EXHIBIT B

BEFORE THE

WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

NW NATURAL

SUPPORTING MATERIALS

Mist Recall Memo

NWN WUTC Advice No. 24-13 / UG-_____

September 13, 2024

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Date: May 1, 2024

To: File; Distribution list

From: Dave Weber and Brody Wilson

Subject: Recall and Transfer of Storage Assets from Interstate to Core Service

Summary
The purpose of this memo is to document the recall of Mist storage assets from Interstate Storage to Core customers and the associated transfer of $4,522,147 in net utility plant from Interstate Storage to Core customers.

This recall is based on core customer supply needs as identified in the 2022 Integrated Resource Plan (IRP), in conjunction with our current gas supply portfolio. The Mist storage requirement for the 2024-25 heating season is 325,000 Dth/day as shown in Attachment A. This is an incremental Core customer need of 20,000 Dth/day. The assets being recalled include reservoir capacity, of which 15,000 Dth/day is the remaining Reichhold reservoir capacity available to be recalled by Core and 5,000 Dth/day of Sapphire project reservoir capacity (~7% of this project) which includes the Busch, Schlicker and Als reservoirs. Miller Station and other assets are also being transferred as discussed below.

The transfer of Mist deliverability and capacity from Interstate Storage to Core customers is effective as of May 1, 2024. Customer impacts of this recall will begin on November 1, 2024, when the next PGA is implemented.

Reservoirs
Mist reservoirs are to be recalled starting with the oldest, most depreciated projects and then moving to the next oldest through time. The Reichhold reservoir is the oldest reservoir project that was constructed by Interstate Storage. Reichhold's total capacity is 110,000 Dth/day and 95,000 Dth/day has already been recalled to Core customers. This recall includes the remaining 15,000/110,000 of Reichhold's outstanding investment, and after recall Reichhold is entirely a Core customer asset. The 2024 recall of Reichhold deliverability includes $4,165,941 in net utility plant with $278,300 of associated deferred taxes for a net rate base impact of $3,887,641 as shown in Attachment B.

The next oldest reservoir project on the Interstate Storage books is the Sapphire project which includes the Busch, Schlicker and Als reservoirs. This project includes total reservoir deliverability of 70,000 Dth/day of which 5,000 Dth/day is being recalled in this 2024 recall. This recall of Sapphire project deliverability equals $352,304 in net utility plant with $93,268 of associated deferred taxes for a net rate base impact of $259,036 as shown in Attachment B.

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The combined total transfer of recalled Mist assets related to reservoirs is $4,518,245 in net utility plant with $371,568 of associated deferred taxes for a net rate base impact of $4,146,677 as shown in Attachment B.

Sebsequent reservoir projects on the Interstate books include Pearl 1 (Als and Bruer Reservoirs) with 50,000 Dth/day of reservoir deliverability and Pearl 2 (Flora and Meyer Reservoirs) with 70,000 Dth/day of reservoir deliverability.

Compression

We note that as of this recall date, compression is sufficiently allocated to Core customers as follows: The GC300, GC400 and GC500 compressors were original to the Miller Station facility prior to any Interstate expansion. The GC600 was added later and is subject to recall. The GC600 has a maximum compressed flow rate of 255 MMscfd which is to be recalled consistent with Core and Interstate needs through to the end of the Mist Recall process.

There have been several modeling improvements to our Mist Storage deliverability modeling since the last recall took place in 2015. First, the heat content of the gas stored at Mist has increased and stabilized between 1060 btu/cf and 1065 btu/cf, which increases the total energy deliverability and storage capacity at Mist. Second, an analysis of peak day Mist deliverability has revealed that while we expect to withdrawal the 515 MMscfd maximum facility deliverability for several hours on a peak day, this would not be sustained for the full 24-hour period. This modeling indicates that we should expect 480 MMscfd over the full 24-hour period. As such, we are reallocating the Mist compression assets over this updated denominator, which at a 1062.5 btu/cf heat content (mid-point of recently observed range) would be 510,000 Dth/day of deliverability. The following table allocates the existing compression to this 510,000 Dth/day of deliverability and we note that 28% of the GC600 would be allocated to Core after this recall and the current accounting records will approximate this allocation.

	MMSCFD	Allocation	Dth @ 1062.5	Core	ISS
GC300	55	51	54,466	54,466	-
GC400	55	51	54,466	54,466	-
GC500	150	140	148,544	148,544	-
GC600	255	238	252,524	65,524	185,000
Total	**515**	**480**	**510,000**	**325,000**	**185,000**

Miller Station and other assets

A portion of Miller Station and other asset costs currently in Interstate Storage should be allocated to Core and are included in the amounts being recalled. These assets will serve utility customers and are being allocated using the remaining deliverability to be recalled. The current recall includes 20,000/205,000 of these assets, leaving 185,000 Dth for future recall. The total 2024 recall of Miller Station and other assets equals $3,902 in net utility plant with $860 of associated deferred taxes for a net rate base impact of $3,042, as shown in Attachment C.

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Dehydration

There are two dehydration units at Mist. The large dehydration unit, which was in-service prior to the startup of Interstate Storage, has a capacity of 350 MMscfd. The small dehydration unit, which was constructed to allow for Interstate Storage service, has a capacity of 165 MMscfd. Accordingly, this recall does not impact the small dehydration unit's allocation to Interstate Storage. This unit will be subject to recall in the future.

System Compression

There are two system compressor sites in addition to the compression at Miller Station. These compressor sites, Molalla and Deer Island, were constructed for Interstate Storage and enable the full deliverability of Mist Storage by moving Mist supplies onto NW Pipeline for re-delivery to other citygates. Molalla compression is rated at 80 MMscfd and Deer Island is rated at 50 MMscfd. This cumulative 130 MMscfd of system compression is still used to meet Interstate customer deliverability requirements and no recall of these assets is required at this time.

Storage Capacity

Associated with the increased 325,000 Dth/day of Core customer deliverability is 12.799 Bcf of storage capacity which includes the remaining 15,000/110,000 for Reichhold reservoir and 5,000/70,000 for the Sapphire project including the Busch, Schlicker and Als reservoirs. This recall increases Core storage capacity by a total of 1.149 Bcf. The allocation of working gas between Core and Interstate is shown in Attachment D.

Dave Weber, Vice President Gas Supply & Utility Support Services

Brody Wilson, Interim CFO, VP, Treasurer & Chief Accounting Officer

Attachments:

Attachment A: Key Resource Decisions – Mist Recall
Attachment B: Reichhold and Sapphire Rate Base Recall Calculations
Attachment C: Miller Station and Other Assets Rate Base Recall Calculation
Attachment D: Mist Storage Working Gas Volume

Attachment A: Key Resource Decisions – Mist Recall

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Peak Day Resource Summary

Resource Type	Max. Daily Rate (Dth/day)
Net Deliverability over Upstream Pipeline Capacity	343,237
Off-System Storage (Jackson Prairie only)	46,030
On-System Storage - Mist	305,000
On-System Storage - Portland LNG	78,000
On-System Storage - Newport LNG	132,840
Recallable Capacity and Supply Agreements	31,000
Citygate Deliveries	-
On-System Supplies	1,200
Segmented Capacity (not primary firm)	60,700
Total Peak Day Resources	998,007

	(Dth/day)
2024-2025 Design Day Forecast	1,018,533

	(Dth/day)
Incremental Resource Need for 2024-2025 Winter	20,526
Mist Recall Rounded to the Nearest 5,000	20,000
Total Mist Deliverability Requirement for the Core Utility	325,000

ATTACHMENT B
2024 Interstate Storage Recall of Reichhold and Sapphire Projects Into Core
Effective May 1, 2024

Gross Plant:	**Total Assets Reichhold**	**Recall of Reichhold Assets Into Core**	**Total Assets Sapphire**	**Recall of Sapphire Assets Into Core**	**Total Recall of Reichhold & Sapphire Assets Into Core**
Offsite/Gathering/Meters/Regs	$ 2,264,160	$ 814,119	$ 618,831	$ 53,163	$ 867,282
Cushion Gas	$ 704,273	$ 96,037	$ -	$ -	$ 96,037
Reservoir	$ 6,019,613	$ 1,098,984	$ -	$ -	$ 1,098,984
Wells	$ 2,749,070	$ 2,749,070	$ 4,907,432	$ 341,453	$ 3,090,523
Lines	$ 53,802	$ 53,802	$ 1,457,528	$ 102,275	$ 156,078
Total Gross Plant	$ 11,790,917	$ 4,812,012	$ 6,983,792	$ 496,892	$ 5,308,904
Accumulated Depreciation:					
Offsite/Gathering/Meters/Regs		$ (177,149)		$ (6,802)	$ (183,951)
Cushion Gas		$ -		$ -	$ -
Reservoir		$ (389,985)		$ -	$ (389,985)
Wells		$ (77,685)		$ (92,920)	$ (170,605)
Lines		$ (1,253)		$ (44,866)	$ (46,119)
Total Accumulated Deprecation		$ (646,072)		$ (144,588)	$ (790,660)
Net Plant		$ 4,165,941		$ 352,304	$ 4,518,245
Deferred Tax Liabilities:					
Offsite/Gathering/Meters/Regs		$ (50,730)		$ (12,273)	$ (63,003)
Cushion Gas		$ -		$ -	$ -
Reservoir		$ (187,699)		$ -	$ (187,699)
Wells		$ (33,669)		$ (65,796)	$ (99,465)
Lines		$ (6,202)		$ (15,199)	$ (21,401)
Total Deferred Tax Liabilities		$ (278,300)		$ (93,268)	$ (371,568)
Rate Base		$ 3,887,641		$ 259,036	$ 4,146,677

ATTACHMENT C
2024 Interstate Storage Recall of Other Assets Into Core
Effective May 1, 2024

	Total Assets Other	Recall of Other Assets Into Core
Gross Plant:		
Other (See Note 1 below)	$ 71,665	$ 7,000
Other Additions	$ -	$ -
Total Gross Plant	$ 71,665	$ 7,000
Accumulated Depreciation:		
Other (See Note 1 below)		$ (3,098)
Total Accumulated Deprecation		$ (3,098)
Net Plant		$ 3,902
Deferred Tax Liability:		
Other (See Note 1 below)		$ (860)
Total Deferred Tax Liability		$ (860)
Rate Base		$ 3,042

Note 1: This represents the cost of miscellanous other assets that are recorded to non-utility, but do not fall into a specific project or reservoir location.

ATTACHMENT D
Mist Storage Working Gas Volume
Effective May 1, 2024

Pool	Total Physical Capacity					2024 Allocation	
	Original Pressure (Bcf)	5% Delta Pressure (Bcf)	10% Delta Pressure (Bcf)	Increased utilization (Bcf)	Total (Bcf)	Core	Interstate
Als	1.925	0.200	0.290	0.435	2.850	2.272	0.578
Bruer	3.450	0.275	0.350	0.272	4.347	3.680	0.667
Busch	-	-	0.310	0.057	0.367	-	0.367
Flora	3.070	0.255	0.250	0.356	3.931	3.376	0.555
Meyer	1.500	-	-	0.036	1.536	-	1.536
Reichhold	2.425	0.250	0.310	0.325	3.310	3.310	-
Schlicker	0.600	-	0.475	0.049	1.124	0.161	0.963
Total Bcf	12.970	0.980	1.985	1.530	17.465	12.799	4.666