

Thursday, September 11, 2014
Mr. Jonathan Wolfgram
Chief Engineer
Minnesota Office of Pipeline Safety
444 Cedar St. Suite 147
St. Paul, MN 55101

RE: CenterPoint Energy Minnesota Gas Integrity Request for §190.341 Special Permit Follow Up

Dear Mr. Wolfgram,

This correspondence is to provide additional information to you and Steve Nanney for the questions related to our special permit application raised during our conference call last week. A couple of items requiring feedback will take additional time and will be answered in forthcoming document(s).

What is the replacement versus reassessment schedule for Class 4 location pipeline segments?

There are two section of Class 4 on the Metro Belt Line. There is a section on the MBLSW and the Lyndale line. On the MBLSW, the pipe will be reassessed the week of 7/14/14 using the Pipetel inline inspection tool. The accelerated replacement plan will have the Class 4 MBLSW pipe replaced in 2018. On the Lyndale line, the pipe is due for reassessment in 2020. The accelerated replacement plan will have the Class 4 Lyndale line replaced in 2016. A new color coded map is included that will readily identify class 4 location pipeline segments.

Check all original assessment recaps for continuity and that all reassessment timelines were met.

2004 MBLSW (North Section) ECDA Assessment Results due in 2011

- This Assessment was completed under the same project as 2010 MBLNW ECDA Results (title needs to be updated)

2005 MBLC ECDA Assessment Results with Low Stress Reassessment due in 2012

- Reassessment was completed in 2012 MBLC Low Stress Reassessment (LSR) Results

2005 MBLNW ECDA Assessment Results with reassessment due in 2010

- Reassessment was completed in 2010 MBLNW ECDA assessment Results

2005 MBLSE (South Section) ECDA Assessment Results with reassessments due in 2012

- Pipeline's MAOP was lowered and pipeline became Distribution

2006 LYNDALE ECDA Assessment Results with Low Stress Reassessment due in 2013

- Reassessment was completed in 2013 LYNDALE Low Stress Reassessment (LSR) Results

2006 MBLN ECDA Assessment Results with Low Stress Reassessment due in 2011

- Reassessment was completed in 2011 MBLN ECDA Reassessment Results

2007 MBLNE ECDA Assessment Results with reassessment due in 2011

- Reassessment was completed in 2011 MBLNE ECDA Reassessment Results

2006 MBLSE (North Section) ECDA Assessment Results with reassessment due in 2012

- Reassessment was completed in 2011 MBLSE (North Section) ECDA Reassessment Results

2007 MBLSW ECDA Assessment Results with Reassessment due in 2014

- This pipe is currently being reassessed with Pipetel

Coatings on new pipeline installations.

Two part epoxy will be used as a field joint coating on the replacement pipe. In the few instances where it is not conducive to use epoxy, a waxed tape coating or other non-shielding coatings will be applied. CNP currently uses wax coating products such as Trenton but is always interested in new products offered by the industry.

Will there be additional SCADA points on the Metro Belt Line?

Since 2011 we have added more than fifteen sites to our SCADA system. Eight of these sites are on the Metro Belt Line system or district regulator stations feeding off the belt line system.

The criteria used to select additional sites involves engineering review of the areas of the system that are not on the SCADA system against criteria including; one way feed, number of customers behind an town border station or district regulator station, design flow through a district regulation station, proximity to existing SCADA sites, other requirements such as plans for remote control of valves or regulator. Based on the review of sites against the criteria, engineering and gas control select, plan and design additional SCADA sites on the system.

This is an ongoing process. SCADA sites and points are typically added every year to allow CNP to gather more real time information on its system operation. For example as segments of the Metro Belt Line are replaced, the potential for additional SCADA points is evaluated and they will be installed as deemed necessary. The beltline currently has adequate SCADA points for pressure monitoring but other points may be added providing for additional data collection. SCADA collected information is used in day to day operations, for response and recovery, historical analysis, and design and planning of system improvements.

How was the replacement plan prioritized?

The information currently available to CNP for differentiation of relative risk on the Belt Line is as follows: Specified Minimum Yield Strength, Pipe Joining Method, Mechanical Coupling Spacing, Class location, and High Consequence Areas. Potential attributes that might be used to differentiate relative risk are either attributes that are uniform in their occurrence over the majority of the pipe or are currently unknown or uncertain and therefore cannot be used as differentiators. To that end, CNP is continuously gathering information about the Belt Line system and when appropriate will use new information to differentiate relative risk in more detail.

The Belt Line was initially prioritized by considering the percentage of specified minimum yield strength (SMYS), which generally correlates to operating pressures which yield a higher percentage of SMYS and are considered relatively higher risks. Next the presence of mechanical couplings as a joining method is considered as elevated relative risk over welded segments of this pipeline. The coupled segments of the line are next differentiated by the spacing of the mechanical couplings which varies by segment according to install year. Segments with mechanical couplings every 40 feet are relatively higher risk than segments with couplings every 60 feet, and the relative risk decreased as the spacing increases to maximum of 120 feet between couplings. These relative risk factors are integrated with class location and High Consequence Areas to determine a higher to lower relative risk prioritization guide.

The proposed schedule for replacement of the Belt Line is also influenced through consideration for planned Public Improvement projects. CNP has met with officials from all affected cities and Hennepin County to review their proposed road projects and integrated this information into the replacement plan of the Belt Line system. This planning assures the most efficient use of public right-of-ways, minimizes traffic disruptions, and ensures compatibility of our design with municipal plans. In addition to coordinating with municipal agencies, the replacement schedule must consider the limited amount of time that we have available during the non-heating season of the year to construct replacement pipeline segments. The Belt Line is an integrated system that must maintain feeds to multiple delivery points throughout the metropolitan area and therefore scheduling of transmission segment outages must consider dependencies and duration of outages. These factors influence the proposed schedule and are reviewed annually to determine if there are changes that materially affect the schedule.

The table below displays the pipeline within the Metro Belt Line replacement that is not currently scheduled to be replaced.

BSTA	ESTA	LENGTH	SYS NM	HCA	COATING	INSTALL YR	DIAMETER	JOINT	GRADE	MAOP	PIR	REASSESS YR	REPLACE YR	COMMENTS
37118	37193	75	LYNDALE 1	HCA	FBE	2002	24	Welded	42000	215	242.8	2020	N/A	
37193	38195	1002	LYNDALE 1	HCA	FBE	2001	24	Welded	42000	215	242.8	2020	N/A	
38195	38386	191	LYNDALE 1	NON-HCA	FBE	2001	24	Welded	42000	215	242.8		N/A	
38386	38955	569	LYNDALE 1	DIST	FBE	2001	24	Welded	42000	215	242.8		N/A	
38955	40123	1168	LYNDALE 1	HCA	FBE	2001	24	Welded	42000	215	242.8	2020	N/A	
40123	40140	17	LYNDALE 1	HCA	FBE	2002	24	Welded	42000	215	242.8	2020	N/A	
1190	3428	2238	MBLN 1	NON-HCA	COAL TAR ENAMEL	1958	24	Welded	35000	170	215.9		N/A	River Crossing
28999	29879	880	MBLNE 1	DIST	BARE	1950	18	Welded	35000	170	161.9		N/A	River Crossing

Information on MBLN and MBLNE river crossings that are not included in the replacement plan.

CNP has two river crossings of the Mississippi River that are integrated into the Belt Line system and are located at: 1) East of 31st Avenue North on the MBLNE segment and 2) West of 62nd Way NE on the MBLN segment. The crossing at 31st Avenue North is an 18” distribution line that is proposed to be inspected through the use of Smart Pig technology to evaluate the condition of the pipeline. This inspection will be conducted in conjunction with the Belt Line replacement work that will occur east of the Mississippi River and is currently scheduled for 2022. The crossing east of 62nd Way NE is a 24” transmission line crossing that is also proposed to be inspected through the use of Smart Pig technology to evaluate the pipeline. This inspection will be coordinated with Belt Line replacement work west of the Mississippi River and is currently scheduled for 2016. CNP will evaluate the results of the inspections and determine a plan for continued usage of the pipelines or plan for replacement work, where warranted.

Best Regards,

Dean A. Headlee

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