

Cardinal FG Company

A Cardinal Glass Industries Company

545 Avery Road West
Winlock, WA 98596
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November 16, 2010

re: Docket PG-100017

David Lykken
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Dr. SW
Olympia WA, 98504-7250

Dear Mr. Lykken:

Please find attached a supplemental Cardinal FG response to the 2010 Natural Gas Pipeline Standard Inspection, Docket PG-100017

We believe this completes all outstanding items in response to Docket PG-100017

Should you have any questions please do not hesitate to contact us directly.

Sincerely,



Steve Smith
Plant Manager
Cardinal FG

cc Cosentino Consulting Inc.
Pipeline facility files

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Supplemental Response to Cardinal Glass 2010 Natural Gas Pipeline Safety Inspection Docket PG-100017

1. 49 CFR §192.463 External Corrosion Control: Cathodic protection

(a) Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part.

Appendix D to Part 192—Criteria for Cathodic Protection and Determination of Measurements

II. *Interpretation of voltage measurement.* *Voltage (IR) drops other than those across the structure-electrolyte boundary must be considered for valid interpretation of the voltage measurement in paragraphs A(1) and (2) and paragraph B(1) of section I of this appendix.*

Charge:

Cardinal does not have a process in their O&M manual to consider the IR drop when interpreting the level of cathodic protection on their pipeline facilities.

Finding(s):

No evidence was presented to show that IR drop was considered when determining the level of cathodic protection on pipeline facilities.

Response:

An analysis of the Cardinal cathodic protection system was undertaken by an independent corrosion registered by the State of Washington. A full copy of the report may be found in the pipeline facility permanent record.

The corrosion engineer further quantifies the voltage drop (IR drop) in the cardinal system to be 0.300 volts.

In summary the corrosion engineer finds the cathodic protection employed at Cardinal provides adequate protection in accordance with 49 CFR 192.463 and 49 CFR 192 Appendix D.

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Supplemental Response to Cardinal Glass 2010 Natural Gas Pipeline Safety Inspection Docket PG-100017 (continued)

2. 49 CFR §192.616 Public Awareness

49 CFR 192.616(d) states the operator's public awareness program must specifically include provisions to educate the public. Appropriate governmental organizations and persons engaged in excavation related activities on:

- 1. Use of one call notification system prior to excavation and other damage prevention activities;*
- 2. Possible hazards associated with unintended releases from hydrogen pipeline facility;*
- 3. Physical indications that such a release may have occurred;*
- 4. Steps that should be taken for public safety in the event of a pipeline release; and*
- 5. Procedures for reporting such an event.*

Charge:

Cardinal did not provide proof that the public was educated as required by 49 CFR §192.616 Public Awareness Section (d)(1-5).

Finding(s):

Cardinal did not educate the public as required in 49 CFR §192.616(d)(1-5). No evidence was presented to confirm that the public was provided with required educational materials.

Response:

The pipeline specific public information mailer presented in the initial Cardinal inspection response was mailed to the affected public on November 15, 2010.