M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 1 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

Section	
1.01	Purpose
1.02	Applicability
1.03	Cost of Firm Gas Allowable for CGAC
1.04	Effective Date of Gas Adjustment Factor
1.05	Definitions
1.06	Gas Adjustment Factor Formulae
1.07	Gas Suppliers' Refunds - Account 242
1.08	Reconciliation Adjustments - Account 175
1.09	Reconciliation Adjustments - Purchased Gas Working Capital - Account 175
1.10	Application of GAFs to Bills
1.11	Information Required to be Filed with the Department
1.12	Other Rules
1.13	Customer Notification
1.14	Interruptible Sales, Capacity Release and other Non-firm Service Margins

1.01 Purpose

The Seasonal Cost of Gas Adjustment Clause ("CGAC") establishes procedures that allow Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities ("Liberty Utilities" or the "Company"), subject to the jurisdiction of the Massachusetts Department of Public Utilities ("Department" or "M.D.P.U") to adjust, on a semi-annual basis, its Default Service rates for firm gas sales in order to recover the costs of gas supplies, along with any taxes applicable to those supplies, pipeline and storage capacity costs, the costs of local production and storage, other gas supply expenses incurred to procure and transport gas supplies, bad debt expense associated with purchased gas costs, and the costs of purchased gas working capital, to reflect the seasonal variation of gas costs. Further, this CGAC provides for the credit of all supplier refunds, the credit from margins associated with capacity release, off-system sales and the credit from non-core gas sales to firm ratepayers.

Liberty Utilities D.P.U. 15-75 3-7-16 COMPLIANCE FILING Tab B - Tariffs (Clean) Page 100 of 213

LIBERY UTILITIES (NEW ENGLAND NATURAL GAS COMPANY) CORP. d/b/a LIBERTY UTILITIES

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 2 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

1.02 **Applicability**

This CGAC shall be applicable to the Service Area of the Liberty Utilities and all firm gas sales made by the Company, and default service provided by the Company unless otherwise designated. The application of the clause may, for good cause shown be modified by the Department. See Section 1.12, "Other Rules."

1.03 Cost of Firm Gas Allowable for CGAC

All costs of firm gas including, but not limited to, commodity costs, taxes on commodity, demand charges, local production and storage costs, other gas supply expenses incurred to procure and transport supplies, transportation fees, gas used in Company operations, bad debt percent (from the last general rate case) applied to allowable CGAC costs for the forecast period, transportation fees, costs associated with buyouts of existing contracts, and purchased gas working capital costs may be included in the CGAC. Any costs recovered through application of the CGAC shall be identified and explained fully in the semi-annual filings outlined in Section 1.11. Noncore gas costs and the costs of gas for Company use that are reflected in base rates are not recoverable through this CGAC.

1.04 Effective Date of Gas Adjustment Factor

The date on which the seasonal Gas Adjustment Factors ("GAF") become effective shall be the first billing cycle of each season as designated by the Company. Unless otherwise notified by the Department, the Company shall submit GAF filings as outlined in Section 1.11 of this clause at least 45 days before they are to take effect.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 3 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

1.05 <u>Definitions</u>

The following terms shall be defined in this section, unless the context requires otherwise.

- (1) <u>Bad Debt Expense</u> is the uncollectible expense attributed to the Company's gas costs plus allowable working capital derived from the gas cost portion of bad debt.
- (2) <u>Commodity Credits</u> The commodity cost of gas assigned to non-core sales to which the GAF is not applied. Non-core sales include sales made under interruptible contracts, non-core contracts and sales for resale.
- (3) <u>Inventory Finance Charges</u> As billed in each peak season for annual charges. The total shall represent an accumulation of the projected charges as calculated using the monthly average of financed inventory at the existing (or anticipated) financing rate through a trust or other financing vehicle.
- (4) <u>Local Production and Storage Costs</u> Include the costs of providing storage service from Company-owned storage (i.e., LNG and LPG) as determined in the Company's most recent base rate proceeding
- (5) <u>Maximum Daily Quantity (MDQ)</u> Redetermined annually for each season. The calculation uses billing histories for the previous peak and off-peak seasons. The number of therms used in each billing period will be the sum of the highest daily uses for each month.
- (6) <u>Number of Days Lag</u> The number of days lag to calculate the purchased gas working capital requirement as approved by the Department.
- (7) Off-Peak Commodity Unless otherwise approved by the Department, the gas supplies procured by the Company to serve firm load in the off-peak season.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 4 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

- (8) <u>Off-Peak Demand</u> Unless otherwise approved by the Department, the storage and transmission capacity procured by the Company to serve firm load in the off-peak season
- (9) Off-Peak Period Reconciliation Date Will be 60 days prior to the next off-peak period effective date.
- (10) Off-Peak Season The Company's off-peak season is the summer season of May through October.
- (11) Other Gas Supply Expenses Include the costs incurred by the Company in its most recent test year to procure and transport gas supplies to the Company's city gate.
- (12) <u>Peak Commodity</u> Unless otherwise approved by the Department, the gas supplies procured by the Company to serve firm load in the peak season.
- (13) <u>Peak Demand -</u> Unless otherwise approved by the Department, the storage and transmission capacity procured by the Company to serve firm load in the peak season.
- (14) <u>Peak Period Reconciliation Date</u> Will be 60 days prior to the next peak period effective date.
- (15) <u>Peak Season</u> The Company's peak season is the winter heating season of November through April.
- (16) <u>Proportional Responsibility Allocator</u> Weighted monthly sendout-based allocator calculated in each CGA filing and used to allocate capacity charges or credits to seasons.
- (17) <u>Purchased Gas Working Capital</u> The allowable working capital derived from peak and off-peak, demand- and commodity-related costs.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 5 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

- (18) Tax Rate The combined state and federal income tax rate
- (19) Therm An amount of gas having a thermal content of 100,000 Btus
- (20) <u>Weighted Cost of Capital</u> The weighted cost of capital as set in the Company's most recent base rate case
- (21) <u>Weighted Cost of Debt</u> The weighted cost of debt as set in the Company's most recent base rate case.
- (22) <u>Weighted Cost of Equity</u> The weighted cost of equity as set in the Company's most recent base rate case.

1.06 Gas Adjustment Factor Formulae

The GAF shall be computed on a semiannual basis using forecasts of seasonal gas costs, carrying charges, sendout volumes, and sales volumes. Forecasts may be based on either historical data or Company projections but must be weather normalized. Any projections must be documented in full with each filing.

Peak GAF Formula

The Peak GAF shall be comprised of a gas cost peak demand factor and a gas cost peak commodity factor. Added to the sum of these factors are per-unit adjustments for fixed production and related overhead costs, other gas costs, bad debt costs, working capital allowances, reconciliation adjustments and supplier refunds.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 6 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

Peak GAF Formula (GAF_p)

 $GAF_P = DF_P + CF_p + FIXF_P + OGSF_P + BDF + WCF_P + RA_P - R1d - R2d$

and:

 $DF_p =$

and:

 $CF_p =$

and:

 $\frac{FIX_p}{P: Sales}$ $FIXF_p =$

and:

 $OGSF_p =$ OGS_p

P: Sales

and:

BDF =BD + BDR + BDWC

P: Sales

and:

BDWC =BDWCreq x (CD + (CE/(1-TR))) + BDWCR

T: Sales

and:

BDWCreq = BD x (DL/365)

and:

 $WCF_p =$ $[[(WCA_p*CC)-(WCA_p*CD)]/(1-TR)]+(WCA_p*CD)+WCR_p$

Filed: March 7, 2016 Effective: March 1, 2016

> Issued By: James M. Sweeney President

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 7 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

P: Sales

and:

 $WCA_p = (D_p + C_p + OGS_p) * (DL/365)$

and:

 $C_P = PC - COM_P$

Where the Peak GAF formula terms have the following meanings:

DF_p Peak period gas cost demand factor.

CF_p Peak period gas cost commodity factor.

FIXF_p Peak period production-related fixed gas cost factor.

OGSF_p Other gas supply expense factor associated with the procurement and

transportation of gas supplies in the peak period.

WCF_p Working capital allowable per peak sales volume associated with gas

charges allocated to the peak period.

BD Bad Debt Expense – the uncollectible expense attributed to the

Company's gas costs.

BDF Bad Debt Expense Factor – the allowable cost per unit collection note

derived from the bad debt expense.

BDR Bad Debt Expense Reconciliation Adjustment – the balance in Account

175.50, inclusive of the associated Account 175.50 interest, as outlined

in Section 8.0.

BDWC Bad Debt Expense Working Capital Allowance – the allowable working

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 8 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

capital cost per-unit collection rate derived from the Bad Debt Expense Working Capital Requirement.

BDWCR Bad Debt Expense Working Capital Requirement – the allowable working capital derived from the Bad Debt Expense.

BDWCreq Bad Debt Expense Working Capital Reconciliation Adjustment – the sum of the balance in Account 176.50 as outlined in Section 8.0.

RA_p Peak period reconciliation adjustment inclusive of associated interest.

R1d, R2d Per-unit supplier refunds from pipeline charges.

D_p Demand charges in the peak period.

P:Sales Forecasted sales volumes associated with the peak period.

C_p Commodity charges allocated to firm customers in the peak period.

FIX_p Peak period production-related fixed gas costs as determined in last base rate case.

OGS_p Other gas supply expenses associated with the procurement and transportation of gas supplies in the peak period.

PR_p Proportional Responsibility Allocator - weighted monthly sendout-based allocator calculated in each GAF filing and used to allocate capacity charges to peak season.

WCA_p Peak period demand and commodity charges allowable for peak period working capital application.

CC Weighted cost of capital.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 9 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

CD Weighted cost of debt.

CE Weighted cost of equity.

WCR_p Peak period working capital reconciliation adjustment.

TR= Combined tax rate.

DL Number of days lag from the purchase of gas from supplier to the

payment by customers.

PC Commodity charges assigned to the peak period.

COM_p The peak period commodity cost of gas assigned to non-core sales to

which the GAF is not applied.

Tvol Total forecasted annual firm sales volumes.

Off-Peak GAF Formula

The Off-Peak GAF shall be comprised of a gas cost off-peak demand factor and a gas cost off-peak commodity factor. Added to the sum of these factors are per-unit adjustments for fixed production and related overhead costs, other gas costs, bad debt expense, working capital allowances, reconciliation adjustments and supplier refunds.

Off-Peak GAF Formula (GAF_{op})

$$GAF_{op} = DF_{op} + CF_{op} + FIXF_{op} + OGSF_{op} + BDF + WCF_{op} + RA_{op} - R1d - R2d$$

and:

$$DF_{op} = \underline{D_{op}}$$
OP: Sales

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 10 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

and:

 $CF_{op} = \underline{C_{op}}_{OP: Sales}$

and

 $FIXF_{op} = \underline{FIX_{op}}$

OP: Sales

and:

 $OGSF_{op} = OGS_{op}$

OP: Sales

and:

BDF = BD+BDR + BDWC

P: Sales

and:

BDWC = BDWCreq x (CD + (CE/(1 - TR))) + BDWCR

T: Sales

and:

 $BDWC_{req} = BD x (DL/365)$

and:

 $WCF_{op} = \frac{\left[\left[\left(WCA_{op} *CC\right) - \left(WCAP *CD\right)\right] / \left(1 - TR\right)\right] + \left(WCA_{op} *CD\right) + WCR_{op}}{\left(1 - TR\right)\left(1 - TR\right)\right] + \left(WCA_{op} *CD\right) + WCR_{op}}$

OP: Sales

and

 $WCA_{op} = (D_{op} + C_{op} + OGS_{op})*(DL/365)$

and:

 $C_{op} = OPC - COM_{op}$

Where the Off Peak formula terms have the following meanings:

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 11 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

SI.	EASONAL COST OF GAS ADJUSTINENT CLAUSE					
$\mathrm{DF}_{\mathrm{op}}$	Off-peak period gas cost demand factor.					
$\mathrm{CF}_{\mathrm{op}}$	Off-peak period gas cost commodity factor.					
$FIXF_{op}$	Off-peak period production-related fixed gas cost.					
$OGSF_{op}$	Other gas supply expense factor associated with the procurement and transportation of gas supplies in the off-peak period.					
WCF_{op}	Working capital allowable per off-peak sales volume associated with gas charges allocated to the off-peak period.					
BD	Bad Debt Expense – the uncollectible expense attributed to the Company's gas costs.					
BDF	Bad Debt Expense Factor – the allowable cost per unit collection note derived from the bad debt expense.					
BDR	Bad Debt Expense Reconciliation Adjustment – the balance in Account 175.50, inclusive of the associated Account 175.50 interest, as outlined in Section 8.0.					
BDWCR	Bad Debt Expense Working Capital Requirement – the allowable working capital derived from the Bad Debt Expense.					
BDWC	Bad Debt Expense Working Capital Allowance – the allowable working capital cost per-unit collection rate derived from the Bad Debt Expense Working Capital Requirement.					
$BDWC_{req}$	Bad Debt Expense Working Capital Reconciliation Adjustment – the sum of the balance in Account 176.50 as outlined in Section 8.0.					
RA_{op}	Off-peak period reconciliation adjustment inclusive of associated interest.					

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 12 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

$D 1 1 D \Delta 1$	D '	1.	C 1	C	. 1.	1
RIG RIG	Per_linit	cumplier r	atunde	trom	nineline	charges
R1d, R2d	I CI-uiiii	Supplied i	crunus	110111	procun	charges.

D_{op} Demand charges in the off-peak period.

OP:Sales Forecasted sales volumes associated with the off-peak period.

Commodity charges allocated to firm customers in the off-peak period.

FIX_{op} Off-Peak period production-related fixed gas costs as determined in last

base rate case.

OGS_{op} Other gas supply expenses associated with the procurement and

transportation of gas supplies in the off-peak period.

 PR_{op} Proportional Responsibility Allocator - weighted monthly sendout-based

allocator calculated in each GAF filing and used to allocate capacity

charges to off-peak season.

WCA_{op} Off-peak period demand and commodity charges allowable for off-peak

period working capital application.

CC Weighted cost of capital.

CD Weighted cost of debt.

CE Weighted cost of equity.

WCR_{op} Off-peak period working capital reconciliation adjustment.

TR Combined tax rate.

DL Number of days lag from the purchase of gas from supplier to the payment

by customers.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 13 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

OPC Commodity charges assigned to the off-peak period.

 COM_{op} The off-peak period commodity cost of gas assigned to non-core sales to

which the GAF is not applied.

T:Sales Total forecasted annual firm sales volumes.

1.07 Gas Suppliers' Refunds - Account 242

Refund programs shall be initiated with each semiannual GAF filing and shall remain in effect for a period of one year. The refunds will be reflected as a credit in the semiannual calculation of the GAF. The total dollars to be placed into a given refund program shall be net of over/under-returns from expired programs plus moneys received from suppliers since the previous program was initiated. Monies to be refunded through each program shall be segregated and distributed volumetrically, producing per-unit refund factors that will return the principal amount with interest as calculated using the prime lending rate.

1.08 Reconciliation Adjustments - Account 175

- (1) The following definitions pertain to reconciliation adjustment calculations:
 - (a) Capacity Costs allowable per Peak Demand shall be:
 - i. Charges associated with upstream storage and transmission capacity procured by the Company to serve firm load in the peak season.
 - ii. Charges associated with transmission capacity procured by the Company to serve base load requirements in the peak season.
 - iii. Charges associated with upstream storage and transmission capacity procured by the Company to serve firm load in excess of base load requirements in the peak period, plus a reallocation of a portion of such charges incurred in the off-peak season to serve firm load.
 - iv. Charges associated with peaking, production and storage capacity to serve firm load in the peak season from the Company's most recent test year and allocated to firm sales storage service.
 - v. Capacity Credits or economic benefits associated with capacity release, non-

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 14 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

traditional off-system sales for resale and non-core margins allocated to the firm sales service, subject to the treatment specified in Section 1.14.

- vi. Peak demand carrying charges.
- (b) Gas Costs allowable per Peak Commodity shall be:
 - i. Charges associated with gas supplies, including any applicable taxes, procured by the Company to serve firm load in the peak season, plus a reallocation of LNG boil-off costs from the off-peak season, determined by the product of the difference in the average cost of pipeline purchases during the off-peak period and the average cost of LNG boil-off in the off-peak period times the LNG boil-off volumes purchased in the off-peak period, less the cost of injections and liquefaction into storage.
 - ii. Credit non-core commodity costs assigned to non-core customers to which the CGAC does not apply.
 - iii. Inventory finance charges (FC).
 - iv. Peak commodity carrying charges.
- (c) Capacity Costs allowable per Off-Peak Demand shall be:
 - i. Charges associated with transmission capacity procured by the Company to serve base load requirements in the off-peak season.
 - ii. Charges associated with upstream storage and transmission capacity procured by the Company to serve firm load in excess of base load requirements in the off-peak period.
 - iii. Charges associated with off-peak production and storage capacity to serve firm load in the off-peak season from the Company's most recent test year and allocated to firm sales service.
 - iv. Off-peak demand carrying charges.
- (d) Gas Costs allowable per Off-Peak Commodity shall be:
 - i. Charges associated with gas supplies, including any applicable taxes, procured by the Company to serve firm load in the off-peak season, less the reallocation of LNG boil-off costs determined by the product of the difference in the average cost of pipeline purchases during the off-peak period and the average cost of LNG boil-off in the off-peak period times the

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 15 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

LNG boil-off volumes purchased in the off-peak period, less the cost of injections and liquefactions into storage.

- ii. Credit non-core commodity costs associated with non-core sales to which the GAF is not applied.
- iii. Off-peak commodity carrying charges.
- (e) Gas Costs allowable per Bad Debt shall be:
 - Un-collectable gas costs incurred by the Company to serve firm sales load, as determined by deriving the portion of actual net write-offs associated with gas cost collections.
 - ii. Account 175.5 Bad Debt carrying charges.
 - iii. Working Capital Gas Costs Allowable per Bad Debt Formula, which shall be charges associated with bad debt incurred by the Company to serve firm sales load and applied to the working capital formula.

(2) <u>Calculations of the Reconciliation Adjustments</u>

Account 175 contains the accumulated difference between gas cost revenues and the actual monthly gas costs incurred by the Company. The Company shall separate Account 175 into Peak Demand (Account 175.1), Peak Commodity (Account 175.2), Off-Peak Demand (Account 175.3), Off-Peak Commodity (Account 175.4) and Bad Debt (Account 175.5). Account 175.1 shall contain the accumulated difference between revenues toward capacity costs calculated by multiplying the Peak Demand Factor (DF_p) plus the peak period Fixed Production Expense Factor (FIXF_p) times monthly firm sales volumes, and the total capacity costs allowable per the peak demand formula. Account 175.2 shall contain the accumulated difference between revenues toward gas costs as calculated by multiplying the Peak Commodity Factor (CF_p) plus the peak period Other Gas Supply Expense Factor (OGSF_p) times monthly firm sales volumes, and the total commodity costs allowable per the peak commodity formula. Account 175.3 shall contain the accumulated difference between revenues toward capacity costs calculated by multiplying the Off-Peak Demand Factor (DF_{op}) plus the off-peak period Fixed Production Expense Factor (FIXF_{op}) times monthly firm sales volumes, and the total capacity costs allowable per the off-peak demand formula. Account 175.4 shall contain the accumulated difference between revenues toward gas costs as calculated by

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 16 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

multiplying the Off-Peak Commodity Factor (CF_{op}) plus the Off-Peak Other Gas Supply Expense Factor ($OGSF_{op}$) times monthly firm sales volumes, and the total commodity costs allowable per the off-peak commodity formula. Account 175.5 shall contain the accumulated difference between the bad debt expense allowable per the base formula, and the revenue collected through the operation of this rate schedule. Interest shall be calculated on the monthly balance of this account using the prime lending rate and then shall be added to each end of month balance.

Interest shall be calculated on the average monthly balance of each sub account using the prime lending rate, and then added to each end-of-the-month balance. The Peak Reconciliation Adjustment Factor (RA_p) shall be determined for use in the peak GAF calculation by dividing the sum of the peak demand account (175.1) and commodity account (175.2) balances as of the peak reconciliation date, by the forecasted sales volume associated with the peak period. The Off-Peak Reconciliation Adjustment Factor (RA_{op}) shall be determined for use in the off-peak GAF calculation by dividing the sum of the off-peak account (175.3) and commodity account (175.4) balances as of the off-peak reconciliation date, by the forecasted sales volume associated with the off-peak period. The Bad Debt Reconciliation Adjustment Factor (BDR) shall be determined for use in the peak and off-peak GAF calculation by dividing the sum of the account (175.5) balances as of the peak and off-peak reconciliation dates, by the forecasted sales volume associated with the peak and off-peak periods.

The peak period reconciliation filing date shall be on September 1 of each year.

The off-peak period reconciliation filing date shall be on March 1 of each year.

1.09 Reconciliation Adjustments - Purchased Gas Working Capital - Account 176

- (1) The following definitions pertain to reconciliation adjustment calculations:
- (a) Working Capital Gas Costs allowable per Peak Demand shall be:
 - i. Charges associated with upstream storage and transmission capacity procured by the Company to serve firm load in the peak season.
 - ii. Charges associated with transmission capacity procured by the Company to

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 17 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

- serve base load requirements in the peak season.
- iii. Charges associated with upstream storage and transmission capacity procured by the Company to serve firm load in excess of base load requirements in the peak period, plus a reallocation of a portion of such charges incurred in the off-peak season to serve firm load.
- iv. Carrying charges.
- (b) Working Capital Gas Costs allowable per Peak Commodity shall be:
 - i. Charges associated with gas supplies, including any applicable taxes, procured by the Company to serve firm load in the peak season, plus a reallocation of LNG boil-off costs from the off-peak season, determined by the product of the difference in the average cost of pipeline purchases during the off-peak period and the average cost of LNG boil-off in the off-peak period times the LNG boil-off volumes purchased in the off-peak period, less the cost of injections and liquefaction into storage.
 - ii. Carrying charges.
- (c) Working Capital Gas Costs allowable per Off-Peak Demand shall be:
 - i. Charges associated with transmission capacity procured by the Company to serve base load requirements in the off-peak season.
 - iii. Charges associated with upstream storage and transmission capacity procured by the Company to serve firm load in excess of base load requirements in the off-peak period.
 - iii. Carrying charges.
- (d) Working Capital Gas Costs allowable per Off-Peak Commodity shall be:
 - i. Charges associated with gas supplies, including any applicable taxes, procured by the Company to serve firm load in the off-peak season, less the reallocation of LNG boil-off costs determined by the product of the difference in the average cost of pipeline purchases during the off-peak period and the average cost of LNG boil-off in the off-peak period times the LNG boil-off volumes purchased in the off-peak period, less the cost of injections and liquefactions into storage.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 18 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

- ii. Non-core commodity costs associated with non-core sales to which the GAF is not applied, as defined in Section 6.05.
- iii. Carrying charges.
- (e) Working Capital Gas Costs allowable per Bad Debt shall be:
 - i. Charges associated with bad debt costs, including any applicable taxes.
- (2) The peak and off-peak working capital requirements shall be calculated by applying the Company's days lag divided by 365 days to the working capital costs allowable per each formula.
- (3) The peak and off-peak working capital allowances shall each be calculated by applying the Company's weighted costs of capital to each working capital requirement to calculate the respective returns on working capital. The interest portion of each working capital allowance is calculated by multiplying each working capital requirement by the weighted costs of debt. This portion is tax deductible. The return on each working capital less the interest portion of each working capital is then divided by one minus the tax rate. This figure plus the interest calculated above equals the working capital allowance for each.
- (4) Calculations of the Reconciliation Adjustments

Accounts 176.1, 176.2, 176.3, 176.4 and 176.5 contain the accumulated difference between working capital allowance revenues and the actual monthly working capital allowance costs as calculated from actual monthly costs for the Company.

The components of the Company's purchased gas days lag shall be recalculated each season based upon actual CGAC seasonal data. This recalculated days lag will be used in the calculation of the working capital allowance revenues. Each such Account 176 shall contain the accumulated difference between revenues toward the working capital allowance and the working capital allowance.

The Peak Working Capital Reconciliation Adjustment (WCR_p) shall be determined for use in the peak factor calculations incorporating the peak working

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 19 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

capital accounts (176.1 and 176.2) balance as of the peak reconciliation date designated by the Company. An Off-Peak Working Capital Reconciliation Adjustment (WCR $_{op}$) shall be determined for use in the off-peak factor calculations incorporating the off-peak working capital accounts (176.3 and 176.4) balance as of the off-peak reconciliation date designated by the Company. A Bad Debt Working Capital Reconciliation Adjustment shall be determined for use in the peak and off-peak calculations incorporating the bad debt working capital account (176.5) balance as of the designated peak and off-peak reconciliation dates designated by the Company.

1.10 The Application of GAFs to Bills

The Company will employ the GAFs as follows: The peak season rates to customers shall be calculated by applying the respective GAF_p factor as defined in Section 1.06. The off-peak season rates to customers shall be calculated by applying the respective off-peak GAF_{op} factor as defined in Section 1.06. The GAFs (\$/therms) for each customer class for each season shall be calculated to the nearest hundredth of a cent per unit and will be applied to each customer's monthly sales volume within the corresponding customer class.

1.11 <u>Information Required to be Filed with the Department</u>

Information pertaining to the cost of gas adjustment shall be filed with the Department in accordance with the Company's standardized forms approved by the Department. Required filings include a monthly report, which shall be submitted to the Department on the twentieth of each month, and a semiannual GAF filing, which shall be submitted to the Department at least 45 days before the date on which a new GAF is to be effective. Additionally, the Company shall file with the Department a complete list by (sub) account of all gas costs claimed as recoverable through the CGAC over the previous season, as included in the seasonal reconciliation. This information shall be submitted with each seasonal GAF filing, along with complete documentation of the reconciliation adjustment calculations.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 20 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

1.12 Other Rules

- (1) The Department may, where appropriate, on petition or on its own motion, grant an exception from the provisions of these regulations, upon such terms that it may determine to be in the public interest.
- (2) The Company may, at any time, file with the Department an amended GAF. An amended GAF filing must be submitted 10 days before the first billing cycle of the month in which it is proposed to take effect. However, the Company shall submit any filing made pursuant to Section 1.12(5) at least seven business days prior to the first billing cycle of the following month.
- (3) The Department may, at any time, require the Company to file an amended GAF.
- (4) The operation of the Cost of Gas Adjustment Clause is subject to all powers of suspension and investigation vested in the Department by G.L. c.164.
- (5) The Company shall file for recovery of a GAF if it determines that its projected deferred gas-cost balance at the end of the peak period will be equal to or greater than five percent of the total seasonal gas costs stated in the Company's effective GAF.

1.13 Customer Notification

The Company will design a notice, which explains in simple terms to customers the GAF, the nature of any change in the GAF and the manner in which the GAF is applied to the bill. The Company will submit this notice for approval at the time of each GAF filing to the Department's Consumer Division.

Upon approval by the Department, the Company must immediately distribute these notices to all of its customers either through direct mail or with its bills.

1.14 <u>Interruptible Sales, Interruptible Transportation, Capacity Release and other Non-firm Service Margins</u>

All margins from transactions associated with Interruptible Sales ("IS"), Capacity Release Revenues and other Non-firm Service Margins entered into or renewed on and after February 20, 2013, pursuant to D.P.U. 10-62, shall be divided between the

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 21 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

Company and its firm sales customers under a 10%/90% sharing arrangement. In accordance with this sharing arrangement 90% of the margins from all Interruptible Sales ("IS"), Capacity Release Revenues and other Non-firm Service Margins shall be a credit in the peak season GAF.

For any transactions that are still in force that have been entered into prior to February 20, 2013, a threshold level of margins, as applicable, will be established annually for Interruptible Sales (IS) Capacity Release Revenues and other Non-firm Service Margins. The threshold is the level of margins for the twelve-month period ending April 30 in any given year. Any margins earned in excess of the applicable threshold level shall be divided between Liberty Utilities and its firm sales customers under a 25/75 sharing arrangement. The threshold level of margins shall be adjusted to reflect additions or loses from customers who switch from FT or Default to IS and conversely, from IS to FT or Default. Liberty Utilities shall adjust the applicable threshold level annually to reflect capacity release revenues for the twelve-month period ending April 30 of each year. Margins from IS and Capacity Release revenues will be reflected as separate credits in the peak season GAF and shall be calculated as the sum of the following:

- (1) 100% of the margins earned up to the predetermined threshold level.
- (2) 75% of the margins earned in excess of the predetermined threshold level. Such amounts are deemed "returnable" margins.

Margins from other non-firm services will be treated as allowed by any applicable Department order.

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 22 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

AMENDMENTS TO UNIFORM SYSTEM OF ACCOUNTS FOR GAS COMPANIES

175.1 Peak Demand Reconciliation Adjustment for CGAC

This account shall be used to record the cumulative difference between peak demand gas revenues and peak demand gas costs. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.08.

175.2 Peak Commodity Reconciliation Adjustment for CGAC

This account shall be used to record the cumulative difference between peak commodity gas revenues and peak commodity gas costs. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.08.

175.3 Off-Peak Demand Reconciliation Adjustment for CGAC

This account shall be used to record the cumulative difference between off-peak demand gas revenues and off-peak demand gas costs. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.08.

175.4 Off-Peak Commodity Reconciliation Adjustment for CGAC

This account shall be used to record the cumulative difference between off-peak commodity gas revenues and off-peak commodity gas costs. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.08.

175.5 Bad Debt Reconciliation Adjustment for CGAC

This account shall be used to record the cumulative difference between bad debt factor revenues and bad debt costs. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.08.

176.1 Peak Demand Gas Working Capital Allowance Reconciliation Adjustment for CGAC
This account shall be used to record the cumulative difference between peak demand gas
working capital allowance revenues and peak demand gas working capital allowance.
Entries to this account shall be determined as outlined in the Cost of Gas Adjustment

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 23 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

Clause, Section 1.09.

- 176.2 Peak Commodity Gas Working Capital Allowance Reconciliation Adjustment for CGAC This account shall be used to record the cumulative difference between peak commodity gas working capital allowance revenues and peak commodity gas working capital allowance. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.09.
- 176.3 Off-Peak Demand Gas Working Capital Allowance Reconciliation Adjustment for CGAC This account shall be used to record the cumulative difference between off-peak demand gas working capital allowance revenues and off-peak demand gas working capital allowance. Entries to this account shall be determined as outlined in the Standard Cost of Gas Adjustment Clause, Section 1.09.
- 176.4 Off-Peak Commodity Gas Working Capital Allowance Reconciliation Adjustment for CGAC

This account shall be used to record the cumulative difference between off-peak commodity gas working capital allowance revenues and off-peak commodity gas working capital allowance. Entries to this account shall be determined as outlined in the Standard Cost of Gas Adjustment Clause, Section 1.09.

- 176.5 <u>Bad Debt Working Capital Allowance Reconciliation Adjustment for CGAC</u>
 This account shall be used to record the cumulative difference between bad debt gas working capital allowance revenues and bad debt working capital allowance. Entries to this account shall be determined as outlined in the Standard Cost of Gas Adjustment Clause, Section 1.09.
- 242.1 <u>Undistributed Capacity Suppliers' Refunds</u>

This account will be used to record the refunds from suppliers of pipeline capacity. Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.07.

242.2 <u>Undistributed Gas Suppliers' Refunds</u>

This account will be used to record the refunds from suppliers of gas and feed stocks.

Liberty Utilities D.P.U. 15-75 3-7-16 COMPLIANCE FILING Tab B - Tariffs (Clean) Page 122 of 213

LIBERY UTILITIES (NEW ENGLAND NATURAL GAS COMPANY) CORP. d/b/a LIBERTY UTILITIES

M.D.P.U. No. 1001C Cancels M.D.P.U. 1001A

Page 24 of 23

SEASONAL COST OF GAS ADJUSTMENT CLAUSE

Entries to this account shall be determined as outlined in the Cost of Gas Adjustment Clause, Section 1.07.