

August 31, 2006

**VIA HAND DELIVERY & ELECTRONIC MAIL**

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

**RE: Renewable Energy Standard (“RES”) Charge Filing**

Dear Ms. Massaro:

In accordance with the Renewable Energy Standard (“RES”) law, R.I.G.L. § 39-26-1 et seq., the Rhode Island Public Utilities Commission’s (“Commission”) Rules and Regulations Governing the Implementation of an RES, as well as Rule 1.9 of the Commission’s Rules of Practice and Procedure, The Narragansett Electric Company d/b/a National Grid (“National Grid” or “Company”) proposes an RES Charge of 0.062¢ per kWh effective January 1, 2007 applicable to both the Last Resort Service and Standard Offer Service rates.

Under the RES law and Commission regulations, beginning on January 1, 2007, National Grid is required to obtain three percent (3%) of its energy supply from a mix of new and existing renewable energy resources for calendar year 2007. The proposed RES Charge is designed through a combination of renewable procurement sources to satisfy the Company’s obligation. The proposed RES Charge is a proxy to be used in advance of the Company’s actual procurement costs. The RES Charge will be reconciled to actual costs incurred to meet the RES obligation.

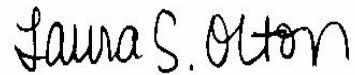
This filing contains testimony and exhibits of John D. Warshaw in support of the RES Charge. Mr. Warshaw’s testimony contains the explanation and analysis of the Company’s obligations in Rhode Island, the Company’s experience in other jurisdictions, and the calculation of the proposed RES Charge.

This filing also contains redlined versions of three tariff pages that must be amended as a result of the implementation of the RES and RES Charge. Specifically, the tariffs include revised language in the descriptions of the Standard Offer Service charge and Last Resort Service charge to include the costs to comply with the RES in the rate. The Company has also amended the language contained in the Standard Offer Adjustment Provision to specify that RES costs are included. Additionally, for clarification purposes, the Company has included language to these tariff pages to include the cost to comply with the Energy Source Disclosure requirement, in accordance with R.I.G.L. § 39-26-9(c). As part of this filing, National Grid seeks approval of the language contained in these three amended tariff pages.

Luly Massaro, Commission Clerk  
RES Charge Filing  
August 31, 2006  
Page 2 of 2

Thank you for your attention to this matter. If you have any questions, please feel free to contact me at (401) 784-7667.

Very truly yours,

A handwritten signature in black ink that reads "Laura S. Olton". The signature is written in a cursive, slightly slanted style.

Laura S. Olton

Enclosures

cc: Paul Roberti, Esq.  
Steve Scialabba, Division

The Narragansett Electric Company d/b/a National Grid

Docket No. \_\_\_\_\_

Renewable Energy Standard Charge  
Testimony and Exhibits of J.D. Warshaw

**DIRECT TESTIMONY**

**AND EXHIBITS**

**OF**

**JOHN D. WARSHAW**

1 **I. Introduction**

2 Q. Please state your name and business address.

3 A. My name is John D. Warshaw, and my business address is 55 Bearfoot Road,  
4 Northborough, Massachusetts 01532.

5  
6 Q. Please state your position.

7 A. I am a Principal Analyst in Energy Supply – New England for National Grid USA  
8 Service Company, Inc. (“Company”) I conduct power procurement and energy supply  
9 related activities for the Company’ s New England operating affiliates, including The  
10 Narragansett Electric Company d/b/a National Grid (“National Grid”).

11  
12 Q. Will you describe your educational background and training?

13 A. I graduated from the State University of New York Maritime College in 1977 with a  
14 Bachelor of Science in Nuclear Science. I received a Masters in Business Administration  
15 from Northeastern University in 1986. In 1992, I earned a Masters of Arts in Energy and  
16 Environmental Management from Boston University.

17  
18 Q. What is your professional background?

19 A. In May 2000, I joined the Company as a Principal Analyst in Energy Supply – New  
20 England. In my position I have conducted a number of solicitations for wholesale power  
21 to meet the needs of the Company’s New England distribution affiliates. I have also  
22 conducted procurements of the Company’s Massachusetts affiliate to satisfy its statutory

1 renewable obligations. I administer both short-term and long-term power purchase  
2 agreements for the Company's New England distribution affiliates. Prior to my  
3 employment at the Company, I was employed at COM/Energy (now NSTAR) from 1992  
4 to 2000. From 1992 to 1997, I was a Rate Analyst in Regulatory Affairs at COM/Energy  
5 responsible for supporting state and federal rate filings. In 1997, I transferred to  
6 COM/Electric to work in Power Supply Administration.  
7

8 **II. Purpose of Testimony**

9 Q. What is the purpose of your testimony?

10 A. The purpose of my testimony is to provide the rationale for and request approval of a  
11 Renewable Energy Standard ("RES") Charge for both Last Resort Service and Standard  
12 Offer Service customers effective January 1, 2007.  
13

14 **III. Background**

15 Q. Why does National Grid need to propose the RES Charge beginning on January 1, 2007?

16 A. On June 29, 2004, the Rhode Island legislature enacted into law a Renewable Energy  
17 Standard (R.I. Gen. Laws § 39-26-1 et seq.). On December 8, 2005, the Public Utilities  
18 Commission ("Commission") issued final regulations implementing the RES effective  
19 January 1, 2006. Pursuant to the RES law and Commission regulations, beginning on  
20 January 1, 2007, National Grid is required to obtain 3% of its energy supply from a mix  
21 of new and existing renewable energy resources for calendar year 2007. The regulations  
22 require National Grid to annually submit a procurement plan to the Commission that  
23 demonstrates its procedures for obtaining resources that satisfy National Grid's RES

1 obligations. National Grid will file a plan in the fall of this year. Since this will be the  
2 first RES procurement plan to be filed under the regulations, National Grid expects the  
3 Commission will require time to review the plan. As a result, National Grid does not  
4 expect to begin making purchases until after the plan has been approved by the  
5 Commission, issued by National Grid, responses reviewed and contracts executed with  
6 winning suppliers. National Grid believes this will be sometime after January 1, 2007.  
7 Thus, National Grid is proposing an RES Charge that will be included in the Last Resort  
8 Service and Standard Offer Service rates to be effective simultaneously with the start of  
9 the RES obligation. The RES Charge will be reconcilable to actual costs incurred to  
10 meet the RES obligation.

11  
12 Q. How does National Grid expect to satisfy its RES obligations?

13 A. While the details will be included in the procurement plan, National Grid proposes to  
14 purchase the attributes of RES generation, consistent with the RES regulations. These  
15 attributes are available as Renewable Energy Certificates (“RECs”) in the wholesale  
16 marketplace. National Grid’s affiliate in Massachusetts has satisfied similar renewable  
17 portfolio standards by purchasing RECs. National Grid can also satisfy its obligations  
18 through an Alternative Compliance Payment (“ACP”) to the Rhode Island Renewable  
19 Energy Development Fund. This payment is intended to serve as an incentive for the  
20 development of renewable resources.

21  
22 Q. Why is National Grid proposing the RES Charge for Standard Offer Service customers?

1 A. National Grid's supply of Standard Offer Service is provided from a portfolio of long-  
2 term power purchase agreements that were executed prior to the implementation of the  
3 RES. These contracts do not include provisions for this new renewable obligation. As a  
4 result, National Grid's Standard Offer Service suppliers are not obligated to provide a  
5 supply that complies with the RES. Instead, National Grid must purchase RECs in order  
6 to satisfy the RES obligation.

7

8 Q. Why is National Grid proposing the RES Charge for Last Resort Service customers?

9 A. National Grid is currently in the process of procuring a new supply for its Last Resort  
10 Service customers. The current supply for Last Resort Service terminates on October 31,  
11 2006. The new supply will cover the period November 1, 2006 through April 30, 2007.  
12 Because National Grid does not yet have an approved procurement plan, it cannot request  
13 the new supplier(s) of Last Resort Service to include the cost of satisfying the RES  
14 obligation in their pricing. National Grid expects to complete its procurement of Last  
15 Resort Service and file new retail rates by the end of September.

16

17 Q. If the RES Charge will not be effective until January 1, 2007, why is National Grid  
18 proposing approval of the charge so many months in advance of that date?

19 A. The RES Charge will be applicable to both the Last Resort Service and Standard Offer  
20 Service rates. Many of our customers like to plan ahead regarding their energy charges  
21 for budgeting purposes. This is particularly the case for large commercial and industrial  
22 customers receiving Last Resort Service. National Grid typically requests approval of  
23 Last Resort Service rates covering six months. On August 14, 2006, the Company issued

1 an RFP for Last Resort Service and expects to be able to provide notice of Last Resort

2 Service rates for the subsequent six-month period on or about September 29, 2006.

3 When the Company makes those rates available to customers, it would like to be able to

4 include the RES Charge in the Last Resort Service rate. For that reason, the Company is

5 asking the Commission to establish the RES Charge at this time. National Grid is also

6 proposing to apply the same RES Charge applicable to Standard Offer Service on January

7 1, 2007.

8  
9 **IV. Proposed RES Charge**

10 Q. What is the RES obligation for 2007?

11 A. As specified in the RES law and Commission regulations, the RES obligation for  
12 calendar year 2007 is three percent (3%) of National Grid's Standard Offer and Last  
13 Resort Service load, inclusive of losses. Of this total, up to two percent (2%) of the RES  
14 obligation can be satisfied from Existing Renewable Energy Resources. The remaining  
15 one percent (1%) must be from New Renewable Energy Resources.

16  
17 Q. Since National Grid has not yet procured a supply of RES resources, what costs did  
18 National Grid use to develop its RES Charge?

19 A. As a proxy for actual RES costs, National Grid is proposing to use market prices for a  
20 similar product in another jurisdiction for RECs from Existing Renewable Energy  
21 Resources and the ACP to price RECs from New Renewable Energy Resources.

22



1 Q. Why is National Grid proposing to use the ACP to price RECs from New Renewable  
2 Energy Resources?

3 A. As shown in Exhibit JDW-1, New Renewable Energy Resources in Rhode Island are  
4 similar to New Renewable Generation Units in Massachusetts's Renewable Energy  
5 Portfolio Standard ("MA RPS").<sup>1</sup> National Grid's affiliate in Massachusetts,  
6 Massachusetts Electric Company, has been required to meet the RPS obligation starting  
7 in 2003. In both 2004 and 2005, load serving entities in Massachusetts were unable to  
8 purchase sufficient RECs to satisfy their MA RPS obligations and instead were required  
9 to make ACPs to the Massachusetts Technology Park Corporation, as required in the MA  
10 RPS regulations. The Massachusetts Division of Energy Resources ("DOER") expects  
11 this to continue for the foreseeable future until additional renewable generation resources  
12 are constructed in New England. As stated in the DOER's Annual RPS Compliance  
13 Report for 2004, issued on January 9, 2006, "Some level of shortfall in supply is to be  
14 expected in the early years of this new program, and appropriate investment of the ACP  
15 funds will further the goals of growing the market share of renewable energy, along with  
16 its environmental and economic benefits." (See page 2 of the above report). Since it is  
17 expected that many of the New Renewable Energy Resources in the Rhode Island RES  
18 will also be considered New Renewable Generation Units in the MA RPS, the continued  
19 shortage may require National Grid to make an ACP for a portion of its 2007 obligation  
20 in Rhode Island. The current market price for 2006 MA RPS RECs has ranged between  
21 \$52 to \$53.50 per REC, or around 97% of the MA ACP. If the shortage of RECs  
22 continues, it is estimated that the market price for 2007 RECs will be similarly priced.

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<sup>1</sup> See 225 CMR 14.00 – Massachusetts Renewable Energy Portfolio Standards.

1 National Grid is unable to estimate what portion of its 2007 obligation will need to be  
 2 satisfied by an ACP to the Rhode Island Renewable Energy Development Fund or by the  
 3 purchase of RECs at market. Since the market price for RECs from New Renewable  
 4 Energy Resources is expected to be close to the ACP, using the ACP in the RES Charge  
 5 is a reasonable proxy for the cost of such RECs.

6  
 7 Q. Has National Grid estimated what the Rhode Island ACP will be in 2007?

8 A. Yes. National Grid has estimated the 2007 Rhode Island ACP by using the change in the  
 9 Consumer Product Index as seen in 2005 for the change in 2006. This results in an  
 10 increase of 3.64% ( $207.5 \div 200.2 - 1 = 3.64\%$ ) of the 2006 ACP to estimate the 2007  
 11 ACP. This calculation is set forth below:

Year	CPI	ACP Rate
2002	188.2	n/a
2003	193.5	\$50.00
2004	200.2	\$51.41
2005	207.5	\$53.19
2006	215.05 (estimate)	\$55.13
2007		\$57.14 (estimate)

12  
 13 Q. What is the price National Grid is proposing to use for the Existing Renewable Energy  
 14 Resources?

15 A. National Grid is proposing to use a market price of \$0.50 per REC for the Existing  
 16 Renewable Energy Resources. As shown in Exhibit JDW-2, the Existing Renewable  
 17 Energy Resources in Rhode Island are similar to Connecticut Class II Renewable Energy

1 Sources (“CT Class II”). Exhibit JDW-3 shows that in 2005, the total generation  
2 reported by the NEPOOL-Generation Information System (“NEPOOL- GIS”) for  
3 renewable resources in New England far exceeds the RES obligation for Existing  
4 Renewable Energy Resources. As a result, the market price for Existing Renewable  
5 Energy Resources would be significantly lower than the price for New Renewable  
6 Energy Resources. According to information from a number of brokers in the REC  
7 market, the current value of CT Class II RECs is between \$0.50 to \$0.80 per REC.  
8 National Grid has chosen the lower value in its calculation of the RES Charge.

9  
10 Q. What is the RES Charge National Grid is proposing?

11 A. National Grid is proposing an RES Charge of 0.062¢/kWh effective January 1, 2007 for  
12 both its Standard Offer Service and Last Resort Service customers.

13  
14 Q. How did National Grid calculate the RES Charge?

15 A. The calculation of the RES Charge is provided in Exhibit JDW-4. National Grid  
16 proposes to use such charge until it has contracted for RECs in compliance with an  
17 approved RES procurement plan. National Grid will reconcile its costs to comply with  
18 the RES with the revenue received from customers for the RES Charge. This  
19 reconciliation will be filed as part of either the annual Standard Offer Service  
20 reconciliation or Last Resort Service reconciliations. Since the RES Charge will be  
21 added to rates for Standard Offer Service and Last Resort Service, the revenue associated  
22 with the charge will inherently be included in revenue associated with Standard Offer  
23 Service and Last Resort Service. The Company will add a column to its reconciliations

1 for Standard Offer Service and Last Resort Service to identify the costs incurred that are  
2 associated with purchasing RECs and any ACPs ultimately made. This will ensure that  
3 revenue billed relating to the RES Charge is matched against costs incurred to comply  
4 with the RES law. If the actual costs to procure RECs are less than those used to develop  
5 the RES Charge, any over-collection will be refunded to customers as part of the  
6 reconciliations.

7

8 **V. Conclusion**

9 Q. Does this conclude your testimony?

10 A. Yes. It does.

**EXHIBIT JDW – 1**

**COMPARISON OF RI RES NEW ELIGIBLE RESOURCES TO  
MA RPS ELIGIBLE RESOURCES**

<b>MA RPS New Eligible Resource</b>	<b>RI RES New Eligible Resource</b>
Solar photovoltaic or solar thermal electric energy	Direct solar radiation
Wind energy	Wind
Ocean thermal wave or tidal energy	Movement of or the latent heat of the ocean
Fuel cells utilizing renewable fuels	Fuel cells using renewable resources
Low-emission, advanced biomass conversion technologies	Biomass facilities using Eligible Biomass Fuels and maintaining compliance with current air permits
Landfill methane gas and anaerobic digester gas	Small Hydro facilities
	Heat of the earth

Note: New resources have a commencement date of operations after December 31, 1997 for both Massachusetts and Rhode Island.

**EXHIBIT JDW-2**

**COMPARISON OF RI RES EXISTING ELIGIBLE RESOURCES TO  
CT CLASS II RESOURCES**

<b>CT Class II Eligible Resource</b>	<b>RI RES Existing Eligible Resource</b>
Trash to energy in operation prior to December 31, 1997	Direct solar radiation
Biomass facilities in operation prior to July 1, 1998	Wind
Run-of-river hydropower facility under 5 MW and in operation prior to July 1, 2003	Movement of or the latent heat of the ocean
	Fuel cells using renewable resources
	Biomass facilities using Eligible Biomass Fuels and maintaining compliance with current air permits
	Small Hydro facilities
	Heat of the earth

Note: For Rhode Island, existing renewable energy resources means in commercial operation prior to December 31, 1997.

**EXHIBIT JDW – 3**

<b>NEPOOL GENERATION, BY FUEL TYPE</b>		
Line Number	Fuel Source	2005 NEPOOL GIS Generation
1	Coal	20,928,623
2	Diesel	2,833,552
3	Jet	1,764,736
4	Municipal solid waste	1,511,122
5	Natural Gas	45,186,272
6	Nuclear	34,609,333
7	Oil	11,056,574
8	Trash-to-energy	2,211,513
9	Digester gas	26,407
10	Efficient Resource (Maine)	199,186
11	Fuel cell	10,312
12	Hydroelectric/Hydropower	7,608,607
13	Landfill gas	445,265
14	Biomass	897,162
15	Solar Photovoltaic	752
16	Wind	12,290
17	Wood	1,378,098
Existing Renewable Resource Total: (sum of Line Numbers 9 through 17)		10,578,079
Narragansett 2005 Wholesale Load Obligation		7,513,560
2% Existing RES Obligation		150,271
% Of Total Existing Renewable Resources		1.4%





**Amended Tariff Pages**  
(Redline Version)

Standard Offer Service  
Last Resort Service  
Standard Offer Adjustment Provision

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THE NARRAGANSETT ELECTRIC COMPANY  
STANDARD OFFER SERVICE

**AVAILABILITY**

All Customers (including new Customers) who have not elected to take their electric supply from a non-regulated power producer will receive their power supply under this Standard Offer Rate until the Customer either: (1) takes its electric supply from a non-regulated power producer; or (2) takes Last Resort Service.

Customers who leave Standard Offer Service may not return to Standard Offer Service.

Standard Offer Service may be terminated by a Customer upon the next scheduled meter read provided that notice of the change of supplier was received in accordance with the Company's Terms and Conditions for Nonregulated Power Producers.

**MONTHLY CHARGE**

The Charge for Standard Offer Service will be the sum of the applicable Standard Offer Service charges in addition to all appropriate Retail Delivery charges as stated in the applicable tariff. The monthly charge for Standard Offer Service shall also include the costs incurred by the Company to comply with the Renewable Energy Standard, established in R.I.G.L. Section 39-26-1 and the costs to comply with the Commission's Rules Governing Energy Source Disclosure.

Deleted: Monthly

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**RATE FOR ALL CLASSES**

Standard Offer per kWh TBD

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**RATE CHANGES**

The rates set forth in this tariff are effective for usage on and after January 1, 2007 until changes. Any changes will be filed with the Commission and are subject to Commission review and approval.

Deleted: September 1, 2006

Effective January 1, 2007

Deleted: September 1, 2006

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THE NARRAGANSETT ELECTRIC COMPANY  
LAST RESORT SERVICE

**AVAILABILITY**

Customers who do not take their electric supply from a non-regulated power producer and are ineligible for Standard Offer Service will receive their power supply under this Last Resort Rate until the Customer takes its electric supply from a non-regulated power producer. Last Resort Service may be terminated by a Customer upon the next scheduled meter read provided that notice of the change of supplier was received in accordance with the Company's Terms and Conditions for Nonregulated Power Producers.

**MONTHLY CHARGE**

For all residential rate classes, the price shall be the same as [that for](#) Standard Offer Service.

For all non-residential rate classes, the rate for Last Resort Service shall be the estimated market price for the month, as estimated by the Company and filed with the Commission prior to the commencement of the month, [and shall also include the costs incurred by the Company to comply with the Renewable Energy Standard established in R.I.G.L. Section 39-26-1 and the costs to comply with the Commission's Rules Governing Energy Source Disclosure](#). For the current Last Resort Service rate(s) in effect, see the attached schedule.

**RATE CHANGES**

The above rates are subject to change from time to time, subject to Commission approval.

Effective: [January 1, 2007](#)

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**THE NARRAGANSETT ELECTRIC COMPANY  
STANDARD OFFER ADJUSTMENT PROVISION**

The prices contained in the applicable rates of the Company are subject to adjustment to reflect the power purchase costs incurred by the Company in arranging Standard Offer and Last Resort Service, which costs are not recovered from customers through the Standard Offer Service and Last Resort Service rates charged to Standard Offer and Last Resort Service customers [including, but not limited to, the costs incurred by the Company to comply with the Renewable Energy Standard established in R.I.G.L. Section 39-26-1 and the costs to comply with the Commission's Rules Governing Energy Source Disclosure.](#)

On an annual basis, the Company shall reconcile its total cost of purchased power for Standard Offer and Last Resort Service supply against its total purchased power revenue (appropriately adjusted to reflect the Rhode Island Gross Receipts Tax), and the excess or deficiency ("Standard Offer/Last Resort Adjustment Balance") shall be refunded to, or collected from, customers through the rate recovery/refund methodology approved by the Commission at the time the Company files its annual reconciliation. Any positive or negative balance will accrue interest calculated at the rate in effect for customer deposits.

For purposes of the above reconciliation, total purchased power revenues shall mean all revenue collected from Standard Offer and Last Resort Service customers through the Standard Offer and Last Resort Service rates for the applicable 12 month reconciliation period. If there is a positive or negative balance in the then current Standard Offer/Last Resort Adjustment Balance outstanding from the prior period, the balance shall be credited against or added to the new reconciliation amount, as appropriate, in establishing the Standard Offer/Last Resort Adjustment Balance for the new reconciliation period.

By March 1 of each year, the Company shall determine the Standard Offer/Last Resort Adjustment Balance for the prior calendar year and make a filing with the Commission. The Company will propose at that time a rate recovery/refund methodology to recover or refund the balance, as appropriate, over the [subsequent](#) twelve month period [or as otherwise determined by the Commission.](#) The Commission may order the Company to collect or refund the balance over any reasonable time period from (i) all customers, (ii) only Standard Offer and/or Last Resort Service customers, or (iii) through any other reasonable method.

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Notwithstanding the foregoing, the Company may not recover, without full disclosure and the express approval of the Commission, any cost of Standard Offer Service in excess of the costs billable under the applicable Wholesale Settlement agreements from 1997 that established prices for wholesale standard offer supply.

This provision is applicable to all Retail Delivery Service rates of the Company.

Effective: [January 1, 2007](#)

Deleted: May 1, 2000