



Maintenance Capital Update (RP19-1353)

December 9, 2020

Northern is pleased to report that it is on track to meet its 2020 annual maintenance capital target of \$501 million.

In the settlement of its 2019 rate actions, Northern Natural Gas memorialized its plan for annual maintenance capital investment and committed to a rate case moratorium until the later of June 30, 2022, or the date on which it has cumulative maintenance capital investment of at least \$525 million. As stated above, Northern is on track to meet its 2020 annual maintenance capital target of \$501 million, and Northern has nearly met the cumulative maintenance capital investment of \$525 million. Northern also agreed in settlement that its minimum annual capital investment would be equal to depreciation expense reported in its FERC Form 2 (forecasted at \$153.3 million for 2020); Northern is on track to significantly exceed this requirement in 2020. See Table 1 and 2 below for a comparison of Northern’s investment forecast and the amounts identified in the settlement.

**Table 1**

2020 Annual Maintenance Capital			
Minimum	Target	Forecast	On Track?
\$153.3 million	\$501 million	\$501 million	✓

**Table 2**

2020-2022 Cumulative Maintenance Capital					
	2020	2021	2022	Total	On Track?
December 2020 Projection	\$501 million	\$375 million	\$407 million	\$1,283 million	✓
Cumulative Investment				\$525 million	
Projected Excess				\$758 million	

Attached is Northern’s semi-annual update to its Maintenance Capital Plan. The Maintenance Capital Plan was initially published in the settlement agreement approved by FERC, referenced as Appendix D. The attached Appendix D reflects Northern’s current projections and will be updated again and reconciled no later than March 15, 2021. Northern will schedule a customer meeting by mid-April 2021 to present the plan and address any questions.

	Updated Capital Projection					Settlement Appendix D	Increase/ (Decrease)
	2020	2021	2022	2023	Total		
<b>Operations</b>							
Pipeline Assessments	\$ 64,670	\$ 59,796	\$ 43,656	\$ 44,349	\$ 212,471	\$ 169,296	\$ 43,175 (1)
Compression Replacement	64,796	50,021	27,256	5,795	147,868	136,820	11,048
LNG Replacement	67	3,011	7,286	40,784	51,148	51,093	55
Underground Storage Integrity	2,230	-	4,927	-	7,157	7,811	(654)
Vintage Pipeline Replacement	107,453	88,321	163,402	110,016	469,192	446,953	22,239 (1)
<b>Total Asset Modernization</b>	<b>239,216</b>	<b>201,149</b>	<b>246,527</b>	<b>200,944</b>	<b>887,836</b>	<b>811,973</b>	<b>75,863</b>
Building/Facility - Field	7,368	7,301	1,500	1,566	17,735	15,537	2,198
Pipeline-Integrity	57,555	23,344	19,110	17,086	117,095	147,166	(30,071) (1)
<i>NEB46001 Auburn BL Abandonment</i>	444	6,634	-	-	7,078	7,410	(332)
<i>M500C-Class 3 Replacement - MP 82.0 and 82.6</i>	5,004	-	-	-	5,004	5,174	(170)
Pipeline-Shallow/Exposed Pipe	22,853	16,408	27,998	14,928	82,187	81,688	499
<i>WIB22301-3.55 Rib Lake HDD</i>	29	-	5,540	-	5,569	5,552	17
<i>WIB22301-3.05 Rib Lake HDD</i>	-	-	5,414	-	5,414	5,440	(26)
Measurement	7,724	7,012	9,040	22,216	45,992	44,491	1,501
<i>Ventura Interconnect Emergency Bypass</i>	-	1,621	156	13,674	15,451	15,245	206
Automation/Controls	9,228	17,165	15,888	12,815	55,096	54,949	147
<i>Beatrice Automation</i>	10	2,465	3,411	4,517	10,403	8,663	1,740
<i>Clifton Controls Upgrade 1, 2, 3 and 4</i>	255	4,610	2,471	-	7,336	7,615	(279)
<i>Carlton Controls Upgrade Phase 1</i>	543	4,566	1,377	-	6,486	5,931	555
<i>Belleville Automation</i>	-	-	2,977	2,770	5,747	5,242	505
Pipeline - Relocation	4,124	2,192	1,193	1,222	8,731	12,033	(3,302)
Compressor Mods	19,704	9,941	2,143	7,077	38,865	32,914	5,951
<i>Spraberry Header Piping Modifications</i>	5,241	-	-	-	5,241	-	5,241
Underground/LNG Storage	19,956	8,809	1,006	12,364	42,135	44,544	(2,409)
Measurement-Heaters	5,633	7,764	7,011	7,543	27,951	23,541	4,410
Valve Installation/Replacement	8,194	3,045	9,465	4,175	24,879	23,766	1,113
Corrosion Control	24,540	8,111	4,099	11,490	48,240	43,611	4,629
<i>M532B MP 0.603 Pipe Replacement</i>	6,399	-	-	-	6,399	-	6,399
<i>LeSueur Replacement Phase 2</i>	7	-	-	5,138	5,145	5,143	2
Odorization	1,840	2,196	1,580	1,001	6,617	12,966	(6,349)
Pipeline Safety Act HCA	11,783	11,451	10,907	5,706	39,847	38,372	1,475
<i>MNB75601-24"-Replace MP 1.1-2.7 Willmar</i>	3,333	-	-	-	3,333	6,994	(3,661)
Unit Exchange	2,978	1,661	4,203	6,329	15,171	20,709	(5,538)
Systems Development	3,079	5,708	5,461	2,165	16,413	7,471	8,942
Special Projects	10,618	6,050	4,447	2,987	24,102	20,469	3,633
Retirements	10,118	6,661	2,138	1,351	20,268	27,685	(7,417)
Risk-ESD	4,060	2,707	5,018	4,028	15,813	16,252	(439)
Trans/Mob Wrk Eqp	4,084	3,383	3,453	3,192	14,112	12,249	1,863
Information Technology	11,651	14,204	17,855	17,461	61,171	59,554	1,617
<i>Maximo Implementation</i>	-	4,000	4,000	-	8,000	-	8,000
Other	14,694	8,428	6,873	8,706	38,701	35,060	3,641
Other Maintenance Capital	261,784	173,541	160,388	165,408	761,121	775,027	(13,906)
<b>Total Maintenance Capital</b>	<b>\$ 501,000</b>	<b>\$ 374,690</b>	<b>\$ 406,915</b>	<b>\$ 366,352</b>	<b>\$ 1,648,957</b>	<b>\$ 1,587,000</b>	<b>\$ 61,957</b>
Maintenance Capital Target	501,000	369,000	400,000	317,000	1,587,000		
<b>Variance - Increase/(Decrease)</b>	<b>\$ -</b>	<b>\$ 5,690</b>	<b>\$ 6,915</b>	<b>\$ 49,352</b>	<b>\$ 61,957</b>		

Notes:

Items in italics are individual projects that are greater than \$5 million and are included in the total for the project category.  
Asset Modernization projects are listed in Exhibit 1 of the December 2020 Asset Modernization report.

- (1) The reduction in Pipeline Integrity costs compared to the Settlement Appendix D are primarily related to three items:
- Initial Appendix D included \$17 million for unidentified in-line inspection repairs that was reduced to help offset increases in the pipeline assessments and vintage pipeline replacement categories.
  - Northern was able to reduce the Sioux City to Paulina line pressure, which cancelled the need to replace the line for \$8 million.
  - Project to replace the Lake City branch line of \$5 million was cancelled and a new project to modify the Lake City TBS was added to Vintage Pipeline Replacement category.