- Q. What useful information is the Safety Division able to extract from written condition reports that are provided as part of the CIBS main replacement program?
- 3 A. The condition reports provide the Safety Division with valuable pipeline integrity data 4 including wall thickness, age, soil conditions, system pressure, and location information of 5 pipe segments related to various types and vintages of removed bare steel segments. These 6 characteristics determine integrity and corrosion assumptions that are useful to incorporate 7 into subsequent planning. It is a delicate balance to weigh the need to replace aging piping 8 systems as they near the undesirable condition where leaks increase and mains break against 9 premature replacement of pipes that have many years of useful life and pose little risk to the 10 public. In many cases Staff has seen deep pitting, seam cracks, holes and other undesirable 11 features. For FY 2015, 7 projects involved bare steel that required written condition reports, 12 and 5 of the 7 locations had 100% wall loss (i.e. holes). This indicates that the pipeline has 13 far exceeded acceptable safety requirements and was leaking 24 hours a day, 365 days per 14 year, with ratepayers bearing the costs in the cost of gas. Since 2009, 27 40 individual 15 reports have been completed regarding bare steel segments, which is an average of 4.5 6.7 16 per year.
- Q. Do certain municipalities have higher percentages of the cast iron and bare steel distribution pipe that are addressed as part of the CIBS program?
- A. Of the 29 communities served by Liberty Utilities gas distribution operation, only seven have cast iron or bare steel segments (leak prone or worn pipe). As expected, the heaviest concentration is in the municipalities of Manchester, Nashua, and Concord. These communities began serving customers back in the 1800s and, as a result, have some of the oldest piping in the state. Liberty reduced the amount of leak prone pipe from 120.8 miles for FY 2014 to 115.2 miles for FY 2015. This 5.6 mile decrease includes 5.0 miles as a result of the CIBS program (4.73 miles replaced and 0.27 miles abandoned because of conversion

O. What useful information is the Safety Division able to extract from written condition 1 2 reports that are provided as part of the CIBS main replacement program?

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- A. The condition reports provide the Safety Division with valuable pipeline integrity data including wall thickness, age, soil conditions, system pressure, and location information of 4 5 pipe segments related to various types and vintages of removed bare steel segments. These 6 characteristics determine integrity and corrosion assumptions that are useful to incorporate 7 into subsequent planning. It is a delicate balance to weigh the need to replace aging piping 8 systems as they near the undesirable condition where leaks increase and mains break against 9 premature replacement of pipes that have many years of useful life and pose little risk to the 10 public. In many cases Staff has seen deep pitting, seam cracks, holes and other undesirable 11 features. For FY 2015, 7 projects involved bare steel that required written condition reports, 12 and 5 of the 7 locations had 100% wall loss (i.e. holes). This indicates that the pipeline has far exceeded acceptable safety requirements and was leaking 24 hours a day, 365 days per 13 14 year, with ratepayers bearing the costs in the cost of gas. Since 2009, 40 individual reports 15 have been completed regarding bare steel segments, which is an average of 6.7 per year.
 - O. Do certain municipalities have higher percentages of the cast iron and bare steel distribution pipe that are addressed as part of the CIBS program?
- 18 A. Of the 29 communities served by Liberty Utilities gas distribution operation, only seven have 19 cast iron or bare steel segments (leak prone or worn pipe). As expected, the heaviest 20 concentration is in the municipalities of Manchester, Nashua, and Concord. These 21 communities began serving customers back in the 1800s and, as a result, have some of the 22 oldest piping in the state. Liberty reduced the amount of leak prone pipe from 120.8 miles 23 for FY 2014 to 115.2 miles for FY 2015. This 5.6 mile decrease includes 5.0 miles as a result 24 of the CIBS program (4.73 miles replaced and 0.27 miles abandoned because of conversion