

Maintenance Capital Update (RP19-1353)

December 21, 2021

Northern Natural Gas is pleased to report that it is on track to meet its 2021 annual maintenance capital projection with a forecast of \$537 million.

In the settlement of its 2019 rate actions, Northern 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 reported April 2021 annual maintenance capital projection with a forecast of \$537 million, and Northern has met the cumulative maintenance capital investment of \$525 million. Northern also agreed in the settlement that its minimum annual capital investment would be equal to depreciation expense reported in its FERC Form 2 (forecasted at \$162.1 million for 2021); Northern is on track to significantly exceed this requirement in 2021. See Tables 1 and 2 below for a comparison of Northern's investment forecast and the amounts identified in the settlement.

Table 1										
2021 Annual Maintenance Capital										
Minimum	Settlement	April	Forecast	On Track?						
	Target	Projection								
\$162.1 million	\$369 million	\$520 million	\$537 million	\checkmark						

Table 2											
2020-2022 Cumulative Maintenance Capital											
	2020	2021	2022	Total							
					Achieved?						
December 2021 Projection	\$505 million	\$537 million	\$509 million	\$1,551 million							
Settlement Cumulative Investment	\$525 million	\checkmark									
Projected Excess				\$1,026 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 and reconciled no later than March 15, 2022. Northern will schedule a customer meeting by mid-April 2022 to present the Plan and address any questions.

Northern Natural Gas													RP19-1353	
Naintenance Capital Projection - December 2021													Appendix D	
020-2023														
S in thousands)														
										_				
				ted (Capital Pro	ject	ion			_	Previous	Increase/		
	2020	20	21		2022		2023		Total	A	ppendix D	(D	ecrease)	
<u>Dperations</u>														
Pipeline Assessments	\$ 65,197	\$ 6	50,390	\$	64,796	\$	51,277	\$	241,660	\$	217,724	\$	23,936	
Compression Replacement	67,288	6	62,516		56,890		6,674		193,368		162,780		30,588	
NG Replacement	30		2,641		2,053		35,313		40,037		53,169		(13,132)	
Jnderground Storage Integrity	2,548		-		4,891		-		7,439		7,475		(36)	
/intage Pipeline Replacement	108,855	15	58,065		119,840		92,717		479,477		524,328		(44,851)	
Total Asset Modernization	243,918	28	33,612		248,470		185,981		961,981		965,476		(3,495)	
Building/Facility - Field	7,109	1	12,447		5,050		1,655		26,261		24,899		1,362	
Pipeline Integrity	63,642	3	38,147		52,204		19,487		173,480		121,027		52,453	
NEB46001 Auburn BL Abandonment	542		4,705		61		-		5,308		4,630		678	
Pipeline-Shallow/Exposed Pipe	24,150	2	23,797		35,526		17,303		100,776		88,775		12,001	
Measurement	7,269	1	15,812		24,499		8,091		55,671		54,496		1,175	
Automation/Controls	8,511	2	20,113		16,846		16,185		61,655		54,971		6,684	
Beatrice Automation	-		135		5,242		4,101		9,478		-		9,478	
Clifton Controls Upgrade 1, 2, 3 and 4	261		5,623		1,484		-		7,368		261		7,107	
Carlton Controls Upgrade Phase 1	511		6,776		-		-		7,287		6,379		908	
Pipeline - Relocation	4,062		1,341		1,194		1,227		7,824		8,735		(911)	
Compressor Mods	19,345	1	17,131		4,344		10,230		51,050		46,548		4,502	
Spraberry Header Piping Modifications	5,272		1,291		-		-		6,563		5,272		1,291	
Jnderground/LNG Storage	19,657	1	11,003		3,331		11,662		45,653		46,524		(871)	
Measurement-Heaters	5,476		6,853		11,713		8,653		32,695		31,706		989	
/alve Installation/Replacement	7,909		8,274		13,412		2,559		32,154		30,946		1,208	
Corrosion Control	24,273	1	10,158		4,313		16,713		55,457		49,873		5,584	
M532B MP 0.603 Pipe Replacement	6,627		42		-		-		6,669		6,627		42	
Odorization	2,285		1,076		2,565		2,509		8,435		6,850		1,585	
Pipeline Safety Act HCA	11,897	1	14,122		16,295		9,371		51,685		44,567		7,118	
MNB75601-24"-Replace MP 1.1-2.7 Willmar	3,508		1,799		-		-		5,307		3,508		1,799	
Jnit Exchange	2,887		1,892		4,751		3,929		13,459		15,403		(1,944)	
Systems Development	2,516		5,309		5,288		2,016		15,129		16,230		(1,101)	
Special Projects	10,497		8,541		5,482		5,691		30,211		25,425		4,786	
Retirements	8,550		9,493		7,506		9,591		35,140		27,542		7,598	
Risk-ESD	4,069		3,858		5,985		4,169		18,081		16,070		2,011	
Frans/Mob Wrk Eqp	4,215		3,678		3,853		3,192		14,938		15,180		(242)	
nformation Technology	9,516	1	13,511		16,011		12,255		51,293		59,443		(8,150)	
Maximo Implementation	395		3,967		4,552		-		8,914		4,000		4,914	
Other	13,721	2	27,010		20,747		18,136		79,614		47,580		32,034	
Other Maintenance Capital	261,556	25	53,566		260,915		184,624		960,661		832,790		127,871	
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otal Maintenance Capital	\$ 505,474	\$ 53	37,178	\$	509,385	\$	370,605	\$	1,922,642	\$	1,798,266	\$	124,376	
Previous Appendix D	505,474	5	519,525		406,915		366,352		1,798,266	_				
/ariance - Increase/(Decrease)	\$ -	\$ 1	17,653	\$	102,470	\$	4,253	\$	124,376					
Previous Appendix D Reconciliation										_				
Aaintenance Capital Target	\$ 501,000	\$ 36	69,000	\$	400,000	\$	317,000	\$	1,587,000					
December 2020 Update	-		5,690	-	6,915	*	49,352	*	61,957					
March 2021 & April 2021 Update	4,474	14	14,835		-		-		149,309					
Previous Appendix D	\$ 505,474	·	19,525	\$	406,915	\$	366,352	\$	1,798,266					
lotes:										_				

Previous Appendix D is comprised of the 2020 Actuals produced in March 2021, updated 2021 forecast produced in April 2021 and 2022 and 2023 forecasts from the December 2020 update

(1) The increase in Pipeline Integrity costs compared to the previous Appendix D are primarily related to projects required to maintain compliance with the PHMSA Mega Rule,											
which includes:											
a) Newly identified projects to address missing or incomplete records for \$18 million											
b) Installation of remote control valves for \$11 million											
c) A combination of compliance, integrity and class location projects constitute the remainder of the variance											