

NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Second Revision of Sheet 177-1

Cancels First Revision of Sheet 177-1, First Revision of Sheet 177-2

Third Revision of Sheet 177-3, Third Revision of Sheet 177-4, First Revision of Sheet 177-5,
and First Revision of Sheet 177-6.

**SCHEDULE 177
SYSTEM INTEGRITY PROGRAM (SIP) RECOVERY MECHANISM**

-- CANCELLED --

(C)

RESERVED FOR FUTURE USE

(D)

Issued July 29, 2016
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Issued by: NORTHWEST NATURAL GAS COMPANY

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July 29, 2016

SCHEDULE 177
SYSTEM INTEGRITY PROGRAM (SIP) RECOVERY MECHANISM

SIP COST RECOVERY:

For purposes of this Schedule, SIP costs are all SIP costs in excess of (a) Operations and Maintenance (O&M) costs embedded in rates with the Company's most recent general rate case; and (b) Leakage and bare steel capital costs of \$4 million as established in OPUC Order No.13-179

A cost recovery cap of \$37.7million over the 2012-13 and 2013-14 PGA Years shall apply.

In the 2014-15 PGA Year, the Company may recover up to \$3 million in bare steel replacement costs after its first \$3 million investment made in the same twelve month period in accordance with the terms established in OPUC Order No OPUC Order No. 01-843 in Docket UM 1030.

All SIP costs are classified as capital expenditures, and SIP costs will be tracked on a project basis into the respective capital account. The balances in such capital accounts will be used to calculate the SIP cost of service for the relevant year. The SIP cost of service shall be used to calculate permanent adjustments to Base Rates for the respective rate schedules, as follows:

Part A – Bare Steel Replacement Program –Seventy percent (70%) of the cumulative investment is allocated to Residential and Commercial Firm Sales and Firm Transportation Customers on an equal cent per therm basis. The remaining thirty percent (30%) is allocated on an equal percent of margin basis to all customer classes.

Part B –Transmission Integrity Management Program (TIMP) –Costs are allocated across all customer classes based on equal percent of margin.

Part C - Distribution Integrity Management Program (DIMP) –Costs are allocated across all customer classes based on equal percent of margin.

The cost of service for the SIP investment will include incremental depreciation expense, property tax, return on investment, income taxes, and other costs customarily relating to utility investment. The capital structure and the cost of long-term debt and preferred stock to be used in the calculation of return on rate base will be that adopted by the Commission in the Company's most recent general rate case.

ANNUAL REPORTS:

The Company will file a report with the Commission on or before October 31 of each calendar year detailing (1) SIP costs incurred in the prior PGA Year; and (2) a forecast of SIP costs for the coming twelve (12) month period.

GENERAL TERMS:

This Schedule is governed by the terms of this Schedule, the General Rules and Regulations contained in this Tariff, any other schedules that by their terms or by the terms of this Schedule apply to service under this Schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Third Revision of Sheet 177-3
Cancels Second Revision of Sheet 177-3

SCHEDULE 177
SYSTEM INTEGRITY PROGRAM (SIP) RECOVERY MECHANISM
(continued)**APPLICATION TO RATE SCHEDULES:****Effective: November 1, 2015**

The Adjustments shown below are included in the Base Adjustments in the listed Rate Schedules:

Schedule	Block	Part A		Part B	Part C	Total Adjustment
		70%	30%			
2		\$0.00388	\$0.00171	\$0.00000	\$0.00000	\$0.00559
3 (CSF)		\$0.00388	\$0.00121	\$0.00000	\$0.00000	\$0.00509
3 (ISF)		\$0.00000	\$0.00103	\$0.00000	\$0.00000	\$0.00103
27		\$0.00388	\$0.00143	\$0.00000	\$0.00000	\$0.00531
31 (CSF)	Block 1	\$0.00388	\$0.00091	\$0.00000	\$0.00000	\$0.00479
	Block 2	\$0.00388	\$0.00083	\$0.00000	\$0.00000	\$0.00471
31 (CTF)	Block 1	\$0.00388	\$0.00109	\$0.00000	\$0.00000	\$0.00497
	Block 2	\$0.00388	\$0.00100	\$0.00000	\$0.00000	\$0.00488
31 (ISF)	Block 1	\$0.00000	\$0.00066	\$0.00000	\$0.00000	\$0.00066
	Block 2	\$0.00000	\$0.00060	\$0.00000	\$0.00000	\$0.00060
31 (IFT)	Block 1	\$0.00000	\$0.00067	\$0.00000	\$0.00000	\$0.00067
	Block 2	\$0.00000	\$0.00061	\$0.00000	\$0.00000	\$0.00061
32 (CSF)	Block 1	\$0.00000	\$0.00053	\$0.00000	\$0.00000	\$0.00053
	Block 2	\$0.00000	\$0.00045	\$0.00000	\$0.00000	\$0.00045
	Block 3	\$0.00000	\$0.00032	\$0.00000	\$0.00000	\$0.00032
	Block 4	\$0.00000	\$0.00018	\$0.00000	\$0.00000	\$0.00018
	Block 5	\$0.00000	\$0.00011	\$0.00000	\$0.00000	\$0.00011
	Block 6	\$0.00000	\$0.00005	\$0.00000	\$0.00000	\$0.00005

(continue to Sheet 177-4)

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NORTHWEST NATURAL GAS COMPANY

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Third Revision of Sheet 177-4
Cancels Second Revision of Sheet 177-4

SCHEDULE 177 SYSTEM INTEGRITY PROGRAM (SIP) RECOVERY MECHANISM (continued)

APPLICATION TO RATE SCHEDULES:

Effective: November 1, 2015

The Adjustments shown below are included in the Base Adjustments in the listed Rate Schedules:

Schedule	Block	Part A		Part B	Part C	Total Adjustment
		70%	30%			
32 (ISF)	Block 1	\$0.00000	\$0.00039	\$0.00000	\$0.00000	\$0.00039
	Block 2	\$0.00000	\$0.00033	\$0.00000	\$0.00000	\$0.00033
	Block 3	\$0.00000	\$0.00023	\$0.00000	\$0.00000	\$0.00023
	Block 4	\$0.00000	\$0.00014	\$0.00000	\$0.00000	\$0.00014
	Block 5	\$0.00000	\$0.00008	\$0.00000	\$0.00000	\$0.00008
	Block 6	\$0.00000	\$0.00004	\$0.00000	\$0.00000	\$0.00004
32 (TF)	Block 1	\$0.00000	\$0.00037	\$0.00000	\$0.00000	\$0.00037
	Block 2	\$0.00000	\$0.00031	\$0.00000	\$0.00000	\$0.00031
	Block 3	\$0.00000	\$0.00022	\$0.00000	\$0.00000	\$0.00022
	Block 4	\$0.00000	\$0.00013	\$0.00000	\$0.00000	\$0.00013
	Block 5	\$0.00000	\$0.00007	\$0.00000	\$0.00000	\$0.00007
	Block 6	\$0.00000	\$0.00004	\$0.00000	\$0.00000	\$0.00004
32 (CSI)	Block 1	\$0.00000	\$0.00038	\$0.00000	\$0.00000	\$0.00038
	Block 2	\$0.00000	\$0.00032	\$0.00000	\$0.00000	\$0.00032
	Block 3	\$0.00000	\$0.00023	\$0.00000	\$0.00000	\$0.00023
	Block 4	\$0.00000	\$0.00013	\$0.00000	\$0.00000	\$0.00013
	Block 5	\$0.00000	\$0.00008	\$0.00000	\$0.00000	\$0.00008
	Block 6	\$0.00000	\$0.00004	\$0.00000	\$0.00000	\$0.00004
32 (ISI)	Block 1	\$0.00000	\$0.00036	\$0.00000	\$0.00000	\$0.00036
	Block 2	\$0.00000	\$0.00031	\$0.00000	\$0.00000	\$0.00031
	Block 3	\$0.00000	\$0.00022	\$0.00000	\$0.00000	\$0.00022
	Block 4	\$0.00000	\$0.00013	\$0.00000	\$0.00000	\$0.00013
	Block 5	\$0.00000	\$0.00007	\$0.00000	\$0.00000	\$0.00007
	Block 6	\$0.00000	\$0.00004	\$0.00000	\$0.00000	\$0.00004
32 (TI)	Block 1	\$0.00000	\$0.00033	\$0.00000	\$0.00000	\$0.00033
	Block 2	\$0.00000	\$0.00028	\$0.00000	\$0.00000	\$0.00028
	Block 3	\$0.00000	\$0.00020	\$0.00000	\$0.00000	\$0.00020
	Block 4	\$0.00000	\$0.00012	\$0.00000	\$0.00000	\$0.00012
	Block 5	\$0.00000	\$0.00007	\$0.00000	\$0.00000	\$0.00007
	Block 6	\$0.00000	\$0.00003	\$0.00000	\$0.00000	\$0.00003
33 (all)		\$0.00000	\$0.00002	\$0.00000	\$0.00000	\$0.00002

(continue to Sheet 177-5)

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NORTHWEST NATURAL GAS COMPANY

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First Revision of Sheet 177-5
Cancels Original Sheet 177-5**SCHEDULE 177**
SYSTEM INTEGRITY PROGRAM (SIP) RECOVERY MECHANISM
(continued)**APPLICATION TO RATE SCHEDULES:****Effective: November 1, 2015**

The Adjustments shown below reflect a credit to customer rates associated with a cost of service reserve relating to the 2013-2014 PGA Year. The Adjustments shown below are included in the Temporary Adjustments in the listed Rate Schedules:

Schedule	Block	Part A		Part B	Total Adjustment
		70%	30%		
2		\$0.00000	\$0.00000	\$0.00000	\$0.00000
3 (CSF)		\$0.00000	\$0.00000	\$0.00000	\$0.00000
3 (ISF)		\$0.00000	\$0.00000	\$0.00000	\$0.00000
27		\$0.00000	\$0.00000	\$0.00000	\$0.00000
31 (CSF)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
31(CTF)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
31 (ISF)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
31 (IFT)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
32 (CSF)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 3	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 5	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 6	\$0.00000	\$0.00000	\$0.00000	\$0.00000

(continue to Sheet 177-6)

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First Revision of Sheet 177-6

Cancels Original Sheet 177-6

SCHEDULE 177
SYSTEM INTEGRITY PROGRAM (SIP) RECOVERY MECHANISM
(continued)

APPLICATION TO RATE SCHEDULES (continued):**Effective: November 1, 2015**

Schedule	Block	Part A		Part B	Total Adjustment
		70%	30%		
32 (ISF)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 3	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 5	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 6	\$0.00000	\$0.00000	\$0.00000	\$0.00000
32 (TF)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 3	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 5	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 6	\$0.00000	\$0.00000	\$0.00000	\$0.00000
32 (CSI)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 3	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 5	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 6	\$0.00000	\$0.00000	\$0.00000	\$0.00000
32 (ISI)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 3	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 5	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 6	\$0.00000	\$0.00000	\$0.00000	\$0.00000
32 (TI)	Block 1	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 2	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 3	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 5	\$0.00000	\$0.00000	\$0.00000	\$0.00000
	Block 6	\$0.00000	\$0.00000	\$0.00000	\$0.00000
33 (all)		\$0.00000	\$0.00000	\$0.00000	\$0.00000

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