden on the**
12 **remaining customers of the Company". Do you agree?**

13 **A. No. While it is true that the initial impact of NWIGU's rate proposal**
14 **would be relatively small, the overall effect would be much larger**
15 **than the \$150,000 (0.5%) revenue transfer which Mr. Schoenbeck**
16 **claims. The company has performed an analysis of the rate**
17 **migration that would result from NWIGU's rates, and the results are**
18 **more serious than indicated by NWIGU. Were NWIGU's rate**
19 **proposal adopted, longer-term customer migration would account**
20 **for over \$1.3 million in margin revenue loss. A copy of this analysis**
21 **is attached as page 3 of my exhibit. The transfer of this margin**

1 **responsibility to the residential and commercial classes would result**
2 **in a 4.5% increase in rates, for an average of 2.7 cents per therm.**

3 **This is almost ten times the effect claimed by NWIGU.**

4 **Q. What does the WUTC Staff propose with regard to demand charge**
5 **allocation?**

6 **A. The Staff witness, Mr. Russell, allocates demand charges using a**
7 **base-intermediate-peak methodology. This results in a different**
8 **demand rate for each schedule than the company proposed in it's**
9 **original filing.**

10 **Q. Does Staff's proposal conform with past WUTC decisions and**
11 **practice?**

12 **A. For the most part, it does, but it also imposes an unreasonable**
13 **burden upon the company's interruptible customers.**

14 **Q. Why is this?**

15 **A. Staff suggests an interruptible demand charge of 7.014 cents per**
16 **therm. The company has, since at least 1996, charged its**
17 **interruptible customers a demand rate of roughly 1.279 cents per**
18 **therm. Staff's proposed demand charge is an increase of over 500%.**
19 **In addition, the proposed 7.014 cent rate, if applied to Schedule 55,**
20 **will in itself equal fully 82.5 percent of the 8.497 cent per therm, first**
21 **block distribution margin.**

1 Such overwhelming increases in interruptible demand charges
2 constitute serious rate shock with very little beneficial effect. The total
3 cost shifted from firm to interruptible by this exercise is only \$71,374 or
4 1.2% of demand charges. Firm rates will decrease by only \$0.00134
5 cents per therm or a roughly 0.2% reduction in residential rates. This is a
6 very small benefit to be flowing from the very high cost of a five-fold
7 increase in interruptible demand charges.

8 It should be noted, further, that the company's interruptible demand
9 charge reflects a continuous practice over many years, and was
10 developed with the full cooperation of the WUTC Staff and approved by
11 the Commission.

12 ////

13 **Q. How did the current interruptible demand charges come into being?**

14 **A. The Washington Utility Commission Staff approached the company**
15 **in 1995 and suggested that demand charges needed to be applied to**
16 **interruptible rate schedules. The company had not, to that point,**
17 **applied demand charges to interruptible customers. After a period of**
18 **negotiation, a demand charge was developed with WUTC Staff**
19 **participation. The demand charge was in the range of 1.3 cents per**
20 **therm. Staff and the company agreed that this rate should be**
21 **charged interruptible sales customers with the exception of**

1 **Schedule 55. The company argued, and the Staff agreed, that**
2 **Schedule 55 sales could not stand the full 1.3 cent increment and**
3 **still remain competitive. For this reason, Staff and company**
4 **developed the “Market Offset.” The market offset was (and is) a**
5 **roughly 0.7 cent amount that was subtracted from the 1.3 cent**
6 **increment, leaving about 0.6 cents as the Schedule 55 demand**
7 **charge.**

8 **Q. What does the company recommend?**

9 **A. The company feels that imposing a 7 cent demand charge on**
10 **customers who for many years have paid about 1.2 cents towards**
11 **demand constitutes a clear instance of rate shock, and fails to**
12 **provide significant benefits to firm customers. For this reason, the**
13 **company recommends that the interruptible demand charge be left at**
14 **its current level.**

15 **Q. Do you have any further comments?**

16 A. Yes. Staff’s testimony regarding the class cost of service and rate spread
17 issues also addresses a long, three-year phase-in of revenue
18 requirement. I do not address that because it has been addressed by Mr.
19 DeBolt in NW Natural Exhibit 23.

20 **Q. Does this conclude your cross-responsive testimony?**

21 A. Yes.