

**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE
STATE OF RHODE ISLAND
AND PROVIDENCE PLANTATIONS**

IN THE MATTER OF

**The New England Gas Company:)
Customer Migration and)
Gas Procurement Planning)**

Docket No. 3436

**DIRECT TESTIMONY OF WITNESS
BRUCE R. OLIVER**

On Behalf of

The Division of Public Utilities

August 15, 2003

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1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

2 A. My name is Bruce R. Oliver. My business address is 7103 Laketree Drive, Fairfax
3 Station, Virginia, 22039.

4

5 **Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?**

6 A. I am employed by Revilo Hill Associates, Inc., and serve as President of the firm. I
7 manage the firm's business and consulting activities, and I direct its preparation and
8 presentation of economic, utility planning, and policy analyses for our clients.

9

10 **Q. ON WHOSE BEHALF DO YOU APPEAR IN THIS PROCEEDING?**

11 A. My testimony in this proceeding is presented on behalf of the Division of Public
12 Utilities (hereinafter "the Division").

13

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

15 A. This testimony addresses issues relating to the June 26, 2003, filing of New
16 England Gas Company (hereinafter "NEG" or "the Company") relating to customer
17 migration and the impacts of such migration on its Gas Procurement Planning.
18 More specifically, this testimony focuses on issues associated with:

19

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- 1 (a) Necessary steps to protect Residential and Small Commercial customers
2 from adverse gas cost impacts attributable to unforeseen migration of
3 Medium, Large and Extra Large Commercial and Industrial (C&I) customers
4 between firm gas sales service and firm gas transportation service; and
5
6 (b) Appropriate determination of rates and charges for firm transportation
7 customers who transfer to firm sales service.
8

9 **Q. DID YOU PRESENT TESTIMONY IN THIS DOCKET REGARDING THE EFFECTS**
10 **OF CUSTOMER MIGRATION ON GAS COSTS IN MARCH OF THIS YEAR?**

11 A. Yes, I did. On March 19, 2003 I submitted testimony regarding adjustments that
12 NEG proposed to its GCR charges as a result of colder than normal weather and
13 higher than forecasted purchased gas costs. In that testimony, I raised concerns
14 regarding both the impacts of unforeseen migration of customers and throughput
15 volumes from firm gas transportation service to firm gas sales service, as well as
16 concerns regarding the Company's proposal to make uniform adjustments to GCR
17 charges for all firm rate classifications.
18

19 **Q. NEG WITNESS CZEKANSKI'S JUNE 26, 2003 TESTIMONY EXPLAINS IN**
20 **DETAIL THE DERIVATION OF THE COMPANY'S LOAD FORECAST. DID YOUR**

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1 **MARCH 2003 TESTIMONY TAKE ISSUE WITH THE COMPANY'S LOAD**
2 **FORECASTING METHODOLOGY?**

3 A. No. it did not. I did, however, discuss the potential that the combination of
4 unforeseen migration from firm gas transportation service to firm gas sales service
5 and NEG's proposed uniform adjustment of class differentiated GCR charges for all
6 rate classes may adversely impact the Company's GCR charges for Residential and
7 Small Commercial customers.

8
9 **Q. AT PAGES 12 TO 13 OF MR. CZEKANSKI'S JUNE 26, 2003 TESTIMONY, HE**
10 **DISCUSSES FACTORS OTHER THAN WEATHER THAT CONTRIBUTED TO**
11 **VARIANCES BETWEEN TOTAL FORECASTED THROUGHPUT AND ACTUAL**
12 **THROUGHPUT FOR THE PERIOD FROM JULY 2002 THROUGH MARCH 2003.**
13 **WOULD YOU PLEASE COMMENT ON HIS ASSESSMENT OF THOSE OTHER**
14 **INFLUENCES?**

15 A. Witness Czekanski identifies several factors that may have influenced NEG's actual
16 throughput for the July 2002 through March 2003 period, but he does not provide
17 insight regarding the relative importance of each of the factors that he discusses.
18 Also, I appreciate Mr. Czekanski's statements regarding "the normal ebb and flow"
19 of customers and loads, but if that testimony is intended to imply that focus on any
20 single component of the Company's forecast is inappropriate, I must strongly

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1 disagree. Both the Company's class differentiated GCR charges and its Gas Pur-
2 chase Incentive Plan (GPIP) amplify the importance of accuracy in the components
3 of the Company's forecasts.

4 For the Company's GPIP to function efficiently, reasonable accuracy in the
5 Company's forecasts of sales and transportation volumes becomes critical.
6 Likewise, the development of class differentiated GCR charges (and adjustments
7 thereto) requires reasonable accuracy in the Company's forecasting of sales and
8 transportation volumes by rate classification. Thus, it is no longer sufficient for NEG
9 to focus solely on the overall accuracy of its throughput forecasts. In this context,
10 NEG's efforts to minimize the importance of deviations between actual and
11 forecasted results for individual rate classifications, or for transportation versus
12 sales service throughput within a rate classification, are inappropriate. Rather,
13 recognition of the influences of deviations within individual components of the
14 Company's forecast on its incremental (or decremental) gas supply costs are now
15 more critical than ever since the components of the Company's throughput fore-
16 casts determine both mandatory gas purchase requirements and the allocation of
17 gas procurement costs among rate classifications.

18
19 **Q. MR. CZEKANSKI'S JUNE 26, 2003 TESTIMONY AT PAGE 14 ADDRESSES**
20 **FACTORS THAT CONTRIBUTED TO LOWER-THAN-FORECASTED LEVELS OF**

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1 **TRANSPORTATION MIGRATION. DO YOU QUESTION HIS ASSESSMENT OF**
2 **THOSE FACTORS?**

3 A. Yes, I do. Mr. Czekanski may be correct that marketing activity slowed substantially
4 in the late summer and early fall of 2002, but the motivation for such action is less
5 clear than Mr. Czekanski suggests. Also, Mr. Czekanski's testimony implies rather
6 strongly that many C&I customers simply could not obtain price offers for competitive
7 gas supply service during that period. Yet, the Company provides no verifiable
8 support for that implication. An alternative explanation that appears just a plausible
9 is that gas marketers, who rarely purchase gas to meet speculative future require-
10 ments, simply could not beat the average cost of gas reflected in NEG's GCR rates
11 due to the Company's hedging activity (including mandatory gas purchases made
12 under the terms of its GPP).

13
14 **Q. DO YOU AGREE WITH MR. CZEKANSKI THAT LATE SUMMER AND EARLY**
15 **FALL IS TYPICALLY THE TIME PERIOD IN WHICH GAS MARKETERS ARE**
16 **MOST ACTIVELY RENEWING CONTRACTS AND RECRUITING CUSTOMERS?**

17 A. When charges for firm transportation service were first unbundled for Providence
18 Gas Company, a November 1st deadline was established for enrollments in
19 transportation service. That November 1st enrollment necessitated heavy marketer
20 activity during the late summer and early fall. However, it also produced a

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1 substantial surge in work load for the Company which led Providence Gas Company
2 to seek, and the Commission to approve, a rolling-enrollment process. While there
3 may still be some lingering effects of the initial late summer and early fall
4 enrollments on the timing of contract renewals, late summer and early fall
5 contracting for gas supply is no longer necessarily "typical." With the considerable
6 volatility in gas prices experienced in recent years, it is difficult to identify a preferred
7 time of year for gas supply contracting. However, I am aware of a number of large
8 gas customers in other jurisdictions who have realigned the end dates of their gas
9 supply contracts to facilitate negotiation of new service arrangements in the late
10 winter or early spring.

11
12 **Q. WHEN FORMER VALLEY GAS CUSTOMERS WHO WERE FORECASTED TO**
13 **MOVE FROM FIRM SALES SERVICE TO FIRM TRANSPORTATION SERVICE**
14 **DID NOT TRANSFER AS ANTICIPATED, SHOULD NEG HAVE ALTERED ITS**
15 **GAS PURCHASES UNDER ITS GAS PURCHASING PLAN?**

16 **A.** No. Given the volatility of gas prices in recent years, a firm sales service customer
17 who did not switch to transportation service when anticipated may still do so within
18 the forecast period if market conditions become more favorable. For this reason, I
19 suggest that the Company's future forecasting efforts should only reflect customer
20 transfers between sales and transportation service alternatives when such transfers

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1 are known and certain. However, I also recommend that during the forecast period,
2 NEG should adjust its forecasted firm sales service volumes and mandatory gas
3 purchasing requirements to reflect actual migration between gas sales and
4 transportation services if such migration is significant. Through the development of
5 a procedure for adjusting the Company's forecast when significant migration to or
6 from firm transportation service does occur, I believe that NEG can improve the
7 information upon which it bases its gas supply planning and procurement activities.
8

9 **Q. HOW SHOULD NEG'S FORECASTED GAS PURCHASE REQUIREMENTS BE**
10 **ADJUSTED TO REFLECT CUSTOMER MIGRATION?**

11 A. The forecasts upon which NEG relies to guide its gas purchasing can be improved
12 in two ways. First, the Company should refrain from estimating future customer
13 migration patterns, as it did in the forecast it prepared for July 2002 through October
14 2003 period.¹ Second, NEG should adjust its forecasted requirements for all
15 subsequent months on a monthly basis to reflect actual migration of customers to
16 and from firm gas transportation service.

17 In the absence of known and certain information regarding transfers of
18 customers between firm sales service and firm transportation service, the Company

¹ At the time the Company's forecast for the July 2002 – October 2003 period was first presented, I thought NEG's efforts for forecast migration of former Valley customers to firm transportation service was reasonable and appropriate. I have since changed my assessment.

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1 should prepare its sales service forecasts using the assumption that all existing
2 customers will remain under the same service they are enrolled at the time a
3 forecast is prepared. If and when migration actually occurs, the Company should
4 adjust its forecasted gas purchase requirements in a manner analogous to the
5 monthly process that NEG uses to adjust its assignments of pipeline capacity to
6 marketers.

7 Under NEG's existing capacity assignment procedures, the amount of
8 capacity assigned to each marketer is adjusted monthly to reflect customers added
9 or lost for each marketer. This mechanism has been used successfully to make
10 monthly adjustments to capacity assignments without any significant problems since
11 the inception of firm transportation service on the Providence Gas Company
12 system. Adjustment of the Company's sales forecast would require the estimation
13 of changes in volumetric requirements by month, not just measures of capacity, but
14 the adjustment process would be similar.

15 Workpaper 2 attached to NEG's response to Division Data Request 1-37 lists
16 the amount of capacity associated with each customer that migrated during the July
17 2002 through March 2003 period. This provides evidence of NEG's ability to track
18 gas service requirements for individual customers as they migrate to and from firm
19 gas transportation service. However, for the purpose of adjusting forecasted
20 requirements, the Company should be able to estimate changes in monthly sale

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1 service requirements based on a formula which links capacity assignment data to
2 weather-normalized load profile data for each affected rate classification.

3 As further evidentiary support for NEG's ability to make such adjustments to
4 its forecasted sales service requirements, I observe that NEG's response to Division
5 Data Request 1-06 includes an attachment that shows actual monthly adjustments
6 to marketers' capacity assignment volumes for the period January 2001 through
7 July 2003. In addition, the attachment to NEG's response to Division Data Request
8 1-2 demonstrates that the Company can and does develop measures of normal
9 annual gas use volumes for individual customers that could be detailed by month
10 and used as suggested herein to adjust forecasted gas sales service volume
11 requirements when customers migrate to, or from, firm transportation service.

12
13 **Q. MR. BELAND'S JUNE 26, 2003 TESTIMONY AT PAGE 14, LINES 7-10,**
14 **SUGGESTS THAT FT-1 AND FT-2 CUSTOMERS WHO RETURN TO SALES**
15 **SERVICE BRING WITH THEM CAPACITY RESOURCES THAT LARGELY MITI-**
16 **GATE THE IMPACTS OF THEIR RETURN ON THE COMPANY'S GAS COSTS.**
17 **DO YOU AGREE?**

18 **A.** No, I do not. I would agree that the Commission's policies regarding mandatory
19 capacity assignments for FT-1 and FT-2 customers largely mitigate the impacts on
20 NEG's capacity costs resulting from the return of such customers to firm gas sales

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1 service. But, I do not agree that this necessarily implies that either (a) the majority
2 of the gas cost impacts attributable to customer migration from firm transportation
3 service to firm gas sales service are eliminated or (b) the impacts of such migration
4 from firm transportation to firm sales service on NEG's commodity-related costs are
5 small. These considerations are echoed in NEG's August 1, 2003 response to
6 Division Data Request 1-35.

7

8 **Q. IS NEG'S ASSESSMENT OF THE IMPACTS OF CUSTOMER MIGRATION**
9 **DURING THE WINTER OF 2002-2003 REASONABLE?**

10 A. No. I find that the manner in which NEG has approached the allocation of gas costs
11 for that period understates the responsibility of migrating customers for increases in
12 gas costs that were incurred when colder than normal weather conditions were
13 experienced last winter. In particular, NEG's analysis of the costs of serving
14 migrating customers does not appear to appropriately relate incremental costs of
15 gas during peak months to migrating customers incremental service requirements
16 during those months.

17

18 **Q. DO YOU AGREE WITH NEG'S ASSESSMENT OF THE INCREMENTAL COSTS**
19 **OF SUPPLYING REVERSE MIGRATION CUSTOMERS?**

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1 A. No. Although I recognize that there may be some dispute over how such
2 incremental cost responsibilities should be computed, my assessment is that the
3 Company has understated the incremental cost responsibilities of customers who
4 migrated from firm transportation service to firm sales service between July 1, 2002
5 and March 31, 2003. Of particular concern are the methods, assumptions, and
6 calculations upon which NEG has relied to assess incremental gas cost
7 responsibilities for FT-1 customers who migrate to firm sales service.

8 An important element of those concerns relates to NEG's calculation of
9 incremental commodity costs for FT-1 customers. My review of the Company's
10 analysis and workpapers finds that NEG's understatement of incremental
11 commodity costs for migrating FT-1 customers results primarily from the method-
12 ology that the Company has used to estimate incremental supply requirements for
13 those customers.

14 Where NEG computes an incremental supply requirement of 17,395 Dth for
15 migrating FT-1 customers, I compute an incremental supply requirement for the
16 same customers of 26,955 Dth. The difference between the two analyses is 9,560
17 Dth or 55%. Moreover, that difference results from the manner in which those
18 incremental requirements are computed. The analysis that NEG witness Beland
19 presents assumes that migrating FT-1 customers utilized 100% of their assigned
20 pipeline capacity on all days of any month in which the total sales to migrating FT-1

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1 customers exceeds the assigned pipeline capacity for those customers multiplied by
2 the number of days in the month. However, using daily data provided in the
3 workpapers for Exhibits GLB-1 through GLB-4, I performed a day-by-day assess-
4 ment supply requirements in excess of assigned pipeline capacity for the migrating
5 FT-1 customers. That assessment found that the sum of daily excess requirements
6 for migrating FT-1 customers was much greater than the excess requirements that
7 the NEG analysis suggests.

8 The fact is weather-related fluctuations in migrating FT-1 customers' daily
9 demands do not permit those customers to utilize their assigned pipeline capacity at
10 100% load factors in winter months as the NEG analysis assumes. Moreover, most
11 of the difference is found in the computed incremental supply requirements for FT-1
12 customers is associated with the months of February 2003 and March 2003, which
13 are also the months in which the Company's costs of incremental supply appear to
14 be the highest. The combination of greater computed excess requirements in my
15 analysis and higher incremental costs of gas in the most affected months yields an
16 increase in the incremental commodity costs attributed to migrating FT-1 customers.

17 Where Exhibit GLB-2 shows an incremental commodity cost for migrating FT-1
18 customers of \$168,372, my analysis yields an incremental commodity cost for
19 migrating FT-1 customers of \$281,906.

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1 Another concern is NEG's failure to attribute any costs for storage and
2 peaking resources to migrating FT-1 customers. As I explain later in this testimony,
3 migrating FT-1 customers do not return to sales service with adequate resources to
4 ensure the Company's ability to meet requirements for those customers that are in
5 excess of their assigned pipeline MDQ. Yet, NEG's assessment of incremental cost
6 responsibilities for such customers provides them substantial utilization of storage
7 and peaking resources without any responsibility for the costs of such services. If
8 the capacity requirements of FT-1 customers that are in excess of their assigned
9 pipeline MDQ are priced at the Company's weighted average costs of incremental
10 pipeline capacity, the Company's assessment of incremental costs for those
11 customers would conservatively rise another \$63,000. For the comparatively small
12 number of migrating FT-1 customers, the combined upward adjustments to their
13 incremental gas supply costs would increase the Company's assessment of their
14 incremental costs by more than 100%.

15 Based on the analyses and observations explained above, I submit that the
16 impacts on gas costs of customer migration from firm transportation service to firm
17 sales service for other firm sales service customers were greater during this past
18 winter than NEG represents. I, therefore, encourage the Commission to make
19 changes to the Company's current policies and procedures that eliminate, or at
20 least substantially reduce, the potential that customers who migrate from firm

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1 transportation service to NEG's firm gas sales service will adversely impact the
2 costs of gas for other firm gas service customers in the future.

3
4 **Q. THE COMPANY'S CURRENT TARIFF REQUIRES 30 DAYS ADVANCE NOTICE**
5 **BEFORE A FIRM TRANSPORTATION SERVICE CUSTOMER RETURNS TO**
6 **FIRM GAS SALES SERVICE. IS 30 DAYS ADVANCE NOTICE ADEQUATE TO**
7 **ENSURE THAT OTHER CUSTOMERS ARE NOT ADVERSELY IMPACTED BY A**
8 **TRANSPORTATION CUSTOMER'S RETURN TO FIRM GAS SALES SERVICE?**

9 A. No, it is not. Under the Company's GPIP, mandatory purchases of gas to supply
10 the requirements of firm gas sales service customers commence 18 months prior to
11 the start of each gas supply month. Thus, the current requirement for 30 days
12 advance notice of a customer transfer from firm gas transportation service to firm
13 gas sales service cannot be relied upon to place the migrating customer on equal
14 footing with either (a) customers who do not have a transportation service option
15 (e.g., residential and Small C&I customers) or (b) Medium, Large and Extra Large
16 C&I customers who have a transportation service option but do not exercise it.
17 Furthermore, where the time period between a customer's return to firm sales
18 service and the start of a given gas supply month is relatively short, the Company is
19 less likely to be able to modify its gas purchasing activity for the specified month
20 without risk of adversely impacting gas supply costs for its other firm customers.

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**Q. IF 30 DAYS ADVANCE NOTICE OF CUSTOMER TRANSFERS IS NOT ADE-
QUATE TO PROTECT AGAINST ADVERSE IMPACTS ON THE COMPANY'S
GAS SUPPLY COSTS FOR OTHER FIRM SALES SERVICE CUSTOMERS, HOW
SHOULD NEG ADDRESS THIS PROBLEM?**

A. My initial reaction was to lengthen the advance notice requirement. However, after considering the implications of that alternative, I concluded that the problem is better addressed through a pricing mechanism that effectively charges the customer more for service that must be provided with less advance notice than it would be through an arbitrarily lengthening advance notice requirements. Later in this testimony, I recommend an amendment to NEG's proposed formula for computing TSS surcharges/credits that is aimed at establishing such a pricing mechanism.

**Q. HOW DOES NEG PROPOSE TO ADDRESS ISSUES ASSOCIATED WITH
UNANTICIPATED CUSTOMER MIGRATION FROM FIRM TRANSPORTATION
SERVICE TO FIRM SALES SERVICE?**

A. The June 26, 2003 testimony of NEG witness Czekanski proposes a four-step process for calculating gas cost surcharges and credits for customers who return to firm gas sales service from firm transportation service. The key elements of that process are as follows:

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- 1
- 2 1. Obtain the average NYMEX closing price 3 business days prior to the
- 3 start of each gas supply month;
- 4
- 5 2. Calculate the average cost of gas purchased under the Gas
- 6 Procurement Plan (GPP);²
- 7
- 8 3. The difference between the NYMEX closing price and the GPP
- 9 average cost of purchased gas is adjusted to reflect the percentage of
- 10 forecasted firm gas supply requirements purchased under the
- 11 Company's GPP for the gas supply month;³ and
- 12
- 13 4. Eliminate from the surcharge the average cost per Dth of the deferred
- 14 fuel cost balance embedded in the GCR (plus or minus).
- 15

² The tariff language that NEG provides in response to Division Data Request 1-22 references NEG's Gas Procurement Incentive Plan (GPIP), not its GPP. That GPIP reference appears to be an appropriate update to reflect the Commission's approval of procurement incentives for NEG.

³ Mr. Czekanski's June 26, 2003 testimony at page 22, lines 15-18, indicates that this adjustment is intended to "reflect the percentage of gas supplies purchased outside of the GPP." However, this adjustment is stated in somewhat different terms in the proposed tariff language that NEG provides in response to Division Data Request 1-22. I am comfortable with the manner in which it is stated in the proposed tariff language.

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1 NEG also proposes that the surcharge/credit mechanism outlined above be
2 coupled with provisions that require its application to “all firm sales service
3 consumption of customers switching from transportation service during the period
4 September 1st through the following April 30.” Customer’s migrating from firm
5 transportation service to firm sales service during the months of May through
6 August would not be subject to the proposed surcharge/credit mechanism. In
7 addition, NEG proposes that customers who remain on sales service following April
8 30th shall become firm sales customers and shall no longer be subject to the
9 proposed surcharge/credit mechanism.

10
11 **Q. HAS NEG PROPOSED TARIFF LANGUAGE THAT IT WOULD USE TO**
12 **IMPLEMENT ITS PROPOSED FOUR-STEP PROCESS FOR PRICING SERVICE**
13 **TO CUSTOMERS WHO MIGRATE FROM FIRM GAS TRANSPORTATION**
14 **SERVICE TO FIRM GAS SALES SERVICE?**

15 A. It did not provide such language as part of its June 26, 2003 filing of testimony and
16 exhibits, but proposed tariff language was provided in NEG’s August 1, 2003
17 response to Division Data Request No. 1-22.

18 **Q. IS THE FOUR-STEP PROCESS THAT NEG WITNESS CZEKANSKI RECOM-**
19 **MENDS FOR CALCULATING GAS COST SURCHARGES FOR REVERSE**
20 **MIGRATING CUSTOMERS REASONABLE?**

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1 A. I agree with certain elements of the Company's proposal, but I find need for revision
2 or refinement of other elements of that recommendation.

3

4 **Q. WITH WHICH ELEMENTS OF MR. CZEKANSKI'S FOUR-STEP PROCESS DO**
5 **YOU AGREE OR DISAGREE?**

6 A. First, I agree that customers who return to NEG's firm gas sales service from firm
7 gas transportation service and are assessed a surcharge (or provided credit) for
8 incremental (or decremental) gas procurement costs, should not also be held
9 responsible for, and required to pay, the deferred gas component of the Company's
10 GCR charges. Second, with one exception, I find that NEG's proposed procedure
11 for calculating surcharges/credits is reasonable and appropriate for application to
12 FT-2 customers who return to firm sales service. Third, I find that a further
13 modification of the Company's proposed surcharge/credit calculation methodology
14 is necessary to appropriately assess the gas charges that NEG should bill to FT-1
15 customers who migrate to firm sales service.

16

17 **Q. HOW SHOULD THE COMPANY'S PROPOSED SURCHARGE/CREDIT MECH-**
18 **ANISM BE MODIFIED FOR APPLICATION TO FT-2 CUSTOMERS WHO**
19 **MIGRATE TO FIRM SALES SERVICE?**

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1 A. NEG's proposed surcharge/credit calculations for migrating FT-2 customers need to
2 be modified to recognize the length of the advance notice that the Company is
3 provided to adjust its gas purchases for each gas supply month subsequent to the
4 transfer in which the surcharge/credit mechanism is applicable. In other words,
5 where the Company has greater time to alter its gas purchases for given gas supply
6 month, the magnitude of the applicable surcharge/credit for that month should be
7 reduced. Thus, the adjustment that I recommend multiplies the Company's
8 computed surcharge/credit by a fraction that in all cases represents a value of less
9 than 1.00 if at least 30 days advance notice of a transfer to firm gas sales service is
10 provided. The numerator of the fraction I propose equals the number of months of
11 possible advance purchase activity under the GPIIP less the number of months
12 between the month in which notice of the customer's transfer to firm sales service is
13 received and the month for which the surcharge is calculated. The denominator is
14 the number of months of possible advance purchase activity under the GPIIP (i.e.,
15 18 months).

16 For example, if a customer transfers from firm gas transportation service to
17 firm gas sales service with the requisite 30-days advance notice and gas sales
18 service commences in November, the computed surcharge for the customer's first
19 month of firm gas sales service would be multiplied by a fraction for which the
20 numerator is 17 (i.e., $18 - 1$) and the denominator equals 18. The surcharge/credit

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1 for the customer's second month of firm sales service would be subject to an
2 adjustment factor that has a numerator of 16 (i.e., 18 – 2) and denominator of 18.
3 Through the application of this adjustment, customers are effectively credited for the
4 amount of advance notice of increased gas supply requirements that the Company
5 receives for each gas supply month. Once again, this adjustment appropriately
6 reduces the magnitude of the surcharge/credit when the Company is provided
7 greater time to adjust its purchasing to reflect the migrating customer's gas supply
8 requirements.

9
10 **Q. HOW WOULD YOUR PROPOSED ADJUSTMENT TO THE CALCULATION OF**
11 **SURCHARGES/CREDITS FOR MIGRATING FT-2 CUSTOMERS ALTER THE**
12 **FORMULA THAT WHICH NEG PRESENTS IN ITS RESPONSE TO DIVISION**
13 **DATA REQUEST 1-22?**

14 A. The formula that I propose for migrating FT-2 customers is as follows:

15
16
$$\text{TSS}_{\text{FT-1}} = \{ [(\text{NYMEX}_M - \text{GPIP}_M) (\text{GPIP}_{\text{QM}}/\text{Dt}_M)] * [(\text{NP}-\text{X}_M)/\text{NP}] \} - \text{R}_{\text{GCR}}$$

17 **Where:**

18
19
20 $\text{TSS}_{\text{FT-2}}$ = The Transitional Sales Service (TSS) monthly surcharge/credit for a
21 migrating FT-2 customer.

22
23 NYMEX_M = The NYMEX closing price for month M.

24
25 GPIP_M = Average cost of gas purchased under the GPIP for month M.

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- 1
2 GPIP_{QM} = The Total Quantity of GPIP purchases for month M.
3
4 Dt_M = Total forecasted sales for month M underlying the GPIP.
5
6 NP = The number of months in which advance purchases may be made for
7 any given gas supply month. (Under the terms of the GPIP, that
8 number is 18).
9
10 X_M = The number of months between the Company's receipt of notice of a
11 customer's transfer to firm sales service and month M, where month
12 M is the month for which the surcharge is computed.
13
14 R_{GCR} = The per Dth Deferred Gas Cost Reconciliation reflected in the current
15 GCR charge.
16
17

18 **Q. WHY SHOULD THE CALCULATION OF SURCHARGES/CREDITS FOR FT-1**
19 **CUSTOMERS WHO MIGRATE TO FIRM GAS SALES SERVICE BE DIFFER-**
20 **ENTIATED FROM THAT FOR FT-2 CUSTOMERS WHO ENGAGE IN SIMILAR**
21 **MIGRATION ACTIVITIES?**

22 A. Unlike FT-2 customers, FT-1 customers are not required to take assignments of
23 storage and peaking capacity. As a result, when FT-1 customers return to firm
24 sales service, they do so without adequate capacity resources to ensure that their
25 full requirements can be met under colder than normal weather conditions. To
26 ensure that FT-1 customers are not provided unduly preferential treatment, the
27 formula discussed above for computing surcharges/credits for migrating FT-2
28 customers requires further modification to ensure that the computed

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1 surcharges/credits for returning FT-1 customers include appropriate consideration of
2 the incremental costs for storage and peaking services that migrating FT-1
3 customers impose on the system under design winter conditions.

4
5 **Q. WHY WOULD IT BE INAPPROPRIATE TO EXEMPT MIGRATING FT-1 CUS-**
6 **TOMERS FROM RESPONSIBILITY FOR STORAGE AND PEAKING COSTS IN**
7 **THE DETERMINATION OF MONTHLY SURCHARGES/CREDITS?**

8 A. Since FT-1 customers are not required to take assignments of storage and peaking
9 capacity, the pipeline capacity that FT-1 customers are assigned is not sufficient to
10 meet their peak capacity requirements. For example, the workpapers supporting
11 the migration analyses that NEG witness Beland presents indicate that in March
12 2003 migrating FT-1 customers had assigned pipeline capacity (MDQs) totaling
13 1,286 Dth per day. However, using the data provide in Mr. Beland's workpapers, I
14 compute that the same migrating FT-1 customers had peak day requirements in
15 March 2003 totaling 2,084 Dth. Thus, the assigned pipeline capacity for those
16 migrating FT-1 customers was roughly 800 Dth per day or 38% below their peak
17 demands for that month.

18 However, to ensure the reliability of its service, NEG must plan for the
19 availability of sufficient gas supply resources to meet customers' service
20 requirements under design day conditions. Based on a design day which reflects

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1 an average temperature of zero degrees Fahrenheit and 65 degree days, I compute
2 that the design day demands of migrating FT-1 customers in March 2003 was
3 approximately 2,830 Dth. That is more than 1,540 Dth or **120%** above the assigned
4 pipeline capacity for those customers.

5 Despite a large gap between the capacity required to serve FT-1 customers
6 who migrated to firm sales service and the amount of pipeline capacity assigned
7 those customers, NEG would only require migrating FT-1 customers to bear costs
8 for storage and peaking to the extent that NEG actually incurs incremental costs for
9 those services. Thus, by implication, NEG's assessment of incremental cost
10 responsibilities for migrating FT-1 customers implicitly assumes that all other firm
11 sales service customers (including those that migrate from FT-2 service) are
12 responsible for the entirety of the Company's storage and peaking costs, as long as
13 the Company has any excess peaking supply capability. In other words, NEG
14 would permit migrating FT-1 customers cost-free use of storage and peaking
15 resources. Such treatment of migrating FT-1 customers is neither reasonable nor
16 equitable, and it creates a class of "free riders" that cannot be justified. Therefore, I
17 submit that when FT-1 customers return to firm gas sales service they must be
18 required to share responsibility for the costs of the Company's storage and peaking
19 resources in proportion to their design day (or design winter) requirements. The fact
20 that the Commission does not require FT-1 customers to take an assignment of

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1 storage and peaking costs when they are utilizing firm transportation service does
2 not justify preferential treatment of those customers when they return to firm sales
3 service.

4 In addition, the Commission must recognize that Residential, Small
5 Commercial and FT-2 customers are required to bear the full annual costs of the
6 resources required to serve their design day demands regardless of whether actual
7 conditions ever approach design day requirements. Recovery of the full annual
8 costs of storage and peaking resources from those customers is accomplished
9 through charges that are applied to usage throughout the year. However, for FT-1
10 customers NEG offers no mechanism for spreading the recovery of costs for
11 storage and peaking resources overall FT-1 customers' annual usage. In the
12 absence of such a mechanism, either (a) charges for recovery of storage and
13 peaking costs must be designed to ensure their full recovery from migrating FT-1
14 customers during the potentially limited periods of time that they utilize the service
15 or (b) the Company must accept less than full recovery of such costs from migrating
16 FT-1 customers. Neither of these alternatives is particularly appealing. On one
17 hand, costs reasonably assignable to migrating FT-1 customers are either not
18 recovered or shifted to other classes of service. On the other hand, charges billed
19 for to migrating FT-1 customers may appear inordinately large since full annual
20 costs may need to be recovered over only a comparatively small number of therms.

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Q. HOW SHOULD NEG ENSURE THE RECOVERY OF AN APPROPRIATE LEVEL OF PEAKING AND STORAGE COSTS FROM MIGRATING FT-1 CUSTOMERS?

A. The calculation of surcharges/credits for migrating FT-1 customers should start with the adjusted calculation for FT-2 customers that I discuss above. But that formula should be augmented to address migrating FT-1 customers' responsibility for the costs of storage and peaking resources sufficient to meet the design winter requirements of migrating FT-1 customers. Furthermore, to affect recovery of such storage and peaking costs, the following procedures should be used.

1. Once an FT-1 customer transfers to firm sales service, the customer becomes responsible for the full annual cost of storage and peaking required to serve NEG's determination of the customer's design day requirements.
2. The customer is provided the option of paying for those storage and peaking resources through:
 - a. A dollars per Dth charge applied to all metered Dth for the subsequent 12-months (subject to an after-the-fact reconciliation to ensure that assigned costs equal charges paid), or

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b. 12 equal monthly payments computed to in a manner which ensures that the sum of the 12 – monthly payments (billed over the subsequent 12 billing months) equals amount of storage and peaking resources costs assigned to the migrating FT-1 customer based on NEG’s determination of the customer’s design day peak requirements.

If the customer re-migrates to firm transportation service before an amount equal to the full annual costs of assigned storage and peaking resources are paid, the customer remains responsible for the full annual costs that are assigned. The customer will be permitted to continue to draw on such resources for a full calendar year from the date that firm gas sales service under Schedule TSS is initiated.

Q. HOW SHOULD THE FORMULA FOR CALCULATING APPLICABLE SURCHARGES/CREDITS FOR A MIGRATING FT-1 CUSTOMER BE EXPRESSED?

A. The formula that I propose for use in for computing surcharges/credits for migrating FT-1 customers is presented below:

$$TSS_{FT-1} = \{ [(NYMEX_M - GPIP_M) (GPIP_{QM}/Dt_M)] * [(NP-X_M)/NP] \} - R_{GCR} + S\&P$$

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1 **Where:**
2

3 TSS_{FT-1} = The Transitional Sales Service (TSS) monthly surcharge/credit
4 for migrating FT-1 customers.
5

6 $NYMEX_M$ = The NYMEX closing price for month M.
7

8 $GPIP_M$ = Average cost of gas purchased under the GPIP for month M.
9

10 $GPIP_{QM}$ = The Total Quantity of GPIP purchases for month M.
11

12 Dt_M = Total forecasted sales for month M underlying the GPIP.
13

14 NP = The number of months in which advance purchases may be
15 made for any given gas supply. (Under the terms of the GPIP
16 this number of months is 18).
17

18 X_M = The number of months between the Company's receipt of
19 notice of a customer's transfer to firm sales service and month
20 M, where month M is the month for which the surcharge is
21 computed.
22

23 R_{GCR} = The per Dth Deferred Gas Cost Reconciliation reflected in the
24 current GCR charge.
25

26 S&P = Storage and Peaking Costs
27 = $(DDD - MDQ) * \$Th$
28

29 Where:
30

31 DDD = NEG's estimate of Design Day Demand for the
32 migrating FT-1 customer.
33

34 MDQ = The amount of interstate pipeline capacity that NEG
35 assigned to the migrating customer's load while on
36 firm transportation service.
37

38 $\$Th$ = The average cost per therm of design day require-
39 ments of Storage and Peaking resources.
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1 Q. DO YOU HAVE ANY FURTHER OBSERVATIONS REGARDING THE TARIFF
2 LANGUAGE THAT NEG PROPOSES IN ITS RESPONSE TO DIVISION DATA
3 REQUEST 1-22?

4 A. Yes, I propose a number of changes in the draft tariff language that NEG proposes,
5 some of which have already been discussed herein. I will attempt to highlight some
6 of the more substantive changes that I propose below. However, I encourage a
7 thorough reading of the proposed tariff language that I present in Schedule BRO-1.

8 First, NEG proposes to label the service to which the surcharges and credits
9 discussed above would apply as "Transportation to Sales Service (TSS)." I suggest
10 that the more appropriate label for that service might be "**Transitional** Sales Service
11 (TSS)."

12 Second, the initial sentence of the first paragraph under the heading
13 "General Conditions" states that TSS is "... *a fully bundled service* ..." That phrase
14 is misleading and should be deleted. The charges within NEG's firm service rate
15 schedules have been substantially unbundled, and TSS is not an exception.

16 Third, the third paragraph under the heading "General Conditions" states that
17 "*TSS Service will commence on the first day of a calendar month following the*
18 *customer's switch from transportation service to firm sales service.*" This language
19 does not properly recognize the Company's practice of commencing changes in

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1 service for FT-2 customers with the start of a billing cycle. I have re-drafted the
2 proposed tariff language in a manner that eliminates the need for that provision.

3 Fourth, the middle of the fourth paragraph under the heading "General
4 Conditions" states "*Such surcharge/credit will reflect the difference between the*
5 *GPIP cost of gas reflected in the currently effective GCR rate and the market based*
6 *price.*" I find this language to be somewhat misleading. The "*GPIP cost of gas*" to
7 which this refers is not reflected in the current GCR rate. Thus, to avoid confusion,
8 I recommend that the phrase "*reflect in the currently effective GCR rate*" be deleted.

9 Fifth, under the draft tariff language NEG proposes, the TSS would only
10 apply to firm transportation service customers who transfer to firm sale service and
11 commence taking firm sales service between September 1 and April 30. Firm
12 transportation service customers who commence firm sales service between May 1
13 and August 31 of each year would be permitted to go directly to their otherwise
14 applicable firm sales service rate schedule. I find that treatment to be inappropriate
15 in the absence of a commitment from the migrating Customer to utilize firm sales
16 service for a period of at least 12 consecutive months. Therefore, I recommend that
17 all customers who transfer from firm transportation service to firm gas sales service
18 and do not make at least a commitment to use firm sales service continuously for at
19 least a 12-month period should be initially serve under the TSS rate schedule.
20 Furthermore, such customers should remain on the TSS rates through the following

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1 April 30 for migrating FT-1 customers or through the commencement of their first
2 billing cycle subsequent to April 30 for migrating FT-2 customers. This ensures that
3 firm transportation service customers who transfer to firm sales service do not
4 adversely impact gas costs for upcoming or current winter period and are not
5 subject to standard sales service rates until the Company has at least a full summer
6 to adjust its gas procurement plans and gas purchasing to reflect the customer's
7 transfer to firm sales service.

8
9 **Q. HAVE YOU PREPARED A FULLY REVISED DRAFT OF TARIFF LANGUAGE**
10 **FOR TRANSITIONAL SALES SERVICE?**

11 A. Yes. That draft tariff language can be found in Schedule BRO-1.

12
13 **Q. DO YOU HAVE ANY CONCLUDING COMMENTS REGARDING THE PRICING OF**
14 **SERVICE TO FIRM TRANSPORTATION SERVICE CUSTOMERS WHO RETURN**
15 **TO FIRM GAS SALES SERVICE?**

16 A. Yes, I do. The Commission must seek a reasonable balance between the rates
17 charged to FT-1 and FT-2 customers who migrate to firm sales service and
18 protection of the interests of customers who have remained on firm sales service,
19 particularly Residential and Small Commercial customers who have no competitive
20 service alternatives. However, that balance must be constructed in the context of

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1 considerable uncertainty regarding market conditions in months subsequent to a
2 transportation service customer's transfer to firm sales service. Thus, the Commis-
3 sion should establish policies and procedures that minimize, if not eliminate, the
4 affects of uncertainties resulting from the migration of firm transportation customers
5 on gas costs for other firm sales service customers. In doing so, I submit that the
6 Commission should also recognize that the distribution of such risks is often
7 asymmetrical. As a result, the costs of inadequate planning for migrating
8 customers' supply requirements and inadequate adjustment of mandatory gas
9 purchases under colder than normal weather conditions, are generally greater than
10 the costs of excess supply during warmer than normal winter periods. For this
11 reason, I urge the Commission to adopt policies and tariffs for NEG that clearly
12 communicate a desire assign costs and risks attributable to NEG's efforts to provide
13 firm sales service to migrating firm transportation service customers to those
14 customers.

15 Furthermore, the Commission should be sensitive to the fact that the
16 Company's GPIIP is designed to moderate fluctuations in the Company's gas
17 procurement costs for firm sales service customers while encouraging NEG to also
18 minimize those costs within specified constraints. It is not designed to protect
19 customers who have competitive gas supply alternatives from market price fluctua-
20 tions, nor is the GPIIP designed in a manner that ensures the availability of facilities

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1 and gas supply to serve fluctuations in FT-1 customers' requirements above their
2 pipeline MDQ. Thus, to the maximum extent practicable, the terms, conditions and
3 charges applied to customers who migrate from FT-1 service to firm sales service
4 must be designed to discourage such customers' use of that firm sales service as a
5 short-term hedge against less attractive competitive market conditions.

6

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 A. Yes, it does.

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New England Gas Company
A Division of Southern Union Company
RIPUC NEGC No. 101

Section 7
Transportation Terms and Conditions
Schedule __ Sheet __

**Transitional Sales Service
Rate TSS**

Transitional Sales Service (TSS) shall apply to customers subject to the Transportation Service Term and Conditions. The Company's General Terms and Conditions will govern this Service to the extent not consistent herewith.

The Company reserves the right to restrict the availability of this service if the Company determines that the integrity of the distribution system is at risk.

GENERAL CONDITIONS

1. Transitional Sales Service (TSS) is provided by the Company to Customers switching from supplier service to firm sales service. TSS is available to customers (a) who terminate supplier service, (b) who receive a termination notice from a designated supplier, or (c) for whom a designated supplier becomes ineligible to serve the customer.
2. TSS is not available to customers eligible for, or enrolled in, the Company's Non-Firm Transportation Service (NFT), Non-Firm Sales Service (NFS) rates, and the Default Transportation Service.
3. All customers transferring to firm sales service from either FT-1 service or FT-2 service will be subject to the provisions of this rate schedule in addition to the provisions of the Company's applicable firm sales service rate schedules.
 - a. For each customer who transfers to firm sales service from FT-1 service, TSS will be applicable to all firm sales service provided to the Customer through the first April 30th after the customer starts taking firm sales service or until the Customer enters into a contractual commitment with the Company to take firm sales service continuously for a period of not less than one year.
 - b. For each customer transferring to firm sales service from FT-2 service, TSS will be applicable to all firm sales service provided to the Customer through the end of the Customer's first billing cycle subsequent to the first April 30th after the customer starts taking firm sales service or until the Customer enters into a contractual commitment with the Company to take firm sales service continuously for a period of not less than one year.

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4. FT-1 customers who transfer to firm sales service and who take firm sales service continuously beyond the next April 30th shall no longer be subject to the TSS surcharge/credit. However, if such a Customer is served under TSS for less than 12 billing periods, the Customer will be responsible for the balance of any and all applicable annualized Storage and Peaking costs not recovered from the Customer since the Customer's transfer to firm sales service.
5. FT-2 customers who switch to firm sales service and who take firm sales service continuously beyond the next April 30th shall cease being subject to the TSS surcharge/credit as of the start of their first billing cycle subsequent that next April 30th.
6. Each Customer utilizing TSS will be subject to a monthly surcharge/credit. The TSS monthly surcharge/credit is designed to charge a market-based price reflecting the cost of gas supplies in the marketplace at the time consumption is occurring for the incremental amount of gas that the Company must purchase over and above the quantities of gas procured for firm sales customers under the provisions of the Company's Gas Procurement Incentive Plan (GPIP). The surcharge/credit will reflect the difference between the GPIP cost of gas for the month in which gas is supplied and a market-based gas price for the same month. This surcharge/credit shall apply to all firm sales service consumption of customers switching from firm transportation service subsequent to April 30th of each year.
7. The applicable TSS surcharge/credit will be differentiated for customers who switch to firm sales service from FT-1 service and for customers who switch to firm sales service from FT-2 service.
8. The surcharge/credit for customers who switch to firm sales service from FT-1 service shall be computed as follows:

$$TSS_{FT-1} = \{ [(NYMEX_M - GPIP_M) (GPIP_{QM}/Dt_M)] * [(NP-X_M)/NP] \} - R_{GCR} + S\&P$$

Where:

TSS_{FT-1} = Transitional Sales Service monthly surcharge/credit for customers transferring from FT-1 service.

$NYMEX_M$ = The NYMEX closing price for month M.

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Transportation Terms and Conditions
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$GPIP_M$ = Average cost of gas purchased under the GPIIP for month M.

$GPIP_{QM}$ = The Total Quantity of GPIIP purchases for month M.

Dt_M = Total forecasted sales for month M underlying the GPIIP.

NP = The number of months in which advance purchases may be made for any given gas supply. (Under the terms of the GPIIP this number of months is 18).

X_M = The number of months between the month in which the notice of the customer's transfer to sales service is provided to NEG and month M (i.e., the month for which the surcharge is computed).

R_{GCR} = The per Dth Deferred Gas Cost Reconciliation reflected in the current GCR charge.

S&P = Storage and Peaking Costs
= $(DDD - MDQ) * \$Th$

Where:

DDD = NEG's estimate of Design Day Demand for the migrating FT-1 customer.

MDQ = The amount of interstate pipeline capacity that NEG assigned to the migrating customer's load while on firm transportation service.

$\$Th$ = The average cost per therm of design day requirements of Storage and Peaking resources.

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9. For customers who switch from FT-2 service to firm sales service, the applicable surcharge/credit shall be determined as follows:

$$TSS_{FT-2} = \{ [(NYMEX_M - GPIP_M) (GPIP_{QM}/Dt_M)] * [(NP - X_M)/NP] \} - R_{GCR}$$

Where:

TSS_{FT-2} = Transitional Sales Service monthly surcharge/credit for customers transferring from FT-2 service.

$NYMEX_M$ = The NYMEX closing price for month M.

$GPIP_M$ = Average cost of gas purchased under the GPIIP for month M.

$GPIP_{QM}$ = The Total Quantity of GPIIP purchases for month M.

Dt_M = Total forecasted sales for month M underlying the GPIIP.

NP = The number of months in which advance purchases may be made for any given gas supply. (Under the terms of the GPIIP this number of months is 18).

X_M = The number of months between the month in which the notice of the customer's transfer to sales service is provided to NEG and month M (i.e., the month for which the surcharge is computed).

R_{GCR} = The per Dth Deferred Gas Cost Reconciliation reflected in the current GCR charge.

10. TSS surcharges/credits will be calculated monthly. Supporting calculations for all components of the applicable surcharges except the S&P component of the TSS surcharges/credits for customers transferring from FT-1 service will be posted on the Company's website by the second business day of each month. Support for the S&P component which involves Customer-specific data will not be posted on the Company's website. However, such data will be provided upon request to any affected Customer and will be included in confidential workpapers submitted to the Public Utilities Commission and the Division of Public Utilities and Carriers with the Company's annual GCR reconciliation filing.