July 31, 2015

Mr. Chris Hoidal
Director, Western Region, PHMSA
12300 W Dakota Ave., Suite 110
Lakewood, CO 80228

Re: Response to Warning Letter
PHMSA CPF No. 5-2015-1005W

Dear Mr. Hoidal,

This letter is in response to the June 5, 2015 Warning Letter (CPF 5-2015-1005W), advising Kelso-Beaver Pipeline (KB Pipeline) of four probable violations of PHMSA's Part 192 regulations arising from the June 17-20, 2013 inspection of the KB Pipeline (2013 Inspection). KB Pipeline takes its commitment to pipeline safety seriously and is committed to ensuring that it operates in accordance with all applicable laws. Accordingly, we have reviewed the Warning Letter and are providing notification explaining how we intend to resolve the identified items.

We believe that the actions described above fully address all of the probable violations identified in the June 5, 2015 letter and complete all activities required as a result of the 2013 Inspection. For our internal reporting and auditing requirements, we ask that PHMSA provide a letter indicating that there are no remaining actions required by KB Pipeline as a result of the 2013 Inspection.

Described below are the actions that KB Pipeline either has taken, or is preparing to take, in response to the June 5, 2015 Warning Letter.

1. §192.605 Procedural manual for operations, maintenance, and emergencies
   (e) Surveillance, emergency response, and accident investigation. The procedures required by §§192.613 (a), 192.615 and 192.617 must be included in the manual required by paragraph (a) of this section.

   KB Pipeline has updated Section 3 'Pipeline Surveillance' of the KB Operations and Maintenance Manual to incorporate procedures for monitoring slope stability.

2. §192.605 Procedural manual for operations, maintenance, and emergencies

   (e) Surveillance, emergency response, and accident investigation. The procedures required by §§192.613 (a), 192.615 and 192.617 must be included in the manual required by paragraph (a) of this section.

   KB Pipeline has updated Section 3 'Pipeline Surveillance' of the KB Operations and Maintenance Manual to incorporate its Monitored Condition Surveillance Program which is the plan and procedures for monitoring anomalies and which describes examination intervals.

3. § 192.619 Maximum allowable operating pressure (MAOP) – Steel or plastic pipelines

   KB Pipeline will complete a new documented MAOP determination study of the KB Pipeline. The study will include the Williams custody transfer point, Port Westward I and II transfer connections, Unit 8 connection, USG connection, Beaver Power Plant connection and delivery runs 1000 & 1100 connection to NWNG The MAOP will not include the Beaver Unit 8 lateral or any valves and relief valves inside the Beaver or Port Westward plant fences as such facilities have been acknowledged by PHMSA, the Oregon Public Utility Commission (OPUC) and KB Pipeline to be under the jurisdiction of the OPUC (see attached email correspondence dated October 29, 2013 between Thomas Finch of PHMSA and KB Pipeline's consultant, Bob Cosentino (CCI)).

4. §192.739 – Pressure limiting and regulating stations: Inspection and testing.

   On November 21, 2014, KB Pipeline removed the 300/400 meter run. Please consider this letter as formal notification that the run has been abandoned.

KB Pipeline is dedicated to operating a safe pipeline in accordance with the applicable pipeline safety regulations. We appreciate PHMSA's feedback regarding its compliance expectations. Please feel free to call me if you would like to discuss any of the items addressed in this letter or any other issues pertaining to the 2013 Inspection.

Sincerely,

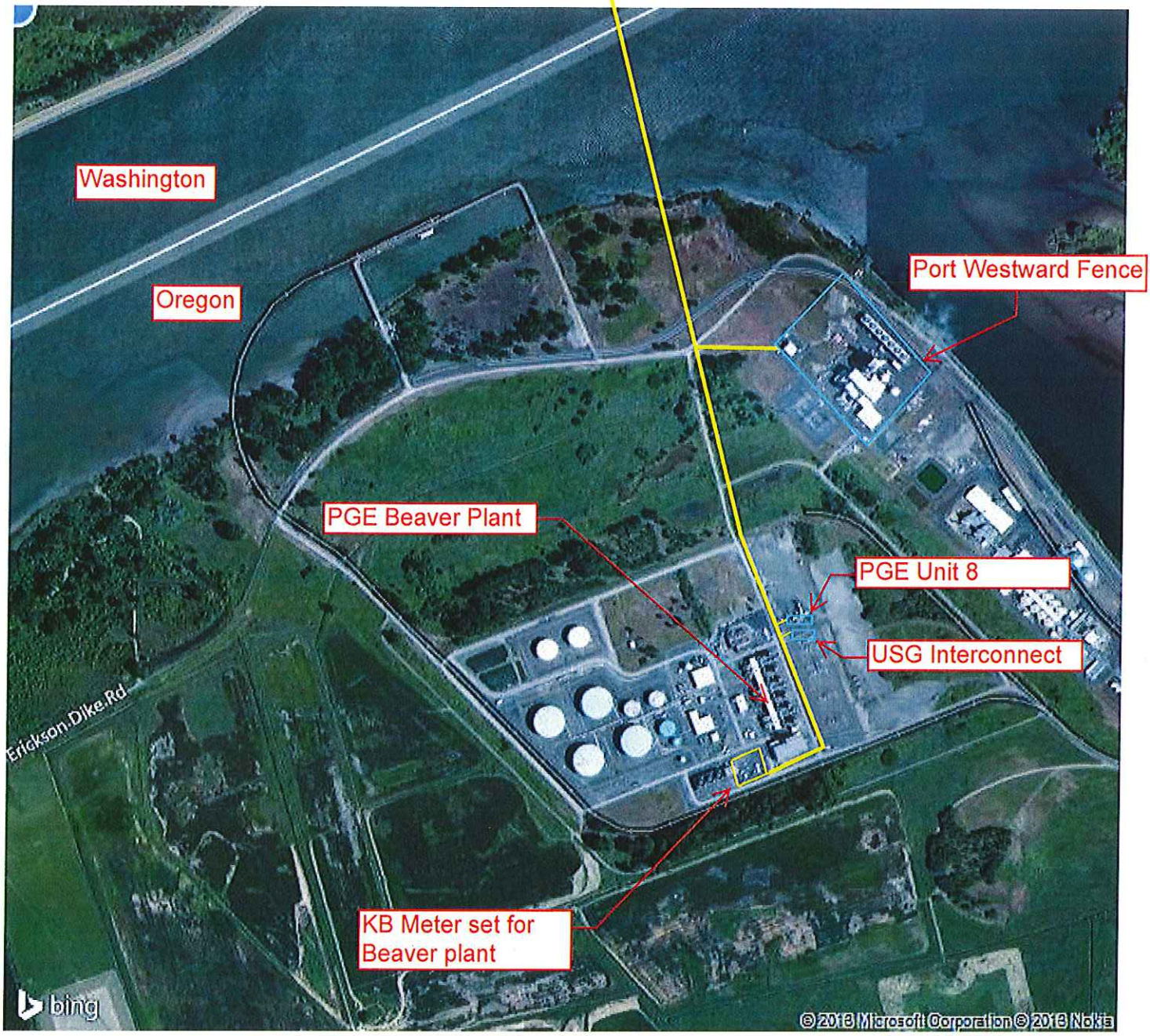
Kathy Davies

Kathy Davies
KB Operations Manager
Portland General Electric Company

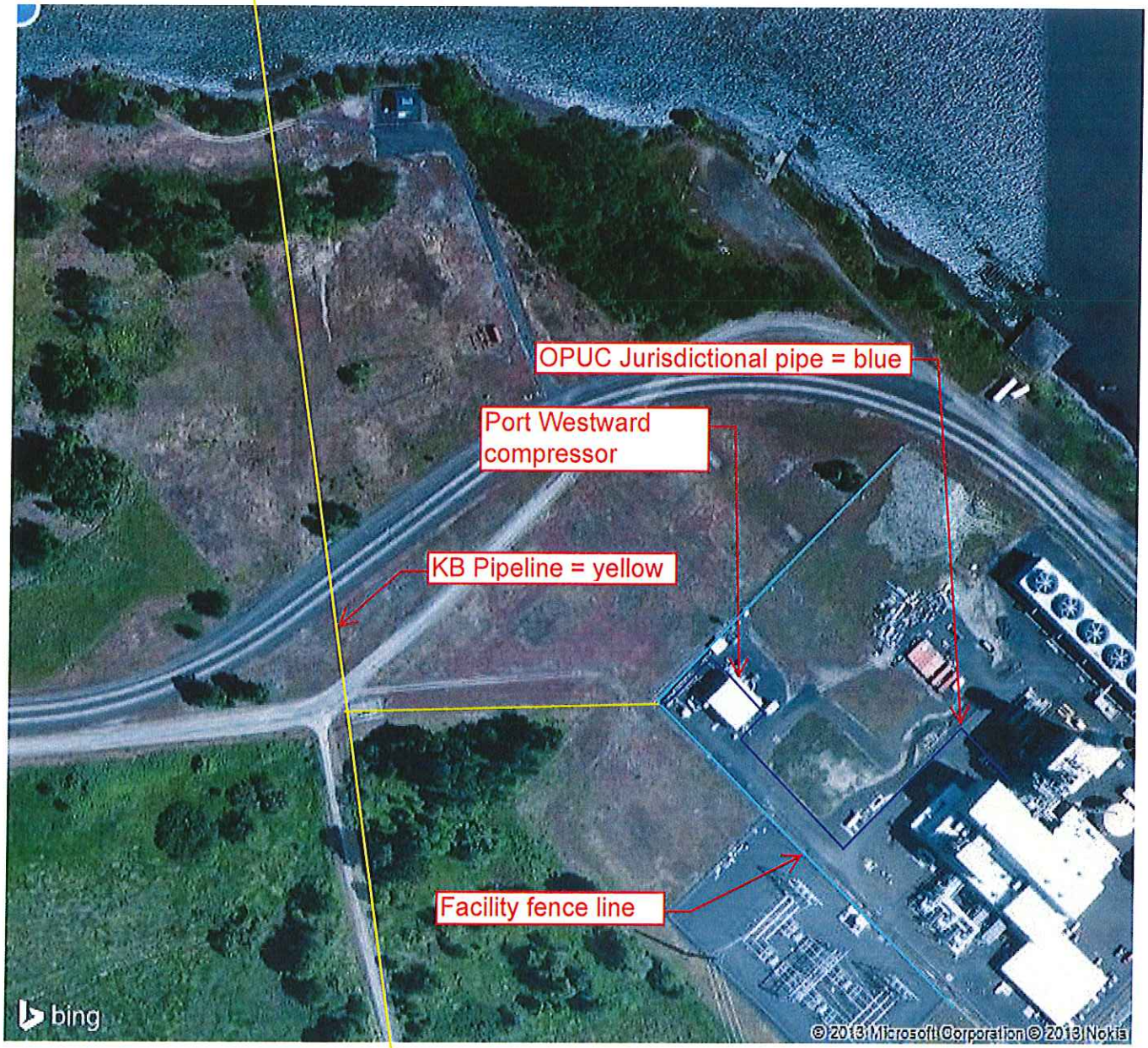
cc:

Randy Friedman, Northwest Natural Gas, KB Owner
Daryll Fuentes, United States Gypsum, KB Owner
Bob Cosentino, Cosentino Consulting Inc.
Washington Utilities & Transportation Commission
Jason Dunphy, PHMSA, Western Region
Amy Light, Portland General Electric Co.
Denise Saunders, Associate General Counsel, Portland General Electric Co.

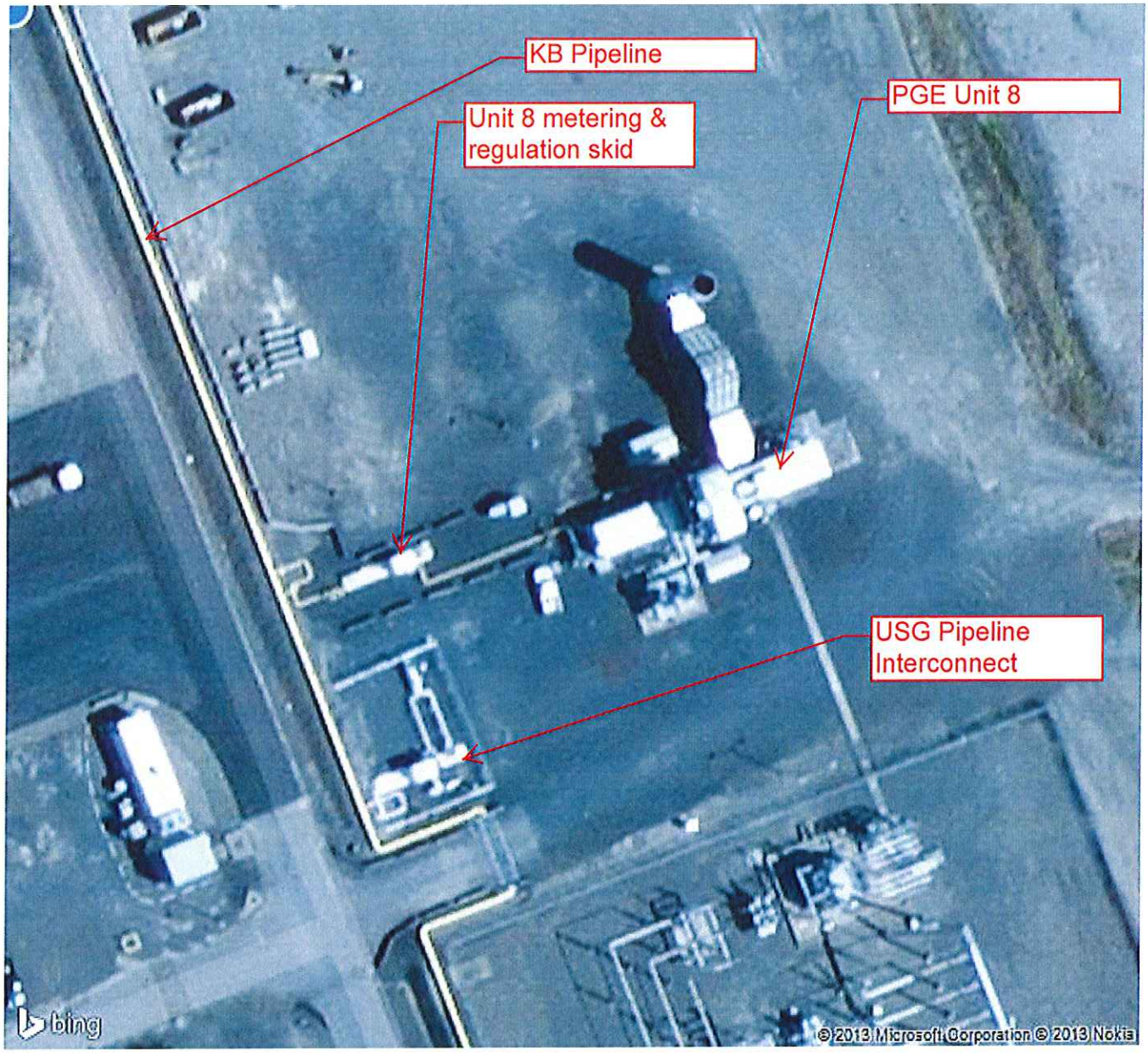
KB Pipeline Overview
Overall site pipeline route



KB Pipeline Overview
Port Westward delivery

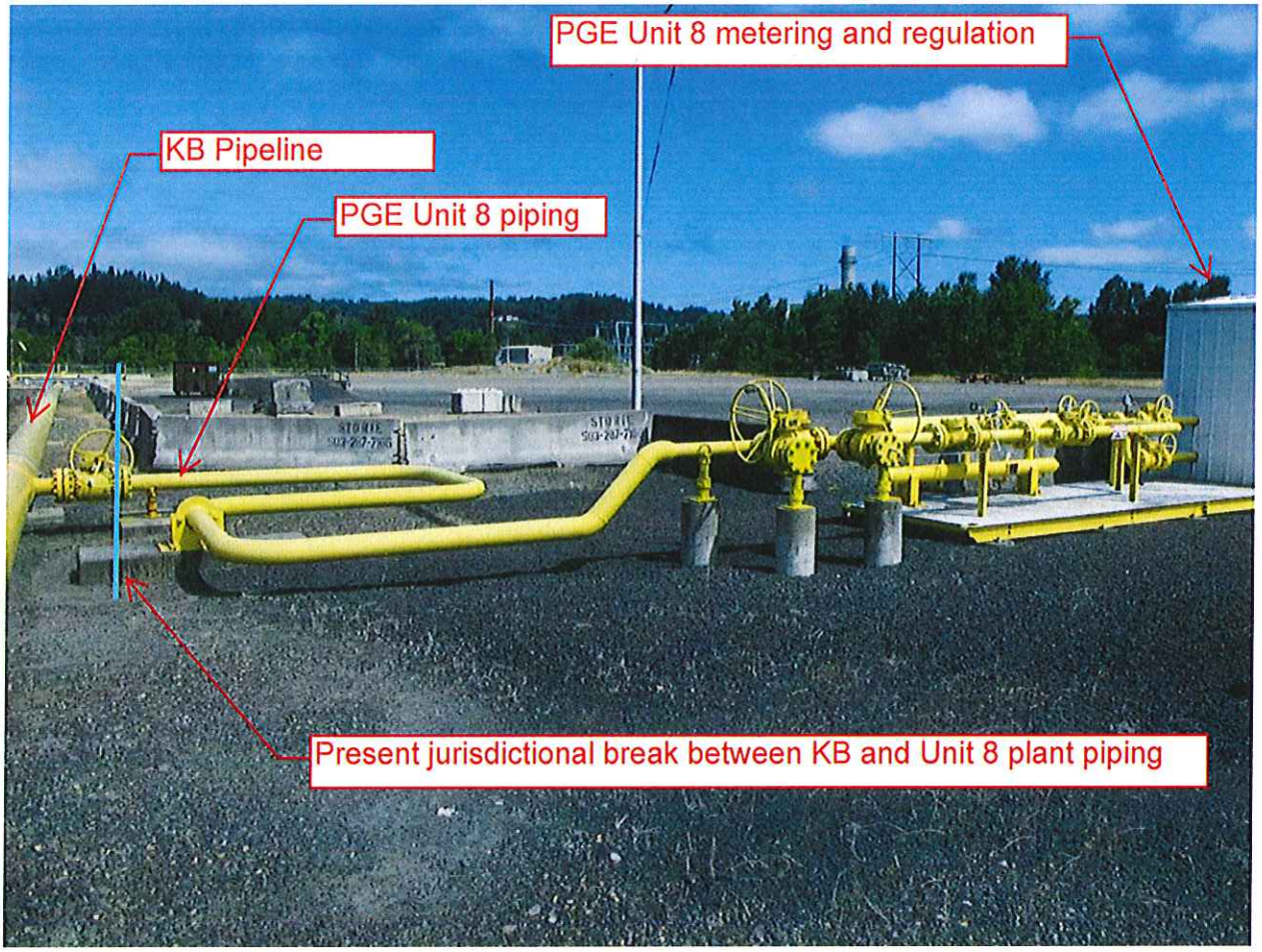


KB Pipeline Overview
Unit 8 & USG deliveries

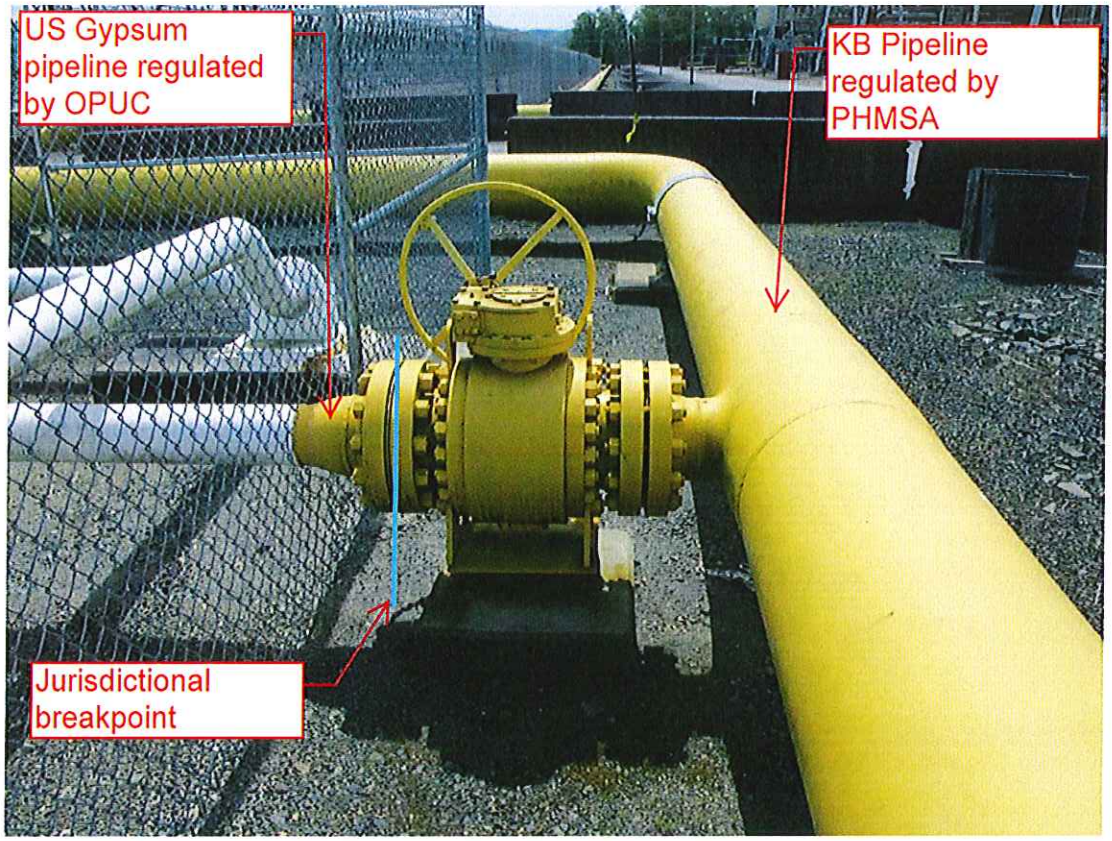


See next two pages for details

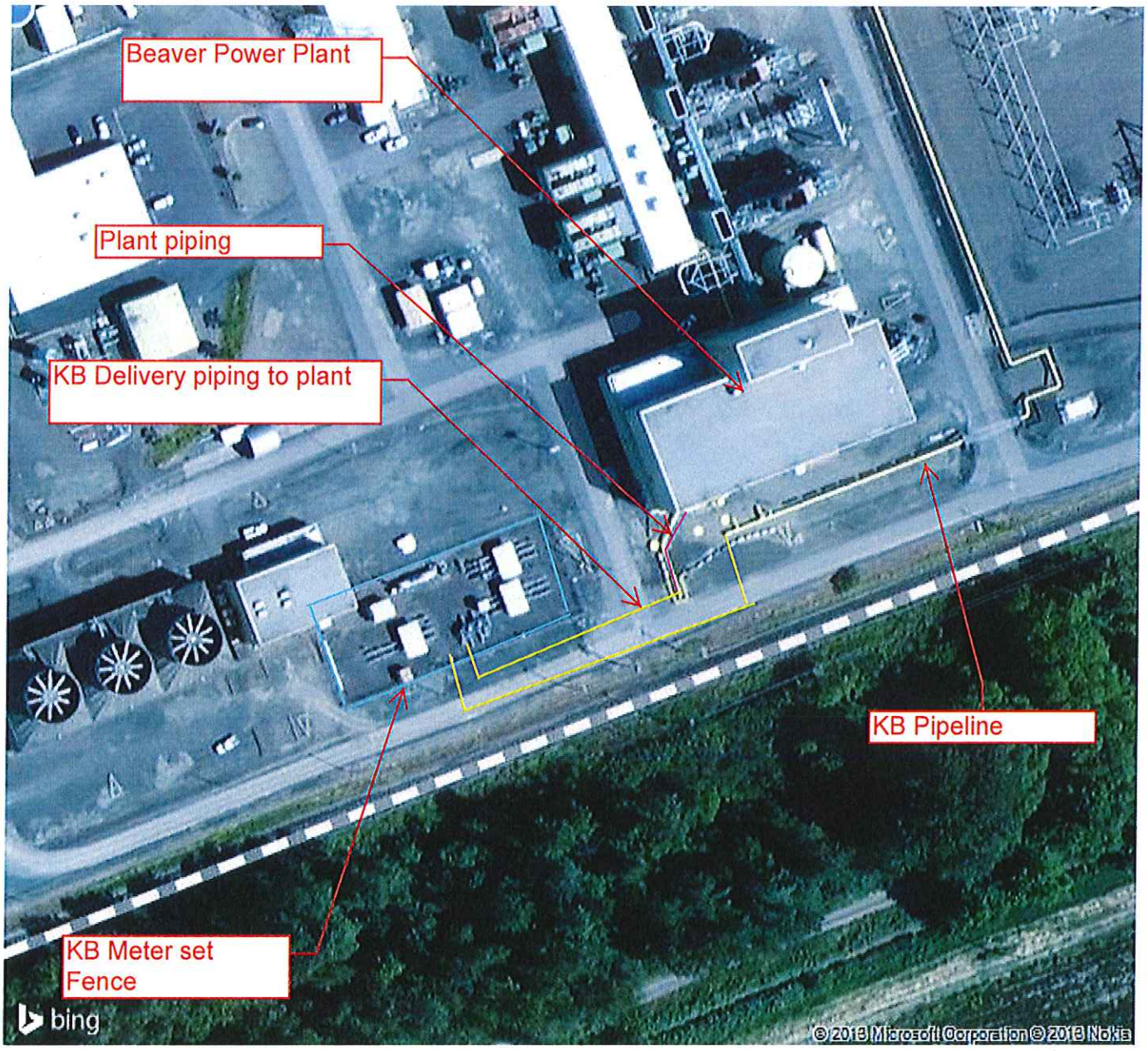
DETAILS OF UNIT 8 JURISDICTIONAL PIPING



DETAILS OF US GYPSUM INTERCONNECT



KB Pipeline Overview
Beaver delivery



From: Thomas.Finch@dot.gov [mailto:Thomas.Finch@dot.gov]
Sent: Tuesday, October 29, 2013 2:07 PM
To: bob@cosentinoconsulting.com
Cc: Kathy Davies; michael.thompson@state.or.us
Subject: FW: Jurisdictional limits at Oregon PGE facilities

I understand all that you have sent to me and so does our Oregon State Partner Michael Thompson. We are in concurrence with the attached KB Pipeline Overview.
Have a good rest of the week.

Tom

From: Bob Cosentino [mailto:bob@cosentinoconsulting.com]
Sent: Sunday, October 20, 2013 1:28 PM
To: Finch, Thomas (PHMSA)
Cc: Kathy.Davies@pgn.com; michael.thompson@state.or.us
Subject: RE: Jurisdictional limits at Oregon PGE facilities

Tom,

I just want to be clear since we are in essence discussing KB and four very different delivery points. I will discuss each separately and have included annotated photos of each which should help with clarity. I suggest you look at the file labeled "KB Overview" as you read this.

Working in the direction of KB flow, the first facility is the PGE Port Westward power plant. This facility takes full KB line pressure and also includes an onsite electrically driven booster gas compressor. This facility is designed to take full line pressure up to the gas turbine controlled regulators. This is a classic case of the fence line jurisdictional break since the OPUC has inspected the "inside the fence" facilities since initial construction. There is really nothing KB can do to over pressurize the facility, and in fact the booster compressor is evidence that KB cant supply enough pressure at times. Note that there are overpressure relief devices associated with the compressors. For clarity there is also an LDC which can supply the facility. This LDC supply is upstream of the compressors similar to KB..

The next facility is called PGE Unit 8. As you can see, this is a stand alone gas turbine with a dedicated metering/regulation skid. Traditionally we have called the jurisdictional break the delivery valve off the KB, see photo. Downstream from that point to the monitor regulator is all above ground Class 600 piping. The regulation is a simple dual run monitor regulator feeding the gas turbine package. The equipment downstream of the KB isolation valve has been traditionally maintained by power plant personnel. It also has not been included in the facilities with oversight by the OPUC since there are no buried facilities to trigger its oversight.

The third facility is the KB to US Gypsum pipeline interconnect. The jurisdictional break has been the KB delivery valve to USG which is also at the USG fence line, see photo. All facilities downstream of the KB delivery valve are presently regulated by the OPUC as an intrastate facility.

The final delivery point is the KB to PGE Beaver power plant. This delivery point has associated a traditional dual run monitor regulator arrangement and KB is responsible for all facilities up to the upstream flange of the plant owned facility isolation valve. This valve and all facilities downstream of it are operated by the plant. The delivery piping downstream of the KB meter set also is connected to the LDC. This LDC also had the ability to deliver to the plant through this same KB maintained piping. This is a traditional situation of the Pipeline company (KB) being responsible for customer overpressure protection and performing/documenting all maintenance to confirm this fact. This documentation was reviewed by Jason during the last audit and found to be satisfactory.

So in summary;

1. The Port Westward facility jurisdictional break stays at the fence line and allow the OPUC to continue their oversight of the inside the fence facilities including the overpressure relief devices associated with the booster compressors.

2. The Unit 8 facility jurisdictional break stays at the KB delivery valve. And allow the Part 192 oversight of the downstream piping be determined by the OPUC.

3. The USG pipeline interconnect stays as is with the OPUC having oversight downstream of the KB delivery valve.

4. The Beaver power plant jurisdictional break stays at the facility isolation valve with all facilities, including overpressure protection, upstream of that point being the responsibility of KB. This does not include the LDC owned and operated facilities which which are under the jurisdiction of the OPUC.

Bob

U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

WARNING LETTER

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 5, 2015

Ms. Kathy Davies
Manager KB Pipeline
Portland General Electric
121 SW Salmon Street, 3WTC0402
Portland, OR 97204

CPF 5-2015-1005W

Dear Ms. Davies:

On June 17-20, 2013, representatives of the Washington Utilities and Transportation Commission (WUTC) and the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected the Operations and Maintenance Manual and associated records of the Kelso-Beaver (KB) Pipeline in Clatskanie, Oregon.

As a result of the inspection, it appears that you have committed a probable violation of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

1. **§192.605 Procedural manual for operations, maintenance, and emergencies**

   (e) Surveillance, emergency response, and accident investigation. The procedures required by §§192.613(a), 192.615, and 192.617 must be included in the manual required by paragraph (a) of this section

The Continuing Surveillance policy and procedures contained in Section 3 "Pipeline Surveillance" of the Operations and Maintenance Manual are not detailed enough in

addressing the slope stability of the Hazen Dell side area or for monitoring the anomalies identified through continuing surveillance (such as the 2010 ILI tool run, or other methods).

Slope stability is a major issue for KB Pipeline, and the Operations and Maintenance Manual only mentions "ground movement" in Section 3.4.2 (b) General Right of Way Surveillance. Ground Movement is one of the highest level hazards to KB Pipeline. KB Pipeline conducts significant monitoring of the Hazen Dell Slide area for slope stability area every year. However, the KB Pipeline Operations and Maintenance Manual does not detail or mention the monitoring methods or what long term planning is being done to mitigate the slope stability hazard. KB needs to include the procedures for monitoring slope stability as a part of the Operations and Maintenance Manual.

2. §192.605 Procedural manual for operations, maintenance, and emergencies

(e) Surveillance, emergency response, and accident investigation. The procedures required by §§192.613(a), 192.615, and 192.617 must be included in the manual required by paragraph (a) of this section

The Continuing Surveillance policy and procedures contained in Section 3 "Pipeline Surveillance" of the Operations and Maintenance Manual are not detailed enough in addressing the anomalies identified through continuing surveillance (such as the 2010 ILI tool run, or other methods).

The 2010 ILI run identified several anomalies. Anomalies S6, S11 & S21 were identified as requiring monitoring. S6 has calculated percent of OD deformation of 5.4% and Strain of 0.89%. S11 has calculated percent of OD deformation of 1.6% and Strain of 5.4%. S21 has calculated percent of OD deformation of 1.7% and Strain of 3.4%. The repair criteria is 6% for OD deformation and strain. KB Pipeline has no process for determining the interval for examining the pipeline with ILI tools (or other methods) in the Operations and Maintenance Manual. KB needs to develop a plan and procedures to monitor the anomalies and include this plan and procedures as a part of the Operations and Maintenance Manual. An integral part of this monitoring plan is to determine the examination interval by various methods such as ILI tools.

3. §192.619 Maximum allowable operating pressure - Steel or plastic pipelines

(a) No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:
(1) The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part. However, for steel pipe in pipelines being converted under §192.14 or uprated under subpart K of this part, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, one of the following pressures is to be used as design pressure:
(i) Eighty percent of the first test pressure that produces yield under section N5 of Appendix N of ASME B31.8 (incorporated by reference, see §192.7), reduced by the appropriate factor in paragraph (a)(2)(ii) of this section; or
(ii) If the pipe is 12¾ inches (324 mm) or less in outside diameter and is not tested to yield under this paragraph, 200 p.s.i. (1379 kPa) gage.
(2) The pressure obtained by dividing the pressure to which the segment was tested after construction as follows:
(i) For plastic pipe in all locations, the test pressure is divided by a factor of 1.5.
(ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with the following table:

Factors (see Note)

Class location	Segment Installed Before Nov.12, 1970	Segment Installed After Nov. 11, 1970	Segment Converted under §192.14
1	1.1	1.1	1.25
2	1.25	1.25	1.25
3	1.4	1.5	1.5
4	1.4	1.5	1.5

Note: For offshore segments installed, or updated, or converted after July 31, 1977, that are not located on an offshore platform, the factor is 1.25. For segments installed, uprated, or converted after July 31, 1977 that are located on an offshore platform or on a platform in inland navigable waters (including a pipe riser), the factor is 1.5

KB Pipeline failed to establish the Maximum Allowable Operating Pressure (MAOP) in accordance with §192.619. KB Pipeline provided an MAOP justification study conducted by Trigon Engineering Inc. (Trigon) in 1995. The 1995 Trigon study evaluates the original pipeline system including the 1992 construction drawings of the pipeline and the hydrostatic testing completed in 1992. Trigon determined that the pipe is the weakest element of the pipeline system. The Trigon Study is vague on what other elements of the pipeline system were evaluated. The KB Pipeline has undergone significant modification between 1995 and 2013. Specifically, KB Pipeline has installed aboveground replacement pipe in two locations, constructed a new lateral to the Port Westward Generating Plant, made modifications to Beaver Meter Station, and accepted responsibility of a segment of the Unit 8 lateral. All applicable elements required in an MAOP calculation were not adequately documented. KB Pipeline needs to complete a new documented MAOP determination study and consider the entire pipeline system including above ground appurtenances.

4. **§192.739 Pressure limiting and regulating stations: Inspection and testing.**

(a) Each pressure limiting station, relief device (except rupture discs), and Pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is-
(1) In good mechanical condition;
(2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;
(3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of §192.201(a); and
(4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

KB Pipeline failed to inspect and test the pressure regulating equipment on meter run 300/400 (Unit 39935) in accordance with §192.739 "Pressure limiting and regulating stations: Inspection and testing." This meter run is currently valved out and locked out of service and KB considers the run abandoned. However, KB Pipeline needs to remove meter run 300/400 and notify PHMSA that it is abandoned or conduct the required Inspection and Testing in accordance with §192.739.

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed $200,000 per violation per day the violation persists up to a maximum of $2,000,000 for a related series of violations. For violations occurring prior to January 4, 2012, the maximum penalty may not exceed $100,000 per violation per day, with a maximum penalty not to exceed $1,000,000 for a related series of violations. We have reviewed the circumstances and supporting documents involved in this case, and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to correct

the items identified in this letter. Failure to do so will result in KB Pipeline being subject to additional enforcement action.

No reply to this letter is required. If you choose to reply, in your correspondence please refer to **CPF 5-2015-1005W.** Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Sincerely,

Christopher Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

cc: PHP-60 Compliance Registry
PHP-500 Jason Dunphy
WUTC