



Nebraska State Fire Marshal Pipeline Safety Section Inspection Report

SFM Deputy Conducting Inspection:

Arnie Bates

Inspection Type:

O&M STANDARD

Operator Name:

Black Hills Energy

Unit:

Beatrice

Call#:

8738

Inspection Date(s):

3/19/13

Town/Site:

Exeter

Report Date:

3/19/2013

Facility ID:

02-02-126

Facility ID 02-02-126

SFM Inspection Date(s) March 19, 2013

NEBRASKA STATE FIRE MARSHAL – PIPELINE SAFETY DIVISION

TOWN Exeter

UNIT: **Beatrice 02-02-000**

COMPANY : **Black Hills Energy**

NG LPG

PRIVATE MM MUNICIPAL

MANAGER Rick Schwartz

TELEPHONE#: (402) 223-3340

COUNTY Fillmore

PIPING MATERIAL / MAINS:

Bare Steel Coated Steel Cast Iron Plastic Copper

PIPING MATERIAL / SERVICES:

Bare Steel Coated Steel Cast Iron Plastic Copper

192.625 ODORANT:

Odorized by: Transmission Field Check: Yes Odorant Intensity Level: Readily Detectable
(f) Odorant Perception Test conducted: Monthly Odorant level checked/calculated: Periodically

TOWN BORDER STATION (Designation & Location) south end of Exeter Street

Company Owner: Kinder Morgan Operator Inspection Date: _____

Size/Make/Model of Distribution Regulator: _____

Size/Make/Model of OPP Device: _____

Relief Stack Size: 2" Approx. Length of Stack: 60"

MAOP for Inlet Pressure: _____ MAOP for Outlet Pressure 50 OPP Set Point _____

Inlet Pressure / Field: _____ Outlet Pressure / Field: 48 Pressure Recording Device: _____

	YES / NO		YES / NO
Cathodic Protection as Required <u>-1.245</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Required Valves Locked	<input checked="" type="checkbox"/> <input type="checkbox"/>
Fire Hazard _____	<input type="checkbox"/> <input checked="" type="checkbox"/>	Station Guard.....	<input checked="" type="checkbox"/> <input type="checkbox"/>
Atmospheric Corrosion Control <u>Good Condition</u>			

192.739 REGULATOR STATION # & Location: DRS#1 155 East Tecumseh w097°26.960' N 40° 38.598'

TYPE: Monitoring Relief Capacity Adequate Operator Inspection Date: 5/30/2012

Size/Make/Model of Distribution Regulator: 2" Fisher 99 67 scfh elevation 1607'

Size/Make/Model of OPP Device: 2" Fisher 289P 84 scfh

Relief Stack Size: 2" Approx. Length of Stack: 12"

MAOP for Inlet Pressure: 50 MAOP for Outlet Pressure 10 OPP Set Point 9

Inlet Pressure / Field: 48 Outlet Pressure / Field: 8 Pressure Recording Device: Chart

	YES / NO		YES / NO
Cathodic Protection as Required <u>-1.149</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>	Required Valves Locked	<input checked="" type="checkbox"/> <input type="checkbox"/>
Fire Hazard _____	<input type="checkbox"/> <input checked="" type="checkbox"/>	Station Guard.....	<input checked="" type="checkbox"/> <input type="checkbox"/>
Atmospheric Corrosion Control <u>Good Condition</u>		Required Signage.....	<input checked="" type="checkbox"/> <input type="checkbox"/>

192.747 – IDENTIFIED NUMBER OF DISTRIBUTION VALVES FOR SAFE OPERATION: 2

Operator Inspection Date: 3/22/12 History: 15 months not exceeded Correction: no inoperable valves

192.741 - CATHODIC PROTECTION

Rectifier Brand NA Output Volts: na Output Amps: na
Anodes Located: Map Marked Number of CP Areas: 4 Date of Reading: 5/2/2012

CHECK POINT

Address	Reading (by 1/2 cell) 3/19/13
1. <u>(west end of Otoe) 310 West Otoe</u>	<u>-1.318</u>
2. <u>Boundry & E. Cheyenne School south/North risers</u>	<u>-0.875/ -0.905</u>
3. <u>520 N Missouri north end of Missouri</u>	<u>-1.575</u>
4. <u>School, n set from Tecumseh St</u>	<u>-1.277</u>
5. <u>DRS #1 cp</u>	<u>-1.149</u>
6. <u>319 Cheyenne</u>	<u>-0.932</u>
7. <u>317 W Kiowa</u>	<u>-1.228</u>
8. <u>605 S Union</u>	<u>-1.325</u>
9. <u>4" steel riser at 163 S Burlington (Grain Dryer) installed 7/2011 isolated</u>	<u>-0.527</u>
10. <u>221 West South Boundry</u>	<u>-1.023</u>
11. <u>Maplewood & Exeter</u>	<u>-1.306</u>

192.465(a) - 10% Isolated Short Section: Yes : Date:5/7/2009

192.481- Atmospheric Survey conducted: conducted with Leakage survey

192.465 External corrosion control: Monitoring (e) reevaluation: Bare cell to cell: 2011

192.723 - LEAK SURVEY DATA 3 yr Cycle on 1/2 town residential

TYPE <u>FI</u>	Business <u>2/28/2012</u>	#Leaks <u>1ag</u>	#Leaks Repaired <u>1</u>
TYPE <u>FI</u>	Residential E <u>8/22-31/2011</u>	#Leaks <u>0</u>	#Leaks Repaired <u>0</u>
TYPE <u>FI</u>	Residential West: <u>6/29-30/2010</u>	#Leaks <u>1s1ag</u>	# Leaks Repaired <u>2</u>

LEAK CAUSES:

Corrosion:1 3rd Party:0 Outside Force:0 Const. Defect:0 Material Defect:0 Other:2

LEAK LOCATION(S):

Mains:0 Service Line:1 On Meter Set:2

192.353, 192.355, 192.357, & 192.365 METER SETS

Inaccessible: 0 Unpainted:0 Outside stress:0 No Service Valve Upstream: 0

Not protected from damage: 0 Plugged or unscreened Regulator Vent: 0

Failed Cathodic Reading: 1

Total Meters 260 Approximate Number of Meters Checked 100

Remarks:

Low P/S potential on 4" service riser of grain dryer located at 163 South Burlington.

St. Stephens Church new service, installed 10/23/12 extended 3/4" Aldyl-A with (70') 1" cts Driscoplex 6500 Gas PE2406 @100 Psi for 1 hour. BHE to New Fellowship Hall and New fuel runs for Church and parsonage.

310 West Otoe new service 1" cts PE extended from end of main.

Meter sets (south from East Boundry Street) for School are displaying lowered CP, appears that no insulator was installed down stream of the meter, isolate customer piping from BHE CP protection.

Deputy Signature:

Arnie Bates

Arnie Bates 8738



Nebraska State Fire Marshal Pipeline Safety Section Inspection Report

SFM Deputy Conducting Inspection:

Arnie Bates

Call#:

8738

Report Date:

11/21/13

Inspection Type:

Compliance FOLLOW-UP

Inspection Date(s):

11/21/13

Operator Name:

Black Hills Energy

Unit:

Beatrice

Town/Site:

Exeter

Facility ID:

02-02-126

**NEBRASKA STATE FIRE MARSHAL - PIPELINE SAFETY SECTION
FOLLOW-UP INSPECTION:**

Name of Operator:	Black Hills Energy	Unit #	Beatrice	Town ID	02-02-126
Operator Address: Black Hills Energy 510 North Commerce Street BEATRICE NE 68310		Phone Number: 402 233 3340 Fax Number: 402 233 3397 Emergency: 1-800-694-8989 Federal ID: 15359			
Persons Interviewed	Title		Phone No.		
Cullen Sila	Operations Supervisor				
Darrin Worrell	Measure/Corrosion Field Operations Supervisor				
Nathan Stewart	Ne State Compliance Specialist				
Person conducting Inspection Arnie Bates DSFM 8738				Date: November 21, 2013	
Description: Issue: Ext Corrosion Code 192.463 Date of Letter: 05/01/13 Type: Concern					
Portion of Unit Inspected: Field Facilities and records inspection for the Friend system					

FINDINGS: Exeter: Low P/S potential on 4" service riser of grain dryer located at 163 South Burlington. Response (6/3/13) from BHE indicated PE riser, no cathodic protection necessary. Visited location 11/21/13 and acquired P/S potential at -0.517.

I had previously indicated to BHE cathodic department that I believed that the service riser needed cathodic protection indicating (Installation records indicate 4" steel 34" riser welded to steel elbow, welded to 4" transition fitting Steel to PE). But did not receive a response. on 11/22/13 sent an email to Darrin Worrell indicating that it was possible that the cathodic department was not aware of a second Work Order had been processed for the construction project.(WO 5226135113 & 60017540) Work order 60017540 deals with the service riser and installation. WO 60017540 indicates the weld fittings and pipe to make the 4" riser. Since this pipe was installed and put into service 7/11/11 and there was no cathodic protection provided to the piping. This becomes a violation of CFR 49 Part 192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971.

(a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

- (1) It must have an external protective coating meeting the requirements of §192.461.
- (2) It must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction.

For additional concern within the Exeter system.

Meter sets (south from East Boundry Street) for School are displaying lowered CP, appears that no insulator was installed downstream of the meter, isolate customer piping from BHE CP protection. 08/15/13 P/S potential at -1.100 & -0.918 (insulator' have been installed on meter set)

**NEBRASKA STATE FIRE MARSHAL - PIPELINE SAFETY SECTION
FOLLOW-UP INSPECTION:**

CONCLUSION: NOPV 20131122-N has been issued for apparent violation.

STATE OF NEBRASKA



Dave Heineman
Governor

Notice of Violation



Jim Heine
Fire Marshal

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

November 25, 2013

Darrin Worrell
Black Hills Energy
P. O. Box 83008
Lincoln, NE 68501-3008

RE: Exeter natural gas piping – #20131125-N

The State Fire Marshal Office, Fuels Division, Pipeline Safety Section has conducted an investigation of field facilities and records for the Exeter system. As a result of this investigation it appears that Black Hills Energy has violated Title 155 Nebraska Administrative Code Chapter 1.001 adopting by reference Pipeline Safety Regulations Title 49, Code of Federal Regulations, Part 191, 192, 199, & 40.

Therefore, the purpose of this letter is to request a response from Black Hills Energy for the probable violation. I am requesting that Black Hills Energy respond within 30 days of receipt of this letter. Please reference 20131122-N in the response. The response may accept the findings and state a plan of action to address the probable violation or, the response may disagree with the findings. If Black Hills Energy chooses to disagree with the findings, please justify your position in the response.

During July 2011 an addition to the Exeter gas piping system was completed and placed into service. This system contained steel piping requiring cathodic protection. To date no cathodic protection has been installed.

§192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971. (a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

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□ **MAIN OFFICE**
□ **DISTRICT A**
246 South 14th Street
Lincoln, NE 68508-1804
(402) 471-2027

□ **DISTRICT B**
438 West Market
Albion, NE 68620-1241
(402) 395-2164

■ **FUELS DIVISION**
□ **FLST** ■ **Pipeline**
246 South 14th Street
Lincoln, NE 68508-1804
(402) 471-9465

□ **TRAINING DIVISION**
2410 North Wheeler Avenue
Suite 112
Grand Island, NE 68801-2376
(308) 385-6892

At present, we consider the findings to be a probable violation of Title 155 Nebraska Administrative Code Chapter 1.001 adopting by reference pipeline safety regulations Title 49, Code of Federal Regulations, Part 192.

Whenever the State Fire Marshal has reason to believe any person is violating any provision of subsection (1) 81-545 or any regulation under the Nebraska Natural Gas Pipeline Safety Act of 1969, The State Fire Marshal shall give notice to such person and permit such person reasonable opportunity to achieve compliance. If compliance has not been achieved in a reasonable time, the State Fire Marshal may request the Attorney general to bring an action under section 81-547 in the district court for the county in which the defendant's principle place of business is located, and the district court may impose a civil penalty of not to exceed ten thousand dollars for each violation for each day that such violation persists, except that the maximum civil penalty shall not exceed five hundred thousand dollars for any related series of violations.

If you have any questions regarding the substance or propriety of this notice, please contact our office at, Nebraska State Fire Marshal, Pipeline Safety, 246 South 14th Street, Lincoln, NE 68508-1804 or telephone 402-471-9465.



Arnie Bates, Deputy
Pipeline Safety Section
Nebraska State Fire Marshal



Clark Conklin,
Chief of Fuels Division
Nebraska State Fire Marshal

cc: Nathan Stewart, P. O. Box 83008, Lincoln, NE 68504
Rick Schwartz, 510 North Commerce Street, Beatrice, NE 68310
Cullen Sila, 510 North Commerce Street, Beatrice, NE 68310



Nebraska State Fire Marshal Pipeline Safety Section Inspection Report

SFM Deputy Conducting Inspection:

Arnie Bates

Call#:

8738

Report Date:

12/23/13

Inspection Type:

Compliance FOLLOW-UP

Inspection Date(s):

12/23/13

Operator Name:

Black Hills Energy

Unit:

Beatrice

Town/Site:

Exeter

Facility ID:

02-02-126

**NEBRASKA STATE FIRE MARSHAL - PIPELINE SAFETY SECTION
FOLLOW-UP INSPECTION:**

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Persons Interviewed	Title		Phone No.		
Cullen Sila	Operations Supervisor				
Darrin Worrell	Measure/Corrosion Field Operations Supervisor				
Nathan Stewart	Ne State Compliance Specialist				
Person conducting Inspection Arnie Bates DSFM 8738				Date: December 23, 2013	
Description: Issue: Ext Corrosion Code 192.463 Date of Letter: 11/22/13 Type: NOPV					
Portion of Unit Inspected: Field Facilities and records inspection for the Friend system					

FINDINGS: Exeter: Low P/S potential on 4" service riser of grain dryer located at 163 South Burlington. Response (6/3/13) from BHE indicated PE riser, no cathodic protection necessary. Visited location 11/21/13 and acquired P/S potential at -0.517.

I had previously indicated to BHE cathodic department that I believed that the service riser needed cathodic protection indicating (Installation records indicate 4" steel 34" riser welded to steel elbow, welded to 4" transition fitting Steel to PE). But did not receive a response. on 11/22/13 sent an email to Darrin Worrell indicating that it was possible that the cathodic department was not aware of a second Work Order had been processed for the construction project.(WO 5226135113 & 60017540) Work order 60017540 deals with the service riser and installation. WO 60017540 indicates the weld fittings and pipe to make the 4" riser. Since this pipe was installed and put into service 7/11/11 and there was no cathodic protection provided to the piping. This becomes a violation of CFR 49 Part 192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971.

NOPV issued for this item on 11/22/13 192.455(2)

(a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

- (1) It must have an external protective coating meeting the requirements of §192.461.
 - (2) It must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction.
- During conversation with Cullen Sila 12/23/13, he indicated that BHE personnel had work at this location, finding that an anode Was originally installed, however the riser had not been electrically isolated for the meter run. BHE personnel install a cathodic insulating device at the 4" flange. BHE personnel tested riser with P/S potentialve the minimum.

NEBRASKA STATE FIRE MARSHAL - PIPELINE SAFETY SECTION
FOLLOW-UP INSPECTION:

I visited this site on 12/23/13 and found the P/S potential to be approximately -1.498, an acceptable value of cathodic protection. Also observed that a cathodic insulating device had been installed between flange section downstream of the service valve. This is an acceptable resolution to the issue.

For additional concern within the Exeter system.

Meter sets (south from East Boundary Street) for School are displaying lowered CP, appears that no insulator was installed downstream of the meter, isolate customer piping from BHE CP protection. 08/15/13 P/S potential at -1.100 & -0.918 (insulating device has been installed on meter set)

CONCLUSION: NOPV 20131122-N has been issued for apparent violation. Upon follow-up inspection 12/23/13 I find that all issues have been addressed and SFM actions will be closed for NOPV 20131122-N and 20130501-C.

STATE OF NEBRASKA



Letter of Approval

Dave Heineman
Governor

Jim Heine
Fire Marshal

Darrin Worrel
Black Hills Energy
P. O. Box 83008
Lincoln, NE 68501-3008

December 26, 2013

RE: Exeter natural gas piping – #20131125-N

The State Fire Marshal Office, Fuels Division, Pipeline Safety Section has conducted follow-up inspection of field facilities and records for the Exeter system to verify action taken to address violation and concerns for the operation and maintenance of the gas piping system. I believe that the specific violation of failure to provide adequate cathodic protection to a short segment of steel natural gas piping has been addressed, and will consider this action closed.

We appreciate your attention to these issues. There will be continued consultation and inspection from The State Fire Marshal Office, Fuels Division, Pipeline Safety Section to monitor operations.

If you have any questions regarding the substance or propriety of this notice, please contact our office at, Nebraska State Fire Marshal, Pipeline Safety, 246 South 14th Street, Lincoln, NE 68508-1804 or telephone 402-471-9465.

Handwritten signature of Arnie Bates.

Arnie Bates, Deputy
Pipeline Safety Section
Nebraska State Fire Marshal

Handwritten signature of Clark Conklin.

Clark Conklin,
Chief of Fuels Division
Nebraska State Fire Marshal

cc: Nathan Stewart, P. O. Box 83008, Lincoln, NE 68501-3008
Rick Schwartz, 510 North Commerce Street, Beatrice, NE 68310
Cullen Sila, 510 North Commerce Street, Beatrice, NE 68310

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