

November 1, 2007

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

RE: The Narragansett Electric Company, d/b/a National Grid Electric Demand-Side Management Programs for 2008 Docket No. 3892

Dear Ms. Masssaro:

Enclosed please find ten (10) copies of a Settlement setting forth the proposed terms of the Electric Demand-Side Management Programs for 2008 entered into by The Narragansett Electric Company, d/b/a National Grid ("Company"), The Division of Public Utilities and Carriers, The Energy Council of Rhode Island, and Environment Northeast (together, the "Parties"). The Parties hereby submit this agreement for the Commission's approval in this proceeding.

As described on page 15 of the Settlement, the Company is separately enclosing five (5) copies of the Avoided Energy Supply Cost Study on CD-Rom, which is referenced in Attachment 11.

Thank you for your attention to this transmittal. Please contact me if you have any questions concerning this Settlement at (401) 784-7667.

Very truly yours,

Laura S. Olton

Laura S. Olton

Enclosures

cc: Docket 3779 Service List

RI Collaborative Members (w/enc.)

Certificate of Service

I hereby certify that a copy of the cover letter and / or any materials accompanying this certificate has been electronically transmitted to the individuals listed below on 11/1/2007. Copies will be sent via U. S. Mail on 11/2/2007.

Joanne M. Scanlon

 $\frac{\text{November 1, 2007}}{\text{Date}}$

National Grid 2007 Demand Side Management – Docket No. 3779 Service list as of 7/26/07

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

)	
In Re: The Narragansett Electric Company d/b/a)	
National Grid)	Docket No. 3892
Electric Demand-Side Management Programs for 2008)	
)	

ELECTRIC DEMAND-SIDE MANAGEMENT PROGRAMS FOR 2008

SETTLEMENT OF THE PARTIES

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ATTACHMENTS

- 1. 2008 Residential Programs
- 2. Summary of Proposed Changes to Residential Programs for 2008
- 3. 2008 Small Business Services Program
- 4. 2008 Large Business Services Programs
- Summary of Proposed Changes to the Large Business Services and Small Business Services Programs for 2008
- 6. DSM Funding Sources in 2008 by Sector
- 7. 2008 Proposed Budget and 2008 Proposed Budget vs. 2007 True-Up Budget
- 8. Derivation of the 2008 Spending Budget for Shareholder Incentive Calculation and Target 2008 Shareholder Incentive
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- 10. Calculation of 2008 Program Year Cost-Effectiveness and Goals
- 11. Electric and Other Fuel Avoided Costs for Rhode Island

I. Introduction

2 This Stipulation and Settlement ("Settlement") is jointly submitted and entered into by

- 3 the Rhode Island Division of Public Utilities and Carriers ("Division"), The Energy
- 4 Council of Rhode Island ("TEC-RI"), Environment Northeast ("ENE"), and The
- 5 Narragansett Electric Company, d/b/a National Grid ("National Grid" or "Company")
- 6 (together, the "Parties"), and addresses all issues raised by members of the DSM
- 7 Collaborative¹ concerning the Company's electric Demand-Side Management ("DSM")
- 8 Programs for the year 2008.

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10 A DSM collaborative group has been meeting regularly since 1991 to analyze and inform

the Company's electric DSM programs. Since 1997, the Company has been offering its

programs pursuant to statute, R.I.G.L. 39-2.1-2(b).

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Prior stipulations and settlements have set forth the criteria for the Company's electric

DSM programs, including that the DSM programs: (1) be as cost-effective as possible;

16 (2) serve a large number and broad mix of Rhode Island customers; (3) maximize long-

term savings; (4) capture potential lost opportunities for efficiency improvement; (5)

promote market transformation; and (6) support long-term electricity supply and

19 reliability objectives. In addition to these goals, the Parties have included an increased

emphasis on services for low and moderate income residential consumers as a means of

helping these consumers deal with high fuel prices.

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Over time, in response to customer feedback obtained through public forums and

24 elsewhere, the DSM Collaborative has worked to enhance programs for customers by

25 improving the efficiency and quality of energy-efficient products, expanding services to

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¹ Members of the Collaborative presently include the Company, the Division, the Rhode Island Office of Energy Resources (OER), TEC-RI, ENE, and Energy Consumers Alliance of New England d/b/a People's Power and Light ("PP&L"). The constitution of the Collaborative has varied since 1991, as some organizations have withdrawn and others have joined. While the OER and PP&L have participated in the negotiations regarding the 2008 programs, they are not parties to the Settlement.

1 customers, and becoming more involved in statewide and regional initiatives. Demand

for energy efficiency program services continues to be strong across all sectors.

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II. 2007 Program Status

- 5 The Company has been working throughout 2007 to implement approved electric energy
- 6 efficiency programs for all customer segments subject to the budget included in the
- 7 Settlement filing of November 1, 2006, in Docket No. 3779, which was approved by the
- 8 Commission in Order 18858 on February 5, 2007. The Company expects to achieve the
- 9 goals outlined in the Settlement filing while not exceeding approved budgets.

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- While spending and commitments approximate budgeted amounts, they are expected to
- exceed available funding in the year, due to lower than expected sales in 2007, which will
- result in a negative fund balance by year-end 2007². As a result, some of the expenses
- and commitments in 2007 are expected to be funded by DSM collections in 2008.

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- 16 The Company will file its Year-End Report regarding the 2007 electric DSM programs
- no later than May 1, 2008.

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III. 2008 DSM Programs

- 20 The DSM programs for 2008 build on the momentum and success of prior electric DSM
- 21 programs and services, offering energy efficiency opportunities to all customer segments,
- 22 with a focus on providing needed services to low and moderate income residential
- consumers as a means of reducing bills. In addition, the Company will continue to
- 24 integrate the delivery of electric energy efficiency programs with its natural gas

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² As shown in Attachment 6, the Company currently projects that the fund balance at year end 2007 will be (\$1,288,600). This negative fund balance indicates that funding sources in 2007 are expected to be somewhat below levels projected when the 2007 Settlement was prepared.

efficiency programs where practical. The Parties agree to the Company's 2008 electric DSM Programs described below³:

A. Residential Programs

In 2008, the Parties agree to continue the residential programs offered in 2007. These programs include the Energy *Wise* Program, the Single Family Low Income Services Program (formerly known as the Appliance Management Program), ENERGY STAR Heating Program, ENERGY STAR® Central Air Conditioning Program, ENERGY STAR® Lighting, ENERGY STAR® Appliances, and ENERGY STAR® Homes. Descriptions of these programs are provided in Attachment 1. A summary of the proposed changes from 2007 are provided in Attachment 2. Highlights of proposed program changes for 2008 include expansion of the ENERGY STAR® Central Air Conditioning Program and cessation of rebates for ENERGY STAR® thermostats.

In order to ensure that residential customers are aware of the Company's energy efficiency programs, Company staff will continue to participate in consumer education seminars sponsored by the Office of Energy Resources and/or the Community Colleges of Rhode Island (CCRI) as it has done in 2007.

The Collaborative wants customers who have difficulty paying their electric bills to participate in the Company's energy efficiency programs, especially in these times of escalating energy prices. Several of the Company's proposed programs provide these customers with services that are designed to help reduce their electric bills, including the Single Family Low Income Services Program, the EnergyWise Program, and the ENERGY STAR Homes Program. The Single Family Low Income Services Program provides qualifying low-income customers in 1-4 unit dwellings with energy efficiency services. Both low-income and non low-income residential customers receive services through the EnergyWise

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³ Throughout the program year, the Parties may consider additional enhancements beyond those identified herein as more information becomes available to support an informed review of those potential changes.

Program and the ENERGY STAR Homes Program. Additional detail about the services offered to economically disadvantaged customers is set forth in Attachment 1.

B. Small Business Services Program

The Parties agree to continue the Small Business Services Program in 2008 with continued emphasis on increasing the penetration of non-prescriptive lighting measure installations in the program. A description of the Small Business Services Program, including expected changes from 2007, is provided in Attachment 3. For 2008, the Company proposes to reduce the customer rebate from 75% of the total installed cost of a measure to 70%. The Company anticipates that this change will not adversely affect the overall subscription of the program and will make it possible to serve more customers. Also, during 2008, the Company will continue to integrate the delivery of its gas energy efficiency programs with Small Business Services

C. Large Business Services Programs

The Parties agree to continue the Energy Initiative and Design 2000*plus* Programs in 2008. In 2008, the Company intends to build on its experience promoting better energy performance in commercial facilities through a number of programmatic changes. The Company will continue to promote best practices in sustainable building design through our Advanced Buildings program and offers a great opportunity to seamlessly integrate our gas and electric energy efficiency offerings in the new construction market. The Company is offering a two tiered rebate for new construction projects that rewards projects that have the potential to save more energy. Other initiatives may focus on targeting for replacement older unitary and split HVAC systems. More details about these changes, as well as continuing program efforts, are available in Attachment 4. A summary of

proposed changes and process improvements to these programs is provided in Attachment 5.

IV. Budgets and Funding Sources

A. 2008 DSM Program Funding Sources

The sources of funding for the 2008 electric DSM Programs are shown in Attachment 6. The Parties agree that the 2008 budget should continue to be funded from the following sources: (1) the statutory-based DSM charge of \$0.002 per kWh; (2) interest expected to be accrued on the fund balance during the year due to timing differences for collections compared to expenditures; (3) funds expected to be received from Small Business Program co-payments⁴ and from large Commercial and Industrial technical assistance co-payments⁵ in 2008; (4) Large C&I commitments from 2007⁶; (5) carryover of the 2007 fund balance, if any, and (6) revenue generated by programs' demand savings during the transition period leading up to the start of ISO-New England's (ISO-NE) Forward Capacity Market (FCM), as explained below. The projected funding amounts are also shown in Attachment 6.

As shown in Attachment 6, the Company currently projects that the fund balance at year end 2007 will be (\$1,288,600). This negative fund balance indicates that funding sources in 2007 are expected to be below levels projected when the 2007 Settlement filing was prepared.

⁴ The Company provides Small Business customers with the opportunity to finance their share of project costs. The Small Business co-pays identified on Attachment 6 refer to the projected amount of funds customers are expected to repay to the Company in calendar year 2008.

The Company typically pays the full cost of technical assistance studies for Large Commercial and Industrial program participants and then bills the customer for their share of the technical assistance study cost. The Large Commercial and Industrial co-pays shown on Attachment 6 reflect the projected amount of technical assistance study funds expected to be repaid by customers in 2008.

⁶ As directed by the Commission, the Company encumbers current funding to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

The projected 2008 budget for DSM programs is dependent on a number of projections that inform the amount of funding, including projections of kWh sales of electricity, year-end 2007 large commercial and industrial program commitments, transition period capacity payments received from ISO-NE, and a projection of year-end 2007 spending. With a November 2007 filing date for this Settlement, the Company believes it has a good understanding of expected year-end spending and commitments as it develops a projection of available funding for the coming year.

However, if the actual 2007 year-end fund balance causes available funding to vary by more than 20% compared to the projected funding included in this Settlement, the Company will prepare a true up filing by May 31, 2008. This true up filing, if necessary, would require Commission approval. If the year-end fund balance does not cause the projection of available funding to vary by more than 20%, no action by the Company will be required and the goals established in this Settlement filing will be in place for all of 2008. If there is a true up filing, the Company will be permitted to adjust the projected spending budgets and savings goals in the shareholder incentive calculation in accordance with the funding adjustments.

1. ISO-NE Capacity Market Revenue

Effective June 16, 2006, the Federal Energy Regulatory Commission (FERC) approved a Settlement Agreement that addresses the future capacity needs of New England. As part of that Settlement, ISO-NE: (1) developed rules that will govern a new Forward Capacity Market (FCM) that will begin operation June 1, 2010, and (2) developed rules which will govern the transition period -- from June 16, 2006, through May 31, 2010 -- leading up to the start of the FCM. Under the terms of these rules,

energy efficiency measures installed after June 16, 2006, and which can be demonstrated to be operational during hours of peak electrical usage, are eligible to receive capacity payments through May 31, 2010. The FCM payments for 2008 in Attachment 6 are projected transition period capacity payments from measures through the Company's programs from June 16, 2006 through November 30, 2008⁷.

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The Company and the Parties recommend that kW demand savings achieved via these energy efficiency programs continue to be reported by the Company to ISO-NE as Other Demand Resources (ODR) during the transition period through 2008, as they were in 2007, consistent with the Settlement Agreement approved by the Commission in Order No. 18858. All ISO-NE capacity payments received will be used to supplement the energy efficiency program budgets. This treatment of the demand resources and the revenues generated recognizes that the savings result from program efforts that are funded by all customers. The demand savings being submitted to ISO-NE would not have occurred in the absence of the Company's energy efficiency programs. reinvesting in the programs the capacity payments received from ISO-NE, these supplemental revenues create a multiplier effect that benefits all of Rhode Island's consumers. In order for the Company to deliver the demand savings to ISO-NE's capacity market⁸ on behalf of its customers, individual customers who participate in the energy efficiency programs in 2008 must continue to agree to forego any ISO-NE capacity payments associated with projects completed with the assistance of energy efficiency program rebates and allow the Company to report kW savings and collect the payments for reinvestment. This is fully consistent with

⁷ According to transition period rules, demand savings for a month is based on the performance of measures installed through the end of the prior month. Therefore, December 2008 savings will be based on measures installed through the end of November.

⁸ This applies to both the transition period before the opening of the FCM, and the FCM itself, see footnote 9.

the Settlement Agreement approved by the Commission for 2007 DSM efforts.

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The transition period continues through May 31, 2010, at which time the FCM is expected to open. The first Forward Capacity Auction will be in February 2008. The Company has qualified a resource of 25.8 MW for this auction, representing the demand reduction from approximately 3 years of energy efficiency programs from May 2007 through May 2010⁹. The Company has already begun to incur costs to facilitate its participation in the FCM. These costs include: (1) administrative costs; and (2) compliance with increased measurement and verification standards that meet ISO-NE reliability requirements. The Parties fully agree that the Company should recover all prudently incurred FCM expenses from ISO-NE capacity payment revenue generated by the demand savings from efficiency programs represented by the Company. The Company expects that capacity payments received from the ISO-NE will exceed its administrative and M&V compliance costs of participation in the FCM and will result in additional funds being made available to fund efficiency programs for customers. If these participation costs exceed the capacity payments, the Parties agree that the Company may recover its prudently incurred costs from the energy efficiency program fund. (The Parties reserve the right to examine the actions and expenses of the Company to ensure that only prudently incurred expenses are deducted from ISO-NE capacity payments or the energy efficiency program fund.)

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⁹ Even though specific electric energy efficiency programs have not been approved by the Commission beyond December 31, 2007, National Grid submitted its qualification package based on the legislative authority for energy efficiency program funding that continues through 2012 and the knowledge that participation would generate revenue that would benefit all Rhode Island consumers. The demand savings qualified to bid into Forward Capacity Auction 1 assume that the Company will continue to submit all demand savings secured through these programs to ISO-NE. The Company acted in good faith, based on the policy established by the Settlement of the Parties for 2007, which was approved by the Commission.

In addition, as part of the FCM, all qualified auction participants are required to post Financial Assurance to provide security that the promised resource will deliver the promised MW at the promised time.¹⁰ If, as a result of circumstances beyond the control of the Company¹¹, the Company is unable to provide all or a portion of the megawatts of capacity proposed in its qualification packages and capacity auction bids, some or all of the financial assurance monies would be forfeited. Accordingly, the Parties agree that the Company should recover all prudently incurred Financial Assurance expenses from ISO-NE capacity payments generated by the demand savings represented by the Company or the energy efficiency program fund¹², similar to the procedures described above for administrative and M&V compliance costs.

B. **Budgets**

The Parties agree that the portfolio of DSM programs and services for 2008 will have an overall projected budget of approximately \$21 million. The Parties agree to segment the budget into three sectors: residential, small commercial and industrial, and large commercial and industrial. Proposed sector and program budgets are provided in Attachment 7. A comparison of these proposed budgets to the 2007 budget filed with the Commission on November 1, 2006, in the Settlement filing is also provided in Attachment 7. Due to lower available funding relative to 2007, the Company anticipates scaling back the implementation of some programs in 2008, particularly in the Residential sector,

¹⁰ Since the Company was able to qualify its bid as an existing resource rather than a new resource (because of its activity during the transition period), ISO-NE has notified the Company that it will not be required to post security for Forward Capacity Auction 1. However, the Company will be required to post security for all future capacity auctions.

Such circumstances may include legislative action to alter the DSM charge or discontinue the Company's authority to implement the energy efficiency programs underlying the Qualifications Package, or a Commission decision limiting the Company's role in bidding the demand savings acquired through program efforts into the FCM.

12 Beginning in 2009, the Company plans to propose setting aside a small portion of the program budget as

¹² Beginning in 2009, the Company plans to propose setting aside a small portion of the program budget as a contingency fund to cover future Financial Assurance claims that result from the Company's inability to meet its obligation to deliver demand savings due to circumstances beyond its control.

the sector that had the largest projected negative fund balance. The proposed distribution reduces the budget for some Residential programs by as much as 35% relative to 2007.

The Parties agree that the Company should make every attempt to spend or commit all the funds available for DSM in the year, including any increases in the fund balance due to increased sales or other factors. The Parties also agree to review the status of program budgets regularly to assess whether they are likely to come to a successful completion. If not, the Parties agree to review the advisability of transferring funds to other programs where the money could be more effectively used.

C. Transferring of Funds

The Parties will regularly review the amount of funds needed and available for each program (as well as any changes to the overall fund balance, as discussed in Section IV.A above) and will transfer monies as needed. The Parties propose to use the same methodology that has been used since 2001 for the transfer of funds from one program to another, or from one sector to another. Transfers during the program year may occur as follows:

1. Within a sector, the Company can transfer funds from one program to another with prior approval by the Division.

2. From one sector to another, the Company can transfer funds so long as the transfers from a sector reduce the approved budget for that sector by 20% or less. Division approval is required. Transfers that would reduce a sector's budget by more than 20% in aggregate (over the course of the program year) will require Commission approval.

For transfers requiring Division, but not Commission, approval, the Parties will inform the Commission about all the transfers, both between sectors and within

1	sectors, in a timely fashion. The Company will not be permitted to adjust its goals
2	or incentive target calculations for any transfers between sector budgets except as
3	described in Section IV.A above.

V. Continuation of the Collaborative

6 The Parties agree that the Collaborative shall meet no less than six times in 2008 to

7 review the status and performance of the Company's 2008 DSM programs and advise on

8 potential energy efficiency programs for 2009.¹³

VI. Incentive

The shareholder incentive mechanism applicable to Company DSM efforts in 2008 follows the incentive mechanism applicable to the 2007 program year, which was approved by the Commission in its Order No. 18858 issued February 5, 2007. The shareholder incentive mechanism will continue to include two components: (1) kWh savings targets by sector and (2) performance-based metrics.

A. kWh Savings

The Parties have agreed to retain a target incentive rate of 4.40% in 2008 applied to the eligible spending budget for 2008. The projected spending budget for 2008 is approximately \$14.7 million (see Attachment 8, page 1 of 2). The total target incentive for 2008 is 4.40% of the approved spending budget, or approximately \$648,000 (see Attachment 8, page 2 of 2). Of this total, \$100,000 will be the target incentive for the performance-based metrics and the remainder will be for the kWh savings target.

¹³ In 2006, the Rhode Island General Assembly enacted several initiatives which are likely to change the scope of electric and gas energy efficiency programs in Rhode Island after 2008. The role of the Collaborative beyond 2008 is yet to be determined. The Collaborative will continue to monitor these initiatives and respond accordingly to advance the deployment of energy efficiency in Rhode Island in 2008 and beyond.

The threshold performance level for energy savings by sector will remain at 60% of the annual energy savings goal for the sector. The Company must attain at least this threshold level of savings in the sector before it can earn an incentive related to achieved energy savings in the sector. The Company will have the ability to earn an incentive for each kWh saved, once threshold savings for the sector are achieved, up to 125% of target savings. The incentive per kWh saved by sector is provided in Attachment 8 page 2 of 2.

The incentive cap on energy savings will be equal to 125% of the target incentive amount for energy savings. If the Company achieves this level of exemplary performance, Rhode Island consumers will realize additional savings. Given budget control requirements, this will provide the Company with an incentive to improve the efficiency of its program implementation efforts while providing Rhode Island consumers with value in excess of the incremental incentive that may be earned by the Company.

Attachment 8, page 1 of 2, provides the derivation of the eligible spending budget that is used to determine the amount of the incentive that the Company may earn if it is successful in achieving its goals for both energy savings and performance metrics. Attachment 8, page 2 of 2, provides a summary of the incentive related to performance metrics and the incentive related to annual energy savings goals by sector. Energy savings goals by sector reflect the expected cost of savings in each sector informed by evaluation studies and have been adjusted to take into account changing rebate policies and the changing market being served. These goals have been carefully reviewed by the Collaborative to ensure that they represent reasonable and challenging goals for the year.

There are three circumstances that would necessitate the recalculation of the threshold, calculated cap, and incentive for a particular sector.

1	1. If budgets are adjusted as a consequence of a true up filing in May
2	2008 (only under the condition that the actual 2007 year end fund
3	balance deviates from projections by more than 20%, as described
1	above, and only then with Commission approval), the threshold and
5	incentive for the affected sectors will be adjusted as will each sector's
5	incentive caps.

- 2. If the assumptions used to develop savings goals change as a result of evaluation studies completed by September 30, 2008, the Company will recalculate savings goals to account for those evaluation findings and will report actual savings on the same basis.
- 3. If the actual spending in a sector at year end is greater than or less than the spending budget by more than five percent, the savings goal for that sector will be adjusted by the ratio of actual spending to the spending budget.

None of these changes will affect the target incentive dollars associated with performance metrics. The Company will report program results compared to these revised budgets and goals in its Year-End Report regarding 2008 DSM Program efforts.

B. Performance Metrics

The Parties have agreed to the inclusion of five performance-based metrics for 2008. These metrics include two that relate to the Residential sector, one that relates to the Small Commercial and Industrial sector, and two that relate to the Large Commercial and Industrial sector. Each of the proposed performance-based metrics is provided in Attachment 9. The Parties agree that the Company will have the ability to earn \$20,000 for each performance metric it successfully achieves in 2008 with an opportunity to earn a portion of the incentive for

partially achieving goals for three of the metrics as shown in Attachment 9.	The
total potential incentive for performance metrics is capped at \$100,000.	

Attachment 9 includes a framework for establishing the goals for the proposed metrics based on currently available information. As detailed in Appendix 9, the Company, with agreement of the Parties, will file with the Commission no later than September 30, 2008, a supplement to this Settlement that provides final goals for each metric. Finalizing the numeric performance targets at a later date will have no impact on the shareholder incentives established for these performance-based metrics. If the Parties are unable to reach agreement about the specific performance goals, the Company reserves the right to file recommended goals with the Commission for its approval by September 30, 2008.

VII. Miscellaneous

A. Cost-Effectiveness

The Company has projected cost-effectiveness for the proposed 2008 programs using the Utility Cost Test, which is the benefit/cost test that was in place during 2007. It takes into account program costs compared to the value of the electric savings expected to be created in the programs over the expected life of those savings.

The value of other resource benefits has also been included in the analysis of expected benefits from program efforts. In this case, the other resource benefits include expected fuel and water savings that are incremental to the electricity savings expected through the electric efficiency programs.

The Parties agree to review alternatives to the current Utility Cost Test for use in 2009. An alternative to the current benefit/cost test may be appropriate given the

introduction of least-cost procurement practices required by the 2006 Act, the Regional Greenhouse Gas Initiative, and other energy policy objectives in Rhode Island.

Attachment 10 provides the calculation of 2007 program year cost-effectiveness and goals based on the proposed budgets. Attachment 10, page 1 of 3, shows that the proposed portfolio of programs is expected to have a benefit/cost ratio of 5.22 which means that \$5.22 in benefits are expected to be created for each \$1 invested in the programs.

The cost-effectiveness analyses of the proposed programs use updated avoided energy supply costs. These updated values for electricity and other resources were developed by Synapse Energy Economics as part of a 2007 study that was sponsored by all electric DSM program administrators in New England, as well as some gas program administrators. They reflect current and expected market conditions and are highly influenced by the increasing cost of fossil fuels and expectations about ISO-NE's emerging forward capacity market. Company-specific transmission and distribution capacity values have also been updated to reflect recent data on costs and peak loads. The new avoided energy supply costs are shown in Attachment 11. The 2007 avoided cost study is being provided electronically with this Settlement.

The avoided costs include the demand reduction induced price effect (DRIPE) benefits that are projected to result from the installation of energy efficiency measures in 2008. These benefits occur when the retail price of electricity is reduced as a result of the reduced long term demand for electricity stemming from the installation of energy efficiency measures. Some amount of DRIPE benefits have been counted in Rhode Island since 2006. While some Collaborative members have expressed concern about whether DRIPE represents a real benefit

to Rhode Island consumers, the Parties have agreed to include DRIPE in value
and cost effectiveness calculations for energy efficiency programs in 2008.

The Parties further agree that DRIPE is not currently applicable to other potential applications of avoided costs, such as least cost planning. The Parties agree to review the applicability of DRIPE for 2009, in light of future developments in the New England wholesale market after one auction has been held, developments in the Rhode Island retail market (particularly Least Cost Procurement, and the extension of Standard Offer), and perhaps other developments as well.

B. Summary of Reporting Obligations

- 1. The Company will provide quarterly reports to the Division and the Commission on the most currently available program performance. These reports will include a comparison of budgets and goals by program to actual expenses and savings on a year-to-date basis, as well as information about the number of customers who may be waiting for energy efficiency program services.
- 2. The Company will provide to the Parties and file with the Commission its 2007 Year-End Report no later than May 1, 2008.
- 3. The Company will provide to the Parties a summary of evaluation results together with a memorandum summarizing the impact of those results on the Company's 2007 programs no later than September 30, 2008.
- 4. The Company will file with the Commission updated savings goals and metric targets for 2008, reflecting the results of completed evaluation studies, no later than September 30, 2008.
- 5. The Company will report on 2008 metric results, achieved energy savings in 2008, and earned incentives in its Year-End Report for 2008, to be filed no later than May 1, 2009.

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2	C. Oth	er Miscellaneous Provisions	
3	1.	Other than as expressly stated	herein, this Settlement establishes no
4		principles and shall not be of	deemed to foreclose any Party from
5		making any contention in futur	re proceeding or investigation.
6	2.	This Settlement is the produ	act of settlement negotiations. The
7		content of those negotiations is	s privileged and all offers of settlement
8		shall be without prejudice to the	ne position of any Party.
9	3.	Other than as expressly stated	herein, the approval of this Settlement
10		by the Commission shall	not in any respect constitute a
11		determination as to the merits of	of any issue in any other proceeding.
12			
13	The Parties respec	tfully request the Commission a	pprove this Stipulation and Settlement
14	-	n of all issues in this proceeding.	•
15			
16		Respectfully submitted,	
		•	
17 18		THE NARRAGANSETT NATIONAL GRID	ELECTRIC COMPANY D/B/A
19			
		James C. Mila	
20		Laura S. Olton	11/1/2007
21			
21 22 23 24		Laura S. Olton, Esq.	Date
23 24			
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1 2	RHODE ISLAND DIVISION CARRIERS	OF PUBLIC UTILITIES AND
3	Willia Kal his	
4	Willa pur pre	ch
5	By its Attorney	Date: November 1, 2007
6	William K. Lueker, Esq.	
7	Special Assistant Attorney Gene	eral
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-19-

THE ENERGY COUNCIL OF RHODE ISLAND

The ENERGY COUNCIL OF RHODE ISLAND

John Farley

Date

-24-

ENVIRONMENT NORTHEAST

Samuel Krasnow Date

d/b/a National Grid

R.I.P.U.C. Docket No. 3892

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2008 RESIDENTIAL PROGRAMS

- 2 The Company proposes a comprehensive set of residential energy efficiency programs
- for implementation in 2008. Proposed program changes for 2008 are summarized in
- 4 Attachment 2.

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Residential Programs

- 7 The Company is proposing to implement a broad range of energy efficiency programs for
- 8 its residential customers. These programs are designed to provide energy efficiency
- 9 opportunities to the diverse segments of residential customers in the state, including
- 10 homeowners and renters, low-income and moderate income consumers, and those
- 11 constructing new homes. These programs all include a component of consumer
- education to help the customer to better understand how to control and manage energy
- 13 costs. The Residential programs planned for implementation in 2008 are described
- 14 below.

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1. EnergyWise Program

Overview

- First offered in 1998, this program provides efficiency improvements in existing
- multifamily and single-family homes. It offers customers free home energy audits of
- 20 their homes and information on their actual electric usage. Participants in this program
- 21 receive financial incentives for cost effective measures to replace inefficient lighting
- 22 fixtures, appliances, thermostats, and insulation levels with models that are more energy
- 23 efficient. The program now provides combined services for gas customers, with gas
- rebates described in Docket 3790.

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Eligible Population

- 2 All residential customers in 1-4 unit buildings are eligible to participate. Multifamily
- facilities of five or more units are eligible if they have not previously participated in the
- 4 program in the past five years. The Company proposes to serve 2,962 customers
- 5 (dwelling units) through the Energy *Wise* program in 2008.

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Program Design

- 8 The program is certified by the Environmental Protection Agency as a "Home
- 9 Performance with ENERGY STAR®" program. This allows the program to use the
- 10 ENERGY STAR name for marketing purposes, and ensures that the program meets high
- health and safety standards. The energy audit looks at the house as a system, so that the
- customer can consider all energy efficiency measures as well as occupant health and
- 13 safety.

14

- 15 The program is marketed through direct contact with interested customers and owners,
- property owners' associations, bill inserts, customer newsletters, the National Grid
- website, as part of the new Gas Energy Efficiency programs, and other methods. There is
- often a waiting list for multifamily program services, though the program is usually able
- 19 to serve customers within the year the participation request is made.

- 21 Eligible customers and/or building managers or associations receive a comprehensive
- 22 energy audit, energy education, and the installation of low cost efficiency measures (e.g.
- 23 hot water measures, air sealing for electrically heated buildings, compact fluorescent
- 24 lightbulbs) at no direct cost. The contractor puts major measures out to competitive bid
- 25 in facilities that have greater than twenty units. Major measures include lighting
- 26 upgrades, electric heat thermostats, replacement of inefficient refrigerators, heat pump
- testing and upgrades, duct sealing and insulation for electrically heated buildings. The

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- 1 Company will pay 75% of the cost of any needed insulation in electrically heated homes.
- 2 The Company will provide incentives of \$200-\$300 to encourage customers to replace
- 3 inefficient refrigerators. The Company does not require a co-payment for lighting
- 4 installed in the living units of multifamily buildings in order to avoid lost opportunities.

5

- 6 The program also offers low interest loans for customers who live in one to two unit
- 7 facilities to install additional weatherization, including insulation and air sealing. These
- 8 loans are available to customers with homes heated by electricity, oil, propane, and wood,
- 9 regardless of their level of electric use.

10

- The Company will make an up-front payment to write down the interest on an unsecured
- loan. It will plan to provide funds to lower the interest rate to approximately six percent.
- 13 The Company may adjust the loan rate during the year to respond to market conditions
- and customer demand. The participating bank will determine loan approval.

15

- The EnergyWise program also services Public Housing Authority properties and other
- low income multifamily buildings. Depending on income eligibility of the tenants, co-
- payments may be reduced or waived for these larger facilities. If the facility is 50% or
- more low income, co-payments are waived on all measures except refrigerators. There is
- 20 no copayment required on any measure for Public Housing Authorities or other low
- 21 income state and federally funded facilities. Elderly housing projects are eligible to
- 22 participate through the Energy Wise program and many have participated. Over the last
- 23 five years, Narragansett Electric has served over 9,700 low income dwelling units
- 24 through the Energy *Wise* program.

- Low Income customers living in 1-4 unit buildings will be served by the Single Family
- 27 Low Income Services Program described below.

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2. Single Family Low Income Services

Overview

- 3 Electric and heating bills are typically a big burden to low income customers, who often
- 4 pay a high percentage of their income to cover these bills. Customers who are unable to
- 5 pay are at great risk for shut-off of services. All customers bear these costs through
- 6 paying for collection and shut-off visits and the write off of bad debt. Efforts to lower
- 7 energy bills for low-income customers benefit them directly and all ratepayers indirectly.

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Eligible Population

- 10 Customers who are eligible for the Low Income Heating Assistance Program (LIHEAP)¹,
- also known as fuel assistance, and live in 1-4 unit buildings, are eligible for this
- program². There is no co-payment requirement. Over the last five years, Narragansett
- 13 Electric has served over 4,400 low income dwelling units through single family low
- income program offerings. The Company proposes to serve 806 customers (dwelling
- units) in 2008.

- 17 The Collaborative and Company want customers who have difficulty paying their electric
- bills to receive assistance from the energy efficiency programs. While the average
- savings of \$140 per year through the electric measure component of the program may not
- 20 be enough to help these customers avoid shut-off, it will certainly provide some
- 21 assistance and increased control of electric usage. The Collaborative and the Company
- believe the targeted approach described below is the best way to reach these at risk
- 23 customers.

¹The federal government has set an income level, tied to the median income of each state, which defines the uppermost income boundary for LIHEAP participation. Individual states have some flexibility in defining income eligibility as long as it is not set above the federally defined maximum. Eligibility in this program will track the eligibility for LIHEAP set by the State of Rhode Island.

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- In 2008, the Company will continue to work with the Office of Energy Resources (OER)
- 2 to offer services to low income customer addresses where shut-offs have occurred. In
- 3 2005, the Company identified approximately 1,400 addresses where shut-offs have
- 4 occurred and electric usage was at least 10 kWh per day in the non-heating months. The
- 5 Company provided electronic mailing lists and labels for outreach to these customers and
- 6 the local agencies contacted the customers. Depending on the area, about ten to fifteen
- 7 percent of customers contacted requested services through the program. For 2008, the
- 8 Company will provide an updated list and encourage local agencies to make follow-up
- 9 outreach phone calls to targeted customers.

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Program Design

- 12 The Company contracts with the Rhode Island Office of Energy Resources (OER) and
- local weatherization agencies for the delivery of energy efficiency services to eligible
- customers. OER will continue to maintain a list of eligible clients who are qualified for
- low income services who have requested services and are not yet scheduled to be served.

16

- 17 The agencies delivering program services focus on both electric energy efficiency
- opportunities and selected non-electric energy efficiency opportunities. Electric measures
- 19 are identified through a comprehensive review of the customer's electric bill, existing
- 20 appliances, and electric use patterns. The Single Family Low Income Services Program
- 21 provides for the installation of ENERGY STAR refrigerators and lighting, and cost-
- 22 effective custom measures to replace inefficient equipment and help lower customers'
- 23 electric bills. In addition, the Company installs electric water heating energy efficiency
- 24 measures at no cost for participating customers.

² In previous years, this program was known as the Appliance Management Program (AMP).

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1 The Company also funds weatherization work for these customers in one to four unit

homes where the primary heating fuel is electricity, oil, propane or wood. This funding

3 supplements federal dollars received by the Office of Energy Resources (OER) for

weatherization work. In 2005 the Company also began to fund oil heating system

replacements through the OER and plans to continue this in 2008.³ The new hot water

and air heating systems are required to meet Federal weatherization program guidelines

and have an Annual Fuel Use Efficiency (AFUE) of at least 80%. Installed steam systems

have a minimum efficiency of 82%. The Company proposes to continue to work with

local Community Action Agencies and the OER to provide no-cost services to income

10 eligible customers in 1-4 unit facilities.

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12 The program is marketed through direct contact with eligible customers. One marketing

effort consists of contacting, by mail and/or telephone, customers subscribing to

Narragansett Electric's low income rates who have not previously received program

services. Another important marketing focus is direct marketing by the OER and local

16 CAP agencies to customers it serves through state, federal, or local low income programs.

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Low Income Services through the Energy Wise Program

19 As noted above the EnergyWise Program also services Public Housing Authority

20 properties and other low income multifamily buildings. Depending on income eligibility

of the tenants, co-payments may be reduced or waived for these larger facilities. If the

facility is 50% or more low income, co-payments are waived on all measures except

refrigerators. There is no co-payment required on any measure for Public Housing

24 Authorities or other low income state and federally funded facilities. Elderly housing

projects are eligible to participate through the EnergyWise Program and many have

³ Natural gas-fired systems are not eligible for replacement under this program. There are other programs, including those sponsored by the Company, that cover gas-fired systems.

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- participated. Over the last five years, Narragansett Electric has served over 9,700 low
- 2 income dwelling units through the Energy Wise Program.

3

4 Low Income participation in the ENERGY STAR Homes Program

- 5 The Company works closely with the Rhode Island Housing and Mortgage Finance
- 6 Corporation ("Rhode Island Housing")⁴ and developers of affordable housing in Rhode
- 7 Island to encourage participation in the ENERGY STAR Homes program. Currently
- 8 Rhode Island Housing encourages developers to build to ENERGY STAR Home
- 9 standards. About 30% of the homes completed each year through the ENERGY STAR
- 10 Homes program are for low income families.

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- The table below summarizes the Company's history in serving low income customers and
- proposed low income services for 2008.

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Projected Low-Income Participation in 2007 Programs and Participation History

Program	2008 projected	Percentage of	Number of low
	participants	Total Participants	income participants
		in 2008	2002-2006
Single Family Low Income	806	100%	4,402
EnergyWise	240	8%	9,724
ENERGY STAR Homes	133	40%	679

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Projected Low-Income Expenditures in 2008 Programs and Expenditure History

1 Tojected Low-Income Expenditures in 2000 I Tograms and Expenditure Instory				
Program	2008 Proposed	Percentage of	Low Income	
	Low Income	Total Budget	Spending for years	
	Expenditures		2002-2006	
Single Family Low Income	\$1,475,100	100%	\$6,239,746	
EnergyWise	\$320,000	18%	\$3,791,340	
ENERGY STAR Homes	\$285,000	40%	\$1,314,868	

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⁴Rhode Island Housing's mission is "to ensure that every person who lives or works in Rhode Island can afford a safe, healthy home that meets their needs." (www.rihousing.com) As such, they have some influence in many of the arenas that are targeted by the Company's low income services programs.

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3. ENERGY STAR® Appliances

2 Overview

- 3 ENERGY STAR® is the national program sponsored by the United States Department of
- 4 Energy and the Environmental Protection Agency to promote energy efficient products to
- 5 help reduce energy use and prevent air pollution. Energy efficient choices can save
- 6 families about a third on their energy bill with similar savings of greenhouse gas
- 7 emissions, without sacrificing features, style or comfort.

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- 9 This program is part of a regional joint effort by utilities and energy efficiency
- organizations to encourage the purchase of ENERGY STAR rated major appliances.
- These appliances include clothes washers, dishwashers, refrigerators, dehumidifiers, and
- 12 room air conditioners (RAC). Manufacturers build their products to meet or exceed
- energy efficiency performance specifications established by ENERGY STAR. Together
- with manufacturers, local retailers, the DOE, and EPA, the Company works to help
- identify and promote the purchase of these high efficiency appliances to its customers.

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Eligible Population

- All residential customers are eligible to participate. The Company proposes to serve
- 19 about 3,750 customers in 2008.

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Program design

- 22 The program provides retailer support, training, advertising, consumer education, codes
- and standards review and advocacy, and manufacturer labeling. For 2008 the Company
- 24 proposes to continue to provide consumer education on these products and continue to
- offer rebates for ENERGY STAR clothes washers and room air conditioners. The
- 26 Company proposes to increase the clothes washer rebate of \$50 and increase the

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efficiency requirement to receive that rebate. To be eligible for the rebate, clothes washers will need to meet the ENERGY STAR requirements, and also have a modified energy factor (MEF) of 1.8 or better. MEF is a measurement of how effective the clothes washer is at removing water from clothing. The higher the MEF, the less time the dryer has to run in order to dry clothes, which is a large energy saver. The most recent ENERGY STAR standard, which went into effect on January 1, 2007, requires ENERGY STAR Clothes Washers to have an MEF of 1.72 or greater. Continuing the rebate will encourage consumers to choose ENERGY STAR and encourage manufacturers to

provide products that exceed the ENERGY STAR standard.

The Company proposes to increase the room air conditioner rebate to \$30, and it may be paid directly to industry partners rather than to consumers. The Company, and other sponsors in Vermont and Massachusetts, have issued a request for proposal to work with manufacturers and retailers directly to encourage increased stocking of ENERGY STAR room air conditioners on retail shelves. Customer purchase behavior is largely influenced by what air conditioners are available for purchase at local retailers. It may be that working directly with industry partners is more effective than direct consumer rebates in increasing the market share of ENERGY STAR room air conditioners. The rebates may be adjusted to ensure coordination with regional and national program efforts and to reflect changing Rhode Island market conditions.

An important part of the program is educating customers about ENERGY STAR. The Company sponsors media advertising that promotes ENERGY STAR and specific ENERGY STAR promotions. Additionally, the retail stores are an integral channel for promoting ENERGY STAR. The Company prints and distributes a wide variety of point-of-purchase materials and signs for display in retail stores. The Company also supports cooperative advertising with retailers in various print and newspaper channels. The

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- 1 Company also develops media stories and public relations opportunities about ENERGY
- 2 STAR.

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- 4 A nationwide study of consumers' awareness of ENERGY STAR labeling is conducted
- 5 annually. The most recent study, "National Awareness of ENERGY STAR for 2006 –
- 6 Analysis of CEE Household Survey" indicates that the existence of utility sponsored
- 7 programs increases the awareness of ENERGY STAR products. National recognition of
- 8 the ENERGY STAR label in high-publicity areas (areas with an active local ENERGY
- 9 STAR program sponsored by a utility, state agency, or other organization for two or more
- continuous years) was 63% compared to 45% in low-publicity areas. When the ENERGY
- STAR label is shown, the aided recognition in high-publicity areas rises to 75% and in
- low-publicity areas the value increases to 61%. The Company will inform the
- 13 Collaborative about future awareness study results.

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4. ENERGY STAR® Heating Program

17 **Overview**

- A typical residential customer spends approximately 44% of his or her energy budget on
- heating and cooling. To address heating costs, the ENERGY STAR Heating Program will
- 20 continue to provide ENERGY STAR heating system rebates.

21

22

Eligible Population

- 23 Residential customers who purchase ENERGY STAR Heating Systems fueled by oil or
- 24 high efficiency gas or oil furnaces with high efficiency fans in their existing home are
- 25 eligible to participate in this program. The Company proposes to serve about 423
- customers in 2008. About 352 of these customers will receive heating system rebates and
- about 71 will receive ECM motor rebates.

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Program Design

- 2 The Company will continue to offer incentives to customers who purchase ENERGY
- 3 STAR Heating Systems that are fueled by oil. We will market the program through,
- 4 contact with air conditioning/heating equipment contractors, our website and word of
- 5 mouth. In order to encourage higher efficiency and positively reinforce market changes,
- 6 the Company proposes to continue the rebate in 2008 for ENERGY STAR oil heating
- 7 systems at \$200. The efficiency requirements are an Annual Fuel Use Efficiency Rating
- 8 (AFUE) of at least 85% for forced hot air systems, at least 85% for forced hot water
- 9 systems, and at least 82% for steam systems. In 2008, oil-fired forced hot air systems are
- also required to be equipped with an electronically commutated permanent magnet
- 11 (ECM) motor.

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- For 2008 the Company proposes continuing an incentive of \$200 for high efficiency gas
- furnaces equipped with an advanced ECM motor or equivalent energy saving furnace fan
- 15 (blower) motor, subject to budget limitations. ECM motors in gas or oil furnaces save
- about 600 kWh of electricity per year for consumers. New Rhode Island minimum
- efficiency standards for residential furnaces and boilers may go into effect as early as
- January 1, 2008. The Collaborative will monitor any developments in this area.

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5. ENERGY STAR® Central Air Conditioning Program

Overview

- As noted previously, a typical residential customer spends approximately 44% of his or
- 24 her energy budget on heating and cooling. To address cooling costs, the ENERGY STAR
- 25 Central Air Conditioning Program provides funding to offer ENERGY STAR central air
- 26 conditioning system rebates.

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In 2002, the Company participated in a joint study of HVAC market conditions and

2 efficiency potential in Rhode Island, Connecticut, and Massachusetts. The study

identified several key target markets including residential customers who are in the

4 market to purchase central air conditioning (AC) or heat pump systems, residential

customers with existing air conditioning systems, and HVAC technicians responsible for

servicing and installing this equipment. The market research estimates that

approximately 4,200 Rhode Island customers are purchasing replacement or new central

air conditioners each year. Recent customer surveys by the Company indicate that about

23% of Rhode Island residences, or about 95,000 customers, have central air

10 conditioning.

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The market research documented that energy savings opportunities exist due to the

improper design and installation practices of residential AC contractors. Inadequacies

documented include over-sizing of systems overall, undersizing of the air distribution

system, failure to obtain proper refrigerant charge, and inadequate duct sealing.

Significant savings are also available from existing air conditioning systems in

customers' homes, where the same conditions of improper refrigerant charge and airflow

are common.

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Eligible customers

- 21 Any residential customer installing, servicing or replacing a central air conditioning or
- heat pump system in an existing home is eligible to participate. Incentives for ENERGY
- 23 STAR heating and cooling are included in the ENERGY STAR Homes program for new
- 24 construction. The Company plans to continue ENERGY STAR equipment rebates at the
- 25 \$300 level and further expand the scope of program measures and proposes to serve 620
- customers in 2008.

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- 1 The ENERGY STAR specification and the Federal standard for manufacturing central air
- 2 conditioning systems changed to require 13 Seasonal Energy Efficiency Ratio (SEER) as
- of January 23, 2006. The previous requirement was 10 SEER.

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Program design

- 6 The Company began the program in the fall of 2002. The Company has provided
- 7 rebates to customers for properly installed ENERGY STAR central air conditioning and
- 8 heat pump systems in existing homes in 2003 throughout 2006. In February of 2006 the
- 9 program merged with the COOL SMART program in Massachusetts in order to reduce
- administrative and marketing costs. This also provides consistency for HVAC contractors
- and distributors which operate in both states.

12

- In 2008 the Company proposes to continue equipment incentives with an incentive
- 14 corresponding to the ENERGY STAR specification level of 14 SEER with 11.5 EER and
- 15 8.2 HSPF for heat pumps. The Company plans to offer rebates that are consistent with
- those offered throughout the region. The following is a summary of the Company's
- proposed tiers and rebate levels for 2008, which are subject to change to be consistent
- 18 with the regional program:

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- \$300 consumer rebate for the purchase and installation of high-efficiency central air conditioning equipment and air source heat pump condensers that meet or exceed the ENERGY STAR minimum standard SEER rating of 14, EER of 11.5, and HSPF of 8.2 (for heat pumps only) OR
- \$400 consumer rebate for the purchase and installation of properly sized equipment of SEER 14, EER of 12 or higher
- \$100 incentive to contractors when customers receive a \$400 rebate where the equipment has been properly sized
- \$400 incentive to contractors where installation meets the new ENERGY STAR Quality Installation standard OR
- \$1,100 incentive to contractors where installation meets the new ENERGY STAR Quality Installation standard and duct modifications beyond duct sealing are made

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- \$500 incentive to contractors for replacing inefficient operating central air conditioners which are 10 to 15 years old with ENERGY STAR rated units
 - \$40 incentive for equipment distributors who process the incentive on behalf of the customer and contractor
 - Corrective Sizing \$50 per ½ ton of down sizing to the contractor and \$50 per ½ ton to the customer for replacement systems. The system must be sized to match ASHRAE manual J sizing or the measured system airflow of the existing ductwork.
 - Third party verification of optimal refrigerant charge and system air flow can be performed for any new equipment installation regardless of SEER. The contractor incentive for this "system commissioning" is \$175.
 - Customers receive a \$100 instant credit on their bill from the HVAC contractor
 for the digital check-up when it is part of work done associated with a tune-up or
 repair of an eligible unit from a participating contractor who must be QIV listed.
 - A contractor incentive of up to \$175 will be provided to cover the \$100 customer instant credit and \$75 to cover contractor cost associated with the digital check-up provided the unit passes or meets exception condition where at least charge with respect to airflow is within acceptable parameters.
 - A contractor incentive of \$1 per CFM of duct leakage reduction. Typically this is expected to average 100 CFM per home that receives this measure.

The new incentives have been added to encourage consumers and contractors to implement improvements that create the greatest electricity savings and decrease to the region's demand peak. Recent program recommendations from the U.S. Environmental Protection Agency (EPA) and the Air Conditioning Contractors of America (ACCA) include ensuring that the air flow across the indoor coil has been measured and set to correct levels, that ducts are sealed and sized directly, and that the refrigerant charge is at correct levels. For homes where the duct system is currently not operating properly,

31 These measures are proposed to further support market transformation towards the

fixing the ductwork provides additional kW savings.

- 32 coming ENERGY STAR and recently adopted ACCA Quality Installation standard. The
- 33 extra incentive for duct modifications is to offset costs involved in a particularly difficult
- 34 aspect of that standard. It is critical to provide incentives directly to contractors to

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- reimburse them for the additional costs associated with this work, and also to underline
- 2 the importance of these advanced installation practices.

3

- 4 The Company has focused its efforts on both customer education and outreach via bill
- 5 inserts, fact sheets, and targeted mailings to high users in summer months; contractors'
- 6 education and outreach via phone calls, mailings, one-on-one meetings, trainings on
- technical issues, usage of sizing software, and up-selling to high efficiency equipment;
- 8 and working closely with contractors to encourage participation in the program and
- 9 installing the air conditioning systems properly.

10

- Although new central air conditioning equipment that is properly sized and operating is
- 12 critical to the energy efficiency of the equipment, HVAC technicians do not, as a
- standard practice, perform all the needed calculations and tests. The Company has
- assisted technicians by providing hands-on training and technical support on third party
- verification of charge and airflow of systems.

16

- 17 In 2008, the Company proposes to continue activities to educate customers and
- contractors, to promote installation quality, and to offer the third party verification of the
- 19 results for central air conditioning tune-ups, including incentives for customers and
- 20 contractors.

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6. ENERGY STAR® Lighting

23 Overview

- 24 This program is designed to support the development, introduction, sales, promotion, and
- use of ENERGY STAR residential lighting products. The Company has provided rebates
- and actively promoted energy efficient residential lighting since 1991. In 1998,
- 27 Narragansett Electric joined with other electric utilities in the region through the

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- 1 Northeast Energy Efficiency Partnerships (NEEP) to offer a common residential lighting
- 2 program to its customers.

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Eligible Customers

- 5 All residential customers are eligible to participate in this program. The Company
- 6 proposes to serve about 51,650 lighting customers. While this program has been
- 7 available for a number of years, there are still significant opportunities to encourage
- 8 customers to use ENERGY STAR lighting. An evaluation study conducted in
- 9 Massachusetts in 2006 found that 11% of all sockets are filled with Compact Fluorescent
- Lighting (CFL), indicating that a large market potential for energy efficient lighting still
- exists in customer homes. The Company believes the penetration of CFLs in Rhode
- 12 Island is similar to the penetration in Massachusetts.

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Program Design

- For 2008 the Company proposes to continue offering its residential lighting programs as
- part of the regional joint efforts. The program offers customers the opportunity to
- purchase compact fluorescent bulbs (CFL) and fixtures at substantial discounts.
- 18 Customers have several options for program participation, including redeeming instant
- 19 rebate coupons for qualifying products purchased in participating retail stores, purchasing
- 20 reduced price products at retailers where the manufacturer has received a rebate from the
- 21 Company and passed on the discount directly to retailers and consumers, using the mail
- order catalog, and making website purchases.

- 24 The Company will continue to work with manufacturers and retailers to offer a good mix
- of standard, innovative, and specialized CFL product. CFL rebates will be offered in the
- \$1 \$4 range, depending on the style and technology of the bulb (standard, dimmable, 3-
- 27 way, etc.).

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- The Company has found that the "Negotiated Cooperative Promotions" (NCPs) through
- 2 NEEP are an excellent way to lower rebate costs and encourage retailers and
- 3 manufacturers to pay for marketing and promotion through their regular channels. Active
- 4 promotions in 2007 have included retailers: Stop and Shop, Rocky's, Benny's, BJs,
- 5 Shaw's, Whole Foods, and Home Depot. Manufacturers who have participated in
- 6 Negotiated Cooperative Promotions include: General Electric, Osram Sylvania, TCP,
- 7 Maxlite, Feit, and Globe. In 2008, the Company will also investigate cooperative efforts
- 8 to retailer(s) to recycle CFLs.

9

- 10 The Company proposes to continue rebates for ENERGY STAR fixtures and torchieres.
- Rebates will be \$10 for exterior fixtures and \$15 for interior fixtures, table lamps, and
- 12 floor lamps and torchieres. Rebates on fixtures and bulbs may be adjusted to ensure
- coordination with regional and national program efforts and to reflect changing Rhode
- 14 Island market conditions. The Company will also continue to work directly with lighting
- showrooms to encourage the promotion of high efficiency, high fashion residential CFL
- 16 fixtures. The Company will continue to support local retailers with promotional
- materials (signs, coupons, displays) training, and regular sales visits.

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7. ENERGY STAR® Homes

Overview

- 22 The ENERGY STAR Homes Program is part of the national energy efficiency campaign
- 23 first developed in 1998 by the Environmental Protection Agency (EPA) and United States
- Department of Energy (DOE). Rhode Island was one of the first states to adopt this
- 25 program. The homes are designed, site inspected, and performance-tested to achieve a
- 26 home energy rating which helps consumers differentiate between efficient homes and
- 27 standard homes.

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Eligible Population

- 3 Anyone building a home in Rhode Island can participate, regardless of type of heating
- 4 fuel. The Company plans to serve 335 customers through this program in 2008.

5

Program Design

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6

- For 2008, National Grid will continue to offer three program options that builders/homeowners can choose. The first option, the "Performance Path", is similar to
- 10 the previous program and requires a HERS rating to qualify. Any builder hoping to
- access the \$2,000 Federal tax incentive must use this path. The second option is the
- "Builder Option Package" (BOPs) that allows a builder to qualify as ENERGY STAR by
- agreeing to install specific equipment and meeting certain measured performance
- standards. For both these options, incentives of \$250 to \$2,000 will be available to
- builders depending on the new house characteristics and the level of efficiency achieved.
- The third option is called "Codes Plus". In this option, the builder will receive specific
- incentives for energy efficiency improvements above Code requirements.

- 19 The "Codes Plus" option is for builders who are learning how to achieve the new more
- 20 rigorous ENERGY STAR standards and may not be able to achieve the ENERGY STAR
- 21 standards immediately. The Codes Plus option ensures that homeowners will receive
- 22 energy efficiency upgrades above the code during the transition period of the new
- 23 program. The incentives will be in two categories: Thermal Measures/Practices and
- 24 Heating/Ventilation/Air Conditioning. The incentives are designed to ensure that a
- 25 builder would not receive more money through this path than through the other two
- paths. Typically, the builder would only be eligible for one of these; otherwise, the house
- 27 would meet ENERGY STAR standards. . An incentive of up to \$1,500 will be available
- for the Thermal Measures including CFLs, Air Sealing, Insulation, ENERGY STAR

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- windows, and mechanical ventilation. An incentive of up to \$1,500 will be available for
- 2 HVAC upgrades including CFLs, Duct Sealing, High Efficiency Heating Systems, ECM
- 3 Motors, Indirect Water Heating, High Efficiency Air Conditioning, and Quality
- 4 Installation Verification.

5

- 6 National Grid will provide training and technical assistance to builders to help them meet
- these standards. Additionally, in order to help builders with the program transition, the
- 8 Company plans to offer rebates for specific energy measure upgrades including duct
- 9 sealing, high efficiency furnaces, blower door verified air tightness and mechanical
- ventilation, high efficiency air conditioning, and lighting upgrades.

11

12

Low Income participation in the ENERGY STAR Homes Program

- 13 The Company works closely with Rhode Island Housing and developers of affordable
- 14 housing in Rhode Island to encourage participation in the ENERGY STAR Homes
- program. Currently Rhode Island Housing encourages developers to receive ENERGY
- STAR Home certification. About 30% of the homes completed each year through the
- 17 ENERGY STAR Homes program are for low income families. The Company also plans
- to continue to work with Rhode Island Housing and the Rhode Island Office of Energy
- 19 Resources (OER) to support the energy efficiency of Rhode Island's affordable housing
- 20 programs.

21

22

8. Energy Efficiency Educational Programs

23 **Overview**

- 24 All the residential energy efficiency programs include customer education as a primary
- element of the program design. In addition, the Company also sponsors educational
- 26 programs for children and young adults who are among Rhode Island's future ratepayers,
- 27 builders, and contractors. The budget for educational programs includes three

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- components described below, including a new component that provides general education
- 2 to all customers about low cost energy efficiency actions they can take.

3

4 Eligible Population

- 5 The first two energy efficiency educational initiatives are targeted toward students. All
- 6 residential customers can benefit from the public education initiative.

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8

10

Program Design

9 The three programs are described in detail below.

a) National Energy Education Development (NEED) Project

- 11 The National Energy Education Development (NEED) Project is a nonprofit education
- association that works with thousands of schools nationwide to promote an energy
- conscious education. NEED is a strategic partner of Rebuild America and **EnergySmart**
- Schools, programs of the U.S. Department of Energy. NEED creates networks of
- students, educators, and business, government and community leaders to design and
- implement objective energy education programs. The Rhode Island EnergySmart
- 17 Schools program includes educational materials for kindergarten to twelfth grade that
- provide comprehensive, objective information about energy production and consumption,
- the major energy sources, and their impact on the environment, economy, and society.
- 20 Services offered include kits and curriculum for students from kindergarten through high
- school, student/teacher training programs, workshops, and conferences, a summer camp
- 22 program, scholarships to national energy educational conferences, and youth awards.

23

24

b) ENERGY STAR Homes Vocational Schools Initiative

- 25 The Company currently works with all nine Rhode Island Career and Technical schools
- on this initiative: Chariho, Coventry, Cranston, Davies, East Providence, Hanley,

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- Newport, Warwick, and Woonsocket. It provides training to vocational school students
- 2 on building ENERGY STAR homes. These homes are then sold as affordable housing.

3

- 4 Originally, only Woonsocket and Warwick were participating in the program. In the past
- 5 year, the other schools were encouraged to participate in cooperation with the Skill USA
- 6 national competition for vocational schools. Working with the Woonsocket Area Career
- and Technical Center, the Community College of Rhode Island, and the Rhode Island
- 8 Builders Association, the Company sponsored a Rhode Island Energy Efficient Building
- 9 Competition to help students improve performance in the national competition. In
- 10 preparation, on-site training was provided at all schools on energy efficient building
- practices. The Company will continue this outreach effort because it will improve
- Rhode Island's energy efficiency for years to come.

13

14

c) Public Education Initiative

- During 2008, the Collaborative will discuss whether and how to continue the Company's
- public education effort to promote energy conservation during times of high energy costs.
- 17 This may include an advertising campaign to educate customers about low cost steps they
- can take to lower their electric bills and giving customers a contact number and/or
- website to get more information about energy efficiency programs and additional low
- 20 cost energy saving tips.

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SUMMARY OF PROPOSED CHANGES TO RESIDENTIAL PROGRAMS FOR 2008

Program	Changes
EnergyWise	No changes
Low Income Services	No changes
ENERGY STAR® Appliances	 Increase the modified energy factor requirement for the clothes washer rebate to 1.8 MEF and increase the rebate to \$50. Increase the room air conditioning rebate to \$30 and implement an upstream incentive program with retailers and manufacturers
ENERGY STAR Heating	Discontinue incentive for ENERGY STAR thermostats.
COOL SMART ENERGY STAR Central Air Conditioning and Heat Pumps	 \$400 consumer rebate for the purchase and installation of properly sized equipment of SEER 14, EER of 12 or higher \$100 incentive to contractors when customers receive a \$400 rebate where the equipment has been properly sized \$400 incentive to contractors where installation meets the new ENERGY STAR Quality Installation standard OR \$1,100 incentive to contractors where installation meets the new ENERGY STAR Quality Installation standard and duct modifications beyond duct sealing are made \$500 incentive to contractors for replacing inefficient operating central air conditioners which are 10 to 15 years old with ENERGY STAR rated units \$40 incentive for equipment distributors who process the incentive on behalf of the customer and contractor
ENERGY STAR	• Decrease torchiere rebate from \$20 to \$15
Lighting	Encourage recycling of CFLs by retailers through cooperative activity
Energy Efficiency Educational Programs	No changes
ENERGY STAR Homes	No changes

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2008 SMALL BUSINESS SERVICES PROGRAM

1 2 3

Overview

- 4 For over ten years, this program has provided direct retrofit installation of energy
- 5 efficient lighting, refrigeration and other energy efficient measures to small commercial
- 6 and industrial customers.

7

Eligible Population

- 9 Any customer with an average monthly demand of less than 200 kW or annual energy
- usage of less than 483,600 kWh is eligible for this program.

11

12

Program Design

- 13 The Small Business Services Program offers incentives for the installation of energy
- 14 efficient fluorescent ballasts, lamps, and fixtures; hard-wired and screw-in compact
- 15 fluorescent systems; high intensity discharge systems; occupancy sensors; programmable
- thermostats; hot water pump time clocks; and refrigeration measures such as evaporator
- 17 fan controls, efficient evaporator fan motors, automatic door closers and door heater
- 18 control devices for walk-in coolers. The Company arranges the equipment purchase
- 19 through a material vendor and installation with an administrative contractor. Starting in
- 20 2004 the Small Business Program was expanded to create broader program depth and
- 21 appeal to customers by offering the potential to deliver more comprehensive energy
- 22 efficiency opportunities. This expansion provided customers the benefit to build on their
- potential energy savings by examining a broader array of energy efficient opportunities
- 24 outside the current available measures.

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1 The Company is currently integrating the delivery of this program with its gas energy

2 efficiency programs. The progress of this integration will be shared with the

3 Collaborative.

4

5 For 2008, the company proposes to reduce the rebate from 75% to 70%. SBS continues

6 to be a strong performer and discussions with our vendor suggest that we might be able to

7 gain more savings with less spending by increasing the co-pay to roughly 5% that would

provide approximately \$200,000 additional funding for more projects in future years.

9 This would leave us with an incentive structure of 70% incentive and 30% customer co-

10 pay.

11

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Most rebates cover 70% of both labor and material costs. Customers may finance the

remainder for up to 24 months interest-free through their electric bill. If customers pay

their portion up front, they receive a 15% discount off the amount due.

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In 2008, the Small Business Services program will continue to offer a broad selection of

17 comprehensive measures. While potential for significant energy savings in small

business rests on improving lighting energy use, the proposed improvements to the

program support more comprehensiveness in customers' facilities and build on the

experience gained from delivering these services in prior years. These additional energy

efficiency measures will include but not be limited to non-prescriptive lighting measures,

motor and drive power improvements and other custom energy efficiency opportunities.

23

Also for 2008, the company is looking at adding an emerging technology piece to SBS to

25 begin examining other new technologies such as LED's lighting technologies to the mix

of eligible measures once proven to be both cost effective and reliable.

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2008 LARGE BUSINESS SERVICES PROGRAMS

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1. Design 2000plus

Overview

5 Offered to commercial and industrial customers since 1988, Design 2000plus encourages 6 energy efficiency in new construction, renovations, remodeling, and replacement of 7 failed equipment through financial incentives and technical assistance to developers, customers and design professionals. Financial incentives reduce the cost barrier to investing in efficiency. Technical assistance reduces barriers to more efficient design by providing education to participants in the use of energy-efficient engineering practices. During 2008, the Company will continue to integrate the delivery of Design 2000plus with our gas program offerings. Newly constructed buildings in particular offer the

greatest opportunity to integrate all gas and electric energy efficiency offerings.

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Eligible Population

Design 2000 plus is available to all non-residential customers, but is generally appropriate for customers with more than 100 kW in demand¹. It is available for new construction and remodeling projects such as a new building, expansion or renovation of an existing building, change in the use or function of the building space, new equipment for a new process or expanded operation, replacement of failed equipment, or planned replacement of equipment.

22

¹ The increase in the ceiling for Small Business Services program eligibility to 200 kW in 2004 has not impacted the Design2000plus program, since this program focuses on lost opportunity measures, rather than retrofit measures.

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Program Design

- 2 Design 2000*plus* provides technical consulting and incentives for the installation of many
- 3 different kinds of energy efficient equipment and systems. Energy efficiency measures
- 4 which are eligible for incentives include premium efficiency lighting, motors, variable
- 5 speed drives, heating, ventilating and air conditioning systems (HVAC), refrigeration,
- 6 industrial process, compressed air, and process cooling.

7

1

- 8 There are three specific types of incentives. (1) Prescriptive incentives are fixed and
- 9 address a single electric efficiency improvement in operations such as lighting, motors
- and HVAC. High efficiency alternative equipment and systems are offered to customers
- on a per unit basis. (2) Custom incentives are based on the unique energy savings criteria
- of a project. (3) Comprehensive incentives are based upon evaluation of the whole
- building and the benefits that come from examining an integrated engineering approach.
- In general, incentives are designed either to cover 60 to 75% of the incremental cost
- between standard and premium efficiency equipment and systems or to buy down the
- 16 cost of equipment to the customer to a one and a half year payback, whichever is less.
- 17 For Comprehensive Design Approach and Comprehensive Chiller projects, incentives
- cover 80% of the incremental cost or buy the cost of the equipment and systems down to
- a one year payback, whichever is less.

- 21 The Company markets Design 2000plus through extensive personal communication by
- 22 account managers with customers, vendors, contractors, design professionals and,
- 23 seminars, training sessions and other direct marketing approaches. For 2008 the
- 24 Company proposes to build on this marketing effort by implementing a broader
- 25 communications plan to customers to underscore the value of implementing energy
- 26 efficiency solutions in their facilities to control their electricity costs and reduce their
- building operating costs.

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- 2 The proposed changes to the Design 2000plus program for 2008 are summarized in
- 3 Attachment 5.

4

5

Tax Title Provisions in the Federal Energy Policy Act of 2005

- 6 The Federal Energy Policy Act of 2005 provides some tax incentives to businesses
- 7 building new or renovating existing buildings. The law provides a tax deduction of up to
- 8 \$1.80 per square foot for buildings where energy use is reduced by 50 percent relative to
- 9 the requirements of the 2001 new construction standards developed by the American
- 10 Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE 90.1-
- 11 2001). The new law also allows building owners of new and existing buildings to earn a
- partial deduction of \$0.60 per square foot for each system (envelope, lighting or HVAC)
- that is 50 percent more energy efficient relative to ASHRAE 90.1-2001. Implementation
- 14 regulations were issued by the U.S. Treasury Department in 2006 with input from the
- 15 U.S. Department of Energy.

16

- 17 The tax title promotes a level of efficiency that is almost twice the minimum efficiency
- thresholds for Design 2000*plus*. The combination of Design 2000*plus* incentives and
- 19 these tax incentives coupled with the program's technical assistance, should help
- 20 customers reach a higher building performance standard.

21

22

A. Services

- 23 The earlier in the design process the Company becomes involved, the more likely it is
- 24 that a comprehensive solution will be possible. For example, if the customer begins
- 25 participation in Design 2000plus before making final design decisions, there is the
- 26 advantage that comes from investigating reduced cooling requirements through improved

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1 lighting systems. Moreover this improvement may lead to selecting smaller HVAC 2 equipment and contribute to greater efficiency and lower costs of operations in the 3 building. Once the Company identifies an appropriate Design 2000plus project at a 4 customer site, the Company offers technical assistance services. 5 6 These technical assistance services include engineering evaluations that support best 7 practices in building design and consider energy efficient measure identification, 8 equipment metering or monitoring, improved technical design solutions, customer 9 presentations, and design and construction assistance. Technical assistance provides 10 customers with detailed engineering studies that identify alternative energy systems that 11 support lower operating costs in the buildings and the operational benefits that come 12 from this selection. The costs of these energy efficiency studies are usually cost shared at 13 50% with customers. 14 15 To ensure that energy savings features are installed and operated as designed, the Company provides a commissioning service. This service is an independent third party 16 17 verification that complex building systems, such as HVAC projects involving energy 18 management systems or other controls, are operating as designed. 19 20 For customers who wish to use their own design team, Design 2000plus offers a 21 Comprehensive Design Approach. This service provides outside expert technical support 22 for the customer's own design team or reimburses the customer the incremental cost of 23 having its design team analyze all cost-effective efficiency options. 24 25 Financing for the customer portion of the Design 2000plus project is available to

Financing is generally arranged with Citicorp Vendor Financing, and

26

customers.

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1	includes nominal application and documentation fees, a limited up-front cash requirement
2	of no more than the first month's lease payment, flexible repayment terms of two to
3	seven years and a simple application process. The amounts available range from \$5,000
4	to \$4,000,000. This arrangement benefits not only the specific customer in need of
5	financing, but also more generally is introducing energy efficiency lending to the
6	financial community, which considers this type of loan unconventional.
7	
8	Design 2000plus provides free ballast recycling to customers installing energy efficient
9	lighting under Design 2000plus. The purpose of this service is to ensure that all ballasts
10	(some of which contain polychlorinated biphenyls or PCBs) are disposed of in an
11	environmentally sound manner.
12	
13	The Company offers the Project Expediter service, which uses pre-qualified contractors
14	to audit customers' facilities and arranges for the purchase and installation of energy
15	efficient equipment. As with most of the other services listed here, Project Expediter is
16	available for both Design 2000plus and Energy Initiative, described below. Usually,
17	these installations are retrofits, however, and therefore qualify under Energy Initiative.
18	
19	B. Best Practices Initiatives
20	a. Advanced Buildings, LEED and Sustainable Design
21	The Company is supporting Advanced Buildings (AB) developed by the New Buildings
22	Institute (NBI) in cooperation with US EPA, ASHRAE, the US Green Buildings Council
23	and the national Building Operators and Managers Association. Advanced Buildings is a
24	suite of technical resources and design guides that help design professionals create
25	commercial buildings that are energy efficient and provide a healthy work environment
26	for occupants. Advanced Buildings complements the Comprehensive Design Approach

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with a special emphasis on smaller buildings. AB also serves to promote better commercial design practices such that advancements in the Rhode Island building code can be implemented at an accelerated rate. The Company has played a lead role nationally in the development and refinement of Advance Buildings along with other stakeholders and utilities. For 2008, the Company will continue to build on the success of the Advanced Buildings program we have been promoting for two years in Rhode Island to address the efficiency needs of new construction projects for commercial buildings less than 75,000 sf. National Grid launched this effort in 2006 with several training programs on the topic offered in RI. In 2007, the program has blossomed with 3 projects, New England Tech, Child and Family Services and Homeloan Bank, all using the approach in current designs. Further, at least one Rhode Island based design firm is using the method to grow their business with out of state clients.

The program will be expanded in 2008 to reach more projects and more design firms through further training and promotional efforts. In 2007 National Grid worked closely with the New Buildings Institute the national organization that manages and promotes and maintains Advanced Buildings across the country to add powerful new features to the program that will increase its appeal and market penetration in 2008.

National Grid will support customers with designs that incorporate LEED in their new construction projects using our on staff LEED Accredited professionals. For many this will include providing them a basic understanding of LEED requirements and guiding them through the process of assembling a qualified design team. Beyond this we will guide customers to the best path for achieving LEED points for Energy and Atmosphere, by providing technical support along with financial incentives.

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- 1 Advanced Buildings is also supported by the Company's gas programs and is integrated
- with the delivery of the gas Emerald Network program.

3

- 4 b. <u>Comprehensive Chiller Program</u>
- 5 Design 2000plus also assists customers in optimizing their building operating systems at
- 6 the time of their federally mandated replacement or conversion of CFC (R-11, R-12
- 7 refrigerant) chillers. Customers may either optimize the performance of their existing
- 8 older building systems or receive technical guidance and recommendations regarding the
- 9 proper size and efficiency for a replacement chiller plant. This program component,
- 10 called the Comprehensive Chiller initiative, also helps to reduce peak summer generation
- 11 demand.

12

13

c. Economic Development

- 14 Design 2000 plus offers a significant opportunity for economic development in Rhode
- 15 Island by helping businesses save on their electric costs while at the same time
- supporting them in their investments in new energy efficient equipment and system
- improvements to their facilities. To this end, for 2008 the Company intends to continue
- 18 to work closely with various economic development groups in the state, including the
- 19 Rhode Island Economic Development Corporation (RIEDC), to seek ways the Company
- 20 may provide focused efficiency services. This effort builds on the relationships
- 21 established in 2005, and may create a more favorable climate for doing business in Rhode
- 22 Island. In addition, this effort has afforded the opportunity to coordinate with the gas
- 23 Economic Development effort.

24

25

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C. Market Transformation Initiatives

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- 1 Design 2000plus has a large market transformation component that supports the new
- 2 construction program toward better performance. By familiarizing the large commercial
- and industrial segment with higher energy efficiency standards, Design 2000*plus* creates
- 4 new efficiency standards for construction. The Company actively supports regional and
- 5 national market transformation programs designed to transform markets for a broad range
- 6 of energy efficient equipment and services. These activities are discussed below.

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8 a. <u>Regional Energy Efficient Motors and Unitary HVAC initiatives</u>

As a feature of the Design 2000plus Program, the Company has supported the MotorUp premium efficiency motor initiative since 1998, a regional market transformation initiative that promotes motor management of high efficiency motors and quality repair of motors to maintain high efficiency. In the past, the MotorUp program was delivered through a joint effort by participating utilities and energy efficiency agencies in New England, New York and New Jersey through the Northeast Energy Efficiency Partnerships. This extended regional group has decided to end the joint delivery of In its place for 2007, a Motors program was developed by a group that MotorUp. encompasses a smaller region consisting of Massachusetts and Rhode Island utilities. The regional program also called MotorUp has continued to offer consistent equipment efficiency requirements for qualifying "NEMA Premium" motors. Uniform rebates and application forms are used throughout the region. For 2008, Massachusetts and Rhode Island utilities will continue to coordinate the use of a contracted circuit rider to provide outreach to motor dealers, trade allies, vendors and distributors. MotorUp also features 1-800 number for technical assistance, and a central clearing house for application processing. Since 2003, the regional initiative has provided instant rebates at motor dealer sites through participation in MotorUp. The Company expects to continue with this approach in 2008. Additionally, the Company is continuing an effort that was initiated in 2006 and expanded in 2007 for smaller businesses, through the vendors that provide Project Expeditor services, to transform their purchasing practices through motor

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1 management best practices, to include larger C&I customers. The Company will work 2 with the customer to facilitate audits of their motor inventory and to develop a motor 3 management plan and purchasing policy to optimize energy efficiency by replacing new 4 or failed motors with a NEMA PremiumTM motor. 5 6 The Company has participated in Cool Choice since 1999, a regional program that 7 focuses on promoting the installation of energy efficient unitary HVAC equipment 8 through Design 2000plus. In 2007, the Company (as well as other regional sponsors) 9 decided to withdraw from Cool Choice. Since then, the Company has coordinated with 10 utilities in Massachusetts in their effort to operate a joint state-wide program, sharing a 11 rebate worksheet form, a single circuit rider, and a 1-800 information line, similar to what is described above for motors. The program features consistent efficiency rebates 12 13 level revised to follow CEE's new Tier 2 specifications for <5.4 Ton to <20 Ton units. 14 Incentives are also offered for dual enthalpy economizer controls, demand control 15 ventilation electronically commutated motors (ECM fan motors) in packaged units. The 16 rebates are expected to remain unchanged in 2008. 17 18 For 2008 the Company is considering an early replacement initiative which targets 19 existing unitary and split HVAC units manufactured before 1992 or units that have a field 20 tested efficiency of an EER 7.0 or less. The Company will move forward with this 21 initiative if results from a pilot done in Massachusetts during 2007 are favorable. 22 23 Similar to the Design 2000plus Motors program described above, the Company, along 24 with utilities in Massachusetts, will continue to retain the services of a circuit rider to 25 provide outreach in 2008 to HVAC contractors and architectural and engineering firms 26 located in Rhode Island or that service customers in RI. This circuit rider will also 27 provide services for application processing and a 1-800 number for technical assistance.

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2 The budgets for these initiatives are included in the overall Design2000plus program

3 budget.

b. High Performance Commercial Lighting Design/DesignLightsTM Consortium

In an attempt to continue to promote high quality, high performance lighting with commercial and industrial customers the Company will utilize a series of specialized guidelines, called the *knowhow*TM series, that have been developed by the DesignLights Consortium to help customers with their lighting design decisions. For 2008 the Company will continue to provide additional outreach on the benefits of high quality lighting design to various lighting equipment vendors throughout Rhode Island. The Company proposes to accomplish this through visits, workshops and breakfast meetings with these vendors and with lighting specifiers. These meetings will be educational but also provide an opportunity for these market players to promote high quality, energy

In 2008, the Company will continue to seek out and promote emerging technologies for energy efficient lighting technologies. For example, a custom incentive will be offered for LED lighting that replaces fluorescent tubes in retail case refrigerators commonly found in grocery stores.

efficient lighting that would be eligible for rebate to their customers.

The company has been offering a "performance lighting" option which offers an incentive based on the ability of a project to achieve lighting power densities (watts per sq foot) more efficient than what's required by the Rhode Island State Energy Code. This program targets architect, building design engineers and lighting equipment suppliers who have to ensure that installed lighting meets the code. Performance lighting

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1	achieves two things: 1. makes the practitioner more aware of lighting power density
2	requirements in the code and 2. Introduces them to technologies and design that will help
3	their project deliver a lighting power density 25% or more less than code. The Company
4	will continue to offer a "performance lighting" option in 2008
5	
6	In 2008, the Company also intends to introduce a lighting consultant that will visit with
7	lighting distributors, specifiers and A&E firms and review their designs as well as
8	provide technical design assistance (the Company will refer to this consultant as a
9	"circuit rider"). In addition new tools will be developed to help key account managers
10	introduce advance lighting practices to their customers and specialized efficient lighting
11	design training will be conducted.
12	
13	c. <u>Schools Initiative</u>
14	The Company proposes to continue offering a special initiative targeted to public schools
15	through Design 2000plus. While Design 2000plus has been effective in reaching public
16	schools, a majority of schools have not participated due to a broad range of market
17	barriers including limited funding and competitive bidding requirements. This program's
18	intent is to help schools minimize the hurdles posed by these market barriers during a
19	time when Rhode Island is seeing an unprecedented level of investment in new and
20	renovated schools.
21	
22	The Company proposes to fund the full incremental cost for new construction or
23	renovation under Design 2000plus. All cost-effective electric energy saving measures
24	would be addressed. It is anticipated that most projects will involve lighting. A key
25	requirement for this initiative is that lighting must follow the DesignLights TM Consortium
26	guidelines for schools as outlined in "Classroom Lighting knowhow TM " guide published

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- 1 by the DesignLightsTM Consortium and that projects follow the Comprehensive Design
- 2 Approach (CDA) track which entails an interactive analysis of proposed measures
- 3 utilizing whole building simulation tools. As an alternative to CDA, smaller school
- 4 projects may follow the New Buildings Institute Advanced Buildings standards described
- 5 previously.

6

- 7 The Company will also continue to participate in the Rhode Island High Performance
- 8 Schools working group. Its mission is to promote "green" schools design elements to
- 9 districts considering new schools and to the design community that serves Rhode Island.
- 10 A circuit rider, funded through a grant from the Henry P. Kendall Foundation, will work
- with prospective districts that are considering a high performance school.

12

Funding for this initiative is included in the overall Design2000*plus* program budget.

14

- 15 d. Building Codes and Standards
- 16 The Parties agree to support work at national and local levels to develop codes and
- standards that continue to upgrade building energy efficiency. In cooperation with the
- 18 codes community, including the Building Code Commission, the Company will work
- 19 with this and other agencies to offer continued improvement on proposed building codes
- and standards that lead to the future revisions of the Rhode Island State Building Code.

- 22 Continually refining these codes and standards, which complement existing programs
- 23 such as Design 2000plus and Energy Initiative, has a significant impact on
- 24 institutionalizing progress made through utility programs. Therefore, this initiative
- 25 focuses on (1) working with national code development organizations such as ASHRAE
- to upgrade building efficiency codes and (2) working at the local level with Rhode Island

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1 and other states in the development of state efficiency codes and standards. 2 Company will offer support to this effort which will be coordinated primarily through the 3 Northeast Energy Efficiency Partnership (NEEP) and the New Buildings Institute (NBI), 4 organizations with the goal of assisting states and others with the development of codes 5 and standards that are practical and enforceable. For instance, Rhode Island has recently 6 upgraded its state energy code to the "2006 International Energy Conservation Code" 7 (IECC-2006) with amendments drafted by NBI. The Company will continue to pursue 8 additional upgrades to the present code through NBI. Part of this effort includes 9 facilitating and supporting the training and education efforts for code enforcers, designers

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e. Federal Standards

and builders.

Ultimately, markets are transformed towards higher efficiency when newer efficient equipment supplants older inefficient equipment to an extent that the latter is either no longer produced, becomes unattractive to end users or is excluded from the marketplace as the result of various standard-setting processes. Some of these standard setting processes are industry-driven and voluntary; others produce mandatory codes or standards promulgated by federal or state governments.

- 20 The Company agrees to actively track and participate in DOE's standard setting process.
- 21 DOE's standard setting process involves multiple stakeholder workshops and a public
- 22 hearing for each standard. These workshops typically seek input on all aspects of the
- 23 standard setting process. By participating in these workshops and using our experience
- 24 with energy efficient equipment, the Company feels it will be able to most effectively
- communicate its support for appropriate standards.

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- 1 As Federal standards are raised, participation requirements for Design 2000plus and
- 2 Energy Initiative will be elevated accordingly, pulling the market toward successively
- 3 higher efficiency strata. The Company believes that active participation in the elevation
- 4 of energy efficiency standards is an integral part of any transition strategy in respect to
- 5 ratepayer funded market transformation initiatives.

6

7 Associated costs for this initiative are included in the Design2000*plus* program budget.

8

9

2. Energy Initiative

10 **Overview**

- 11 Offered since 1988, Energy Initiative encourages the replacement of existing equipment
- and systems with energy efficient alternatives. Its structure is very similar to Design
- 13 2000 plus, offering financial incentives, technical assistance, and other ancillary services
- such as commissioning, comprehensive chiller assistance, financing, and ballast disposal.

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Eligible Population

- 17 Energy Initiative is available to all non-residential customers, although customers with
- demand below 200 kW are also eligible to participate in the Small Business Services
- 19 program.

20

21

Program Design

- 22 Energy Initiative provides incentives for the installation of many different types of
- energy efficient equipment, including lighting, motors, energy management systems,
- 24 programmable thermostats, variable speed drives, refrigeration, industrial process,
- 25 compressed air, and process cooling. The Company's delivery of Energy Initiative is

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1	similar to its delivery of Design 2000plus. Energy Initiative offers two types of
2	incentives, prescriptive and custom. Prescriptive incentives are fixed and offered on a
3	per unit basis. Custom incentives are based on the unique energy savings criteria of
4	projects. Both are based on average at 40% of the total installed cost (including labor and
5	equipment) or at a level that buys the equipment down to a two-year payback to the
6	customer, whichever is less.

7

- 8 The Office of Energy Resources (RIOER) is also offering an Energy Services Company
- 9 (ESCO) initiative to encourage efficiency improvements in Rhode Island's state and
- municipal facilities. The Company will continue to support the delivery of this service by
- 11 coordinating its Energy Initiative program services (including incentives) with the
- 12 ESCOs as they develop technical assessments for these customers. For 2008, the RIOER
- and the Company will explore ways to help municipalities participate in this initiative.

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The proposed changes to Energy Initiative for 2008 are shown in Attachment 5.

16

17

A. Best Practices Initiatives

- 18 Energy Initiative offers a significant opportunity for economic development in Rhode
- 19 Island by helping businesses save on their electric costs while at the same time
- 20 supporting them in their investments in new energy efficient equipment and system
- 21 improvements to their facilities. To this end, for 2008 the Company intends to continue
- 22 to work closely with various economic development groups in the state including the
- 23 Rhode Island Economic Development Corporation in an attempt to provide focused
- 24 efficiency services. This effort may lead to fostering a more favorable business climate
- 25 in Rhode Island to retain businesses in the state. This effort is being coordinated closely

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- 1 with the Economic Development initiative offered under the gas energy efficiency
- 2 programs.

3

- 4 The Company also will continue a public education campaign to promote energy
- 5 efficiency, especially during peak periods. The Company expects to develop brochures
- 6 and other informational literature and disseminate these to C&I customers through bill
- 7 inserts, direct mail, e-mail equipment vendors and account managers Some of the
- 8 literature and information that can be used is already available from E Source and the
- 9 American Council for an Energy Efficient Economy, organizations that feature the
- benefits to customers available from improving their energy use practices.

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B. Market Transformation Initiatives

- Similar to Design 2000*plus*, the Company's retrofit program includes a strong market
- transformation component to include the following activities.

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16

a. <u>Compressed Air Challenge</u>

- 17 The Company will continue its active sponsorship of the national Compressed Air
- 18 Challenge (CAC). The CAC is a broad based collaborative of government agencies,
- 19 compressed air specialists, equipment manufacturers, end-use consumers and utilities
- 20 whose objective is to promote the substantial energy savings improvements available by
- 21 means of a comprehensive, systems approach to compressed air system design and
- 22 operation. The CAC educational and technical materials being disseminated by the
- 23 Company are intended to increase customer awareness of, and demand for, products and
- services that encompass a comprehensive, "systems optimization" approach. Coupled
- 25 with this increased demand for enhanced services from customers, regional compressed

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1 air equipment and service vendors will be exposed in depth to the technical approaches

2 promoted by the CAC.

Eastern Massachusetts.

3

4 Over the past few years the Company has been actively coordinating local workshops 5 that have been developed by the CAC. These workshops reflect consensus approaches to 6 a variety of technical issues associated with the comprehensive system approach to 7 compressed air quality, reliability, and efficiency. The first workshop, entitled 8 "Fundamental of Compressed Air Systems," has been very well received by industrial 9 customers and vendors who have attended to date. The second is a more advanced two-10 day workshop entitled "Advanced Management of Compressed Air Systems." This 11 complementary workshop is primarily targeted at larger, more sophisticated customers as 12 well as regional vendors and engineering consultants. The Company anticipates that 13 these workshops will result in an increased number of applications under the Company's 14 programs that address more comprehensive solutions to system efficiency. The Company 15 expects to hold one Level 1 workshop in Rhode Island. We will also target Rhode Island 16 Customers and compressed air vendors for Level 1 and Level 2 classes that are offered in

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In addition to promoting the two levels of CAC training currently available, the Company will also be providing comprehensive compressed air system O&M initiative for large industrial compressed air users as described below.

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23

The budget for this initiative is included in the overall budget for Energy Initiative

24

25 b. <u>Compressed Air Operations & Maintenance Improvement Program</u>

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The Company will continue to offer an O&M program targeted at industrial customers with compressed air systems with a goal of helping them reduce compressed air costs and to promote long term reliability and efficiency in the future. One of the key elements of the O&M program is the repair of widespread compressed air leakage in distribution systems. Experience indicates that air leakage typically wastes 25% of total compressed air produced by a system, wasting significant electric energy. Energy cost savings resulting from the repair of leakage typically produces paybacks as short as 5 months.

This program will provide participating customers with financial and technical assistance in making low cost system improvements and help customers establish a long term leak management program at their facilities. Participation in the program will include: a compressed air system survey, identification of leakage and other potentially low cost O&M improvements, staff training in leak repairs and planning for continuous system monitoring. Eligible customers must have a minimum of 100 horsepower of compressed air load in their facility. The customer will sign a memorandum of understanding with the Company detailing the responsibilities of both parties.

The budget for this initiative is included in the overall budget for Energy Initiative.

c. Building Operator Training and Certification (BOTC)

The Building Operator Training and Certification (BOTC) initiative is a collaborative effort among gas and electric utilities in the region. Through this effort a training and certification program is administered and conducted by a third party and offered to commercial and industrial customers. The Company has offered Level 1 of the BOTC initiative for the past five years. During 2005, a Level 2 class was offered in RI consisting of a more comprehensive curriculum that supports advanced practices in

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- building operations. The Company hosted one class in Massachusetts in 2007 that was
- 2 open to Rhode Island customers and plans for 2008 to offer at a minimum one BOTC
- 3 Level 1 in Providence.

4

- 5 The BOTC's objectives include:
- 6 Increasing O&M personnel knowledge and skills in operating and maintaining
- 7 commercial and industrial buildings for efficiency, comfort, and safety.
- 8 Expanding market awareness of the benefits of improved building performance.
- Building market demand for resource-efficient O&M services.
- Distinguishing resource-efficient practices, service providers, and knowledgeable
- building operators in the marketplace.
- Establishing a Training and Certification program that will become financially self-
- sustaining in the future.
- In 2007, the Northeast Energy Efficiency Partnerships decided not renew its license for
- 15 BOC. The company is currently exploring the continuation of a program like BOC
- along with other energy efficiency program providers in the region and expects to offer a
- 17 program in 2008.

18

19 The budget to subsidize attendance in BOTC courses will be \$10,000.

- 21 d. Whole Building Assessment and Retro-Commissioning
- 22 In 2008, the Company will continue to benchmark the energy use of large C&I customers
- 23 through the Whole Building Assessment initiative to assist them in setting priorities and
- 24 promote the installation of energy efficiency measures in their facilities. Also, the
- 25 Company will continue offering a retro-commissioning initiative to help customers

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1 understand how their equipment is operating and make adjustments to improve

2 performance and efficiency

findings of the benchmarking exercise.

3

Whole Building Assessment starts by "benchmarking" the customer's energy use and comparing it to their peers' or their own historic consumption characteristics. By gathering their current and historical energy use from the Company's billing data systems and presenting it in an insightful manner, new energy efficiency strategies may be readily identified, and an action plan leading to an installation can be developed. This initiative provides the opportunity to promote this service in Rhode Island, with the focus on the creation of applications for energy efficiency incentives directly resulting from the

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As companies become more aware of how and when they use energy in their facilities, they are in a position to assess where the best opportunities lie to develop better operating and maintenance practices. Through benchmarking, building owners and operators achieve a better understanding of the energy related cost of their buildings. Moreover it leads them to reduce operating costs, increase energy efficiency and promote environmentally-friendly operations.

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There are two primary tools the Company will use to accomplish the benchmarking objective. The combination of these approaches and services determined by the Company's Account Managers should help to stimulate greater efficiency savings and reach those customers who may not have taken advantage of the program and services to date.

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• The Company's *Energy Profiler On-Line (EPO)*. This is a tool that is used effectively to identify energy use patterns within large commercial or industrial facilities. It helps to identify energy and demand savings potential by offering detail on current load duration and daily and historical building energy use. EPO can provide an account manager an accurate snapshot of the facility before meeting with the customer. The service can frame discussions to influence better energy use practices and /or further technical assistance to validate the potential of new energy efficient strategies and opportunities.

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Commercial Benchmarking Services available through the EPA's Energy Star Portfolio Manager. This is a tool that provides a comparison of the level of annual energy consumption for commercial or institutional customers to that of other facilities with the same function. The buildings are ranked in comparison to the other buildings in a national database, corrected for climate and other key variables. The analysis considers all purchased energy types used in the facility. The customer will be responsible for providing the utility data, and tracking resource consumption and costs. The EPA's ENERGY STAR Benchmarking system utilizing Portfolio Manager is used for this effort. The Company will furnish a written action plan identifying efficiency cost and savings opportunities resulting from the benchmarking. The process recognizes that a customer may be motivated by a comparison to peers more than a comparison to previous period's consumption. The Company will use the services of a Project Expediter to generate opportunity assessment, analysis and follow up services to steer the customer toward an installation of efficiency measures.

25

The budget for this initiative is included in the overall budget for Energy Initiative.

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1	Retro-commissioning, is a process of testing, troubleshooting, and adjusting systems in
2	an existing building with the expectation to raise existing performance standards. The
3	retro-commissioning process can significantly reduce energy consumption with little
4	financial investment. Experience suggests that the cost of retro-commissioning can be
5	paid back through improved system performance, reduced energy costs, and improved
6	occupant comfort.
7	
8	The Retro-commissioning Initiative is bested suited for the following:
9	• Commercial and industrial buildings that have an electric demand greater than 0.5
10	MW.
11	HVAC and process systems
12	Desire to reduce operating costs
13	• Use an energy management system
14	The objective of the Retro-commissioning Initiative is to:
15	Reduce operating costs during peak and off peak periods
16	Develop a comprehensive and acceptable operation and maintenance plan
17	• Identify capital projects that can lead to substantial energy savings
18	• Educate the building personal how to operate the building efficiently
19	
20	Retro-commissioning will entail an assessment of the major building systems effecting
21	energy used. Data is collected on how the systems operate presently and how they were
22	originally designed to operate. Recommendations on where changes should be made to

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set points, maintenance practices or new energy efficient equipment are presented in a report.

3

- 4 The Company proposes to perform retro-commissioning services as outlined above with
- 5 two to three commercial or industrial customers. Incentives will be paid to encourage
- 6 customers to implement the operations and maintenance (O&M) measures that have a
- 7 simple payback of less than 2 years. The Company will continue to review the results of
- 8 the Retro-commissioning Initiative with the Collaborative.

9

- 10 The expected cost of these retro-commissioning projects is \$40,000. These funds will
- 11 pay for technical assistance on retrocommissioning studies. Where efficiency
- opportunities are identified in the studies, they will be processed through the appropriate
- 13 rebate program.

- 15 Experience gained by the company over the past several years in offering to over 50
- 16 customers across New England these expanded services suggest that continuing to
- 17 develop and enhance Whole Building Assessment and retro-commissioning services to
- customers to help identify more efficiency options in operating their facilities that will
- 19 provide additional savings that may be missed without a targeted whole building effort.
- 20 Many of the measures identified offer immediate to six months paybacks, are low costs
- 21 and generally involve some degree of control strategies for the buildings. To build on
- 22 these early results the company plans to continue to offer customers incentives for Whole
- 23 Building Assessment and retro-commissioning measures that may have less than a 2 year
- simple payback- a threshold that is currently in place to be eligible for incentives. In
- 25 addition we believe it makes sense to also include a demand response evaluation to see if
- we can bundle both Whole Building Assessment and retro-commissioning services with

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1 demand response opportunities in the facility studies. We are also interested in

2 determining for 2008 the benefits of working with customer's controls company that

would combine a full assessment that includes gas and electrical savings and demand

response. This approach will bundle services under one project working with a controls

5 vendor.

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C. Distribution Load Response Audit Services

8 In any local electrical distribution system, the utility equipment has historically been

sized for a few hundred hours of peak loading conditions, and is routinely under-loaded

for the bulk of the year. Peak load reduction is only needed for the few hours per year of

11 high supply prices, and/or high loading conditions on the local distribution system.

Managing this peak load may result in more stable delivery costs when upgrades to the

distribution system can be deferred. On a regional basis, managing peak loads can help

to moderate supply costs as the need to construct additional capacity to meet higher

demand is dampened. Deferring supply additions should lead to lower generation costs

over time. Furthermore, individual customers can use demand reduction strategies to

reduce their billed peak demands and their own energy costs.

- 19 The proposal for 2008 is a continuation of the Company's Demand Response audit
- services funded in its energy efficiency program since 2006. In addition, the results of
- 21 the audits will provide information to customers that will allow them to integrate energy
- 22 efficiency measures with demand response capability that may include working more
- 23 closely with a controls vendor to provide customers both benefits from reducing energy
- and demand in their facility.

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1	The Company will identify areas throughout Rhode Island where past and anticipated
2	load growth has the potential to outpace infrastructure improvements, resulting in an
3	accelerated need for infrastructure improvements over original estimates. Active
4	management of the loads on the system could be a useful tool for future planning. As part
5	of the Company's Summer Load Relief Program, Docket 3680, demand response audits
5	that will identify the potential for various demand limiting strategies will be performed
7	for interested customers in the area outlined in the Summer Load Relief Program.

Audit services will be primarily marketed to large customers on these highly loaded distribution system components. These could be customers with newer buildings (office buildings, retail establishments, schools, etc.), which currently have building management systems (BMS) in the facility to monitor life safety conditions (smoke, fire alarms), security, and HVAC systems. Buildings with building management systems are typically less than 15 years old. Industrial process customers with potentially controllable or variable production loads are also potential candidates.

In addition, load shed audit services will be available to any Rhode Island customer who requests them, even those outside a targeted distribution area, to facilitate their participation in ISO-New England's demand response programs. ISO-New England's programs require a minimum load reduction commitment 100 kW, so large customers are the likely population to request audit services.

The proposed spending for this effort in 2008 is \$61,000. It is anticipated that the proposed funding will support 20 to 40 "load shed" technical assistance studies. The Company's demand response initiative program manager and the Company's account managers will market this service to customers on a one-to-one basis. Several technical assistance (TA) contractors will be used to identify demand response options and

d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 4 Page 26 of 27

- 1 coordinate their implementation. Economies may be achieved if these focused studies
- 2 are performed simultaneously with broader energy efficiency TA studies. The Company
- 3 will report to the Collaborative periodically on Demand Response audit service spending.

4

- 5 The load shed audits may be conducted as part of energy efficiency surveys or as
- 6 independent studies. The findings of the audit will be presented to each customer in a
- 7 report that will develop a load profile for the facility, followed by set of site-specific load
- 8 reduction measures for each customer, along with steps the customer should take to
- 9 develop a load reduction plan to optimize their performance during a demand response
- 10 event.

11

- Preliminarily, the list of measures to be considered includes:
- Lighting retrofits, including dimmable electronic ballasts for lighting;
- Cooling system upgrades, including chiller efficiency improvements and CO₂ sensors
- to regulate air distribution;
- Building management system control changes, including temperature setbacks for
- 17 HVAC systems;
- Scheduling of industrial processes, such as rearranging shift operations;
- Compressed air system modifications.

- No demand response incentives will be paid through the energy efficiency programs, and
- 22 no impacts are projected. Providing customers access to the payment streams from the
- 23 ISO-NE demand response programs, and more importantly, the tools to allow
- 24 participation, will provide added incentives for customers. The Internet enabled gateway

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- also has potential to provide real-time demand data allowing customers to experiment
- 2 within their facility to modify their load curves and further reduce the overall electric bill.

- 4 Demand-reducing measures associated with equipment installations will be run through
- 5 the Custom Measure approach under Energy Initiative and Design 2000plus to determine
- 6 cost-effectiveness and rebate eligibility under standard energy efficiency protocols.

THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 5 Page 1 of 1

SUMMARY OF PROPOSED CHANGES TO THE LARGE BUSINESS SERVICES PROGRAMS FOR 2008

Category	Energy Initiative	Design 2000plus
Lighting	• Increase the incentive for new fluorescent recessed and pendant fixtures typically installed in office and classroom spaces by \$5.	• Increase the incentive for new fluorescent recessed and pendant fixtures typically installed in office and classroom spaces by \$5.
Motors	N/A – prescriptive rebates are not offered under Energy Initiative	No change
HVAC	• No change	• An early replacement initiative is being considered which targets existing unitary and split HVAC units manufactured before 1992 or units that have a field tested efficiency of a EER 7.0 or less. This offering will depend on the success of a pilot program being conducted in Massachusetts
Compressed Air	No changes	No changes
Custom	No Changes	No changes
Advanced Buildings and Comprehensive Design Approach (CDA)	N/A	Two tier incentive levels will be created to promote even more comprehensive efforts by design teams and their clients in new construction. • A lower tier will pay an incentive of up to 80% (CDA) of the incremental cost on HVAC measures that are part of comprehensive project that reduce energy use to at least 15% better than a code compliant design. For the higher tier, projects that are designed to be least 20% more efficient than the code compliant design will receive an additional 10% incentive.

These proposed enhancements continue to reflect the Company's objectives to improve the way buildings are designed, constructed and operated.

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID R.I.P.U.C Docket No.3892 Attachment 6

DSM Funding Sources in 2008 by Sector

Projected kWh Sales¹:	Projection
Residential	3,104,796,233
Small Commercial & Industrial	2,013,363,186
Large Commercial & Industrial	2,795,622,701
Total	7,913,782,120
DSM Revenue per kWh	\$0.002
Projected DSM Revenues (\$000) Residential	¢c 200 5
Small Commercial & Industrial	\$6,209.5 \$4,026.7
Large Commercial & Industrial	\$5,591.2
Total	\$15,827.4
Other Sources of DSM Revenues (\$000):	
Projected DSM Fund Balance Interest in 2008	(\$60.4)
Residential Small Commercial & Industrial	(\$68.4) \$144.9
Large Commercial & Industrial	\$314.3
Total	\$390.8
Projected Co-Payments by Customers in 2008:	
Residential	\$0.0
Small Commercial & Industrial	\$812.6
Large Commercial & Industrial Total	<u>\$18.4</u> \$831.0
Projected DSM Commitments at Year-End 2007:	
Residential	\$0.0
Small Commercial & Industrial	\$0.0
Large Commercial & Industrial Total	\$4,337.2 \$4,337.2
Projected 2007 Fund Balance:	
Residential	(\$1,622.1)
Small Commercial & Industrial Large Commercial & Industrial	\$1,183.2
Total ²	(\$849.7) (\$1,288.6)
Total	(\$1,200.0)
Projected Payments During Transition Period From ISO-NE: Residential	\$360.0
Small Commercial & Industrial	\$233.4
Large Commercial & Industrial	\$324.1
Total	\$917.5
Subtotal - Other Sources of DSM Revenues:	
Residential	(\$1,330.5)
Small Commercial & Industrial	\$2,374.1
Large Commercial & Industrial	\$4,144.3
Total	\$5,187.9
Projected Total Funding Available in 2008:	A. 000 -
Residential	\$4,879.0
Small Commercial & Industrial Large Commercial & Industrial	\$6,400.8 \$9,735.5
Total	\$21,015.3
	. ,

Notes:

¹ Projected streetlighting and sales for resale kWh sales have been allocated to each sector based on the percentage of sales in each sector excluding expected streetlighting sales.
² A projected negative fund balance at year end indicates that projected spending and commitments for 2007 are greater than the actual funding available in 2007. The Company expects to either spend or commit its approved DSM budget for 2007 but not to exceed approved budget amounts. The negative fund balance is due primarily to kWh sales in 2007 below forecasted sales for the year and less than anticipated interest accruing on the fund balance during the year. As a result, DSM funding in 2007 is lower than what was expected when budgets were set for the year and the projected year-end fund balance is negative.

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID R.I.P.U.C Docket No.3892 Attachment 7 page 1 of 2

National Grid 2008 Electric Energy Efficiency Program Budget (\$000)

	Program Planning	& Administration				
	External	Internal	Marketing	Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
RESIDENTIAL PROGRAMS						
ENERGY STAR Homes	\$49.0	\$37.5	\$21.0	\$608.9	\$0.4	\$716.7
ENERGY STAR Air Conditioning	\$11.3	\$16.9	\$15.2	\$254.5	\$13.4	\$311.2
ENERGY STAR Heating	\$0.0	\$6.6	\$1.5	\$91.6	\$0.0	\$99.6
EnergyWise	\$225.0	\$90.2	\$0.0	\$1,347.4	\$1.3	\$1,664.0
ENERGY STAR Lighting	\$75.0	\$40.0	\$51.5	\$459.4	\$33.3	\$659.2
ENERGY STAR Products	\$18.4	\$15.4	\$37.5	\$237.8	\$0.3	\$309.4
Single Family - Low Income Services	\$11.9	\$68.3	\$0.0	\$1,394.9	\$18.2	\$1,493.3
EERMC - Residential	\$124.1	\$0.0	\$0.0	\$0.0	\$0.0	\$124.1
Residential Education Program	\$15.8	\$0.5	\$15.0	\$0.0	\$0.0	\$31.2
Shareholder Incentive	\$0.0	\$236.6	\$0.0	\$0.0	\$0.0	\$236.6
Subtotal - Residential	\$530.4	\$512.0	\$141.7	\$4,394.4	\$66.9	\$5,645.5
SMALL COMMERCIAL & INDUSTRIAL PROGRAMS						
Small Business Services	\$218.6	\$79.5	\$50.0	\$3,915.8	\$28.5	\$4,292.4
EERMC - Small C&I	\$80.5	\$0.0	\$0.0	\$0.0	\$0.0	\$80.5
Shareholder Incentive	\$0.0	\$149.5	\$0.0	\$0.0	\$0.0	\$149.5
Subtotal - Small Commercial & Industrial	\$299.1	\$229.0	\$50.0	\$3,915.8	\$28.5	\$4,522.4
LARGE COMMERCIAL & INDUSTRIAL PROGRAMS						
Design 2000plus1	\$260.9	\$448.5	\$20.1	\$3,099.5	\$173.6	\$4,002.5
Energy Initiative1	\$237.1	\$476.5	\$12.5	\$5,614.4	\$131.0	\$6,471.5
EERMC - Large C&I	\$111.8	\$0.0	\$0.0	\$0.0	\$0.0	\$111.8
Shareholder Incentive	\$0.0	\$261.6	\$0.0	\$0.0	\$0.0	\$261.6
Subtotal - Large Commercial & Industrial	\$609.7	\$1,186.6	\$32.6	\$8,714.0	\$304.6	\$10,847.4
Grand Total	\$1,439.2	\$1,927.6	\$224.3	\$17,024.2	\$400.0	\$21,015.2

Notes:

 $1\ \ Includes\ commitments\ for\ Design\ 2000 plus\ and\ for\ Energy\ Initiative\ as\ shown\ below:$

Design 2000plus Commitments: \$1,500.0 Energy Initiative Commitments: \$3,000.0

These commitments reflect agreements with customers to provide funding for approved energy efficiencg projects that will be completed after year-end 2008.

R.I.P.U.C Docket No.3892

Attachment 7 page 2 of 2

Proposed 2008 Budget Compared to Approved 2007 Budget (\$000)

	Proposed	Approved	Change
	Budget	Budget	Compared
	(2008)	(2007)	to 2007
RESIDENTIAL PROGRAMS			
EnergyWise	\$1,662.7	\$2,170.2	(\$507.5)
Single Family - Low Income Services	\$1,475.1	\$1,953.3	(\$478.1)
ENERGY STAR Products	\$309.1	\$332.7	(\$23.6)
ENERGY STAR Heating System	\$99.6	\$130.8	(\$31.2)
ENERGY STAR Air Conditioning	\$297.8	\$145.4	\$152.4
Residential Lighting	\$625.9	\$819.8	(\$193.9)
ENERGY STAR New Construction	\$716.3	\$712.3	\$4.1
Energy Efficiency Educational Programs	\$31.2	\$48.4	(\$17.1)
EERMC - Residential	\$124.1	\$125.5	(\$1.4)
Subtotal Residential	\$5,341.9	\$6,438.3	(\$1,096.3)
LARGE COMMERCIAL AND INDUSTRIAL PROGRAMS			
Design 2000plus	\$3,828.9	\$3,957.1	(\$128.1)
Energy Initiative	\$6,340.5	\$6,603.3	(\$262.8)
EERMC - Large C&I	\$111.8	\$114.3	(\$2.5)
Subtotal Large Commercial & Industrial	\$10,281.2	\$10,674.6	(\$393.4)
SMALL COMMERCIAL & INDUSTRIAL PROGRAMS			
Small C&I	\$4,263.9	\$4,260.0	\$3.9
EERMC - Small C&I	\$80.5	\$82.0	(\$1.5)
Subtotal Small Commercial & Industrial	\$4,344.4	\$4,342.0	\$2.4
	·		
OTHER EXPENSE ITEMS			
Company Incentive	\$647.7	\$723.0	(\$75.3)
Program Design, Evaluation and Planning	\$400.0	\$350.0	\$50.0
Subtotal Other Items	\$1,047.7	\$1,073.0	(\$25.3)
TOTAL BUDGET	\$21,015.2	\$22,527.8	(\$1,512.6)

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID R.I.P.U.C Docket No.3892 Attachment 8 page 1 of 2

Derivation of the 2008 Spending Budget for Shareholder Incentive Calculation

-			Other Funding	
	Proposed 2008 Budget (\$000)	Commitments and Copays (\$000)	Excluded From the Eligible Spending Budget (\$000)	Spending Budget (\$000)
RESIDENTIAL PROGRAMS				
ENERGY STAR Homes	\$716.7			
ENERGY STAR Air Conditioning	\$311.2			
ENERGY STAR Heating	\$99.6			
EnergyWise	\$1,664.0			
ENERGY STAR Lighting	\$659.2			
ENERGY STAR Products	\$309.4			
Single Family - Low Income Services	\$1,493.3			
EERMC - Residential	\$124.1		\$124.1	
Residential Education Program	\$31.2			
Shareholder Incentive	\$236.6		\$236.6	
Subtotal - Residential	\$5,645.5	\$0.0	\$360.7	\$5,284.7
SMALL COMMERCIAL & INDUSTRIAL PROGRAMS				
Small Business Services	\$4,292.4			
EERMC - Small C&I	\$80.5		\$80.5	
Shareholder Incentive	\$149.5		\$149.5	
Subtotal - Small Commercial & Industrial	\$4,522.4	\$812.6	\$230.0	\$3,479.8
LARGE COMMERCIAL & INDUSTRIAL PROGRAMS				
Design 2000plus	\$4,002.5			
Energy Initiative	\$6,471.5			
EERMC - Large C&I	\$111.8		\$111.8	
Shareholder Incentive	\$261.6		\$261.6	
Subtotal - Large Commercial & Industrial	\$10,847.4	\$4,518.4	\$373.4	\$5,955.7
Grand Total	\$21,015.2	\$5,331.0	\$964.1	\$14,720.2

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID R.I.P.U.C Docket No.3892 Attachment 8 page 2 of 2

Target 2008 Shareholder Incentive

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Target	Target				
				Incentive for	Incentive -			Target	Incentive Cap ·
	Spending	Incentive	Target	Performance	Annual kWh	Annual kWh	Threshold	Incentive	Annual kWh
Sector	Budget	Rate	Incentive	Metrics	Savings	Savings Goal	kWh Savings	Per kWh	Savings
Residential	\$5,284,732		\$236,627	\$40,000	\$196,627	15,908,740	9,545,244	\$0.012	\$245,784
Small Commercial & Industrial	\$3,479,808		\$149,472	\$20,000	\$129,472	8,698,030	5,218,818	\$0.015	\$161,840
Large Commercial & Industrial	\$5,955,670		\$261,590	\$40,000	\$221,590	30,196,093	18,117,656	\$0.007	\$276,988
Total	\$14,720,210	4.40%	\$647,689	\$100,000	\$547,689	54,802,862	32,881,718		\$684,611

Notes:

- (1) Sector budget net of projected commitments and copays. See Attachment 8, page 1 of 2.
- (2) 4.40% of the sector spending budget.
- (3) Target Incentive Total = Incentive Rate x Spending Budget Total (Column (1)).
- (4) \$20,000 per proposed performance metric.
- (5) Total for Column (3) Total for Column (4) allocated to sectors based on the relative size of the spending budget in the sector.
- (6) Goal for annual kWh savings by sector. This may be adjusted at year end for evaluation results and actual spending relative to the spending budget. If goal is adjusted, values in columns (7), (8), and (9) will be adjusted as well.
- (7) 60% of Column (5). No incentive is earned on annual kWh savings in the sector unless the Company achieves at least this threshold level of
- (8) Column (5)/Column (6). Applicable to all annual kWh savings up to 125% of target savings if at least 60% of target savings have been achieved.
- (9) Column (5) x 1.25.

d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 9 Page 1 of 10

1	2008 PERFORMANCE METRICS
2 3 4	Introduction
5	Since 2004, a portion of the incentive under the shareholder incentive mechanism for the
6	DSM programs has been reserved for incentivized performance metrics. These
7	performance metrics are established for initiatives offered in Rhode Island for market
8	transformation objectives or for significant improvements in program offerings. In all
9	cases, the metrics are designed to be straightforward measures of progress for initiatives
10	believed worthy of a special targeted focus.
11 12	For 2008, the Company proposes performance metrics for five initiatives. For the first
13	time, the essential objective for each individual initiative is not changing from 2007.
14	This reflects the Parties agreement that the metrics are still valid as well as the fact that,
15	for many such initiatives, progress is achieved over time and that it is worthwhile to
16	maintain the focus of program implementation on the policy objective defined by the
17	metric over more than one year
18 19	The Company proposes the performance targets for 2008 described on the following
20	pages. The proposed targets reflect current market conditions and will require significant
21	Company effort to achieve desired results.
22	
23	Final Metric Targets
24	

Threshold performance for all five metrics will be based on 2007 results. As 2007 results

are not yet available, this Attachment provides a process and framework for the

calculation of metric targets once results are available. For two metrics (ENERGY

STAR® Homes and High Performance Schools), the targets may be set early in 2008.

For the other three metrics, preliminary MWh targets are included here consistent with

the program savings estimates provided in the Settlement, Attachment 10, page 2 of 3.

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d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 9 Page 2 of 10

1	However, if the assumptions used to develop metric MWh targets change as the result of
2	completed evaluation studies, the Parties agree that the performance metric MWh targets
3	may be adjusted accordingly. The Company will recalculate metric targets to account for
4	those evaluation findings and provide them to the Collaborative for review. If the
5	adjusted metric MWh targets vary by more than 5% from the targets included below,
6	Division review and approval will be required. The incorporation of evaluation study
7	results is typically not completed until August of the program year, i.e., the results from
8	evaluation of the 2007 programs will not be incorporated until August 2008. Therefore,
9	the Company proposes to calculate and file revised metric targets, if any, no later than
10	September 30, 2008.
1.1	

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Partial Credit

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The Parties agree that, for three of the metrics, partial credit will be awarded for performance that does not meet the specific numeric target, in recognition of the Company's effort and in recognition that Rhode Island consumers benefit from even partial progress toward the metric's objective. No extra incentive will be awarded for exceeding the numeric target.

19

- The performance level at which partial achievement will be credited is the "threshold."

 For the three metrics structured with partial credit in 2008, the threshold will be greater than or equal to final 2007 performance after consideration of the unique attributes of the
- 23 metric. This provides continuity in the structure of the metric at the same time as
- creating a clear standard for the Company from which it must improve in order to receive
- an incentive. .

- 27 The performance level at which the full incentive will be credited is the "target." The
- 28 incentive for two metrics will be linearly scaled between the threshold and the target. For

d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 9 Page 3 of 10

- the schools metric that does not allow for this kind of scaling, the incentive will be
- 2 credited for incremental levels of performance.

3

Residential Metric 1: ENERGY STAR® Homes

- 5 Metric: In 2008, the Company will conduct plans analyses and home ratings and sign
- 6 ENERGY STAR® builders' agreements for new homes being built in Rhode Island. It
- 7 will increase the penetration of signed builders agreements in 2008 by 3 percentage
- 8 points compared to the penetration achieved in 2008. Penetration will be calculated as
- 9 the number of signed agreements divided by the number of permits for new dwelling
- units issued in 2007.
- Objective: The metric supports market transformation in the construction of new homes
- by giving an incentive for an increase in market penetration. This is a leading indicator
- of future savings in the program.

- 15 Discussion: In 2006 the ENERGY STAR® Homes program was redesigned at the
- 16 national level to increase efficiency requirements. Signing up builders and home buyers
- 17 to the more stringent updated ENERGY STAR® Homes program requires builders to
- agree to a significant change in their building practices, so the trend in penetration can be
- viewed beginning with that year. Penetration levels for 2006 were 15.8% and penetration
- 20 in 2007 is tracking at 20.4%. Note that these values include only those who sign
- 21 ENERGY STAR agreements; participants through the Code Plus feature of the program
- will not be counted toward the metric.
- For 2008, the threshold for this metric is set at 1 percentage point greater than 2007 year-
- 24 end penetration and the target level of performance is an increase of 3 percentage points
- over the penetration achieved in 2007. The increase of 3% over year end 2007
- penetration is comparable to the penetration increase that was observed in 2001-03, when
- 27 the previous program design was in its initial years of deployment.

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- 1 <u>Partial Performance:</u> The following is proposed for partial achievement toward the target
- 2 of a 3 percentage point increase in penetration. The incentive for performance between
- 3 the threshold and the target will be scaled proportionately.

4

ENERGY STAR® HOMES						
	Penetration %	Incentive	% of Incentive			
Threshold	XX.X% (2007 penetration + 1%)	\$6,700	33%			
Target	XX.X% (2007 penetration +3%)	\$20,000	100%			

5

Residential Metric #2: Savings from Programs other than Residential Lighting

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- Metric: The Company will achieve a target amount of MWh savings from programs other than Residential Lighting in 2008. The target will be calculated as the net annual MWh savings goal for all residential programs excluding the net annual MWh savings
- 12 from the Residential Lighting program.

13

Objective: This metric encourages the Company to provide sufficient focus on achieving savings objectives in all of its residential energy efficiency programs.

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<u>Discussion:</u> The Company's proposed savings goals for 2008 include objectives that focus on energy efficiency opportunities beyond energy efficient lighting in the Residential Lighting Program. This metric complements and reinforces these other objectives by focusing Company efforts on all residential programs. The metric incentive will be earned only if savings from programs other than Residential Lighting meet or exceed the combined threshold savings goal for those programs.

- 24 Annual MWh savings will be counted for all programs, excluding Residential Lighting.
- 25 The proposed target is set at 100% of the net annual MWh savings goal from programs

d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 9 Page 5 of 10

1 other than Residential Lighting. The goal is set as a MWh target for savings from

2 programs other than Residential Lighting, rather than a percentage of sector savings,

because of the individual characteristics of the various programs. There is no threshold

for this metric. Without a threshold, this becomes an "all-or-nothing" performance

5 metric. The parties propose this treatment because it efficiently complements the MWh

6 savings incentive for this sector. Recognizing the difficulty in predicting customer

demand for program services in these residential programs, this will be a challenging goal

8 to achieve.

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Metric Performance: The following is for achievement of the target savings from

residential programs other than the Residential Lighting Program.

There is no threshold for this metric.

12

RESIDENTIAL OTHER PROGRAM SAVINGS						
Performance	Annual MWh Savings	Incentive	% of Incentive			
Target	3,935 MWh (100% of MWh goal) ¹	\$20,000	100%			

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C&I Metric 1: Savings Other Than Prescriptive Lighting Savings in the Energy

Initiative Program

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Metric: The Company will achieve a target amount of MWh savings from subprograms other than prescriptive lighting in the Energy Initiative program in 2008. The target will be calculated as the net annual MWh savings from all other subprograms² estimated as part of the planned savings for the Energy Initiative program in 2008.

23

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¹ This target is based on program savings estimates contained in Attachment 10, page 2; it may be changed by September 30, 2008, as noted above.

² For the 2007 Energy Initiative Program, subprograms include Compressed Air, Custom, HVAC, Lighting, and VSDs.

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1 <u>Objective:</u> This metric encourages the Company to seek comprehensive retrofit projects

in existing Commercial and Industrial customer facilities that go beyond prescriptive

3 lighting.

4

2

Discussion: The percentage of savings from prescriptive lighting in the Energy Initiative
 Program has been increasing over the past few years. This type of measure distribution

7 has helped the Company achieve savings goals but this has perhaps been achieved at the

8 expense of measure diversity. This metric complements and reinforces the overall

9 program savings goals by establishing a performance metric focusing on other

subprogram savings. The metric incentive will only be earned only if other subprogram

savings meets or exceeds 100% of the kWh savings built into the savings goals.

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As mentioned above, the proposed target is 100% of the MWh savings from all Energy Initiative subprograms except prescriptive lighting consistent with the savings goals for 2007. The goal is set as a MWh target for savings, rather than a percentage of program savings, because this provides a clearer target than a percentage, which would be affected by how much prescriptive lighting savings are achieved. There is no threshold for this metric. Without a threshold, this becomes an "all-or-nothing" performance metric. The parties propose this treatment because it efficiently complements the MWh savings incentive for this sector. The Company will share quarterly subprogram MWh savings information with the Collaborative to track metric performance.

22

23

24

<u>Metric Performance:</u> The following is for achievement of the target savings from Energy Initiative other than prescriptive-lighting.

25

ENERGY INITIATIVE OTHER SUBPROGRAM SAVINGS											
Performance	Performance MWh Savings Incentive % of Incentive										
Target											

-

³ This target is based on program savings estimates embedded in Attachment 10, page 2; it may be changed by September 30, 2008, as noted above.

d/b/a National Grid R.I.P.U.C. Docket No. 3892 Attachment 9 Page 7 of 10

1	There is no threshold for this metric.
2	
3	C&I Metric 2: High Performance Schools
4	
5	Metric: The Company will contract with public or private school projects through
6	Design 2000plus to provide full incremental cost for high performance design and
7	construction practices for new construction or major renovations with a special focus or
8	high quality energy efficient lighting. It shall contract with 2 schools in 2008 more than
9	were contracted with in 2007.
10	
11	Objective: This market capitalizes on the window of opportunity available when school
12	facilities are being built or renovated to increase program participation and energy
13	savings. It assists a portion of the municipal sector that faces continuing funding
14	challenges.
15	
16	<u>Discussion:</u> Schools present unique opportunities to not only adopt energy efficiency but
17	to enhance student learning through better classroom design. This metric provides
18	technical and financial support from the very beginning of school construction projects
19	emphasizes thermal, acoustic, and visual comfort, especially in lighting design, and helps
20	cities and towns construct new schools that are high quality, environmentally sensitive
21	and cost less to operate.
22	
23	According to documents from the Department of Education, on average, funding is
24	approved for approximately 15 public school projects per year. In the period 2001
25	through 2006, 11 schools, or 12% (of approximately 90 schools), have participated in the
26	Schools Initiative. ⁴

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⁴ Some of the approved public school projects may be for projects that may not be suitable for the Schools Initiative, in other words, projects that do not involve new construction or major renovation. These may be for partial facility construction, minor renovations, or equipment replacement at the end of its useful life.

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1

The Company placed under contract 1 school in each of 2004 and 2005, and zero schools in 2006, and expects two schools to be placed under contract in 2007. This indicates the continuing difficulty in recruiting customers to this initiative considering the small number of new schools built each year, the long project development schedules, and the current economic climate, particularly for municipalities. The parties agree to set the threshold equal to the final number of number of schools placed under contract in 2007 and the target at the 2007 participation level plus two additional schools.

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For 2008, the Company will continue to work with the Rhode Island Department of Elementary and Secondary Education to help identify additional participants. The Company has not yet been able to identify a single source of data that tracks funding of private school construction. Nevertheless, the Company will use the same level of effort to offer the program to private schools as to public schools and include contracts with private schools in the performance metric for 2008.

1617

<u>Partial Performance</u>: Based on historic performance, the small size of the eligible market and the uncertainty about the potential in the private school sector, the following is proposed for partial achievement toward the target of three schools.

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SCHOOLS INITIATIVE										
Performance	Signed Agreements	Incentive	% of Incentive							
Threshold	2007 participation	\$10,000	50%							
Intermediate	2007 participation + 1 school	\$15,000	75%							
Target	2007 participation + 2 schools	\$20,000	100%							

21 22

C&I Metric 3: Comprehensiveness in Small Business Installations

d/b/a National Grid R.I.P.U.C. Docket No. 3892 **Attachment 9** Page 9 of 10

1	Metric: The Company will achieve 6% greater MWh savings from completed measures
2	other than prescriptive lighting and refrigeration in Small Business Services in 2008 than
3	it achieved in 2007.
4	
5	Objective: This metric continues to encourage the Company to add other electrical
6	efficiency opportunities beyond lighting and refrigeration retrofits to the Small Business
7	Services program. These improvements to program design support more
8	comprehensiveness in customers' facilities and expand the depth and appeal of the
9	program.
10	
11	Discussion: In 2004 through 2006, the Parties established and achieved a metric target of
12	comprehensiveness, determined by the percentage of custom applications. With
13	increased vendor experience in identifying and delivering non-lighting measures, it is
14	appropriate to focus the metric on savings.
15	
16	Small Business Services projects are tracked in nine categories. For the purposes of this
17	metric, "comprehensive" will be defined as only those savings from the Custom,
18	Thermostats, Hot Water Heater Wrap, Hot Water Heater Pump Controls, and HVAC
19	Tune-up categories ⁵ . Lighting Controls and Lighting Systems are the end uses that have
20	dominated savings. Coolers and Custom Coolers are excluded because they deal with a
21	very specific end use with finite savings opportunities and are typically installed by a
22	separate vendor.
23	
24	The Company proposes to set the target in 2008 at a 6% increase in comprehensive end
25	use MWh compared to 2007. The Company believes that good progress has been made
26	in small business comprehensive implementation, but that more progress remains to be
27	made. The 6 percentage point increase will be a challenge because it continues to be a

⁵ No savings have been recorded in the Hot Water Heater Wrap, Hot Water Heater Pump Controls, HVAC Tune-up categories at least since 2004.

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1 challenge for the implementation vendor to cost effectively manage the implementation

2 of custom measures while managing the budget and achieving savings targets. The target

3 is not a percentage of total savings in the program because the recent increase in the

eligibility ceiling to 200 kW demand has lead to an increase in MWh savings from

5 lighting as well.

6

4

7 As in 2007, the metric specifies completed projects to put the tracking of

8 comprehensiveness on equal footing with other results that are tracked throughout the

9 years, and to eliminate the potential for counting a comprehensive project in two years.

10 Also, as in 2007, the Company will exclude from this metric and assessment of its

performance toward the customers who participate in the RIOER's ESCO program.

1213

<u>Partial Performance</u>: Based on historic performance, the following is proposed for partial

achievement toward the target.

15

SBS COMPREHENSIVENESS										
Performance	Comprehensive MWh	Incentive	% of Incentive							
Threshold	XXX MWh (equal to 2007) ⁶	\$10,000	50%							
Target	XXX MWh (6 percent increase in	\$20,000	100%							
	MWh above 2007)									

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The incentive for performance between the threshold and the target will be scaled

18 proportionately.

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⁶ The target will be initially set at year end 2007 based on results available at that time.	This target may be
changed by September 30, 2008, as noted above.	

R.I.P.U.C Docket No. 3892

Attachment 10

Calculation of 2008 Program Year Cost-Effectiveness and Goals

Page 1 of 3

2008 RHODE ISLAND BENEFIT COST TEST

Summary of Benefit, Expenses, Evaluation Costs (\$000)

			ı		
	D1 1. T.1 1		D		
	Rhode Island Benefit/	Total	Program	Evaluation	Shareholder
	Cost (2)	1 otai Benefit	Implementation Expenses	Evaluation Cost	Incentive (3)
I C	Cost (2)	Бенені	Expenses	Cost	incentive (3)
Large Commercial & Industrial	- 10	*10.710.1	** ** *	**=	
Design 2000plus	7.40	\$18,510.1	\$2,328.9	\$173.6	NA
Energy Initiative	8.21	\$28,502.0	\$3,340.5	\$131.0	NA
Energy Efficiency and Resources Management Council - Large C&I	NA	NA	\$111.8	\$0.0	NA
SUBTOTAL	7.41	\$47,012.1	\$5,781.2	\$304.6	\$261.6
Small Commercial & Industrial					
Small Business (1)	4.54	\$14,905.8	\$3.257.7	\$28.5	NA
Energy Efficiency and Resources Management Council - Small C&I	NA	NA	\$80.5	\$0.0	NA NA
SUBTOTAL	4.24	\$14,905.8	\$3,338.2	\$28.5	\$149.5
Residential Programs					
Residential Programs IN-HOME SERVICES	1.69	\$5,324.5	\$3,137.8	\$19.5	NA
	1.69 1.54	\$5,324.5 \$2,557.7	\$3,137.8 \$1,662.7	\$19.5 \$1.3	NA NA
IN-HOME SERVICES		. ,	1.7		
IN-HOME SERVICES EnergyWise Program	1.54	\$2,557.7	\$1,662.7	\$1.3	NA
IN-HOME SERVICES EnergyWise Program Low Income Services	1.54 1.85	\$2,557.7 \$2,766.8	\$1,662.7 \$1,475.1	\$1.3 \$18.2	NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES	1.54 1.85 8.33	\$2,557.7 \$2,766.8 \$11,489.9	\$1,662.7 \$1,475.1 \$1,332.4	\$1.3 \$18.2 \$47.0	NA NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances	1.54 1.85 8.33 4.83	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1	\$1.3 \$18.2 \$47.0 \$0.3	NA NA NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances ENERGY STAR Heating System	1.54 1.85 8.33 4.83 7.57	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8 \$754.4	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1 \$99.6	\$1.3 \$18.2 \$47.0 \$0.3 \$0.0	NA NA NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances ENERGY STAR Heating System ENERGY STAR Air Conditioning	1.54 1.85 8.33 4.83 7.57 1.86	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8 \$754.4 \$579.8	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1 \$99.6 \$297.8	\$1.3 \$18.2 \$47.0 \$0.3 \$0.0 \$13.4	NA NA NA NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances ENERGY STAR Heating System ENERGY STAR Air Conditioning Residential Lighting NEW CONSTRUCTION Energy Efficiency Education Programs	1.54 1.85 8.33 4.83 7.57 1.86	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8 \$754.4 \$579.8 \$8,659.9	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1 \$99.6 \$297.8 \$625.9	\$1.3 \$18.2 \$47.0 \$0.3 \$0.0 \$13.4 \$33.3	NA NA NA NA NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances ENERGY STAR Heating System ENERGY STAR Air Conditioning Residential Lighting NEW CONSTRUCTION	1.54 1.85 8.33 4.83 7.57 1.86 13.14 3.07	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8 \$754.4 \$579.8 \$8,659.9 \$2,202.2	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1 \$99.6 \$297.8 \$625.9 \$716.3	\$1.3 \$18.2 \$47.0 \$0.3 \$0.0 \$13.4 \$33.3 \$0.4	NA NA NA NA NA NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances ENERGY STAR Heating System ENERGY STAR Air Conditioning Residential Lighting NEW CONSTRUCTION Energy Efficiency Education Programs	1.54 1.85 8.33 4.83 7.57 1.86 13.14 3.07 NA	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8 \$754.4 \$579.8 \$8,659.9 \$2,202.2 NA	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1 \$99.6 \$297.8 \$625.9 \$716.3 \$31.2	\$1.3 \$18.2 \$47.0 \$0.3 \$0.0 \$13.4 \$33.3 \$0.4 NA	NA
IN-HOME SERVICES EnergyWise Program Low Income Services PRODUCTS & SERVICES Energy Star Appliances ENERGY STAR Heating System ENERGY STAR Air Conditioning Residential Lighting NEW CONSTRUCTION Energy Efficiency Education Programs Energy Efficiency and Resources Management Council - Residential	1.54 1.85 8.33 4.83 7.57 1.86 13.14 3.07 NA	\$2,557.7 \$2,766.8 \$11,489.9 \$1,495.8 \$754.4 \$579.8 \$8,659.9 \$2,202.2 NA	\$1,662.7 \$1,475.1 \$1,332.4 \$309.1 \$99.6 \$297.8 \$625.9 \$716.3 \$31.2 \$124.1	\$1.3 \$18.2 \$47.0 \$0.3 \$0.0 \$13.4 \$33.3 \$0.4 NA \$0.0	NA N

Notes:

- 1) Small Business program expenses are net of the projected customer co-pay for 2008 installations (\$1,006,205).
- 2) RI B/C Test = (Energy + Capacity + Participant Resource Benefits) / (Program Implementation + Evaluation Costs + Shareholder Incentive)
- 3) See Attachment 8.

R.I.P.U.C Docket No. 3892

Attachment 10

Calculation of 2008 Program Year Cost-Effectiveness and Goals

Page 2 of 3

2008 RHODE ISLAND BENEFIT COST TEST

Summary of Expenses, Benefit, kW, and kWh by Program

Γ					Benefit	ts (000's)					Load	Reduction	in kW	MWh	MWh Saved	
			Capa	icity			Ene	rgy								
		Gener				Win	nter	Sum	nmer	Participant				Maximum		
	Total	Summer	Winter	Trans	MDC	Peak	Off Peak	Peak	Off Peak	Resource	Summer	Winter	Lifetime	Annual	Lifetime	
Large Commercial & Industrial																
Design 2000plus	\$18,510	3,663	\$0	\$1,100	\$2,205	\$5,018	\$2,534	\$2,770	\$1,220	\$0	2,016	1,154	32,346	9,157	143,895	
Energy Initiative	28,502	5,296	0	1,598	3,203	6,122	4,418	5,754	2,111	0	3,592	2,565	44,818	21,039	264,387	
SUBTOTAL	\$47,012	\$8,959	\$0	\$2,698	\$5,408	\$11,140	\$6,952	\$8,524	\$3,330	\$0	5,608	3,719	77,165	30,196	408,282	
					•		•				•					
Small Commercial & Industrial																
Small Business	14,906	3,024	0	913	1,830	4,138	1,842	2,279	879	0	2,094	1,067	25,484	8,698	105,864	
SUBTOTAL	\$14,906	\$3,024	\$0	\$913	\$1,830	\$4,138	\$1,842	\$2,279	\$879	\$0	2,094	1,067	25,484	8,698	105,864	
Residential Programs																
IN-HOME SERVICES	\$5,324	\$357	\$0	\$108	\$315	\$907	\$1,000	\$526	\$470	\$1,641	236	493	3,051	2,820	36,991	
EnergyWise Program	2,558	211	0	64	186	626	697	370	325	79	131	292	1,790	1,875	25,910	
Low Income Services	2,767	146	0	44	130	281	303	156	145	1,562	105	201	1,261	945	11,082	
PRODUCTS & SERVICES	\$11,490	\$1,082	\$0	\$333	\$971	\$2,410	\$2,686	\$1,559	\$1,256	\$1,194	1,132	3,009	8,808	12,555	83,271	
Energy Star Products	1,496	232	0	70	204	125	139	114	76	536	153	60	1,937	415	5,724	
Energy Star Heating System	754	11	0	3	10	38	12	17	6	657	6	4	100	50	896	
Energy Star Air Conditioning	580	209	0	65	190	8	2	84	22	0	192	4	1,804	116	1,216	
Residential Lighting	8,660	630	0	194	567	2,239	2,533	1,344	1,153	0	782	2,942	4,967	11,974	75,435	
NEW CONSTRUCTION	2,202	333	0	100	291	134	150	80	69	1,046	149	111	3,188	534	5,246	
SUBTOTAL	\$19,017	\$1,772	\$0	\$540	\$1,578	\$3,451	\$3,836	\$2,164	\$1,796	\$3,880	1,517	3,613	15,047	15,909	125,508	
					•		•				•					
TOTAL	\$80,935	\$13,755	\$0	\$4,152	\$8,815	\$18,730	\$12,631	\$12,967	\$6,005	\$3,880	9,219	8,399	117,696	54,803	639,655	

R.I.P.U.C Docket No. 3892

Attachment 10

Calculation of 2008 Program Year Cost-Effectiveness and Goals

Page 3 of 3

Γ	Propose	ed 2008	20	007	Diffe	erence
	Annual		Annual		Annual	
	Energy		Energy		Energy	
	Savings		Savings		Savings	
	(MWh)	Participants	(MWh)	Participants	(MWh)	Participants
Program						
Large Commercial & Industrial						
Design 2000plus	9,157	159	9,453	182	(296)	(23)
Energy Initiative	21,039	145	21,944	234	(905)	(89)
SUBTOTAL	30,196	304	31,397	416	(1,201)	(112)
Small Commercial & Industrial						
Small Business Services	8,698	542	8,683	508	15	34
SUBTOTAL	8,698	542	8,683	508	15	34
Residential Programs						
IN-HOME SERVICES						
Energy Wise	1,875	2,962	3,241	4,965	(1,367)	(2,003)
Low Income Services	945	806	1,393	1,180	(448)	(374)
PRODUCTS & SERVICES						
ENERGY STAR® Appliances	415	3,750	1,288	5,800	(873)	(2,050)
ENERGY STAR® Heating Program	50	423	70	580	(20)	(157)
ENERGY STAR® Central Air Conditioning Program	116	620	42	268	73	352
ENERGY STAR® Lighting	11,974	51,650	15,966	68,864	(3,991)	(17,214)
NEW CONSTRUCTION	534	335	495	225	39	110
SUBTOTAL	15,909	60,546	22,495	81,882	(6,586)	(21,336)
	· · · · · · · · · · · · · · · · · · ·	•	· · · · · · · · · · · · · · · · · · ·		<u>'</u>	
TOTAL	54,803	61,392	62,575	82,806	(7,772)	(21,414)

Attachment 11 page 1 of 4

ELECTRIC AND OTHER FUEL AVOIDED COSTS FOR RHODE ISLAND

ELECTRIC AVOIDED COSTS FOR RHODE ISLAND

WHOLESALE POWER PRICE (Columns 1 through 10) FROM 2007 AVOIDED ENERGY SUPPLY COMPONENT STUDY, IN 2007\$ EXHIBIT E-1 RI-C\$

TRANSMISSION AND DISTRIBUTION CAPACITY VALUES (Columns 11, 12 and 13) FROM COMPANY ANALYSIS, IN 2007\$

	1	2	3	4	5	6	7	8	9	10	11	12	13
				Wholesal	e Power Pri	ce, Consta	nt Dollars				T&D C	APACITY V	ALUES
		R	Rhode Islan	d			DRIPE for	Installatio	ns in 2008				
	Winter Peak Energy	Winter Off- Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Winter Peak Energy	Winter Off- Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Avoided Trans. Capacity Value	Avoided Res Distr. Capacity Value	Avoided C&I Distr. Capacity Value
Units:	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kW-yr	\$/kW-yr	\$/kW-yr
Period:	φ/κττι	ψηκτι	ψ/ιττιι	Ψ/πτττι	ψ/κττ y	ψητιστι	ψ/ΚΨΠ	ψητιντι	Ψ/ΙζΤΙΙΙ	φ/κττ γ.	ψ/κττ y:	ψ/κττ y.	ψ/κττ y.
2007	0.092	0.067	0.093	0.070	-						37.4	109.2	74.9
2008	0.105	0.077	0.096	0.072	-	0.015	0.012	0.024	0.010	-	38.8	113.3	77.8
2009	0.096	0.074	0.097	0.067	-	0.043	0.035	0.070	0.031	-	38.8	113.3	77.8
2010	0.096	0.071	0.097	0.065	60.5	0.040	0.033	0.066	0.030	72	38.8	113.3	77.8
2011	0.092	0.067	0.095	0.063	109.1	0.025	0.020	0.040	0.018	140	38.8	113.3	77.8
2012	0.093	0.069	0.095	0.065	122.1					90	38.8	113.3	77.8
2013	0.087	0.064	0.092	0.063	129.6					40	38.8	113.3	77.8
2014	0.090	0.064	0.092	0.063	129.6						38.8	113.3	77.8
2015	0.089	0.064	0.096	0.062	129.6						38.8	113.3	77.8
2016	0.090	0.066	0.098	0.066	129.6						38.8	113.3	77.8
2017	0.093	0.068	0.101	0.066	129.6						38.8	113.3	77.8
2018	0.092	0.067	0.098	0.067	129.6						38.8	113.3	77.8
2019	0.092	0.066	0.101	0.067	129.6						38.8	113.3	77.8
2020	0.092	0.068	0.102	0.068	129.6						38.8	113.3	77.8
2021	0.093	0.069	0.106	0.067	129.6						38.8	113.3	77.8
2022	0.098	0.069	0.108	0.070	129.6						38.8	113.3	77.8
2023	0.099	0.070	0.109	0.071	129.6						38.8	113.3	77.8
2024	0.100	0.071	0.111	0.072	129.6						38.8	113.3	77.8
2025	0.102	0.072	0.113	0.073	129.6						38.8	113.3	77.8
2026	0.103	0.073	0.114	0.074	129.6						38.8	113.3	77.8
2027	0.105	0.074	0.116	0.075	129.6						38.8	113.3	77.8
2028	0.106	0.075	0.118	0.076	129.6						38.8	113.3	77.8
2029	0.108	0.076	0.119	0.077	129.6						38.8	113.3	77.8
2030	0.109	0.077	0.121	0.078	129.6						38.8	113.3	77.8
2031	0.111	0.079	0.123	0.080	129.6						38.8	113.3	77.8
2033	0.114	0.081	0.126	0.082	129.6						38.8	113.3	77.8
2035	0.118	0.083	0.130	0.084	129.6						38.8	113.3	77.8
2037	0.121	0.086	0.134	0.087	129.6						38.8	113.3	77.8
2039	0.125	0.088	0.138	0.089	129.6						38.8	113.3	77.8
2040	0.126	0.089	0.140	0.091	129.6						38.8	113.3	77.8
Levelized													
(2008-2040)	0.101	0.073	0.109	0.072	114.9	0.005	0.004	0.008	0.004	13.4	38.8	113.3	77.8
5 years (2008-12)	0.096	0.072	0.096	0.067	56.8	0.025	0.020	0.040	0.018	59.0	38.8	113.3	77.8
10 years (2008-17)	0.093	0.068	0.096	0.065	91.2	0.013	0.011	0.021	0.010	35.1	38.8	113.3	77.8
15 years (2008-22)	0.093	0.068	0.098	0.066	102.6	0.009	0.007	0.015	0.007	24.6	38.8	113.3	77.8

Notes:

- 1) All Avoided Costs are in Year 2007 Dollars; Peak hours are: Monday through Friday 6am 10pm; Off-Peak Hours are: All other hours
- 2) Summer for energy values includes June through September; Winter is all other months
- 3) Wholesale power prices include Retail Adder of 10%
- 4) Real escalation of 1.9% from 2007 to 2008 used in cost-effectivenss models
- 5) Levelized values calculated using real discount rate of
- 6) All Wholesale Power Prices include losses on the ISO-administered Transmission System. DSM savings should include distribution and local transmission losses

ELECTRIC AND OTHER FUEL AVOIDED COSTS FOR RHODE ISLAND

ELECTRIC AVOIDED COSTS FOR RHODE ISLAND USED IN B/C MODEL FOR 2008 RESIDENTIAL PROGRAMS From Page 1 of 4, including residential loss factors

2007\$ escalated 1.9% real to 2008\$

				Wholesal	e Power Pri	ce, Consta	, Constant Dollars					T&D CAP. VALUES	
		F	Rhode Islan	d			DRIPE for	r Installatio	ns in 2008				
	Winter Peak Energy	Winter Off- Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Winter Peak Energy	Winter Off- Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Avoided Trans. Capacity Value	Avoided Res Distr. Capacity Value	
Units:	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kW-yr	\$/kW-yr	
Period:													
2008	0.115	0.081	0.105	0.076	0.0	0.016	0.013	0.026	0.011	0.0	44.0	128.4	
2009	0.105	0.078	0.106	0.071	0.0	0.047	0.037	0.077	0.033	0.0	44.0	128.4	
2010	0.105	0.075	0.106	0.069	68.6	0.044	0.035	0.072	0.032	81.6	44.0	128.4	
2011	0.100	0.071	0.104	0.066	123.6	0.027	0.021	0.044	0.019	158.6	44.0	128.4	
2012	0.101	0.073	0.104	0.069	138.3	0.000	0.000	0.000	0.000	102.0	44.0	128.4	
2013	0.095	0.067	0.100	0.067	146.9	0.000	0.000	0.000	0.000	45.3	44.0	128.4	
2014	0.099	0.068	0.101	0.067	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2015	0.097	0.068	0.105	0.066	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2016	0.099	0.070	0.107	0.070	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2017	0.102	0.072	0.110	0.070	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2018	0.100	0.071	0.107	0.071	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2019	0.100	0.070	0.110	0.071	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2020	0.100	0.072	0.112	0.072	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2021	0.101	0.073	0.115	0.071	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2022	0.107	0.073	0.118	0.074	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2023	0.108	0.074	0.120	0.075	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2024	0.110	0.075	0.121	0.076	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2025	0.111	0.076	0.123	0.077	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2026	0.113	0.077	0.125	0.078	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2027	0.115	0.079	0.127	0.080	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2028	0.116	0.080	0.128	0.081	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2029	0.118	0.081	0.130	0.082	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2030	0.120	0.082	0.132	0.083	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2031	0.121	0.083	0.134	0.084	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2032	0.123	0.084	0.136	0.086	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2033	0.125	0.086	0.138	0.087	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2034	0.127	0.087	0.140	0.088	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2035	0.129	0.088	0.142	0.089	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2036	0.130	0.089	0.144	0.091	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2037	0.132	0.091	0.146	0.092	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2038	0.134	0.092	0.148	0.093	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2039	0.136	0.093	0.150	0.095	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	
2040	0.138	0.095	0.153	0.096	146.9	0.000	0.000	0.000	0.000	0.0	44.0	128.4	

ELECTRIC AND OTHER FUEL AVOIDED COSTS FOR RHODE ISLAND

ELECTRIC AVOIDED COSTS FOR RHODE ISLAND USED IN B/C MODEL FOR 2008 C&I PROGRAMS From Page 1 of 4, including C&I loss factors 2007\$ escalated 1.9% real to 2008\$

				Wholesal	e Power Pri	ce, Consta	nt Dollars				T&D CAP. VALUES	
		F	Rhode Islan	d			DRIPE for	r Installatio	ns in 2008			
	Winter Peak Energy	Winter Off- Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Winter Peak Energy	Winter Off- Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Avoided Trans. Capacity Value	Avoided C&I Distr. Capacity Value
Units:	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kW-yr	\$/kW-yr
Period:		•							•	•	•	
2008	0.113	0.081	0.104	0.075	0.000	0.016	0.012	0.026	0.011	0.000	43.297	115.491
2009	0.104	0.077	0.105	0.071	0.000	0.046	0.036	0.076	0.033	0.000	43.297	115.491
2010	0.103	0.074	0.105	0.068	67.504	0.043	0.034	0.071	0.031	80.338	43.297	115.491
2011	0.099	0.071	0.103	0.066	121.748	0.026	0.021	0.043	0.019	156.213	43.297	115.491
2012	0.100	0.072	0.103	0.069	136.213	0.000	0.000	0.000	0.000	100.422	43.297	115.491
2013	0.094	0.067	0.099	0.066	144.651	0.000	0.000	0.000	0.000	44.632	43.297	115.491
2014	0.098	0.067	0.100	0.067	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2015	0.096	0.067	0.104	0.065	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2016	0.097	0.069	0.105	0.069	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2017	0.101	0.071	0.109	0.070	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2018	0.099	0.071	0.106	0.071	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2019	0.099	0.070	0.109	0.070	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2020	0.099	0.071	0.110	0.071	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2021	0.100	0.073	0.114	0.071	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2022	0.105	0.072	0.116	0.073	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2023	0.107	0.073	0.118	0.074	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2024	0.108	0.075	0.120	0.075	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2025	0.110	0.076	0.122	0.077	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2026	0.112	0.077	0.123	0.078	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2027	0.113	0.078	0.125	0.079	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2028	0.115	0.079	0.127	0.080	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2029	0.116	0.080	0.129	0.081	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2030	0.118	0.081	0.131	0.082	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2031	0.120	0.082	0.132	0.084	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2032	0.122	0.084	0.134	0.085	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2033	0.123	0.085	0.136	0.086	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2034	0.125	0.086	0.138	0.087	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2035	0.127	0.087	0.140	0.088	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2036	0.129	0.089	0.142	0.090	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2037	0.131	0.090	0.144	0.091	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2038	0.133	0.091	0.147	0.092	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2039	0.134	0.092	0.149	0.094	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491
2040	0.136	0.094	0.151	0.095	144.651	0.000	0.000	0.000	0.000	0.000	43.297	115.491

ELECTRIC AND OTHER FUEL AVOIDED COSTS FOR RHODE ISLAND

Avoided Cost of Fuels Delivered to Retail Customers in Southern New England by End Use in 2008\$ USED IN B/C MODEL FOR 2008 RESIDENTIAL PROGRAMS FROM 2007 AVOIDED ENERGY SUPPLY COMPONENT STUDY, EXHIBITS B-5 and F-1 in 2007\$ 2007\$ escalated 1.9% real to 2008\$

	NATURAL GAS (FROM EXHIBIT B-5)				OTHER FUELS (FROM EXHIBIT F-1)						i i
	Existing	New	Hot		ALL	Distillate	Propane	Kerosene	BioFuel	BioFuel	Wood
	Heating	Heating	Water	All	RETAIL	Retail	Retail	Retail			Retail
	3-mon.	5-mon.	annual	6-mon.	5-mon.	Residential	Residential	Res & Com	B5 Blend	B20 Blend	Residential
Year	\$/Dth	\$/Dth	\$/Dth	\$/Dth	\$/Dth	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu
2007	13.67	13.44	12.18	10.99	12.27	16.14	27.32	16.79	16.14	16.14	5.78
2008	14.78	14.54	13.21	12.07	13.37	16.74	29.30	17.42	16.74	16.74	6.00
2009	14.20	13.96	12.67	11.50	12.80	16.35	29.52	17.01	16.35	16.35	5.86
2010	13.59	13.36	12.11	10.91	12.19	15.87	29.99	16.51	15.87	15.87	5.68
2011	13.07	12.84	11.62	10.40	11.67	15.39	30.27	16.01	15.39	15.39	5.51
2012	12.67	12.44	11.25	10.01	11.27	14.95	30.65	15.55	14.95	14.95	5.36
2013	11.94	11.72	10.57	9.30	10.55	14.49	30.17	15.07	14.49	14.49	5.19
2014	12.00	11.78	10.64	9.37	10.62	14.30	30.19	14.87	14.30	14.30	5.12
2015	11.95	11.73	10.59	9.32	10.56	14.36	30.11	14.94	14.36	14.36	5.14
2016	12.11	11.89	10.73	9.47	10.72	14.43	30.17	15.01	14.43	14.43	5.17
2017	12.40	12.18	11.00	9.76	11.01	14.56	30.42	15.14	14.56	14.56	5.21
2018	12.31	12.09	10.92	9.67	10.92	14.70	30.33	15.29	14.70	14.70	5.26
2019	12.26	12.04	10.87	9.62	10.87	14.83	30.26	15.42	14.83	14.83	5.31
2020	12.40	12.17	11.00	9.75	11.01	14.96	30.37	15.56	14.96	14.96	5.36
2021	12.52	12.29	11.11	9.87	11.13	15.16	30.24	15.77	15.16	15.16	5.43
2022	12.81	12.58	11.38	10.15	11.42	15.36	30.39	15.98	15.36	15.36	5.50
2023	12.94	12.71	11.50	10.26	11.53	15.56	30.54	16.19	15.56	15.56	5.57
2024	13.07	12.84	11.61	10.36	11.65	15.76	30.58	16.39	15.76	15.76	5.64
2025	13.20	12.96	11.73	10.46	11.76	15.96	30.59	16.60	15.96	15.96	5.72
2026	13.33	13.09	11.85	10.57	11.88	16.09	30.62	16.74	16.09	16.09	5.76
2027	13.47	13.22	11.97	10.67	12.00	16.23	30.73	16.88	16.23	16.23	5.81
2028	13.60	13.36	12.08	10.78	12.12	16.36	30.89	17.01	16.36	16.36	5.86
2029	13.74	13.49	12.21	10.89	12.24	16.49	30.98	17.15	16.49	16.49	5.91
2030	13.87	13.63	12.33	11.00	12.36	16.62	31.02	17.29	16.62	16.62	5.95
2031	14.01	13.76	12.45	11.11	12.49	16.79	31.33	17.46	16.79	16.79	6.01
2032	14.15	13.90	12.58	11.22	12.61	16.96	31.65	17.64	16.96	16.96	6.07
2033	14.29	14.04	12.70	11.33	12.74	17.13	31.96	17.82	17.13	17.13	6.13
2034	14.44	14.18	12.83	11.44	12.87	17.30	32.28	17.99	17.30	17.30	6.20
2035	14.58	14.32	12.96	11.56	12.99	17.47	32.61	18.17	17.47	17.47	6.26
2036	14.73	14.46	13.09	11.67	13.12	17.65	32.93	18.36	17.65	17.65	6.32
2037	14.87	14.61	13.22	11.79	13.26	17.82	33.26	18.54	17.82	17.82	6.38
2038	15.02	14.75	13.35	11.91	13.39	18.00	33.59	18.72	18.00	18.00	6.45
2039	15.17	14.90	13.48	12.03	13.52	18.18	33.93	18.91	18.18	18.18	6.51