BEFORE THE

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

IN THE MATTER OF

National Grid's Revenue Decoupling	**)**	
Mechanism Proposals	**)**	**Docket No. 4206**

DIRECT TESTIMONY OF WITNESS BRUCE R. OLIVER

On Behalf of

The Division of Public Utilities and Carriers

March 21, 2011

TESTIMONY OF BRUCE R. OLIVER
Docket No. 4206
March 17, 2011

TABLE OF CONTENTS

Exhibits BRO-1 through BRO-4.

I. INTRODUCTION

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

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

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

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

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

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

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

A. This testimony addresses issues relating to National Grid (or hereinafter “NGrid” or “the Company”) requests for approval of Revenue Decoupling Mechanisms for Electric and Natural Gas service. This testimony reviews the content of the October 18, 2010 direct testimony of witnesses Jennifer Feinstein and Jeanne A Lloyd, as well as the attachments submitted in support of those testimonies and the Company’s responses to data requests regarding its proposals.

Q. WHAT EXHIBITS ARE YOU SPONSORING AS PART OF THIS TESTIMONY?

A. Attached to this testimony are four exhibits. They include:

Exhibit BRO-1	Comparison of Class Specific Revenue Reconciliation Factors with NGrid's proposed Gas RDA
Exhibit BRO-2	Alternative Gas RPC Calculations and Resulting Revenue Differences
Exhibit BRO-3	Examples of RDM Rate Caps in Other Jurisdictions
Exhibit BRO-4	NGrid's Response to Division Data Request DIV 1-9

II. DISCUSSION OF ISSUES

Q. HOW IS YOUR DISCUSSION OF ISSUES RELATING TO NATIONAL GRID'S FILING IN THIS PROCEEDING ORGANIZED?

A. This discussion is presented in six sections. **Section A** outlines the key parameters of the Company's proposals for Revenue Decoupling Mechanisms for Electric service and for Gas service and highlights differences between the two proposals. **Section B** reviews the legislated requirements for such mechanisms. **Section C** evaluates the reasonableness and appropriateness of the Company's proposed Electric Revenue Decoupling Mechanism. **Section D** discusses alternatives to NGrid's Electric RDM proposal. **Section E** examines the merits of NGrid's proposed Revenue Decoupling Mechanism for Natural Gas service. Included in this section is the Division's evaluation of the reasonableness of the Company's proposal to

exempt certain classes of customers from its Gas Revenue Decoupling Mechanism. **Section F** assesses the Company's proposed schedule for the timing of Revenue Decoupling rate determinations, review, and implementation of charges. **Section G** details other matters of concern to the Division from ratemaking and regulatory policy perspectives.

A. National Grid's Proposed Revenue Decoupling Mechanisms

Q. PLEASE DESCRIBE THE COMPANY'S REVENUE DECOUPLING PROPOSALS IN THIS PROCEEDING?

A. In its October 18, 2010 filing in this proceeding, NGrid presents proposals for revenue decoupling that would be applicable to its Electric service in Rhode Island and to its Rhode Island Natural Gas service. Both mechanisms are aimed at ensuring the Company's ability to achieve its authorized levels of distribution utility revenue under the provisions of recently passed legislation. However, there are some notable differences between the structure of the Company's proposed Revenue Decoupling Mechanisms for electricity and natural gas service. Some of those differences are dictated by the provisions of the aforementioned legislation. Others reflect NGrid's recommendations under the provisions of that legislation which provide for the Commission's exercise of discretion in the application of such mechanisms to certain classes of customers.

Q. HOW IS NGRID'S REVENUE DECOUPLING MECHANISM FOR ELECTRIC SERVICE STRUCTURED?

A. The Company's proposed RDM for electric service provides for an annual reconciliation of total billed base distribution revenue from electric service customers with Annual Target Revenue ("ATR") where the ATR reflects the base revenue requirement approved by the Commission in the Company's last base rate case. Any difference between actual base distribution revenue and the ATR for a specified reconciliation period would be recovered from customers through a uniform cents-per-kWh charge (or credit) applied to **ALL** customers. Although reconciliation adjustments to billed charges would be computed once a year and applied to customers over a subsequent twelve-month period, NGrid proposes to record a regulatory asset or regulatory liability each month, rather than wait until the end of an RDM year. Moreover, the Company proposes, that any time it projects an RDM Reconciliation balance of greater than 10% above or below the ATR, it would be allowed to make an "interim" rate adjustment.

Q. WHAT IS THE STRUCTURE OF THE COMPANY'S PROPOSED REVENUE DECOUPLING MECHANISM FOR NATURAL GAS SERVICE?

A. The Company's proposed Gas RDM is also an annual rate adjustment mechanism that is tied to revenue levels approved by the Commission in the Company's last base rate case (Docket No. 3943). However, unlike its electric RDM counterpart, NGrid's proposed Gas RDM would **not** reconcile total billed base rate revenue with

total authorized base rate revenue. Instead, it would reconcile revenue on a class-by-class basis using **revenue per customer** ("RPC") measures. Also, unlike the Company's Electric RDM counterpart, NGrid recommends that **certain classes of service be exempted** from applications of its Gas RDM. In addition, it should be noted that while NGrid proposed to exempt certain classes of service from its Gas RDM, a single uniform rate adjustment factor, stated in dollars-per-therm would be computed for all classes to which the Company's Gas RDM would apply.

Furthermore, as in the Company's Electric RDM proposal, NGrid seeks to commence its accounting for Gas RDM reconciliations with the month of April 2011 such that it's first Gas RDM Year would conform to its fiscal year (i.e., April 1 through March 31). But, the Company's proposed application of rate adjustments would be on a different schedule. NGrid's proposal is to include its Gas RDM adjustments in its annual Distribution Adjustment Clause ("DAC") calculations, with the resulting rate adjustments applied over a twelve month period beginning November 1 of each year and continuing through October 31 of the following year.

Q. WHAT CLASSES OF SERVICE WOULD BE EXEMPTED FROM NGRID'S PROPOSED GAS RDM?

A. According to the Company's pre-filed Direct Testimony at page 14, its revenue decoupling proposal for gas service would not apply to:

- Large Low Load Factor Commercial and Industrial ("C&I") customers
- Large High Load Factor C&I customers
- Extra Large Low Load Factor C&I customers
- Extra Large High Load Factor C&I customers
- Dual-Fuel Customers

Q. DOES THE COMPANY'S ELECTRIC RDM PROPOSAL IN THIS PROCEEDING DIFFER FROM THAT WHICH NGRID PROPOSED IN ITS LAST ELECTRIC BASE RATE PROCEEDING (DOCKET NO. 4065)?

A. The Company's Electric RDM proposal in this proceeding is less complex than the mechanism the NGrid requested in Docket No. 4065. Both the current proposal and that in Docket No. 4065 provided for annual rate adjustments in the form of a single cents-per-kWh rate that would be applicable to all electric service customers. However, in Docket No. 4065 the Company's proposal included "look back" and "look forward" components, and the "look forward" component included an adjustment to the Company's annual revenue requirement that was purported to address the effects of inflation on NGrid's costs of providing electric service. The Company's proposal in Docket No. 4065 also included an explicit CapEx adjustment to its annual revenue requirement where the CapEx adjustment was designed to annually increase the Company's revenue requirement for additions to plant made since the Commission's rate base determination in the last base rate case. In this proceeding, NGrid's proposed Electric RDM does not include an

explicit automatic mechanism for adjusting its revenue requirement for new plant additions. However, the Company does recognize that there may be adjustments to its authorized revenue requirement made outside of base rate proceedings.

Q. HOW DOES NGRID'S PROPOSED GAS RDM IN THIS PROCEEDING COMPARE WITH ITS PROPOSAL IN ITS LAST GAS BASE RATE PROCEEDING (DOCKET NO. 3943)?

A. Three important aspects of the Company's Gas RDM proposal in this proceeding differ from its proposal in Docket No. 3943.

First, in this proceeding, NGrid recommends that **ALL** Large & Extra Large C&I customers be exempted from applications of its Gas RDM. In Docket No. 3943, NGrid only sought to exempt **NEW** Large & Extra Large C&I customers from its Gas RDM.

Second, in Docket No. 3943 NGrid proposed the use of class-specific annual revenue adjustment factors. That contrasts with the Company's RDM proposals in this proceeding which call for the use of a single dollars-per-therm Revenue Decoupling Adjustment ("DRA") for those classes that are not exempted from applications of the proposed RDM.

Third, the Company's Gas RDM in this proceeding includes no explicit provision for adjustment of its Gas base distribution base rate revenue requirements between rate cases as they did in Docket No. 3943. Although NGrid has made recent proposals in other proceedings for the recovery of added costs, those matters

would not affect the Company's RDM rate reconciliations as proposed in this proceeding.

B. Statutory Requirements for Revenue Decoupling Mechanisms

Q. AS EXPRESSED IN THE REVENUE DECOUPLING ACT PASSED BY THE RHODE ISLAND LEGISLATURE DURING ITS 2010 SESSION, WHAT ARE THE PURPOSES OF REVENUE DECOUPLING?

A. The enacted legislation indicates that "*…electricity and gas revenues shall be fully decoupled from sales…*" and that such revenue decoupling "…*shall be for the following purposes:*

(1) Increasing efficiency in the operations and management of the electric and gas distribution system;

(2) Achieving the goals established in the electric distribution company's plan for system reliability and energy efficiency and conservation procurement as required pursuant to subsection 39-1-27.7(c);

(3) Increasing investment in least-cost resources that will reduce long-term electricity demand;

(4) Reducing risks for both customers and the distribution company including, but not limited to, societal risks, weather risks and economic risks;

(5) Increasing investment in end-use energy efficiency;

(6) Eliminating disincentives to support energy efficiency programs;

(7) Facilitating and encouraging investment in utility infrastructure, safety, and reliability; and

(8) Considering the reduction of fixed, recurring customer charges and transition to increased unit charges that more accurately reflect the long-term costs of energy production and delivery.

Q. HAS NGRID DEMONSTRATED THAT THE REVENUE DECOUPLING MECHANISMS IT PROPOSES IN THIS PROCEEDING SERVE THE PURPOSES INDICATED IN THE LEGISLATION FOR SUCH MECHANISMS?

A. Only in part. Most of the purposes for Revenue Decoupling that are set forth in Section (a) of the legislation are not addressed by the Company's testimony in this proceeding. While NGrid asserts that the main purpose of its revenue decoupling proposals is "*to establish a rate mechanism that breaks the link between the revenues a gas or electric distribution company receives and the level of sales it makes*," the Company's proposals in this proceeding do not fully break that link. Rather, NGrid relies on measures of sales as the means of recovering or crediting under- or over-recoveries of authorized levels of revenue, and that use of sales measures re-establishes the linkage between sales and revenue that the proposed RDM mechanisms are purported to break. If in fact a key objective of revenue decoupling is severing the link between revenue and sales, then there are other means that may better achieve that objective. For example, over- or under-recoveries of authorized revenue levels could be billed on a dollars per customer basis or perhaps on a demand basis for larger non-residential customers.

Q. DO THE COMPANY'S RDM RECOMMENDATIONS FOR GAS AND ELECTRIC SERVICE IN THIS PROCEEDING CONFORM TO THE REQUIREMENTS FOR

SUCH MECHANISMS THAT ARE SET FORTH IN THE ENACTED LEGISLATION?

A. As set forth in the recently enacted legislation the requirements for revenue decoupling mechanisms for electric service and for gas service are somewhat different. Both electric and gas decoupling mechanisms are annual mechanisms, and the legislated requirements for both electric and gas RDMs are tied to Commission revenue determinations in the Company's most recent base rate proceedings for electric and gas service. Also, both mechanisms allow for the pass through of rate credits if actual revenue collections exceed authorized levels, as well as the implementation of revenue surcharges when actual revenue collections fall below authorized levels.

Key differences between the legislated requirements for electric and natural gas RDMs include:

- Determination of Target Revenue
  - ✓ Electric RDM – A single revenue target is established based on the Commission's authorized Total Distribution Revenue for all rate classes.
  - ✓ Gas RDM – Annual revenue targets premised on the Commission's authorized revenue requirement for the Company in its last base rate class, but authorized revenue by class must be converted to a average "revenue per customer" target for each rate class to which the RDM is applied.
- Excluded Rate Classes
  - ✓ Electric RDM - Low-Income Residential customers may be excluded

- ✓ Gas RDM – exclusions permitted, but not mandated, for low-income residential customers as well as large commercial and industrial customers.

Q. DO NGRID'S PROPOSED REVENUE DECOUPLING MECHANISMS CONFORM WITH THE PARAMETERS FOR ELECTRIC AND GAS REVENUE DECOUPLING MECHANISMS THAT ARE SPECIFIED IN THE LEGISLATION?

A. From my perspective as a ratemaking and regulatory policy analyst, I believe that they do. However, it should be recognized that the Company's proposals also include some provisions and implementation parameters that are not specifically required by the legislation.

Q. GIVEN THE CONFORMANCE OF NATIONAL GRID'S PROPOSED MECHANISMS WITH THE TECHNICAL REQUIREMENTS OF THE LEGISLATION, MUST THE COMMISSION ADOPT THOSE MECHANISMS AS PRESENTED?

A. No. I do not believe such action is either necessary or appropriate without a more detailed analysis of the ratemaking and regulatory policy impacts of the proposed mechanisms. Elements of the Company's proposals necessarily address matters which extend beyond the dictates of the legislated requirements for such mechanisms, and the Commission must consider the reasonableness and appropriateness of those elements of NGrid's proposals. In addition, the Commission must assess whether discretionary determinations made by the Company in the formulation of its proposals are reasonable and not unduly discriminatory.

Q. DO YOU HAVE ANY FURTHER COMMENT ON THE PROVISIONS OF THE LEGISLATED REQUIREMENTS FOR RDM MECHANISMS?

A. Yes, I do. The legislation provides that the existence of an RDM shall not be relied upon or cited for the purpose of making any adjustments in the determination of the Company's cost of capital. As one who has testified on rate of return and cost of equity issues in a number of proceedings, I find that requirement somewhat problematic. It is generally presumed that investors are well informed and aware of differences in risk among companies in which they might invest. If the implementation of an RDM changes investors assessment of risk associated with a given utility, that change in risk is expected to be reflected in the company's market price, and that in turn, impacts the effective return that investors expect to derive from an investment in the Company. It is generally difficult, if not impossible, to segregate fully the impacts of RDM mechanisms on risk and return requirements from other factors that may influence perceived risk and return requirements for a utility. If the legislative intent is that there should be no explicit, separately stated adjustment (e.g., a 50 basis point reduction in the allowed return on equity), that may be doable. However, if the intent is that differences in risk are not even to be included in the PUC's assessments of differences in return requirements in a comparison group of companies for return on equity determinations, the very premise for cost of equity determinations could be severely undermined.

C. Evaluation of NGrid's Electric Revenue Decoupling Proposal

1. Inclusion or Exclusion of Specific Rate Classes

Q. DO YOU FIND THE COMPANY'S PROPOSAL TO APPLY ITS ELECTRIC RDM TO ALL CUSTOMERS REASONABLE AND APPROPRIATE?

A. No, I do not given the manner in which the Company proposes to compute and apply such rate adjustments. I am most concerned regarding distortions to current cost-of-service and revenue relationships within and among classes that can be expected to result from applications of uniform dollars per kWh adjustments to all classes regardless of the composition of cost responsibilities by rate class and the current design of rates for each class. The Company's proposal for a uniform cents-per-kWh adjustment for all rate classes represents a marked departure from cost-of-service based ratemaking concepts. Apparently, the Company's concerns regarding interclass and intra-class rate equity issues do not rise to the level of its concerns regarding its ability to collect its authorized level of total distribution revenue.

The influence of sales changes on billed revenue by class is not uniform, and cannot be reasonably reflected through a uniform cents-per-kWh rate adjustment that is applied to all customer classes. For example, NGrid indicates that distribution revenue for street lighting service would be included in its RDM calculations. Yet, such street lighting revenue is predominantly comprised of charges per luminaire. Moreover, energy use for street lighting service is generally based on either fixed

numbers of annual or monthly kWh per luminaire. Due to the nature of street lighting activities, street lighting energy use and changes in street lighting revenue does not vary with changes in weather or economic cycles. As a result, application of a uniform cents-per-kWh revenue adjustment to all classes including street lighting can only be expected to distort relationships between the revenue derived from that class and the Company's costs of providing street lighting service. Similar relationships exist for other classes for which a greater than average proportion of total distribution revenue is billed through fixed charges (e.g., monthly customer and/or demand charges).

Q. THE ENACTED LEGISLATION ALLOWS FOR EXEMPTING LOW-INCOME RESIDENTIAL CUSTOMERS FROM THE ELECTRIC RDM, BUT NGRID HAS PROPOSED NOT TO EXCLUDE THOSE CUSTOMERS. WHAT JUSTIFICATION DOES NGRID OFFER FOR ITS RECOMMENDED INCLUSION OF LOW INCOME RESIDENTIAL CUSTOMERS IN ITS PROPOSED ELECTRIC RDM REVENUE RECONCILIATIONS?

A. NGrid's Direct Testimony at page 7 simply indicates a belief that it would be appropriate to include all customers in its RDM reconciliations. At pages 22-23 of its Direct Testimony, the Company offers two additional rationales for including low income residential customers in its RDM proposals. First, NGrid suggests that low income residential customers should be included in RDM revenue reconciliations because they participate in energy efficiency programs. Second, the Company

indicates that exempting low income residential customers would result in further subsidization of that class which already receives a low income discount on distribution rates.

Q. SHOULD THE COMMISSION ACCEPT NGIRD'S PROPOSAL TO INCLUDE LOW-INCOME RESIDENTIAL CUSTOMERS IN THE COMPANY'S ELECTRIC RDM RATE RECONCILIATIONS?

A. This is a difficult question given the design of the Electric RDM that NGrid proposes. The concept of an RDM is to ensure that the Company can collect its full authorized level of Distribution Revenue. If that were accomplished in a manner which avoided revenue shifts among rate classes and minimized shifts of revenue responsibilities among customers within each rate class, then it could be argued that Low-Income Residential customers would not be harmed by RDM rate adjustments. Rather, those adjustments would simply maintain the revenue requirements determined by the Commission in NGrid's last electric base rate proceeding to be fair and reasonable. However, under a uniform cents-per-kWh rate adjustment mechanism, shifts of revenue responsibilities among and within rate classes appear inevitable. Moreover, without any quantification of the expected contribution of each rate class to the Company's revenue shortfall or over-collection, assessments of the significance of potential revenue shifts among rate classes, and particularly to or from the Residential Low-Income classes, are not possible.

An RDM premised on ensuring the Company's ability to recover fully its revenue requirement for each rate class would also ensure NGrid's recovery of its overall revenue requirement, and thereby, would meet a key objective of the revenue decoupling legislation without raising the potential for shifts of revenue responsibilities among rate classes. However, the use of class revenue targets increases the potential that customers in classes with comparatively small numbers of accounts and/or large diversity in size could be adversely impacted by the decision of a single customer to leave the system or change its operations in a manner that dramatically reduces its electric service requirements. Such concerns regarding impacts on large customers have contributed to the Company's recommendation the Large and Extra Large C&I customers be excluded from its Gas RDM.

Q. HOW SHOULD THIS COMMISSION APPROACH THE STRUCTURING AND APPLICATION OF AN ELECTRIC RDM FOR NATIONAL GRID?

A. The Commission should adopt an Electric RDM that applies to all rate classes. However, that mechanism should be premised on the establishment of class-specific revenue targets that are tied directly to the Commission's determination of class revenue responsibilities in Docket No. 4065, rather than relying on a single revenue target for all of its electric distribution service. Furthermore, the Commission should require that revenue reconciliations also be made on a class specific basis with the development of a separate revenue reconciliation factor for each rate class. This

approach meets the requirements of the revenue decoupling legislation for a mechanism that "…reconciles annually the revenue requirement allowed in the company's base distribution rate case to revenues actually received…," but it does so in a manner that avoids shifting of revenue requirements among rate classes. Although, as previously mentioned, the use of class revenue targets may introduce some problems for classes having comparatively small numbers of customers and/or substantial diversity in usage requirement among the customers in a class, I will present alternative means for dealing with such problems later in this testimony.

Q. WHY SHOULD THE COMMISSION BE CONCERNED ABOUT THE IMPACTS OF REVENUE DECOUPLING MECHANISMS ON REVENUE AND COST OF SERVICE RELATIONSHIPS BY CLASS OF SERVICE?

A. NGrid's proposals in this proceeding, although generally consistent with the provisions of recent legislation authorizing the use of such mechanisms, do not provide for cost-based rate adjustments. They are strictly focused on ensuring the Company's revenue collections. As a result, the assurance of recovery of specific amounts of revenue for the Company and its shareholders is given priority over concerns regarding the fair and equitable distribution of revenue requirements among and within rate classes for the Company's captive customers. Thus, after the implementation of RDM rate adjustments, relationships that the Commission found to be reasonable in the Company's last base rate proceedings may be substantially distorted, and could possibly yield significant deviations from cost-

based charges for service. As a result of annual RDM-induced class cost of service distortions, the Commission may be challenged in future base rate proceedings to find reasonable and appropriate means for restoring a cost-basis for NGrid's class revenue requirements and rate designs. In addition, deviations from cost-based ratemaking principles may lead to distorted price signals for customers that, in turn, may distort customers' decisions regarding energy consumption and energy efficiency investments.

2. Interim Rate Adjustments

Q. IS NGRID'S PROPOSAL FOR INTERIM ADJUSTMENTS TO RDM CHARGES REASONABLE AND APPROPRIATE?

A. No, it is not. The Company claims that such adjustments would promote rate stability. I disagree.

Under NGrid's proposals interim rate adjustments would be permitted based on **forecasted** reconciliation balances where the forecasted balance exceeds 10 percent of its annual ATR. The Company's recommendation for interim rate adjustments also implies that RDM reconciliation charges could exceed 10% of a customer's billed charges in months after such an interim rate adjustment is implemented. That contrasts with the practices of other utilities that limit the magnitude of rate adjustments to not more than 10% of base rate charges for any month and defer any excess for recovery in future periods.

If a large variation from the Company's annual target revenue is identified late in an RDM year, an interim rate adjustment could have disproportion impacts on customers with seasonal usage and/or do little to address the overall magnitude of the under- or over-recovery balance. On the other hand, if a greater than 10 percent plus or minus reconciliation balance can be forecasted early in a RDM year, that will most likely be attributable to either (1) a large (i.e., greater than 10%) change from test period sales levels or (2) extreme weather. A large imbalance due to extreme weather is not likely to endure over time and may even be offset by weather in the remainder of the same RDM year. A large reconciliation balance that results from large variations from test period sales levels suggests that a more thorough review of the Company's test year parameters and costs in its last base rate case is needed to ensure the reasonableness and equity of charges being applied within and among rate classes. If the Company believes that it is being adversely impacted by changes in usage that cause growing reconciliation balances, the remedy should be sought through the filing of a new base rate proceeding, not a request for an interim rate adjustment. Anytime that either RDM reconciliation charges or RDM over- or under-collection balances exceed 10% of Annual Target Revenue, it should be viewed by all parties as a signal that a fresh examination of test year sales and costs is needed.

National Grid argues that its interim rate adjustment recommendation is similar to the provision in the Company's Transmission Service Cost Adjustment which provides for interim transmission rate adjustments when there are significant

over- or under-recoveries. However, the Transmission Service Cost Adjustment and the Company's proposed RDM service quite different functions. The Transmission Service Cost Adjustment is intended to provide for recovery of changes in transmission costs and is not specifically designed to address changes in test year usage levels. On the other hand, the primary purpose of the proposed Electric RDM is to ensure the Company's revenue recoveries when faced with changes in sales.

Q. DOES THE RECENTLY ENACTED REVENUE DECOUPLING LEGISLATION REQUIRE INTERIM RATE ADJUSTMENTS?

A. No, it does not. My reading of the legislation indicates it only requires annual revenue reconciliations. It includes no requirement for interim rate adjustments.

<u>3. Interest on Reconciliation Balances</u>

Q. NGRID'S TESTIMONY ALSO SUGGESTS THAT THE BALANCE IN THE RECONCILIATION ACCOUNT WOULD ACCRUE INTEREST AT THE CUSTOMER DEPOSIT RATE. SHOULD INTEREST BE PROVIDED ON RECONCILIATION ACCOUNT BALANCES?

A. No. The accrual of interest on monthly over- or under-recovery balances is unnecessary and inappropriate.

First, the law does not specifically require the accrual of interest on reconciliation balances.

Second, as shown in Exhibits JAL-1 and JAL-2, under-recovery balances in most months are primarily the result of billing lags (i.e., only about half the target revenue for the first month shown is actually billed in that month). Such revenue lags are already addressed in base rate proceedings through cash working capital determinations, and therefore, the accrual of additional interest on such under-collection balances would be unwarranted and duplicative.

Third, the Company's proposal to record increases in its reconciliation balance on a monthly basis, and accrue interest on the balance is premised on the notion that NGrid is entitled to a specific amount of revenue each month. However, this Commission's order in the Company's last electric base rate case includes no specific determinations regarding monthly revenue levels. The monthly revenue targets that NGrid proposes to use are of its own creation. Historically, the only revenue levels most commissions set are annual revenue amounts, and it is understood that weather, business cycles, major outages, and other factors may change the actual distribution of revenue by month during the rate-effective period. Frequently, increases or decreases in sales and revenue during any given month are offset by changes in usage in other months of the year. Although the Company's overall revenue for an RDM year may closely approximate its authorized revenue level, deviations from what NGrid proposes as target monthly revenue levels could result in the assessment of net interest charges despite the fact that there was no annual revenue deficiency. If no interest is computed for either monthly over-recovery balances or monthly under-recovery balances, then

conceptually the mechanism remains balanced. Ratepayers would forego interest on over-recovery balances, and the Company would forego interest on under-recovery balances.

Fourth, if the Company is provided interest on monthly over- or under-recovery balances then the Commission should direct the Company and the Division to attribute much greater attention to the determination of monthly revenue targets. At present, there are no Commission-established **monthly** revenue or sales targets. Moreover, the development of such monthly targets is not necessarily a simple or straightforward process. Also, to be fair and balanced, monthly revenue targets would need to be premised on estimates of weather normal monthly sales. Yet, weather normalization techniques when applied to monthly data tend to yield less precise and less reliable results than annual or seasonal efforts to weather normalize sales data.[1]

Finally, I would view revenue adjustments for over- or under-recoveries of annual revenue targets as being more akin to the Weather Normalization adjustments that have been made as part of gas DAC rate calculations for years now. In those calculations, no interest has been provided on the dollar amount of such adjustments prior to their inclusion in the DAC.

[1] The Commission should note that in prior gas proceedings, the Company has recognized that the sensitivity of usage to degree days is generally not uniform across the months of a season or year. Similar relationships should be expected for electric sales and degree day measures. Thus, at a minimum monthly degree day adjustment factors for sales would be required to estimate monthly revenue targets.

4. NGrid's Proposed Electric RDM Tariff Language

Q. IS THE TARIFF LANGUAGE THAT NGRID PRESENTS IN EXHIBIT JAL-4 REASONABLE AND APPROPRIATE FOR USE IN THE IMPLEMENTATION OF AN ELECTRIC REVENUE DECOUPLING MECHANISM?

A. No, it is not. The Company's proposed tariff language exhibits numerous shortcomings.

First, accepting ***arguendo***, NGrid's proposal to apply a uniform cents-per-kWh adjustment to all rate classes, the proposed Electric RDM tariff language does not address or does not adequately address (a) the monthly accrual of regulatory assets and (b) the proposed procedures for calculating interest on reconciliation balances. Although the Company's Direct Testimony at pages 8-9 discusses its plans for monthly accrual of regulatory assets and Exhibit JAL-1 shows monthly calculations of Electric RDM over- or under-recovery balances, the procedures for calculating those targets are not detailed by the Company in the proposed tariff language. Likewise, the proposed tariff language in Exhibit JAL-4 does not clearly specify whether the Company's proposed interest calculations would be computed monthly in conjunction with monthly accruals of regulatory asset/liability entries or annually. Also, NGrid has not added language to each of its individual rate schedules to reference the applicability of Electric RDM rate adjustments.

Second, the time period provided for the Division and the Commission to review RDM rate adjustments is inappropriately and unnecessarily short. As I will

explain in more detail in later sections of this testimony, the determination of appropriate measures of revenue and usage for use in rate adjustment calculations may not be as simple and straightforward as NGrid's presentation suggests. Moreover, the Company has presented no compelling reason that a longer lag between the filing of Electric RDM rate adjustment calculations and the implementation of such rate adjustments would be problematic. Furthermore, implementation of new RDM rate adjustments in the middle of the summer period (i.e., July 1 of each year) with limited advance notice may not provide reasonable opportunity for customers to reflect those changes in their electric use decisions during the expected months of peak summer usage.

Third, the proposed tariff language provides for no limit on the magnitude of rate adjustments that can be imposed on customers between rate cases.

Fourth, the use of a uniform cents-per-kWh adjustment for all class allows for inequitable shifting of cost responsibilities among rate classes, but offers no explicit mechanism to limit or offset such impacts on interclass and/or intra-class revenue shifts.

Lastly, as presented, Section V. of the proposed "Electric Revenue Decoupling Provision" provides that Adjustments to RDM rates will be implemented with "*notice filed with the Commission setting forth the amount(s) of the revised factor(s) and the amount of the increase(s) or decrease(s)*." No provision is made for any Division or public input to the rate adjustment process or for Commission approval of rate changes. There are substantial reasons for this Commission to find

that notice of rate RDM changes without adequate time for Division review and comment is not in the public interest. Among such reasons are:

- Issues associated with the impacts of billing adjustments included in reported revenue for an RDM Year that are actually associated with usage and billed revenue in prior periods;

- A need for the Commission to more closely monitor and review the use of forecasted usage data in the development of revenue decoupling rate adjustments;

D. Alternatives to NGrid's Electric RDM Structure

Q. ARE THERE WORKABLE ALTERNATIVES TO THE ELECTRIC RDM MECHANISM THAT NGRID PROPOSES?

A. Yes. The development of an Electric RDM which reconciles revenue by rate class could significantly improve the revenue reconciliation and rate adjustment process for NGrid's customers while still achieving conformance with the requirements of the recently enacted revenue decoupling legislation.

Q. IF TARGET REVENUE REQUIREMENTS FOR ELECTRIC DISTRIBUTION SERVICE ARE SET ON A CLASS-BY-CLASS BASIS, SHOULD ELECTRIC RDM

RATE ADJUSTMENTS BE COMPUTED USING TOTAL CLASS REVENUE OR CALCULATIONS OF REVENUE PER CUSTOMER?

A. Electric RDM rate adjustments should be computed using total class revenue. Although use of revenue per customer targets is required for gas revenue decoupling under the enacted revenue decoupling legislation, no corresponding mandate for the use of revenue per customer ("RPC") targets is required for electric service. Moreover, use of RPC targets for certain classes of electric customers can be particularly inequitable when applied to street lighting and large C&I service classifications. Further, use of RPC measures only provides a reasonably accurate portrayal of changes in revenue requirements associated with changes in numbers of customers where the average costs of providing service to new customers can be reasonably approximated by the average costs of serving existing customers in the same rate class.

For street lighting classes, the Commission would face the question of whether RPC numbers would be more reasonably computed on the basis of the number of customer accounts or numbers of luminaires for which service is provided. If RPC targets are computed using the number of customer accounts, diversity within the class in terms of numbers of luminaires per account is ignored. On the other hand, if RPC targets utilize numbers of luminaires, significant cost differences associated with the sizes and types of luminaires utilized by individual street lighting service customers would be overlooked.

Similar problems can be expected if RPC-based revenue targets are used for larger C&I service classifications where the numbers of accounts are comparatively small and substantial diversity in usage exists among customers within a class.

Q. WOULD THE USE OF RPC-BASED REVENUE TARGETS IN A RDM FOR ELECTRIC SERVICE ADDRESS CONCERNS REGARDING THE POTENTIAL IMPACTS OF CUSTOMER MIGRATION BETWEEN RATE CASES?

A. Not completely. The migration of a customer from one service classification to another generally has little impact on the Company's costs of providing distribution service for the customer unless the customer requests, and separately pays for, required facilities upgrades. However, the Company's overall level of authorized revenue could change as a result of such migration by an amount equal to the difference in the RPC amount between the class that the customer leaves and the RPC for the class to which the customer migrates.

Customer migration issues tend to be of greater importance for C&I rate classifications than for residential service classes since residential customers tend to be somewhat more homogeneous in their usage requirements and opportunities for migration may be more limited. However, with the introduction of distinctions between low-income ("Discounted") and non-low-income ("Non-Discounted") residential customers, that may change. Differences between average usage for low-income and non-low-income customer classifications can be substantial, and

such differences in usage can lead to unnecessary and inappropriate adjustments to the Company's overall revenue requirement.[2]

Q. SHOULD THE COMMISSION ACCEPT THE ANALYSIS PROVIDED IN EXHIBIT JAL-1 AS A REASONABLE AND APPROPRIATE REPRESENTATION OF THE OPERATION OF AN ELECTRIC REVENUE DECOUPLING MECHANISM RECONCILIATION?

A. No. There are several significant flaws in that presentation.

First, it should be observed that column (e) in Exhibit JAL-1, page 1 of 2, shows significant under-recovery balances for all months except the final month (April 2012). Those under-recovery balances on which the Company seeks to earn interest are the result of a mismatch between the Monthly Target[3] revenue and the Billed Distribution Revenue that is used for Illustrative purposes. Basically, the Company reflects a monthly revenue target that represents a full month of revenue requirement while the "Billed Distribution Revenue" reflects a lagged billing of revenue for the reconciliation period based on meter reading cycles for the month and thereby reflects less than half the Target Revenue for the month. In essence the Company's exhibit portrays a lack of synchronization that creates an inappropriate and unwarranted bias toward overstating appropriate under-recovery

[2] This matter will be discussed further in the context of the evaluation of NGrid's Gas RDM mechanism which is presented later in this testimony.

[3] Column (b) on page 1 of Exhibit JAL-1 is labeled "ATR" or Annual Target Revenue but all of the entries in that column except the total at the bottom actually reflect the Company's representation of ***monthly*** revenue targets.

balances. Using the procedures set forth in Exhibit JAL-1, page 1 of 2, with monthly accrual of over- or under-recovery balances and monthly computation of interest on those balances NGrid could add substantial additional charges over the course of the year for monthly under-recovery balances even though the ultimate result is an over-recovery of nearly $4 million.

Second, as I understand the Company's proposal for recording adjustments to its regulatory asset (liability) for over- or under-recovery balances, such adjustments would be accrued monthly. In other rate mechanisms where the Company records deferred balances on a monthly basis (e.g., its Gas DAC and GCR and the Gas RDM proposed in this proceeding), interest on such balances is computed monthly. Yet, the examples provided in Exhibits JAL-1 and JAL-2 only compute interest on an annual basis. If NGrid intends to make monthly computations of interest on reconciliation balances as part of its Electric RDM, as it does for its Gas RDM,[4] the calculation of "Interest @ Customer Deposit Rate" in Exhibit JAL-1 does not reflect that. Rather, Exhibit JAL-1 depicts a somewhat distorted version of an annual interest calculation. That annual interest calculation is distorted because it unrealistically portrays only a partial month for April 2012. In reality, the ending month balance would not reflect partial month data, and that balance would

[4] As I explain in a later portion of this testimony, the Company's proposed Electric RDM tariff language does not clearly indicate whether interest calculations are intended to be made on a monthly or annual basis.

only turn to an over-recovery balance if significant increases in sales were recorded.[5]

Third, page 2 of Exhibit JAL-1 depicts the manner in which NGrid proposes to develop its monthly revenue targets. But the methods that the Company proposes for apportioning revenue across months does not comport with any actual monthly revenue target established in Docket No. 4065. Rather, as shown therein, and discussed on pages 8-9 of the Company's pre-filed Direct Testimony, NGrid's proposals in this proceeding would derive monthly revenue targets by allocating all its authorized annual revenue requirement across months based on forecasted, not test year levels of kWh use. In addition, the Company's proposed method for apportioning revenue across months ignores that fact that significant portions of annual revenue for each class are not billed on a cents-per-kWh basis, and therefore, a kWh-based allocation of such revenue across months is distortive of actual monthly revenue expectations. If monthly revenue targets were to be computed using allocations based on monthly kWh, the monthly kWh data used in making such allocations should be those used to compute rate year revenue in the Company's last base rate compliance filing, **not** forecasted kWh.[6]

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[5] Given the State's encouragement of enhanced energy efficiency programs and energy conservation, such net over-recovery balances would only be expected in the context of extreme weather which produces very high heating and/or cooling degree days.

[6] The Commission should note that the Company's Proof of Revenue calculations in its Second Amended Compliance Filing in Docket No. 4065 was premised on 7,662,968,634 total annual kWh deliveries, but its proposed allocation of revenue requirements by month in Exhibit JAL-1, page 2, in this proceeding uses kWh deliveries which total to 7,778,545,909.

Q. DO YOU HAVE ANY COMMENTS REGARDING THE ELECTRIC REVENUE DECOUPLING FACTOR COMPUTATION PRESENTED IN EXHIBIT JAL-3?

A. Yes, I do. That exhibit provides an overly simplistic representation of the data and analyses that the Division and the Commission will need to review in their assessments of the appropriateness of filed electric revenue decoupling rate adjustments, particularly if more equitable class-based revenue targets are required and/or the Company is required to remove the effects of prior period billing adjustments.

E. Assessment of NGrid's Gas Revenue Decoupling Proposal

1. Exemptions from Gas RDM

Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL TO EXEMPT LARGE AND EXTRA LARGE C&I CUSTOMERS FROM APPLICATION OF GAS RDM REVENUE RECONCILIATIONS?

A. NGrid's rationale for exempting Large and Extra Large C&I customers is discussed at pages 14-16 of its pre-filed Direct Testimony. That portion of the Company's presentation echoes concerns that I raised in Docket No. 3943 regarding the potential impacts of an RPC-based revenue decoupling mechanism on classes having comparatively small numbers of customers and/or substantial diversity in usage of customers within the class.

Q. NGRID'S DIRECT TESTIMONY AT PAGE 15 SUGGESTS THAT UNDER ITS PROPOSED GAS RDM THE DETERMINATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION ("CIAC") FOR CUSTOMERS REQUIRING NEW OR EXPANDED GAS SERVICE WOULD NEED TO BE PREMISED ON "RATE CLASS TARGET REVENUE PER CUSTOMER." DO YOU AGREE?

A. No, I do not. Moreover, I submit that the Commission should expressly instruct NGrid not to utilize rate class target RPC amounts in its calculation of required CIAC payments. Where adopted, revenue decoupling mechanisms are used to ensure a utility's collection of its authorized level of total revenue or total revenue by rate class. Such mechanisms are not appropriately used to support an assumption that the utility should be expected to derive the same amount of revenue from each customer. For the determination of adjustments to **total revenue by class**, use of RPC measures may be a convenient tool, and for gas service in Rhode Island it may be a necessary tool under the recent revenue decoupling legislation. But, it does not justify or warrant an assumption that all customers in a class will (or should) provide the same amount of distribution revenue to the Company on either a monthly or annual basis.

Even within the Residential Heating class for gas service, the Company presently recognizes large differences in monthly and annual usage. With the existence of such differences in service requirements, it is inappropriate to assume that all customers within a rate class either (1) have the same cost responsibilities or (2) should be expected to generate the same amount of annual revenue.

Q. SHOULD THE COMMISSION ACCEPT NGRID'S RECOMMENDATION THAT LARGE AND EXTRA LARGE C&I GAS SERVICE CUSTOMERS BE EXEMPTED FROM APPLICATIONS OF ITS PROPOSED GAS RDM?

A. No. Although I see potential problems with both inclusion and exclusion of Large & Extra Large C&I gas service customers in Gas Revenue Decoupling reconciliations, I believe the preferred approach is to include all customer classes in a mechanism that reconciles revenue by rate class and applies a separate reconciliation factor for each class. The Company's proposal to exempt Large and Extra Large C&I customers from revenue reconciliations raises issues regarding how that exemption would be addressed in the re-setting of rates by class of service in future base rate proceedings. The fact that revenue risk would be eliminated for some classes and not for others would be difficult to ignore, but quantification of the appropriate weight to be given to such differences will be difficult.

If the size of a class or diversity of usage within the class becomes an issue, the Commission can address such concerns, at least in part, by adopting rate designs for Large and Extra Large C&I gas service customers that minimize reliance on usage data in the billing of distribution services. An example of such an approach to the design of rates is the Straight Fixed-Variable ("SFV") rate design methodology. Under the SFV method for designing rates, only those costs which truly vary with levels of usage are billed on the basis of energy use. All other costs are billed on the basis of numbers of customers or measures of demand. Through application of SFV rate design methods, the Commission can minimize variations in

revenue based on changes in customer usage and thereby effectively break the utility's dependence on measures of sales or throughput to achieve its authorized level of distribution revenue.

I am generally not an advocate of SFV rate designs for retail distribution utility services. However, in the context of the enacted revenue decoupling legislation, use of such rate designs for larger non-residential customers should help to enhance efforts to: (a) sever the linkage between usage and billed distribution revenue; and (b) minimize the need for large revenue decoupling rate adjustments for customers in the large and extra large C&I classes. Furthermore, with the adoption of SFV rate designs for Large and Extra Large C&I customers, concerns regarding the need for recognition of revenue risk differences among rate classes would essentially be eliminated in future base rate proceedings.

Q. ARE CONSIDERATIONS REGARDING THE POSSIBLE EXEMPTION OF LOW INCOME RESIDENTIAL CUSTOMERS FROM THE COMPANY'S PROPOSED GAS RDM SUBSTANTIALLY DIFFERENT FROM THOSE ASSOCIATED WITH ITS ELECTRIC RDM?

A. No, they are not. However, NGrid offers an argument regarding customer migration in support of its decision not to exempt Low Income Residential gas service customers that is not found in its electric RDM presentation. .

Q. WHAT IS THE COMPANY'S RATIONALE FOR INCLUDING LOW-INCOME RESIDENTIAL CUSTOMERS IN ITS GAS RDM REVENUE RECONCILIATIONS?

A. NGrid's response to Division Data Request 2-1 expresses the Company belief that inclusion of Low Income Residential customers in its Gas RDM revenue reconciliations is justified by the fact that such customers benefit from energy efficiency programs and pay energy efficiency surcharges.

Q. DOES THE COMPANY OFFER ANY OTHER SUPPORT FOR ITS RECOMMENDATION THAT LOW INCOME RESIDENTIAL CUSTOMERS BE INCLUDED IN ITS PROPOSED GAS RDM?

A. Yes. The Company's Direct Testimony at pages 16-17 suggests that its Gas RDM proposal would yield RDA adjustments that are unaffected by customer movement (i.e., migration) between discounted and non-discounted rate classifications. Also, at pages 22-23 of its Direct Testimony, the Company submits that exemption of low income customers from the RDM would result in further subsidization of those customers. As I will demonstrate later in this testimony, inclusion of low income customers in gas revenue reconciliations may at times produce the opposite effect. In other words, as configured by NGrid in its proposals in this proceeding, the Gas RDM may impose significant additional revenue burdens on low income customers.

Q. DOES NGRID'S PROPOSED GAS RDM ADEQUATELY ADDRESS ISSUES ASSOCIATED WITH THE POTENTIAL MIGRATION OF CUSTOMERS FROM

LOW-INCOME ("DISCOUNTED") TO NON-DISCOUNTED RESIDENTIAL RATE CLASSIFICATIONS?

A. No, it does not. The Company's focus on rate discounts overlooks differences in usage between Discounted (low-income) and Non-Discounted (non-low-income) residential rate classifications.

The electronic workpapers NGrid provided in response to Division Data Request DIV 1-1 show that the claimed lack of impact from migration of residential customers between Discounted (Low Income) and Non-Discounted rates is simply a product of the Company's assumption that average **gas distribution revenue per customer** is the same for both Discounted and Non-Discounted Residential service (i.e., **$196.20**). However, actual base revenue per customer for the twelve months ended March 2010 was **$351.63 for Discounted (Low-Income) Non-Heating** customers, while base actual revenue per customer for Non-Discount Residential Non-Heating customers was **$217.21**. In other words, actual base revenue per customer for Low-Income Non-Heating Residential customers who receive discounted service was roughly **60% greater** than that for Non-Discounted Residential Non-Heating customers. This difference is reflective of more than simply the difference between discounted and non-discounted rates. It also captures significant differences in average annual therm use between customers receiving Discounted Non-Heating service and those receiving Non-Discounted billings for Non-Heating Residential service. Thus, I must question the appropriateness of the Company's

assumption of revenue-per-customer for Discounted and Non-Discounted Residential Non-Heating service in the initial design of its class revenue targets.

With recognition of the difference in average actual revenue per customer contained in NGrid's workpapers, it becomes apparent that the assumption of a uniform measure of revenue per customer for Discounted and Non-Discounted Residential Non-Heating customers represents a marked departure from actual relationships and is not appropriate. Furthermore, given the data cited above, it appears unlikely that future base rate proceeding will yield uniform RPC results for Discounted (low-income) and Non-Discounted Residential Non-Heating customers. With proper recognition of differences in average usage for Discounted and Non-Discounted Residential Non-Heating customers, the potential revenue impacts of further migration of customers between Discounted (Low Income) and Non-Discounted service classifications become more significant. Similar issues can be expected to arise for Discounted (Low Income) and Non-Discount residential electric service customers if a decision is made to use RPC targets in the structuring of a revenue decoupling mechanism for NGrid.

Q. HOW CAN THE COMMISSION MITIGATE THE REVENUE IMPACTS OF CUSTOMER MIGRATION?

A. When a customer migrates from one firm gas service classification to another, the revenue requirement associated with that customer, based on RPC determinations, should migrate with the customer, and a new average revenue-per-customer should

be computed for the rate classification to which the customer migrates. In the Company's next base rate case, revenue-per-customer figures would be re-computed for each rate class based on test year data, and those figures would be used in subsequent Gas RDM reconciliations unless altered by further customer migration.

Q. SHOULD THE COMMISSION ACCEPT NGRID'S PROPOSAL TO EXEMPT DUAL-FUEL CUSTOMERS FROM ITS PROPOSED GAS RDM?

A. Yes. The Company's dual-fuel customers warrant special consideration. Due to the rather unique manner in which their rates were set in Docket No. 3943, application of revenue reconciliation adjustment to such customers does not appear either necessary or appropriate.

<u>2. NGrid's Gas RDM Tariff Language Proposals</u>

Q. DO YOU HAVE ANY CONCERNS REGARDING THE TARIFF LANGUAGE THAT NGRID HAS PROPOSED FOR IMPLEMENTATION OF ITS GAS RDM?

A. Yes, I do. First, Exhibit JBF-3, page 8 of 21, offers proposed tariff language that defines "Target Revenue Per Customer" as follows:

> "*A target average dollar amount per customer established for each month for each firm service rate class at the time of the most recent rate case or other proceeding that results in a base rate adjustme*nt."

However, the Commission's final determinations in Docket No. 3943, did not explicitly establish monthly revenue targets by rate class.

Second, the Company's proposed provision for terminating the current WNA Factor, as presented in Section 3.9 of the Distribution Adjustment Clause (i.e., Section 3, Schedule A, Sheet 8, Third Revision) does not properly compute the final WNA Factor.

Third, the proposed tariff language in Section 3, Schedule A, Sheet 9, Third Revision, references "*Target Revenue Per Customer for the current month as established at the time of the most recent rate case*." But, once again, no monthly revenue targets or target revenue per customer calculations were approved by the Commission for each rate class at the time of the last rate case. Furthermore, the enacted revenue decoupling legislation does not require monthly revenue reconciliations, and monthly calculations of revenue variances are not necessary for the implementation of an annual revenue reconciliation mechanism. In my experience, this Commission has not generally given particular focus to monthly sales or revenue data in gas rate proceedings or imputed particular precision to such numbers. Thus, as I noted in my discussion of the Company's Electric RDM proposal, efforts at this time to give new importance to monthly sales and/or revenue estimates by rate class are not warranted.

Q. DO YOU AGREE THAT THE CURRENT WNA FACTOR WITHIN THE COMPANY'S GAS DISTRIBUTION ADJUSTMENT CLAUSE SHOULD BE TERMINATED WITH THE IMPLEMENTATION OF A GAS RDA FACTOR?

A. Yes, I do. The two mechanisms are clearly duplicative. Each is intended to adjust base distribution revenue for the effects weather although the proposed Gas RDM mechanism is a much more comprehensive mechanism which would also adjust base distribution revenue for other factors. With implementation of a Gas RDM, continuation of the current WNA Factor in the DAC cannot be justified.

Q. IS THE PROCEDURE THAT NGRID RECOMMENDS FOR TERMINATING THE WNA FACTOR APPROPRIATE?

A. No. In language added to the Weather Normalization section of the DAC (Section 3.9, Section 3, Schedule A, Sheet 8, of the Company's Gas Tariff), NGrid indicates that:

> *"With implementation of the Revenue Decoupling Adjustment effective April 1, 2011, the Weather Normalization for the peak season November 2010 through April 2011 will utilize normal heating degree days for the month of April 2011 as actual heating degree days. For subsequent peak seasons, the Weather Normalization provision will no longer be applicable."*

This proposal has two problems. First, it appears unlikely that the Revenue Decoupling proposal NGrid has presented will become effective April 1, as the Company anticipated when it made this proposal. Therefore, a more generically applicable termination procedure for the current WNA Factor will be needed.

Second, I disagree with the manner in which NGrid proposes to make Weather Normalization calculations in a situation where the Revenue Decoupling Adjustment becomes effective (and the WNA Factor is terminated) before the completion of a peak season.

Given the WNA's current use of a symmetrical 2% dead band for Weather Normalization revenue adjustments, NGrid's proposal to use a proxy of normal heating degree days for the month of April has the effect of distorting the magnitude of the final WNA calculation. Therefore, I recommend that the WNA Factor be computed only for those months in which it is actually effective (e.g., November 2010 through March 2011 in the scenario NGrid offers).[7] The 2% dead band should be proportionately reduced to reflect the shorter WNA measurement period. As a result, the WNA calculations are not artificially skewed by including non-actual (proxy) data for the month(s) in which the WNA is no longer applicable.

<u>3. NGrid's Illustrative RPC Reconciliation</u>

Q. DO YOU HAVE ANY COMMENTS REGARDING THE ILLUSTRATIVE EXAMPLE OF THE GAS REVENUE PER CUSTOMER (RPC) RECONCILIATION PRESENTED IN NGRID'S EXHIBIT JBF-2?

[7] If implementation of a Gas RDM for National Grid commences at any point not in the middle of the winter season presently used for Weather Normalization Adjustment Factor calculations, there will be no need for the use of a proxy measure of therms for any month or months subsequent the RDM implementation.

A. I do. Although over- and under-recovery balances are computed by rate class in that example, the Company nets those results[8] and divides by total therms for the applicable rate classes to generate a single dollars per therm[9] rate adjustment that would apply to all of the classes identified. That result is **$0.0646** per **Dekatherm**.

I find that application of the Company's forecasted therms by rate class to its computed RDA from Exhibit JBF-2 yields revenue adjustments by rate class that depart sharply from the RPC balances by class from which the RDA was computed. Although the Company's RDA would essentially eliminate the overall deferred revenue balance that the Company identifies, substantial revenue imbalances remain for individual rate classes. In several instances the rate class deferred balances would be further from zero after the application of the RDA than they were before those adjustments were applied. These results indicate that the Company's proposed RDA would lead to substantial and unacceptable revenue redistributions. These results are quantified in Exhibit BRO-1.

Exhibit BRO-1 also computes the class specific RDA factors that would be required to eliminate the identified deferred revenue balances. As shown therein, class specific revenue adjustment factors would be far from uniform. If the Commission's determinations of class revenue requirements in Docket No. 3943 are

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[8] It is important to observe that the deferred balances by rate class shown in Exhibit JBF-2 are not uniform in terms of either magnitude or direction. The Residential Non-Heating and Medium C&I classes have over-recovery balances, while Residential Heat and Small C&I classes have significant under-recovery balances.

[9] It should be noted that the Firm Throughput Forecast shown on line 6 of Exhibit JBF-2 is actually presented in Dekatherms, not therms as it is stated in that exhibit. Likewise, the RDA factor the Company computes in Exhibit JBF-2 reflects a dollars-per-dekatherm measure, not dollars per therm.

to be maintained, Residential Non-Heating customers would need to receive rate credits of roughly $1.00 per Dekatherm (i.e., $0.10 per therm), while Residential Heating and Small C&I customers would require surcharges in excess of $0.10 per dekatherm or $0.01 per therm. Thus, the calculations presented in Exhibit BRO-1 highlight a key shortcoming of the Company's proposed gas revenue decoupling reconciliation methodology that this Commission should address if fairness and equity in the setting of rates by class are to have any meaning on a going forward basis.

Q. TO WHAT EXTENT DOES THE ANALYSIS IN EXHIBIT JBF-2 DRAW FROM THE REVENUE PER CUSTOMER CALCULATIONS THAT THE COMPANY PRESENTS IN EXHIBIT JBF-1?

A. The ties between Exhibits JBF-1 and JBF-2 are at best incomplete. In particular, I find that the RPC Deferred Balances by rate class shown in Exhibit JBF-2 are represented as including data for low-income customers for each of the residential rate classes (i.e., Non-Heating and Heating). However, the data used in the RPC calculations in Exhibit JBF-1 do not include low income customer data.

Q. DO YOU HAVE ANY OTHER CONCERNS REGARDING THE ANALYSIS PRESENTED IN EXHIBIT JBF-1?

A. Yes. The last column of that exhibit purports to provide annual RPC by rate class, but those annual RPC reflect summations of the monthly RPC for each rate class

and do not quite match the results of dividing the total annual base revenue for each class from Docket No. 3943 Compliance Filing by the average number of customers for each class. This occurs because the monthly numbers of customers, which serve as the divisors in RPC calculations are not equal across the months shown. A basic mathematical principle is that fractions must have a common denominator before they can be added. That principle was not applied here, and as a result the Company's summation of monthly RPC is somewhat askew. Exhibit BRO-2 shows that, if the RPC figures for each class in the last column of Exhibit JBF-1 are multiplied by the number of customers for each class shown in the same column, the resulting annual revenue summed for those four rate classes understates the sum of the annual revenue amounts shown in that column by **$469,761.**

F. Timing of Revenue Decoupling Rate Adjustments

Q. WHAT IS THE SCHEDULE THAT NGRID PROPOSES FOR IMPLEMENTATION OF ITS PROPOSED REVENUE DECOUPLING RATE ADJUSTMENTS?

A. The Company proposes that revenue reconciliations for both its Electric and Gas RDMs (p. 11) be premised on an "RDM Year" that would correspond to the Company's fiscal year (i.e., a twelve month period running from April 1 though March 31). NGrid further requests that its first RDM Year be the twelve months ended March 31, 2012.

For electric service, the Company proposes that upon completion of each fiscal year, it would compute a "Revenue Decoupling Adjustment ("RDA") Factor" to offset any identified over- or under-recovery of base revenue that occurred over the prior April 1 – March 31 period. The computed RDA Factor would be placed in effect starting July 1 and remain effective through the following June 30. NGrid indicates that it would submit a reconciliation filing with the Commission by June 1 of each year for implementation one month later on July 1. In addition, the total dollar amount that the Commission approves each year for recovery or refund through the Electric RDM Adjustment Factor would itself be subject to reconciliation, although the Company is somewhat unclear regarding how and when such further reconciliation adjustments would be computed and applied. If such reconciliations of revenue derived from previously applied RDA factors are to be coordinated with annual RDM calculations, then the initial reconciliation would most likely involve only a nine month period (i.e., July 1, 2012 through March 31, 2013). The remaining three months of the initial twelve month period (i.e., April 1 through June 30) would be addressed through subsequent reconciliation filings with those rate adjustments applied during the following July 1 through June 30 period as part of the next annual RDA factor.

The Company's proposed schedule for filing and implementation of Gas revenue reconciliation factors allows somewhat greater time for Commission and Division review of such filings, as the Company proposes an August 1 filing and a November 1 implementation. However, given the number of other gas filings

presently being made by the Company on or about August 1 of each year, an earlier filing date for the Company's gas reconciliations would be helpful. Given that the subject reconciliations would be based on data for the fiscal year ending March 31 of each year, a July 1 filing date for those reconciliations and supporting workpapers appears reasonable.

Q. DOES THE RECENT LEGISLATION REGARDING REVENUE DECOUPLING MECHANISMS SPECIFY A SCHEDULE FOR COMPUTING AND IMPLEMENTING REVENUE DECOUPLING RATE ADJUSTMENTS?

A. No, it does not. It only specifies that annual rate adjustments be used.

Q. ARE THE IMPLEMENTATION SCHEDULES THAT NGRID PROPOSES REASONABLE AND APPROPRIATE?

A. The proposed schedule for consideration of Gas RDM adjustments would be reasonable with adjustment of the timing of information relating to computation of such adjustments. The Company's proposed schedule for the implementation of Electric RDM rate adjustments does not provide the Division and the Commission adequate time for review of rate adjustment calculations and supporting data and calculations used in determining Electric RDM rate adjustments.

Q. THE TARIFF LANGUAGE FOR IMPLEMENTATION OF NGRID'S PROPOSED ELECTRIC RDM INCLUDES AN APRIL 1, 2011 INITIAL IMPLEMENTATION

DATE FOR THAT MECHANISM. GIVEN THE ESTABLISHED SCHEDULE FOR THIS PROCEEDING, IS AN APRIL 1, 2011 IMPLEMENTATION DATE FOR THE COMPANY'S PROPOSED ELECTRIC RDM REASONABLE?

A. No. Clearly, the matters before the Commission in this proceeding are not going to be resolved by April 1, 2011. Moreover, retroactive implementation of NGrid's RDM proposals to April 1, 2011 appears neither necessary under the law nor appropriate.

Q. IS USE OF AN INITIAL IMPLEMENTATION DATE OF SOMETHING OTHER THAN APRIL 1 PRACTICAL?

A. Yes. I believe it is. Although there may be some value in maintaining an RDM Year that corresponds to the Company's fiscal year, I believe that initial implementation using less than a twelve month period (i.e., a stub year) that begins after a final order in this proceeding and ends March 31, 2012 is workable. In fact, NGrid's Direct Testimony at page 10 indicates that the Company has prior experience with the use of a "partial year" for revenue reconciliation purposes. An initial partial RDM period of July 1, 2011 – March 31, 2012 would be a reasonable means of transitioning to a first full RDM Year of April 1, 2012 - March 31, 2013.

Q. WHAT WOULD CONSTITUTE A MORE APPROPRIATE SCHEDULE FOR IMPLEMENTATION OF ANNUAL ELECTRIC RDM RATE CHANGES?

A. Accepting June 1 as the date for NGrid's annual electric RDM reconciliation filing, I believe that October 1 would represent an appropriate annual implementation date

for new electric RDA factors. This schedule moves the implementation date to a point after the conclusion of the summer period, and provides the Division and Commission greater time for discovery and verification of supporting data and calculations for that filing.

Q. HOW SHOULD THE COMPANY'S PROPOSED SCHEDULE FOR IMPLEMENTATION OF ITS GAS RDM BE AMENDED?

A. As previously mentioned, the only change the Division would seek with respect to NGrid's proposed schedule for annual Gas RDM reconciliations would be an earlier date for the annual reconciliation filing. Where NGrid suggests an August 1 filing date for its annual gas RDM filing, the Division requests that the date of that filing be moved forward one month to July 1 of each year.

G. Other Rate and Regulatory Policy Considerations

1. Caps on RDM Rate Adjustments

Q. SHOULD THE COMMISSION PLACE A CAP ON THE MAGNITUDE OF REVENUE DECOUPLING RATE ADJUSTMENTS?

A. Yes. Sound rate and regulatory policy suggests that customers should not be subjected to large rate adjustments outside the context of base rate proceedings. In that context, limiting the magnitude of revenue decoupling rate adjustments without

constraining the Company's ultimate recovery of imbalances between authorized revenue levels and actual billed revenue is consistent with both this Commission's efforts to foster rate stability and the legislated mandate for full recovery of authorized revenue requirements.

Q. HOW SHOULD CAPS FOR RDM RATE ADJUSTMENTS BE STRUCTURED?

A. I recommend that revenue decoupling rate adjustments be capped at 5% of the annual base distribution revenue requirement for each rate class. Any amount in excess of plus or minus 5% of the annual revenue requirement established for a rate class should be deferred, with interest, for recovery in future periods.

Q. WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN SETTING A CAP ON THE LEVEL OF REVENUE DECOUPLING RATE ADJUSTMENTS?

A. The setting of appropriate limits on revenue decoupling rate adjustments involves considerable judgment. There is no precisely correct answer. Some advocates of revenue decoupling rate adjustments argue that such adjustments tend to be small, if not miniscule.[10] If that is correct, setting reasonable caps on revenue decoupling rate adjustments should have little impact. However, I do not agree with that assessment.[11] If revenue decoupling is successful in fostering energy conservation

[10] See, for example, "Rate Impacts and Key Design Elements of Gas and Electric Revenue Decoupling; a Comprehensive Review, by Pamela G. Lesh, 6/30/2009.

[11] I also do not agree fully with the other major conclusion of the Lesh report (cited above) which suggests that revenue decoupling adjustments "go both ways." Although it is true that most revenue decoupling mechanisms allow for both rate surcharges and credits it must be recognized that a key rationale for such mechanisms is to remove the utility's disincentives for aggressively deploying energy efficiency

and efficiency, and targeted load reductions are achieved, impacts on revenue and required revenue decoupling rate adjustments will not be "miniscule." In fact, under the revenue decoupling mechanism implemented by the Potomac Electric Power Company ("Pepco") in Maryland, substantial numbers of C&I customers have been subjected to maximum (10%) rate surcharges every month since shortly after the initial implementation of that mechanism in 2007 (i.e., a period that is now in excess of three years).

Exhibit BRO-4 provides examples of revenue decoupling rate caps used in other jurisdictions. Those examples illustrate a range of alternative rate cap formulations, and highlight the rather subjective nature of determinations regarding appropriate levels for such caps. Still, such caps appear essential for ensuring reasonable rate stability.

2. Changes to Annual Target Revenue

Q. DOES NGRID'S ELECTRIC RDM PROPOSAL PROVIDE FOR CHANGES IN THE COMPANY'S ANNUAL DISTRIBUTION REVENUE REQUIREMENT OR ANNUAL TARGET REVENUE OUTSIDE OF A BASE RATE PROCEEDING?

A. NGrid's Electric RDM does include such a provision in Paragraph III, of the Electric Revenue Decoupling tariff language presented on page 2 of Exhibit JAL-4. That

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programs. However, if energy conservation and efficiency programs are effective, RDM adjustments must be expected to exhibit a clear biased toward the assessment of surcharges.

paragraph which is titled, "Adjustments to Annual Target Revenue," includes a broadly worded provision for "changes" in the Company's annual distribution revenue requirements. Further, NGrid Direct Testimony at pages 6-7 specifically indicates that the Company's intent is to provide for adjustments to its distribution revenue adjustments "outside of a base rate proceeding."

Q. DOES THE COMPANY IDENTIFY ANY SPECIFIC TYPES OF COSTS THAT IT INTENDS TO REFLECT IN SUCH ADJUSTMENTS TO ITS ELECTRIC ANNUAL TARGET REVENUE?

A. No. it does not. The provisions of NGrid's proposed Electric Revenue Decoupling tariff language have been drafted in a manner that would potentially be applicable to a broad range of electric revenue requirement adjustments. Before approving the language in Paragraph III of the Company's proposed Electric Revenue Decoupling Tariff provisions, the Commission should require NGrid to provide a more detailed explanation of the types of costs for which it expects to seek adjustments to its Annual Target Revenue outside of a base rate proceeding.

Q. IS A SIMILAR PROVISION FOR THE ADJUSTMENT OF THE COMPANY'S ANNUAL GAS DISTRIBUTION REVENUE REQUIREMENT OUTSIDE OF A BASE RATE PROCEEDING FOUND IN NGRID'S GAS RDM PROPOSAL?

A. I find no provision in the Company's proposed changes to its gas DAC tariff language that would permit such adjustments to NGrid's annual distribution base

rate revenue requirement outside of a base rate proceeding other than those for which specific provisions are already included in the DAC.

Q. WHEN CHANGES ARE MADE TO ANNUAL TARGET REVENUE UNDER THE COMPANY'S PROPOSED RDM, ARE THOSE CHANGES REFLECTED AS COST-BASED ADJUSTMENTS TO CLASS REVENUE REQUIREMENTS?

A. No, they are not. Thus, the Company's Electric RDM proposal in this proceeding contrasts sharply with its proposals relating to the recovery of infrastructure, reliability, and safety costs in Docket No. 4218 and 4219. In each of those proceedings, NGrid has proposed more cost-based allocations of revenue requirements among rate classes that are not part of its proposed procedures for adjusting electric revenue requirements in this proceeding.

Q. SHOULD THE COMMISSION REQUIRE COST-BASED ALLOCATIONS OF ADJUSTMENTS TO ELECTRIC ANNUAL TARGET REVENUE?

A. Yes. When adjustments to electric Annual Target Revenue are approved, the Commission should require that those adjustment be allocated among classes in a manner consistent with the allocation methods used to determine class cost responsibilities in the Company's last electric distribution base rate proceeding. Moreover, such allocations of adjustments to revenue targets by rate class will have little practical impact unless the Commission also requires class-based revenue reconciliations and the development of class-specific Revenue Decoupling

Adjustment Factors. NGrid has proposed class-specific rate adjustments in Docket Nos. 4218 and 4219. Thus, I see no reason why class-specific RDAs cannot be developed for both electric and gas service rate classifications in this proceeding.

3. Adjustment to NGrid's Costs of Capital

Q. DOES NGRID PROPOSE ANY ADJUSTMENTS TO ITS CURRENT AUTHORIZED RETURNS ON EQUITY OR COMPONENTS OF ITS COSTS OF CAPITAL FOR EITHER ELECTRIC OR NATURAL GAS SERVICE IN THIS PROCEEDING?

A. No. Some other jurisdictions in which revenue decoupling mechanisms have been implemented have made corresponding downward adjustments to utilities' authorized rates of return to reflect the effects of eliminating revenue risk for shareholders. However, the enacted revenue decoupling legislation for Rhode Island specifically bars the Commission from making such adjustment. Thus, NGrid offers no proposal for such adjustments in this proceeding.

Q. WHAT ARE THE EFFECTS OF THE LEGISLATED BAN ON ADJUSTMENTS TO THE COMPANY'S COST OF CAPITAL?

A. As a result of the ban, the Company's shareholders benefit from reduced risk without any offsetting impact on its authorized returns on equity. From a ratemaking and regulatory policy perspective this may be viewed as troubling given the well-established link between risk and return requirements. If the Company is provided

the benefit of reduced revenue risk without a corresponding reduction in its allowed equity returns, the result is an increase in the effective risk-adjusted returns provided to the Company. If such a change in ratemaking practice was implemented through base rate proceedings, the Commission would be free to consider the impacts of the introduction of such mechanisms on the Company's risk profile, and adjust its authorized returns accordingly.

In addition, the legislated ban on adjustments to the Company's cost of capital could create a situation where the provisions of the legislation (including cost pass-through provision for certain types of infrastructure, safety, and reliability expenditures) may enable the Company to avoid filing a new base rate case for an extended period of time. By avoiding the filing of a new base rate case, ratepayers could be deprived of the benefits of market driven reductions in utility capital costs.

4. RDM Impacts on Future Base Rate Proceedings

Q. WHAT IMPACT WOULD IMPLEMENTATION OF THE COMPANY'S PROPOSED MECHANISMS FOR ELECTRIC AND GAS REVENUE DECOUPLING HAVE ON THE COMMISSION'S CONSIDERATIONS IN FUTURE BASE RATE PROCEEDINGS?

A. Although the Commission may be constrained at this time in terms of its ability to ensure the compatibility of its past base rate determinations with the implementation of Revenue Decoupling Mechanisms, it should establish its intent to consider such

matters in subsequent base rate proceedings. Among the matters the Commission will need to consider will be:

- The importance of consistent treatment of prior period billing adjustments;
- The impact of revenue decoupling rate adjustments on relationships between the Company's costs of providing service and rates billed to customers;
- The increased importance of forecasted numbers of customers and usage on a monthly basis;
- The influence that exemption of certain classifications of customers or usage from an RDM should have on the determination of class costs of service and class revenue requirements;
- The manner in which Revenue Decoupling rate adjustments would be presented to customers on their bills; and
- The effects of revenue decoupling mechanisms on existing incentives for ensuring the quality and reliability of service, and the potential that new or amended incentive structures may be required.

Q. WHY SHOULD THIS COMMISSION CONSIDER PRIOR PERIOD BILLING ADJUSTMENTS IN THE DETERMINATION OF REVENUE DECOUPLING RATE ADJUSTMENTS?

A. Billing adjustments are common for electric and gas utilities. Yet, such adjustments can be of sufficient magnitude to have a noticeable impact on revenue decoupling rate adjustments. As a result, appropriate exercise of regulatory oversight suggests that RDM revenue reconciliations should be computed in a manner that eliminates distortions that out-of-period adjustments could otherwise introduce. In other words, NGrid's computation of revenue decoupling adjustments for an RDM Year should not include dollar amounts that are the result of adjustments to bills rendered for months prior to that RDM Year. Likewise, in future base rate cases, the Commission should require that test year revenues be reported in a manner that removes the billing adjustments made to bills which were more than one billing cycle prior to the end of the fiscal year.

Although the vast majority of billing adjustments are made to the charges for the immediate billing month, the dollar significance of bill adjustments which reach back multiple months often represents the more significant portion of the total dollar value of billing adjustments that utilities make. Moreover, there is a general tendency that the aggregate dollar value of billing adjustments applied by utilities are more likely to be negative (i.e., reflect reductions to prior period charges) rather than positive. Where the total dollar amount of billing adjustments associated with prior periods is negative, inclusion of such adjustments in the computation of revenue

decoupling rate adjustments can distort the magnitude of amounts subsequently billed to customers through revenue decoupling mechanisms.

Q. ON WHAT DO YOU BASE YOUR ASSESSMENT OF THE POTENTIAL DOLLAR MAGNITUDE OF PRIOR PERIOD BILLING ADJUSTMENTS?

A. My assessment is premised on analysis of out-of-period billing adjustment data for:

(1) NGrid as detailed in the Company's response to Division Data Request DIV 1-9 in this proceeding; and

(2) Washington Gas Light Company ("WGL") data for the District of Columbia reflecting substantial net billing adjustments that lowered reported actual billed revenues in each year for which the data was provided.

Q. WHAT DOES THE DATA INCLUDED IN THE COMPANY'S RESPONSE TO DIVISION DATA REQUEST DIV 1-9 INDICATE?

A. The Company's response to Division Data Request DIV 1-9 generally indicates that the Company's present billing system is not well-designed for addressing the time period to which prior period billing adjustments are applicable. However, that response also suggests that such billing adjustments can cause reported billed revenue to be significantly understated. In each scenario provided, net **out-of-period** billing adjustments were negative, and in several instances those

adjustments lowered reported revenue for the Medium C&I rate class by more than 5%. A copy of NGrid's response to Division Data Request DIV 1-9 is attached to this testimony as Exhibit BRO-5.

Q. WHY SHOULD THE COMMISSION BE SENSITIVE TO THE IMPACTS OF OUT-PERIOD BILLING ADJUSTMENTS?

A. First, to the extent such adjustments are associated with billing periods prior to the implementation of an RDM, they should not be permitted to impact revenue reconciliations under such a mechanism. Second, allowing out-period-billing adjustments in reported billed revenue for RDM purposes essentially permits the Company to recover amounts from other customers in future billing months that it had agreed not to bill to a particular customer for the prior period. To the extent such out-of-period billing adjustments represent corrections for meter reading errors, billing errors, or other amounts NGrid agreed to voluntarily forego recovery of those amounts through revenue decoupling rate adjustments should not be permitted.

Q. WHAT IS THE RELEVANCE OF THE WASHINGTON GAS LIGHT DATA TO WHICH YOU HAVE REFERRED?

A. The referenced WGL data, which reflected a more comprehensive analysis of prior period billing adjustments for all rate classes, detailed the billing adjustments associated with prior months for WGL and identified the specific prior billing months to which those adjustments related. For each year for which that data was provided

(i.e., 2007 through 2009) the net effect of the reported billing adjustments was negative and produced a downward impact to billed revenue in excess of several million dollars per year.

Q. HOW SHOULD THE COMMISSION ADDRESS OUT-OF-PERIOD BILLING ADJUSTMENTS IN THE REVENUE RECONCILIATION PROCESS?

A. In each annual Electric or Gas RDM filing, the Commission should require National Grid to identify all elements of billing adjustments in excess of $1,000 that relate to periods outside the RDM Year being reconciled in the filing. The Company should also be required to demonstrate that those adjustments have been fully removed from the actual billed revenue measures used in the revenue reconciliation process.

<u>5. Potential RDM Impacts on Service Quality</u>

Q. ARE THERE OTHER RATEMAKING AND REGULATORY CONCERNS THAT MAY ARISE FROM THE IMPLEMENTATION OF REVENUE DECOUPLING MECHANISMS?

A. Yes, there are. Heretofore, losses of revenue represented a key incentive to the Company to provide timely restoration of service after major service disruption events (e.g., severe storms). However, with implementation of the NGrid's RDM proposals in this proceeding, the Company would no longer be subject to such losses. Any revenue lost due to service outages will be offset in full by subsequent

revenue reconciliation adjustments to rates. As a result, NGrid will no longer have a direct financial incentive to minimize the scope and duration of service outages, except for the potential for limited penalties under its service quality plan.

In this context, I note that this issue has recently become a concern for customers of the Potomac Electric Power Company ("Pepco") in Maryland and for the Maryland Public Service Commission. Since the implementation of a revenue decoupling mechanism for Pepco in Maryland in 2007, the reliability of that company's distribution service in Maryland has declined noticeably, and customer complaints regarding slow service restoration efforts and prolonged service outages have reach a new crescendo. This is a scenario that should be avoided in Rhode Island.

A key concern that has arisen with respect to Pepco service restoration activity relates to the fact that Pepco no longer faces revenue risk when its customers lose service. Rather, Pepco can rely on the fact that revenue decoupling rate adjustments will fully offset any lost sales due to service outages. Thus, the company no longer has a financial incentive to ensure timely restoration of service.

Q. HOW CAN SUCH CONCERNS BE ADDRESSED IN THE STRUCTURING OF REVENUE DECOUPLING MECHANISMS FOR NATIONAL GRID?

A. At least two alternatives appear to exist. One approach (that has been used by the District of Columbia Public Service Commission for Pepco) would require the Company to eliminate losses of sales due to major service outages from its revenue

decoupling rate adjustments. The other alternative is to establish or tighten service quality standards for service restoration after major distribution system outages and increase penalties for failures to meet such standards.

Both alternatives involve increased data collection and reporting for the identification of major outages and assessment of their impacts, and either approach may require the Commission to define what it deems a disruption of distribution service that is of sufficient size and duration to warrant Commission consideration in RDM rate adjustment calculations. However, most utilities now have systems in place to identify and track customers or portions of their systems without service at any point in time, and most utilities can fairly accurately assess the numbers of customers (often by rate class) affected by a service outage and/or the amount of load that customers without service represented for any given period of time.

III. SUMMARY OF RECOMMENDATIONS

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS THAT YOU HAVE PRESENTED IN THIS TESTIMONY.

A. My recommendations to the Commission in this proceeding include the following:

1. NGrid's Electric RDM proposal should be modified such that annual revenue reconciliations are performed on a class-by-class basis and

separate revenue reconciliation factors are computed for each rate class.

2. NGrid should be required to cap revenue reconciliation adjustments billed to customers such that the revenue reconciliation factor for any rate class is never greater than plus or minus 5% of authorized base rate revenue for the class.[12] Amounts in excess of the rate cap for any rate class should be deferred with interest for recovery in future periods.

3. NGrid should not be provided interest on revenue reconciliation balances except for those amounts deferred due to the imposition of an RDM adjustment cap.

4. NGrid's proposal for interim rate adjustments within its Electric RDM should be rejected.

5. The Commission should either: (1) act expeditiously to move toward the use of Straight Fixed-Variable rate designs for all classes of large or extra large non-residential **electric and gas** service customers; or

[12] This recommended cap on adjustments only applies to over- or under-recovery balances based on the revenue requirement for each class as established in the Company's Proof of Revenue in its compliance filing in the last base rate case. It is not intended to apply to amounts billed for incremental costs that are billed to customers for infrastructure, reliability and safety expenditures under Commission-approved budgets.

(2) implement revenue reconciliation factors for those classes that utilize demand-based measures to apportion responsibility for reconciliation balances among customers in those rate classes.

6. NGrid's proposed schedule for implementation of new Electric RDM rate adjustments on July 1 of each year should be modified, in favor of a schedule that is designed for the implementation of new Electric rate adjustment factors by October 1 of each year.

7. National Grid's annual Gas RDM reconciliation filing should be submitted by July 1 of each year.

8. The Commission should adopt measures designed to ensure that the implementation of revenue decoupling mechanisms does not reduce or eliminate incentives for the Company to restore service when confronted with distribution service outages.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

National Grid - Revenue Decoupling

Docket No. 4206

Comparison of Class Specific Reconciliation Factors with NGrid's Proposed RDA

	(A)	(B)	(C) = (B) / (A)	(D)	(E)	(F) = (D) * (E)	(G) = (A) - (F)
	Class RPC Deferred Balance 1/	Forecasted Dth 2/	Class RDA Factor $/Dth	NGrid RDA Factor 1/	Forecasted Dth 2/	RDA Revenue Adjustment	Post RDA Revenue Balance
Residential							
Non-Heat	$ (614,281)	641,044	$ (0.9583)	$ 0.0646	641,044	$ 41,431	$ (655,712)
Non-Heat - Low Income	$ (60,576)	57,166	$ (1.0596)	$ 0.0646	57,166	$ 3,695	$ (64,271)
Heat	$1,784,775	15,450,268	$ 0.1155	$ 0.0646	15,450,268	$ 998,551	$ 786,224
Heat - low Income	$ 281,297	1,364,995	$ 0.2061	$ 0.0646	1,364,995	$ 88,220	$ 193,077
Small C&I	$ 258,677	1,986,681	$ 0.1302	$ 0.0646	1,986,681	$ 128,399	$ 130,278
Med C&I	$ (97,289)	4,513,915	$ (0.0216)	$ 0.0646	4,513,915	$ 291,734	$ (389,023)
Total	$1,552,603	24,014,069	$ 0.0647	$ 0.0646	24,014,069	$ 1,552,029	$ 574

1/ From Ngrid Exhibit JBF-2
2/ From Docket No. 4199, Attachment NG-JFN-1S, page 14 of 16.

Note: The Forecasted Firm Throughput (Nov 2010 through Oct 2011) from Exhibit JBF-2 differs slightly from the forecasted amounts for the identified rate classes reported in Attachment NG-JFN-1S, Page 14 of 16, in Docket No. 4199. The Company's filings in Docket No. 4196 did not provide forecasted throughput by rate class.

National Grid - Revenue Decoupling

Docket No. 4206

Alternative Gas RPC Calculations and Resulting Revenue Differences

(October 2008 - September 2009, NGrid Docket No. 3943 Compliance Filing)

		(A)	(B)	(C) = (B) / (A)	(D)	(E) = (A) * (D)	(F) = (B) - (E)
Ln No.	Rate Class	Average No. of Customers	Annual Base Revenue	Computed **Annual** RPC	NGrid Sum of Monthly RPCs	Annual Revenue From Sum of Monthly RPCs	Annual Revenue Difference
1	Residential Non-Heat	27,715	$ 5,440,763	**$ 196.31**	$ 196.20	$ 5,437,809	$ 2,954
2	Residential Heating	179,950	$ 84,050,163	**$ 467.08**	$ 465.06	$ 83,687,219	$ 362,944
3	Small C&I	18,589	$ 11,972,422	**$ 644.06**	$ 639.67	$ 11,890,892	$ 81,530
4	Medium C&I	4,517	$ 15,928,856	**$ 3,526.23**	$ 3,521.28	$ 15,906,524	$ 22,332
5	Total		$ 117,392,204			$ 116,922,443	$ 469,761

National Grid - Revenue Decoupling

Docket No. 4206

Examples of RDM Rate Caps in Other Jurisdictions

Ln No.	Utility	Jurisdiction	Type of Utilty Service	Description of Cap	Treatment of Amounts in Excess of Cap
1	Avista	Washington	Gas	45% of lost margin revenue	No Deferral to future periods
2	Baltimore Gas & Electric Company	Maryland	Gas	10% of class base distribution revenue	Deferred for recovery in future periods
3	Delmarva Power & Light Company	Maryland	Electric	10% of class base distribution revenue	Deferred for recovery in future periods
4	Idaho Power Company	Idaho	Electric	3% over previous year	Deferred for recovery in future periods
5	Massachusetts Electric Company	Massachusetts	Electric	3% of total revenue in prior calendar year	Deferred with interest
6	Nantucket Electric Company	Massachusetts	Electric	3% of total revenue in prior calendar year	Deferred with interest
7	Potomac Electric Power Company	Maryland	Electric	10% of class base distribution revenue	Deferred for recovery in future periods
8	Potomac Electric Power Company	District of Columbia	Electric	10% of class base distribution revenue	Deferred for recovery in future periods
9	Portland General Electric	Oregon	Electric	2% of base revenue per year	No Deferral to future periods
10	Questar Gas	Utah	Gas	5% of base revenue for each year ending October	No Deferral to future periods
11	Vectren Indiana Gas	Indiana	Gas	Rate adjustments limited to 85% of revenue imbalance	No Deferral to future periods
12	Washington Gas Light Company	Maryland	Gas	5 cents per therm	Deferred for recovery in future periods

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Division 1-9

Request:

Please provide documentation of all billing adjustments made to individual gas customer bills over the Company's last three fiscal years and its current fiscal year to date showing:

a. The month in which the adjustment was reflected on the customer's bill;
b. The month(s) of actual usage to which the adjustment applied;
c. The dollar amount of each adjustment by month for which the adjustment was applicable;
d. Any and all changes in billing units by month associated with the billing adjustment.

Response:

a.-d. After a discussion with the Division, the Company and the Division agreed to modify the scope of this request to provide prior period adjustments of +/-$1,000 or more for the Medium C&I rate class for the last three years. Attachment DIV 1-9A provides the prior period adjustment information that is available from the Company's billing system for the Company's fiscal years (FY) FY 2008, FY 2009, FY 2010 and FY 2011 to date. (The Company's fiscal year runs from April1 through March 31.) Due to system limitations, the Company can only identify those customers that are currently Medium C&I customers or were Medium C&I customers at the time their account became inactive. For example, the data does not include adjustments for customers who were Medium C&I customers in FY 2008, but were reclassified to the large customer rate class in FY 2009. In addition, the Company was not able to identify the specific month associated with each adjustment. However, the Company was able to extract from the billing system the oldest and most recent adjustment charge to each targeted Medium C&I customer. The Company utilized the data for two analyses, one based on the oldest adjustment charge and the second on the most recent adjustment charge, with the expectation that the actual prior period adjustments fall somewhere in these ranges.

Initially, it is important to note that not all adjustments identified by the Company in Attachment DIV 1-9 were actually billed to customers. This is particularly the case where a large billing adjustment was identified at the time an initial bill was prepared, and after investigation it was cancelled and the corrected bill was sent to the customer. In these instances, the customer only received the correct bill and did not receive the initially incorrect bill or see the adjustment on their bill. However, the billing system retains the information and it is identified as an adjustment on Attachment DIV 1-9-A. These cancel/rebilled accounts can only be identified by a manual review of the customer's account records.

Medium C&I

Time Period	Base Revenues*	Net Out of Period Adjustment $ Based on First Adjustment Date	% Revenues	
FY 2011 To Date (April 10 to Nov 10)	$10,448,274.26	($389,645.91)	-3.73%	
FY 2010 (April 09 to Mar 10)	$17,118,692.58	($1,230,862.88)	-7.19%	(1)
FY 2009 (April 08 to Mar 09)	$15,696,910.79	($1,258,649.13)	-8.02%	
FY 2008 (April 07 to Mar 08)	$16,518,688.84	($298,843.35)	-1.81%	
Average			**-5.19%**	

Time Period	Base Revenues*	Net Out of Period Adjustment $ Based on Last Adjustment Date	% Revenues
FY 2011 To Date (April 10 to Nov 10)	$10,448,274.26	($118,230.67)	-1.13%
FY 2010 (April 09 to Mar 10)	$17,118,692.58	($159,193.29)	-0.93%
FY 2009 (April 08 to Mar 09)	$15,696,910.79	($796,392.00)	-5.07%
FY 2008 (April 07 to Mar 08)	$16,518,688.84	($52,662.66)	-0.32%
Average			**-1.86%**

* Base Revenues from Classified Sales
(1) Adjusted for Customer Reclassification to Large C&I