

Application for Amendment No. 4 to the South Mist Pipeline Extension Site Certificate

Submitted to the Oregon Energy Facility Siting Council
By Northwest Natural Gas Company
April 2007

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SECTION I. INTRODUCTION AND BACKGROUND

A. The Request

Pursuant to OAR 345-027-0050, Northwest Natural Gas Company (“NW Natural”) proposes a fourth amendment to the South Mist Pipeline Extension (“SMPE”) Site Certificate. In this fourth amendment, NW Natural seeks approval to:

1. Amend Condition 7 (Structural Standards) from the SMPE Site Certificate to remove the requirement that horizontal inclinometers be required and maintained in the Sherman Mill slide area; and
2. Install two refurbished compressors and ancillary equipment at the Molalla Gate Station to increase the pressure and deliver gas from the SMPE to the interstate pipeline located adjacent to the NW Natural facilities at the Molalla Gate Station.

B. Site Certificate and Amendments

NW Natural submitted an Application for Site Certificate (“ASC”) for the SMPE to the Energy Facility Siting Council (Council or EFSC) on March 22, 2001. The SMPE Site Certificate was approved by the Council on March 13, 2003. This action authorized the construction, operation, and retirement of a 24-inch diameter, high pressure natural gas transmission pipeline in a 200-foot wide corridor, approximately 62 miles in length. The corridor is located between the Bacona Blowdown Station in Washington County - the terminus of NW Natural’s existing 24-inch diameter South Mist Pipeline - and the Molalla Gate Station for the Williams interstate pipeline near Molalla, Oregon. In 2004 NW Natural commissioned the newly completed 24-inch SMPE. The SMPE (or “Pipeline”) connects the NW Natural underground storage facilities at Mist, Oregon to the Williams Northwest Pipeline Corporation (or “Northwest” or “NWP”) interstate pipeline facilities near Molalla.

The Council approved a 200-foot wide corridor, and imposed conditions limiting the location of the pipeline and construction activities within the 200 foot corridor. Some of those conditions include: (1) limitations on the width of both permanent maintenance and temporary construction easements; (2) compliance with NW Natural’s proposed Agricultural Impact Mitigation Plan (AIMP); and (3) a 24-inch separation between the SMPE and other underground structures. Since Council approval in 2003, the Site Certificate has been amended three times.

On August 28, 2003, the Council approved the first amendment to the Site Certificate authorizing: (1) the use of larger easements in site specific instances, including one amendment of Mandatory Condition 7 and two additions to the General Land Use Conditions; (2) one addendum to the AIMP and a corresponding change to Soil Protection Standard Condition 3; and (3) an amendment of the condition requiring 24 inches of separation between the SMPE and other underground structures.

On December 5, 2003, the Council approved a second amendment to the Site Certificate authorizing: (1) a new limited water license for water from the Willamette River to be used in

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hydrostatic testing; and (2) a new discharge location under NW Natural's Water Pollution Control Facilities permit for discharge of water used in hydrostatic testing.

On April 23, 2004, the Council approved a third amendment to the Site Certificate authorizing: (1) construction of pipeline within an approved 200-foot corridor; (2) temporary access and workspace outside the 200-foot corridor on 48 properties; and (3) realignment of the pipeline on five properties and permanent access easements outside the 200-foot corridor on two additional properties.

SECTION II. DIVISION 27 REQUIREMENTS

A. *Request by Certificate Holder to Amend Certificate – When Required (OAR 345-027-0050)*

OAR 345-027-0050(1) requires a site certificate amendment in the following circumstances:

“To change the site boundary or otherwise to design, construct, operate or retire a facility in a manner different from the description in the site certificate, the certificate holder shall submit an amendment request, as described in OAR 345-027-0060, to the Office of Energy if the proposed change:

“(a) Could result in a significant adverse impact that the Council did not evaluate and address in the final order granting a site certificate affecting any resource protected by applicable standards in divisions 22 and 24 of this chapter;

“(b) Could result in a significant adverse impact that the Council did not evaluate and address in the final order granting a site certificate affecting geographic areas or human, animal or plant populations;

“(c) Could impair the certificate holder's ability to comply with a site certificate condition; or

“(d) Could require a new condition or a change to a condition in the site certificate.”

Discussion. The changes proposed as part of the fourth amendment would not alter the site boundary. The installation of new equipment at the Molalla Gate Station could potentially result in an adverse impact that the Council did not evaluate and address in the SMPE final order and SCA. However, the analyses provided in Sections III, IV and V of this application demonstrate that the changes would not result in significant adverse impacts as described under OAR 345-027-0050(1)(a) and (b). While not impairing the certificate holder's ability to comply with a Site Certificate condition (OAR 345-027-0050(1)(c)), the proposed changes would remove condition 7 (Structural Standards) from the Site Certificate. Under subsection (d), the deletion of a

condition and the consideration of changed equipment at the Molalla Gate Station (including potential conditions) require a site certificate amendment.

B. Request to Amend Certificate (OAR 345-027-0060)

OAR 345-027-0060(1) requires that a request to amend a site certificate include specific information:

“In a request to amend a site certificate, the certificate holder shall include:

“(a) The name and mailing address of the certificate holder and the name, mailing address and phone number of the individual responsible for submitting the request;

“(b) A description of the facility including its location and other information relevant to the proposed change;

“(c) A detailed description of the proposed change and the certificate holder's analysis of the proposed change under the criteria of OAR 345-027-0050(1);

“(d) The specific language of the site certificate, including affected conditions, that the certificate holder proposes to change, add or delete by an amendment;

“(e) A list of the standards of divisions 22, 23 and 24 of this chapter relevant to the proposed change; and

“(f) An analysis of whether the facility, with the proposed change, would comply with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances if the Council amends the site certificate as requested. For the purpose of this rule, a law, rule or ordinance is "applicable" if the Council would apply or consider the law, rule or ordinance under OAR 345-027-0070(9). * * *”

Discussion. (a) Name and Address: The name and mailing address of the certificate holder:

Northwest Natural Gas Company
220 NW Second Avenue
Portland, OR 97209.

The names, mailing addresses, and phone numbers of the persons responsible for submitting this request:

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Northwest Natural Gas Company
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Portland, OR 97209
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(b) Facility Description and Location: The facility and its location are described in detail in Section III of the SMPE Site Certificate, and that description is incorporated herein by reference. This application requests approval to install and operate compressors and ancillary equipment at the Molalla Gate Station at the southern terminus of the South Mist Pipeline (**Exhibits 1 and 4**). The Molalla Gate Station is composed of two adjacent properties, one owned by Northwest Pipeline (NWP), and the other owned by NW Natural. The property owned and controlled by NW Natural is shown on **Exhibit 5**. NW Natural understands that the NWP portion of the Molalla Gate Station was originally licensed under the Federal Energy Regulatory Commission (FERC) at the request of Williams. The NW Natural portion of the Molalla Gate Station was modified as part of the SMPE facility, as approved in the SMPE Site Certificate.

This application also requests approval to amend condition 7 (Structural Standards) of the Site Certificate. This amendment would result in the removal of the horizontal inclinometer installed in the vicinity of the Sherman Mill slide located in Upper Dairy Creek, Oregon (**Exhibits 2 and 3**).

(c) Detailed Description and Analysis: By this application, NW Natural seeks Council approval to install two refurbished compressors and ancillary equipment at Molalla Gate Station to increase throughput and to amend Condition 7 (Structural Standards).

Description of Molalla Gate Station and Request to Install Two Compressors and Ancillary Equipment

The Site Certificate for the SMPE describes the facility as a 24-inch diameter pipeline, approximately 62 miles long with its northern terminus at the Bacona Blowdown Station and the southerly point at the Northwest Pipeline Gate Station. (Site Certificate, p. 4). The Site Certificate then states that the SMPE “does not include any related or supporting facilities, as that term is defined in OAR 345-001-0010.” (Site Certificate, p. 6). The Molalla Gate Station, and the above-ground and below-ground facilities constructed within the fenced area of the Molalla Gate Station are inextricable components of the SMPE facility itself.

The Application for Site Certificate (“ASC”) for the SMPE, Exhibit B and Exhibit K, reference the Molalla Gate Station and describe it as part of the Project. SMPE Exhibit B describes the SMPE terminating at the Molalla Gate Station and describes the Molalla Gate Station as a part of the “System Operation Support” and an above-ground facility. (Ex. B, p. 5). SMPE Exhibit B provides that the Northwest Natural component of the Molalla Gate Station will be expanded to approximately 50 by 100 feet as a part of the project. (Ex. B, p. 8). SMPE Exhibit K also addresses the Molalla Gate Station in the Project Description and discusses modifying and expanding the Station. (Ex. K, p. 1-2). In reviewing Project design and need, Exhibit K states that the Project includes the interconnection at the Molalla Gate Station. (Ex. K, p. 10). The

Molalla Gate Station is also addressed in Exhibit K as “Constraint 10” because the station already exists and is the terminus for the SMPE. (Ex. K, p. 28).

Molalla Gate Station and Relationship Between Northwest Pipeline and Northwest Natural Facilities

The Molalla Gate Station is a fenced and secure area containing both NWP facilities and NW Natural facilities. NW Natural and NWP each own and control distinct parcels within the fenced area. **Exhibit 5.**¹ At the boundary line between the NW Natural and Northwest facilities, a valve is installed to connect the intrastate NW Natural facilities into the NWP interstate pipeline facilities. The above-ground piping and associated pig trap and launcher and valves, depicted on **Exhibits 6 and 7** were elements of the SMPE. As noted above, at the time the above-ground Molalla Gate Station facilities were constructed, a flange was installed in the facilities, as an inlet to future compressors, anticipated at the time of construction.

The Molalla Meter Station has been one of the many city gate receipt points on the NWP Pipeline system used by NW Natural to receive deliveries of gas it has transported on the NWP’s system’s Grants Pass Lateral since its original construction in 1965. A second meter station, known as Molalla II was put in service by NWP on December 1, 1995 as part of a NWP system expansion project. In 2004, a new Molalla Meter Station was established by NWP at the existing Molalla and Molalla II Meter Station sites to accommodate increased volumes and bi-directional deliveries and receipts between NWP and NW Natural. The new Molalla Meter Station replaced the original Molalla and Molalla II facilities and they were abandoned by NWP by the removal of those facilities. In late 2004, the SMPE interconnect of the new NW Natural SMPE facilities to NWP at the Molalla Gate was commissioned, as part of the SMPE. NW Natural and NWP negotiated and signed a facilities agreement for the joint use of the fenced Molalla Gate Station area. The new NWP facilities were designed to deliver up to 225,000 Dth² per day and receive 200,000 Dth per day. Basic Systems, Inc. of Derwent, Ohio completed the gate station facility design. Although the site is small, the gas piping was constructed to accept inlet and outlet piping from a compressor without major modification.

¹ The above-ground NW Natural facilities are painted off-white and the NWP facilities are painted green. The distinction, therefore, of the elements that are interstate (NWP) and intrastate (NW Natural) is clear on the ground, as well as based on operational and contractual standards.

² “Dth” is an energy unit term from a pipeline tariff using a standard definition from NAESB – the North American Energy Standards Board: Dekatherm (“Dth”): “The standard quantity for nominations, confirmation and scheduling is dekatherms per gas day in the United States, gigajoules per gas day in Canada and gigacalories per gas day in Mexico. (For reference 1 dekatherm = 1,000,000 Btu’s; 1 gigajoule = 1,000,000,000 joules; and 1 gigacalorie = 1,000,000,000 calories.) For commercial purposes, the standard conversion factor between dekatherms and gigajoules is 1.055056 gigajoules per dekatherm and between dekatherms and gigacalories is 0.251996 gigacalories per dekatherm. The standard Btu is the International Btu, which is also called the Btu(IT); the standard joule is the joule specified in the SI system of units.” NAESB WGQ Nominations Related Standard 1.3.14 (Version 1.7). For purposes of this Tariff and associated Service Agreements, MMBtu and Dth are synonymous.

The Mist Storage facilities are currently designed to re-deliver stored gas volumes of up to 515 MMcfd³ into NW Natural's system. Approximately 110 MMcfd can flow north on the North Mist Pipeline and the balance flows south on the SMPE system and is delivered through displacement. Based on operational history from winter 2005–06 and 2006-07, there are seasonal situations when the Mist facilities meet the requested delivery requirements but the Portland load area cannot consume the total volume. These system conditions are a result of the incremental increase of storage re-delivery demand from NW Natural's FERC-regulated Interstate Storage business unit. Modeling has indicated that the latest commitments to interstate storage customers may exceed the displacement capacity by as much as 70 to 80 MMcfd. Consequently, to meet this demand, compression is needed at Molalla to enable NW Natural to physically re-deliver the stored gas to its interstate customers at Molalla. Approximately 2,000 BHP of compression at the Molalla Gate Station is necessary to boost the required volume of gas to exceed NWP pressures so that the gas will actually flow into NWP's system.

The attached schematic **Exhibit 7**, shows the inlet to the compressors and the outlet from the compressors that will be connected to the NW Natural system. The custody transfer and ownership property line is downstream (on delivery from the compressors) of the discharge connection from the compressors. The area proposed for installation of the compressors and ancillary equipment is shown on **Exhibits 8 and 9**. The proposed location for temporary construction phase staging and equipment laydown is shown on **Exhibit 10**.

Description of Compression Equipment Proposed at Molalla Gate Station

The proposed equipment would include the following:

- Two Compressors – Refurbished Solar Saturn MKII/C-16
- Gas Cooler (necessary, in that compression warms the gas, requiring cooling prior to delivery)
- Inlet separator (to protect the compressors from any liquids, such as condensation)
- Stand-by generator
- Sound proof building or enclosure
- Programmable Logic Control (“PLC”) panels and programming for remote, unmanned operations

In addition to the equipment, NW Natural proposes a temporary laydown and parking area across South Barnards Road from the Molalla Gate Station, in a location used by the Christmas tree farmer for seasonal tree loading and mobilization.

Request to Amend SMPE Site Certificate Condition 7 (Removal of Horizontal Inclinometers)

Since the construction of the SMPE, NW Natural has confirmed that the horizontal inclinometer installed at the Sherman Mill Slide Area (**Exhibit 3**) are not an appropriate application of the

³ “MMcfd” is Million cubic feet of gas per day. A measure of gas flow rates.

technology. NW Natural has spent several thousand dollars proving what the professionals initially said was not an appropriate use of a horizontal inclinometer. The readings completed from this instrument have proven it to have no useful value, not justifying the ongoing expenses of conducting the monitoring and reporting. **(Exhibit 12)**.

Horizontal inclinometers are used to monitor the effects of a civil engineered structure on a slope or fill. They are installed in a trench and carefully oriented so the groove in the inclinometer casing deviates very little from top dead center. Just a few degrees deviation (*i.e.* 3 to 5 degrees) renders the inclinometer useless. The horizontal inclinometer is then buried and the structure is built on top of it or nearby. For a pipeline, strain gauges do the same thing as a horizontal inclinometer. While they do not measure changes in slope movement, more importantly to pipeline engineers, they measure the actual stress/strain the pipe is experiencing. They provide warning of such stress, plus they have the added value that they do not go out of service. A slope inclinometer will become useless after 2 or 3 inches of deflection. As described below, the measuring instrument cannot be successfully placed down the hole drilled for the instrument.

When NW Natural installed the horizontal inclinometer, its contractors drilled a near horizontal hole into the slope on the abandoned county road below the pipeline and just west of the Sherman Mill landslide. Since it is a drilled hole, it came under the jurisdiction of Water Resources Department (“WRD”). A slight angle from vertical was needed to insure the hole could be sealed to prevent water migration.

The inclinometer pipe was installed to a lateral depth of about 115 feet in the open hole. NW Natural’s contractors needed to keep the inclinometer pipe properly oriented, but they were not aware of the strict tolerances. Only after the initial reading failed did NW Natural learn of the very tight tolerance for the orientation of groove from Slope Indicator. There are two difficulties that must be overcome for a drilled hole to work for installation and operation of the horizontal inclinometer. First, the hole must be perfectly straight. Second, when installing the inclinometer casing, it must slide in perfectly straight and not twist in the slightest. There is no practical way to keep the pipe oriented correctly. That is why the geotechnical engineering industry does not use drilled horizontal inclinometers to monitor landslides and slope stability. They use vertical inclinometers. **(Exhibit 12)**.

The removal of the horizontal inclinometer will not affect the monitoring of slope movement for the Sherman Mill slide. The vertical inclinometer (1), and strain gauges (2) installed in the vicinity of the Sherman Mill slide would remain in place and will continue to be monitored in accordance with Condition 7 of the Structural Standard and Condition 3 of the Conditions Related to Public Safety, OAR Chapter 345, Div. 24.

A detailed description the certificate holder's analysis of the proposed changes under the criteria of OAR 345-027-0050(1) is provided in Sections III, IV and V of this application.

(d) The Specific Language of the Site Certificate, that NW Natural Proposes to Change or Delete by the Amendment: NW Natural proposes that the Project Description, SMPE Exhibit B be changed to include the addition of the compressors and ancillary equipment at the Molalla Gate Station. Additionally, NW Natural requests that Condition 7, Structural Standards of the Site Certificate be amended as follows:

“In addition to strain gauges installed on the pipeline, NWN shall install vertical *and horizontal* inclinometer(s) in appropriate locations to monitor for ground movement in the vicinity of the Sherman Mill slide. The installation shall be prior to or concurrent with pipeline construction. NWN shall monitor these instruments and report findings to OOE yearly after installation. If the instruments indicate ground movement that is different from what was predicted in the ASC, NWN shall promptly report to the Council and describe any corrective actions necessary to alleviate danger to the pipeline.”

(e) A List of the Standards of Divisions 22, 23 and 24 Relevant to the Proposed Change: NW Natural’s request for a fourth amendment to the SMPE Site Certificate requires an assessment of compliance with certain Council standards contained in OAR chapter 345, divisions 22 and 24. However, the proposed amendment would not raise issues of compliance with standards in OAR chapter 345, Division 23, as the need standard does not apply to utilities with least cost plans. The proposed changes are assessed for compliance with standards in Divisions 22 and 24 in Sections III and IV of this application.

(f) Analysis of Compliance with Applicable Council Rules and State and Local Laws, rules and Ordinances: Compliance with other state and local laws is discussed in Section V of this application.

SECTION III. DIVISION 22 STANDARDS

Subsection (e) of OAR 345-027-0060(1) requires a list of Council standards relevant to the proposed amendment. Compliance with the Division 22 standards is discussed below.

A. Organizational, Managerial and Technical Expertise (OAR 345-022-0010)

OAR 345-022-0010 provides in relevant part:

“(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. * * *

“* * *

“(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, * * *

“(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, * * *.”

Discussion. Exhibit D of the ASC describes in detail NW Natural’s organizational, managerial, and technical expertise to construct and operate the SMPE, and NW Natural incorporates it by reference into this application. In its Final Order on the ASC, the Council found that NW Natural met the Organizational Expertise Standard based on its previous pipeline experience, the experience of managers and engineers associated with the project, and favorable regulatory history with the Oregon Public Utilities Commission.

NW Natural currently operates compressors and ancillary equipment similar to that proposed for installation at Molalla Gate Station. The new equipment proposed for the Molalla Gate Station will be remotely operated from the NW Natural offices in Portland, Oregon. The facility will be programmed to start, stop and adjust flow and will be operated by the gas controllers that operate the entire NW Natural system from its Portland location. This type of remotely operated facility is common to the industry, but remote operation is new to NW Natural. Training will be provided for the controllers. NW Natural has been monitoring slope movement in the Sherman Mill slide area for several years and has decades of experience studying the geology in the vicinity of the pipeline. Exhibit 2 provides the rationale abandoning the horizontal inclinometer at the Sherman Mill slide area. The abandonment of the horizontal inclinometer would not require additional expertise or experience to complete.

Sections (3) and (4) of the standard do not apply because the SMPE does not require any third party permits and NW Natural would obtain any permits directly.

Conclusion. The proposed amendment complies with the Organizational, Managerial and Technical Expertise Standard.

B. Structural (OAR 345-022-0020)

To issue the amendment, the Council must find that:

“(a) The applicant, through appropriate site-specific study, has adequately characterized the site as to seismic zone and expected ground motion and ground failure, taking into account amplification, during the maximum credible and maximum probable seismic events; and

“(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule “seismic hazard” includes ground shaking, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement, and subsidence;

“(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards

of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

“(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety presented by the hazards identified in subsection (c).”

Discussion. Exhibit H and Appendix H-1 of the ASC identify, describe, and characterize the seismic and nonseismic geological and soil hazards in the vicinity of the 200-foot corridor, including the vicinity of areas subject to this amendment request. In its Final Order approving the SMPE, the Council found that the SMPE satisfies the Structural Standard. To supplement the SMPE ASC, for the purpose of this application, NW Natural submits the Geotechnical Engineering Report provided by GeoEngineers, **Exhibit 11**. The GeoEngineers Report provides additional characterization and analysis of the potential seismic and nonseismic geological and soil hazards at the location of the Molalla Gate Station.

Amendment of Condition 7 (Structural Standards) which results in the removal of the requirement for the installation of a horizontal inclinometer, does not affect NW Natural’s ability to meet this standard. See **Exhibit 12**.

The installation of the compressors and ancillary equipment at the Molalla Gate Station would not occur in any areas of critical geotechnical importance, nor would it affect any of the design, construction, or surveillance measures recommended to achieve compliance with the Structural Standard. The Geotechnical Engineering Report provided by GeoEngineers, **Exhibit 11**, provides a complete analysis of the geology of the Molalla Gate site, and includes recommendations for construction, pages 4 – 12. NW Natural accepts those recommendations.

Conclusion. The proposed amendment complies with the Structural Standard.

C. Soil Protection (OAR 345-022-0022)

To issue the proposed amendment, the Council must find that:

“* * * the design, construction, operation and retirement of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.”

Discussion. Exhibit I of the ASC addressed the Soil Protection Standard, including those areas subject to this amendment request. The Final Order and the Proposed Order concluded that NW Natural provided an extensive and detailed plan for mitigating soil impacts. As conditioned, the Council found that the SMPE satisfies the Soil Protection Standard.

The proposed installation of a new compressor and ancillary equipment would not impact soils outside of the existing fence line. All equipment would be installed within the existing footprint of Molalla Gate Station, and the installation process would only disturb soils for inlet/outlet

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pipng, control valves, and the compressor building foundation.

With implementation of reasonable construction phase erosion control measures, the installation of the compressors and ancillary equipment at the Molalla Gate Station would not cause significant impacts to soils. The Geotechnical Engineering Report provided by GeoEngineers, **Exhibit 11**, provides a complete analysis of the soils at the Molalla Gate site, and includes recommendations for construction, pages 4 – 12. NW Natural accepts those recommendations.

A 1200-C Erosion Control/Stormwater permit had been required for the SMPE, but will not be required for this project as a total of less than one acre of land will be disturbed. The trigger for requiring a 1200-C is a total disturbance of one acre or more. NW Natural will follow its own erosion control standards as set forth in the Company’s Environmental Procedures Manual.

Amendment of Condition 7 (Structural Standards) would result in the abandonment in place of the horizontal inclinometer. The inclinometer casing will be abandoned in accordance with the WRD requirements as defined in OAR 690-240 by backfilling the casing with a bentonite/neat cement slurry grout. A tremie pipe (essentially a hose that the grout is pumped through to the bottom of the hole) will be used to pump the grout into the bottom of the casing and will be extracted as the casing is filled. If necessary under WRD rules, the contractor will be bonded by WRD. Abandonment of the horizontal inclinometer would create minimal, if any localized soil disturbance, and that would be mitigated by compliance with the Company’s Environmental Procedures Manual and the soil restoration requirements in the SMPE.

Conclusion. The proposed amendments comply with the Soil Protection Standard.

D. Land Use (OAR 345-022-0030)

To issue a site certificate, the Council must find that:

“(1)*** the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

“The Council shall find that a proposed facility complies with section (1) if:

“* * *

“(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

“(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3)***.”

Discussion. The Land Use Standard requires the Council to determine that a proposed facility complies with the Statewide Planning Goals. Exhibit K of the ASC and subsequent materials submitted through the course of the siting process detail the SMPE’s compliance with the Statewide Planning Goals. The requested amendment does not propose any use that is new or different from the “utility facility necessary for public service” for which the Site Certificate was issued.

The Molalla Gate Station is a preexisting facility defined by a fence that includes both NW Natural and NWP facilities, as discussed above. NW Natural understands that the NWP facilities were first constructed in 1965. NW Natural does not propose any change in the use of the Molalla Gate Station or expansion of the facility beyond the existing fenced area.

NW Natural's Application for Site Certificate (ASC) for the South Mist Pipeline Extension (SMPE) includes the Molalla Gate Station in the facility description. The SMPE begins at the Bacona Blowdown Station and ends at the Molalla Gate Station where it interconnects with the Williams Interstate Pipeline system. (SMPE Ex. K, p. 13). As part of the SMPE project, NW Natural proposed modifying and enlarging the Molalla Gate Station from a 40 foot by 50 foot dimension to a 50 foot by 100 foot dimension to accommodate the above-ground components of the 24-inch pipeline. (Ex. K, p 1-2). Accordingly, the Molalla Gate Station was included in the project for purposes of the ASC. (Ex. B, p 5, 7-8; Ex. K, p 10). The Station is included in the project study area and forms the study area's southern boundary. (Ex. K, p 14).

NW Natural’s portion of the Molalla Gate Station is a component of the SMPE. Additionally, these components would be unnecessary but for the SMPE’s interconnection with Williams Northwest Pipeline. The Molalla Gate Station provides one of the SMPE’s four aboveground isolation value points and is the interconnection with the interstate pipeline. (Ex. K, p. 20). The station was “Constraint 10” on selecting the SMPE route as the terminus needed to be located at the station. (Ex. K, p. 28). As modified and enlarged, the Station is directly and inextricably tied to the SMPE, and but for the SMPE, would have been unnecessary. Moreover, the Station is necessary to serve NW Natural’s in-state customer base. The SMPE Site Certificate states that the project does not include any related or supporting facilities, as defined in OAR 345-001-0010. Consequently, the above- and below-ground NW Natural facilities within the fenced Molalla Gate Station are a component of the facility itself.

In summary, NW Natural seeks approval to install two compressors and ancillary equipment at the Molalla Gate Station – this equipment is substantially similar to existing equipment already constructed and is part of that facility. The addition of the new equipment would not change any land use on the site. The request to amend Condition 7 (Structural Standard) would not affect compliance with the Land Use Standard.

Conclusion. The proposed amendment complies with the Land Use Standard. The analysis prepared in Exhibit K for the SMPE is fully applicable to this request, without modification.

E. Protected Areas (OAR 345-022-0040)

As a general rule, the Council’s Protected Areas Standard prohibits the siting of an energy facility within any of the protected areas listed in the rule. The standard permits the siting of an SMPE Amendment No. 4 Application

energy facility outside the listed protected areas as long as the “design, construction and operation of the facility are not likely to result in significant adverse impact to” any of the protected areas. OAR 345-022-0040(1).

Discussion. Exhibit L and Figure L-1 of the ASC identify and describe in detail the SMPE’s compliance with the Protected Areas Standard. The Proposed Order found that the ASC satisfied the Protected Areas Standard with one condition applied to the Willamette River Greenway.

The Molalla Gate Station, where new equipment would be installed, is not in the vicinity of the Willamette River Greenway and would not create additional impacts that would affect protected areas in any way. The removal of slope monitoring equipment would occur in the Sherman Mill slide area, which is remote from any of the identified protected areas. It would not create any impacts that would affect protected areas in any way.

Conclusion. The proposed amendment complies with the Protected Areas Standard.

F. Retirement and Financial Assurance (OAR 345-022-0050)

Under its Retirement and Financial Assurance Standard, OAR 345-022-0050, the Council determines whether:

“(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.

“(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.”

Discussion. In its Final Order approving the ASC, the Council found that the SMPE as a whole complied with the Retirement and Financial Assurance Standard. The Site Certificate requires NWN to obtain a restoration bond in the amount of \$700,000 in 2001 dollars, which was obtained and approved by the Council in August 2003. The amount of the bond is a relatively small fraction of the project’s overall cost, estimated in the ASC at about \$80 million.

The proposed installation of the compressors and ancillary equipment would not require additional restoration because it would not disturb any additional land. The installation of the horizontal inclinometer occurred in accordance with Department of Water Resources (“WRD”) requirements. Similarly, the abandonment of the horizontal inclinometer would be performed in accordance with the regulations of the WRD.

The inclinometer casing will be abandoned in accordance with the WRD requirements as defined in OAR 690-240 by backfilling the casing with a bentonite/neat cement slurry grout. A tremie pipe (essentially a hose that the grout is pumped through to the bottom of the hole) will be used to pump the grout into the bottom of the casing and will be extracted as the casing is filled.

If necessary under WRD rules, the contractor will be bonded by WRD. NW Natural will follow the site restoration standards as approved by the Council in the Site Certificate. The requested changes would not significantly increase the cost of compliance with conditions or NW Natural's financial ability to meet them.

Conclusion. The proposed amendment complies with the Retirement and Financial Assurance Standard.

G. Fish and Wildlife Habitat (OAR 345-022-0060)

To issue the amendment, the Council must find that:

“the design, construction, operation and retirement of the facility, taking into account mitigation, are consistent with the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.”

Discussion. In its Final Order approving the ASC, the Council found that the SMPE, taking into account mitigation, would meet the Oregon Fish and Wildlife (ODFW) habitat mitigation goals. The installation of the compressors and ancillary equipment would be within the existing footprint of the Molalla Gate Station. Installation would not require any excavation, tree removal, vegetation removal, or other disturbance of vegetation or wildlife habitat. The abandonment of the horizontal inclinometer at the Sherman Mill slide area would result in minimal, if any, vegetation disturbance, and no other types of environmental impacts.

Conclusion. The proposed amendment complies with the Fish and Wildlife Habitat Standard.

H. Threatened & Endangered Species (OAR 345-022-0070)

To issue the amendment, the Council must find that:

“(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction, operation and retirement of the proposed facility, taking into account mitigation:

“(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

“(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

“(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS

496.172(2), the design, construction, operation and retirement of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.”

Discussion. In its Final Order approving the Application for Site Certificate, the Council found that the SMPE was not likely to adversely affect the survival or recovery of any species listed as threatened or endangered. Since the equipment would be installed within the Molalla Gate Station footprint, and since there would be no environmental impacts associated with removal of the horizontal inclinometer in the Sherman Mill slide area, nothing in this amendment request would alter the Council’s conclusion.

Conclusion. The proposed amendment complies with the Threatened and Endangered Species Standard.

I. Scenic and Aesthetic Values (OAR 345-022-0080)

To issue the amendment, the Council must find that:

“(1) Except for facilities described in sections (2), to issue a site certificate, the Council must find that the design, construction, operation and retirement of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic and aesthetic values identified as significant or important in applicable federal land management plans or in local land use plans in the analysis area described in the project order.

“(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.”

Discussion. In the Final Order on the ASC, the Council found that the SMPE, including Molalla Gate Station, would not adversely affect scenic and aesthetic resources primarily because the pipeline would be underground, except for a the relatively small visual impact from valves required by operational considerations and 49 CFR 192 safety regulations.

Since the new equipment would be installed within the existing footprint of the Molalla Gate Station, and the nearest scenic area is the Canby-Marquam Highway more than 1.5 miles away, there would be no additional impacts to scenic or aesthetic resources. The compressors will be installed inside an insulated building, situated within the fenced compound. The ancillary equipment (*i.e.* the cooler, separator, valves, etc.) will be installed adjacent to and outside the building on all sides and inside the fenced compound (**Exhibits 8 and 9**). The amendment of Condition 7 (Structural Standards) would result in the abandonment of the horizontal inclinometer in Upper Dairy Creek, Oregon. (**Exhibit 3 and 12**). The elimination of surface materials would have no adverse impacts on scenic or aesthetic resources.

Conclusion. The proposed amendment complies with the Scenic and Aesthetic Values Standard.

J. *Historic, Cultural and Archeological Resources (OAR 345-022-0090)*

To issue the amendment, the Council must find that:

“the construction, operation and retirement of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

“(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

“(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and

“(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).”

Discussion. The Council found that the SMPE is not likely to result in significant adverse impacts to archeological resources, objects, or sites based on surveys performed by NW Natural’s archeological consultant. The Council imposed conditions that protect sites or objects uncovered during construction of the pipeline, require NW Natural to avoid known archeological sites within the corridor, and require NW Natural to survey temporary laydown areas and properties where NW Natural was denied access.

Since the compressors and ancillary equipment would be installed within the existing footprint at Molalla Gate Station, it would not result in additional ground disturbance. Similarly, the abandonment of the horizontal inclinometer associated with Condition 7 would not disturb new ground. Given the lack of ground disturbance, the proposed changes would not negatively impact any historic, cultural, or archaeological resources.

Conclusion. The proposed amendment complies with the Historic, Cultural and Archeological Resources Standard.

K. *Recreation (OAR 345-022-0100)*

To issue the amendment, the Council must find that:

“the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

“(a) Any special designation or management of the location;

“(b) The degree of demand;

“(c) Outstanding or unusual qualities;

“(d) Availability or rareness;

“(e) Irreplaceability or irretrievability of the opportunity.”

Discussion. ASC, Exhibit T and Figure T-1 identify and describe the existing recreational facilities and opportunities in the vicinity of the SMPE site and are incorporated herein by reference. In its Final Order on the ASC, the Council found that the SMPE would not adversely affect any important recreational opportunity in the analysis area, and did not impose any conditions.

The compressors and ancillary equipment would be installed within the existing footprint at Molalla Gate Station, and the station is within the area studied for recreational impacts. Since the nearest significant recreational resources are Wilsonville Pond and the Willamette Greenway, and the equipment would not generate new types of impacts, it would not cause additional impacts to recreational facilities or opportunities already considered by the Council. The abandonment of the horizontal inclinometer associated with Condition 7 would not result in any impacts to recreational facilities or opportunities already considered by the Council.

Conclusion. The proposed amendment complies with the Recreation Standard.

L. Public Services (OAR 345-022-0110)

To issue the amendment, the Council must find that:

“the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.”

Discussion. The ASC, in Exhibit U, fully describes the SMPE’s compliance with this standard and is incorporated herein. The Council determined in Attachment C that the SMPE met this standard. The amendment of Condition 7 (Structural Standards) and installation of equipment at Molalla Gate Station would not affect any public roadways or easements. NW Natural will implement typical construction phase traffic control measures (*e.g.* flagmen and signage) during construction, as needed. The amendment would in no way adversely impact the availability or provision of services by communities.

Conclusion. The proposed amendment complies with the Public Services Standard.

M. Waste Minimization (OAR 345-022-0120)

To issue the amendment, the Council must find that:

“(a) The applicant’s solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction, operation, and retirement of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;

“(b) The applicant’s plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.”

Discussion. In the Site Certificate, the Council imposed conditions governing the handling and recycling of solid waste and disposal of wastewater. The amendment of Condition 7 (Structural Standards) and installation of equipment at Molalla Gate Station would not generate any wastewater, hazardous solid waste, or nonhazardous solid waste, other than welding rod ends and packaging. All materials will be hauled off site and disposed of appropriately in permitted landfills. The amendment would in no way affect NW Natural’s ability to comply with this standard or the conditions imposed under it.

Conclusion. The proposed amendment complies with the Waste Minimization Standard.

SECTION IV. DIVISION 24 STANDARDS

Division 24 provides standards for carbon dioxide emission standards for nongenerating energy facilities and means of compliance with these standards. This amendment proposes to install two refurbished compressors and ancillary equipment at Molalla Gate Station to increase the gas pressure to deliver gas to NWP. The addition of an operating compressor would alter carbon dioxide emissions from their current levels to (zero) to 883 tons/year (*i.e.* 26,489 tons over 30 years, as shown on **Exhibit 13**).

A. Carbon Dioxide Offsets for Nongenerating Energy Facilities. Standard for Nongenerating Energy Facilities (OAR 345-024-0620).

To issue a site certificate for a nongenerating energy facility that emits carbon dioxide, the Council must find that “the net carbon dioxide emissions rate of the proposed facility does not exceed 0.504 pounds of carbon dioxide per horsepower hour.” OAR 345-024-0620.

Discussion.

1. Subsection 1.

“The Council shall determine whether the carbon dioxide emissions standard is met as follows:

“(1) The Council shall determine the gross carbon dioxide emissions that are reasonably likely to result from the operation of the proposed energy facility. The Council shall base such determination on the proposed design of the energy facility. In determining gross carbon dioxide emissions for a nongenerating facility, the Council shall calculate carbon dioxide emissions for a 30-year period unless the applicant requests, and the Council adopts in the site certificate, a different period. The Council shall determine gross carbon dioxide emissions based on its findings of the reasonably likely operation of the energy facility. The Council shall use a rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel * * *.” OAR 345-024-0620.

The Molalla Gate Station facility currently has no existing turbine-driven compressors. The proposed facility will add two (2) 1100 Hp turbine-driven compressors. These compressors will be used to increase the pressure of the gas within the SMPE and deliver to NWP. The two refurbished Solar MK-II turbine-driven compressors are subject to the rules of OAR 345 Division 24. With this amendment, the peak-day re-delivery capacity of Molalla Gate Station will be 110 MMcfd. Under current conditions, the facility is not capable of re-delivery as the pressure of the NWP facilities is typically greater than the pressure within the SMPE.

An operating model was developed to estimate the amount of horsepower needed during a typical annual flow cycle. (“Operating Plan – Molalla Gate Compression,” **Exhibit 14**). The horsepower requirements were then allocated among the two pieces of compression equipment available for use in a manner that used each piece of equipment in a reasonable manner for overall plant efficiency. Under the current model, the two MK-II turbines would be used for approximately 32 days per year, during annual cycle.

The two MK-II turbines are projected to operate at full loads for 32 days per year over a 30-year period. The projected fuel use for the operating scenario is 12,096 MMBtu per unit per year or 24,192 MMBtu per year for the facility. This is a conservative estimate of the reasonably likely operation and allows for an operational increase of 25 percent in future years.

$$24,192 \frac{\text{MMBtu}}{\text{year}} \times 30 \text{ years} \times \frac{117 \text{ lb CO}_2}{\text{MMBtu}} \times \frac{\text{ton}}{2,000 \text{ lbs}} =$$

42,456 tons carbon dioxide emissions reasonably likely over a 30-year period.

The following calculation uses the same operating assumptions to calculate the allowable carbon dioxide emissions based on 0.504 pounds of carbon dioxide per horsepower hour (hp-hr):

$$2,112,000 \frac{\text{hp-hrs}}{\text{year}} \times 30 \text{ years} \times \frac{0.504 \text{ lb CO}_2}{\text{hp-hr}} \times \frac{\text{ton}}{2,000 \text{ lbs}} =$$

15,967 tons of carbon dioxide allowable under the standard.

Therefore, the remaining emissions reduction needed to meet the standard under a

conservative estimate of the reasonably likely operations is:

42,456 tons CO₂ – 15,967 tons of CO₂ = 26,489 tons over 30 years. **See Exhibit 13.**

2. Subsection 2.

“(2) For any remaining emissions reduction necessary to meet the applicable standard, the applicant may elect to use any of the means described in OAR 345-024-0630, or any combination thereof. The Council shall determine the amount of carbon dioxide emissions reduction that is reasonably likely to result from the applicant’s offsets and whether the resulting net carbon dioxide emissions meet the applicable carbon dioxide emissions standard[.]” OAR 345-024-0620.

NW Natural wishes to meet the applicable standard by means of OAR 345-024-0630(2) by providing offset funds at the rate of 85 cents for each ton of remaining carbon dioxide emissions reduction needed, pursuant to the rate established in OAR 345-024-0580. This would result in a carbon dioxide offset fund of \$22,516. This fund is allocated for the increase in carbon dioxide emissions resulting from the installation and operation of the two turbines at the energy facility subject to OAR 345 Division 24. (**Exhibit 13**).

3. Subsection 3.

“(3) If the applicant elects to comply with the standard using the means described in OAR 345-024-0630(1) * * *.” OAR 345-024-0620.

NW Natural does not elect to comply in this manner.

4. Subsection 4.

“(4) Before beginning construction, the certificate holder shall notify the Office in writing of its final selection of an equipment manufacturer and shall submit a written design information report to the Office sufficient to verify the facility’s designed rate of fuel use and its nominal capacity for each fuel type. In the site certificate, the Council may specify other information to be included in the report. The Office shall use the information the certificate holder provides in the report as the basis for calculating, according to the site certificate, the amount of carbon dioxide emissions reductions the certificate holder must provide under OAR 345-024-0630[.]” OAR 345-024-0620.

The “Operating Plan – Molalla Gate Compression,” prepared by NW Natural, is attached as **Exhibit 14**.

5. Subsection 5.

“(5) In the site certificate, the Council shall specify the schedule by which the certificate holder shall provide carbon dioxide emission offsets. In the schedule, the Council shall specify the amount and timing of offsets the certificate holder must provide to a carbon dioxide emissions offset credit account. In determining the amount and timing of offsets, the Council may consider the estimate of total offsets that may be required for the facility and the minimum amount of offsets needed for effective offset projects. The Office shall maintain the record of the offset credit account.”
OAR 345-024-0620.

NW Natural assumes that the emission offset credit will be paid in a single installment.

Conclusion. As described above and below, taking into account offsets, the net carbon dioxide emissions rate of the Project will not exceed 0.504 pounds of carbon dioxide per horsepower hour. The Project complies with the standard for nongenerating energy facilities.

B. Means of Compliance for Nongenerating Energy Facilities (OAR 345-024-0630).

To comply with the carbon dioxide emissions standard for nongenerating energy facilities, an applicant may elect to use one of several listed methods.

1. Selection of Method; Monetary Path.

“(1) Implementing offset projects directly or through a third party * * *;

“(2) Providing offset funds, directly or through a third party, in an amount deemed sufficient to produce the reduction in carbon dioxide emissions necessary to meet the applicable carbon dioxide emissions standard according to the schedule set forth pursuant to OAR 345-024-0620(5). The applicant or third party shall use the funds as specified in OAR 345-024-0710. The Council shall deem the payment of the monetary offset rate, pursuant to OAR 345-024-0580, to result in a reduction of one ton of carbon dioxide emissions. The Council shall determine the offset funds using the monetary offset rate and the level of emissions reduction required to meet the applicable standard. If the Council issues a site certificate based on this section, the Council may not adjust the amount of the offset funds based on the actual performance of offsets;

“(3) Any other means that the Council adopts by rule * * *.”
OAR 345-024-0630.

Discussion: NW Natural will provide offset funds directly, as outlined above.

2. Reporting.

“(4) Each year after beginning commercial operation, the certificate holder shall report to the Office data showing the amount and type of fossil fuels used by the facility and its horsepower-hours of operation. The Council shall specify in the site certificate how the Office shall use those data to calculate the gross carbon dioxide emissions from the facility during the report year and the net emissions in excess of the carbon dioxide emissions standard. The Office shall then subtract excess emissions from the carbon dioxide emissions offset credit account. The Council shall specify in the site certificate the minimum amount of carbon dioxide offset credits that a certificate holder shall provide to establish the offset credit account. The Council may specify an amount of offset credits equal to the total offsets required for the facility. The Council shall specify the minimum amount of carbon dioxide offset credits that a certificate holder must maintain in the account and the minimum amount of carbon dioxide offset credits the certificate holder shall provide to replenish the account. The Office shall notify the certificate holder when it must replenish its offset credit account according to the conditions in the site certificate. The certificate holder shall maintain a positive balance in the offset credit account for 30 years, unless the Council specifies a different period in the site certificate[.]” OAR 345-024-0630.

Discussion: NW Natural recommends the use of the simple equations outlined above to determine compliance, using the actual annual horsepower hours and actual annual million Btu of fuel consumption. NW Natural will increase the balance of the offset account by 26,489 tons of carbon dioxide. This is the projected increase in the 30-year offset for the Project operations for the Molalla Gate Station operating scenario. For compliance calculations NW Natural will use the 0.504 lb CO₂/hp-hr allowable emission rate. Given the relatively small amount of offset credits in comparison to that for a power plant, NW Natural believes that a single deposit with no future adjustments would be most practical in terms of the effort expended by the Council and NW Natural for compliance. Rather than establishing a separate account for the purpose of the SMPE compressor emissions, NW Natural proposes to make the deposits into the existing account established for the compressors at the Mist Storage Facility.

3. Offset Account.

“(5) If the certificate holder is replenishing its offset credit account by meeting the monetary path payment requirement described in OAR 334-024-0710, the certificate holder may replenish its offset credit account without amending the site certificate by using the calculation methodology detailed in

conditions that the Council adopts in the site certificate[.]” OAR 345-024-0630.

Discussion: NW Natural suggests increasing the balance of the offset account by 26,489 tons of carbon dioxide. This is the projected increase in the 30-year offset for the Project operations. Given the relatively small amount of offset credits in comparison to a power plant, as explained above, a single deposit (into the existing Mist account) with no future adjustments would be most practical in terms of the effort expended by the Council and NW Natural for compliance.

4. Replenish Offset Account.

“(6) If the certificate holder proposes to replenish the offset credit account under OAR 345-024-0630(1), the Council may amend the site certificate conditions to ensure that the proposed offset projects are implemented[.]”

Discussion: NW Natural does not wish to use this compliance method.

Conclusion. As described above, taking into account offsets, the net carbon dioxide emissions rate of the Project will not exceed 0.504 pounds of carbon dioxide per horsepower hour. The Project complies with the standard for nongenerating energy facilities.

SECTION V. OTHER STATE AND LOCAL REQUIREMENTS

Subsection (f) of OAR 345-027-0060(1) requires an analysis of compliance with applicable Council rules and state and local laws, rules, and ordinances.

A. Air Quality Permit: Emissions are so low due to size of equipment and hours of operation that the approval would qualify under the category of “Simple Permit” under applicable Department of Ecology (“DEQ”) rules. NW Natural is seeking approvals from DEQ. A copy of the cover sheet from the DEQ Air Permit Application is attached as **Exhibit 15**.

B. Noise Standards: OAR 340, division 35, contains the Oregon Noise Control Regulations. The Oregon Noise Control Regulations limit the allowable sound emissions of industrial and commercial noise sources in several ways: specifically, limits on allowable statistical sound levels, limits on allowable octave band sound pressure levels and limits on impulsive sound levels. For new noise sources located on previously unused sites, there is an additional limit on the allowable increase in two statistical noise descriptors. A noise analysis was prepared in a report by Hoover and Keith, Inc and a compliance report from TW Environmental, Inc. (**Exhibits 16 and 17**). These reports confirm that the Project, as designed, will meet the Oregon Noise Control Regulations. The TW Environmental Report recommends that additional pre-construction noise modeling occur at the nearest residence to the Molalla Gate Station to provide a baseline at that location in case post-construction noise monitoring is required.

C. Wetlands: There are no impacts to wetlands at either the Molalla Gate Station or the location of the inclinometer. The impacts to the Molalla Gate Station are within an existing rocked facility with surrounding farmland that is classified as uplands. There are no streams immediately adjacent to the facility.

The location of the inclinometer is in the side of a hill adjacent to an old logging road in the Bacona area. This location is also classified as an upland area with no wetlands nor streams immediately adjacent to the area.

SECTION VI. NOTICE LIST (OAR 345-027-0060(g))

OAR 345-027-0060(g) requires:

“For an amendment to change the site boundary or to extend the deadlines for beginning or completing construction of the facility, an updated list of the owners of property located within or adjacent to the site of the facility, as described in OAR 345-021-0010(1)(f).”

Discussion. This Amendment No. 4 request does not propose a change to the site boundary.

Conclusion. This criterion is inapplicable.

SECTION VII. CONCLUSION

The proposed amendment would comply with relevant Council standards. NW Natural respectfully requests Council approval of the proposed changes to the SMPE Site Certificate.

EXHIBITS

- Exhibit 1 Location Map of Molalla Gate Station
- Exhibit 2 Location Map of Sherman Mills Slide Area, Showing Location of Horizontal Inclinometer
- Exhibit 3 Aerial Photo of Upper Dairy Creek Area, Showing Location of Strain Gauge and Horizontal Inclinometer
- Exhibit 4 Aerial Photo of Molalla Gate Station Showing Location of NW Natural Facilities
- Exhibit 5 Survey Map Showing NW Natural-Owned and Controlled Properties at Molalla Gate Station
- Exhibit 6 Photo Depicting Existing Above-Ground NW Natural SMPE Facilities at Molalla Gate Station, Showing Location of Proposed (“Future”) Compressor
- Exhibit 7 Photo Depicting Existing Above-Ground NW Natural SMPE Facilities at Molalla Gate Station, Showing Location of Proposed Compressor Inlet
- Exhibit 8 Site Plan Showing Compressor Equipment Locations Proposed at Molalla Gate Station
- Exhibit 9 Schematic Detail Drawing of Equipment Proposed at Molalla Gate Station
- Exhibit 10 Aerial Photo Depicting Location of Temporary Construction Phase Staging/Laydown Area and Parking, Near Molalla Gate Station
- Exhibit 11 Geotechnical Engineering Report Regarding Molalla Gate Station
- Exhibit 12 August 3, 2005 “Final Memorandum” from Geotechnical Engineers (URS) Recommending Removal of Horizontal Inclinometer
- Exhibit 13 Data Sheet Showing Projected CO2 Emissions from Compressor Equipment, Prepared by TW Environmental, Inc. and NW Natural
- Exhibit 14 Operating Plan – Molalla Gate Compression, Prepared by NW Natural
- Exhibit 15 Cover Sheet from DEQ Air Permit Application Form
- Exhibit 16 Compliance Letter Prepared by TW Environmental, Documenting Compliance with Oregon Noise Rules
- Exhibit 17 Noise Analysis Hoover & Keith, Inc.