CASE: UG 344

WITNESS: DEBORAH GLOSSER

PUBLIC UTILITY COMMISSION

OF

OREGON

STAFF EXHIBIT 1300

Opening Testimony

May 4, 2018

Q. Please state your name, occupation, and business address.

A. My name is Deborah Glosser. I am a Senior Analyst employed in the Energy Resources and Planning Division of the Public Utility Commission of Oregon (Commission or OPUC). My business address is 201 High Street SE, Suite 100, Salem, Oregon 97301.

Q. Please describe your educational background and work experience.

A. My witness qualification statement is found in Exhibit Staff/1301.

Q. What is the purpose of your testimony?

A. I address whether the Commission should change how shareholders and ratepayers share net revenues produced by interstate and intrastate storage service using shareholder-funded capability at NW Natural's Mist underground gas storage facility and by "optimization" of this capability. I also address whether the Commission should change how shareholders and ratepayers share net revenue produced by the optimization of non-Mist assets funded by ratepayers.[1] This issue has a long history that dates back to NW Natural's 2011 rate case (Docket No. UG 211) and includes an independent investigation in Docket No. UM 1654. I discuss that history, which includes a recent report of an independent consultant ordered by the Commission in Docket No. UM 1654, and provide my analysis and recommendation regarding the sharing between the Company and ratepayers.

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[1] As discussed later in testimony, "optimization" refers to activities such as wholesale sales and purchases of gas, extraction of liquids from purchased gas, and others.

Q. What is your recommendation?

A. I recommend that the Commission retain the current shareholder/ratepayer sharing for net revenues from interstate and intrastate storage service and optimization activities using NW Natural's Mist underground storage facility, but increase the percentage of revenue that is passed through to ratepayers for system optimization activities conducted with non-Mist assets. Currently, ratepayers receive 67 percent of the "net margin" produced by non-Mist optimization activities and the Company retains 33 percent. For reasons discussed below, Staff recommends that the Commission increase the percentage provided to ratepayers to 90 percent and decrease the percentage retained by the Company to ten percent.

Q. Before proceeding with your testimony, please explain what you mean by "optimization."

A. In the early years, NWN's Mist optimization activities included the sale and trading of excess gas, existing Mist storage, and excess capacity on upstream pipeline contracts on the NWP and other upstream pipeline systems. Later, as opportunities arose, NWN added new wholesale trading activities such as the exchange of gas commodity contract purchases at different trading locations ("portfolio" optimization), the use of off-system underground storage contracts at Jackson Prairie and in Alberta, and the extraction of natural gas liquids.[2]

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[2] NW Natural/1300, Friedman/7.

Background and procedural history

Q. Please summarize the history of Mist.

A. Mist is owned and operated by NW Natural. The original utility storage and related pipeline development went into service in 1989. The Company completed subsequent Mist expansions for utility customers in 1991, 1997, and 1999. All of these expansions were for the sole purpose of serving core customers (those that take firm service), and accordingly, the capital costs of these pre-2000 expansions were included in utility rate base.

In the late 1990s, the Company perceived a future need for storage capacity at Mist to serve its core customers and a more immediate business opportunity to develop additional Mist Storage for the purpose of serving the broader Pacific Northwest regional market. NWN invested shareholder dollars in incremental capacity Mist in 2001, with subsequent shareholder investments for additional expansions in 2004, 2005, and 2007. To date, these non-rate-base investments have totaled over $65 million (original investments before depreciation and any recall by the utility). However, the incremental capacity is subject to “recall” for use as storage for NW Natural’s core customers. Once capacity is recalled, it is included in NWN’s rate base at its depreciated value.

Q. How are costs and benefits associated with use of the Mist facilities for non-utility purposes allocated between ratepayers and shareholders?

A. The first source of sharing is associated with the portion of Mist capability not yet recalled for core-service utility use, and falls under the category of Interstate Storage Services (ISS). Calculations for determining and sharing ISS margins operate as follows:

- Begin with total ISS revenues
- Deduct costs for O&M (*e.g.*, allocating payroll for the utility employees supporting storage transactions), leases, depreciation, interest, and property taxes
- The result equals "net revenues"
- Apply 20 percent of net revenues to offset costs to core utility customers
- Leave 80 percent of net revenues available to ownership.[3]

The second source of sharing arises from exploiting the ability to optimize Mist capability that frequently proves excess to the needs of core and storage customers. The calculations for determining and sharing margins in this Mist Optimization category operate as follows:

- Begin with Total Mist Optimization revenues
- Set margin shares according to the apportionment of Mist deliverability (recall of Mist capability produced an allocation of 59 percent to core utility service for 2016)

[3] NW Natural/1301, "Final Report on The Liberty Consulting Group's Evaluation of NW Natural's Optimization Activities."

- Apply 67 percent of the 59 percent of deliverability allocated to core-utility service to offset costs to core utility customers
- Leave 33 percent of the 59 percent of deliverability allocated to core-utility service available to ownership
- Apply 20 percent of the remaining 41 percent of deliverability to offset costs to core utility customers
- Leave 80 percent of the remaining 41 percent deliverability allocation available to ownership.[4]

The sharing arrangements described above are reflected in Schedule 185 established in the early 2000's. Schedule 185, titled "Special Annual Interstate and Intrastate Storage and Transportation Credit," applies to core customers receiving firm sales service, whose rates include costs related to the Mist storage facility.

Q. How are costs and benefits associated with use of non-Mist facilities, those used for utility purposes, allocated between ratepayers and shareholders?

A. The third source of sharing, Other Asset Optimization, arises from opportunities associated with assets such as upstream pipeline use, other storage, portfolio optimization, and the extraction of valuable natural gas liquids remaining in gas sourced from some regions in Canada. The calculations for determining and sharing those margins operate as follows:

- Begin with Other Optimization revenues

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[4] NW Natural/1301, "Final Report on The Liberty Consulting Group's Evaluation of NW Natural's Optimization Activities."

- Deduct compensation paid to the third-party asset manager
- The remaining amount equals margins subject to sharing
- Apply 67 percent of margins subject to sharing to offset costs to core utility customers
- Leave 33 percent of margins subject to sharing available to ownership.

These sharing arrangements are reflected in Schedule 186, titled "Special Annual Core Pipeline Capacity Optimization Credit." Under Schedule 186, eligible ratepayers are credited with the Oregon share of net margins received by NW Natural for the optimization of core customer pipeline, gas processing, commodity supply, and non-Mist storage capacity.

Q. Please explain how the issues related to allocation of sharing and optimization revenues are presented to the Commission in this proceeding.

A. In Docket No. UG 221, NW Natural's most recent general rate case, certain parties raised concerns about the sharing arrangements applied to NW Natural's Mist storage service and resource optimization activities under the company's Schedules 185 and 186. The parties reached a settlement in the rate case that extended the current sharing arrangement while requesting that a new docket be opened to evaluate Mist storage and optimization sharing. The Commission opened Docket No. UM 1654 for this purpose.

In Docket UM 1654, the Commission directed NW Natural to form a steering committee comprised of representatives of the Company, Commission Staff, the Citizens' Utility Board of Oregon, and the Northwest Industrial Gas Users (together, the "Steering Committee") for the purpose of identifying, retaining, and supervising a neutral third party to conduct an evaluation and cost allocation study of NW Natural's activities at Mist. Specifically, the matters to be addressed per the Commission order were:

- How costs related to NWN's Mist storage services are generated and shared; and
- Whether the current sharing arrangement (20% of net margins primarily shareholder funded on Schedule 185, and 67% of net margins for optimization activities that are primarily customer funded on Schedule 186) is fair and equitable.

The Liberty Consultant Group was hired to perform the independent evaluation. It submitted its "Final Report on The Liberty Consulting Group's Evaluation of NW Natural's Optimization Activities" (hereinafter "the Liberty Report") on November 17, 2017.[5]

[5] The Liberty Report can be found at NW Natural/1301.

Liberty Report

Q. Please describe the independent evaluation.

A. Liberty produced a chronology of events in the development of the Mist facilities and to ensure parity of information among stakeholders. This information was iteratively obtained through meetings with stakeholders and NW Natural as well as information requests and interviews. Information collected included detailed financial information about the development and operation of the facility including Capital Expenditures and Revenue and Expenses for both customer and shareholder assets.

Q. Please describe Liberty's approach to cost analysis.

A. Liberty compared actual revenues and costs with historical expectations, factoring in risk and benefit to the Company and ratepayers. Liberty's stated goal was to determine to what degree realistic expectations for customers and ownership have been met across the period from 2000 to 2016. To analyze these factors Liberty considered a range of alternate approaches in the two main categories of sharing - - Mist and asset optimization. For each of those alternatives, variations were analyzed. For each variation, ownership and customer results were calculated using a simplified model. Liberty also performed a benchmarking study to evaluate optimization activity risks, costs, benefits, and comparisons of customer/ ownership sharing percentages with an extensive group of local gas distribution utilities across the country.[6]

[6] NW Natural/1301.

Q. Please summarize the conclusions in the Liberty Report.

A. With respect to the sharing of net revenues from interstate and intrastate storage service and Mist assets, Liberty concluded:

> The original design, the historical results, the expected results, the continuation of similar risks and opportunities, and the comparatively smaller dollar amounts at stake provide significant support for continuing the current sharing arrangements for interstate and intrastate Mist storage.[7]

With respect to the sharing of net revenues from optimization activities using non-Mist assets, Liberty concluded:

> Substantial room exists to reduce ownership's share of optimization margins to bring them closer into line with those established in other jurisdictions, while still leaving management with a sufficiently strong incentive to perform optimization in complex and dynamic markets. [8]

Q. What is the rationale for Liberty's conclusion regarding non-Mist optimization activities?

A. Liberty notes that the net revenues at issue are those from "enhanced optimization activities" that are conducted by a third-party asset manager, Tenaska Marketing Ventures (TMV), hired by NW Natural. Liberty notes that use of asset managers for optimization activities is not uncommon in the industry and that TMV's services are deducted from the net revenues[9] and accordingly, shared by ratepayers and the Company.

Based on its survey of other utilities and jurisdictions, Liberty concluded that NW Natural's efforts in working with the third-party asset manager are not

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[7] NW Natural/1301, Liberty Report, p. 9.
[8] NW Natural/1301, Liberty Report, p. 9
[9] See NW Natural/1301, Liberty Report, p. 44.

beyond those generally seen in the industry.[10] However, Liberty concludes that the percentage of optimization revenues that NW Natural passes along to customers is at the low end of the range seen by Liberty (meaning, least remunerative to customers). Based on these findings, Liberty concludes that there is support for reducing the Company's sharing percentage for optimization employing assets paid for by ratepayers.[11]

[10] NW Natural/1301/Liberty Report, p. 37.
[11] NW Natural/1301, Liberty Report, pp. 37-38.

NORTHWEST NATURAL'S POSITION

Q. Do NW Natural's arguments align with Liberty's conclusions?

A. Not entirely. NW Natural agrees with Liberty's conclusion that the circumstances support maintaining the current sharing percentages for Storage Services. However, the Company disagrees with Liberty that NW Natural's share of net revenues produced by optimization activities is higher relative to that allowed by other jurisdictions or that there is room to decrease that sharing percentage and still achieve the same objectives obtained with the current sharing percentage. NWN asserts that Liberty's benchmarking survey is not representative of the complexity or cost of the Company's optimization activities.

STAFF'S ANALYSIS AND RECOMMENDATION

Q. Does Staff agree with Liberty and NW Natural that the sharing percentages for net revenues produced by Mist interstate and intrastate storage service should remain unchanged?

A. Yes. Liberty thoroughly analyzed the breakdown and use of ratepayer-funded and shareholder-funded assets at Mist and the appropriate matching of costs, risks and benefits of Mist storage services and optimization activities. Liberty found that the current allocation of net revenues from Mist storage services and optimization activities is well supported. Staff does not disagree.

Q. Does Staff agree with NWN's conclusion that its share of revenues from optimization activities that employ non-Mist assets should not be decreased?

A. No. Staff recommends that the Commission decrease NWN's share of net revenues produced by optimization activities that employ non-Mist assets. The current sharing is 67 percent of net revenues to ratepayers and 33 percent to the company. Staff recommends changing this sharing to 90 percent for ratepayers and 10 percent for the Company.

Q. Please explain the rationale for this recommendation.

A. The support for reducing the percentage retained by the Company is easily found in the "Summary of Key Conclusions in the Liberty Report" most notably Liberty's conclusions that:

- NW Natural management remains well-engaged in overseeing the TMV relationship and the asset manager's activities, but again not to a degree outside our experience in the industry.
- NW Natural management does not bear unusual risk associated with the optimization activities that TMV undertakes and that management oversees.
- Optimization comprises a core responsibility of prudent management by gas distribution companies, who, like NW Natural, have significant supply and transportation portfolios.
- We have examined optimization sharing arrangements across the country – some from our direct experience and others through an extensive set of contacts with knowledgeable public service commission staff members.
- We conducted a very broad, nationwide survey of margin-sharing arrangements, against which we could perform robust comparisons of NW Natural's optimization sharing methods and proportions.
- Those comparisons demonstrated that the percentage share available to offset NW Natural core-customer rates falls at the lowest end (least remunerative for customers) of the observed range for jurisdictions that provide for sharing.[12]

Q. NW Natural asserts that its optimization activities are more sophisticated than those surveyed by Liberty and that to the extent

[12] NW Natural/1301, pp. 37-38.

the other LDCs surveyed used asset managers, it is unlikely they "have an arrangement that encourages or allows the type of sophisticated transactions engaged in by NW Natural's Asset Manage on the Company's behalf."[13] Does your reading of the Liberty Report support these assertions?

A. No. Liberty notes that third-party asset managers such as the manager used by NW Natural, Tenaska Marketing Ventures (TMV), "operate[] independently of both local gas distribution utilities and producers[,]" and "specialize in gas marketing and trading."[14] With respect to TMV, Liberty reports "TMV operates as a significant market participant in its own right, owning or controlling its own gas-supply resources.[15] Liberty also reports that "TMV also has other asset-management clients in the Pacific Northwest and in other gas-producing and consuming regions in the U. S. and Canada."[16]

Given Liberty's description of TMV, Staff finds it unlikely that NW Natural's relationship with TMV is unusual in the industry. This may be especially true in light of the fact the Federal Energy Regulatory Commission (FERC) has adopted regulations intended to standardize asset management agreements.[17]

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[13] NW Natural/1300, Friedman/33.
[14] NW Natural/1301, Liberty Report, p. 44.
[15] NW Natural/1301, Liberty Report, p.44.
[16] NW Natural/1301, Liberty Report, p. 44.
[17] NW Natural/1301, Liberty Report, p. 49 ("We also note that the FERC has standardized asset management to a considerable degree. In its Order No. 712, issued June 19, 2008, the FERC revised its regulations governing natural gas

Finally, Liberty took special care to address NW Natural's claim that NW Natural's contribution to system optimization activities warranted a greater level of remuneration than received by other LDCs:

> We have examined the scope of asset optimization at many gas utilities. Comparing them with what management does here, we have not identified any material sources of risk here that do not exist elsewhere in our experience. We also did not find anything in the asset management agreement with TMV or in our discussions with management and TMV about activities here that suggest particularly extraordinary efforts to optimize. We certainly have no reason to question the commitment of management to optimization or to doing so with due regard for risk. Neither do we have any reason to criticize the performance of either management or TMV, although we do note that our work scope did not include a management audit of performance.[18]

Q. Why do you recommend that the Company retain ten percent of net revenue?

A. Allowing the Company to retain a percentage of the net revenue rewards the Company and also may incent the Company. Liberty notes that of the 18 jurisdictions for which it has information, all but five require the companies to pass *all* net revenues to ratepayers.[19] Although it is appropriate to reduce the amount of optimization revenues that NW Natural is allowed to retain, Staff does not think a reduction to zero is appropriate. Staff believes ten

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pipelines to facilitate asset-management arrangements, among other things. 11 Those regulations were further clarified in 2015.xlii As a result, the terms and conditions governing asset management agreements (AMAs) are generally similar.").

[18] NW Natural/1301, Liberty Report, p. 49.
[19] NW Natural/1301, Liberty Report, p. 49.

percent sharing is sufficiently meaningful to achieve the objectives stated above.[20]

Q. Please re-state your recommendations for sharing of net revenues of Mist and non-Mist optimization activities and from Mist storage service?

A. Staff recommends no change to the current sharing percentages for net revenue margins for Mist storage service and optimization activities (Schedule 185). Staff recommends reducing NW Natural's share of net revenue from non-Mist optimization activities from 33 percent to 10 percent, and increasing the ratepayers' share from 67 percent to 90 percent (Schedule186).

Q. Does this conclude your opening testimony?

A. Yes.

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[20] See NW Natural/1301, Liberty Report, p. 61 ("If the goal in Oregon remains to provide a sufficient incentive for management to commit fully to asset optimization, then the experience of our large sample group compels a conclusion that the prevailing view is that a lower share for ownership will nevertheless provide strong incentives to maximize performance without incurring undue risk.").

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WITNESS: DEBORAH GLOSSER

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 1301

Witness Qualification Statement

May 4, 2018

WITNESS QUALIFICATION STATEMENT

NAME:	Deborah Glosser
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Sr. Utility Analyst Energy Resources and Planning
ADDRESS:	201 High St. SE Ste. 100 Salem, OR 97301-3612
EDUCATION:	Bachelor of Arts, Computational Linguistics, The Ohio State University Juris Doctorate, Law, Duquesne University Master of Science, Geophysics, University of Pittsburgh
EXPERIENCE:	I have been employed at the Oregon Public Utility Commission (Commission) since October of 2016. My responsibilities include providing engineering and model analysis for filings made by electric utilities, related to their system operations and resource procurement and planning. Prior to working for the Commission I was a research geophysicist fellow at the United States Department of Energy. There, I developed physical and statistical models related to fossil energy resources. I published several peer review and technical papers related to energy exploration. I also served as a technical expert on a national laboratory task force, where we were tasked with developing science based recommendations to inform the improvement of federal regulation of underground natural gas storage well safety. Prior to my work at US DOE, I worked as an attorney in private industry.