

Gas Transmission Northwest Corporation Pipeline Integrity Plan (PIP) Filing for 2007

GTN's Total Qualifying Costs for the year ended December 31, 2007 were \$9,343,743. As such, there will be no PIP Surcharge for the PIP Surcharge Period of April 1, 2008 through March 31, 2009. Details of the program spending incurred for the year 2007 follow, along with schedules showing the calculation of the Total Qualifying Costs for the year.

Expense Program

Aerial Surveys

- **Description of Work:** The Aerial Patrol/Aerial Survey program monitors for pipeline leaks and for unauthorized activity on the pipeline right of way. As per the Integrity Management Plan (Additional Preventive and Mitigative Measures) the treat of third party interference is partially managed through increased frequency of aerial patrols
- **Pipeline Integrity Justification:** To prevent integrity threats to the pipeline and to identify potential leaks.
- **Location:** The work occurs along the length of the GTN pipeline right of way via aerial observation.
- **Compliance:** Subpart O 192.935, Subpart M 192.613, Subpart M 192.705, Subpart M 192.706.
- **Program/Project Cost:** \$162,761

Cathodic Protection

- **Description of Work:** Includes diagnostic testing, test lead repairs, cable breaks, equipment repairs, test lead survey work, close interval surveys, post remedial, junction box surveys and the program development efforts on GTN's cathodic protection system. All these endeavours lead to a reduction in corrosion on the pipeline.
- **Pipeline Integrity Justification:** Cathodic protection protects areas where the pipeline protective coating is lacking and to maintain the cathodic protection system infrastructure.
- **Location:** The entire GTN system.
- **Compliance:** Subpart I 192.463
- **Program/Project Cost:** \$430,287

Corrosion

- **Description of Work:** As per the Integrity Management Baseline Assessment Plan the GTN A line was Inline inspected in 2006 utilizing a magnetic flux leakage tool to analyze and identify corrosion issues on the A line system. In 2007 seven anomalies reported from the ILI were excavated

and repaired, as required. Also, the external corrosion threat on the GTN B line and Medford Lateral was assessed through the External Corrosion Direct Assessment (ECDA) process. This process consisted of an engineering assessment which identified 11 locations for inspection. Excavations were completed at the 11 locations enabling direction examination for corrosion.

- **Pipeline Integrity Justification:** To assess and manage the integrity risk by identifying and repairing areas of corrosion.
- **Location:** GTN A Line and Medford Lateral.
- **Compliance:** Subpart O 192.933
- **Program/Project Cost:** \$4,586,161

Geotechnical

- **Description of Work:** Geotechnical assessments along the length of the right of way to assess landslide and fault zone geotechnical threats. Engineering analysis work on various water crossings. As per the Integrity Management Plan (Threat Identification, Weather and Outside Forces) the threat of Geotechnical issues along the pipeline must be addressed.
- **Pipeline Integrity Justification:** Reduce and eliminate geotechnical integrity risks.
- **Location:** Geotechnical assessments for fault zone and landslide geotechnical threats occur along the length of the pipeline. Water crossing projects were focused at an identified group of river crossing locations where further integrity analysis is required.
- **Compliance:** Subpart O 192.917, Subpart M 192.613
- **Program/Project Cost:** \$132,654

Stress Corrosion Cracking (SCC)

- **Description of Work:** As per the Integrity Management Baseline Assessment Plan, the threat of Stress Corrosion Cracking (SCC) on the GTN A line was assessed through the Stress Corrosion Direct Assessment (SCCDA) process. An engineering assessment was completed which identified 12 locations for inspection. Excavations were completed at the 12 locations enabling direct examination for SCC.
- **Pipeline Integrity Justification:** To assess the threat of SCC on the GTN B line.
- **Location:** GTN B line.
- **Compliance:** Subpart O 192.933
- **Program/Project Cost:** \$2,562,920

Compliance Program Management

- **Description of Work:** This work comprises the activities required to develop and manage the Integrity Program as per the Sub Part O Integrity Management Plan.
- **Pipeline Integrity Justification:** This work is required to develop and manage the integrity programs.

- **Location:** n/a
- **Compliance:** General requirement of the entire Subpart O document.
- **Program/Project Cost:** \$326,512

Total Expense: \$8,201,294

Total Expense (Subpart O): \$7,771,008

Capital Program

Cathodic Protection

- **Description of Work:** To replace ground beds and rectifiers.
- **Pipeline Integrity Justification:** Cathodic protection protects areas where the pipeline protective coating is lacking and to maintain the cathodic protection system infrastructure. Periodically ground beds and rectifiers need to be replaced to ensure proper functioning of the cathodic protection system.
- **Location:** Starbuck Station 7, Starbuck Station 8, Bend Deep and Fall River locations.
- **Compliance:** Subpart I 192.463
- **Program/Project Cost:** \$691,535

Corrosion

- **Description of Work:** Pipeline modifications to allow for inline inspection.
- **Pipeline Integrity Justification:** As per the Integrity Management Plan, the GTN A line is recognized to have a corrosion threat. As per the Baseline Assessment Plan, the A line was inline inspected in 2007 to assess the threat of corrosion. To enable the inline inspection modifications were required along the pipeline consisting of the installation of a launcher barrel and piping modifications at numerous compressor stations.
- **Location:** Kingsgate, Stations 3, 4, 5, 6, 7, 8 and 9.
- **Compliance:** Subpart O 192.933
- **Program/Project Cost:** \$1,823,730

Damage Prevention

- **Description of Work:** As per the Integrity Management Plan (Additional Preventive and Mitigative Measures) the treat of a pipeline rupture can be reduced through the installation of linebreak controls. In 2007 actuators were replaced at 8 locations and actuators were modified at 40 locations to enable line break control.
- **Pipeline Integrity Justification:** Installation of valve actuators to reduce gas loss, shut off flow to the pipeline in the case of a rupture, and for isolating pipe sections when doing maintenance.
- **Location:** Valve sites M-2, M-3, and M-4 at Medford Lat and lateral side valves at Coyote Springs Lateral.
- **Compliance:** Subpart O 192.935

- **Program/Project Cost:** \$2,238,299

Class Location Upgrade

- **Description of Work:** Replace pipe as needed due to changes in Class location along the pipeline.
- **Pipeline Integrity Justification:** Pipe replacements are required by code and are triggered by population changes within the vicinity of the pipeline right of way.
- **Location:** Pipe was replaced at two locations along the A line.
- **Compliance:** Subpart L 192.614, Subpart L 192.609
- **Program/Project Cost:** \$2,632,157

Total Capital: \$7,385,721

Total Capital (Subpart O): \$4,062,029

**Gas Transmission Northwest Corporation
Pipeline Integrity Plan (PIP) Filing for 2007**

Calculation of Total Qualifying Costs

Cost tracking requirements:	Schedule	Amount
Gross Plant (excludes Work in Progress of \$163,747)	1	\$ 7,221,974
Accumulated Depreciation	1	(75,349)
Net Plant at December 31, 2007	1	<u>7,146,626</u>
Accumulated Deferred Tax Liability at December 31, 2007	2	<u>(105,419)</u>
PIP Rate Base at December 31, 2007		<u>7,041,206</u>
Pre-tax Return - 15% of PIP Rate Base		1,056,181
Annual Depreciation Expense on PIP Plant	3	86,258
Actual PIP-related O&M Expense		<u>8,201,294</u>
Total Qualifying Costs		<u><u>\$ 9,343,733</u></u>

Note:

Threshold of \$12M not reached therefore there will be no surcharge during the 2008 - 2009 PIP Surcharge Period.

Gas Transmission Northwest Corporation
2007 PIP Filing
SCHEDULE 1 - NET PLANT

Description	Account	Reference	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
Gross Plant	367.0	Appendix 1.1	\$ 127,300	\$ 796,678	\$ 1,696,701	\$ 4,564,976	\$ 5,543,646	\$ 5,881,700	\$ 6,144,273	\$ 6,323,434	\$ 6,536,338	\$ 6,984,526	\$ 7,155,288	\$ 7,221,974
Accumulated Depreciation	367.0	Appendix 1.1	0	158	1,486	(6,318)	1,290	10,530	20,109	30,349	40,888	51,782	63,423	75,349
Net Plant			\$ 127,300	\$ 796,519	\$ 1,695,215	\$ 4,571,294	\$ 5,542,356	\$ 5,871,170	\$ 6,124,164	\$ 6,293,084	\$ 6,495,449	\$ 6,932,744	\$ 7,091,865	\$ 7,146,626

**Gas Transmission Northwest Corporation
2007 PIP Filing
SCHEDULE 2 - DEFERRED TAX LIABILITY**

Deferred Tax Expense

Description	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Total	
Tax Depreciation	Appendix 1.2	\$ 530	\$ 3,573	\$ 8,073	\$ 24,008	\$ 30,125	\$ 32,539	\$ 34,727	\$ 36,519	\$ 39,180	\$ 46,650	\$ 50,919	\$ 54,254	\$ 361,099
Book Depreciation	Schedule 3	0	212	1,328	2,828	7,608	9,239	9,803	10,240	10,539	10,894	11,641	11,925	86,258
Timing difference		530	3,361	6,745	21,180	22,516	23,300	24,925	26,279	28,641	35,756	39,278	42,328	274,841
Tax rate - 38.3565%		38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%	38.36%
Deferred Tax Expense		\$ 203	\$ 1,289	\$ 2,587	\$ 8,124	\$ 8,637	\$ 8,937	\$ 9,560	\$ 10,080	\$ 10,986	\$ 13,715	\$ 15,066	\$ 16,236	\$ 105,419

Accumulated Deferred Tax Liability

Description	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
Beginning balance	\$ -	\$ 203	\$ 1,493	\$ 4,080	\$ 12,204	\$ 20,840	\$ 29,777	\$ 39,338	\$ 49,417	\$ 60,403	\$ 74,118	\$ 89,184
Deferred taxes	203	1,289	2,587	8,124	8,637	8,937	9,560	10,080	10,986	13,715	15,066	16,236
Accumulated Deferred Tax Liability	\$ 203	\$ 1,493	\$ 4,080	\$ 12,204	\$ 20,840	\$ 29,777	\$ 39,338	\$ 49,417	\$ 60,403	\$ 74,118	\$ 89,184	\$ 105,419

Gas Transmission Northwest Corporation
2007 PIP Filing
SCHEDULE 3 - DEPRECIATION EXPENSE

Description	Account	Dep. Rate	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
MAINS	367.0	2.00%	\$ -	\$ 212	\$ 1,328	\$ 2,828	\$ 7,608	\$ 9,239	\$ 9,803	\$ 10,240	\$ 10,539	\$ 10,894	\$ 11,641	\$ 11,925
DEPRECIATION EXPENSE			\$ -	\$ 212	\$ 1,328	\$ 2,828	\$ 7,608	\$ 9,239	\$ 9,803	\$ 10,240	\$ 10,539	\$ 10,894	\$ 11,641	\$ 11,925
YTD DEPRECIATION EXPENSE			\$ -	\$ 212	\$ 1,540	\$ 4,368	\$ 11,976	\$ 21,216	\$ 31,018	\$ 41,259	\$ 51,798	\$ 62,692	\$ 74,333	\$ 86,258

Note:
Depreciation begins in the month following the in-service date.

Gas Transmission Northwest Corporation
2007 PIP Filing
APPENDIX 1.1 - CAPITAL
Gross Plant

Description	Reference	Beg. Bal.	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
Beginning balance		0	0	127,300	796,678	1,696,701	4,564,976	5,543,646	5,881,700	6,144,273	6,323,434	6,536,338	6,984,526	7,155,288
MAINS - in service additions	Appendix 1.2	0	127,300	669,377	900,023	2,868,275	978,671	338,053	262,573	179,161	212,904	448,188	170,762	66,686
Gross Plant		0	127,300	796,678	1,696,701	4,564,976	5,543,646	5,881,700	6,144,273	6,323,434	6,536,338	6,984,526	7,155,288	7,221,974

Accumulated Depreciation

Description	Account	Beg. Bal.	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
Beginning balance		\$ -	\$ -	\$ -	\$ 212	\$ 1,540	\$ 4,368	\$ 11,976	\$ 21,216	\$ 31,018	\$ 41,259	\$ 51,798	\$ 62,692	\$ 74,333
MAINS - Depreciation	367.0	0	0	212	1,328	2,828	7,608	9,239	9,803	10,240	10,539	10,894	11,641	11,925
		0	0	212	1,540	4,368	11,976	21,216	31,018	41,259	51,798	62,692	74,333	86,258
RETIREMENTS IN PROCESS (RWIP)		0	0	(54)	(54)	(10,686)	(10,686)	(10,686)	(10,909)	(10,909)	(10,909)	(10,909)	(10,909)	(10,909)
Accumulated Depreciation		\$ -	\$ -	\$ 158	\$ 1,486	\$ (6,318)	\$ 1,290	\$ 10,530	\$ 20,109	\$ 30,349	\$ 40,888	\$ 51,782	\$ 63,423	\$ 75,349

Net Plant

Description	Account	Beg. Bal.	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
MAINS - Gross Plant	367.0	\$ -	\$ 127,300	\$ 796,678	\$ 1,696,701	\$ 4,564,976	\$ 5,543,646	\$ 5,881,700	\$ 6,144,273	\$ 6,323,434	\$ 6,536,338	\$ 6,984,526	\$ 7,155,288	\$ 7,221,974
Accumulated Depreciation		0	0	158	1,486	(6,318)	1,290	10,530	20,109	30,349	40,888	51,782	63,423	75,349
Net Plant		\$ -	\$ 127,300	\$ 796,519	\$ 1,695,215	\$ 4,571,294	\$ 5,542,356	\$ 5,871,170	\$ 6,124,164	\$ 6,293,084	\$ 6,495,449	\$ 6,932,744	\$ 7,091,865	\$ 7,146,626

Gas Transmission Northwest Corporation
2007 PIP Filing
APPENDIX 1.2 - TAX DEPRECIATION

Description	Account	Beg. Bal.	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Total
MAINS - in service additions	367.0	0	\$ 127,300	\$ 669,377	\$ 900,023	\$ 2,868,275	\$ 978,671	\$ 338,053	\$ 262,573	\$ 179,161	\$ 212,904	\$ 448,188	\$ 170,762	\$ 66,686	\$ 7,221,974
Tax Depreciation for Year 1 (2007)		5%													
Monthly depreciation															
Jan			530	530	530	530	530	530	530	530	530	530	530	530	6,365
Feb				3,043	3,043	3,043	3,043	3,043	3,043	3,043	3,043	3,043	3,043	3,043	33,469
Mar					4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	45,001
Apr						15,935	15,935	15,935	15,935	15,935	15,935	15,935	15,935	15,935	143,414
May							6,117	6,117	6,117	6,117	6,117	6,117	6,117	6,117	48,934
Jun								2,415	2,415	2,415	2,415	2,415	2,415	2,415	16,903
Jul									2,188	2,188	2,188	2,188	2,188	2,188	13,129
Aug										1,792	1,792	1,792	1,792	1,792	8,958
Sep											2,661	2,661	2,661	2,661	10,645
Oct												7,470	7,470	7,470	22,409
Nov													4,269	4,269	8,538
Dec														3,334	3,334
Total Tax Depreciation			\$ 530	\$ 3,573	\$ 8,073	\$ 24,008	\$ 30,125	\$ 32,539	\$ 34,727	\$ 36,519	\$ 39,180	\$ 46,650	\$ 50,919	\$ 54,254	\$ 361,099

Note:

(1) Assumed all 2007 additions are pipeline assets, using 15 Yr, Half-Year Convention under MACRS