

Northern Natural Gas Company
2020 Asset Modernization Project Detail

| Project Description | Actual 2020 | Updated Plan Dec 2020 | Increase / (Decrease) | Regulatory Authority |
|---|--------------------|--------------------------|--------------------------|-------------------------|
| Pipeline Assessments | | | | |
| Oakland-Ogden C-MCA | 11,522,694 | 10,256,093 | 1,266,601 | Blanket |
| Beaver-to-Mullinville ILI Mods | 11,063,892 | 11,071,350 | (7,458) | Blanket |
| Beatrice-Palmyra C-MCA | 10,733,979 | 10,523,036 | 210,943 | Blanket |
| Austin 1 Relocation | 986,286 | 418,514 | 567,772 | Blanket |
| Black River Falls-MCA | 6,299,480 | 6,124,218 | 175,262 | Blanket |
| M770D ILI Mods | 1,349,635 | 1,280,244 | 69,391 | Blanket |
| GCCO-Plains ILI Modifications | 768,120 | 768,120 | | Blanket |
| Galena ILI Mods | 194,292 | 225,373 | (31,081) | Blanket |
| Beaver-to-Mullinville ILI Mods | 5,149,512 | 5,015,536 | 133,976 | Blanket |
| Macksville-Bushton B ILI Mods | 57,812 | 50,696 | 7,116 | Blanket |
| Macksville-Bushton D ILI Mods | 34,171 | 30,440 | 3,732 | Blanket |
| Macksville-Bushton E ILI Mods | 37,500 | 33,745 | 3,755 | Blanket |
| Tescott-Clifton B ILI Mods | 524,454 | 519,866 | 4,588 | Blanket |
| Clifton-Beatrice C ILI Mods | 9,683,454 | 8,971,934 | 711,520 | Blanket |
| Auburn J-line Extension | 534,549 | 524,399 | 10,150 | Blanket |
| Auburn A Line Repair | 398,021 | 398,021 | | Blanket |
| M600C Launcher | 566,615 | 545,114 | 21,501 | Blanket |
| Block Valve 3 Replacement | 673,321 | 641,784 | 31,538 | Blanket |
| M600C Shallow Pipe Remediation | 1,835,313 | 1,791,111 | 44,202 | Blanket |
| Clifton-Beatrice BBB02 Removal | 759,674 | 767,570 | (7,896) | Blanket |
| Clifton-Beatrice C Verification Run | 191,284 | 150,018 | 41,266 | Blanket |
| Subtotal: Pipeline Assessments | 65,197,000 | 64,670,000 | 527,000 | |
| Compression Replacement | | | | |
| Mullinville Compressor Unit 27 | 1,275,692 | 1,252,266 | 23,426 | 2.55(b) |
| Bushton Compressor Unit 33 | 20,842,251 | 20,844,133 | (1,883) | 2.55(b) |
| Ogden Horizontal Compression Replacement | 5,782,373 | 5,196,256 | 586,118 | 2.55(b) |
| Ventura Interconnect MCC Upgrade | 118,512 | 156,093 | (37,581) | 2.55(a) |
| Farmington Horsepower Replacement | 39,268,804 | 37,431,876 | 1,836,928 | 2.55(b) |
| Subtotal: Compression Replacement | 67,288,000 | 64,796,000 | 2,492,000 | |
| LNG Replacement | | | | |
| Garner Replace Cold Box | 16,106 | 53,278 | (37,172) | 2.55(b) |
| Subtotal: LNG Replacement | 30,000 | 67,000 | (37,000) | |
| Underground Storage Integrity | | | | |
| Redfield Maher 11 Well Storage | 2,478,024 | 2,193,875 | 284,149 | Blanket |
| Subtotal: Underground Storage Integrity | 2,548,000 | 2,230,000 | 318,000 | |
| Vintage Pipeline Replacement | | | | |
| Ogden-Ventura A-line Abandonment | 19,451,661 | 20,325,215 | (873,554) | FERC 7(b)/(c) |
| Palmyra-SSC Abandonment | 9,255,457 | 7,725,909 | 1,529,548 | FERC 7(b)/(c) |
| Palmyra - SSC A-line Replacement - 1.7 Mile Loop | 10,128,691 | 9,045,869 | 1,082,822 | FERC 7(b)/(c) |
| Palmyra - SSC A-line Replacement - 2.48 Mile Loop | 9,012,080 | 8,722,972 | 289,108 | FERC 7(b)/(c) |
| Bushton-Clifton Abandonment | 4,024,655 | 5,931,730 | (1,907,075) | FERC 7(b)/(c) |
| Bushton-Clifton A Mainline Replacement - Tescott Unit 6 | 31,897,176 | 30,393,452 | 1,503,725 | FERC 7(b)/(c) |
| Clifton-Palmyra A-line Abandonment | 6,031,898 | 8,030,301 | (1,998,403) | FERC 7(b)/(c) |
| Clifton-Palmyra A-line Replacement Beatrice Unit 29 | 7,051,441 | 7,779,502 | (728,061) | FERC 7(b)/(c) |
| South Sioux City-Sioux Falls A-line Abandonment and Replacement | 4,682,555 | 4,880,427 | (197,872) | FERC 7(b)/(c) |
| Ventura-Farmington Abandonment | | 28,129 | (28,129) | FERC 7(b)/(c) |
| Council Bluffs A-line Abandonment | 218,004 | 239,820 | (21,816) | Blanket |
| Auburn A Line Abandonment | 2,806,936 | 2,271,640 | 535,296 | Prior Notice |
| Lake City Abandonment | 1,242,563 | 177,388 | 1,065,175 | Prior Notice |
| Des Moines A-Line Abandonment and Capacity Replacement | 52,101 | 10,344 | 41,757 | FERC 7(b)/(c) |
| Plains, KS System Replacement | 2,432,631 | 1,250,547 | 1,182,084 | Blanket |
| Subtotal: Vintage Pipeline Replacement | 108,855,000 | 107,453,000 | 1,402,000 | |
| Asset Modernization Total | 243,918,000 | 239,216,000 | 4,702,000 | |