

**Utilities and Transportation Commission
Pipeline Safety
Operator Annual Review Checklist**

A completed **Annual Review form and Cover Letter/Field Report** must be submitted to the Chief Engineer within **30 days** from completion of the inspection.

Inspection Report			
Inspection ID/Docket Number	Inspection number 8059		
Inspector Name & Submit Date	Scott Rukke, May 7, 2020		
Chief Eng Name & Review/Date	Joe Subsits, 5/8/2020		
Operator Information			
Name of Operator:	Northwest Natural Gas Co.	OP ID #:	13840
Records Location:	Portland Oregon, (Reviewed electronically due to Covid-19)		
Inspection Date:	Various between January 2020 and May 2020. Timeline below in comments. Exit interview on 5/7/2020		

<p>Review Summary:</p> <p>This is a review of all major operator headquarters programs mandated by the CFR. There are no non-compliances noted in this inspection. Some questions were answered U/No meaning No, not Unsat. Some programs such as DIMP are currently being audited as a full inspection and some related questions were deferred to the audits.</p> <p>Due to Covid-19 all records were reviewed electronically through email and Skype and the original in person headquarters meeting scheduled for 4/6/2020 in NWN's Portland office was cancelled.</p> <p>Form sent to NWN on 4/6/2020.</p> <p>Reviewed form and manuals that were available in our archives.</p> <p>Annual reports reviewed.</p> <p>Went through the form with NWN and did a data request on 4/16/2020.</p> <p>Records provided by NWN on 5/5/2020</p> <p>Reviewed records, completed IA questionnaire and submitted inspection for review. 5/7/2020</p> <p>Other various miscellaneous records were reviewed between January 2020 and May 2020 and completed jointly with other NWN inspections when possible. Examples were OQ records.</p>

HQ Address: 250 SW Taylor St Portland, OR 97204	System/Unit Name & Address: Company wide	
Co. Official: Jon Huddleston		
Phone No.: 503-226-4211		
Persons Interviewed	Title	Phone No.
Ryan Truair	Senior Manager Code Compliance	503-610-7551
Jaimie Lemke	Code Compliance Specialist	503-610-7639
Margaret Locke	Code Compliance Engineer	503-610-7359
Samantha Rookstool	Code Compliance Specialist	503-610-7641
Scott Lundgren	Manager Integrity Management	503-610-7561
Cory Beck	Senior Manager Corporate Communications	503-610-7050
Gabe Cabatic	Manager Quality and Qualifications	503-610-7459
Jeremy Coleman	Manager Gas Control	503-610-7215
Todd Felix	Emergency Consultant	503-610-7236

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SYSTEM OPERATIONS	
Number of reportable safety related conditions last year: 0	Number of deferred leaks in system: 2
Number of <u>non-reportable</u> safety related conditions last year: 0	Number of excavation damage hits last year: 78
Miles of transmission pipeline within unit (total miles and miles in Class 3 & 4 locations): 3.5 miles, all in class 3	Miles of main within inspection unit (total miles and miles in Class 3 & 4 locations): 1,938.3 total miles of main, combined class locations
Operating Pressure(s): Low to high - Low: 27psi / High: 517 psi	MAOP: low to high - Low: 50 psi / High: 575 psi
Does the operator have any transmission pipelines?	Yes
Compressor stations?	No.

REVIEW QUESTIONS		S/Yes	U/No	N/A
1.	Was the Annual Report reviewed for accuracy and trends? If any trends discovered, please describe:	X		
2.	For transmission operators, has the operator submitted information to the NPMS database, along with changes made after the original submission?	X		
3.	Were there federally reportable incidents during the previous year? Please list. N/A, no federally reportable incidents			X
4.	Were Incident reports reviewed for accuracy and trends? If any trends discovered please describe: Non federal incidents will be evaluated in the summer of 2020 during the Gorge unit inspection. State incidents will be evaluated with the unit inspection scheduled for this summer. There were no federal incidents <u>This is marked No not Unsat.</u> It is unclear whether this question pertains to "Incidents" as defined in the CFR or all incidents including state reportable incidents. I commented in the new draft questionnaire also.		X	
5.	Were there reportable or unreportable safety related conditions during the previous year? If yes please describe. Please list. N/A, no safety related conditions.			X

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6.	<p>Were there any abnormal operating conditions (as described in 49 CFR 192.605 (c) or 49 CFR 195.402(d))? If yes please describe.</p> <p>NWN operates a transmission line in conjunction with their distribution system. Per 192.605(c)(5) this is not applicable. NWN remediates AOC's at the time of discovery. They make notes on field orders. NWN's QA department reviews a sampling of field work and ensures that AOC's are documented and remediated.</p>			X
7	<p>Were there changes to the O&M Manual during the previous year? NWN stores details of changes made on an internal website @ fom.nwnatural.com.</p>	X		
8	<p>Are the changes acceptable? No issues. Their manual will be further reviewed when the Gorge and Clark units are inspected this year. At that time their manual can be reviewed for applicability to their field applications.</p>	X		
9	<p>Is the O&M Manual up to date? NWN's manual is in a constant state of revision.</p>	X		
10	<p>Were emergency plans changed during the previous year? NWN maintains a revision log in their ERP. Changes were made through edits to their Business Continuity Plan with minor updates to their business plan. Security updates were also made since NWN recently moved their headquarters location.</p>	X		
11	<p>Were the changes satisfactory? No Issues</p>	X		

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	<p>Were there changes to the Integrity management program (TIMP and DIMP for LDC's)? The following changes were made to NWN's DIMP according to their revision logs.</p> <p>DIMP revision log</p> <ul style="list-style-type: none"> • Page 1 (cover) 11 Updated Company Address • Page 1 (cover) 11 Changed Cover date • All Pages 11 Changed Rev and date • 11 Updated customer count • 3.1 Table 1 11 Updated Org Chart • 4.0 11 Updated Definitions to include Standard Practice acronyms • All Sections 11 Added Washington Standard Practice (SPW) where appropriate • 5.4 11 Added Engineering Standard for Poly Pipe • All of Section 6 11 Updated date range to 2010 to 2019 and reflect latest data • 6.7.3 11 Revised classification of mechanical coupling failure • Appendix E-4 to E-10 11 Updated with 2019 data <p>TIMP Revision Log</p> <ul style="list-style-type: none"> • All Sections Rev 20 Changed plan review dates and footers to reflect 2020 annual review. To include page numbering. • Cover Changed cover date to reflect new year • Cover & Section 13.2 Updated to reflect new NW Natural business address. • Introduction Updated year of reference documents and added NACE SP0102 per PHMSA Final Transmission Rule • Introduction Changed TIMP Organization Chart to reflect personnel changes • Section 1.4 Updated website address for State of Oregon UGB map • Section 2.1, 2.1.6, 4.11, 6.6, 11.2.4, 14.1.1 Updated Code reference and requirement of notification of PHMSA to 90 days per PHMSA Final transmission Rule • Table 2.1 Added seismic activity as a threat per the PHMSA Final Transmission Rule • Section 2.1.1 Revised paragraph for In-line inspection to reflect the threats that this technology can identify such as deformation and cracking. These threats were added per the PHMSA Final Transmission Rule • Section 2.1.1 Revised to state ILI technology must conform to NACE SP0102 per PHMSA Final Transmission Rule • Section 2.1.1.1 – Tools Revised to state “Corrosion” as a threat and defined the variable “t”. Removed restriction that ultrasonic tools were not available for small diameters • Section 2.1.1.2 – In-line Inspection Process Added a step for use of a caliper pig • Section 2.1.2 – Pressure Testing Added dents as a threat that could be addressed by pressure testing • Section 2.2 Revised to include MFL tool with camera • Table 2-3 Stated completion of baseline assessment for past pipe • Table 3-1 Added geology and soil stability as a threat per PHMSA Final Transmission Rule • Section 3.1.3 – Cyclic Fatigue Added requirement to monitor pressure cycles every 7 years not to exceed 90 months to determine threat of Cyclic Fatigue per PHMSA Final Transmission Rule • Section 3.1.3 – Manufacturing Defects Revised condition where segment can be assigned a high-risk priority per PHMSA Final Transmission Rule • Section 3.1.3 – ERW Pipe Added section where pipe with seam cracks need to be evaluated utilizing fracture mechanics modeling per PHMSA Final Transmission Rule • Section 3.1.3 Added a section on Cracks as a threat that needed to be addressed per PHMSA Final Transmission Rule • Section 5.1.3 Modified to state that an immediate condition not remediated in 5 days will require a letter sent to Senior Manager of Code Compliance • Section 8.5 Added Seismicity as an Outside Force 	X		
13	<p>Is the integrity management program up to date? What are the results of the operators program review (effectiveness evaluation) (DIMP every 5 years)?</p> <p>Full DIMP and Transmission inspections are being conducted with NWN currently and results will be reported under inspections #8058 and 8057. There were no issues found as of the date of this inspection.</p>			X
14	<p>Are the changes acceptable? See above</p>			X

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15	Is appropriate assessment/ repair work conducted during the past year? (monitor progress of IMP activities) List an overview of IM work plan. NWN conducted no IM assessment or repair work within the last year. This is typical for the small 3.5 mile transmission pipeline operated by NWN in WA State.	X		
16	What assessment work is planned for the upcoming year? NWN has no assessment or repair work planned for the current year. This is typical for the small 3.5 mile transmission pipeline operated by NWN in WA State.	X		
17	Has appropriate DIMP remediation work occurred during the past year? (monitor progress of DIMP activities) A full DIMP plan inspection is currently being conducted. NWN did record the necessary installation documentation according to their DIMP plan and this information was reviewed.	X		
18	What DIMP remediation work is anticipated for upcoming year? NWN continually addresses and performs remediation work to address the threats listed as Accelerated Actions in Table D-1 in the DIMP Plan. Excavation Damage has been identified as the largest threat NW Natural has. NWN has implemented a risk-based ranking of the incoming locate tickets to focus resources on the higher risk requests such as HP pipelines and business districts.	X		
19	Were there changes to the Operator Qualification program? If yes, please describe. NWN maintains a revision log in their OQ program. The following revisions were made according to NWN: <ul style="list-style-type: none"> • Updated OQ Program Administrator to OQ Program Administration Team • Updated Supervisor of Quality and Qualifications to Manager of Quality and Qualifications • Updated terminology to match electronic testing platform language 	X		
20	Is the Operator Qualification program up to date? NWN's OQ plan is continually revised and kept up to date.	X		
21	Are plan updates satisfactory? No issues. Will be better able to evaluate during the upcoming Columbia Gorge inspection this summer.	X		
22	Are personnel performing covered tasks (including contractors) properly qualified and requalified at intervals determined in the operators plan? All personnel observed in the field had their qualifications checked and were in compliance with the frequencies outlined in their OQ plan. This is done through random crew inspections and the recent Transmission inspection conducted.	X		

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23	<p>Were there changes to the public awareness program?</p> <p>Per NWN the following changes were made which were minor in nature.</p> <ul style="list-style-type: none"> • Elaina Medina replaced Daphne Mathew and Stefanie Week as PIO – Corp. Communications Specialist • Darin Arnold, Supervisor, Field Operations Training, replaced Cari Colton as the Subject Matter Expert for fire department information and training. He now oversees district manager fire department contacts, and ensures appropriate documentation is complete. • Wayne Pipes, Sr. Manager, Security and Facilities, is no longer listed as the SME for communications to Emergency Management & Criminal Justice agencies. • Natasha Siores replaced Onita King as resource for regulatory review of content. • Scott Lundgren is added as a stakeholder list developer. • To our list of local public officials, we added other utilities within the NW Natural service territory. • To determine and maintain lists of excavators, Culver Company is responsible for ensuring excavator lists are updated. • To determine and maintain lists of first responders, Culver Company is responsible for ensuring mailings lists are updated. • To our one-call center targeting excavator audience, we have added new Spanish language radio ads. We now have English and Spanish radio and TV public service announcements, and English and Spanish paid radio advertising. • To our school program, we have added Culver Company to administer a utility public safety awareness program for K-6 teachers, students, and students’ families. • To our outreach evaluation, we now issue surveys after all trainings. • To our understandability evaluation, we added surveys as another way to review materials. <p>NWN is also implementing the following 2020 changes:</p> <ul style="list-style-type: none"> • Launch Spanish radio advertising to target contractors and excavators • Host emergency preparedness and community safety training • Participate in the PAPA excavator mailing program • Participate in the KGW “Keeping You Safe” sponsorship • Continue community safety events focusing on damage prevention 	X		
24	<p>Is the public awareness program up to date? NWN’s PA program is continually revised and kept up to date.</p>	X		
24	<p>Are changes to the public awareness program satisfactory? No issues.</p>	X		

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26	<p>Is the following information on the operator’s web page? (Not a regulatory question) Yes.</p> <ul style="list-style-type: none"> • Pipeline purpose and reliability https://www.nwnatural.com/Business/BenefitsOfGas • Damage Prevention https://www.nwnatural.com/Business/Safety • Pipe location information https://www.nwnatural.com/Business/Safety/PipelineLocationInformation • How to get additional information https://www.nwnatural.com/Business/Safety/PipelineLocationInformation • National Pipeline Mapping system https://www.nwnatural.com/Business/Safety/PipelineLocationInformation • On call requirements https://www.nwnatural.com/Business/Safety/EarthquakePreparedness • Potential Hazards https://www.nwnatural.com/Business/Safety/SafetyTips • Prevention measures https://www.nwnatural.com/Business/Safety/EarthquakePreparedness • Leak/ damage recognition https://www.nwnatural.com/Residential/Safety/GasLeaks/SmellRottenEggs • ROW encroachment https://www.nwnatural.com/Residential/Safety/PipelineRightOfWay • Pipeline location information https://www.nwnatural.com/Business/Safety/PipelineLocationInformation • Integrity management programs https://www.nwnatural.com/Residential/Safety/PipelineIntegrityManagementProgram • Emergency preparedness https://www.nwnatural.com/Business/Safety/EarthquakePreparedness 	X		
27	<p>Were there changes to the Control Room Management Program? NWN’s CRM was reviewed in December 2019 and then submitted. No revisions were made. <u>This is marked No not Unsat.</u></p>		X	
28	<p>Is the control room management program up to date? Yes, reviewed 12/2019.</p>	X		
29	<p>Are the control room management program changes satisfactory? No changes were made.</p>			X
30	<p>Are inspection units broken down appropriately? Do you recommend any changes to inspection units in terms of size? There are two NWN units in WA. No issues.</p>	X		
31	<p>Were there any flow reversals, product changes, or conversions to service since the last review? N/A, There were no flow reversals</p>			X
32	<p>If yes, is the operator taking appropriate actions in accordance with ADB-2014-04? N/A, There were no flow reversals</p>			X

PHMSA ADVISORY BULLETINS: [LINK](#)

<https://www.phmsa.dot.gov/regulations-fr/search/notices?keyword=&nt=Advisory%20Bulletins>