

Proposal Concerning Modifications to LIPA's Tariff for Electric Service

Requested Action:

LIPA staff proposes to revise LIPA's Tariff for Electric Service ("Tariff") to change the On-Peak energy delivery charge for residential and small commercial service to encourage participants to reduce consumption during peak hours under Service Classification No. 16 Advanced Metering Initiative ("AMI") Pilot Service. Staff also proposes to clarify that certain cost recovery Adjustments to Rates and Charges within the Tariff are applicable to the AMI Pilot Service and to remove reference within the Tariff to Service Classification No. 2-VRTP.

Background and Proposal:

In August 2009, LIPA implemented an Advanced Metering Initiative ("AMI") Pilot Service for residential and non-residential customers in selected geographical areas to understand how new advanced metering systems can interact with time-differentiated rates and impact customers' interest in and response to time-differentiated rate structures. The experimental rates offered shortened on-peak hours compared to LIPA's existing time-of-use rating periods, and based on studies reported elsewhere in the United States, LIPA staff expected that customers would respond better to on-peak price signals by conserving more during the higher priced on-peak hours if those hours were shortened cover only the most expensive hours of the day.

More than two hundred customers volunteered for the Pilot program in Bethpage and Hauppauge to test the AMI metering equipment, and sixty-one residential customers selected the modified time of use rate. In 2011, approximately 49% of these customers used less energy during peak hours between 2 pm and 7 pm, saving an average of 385 kWh per customer. On the other hand, 46% of the participants increased their energy usage during peak hours by an average of 216 kWh per customer over the prior year. While the experiment resulted in an overall reduction in energy use during the peak period, the fact that almost half the participants used more on-peak energy suggests the need for an adjustment in the rate design to further encourage a reduction in energy consumption during peak hours on the part of most customers.

Staff is now preparing to roll out the AMI pilot program to a larger customer base of approximately 2,000 customers in the Route 110 corridor, as part of a U.S. Department of Energy sponsored experimental program that combines AMI metering technology with distribution automation technology and technology-focused initiatives, and staff intends to offer the AMI Pilot Service rate to many of these participating customers. Coincident with that roll out, and to address the concern that not enough customers are reducing their on-peak energy consumption, staff considers that a greater price differential between the on-peak and off-peak hours will provide additional motivation to customers to shift their discretionary consumption from on-peak hours to off-peak hours. Summer on-peak energy prices are approximately 2.6 times greater than off-peak prices under the current experimental rate for residential and small commercial customers. Staff proposes to

make summer on-peak prices for the experimental rates approximately 3.5 times higher than off-peak prices by raising the summer on-peak rate. This higher on-peak rate will provide even greater motivation to shift discretionary consumption away from LIPA's peak hours in the summer months when LIPA's power supply and distribution capacity are most constrained.

Proposed and Existing Time-of-Use Price Ratio in the Summer Months
for Residential and Small Commercial Customers under the AMI Pilot
(based on anticipated rates effective July 1, 2013)

<u>Summer Energy Charges for the SC-16 AMI Pilot Service</u>	<u>Proposed On-Peak Rate</u> ¢ per kWh	<u>Existing On-Peak Rate</u> ¢ per kWh	<u>Existing Off-Peak Rate</u> ¢ per kWh
Delivery Charge	40.72	27.35	5.78
Power Supply Charge	7.40	7.40	7.40
<u>Efficiency and Renewables Charge</u>	<u>0.62</u>	<u>0.62</u>	<u>0.62</u>
Sub-Total Energy Charges	48.74	35.37	13.80
Ratio to Off-Peak Energy Charges	3.5-to-1	2.6-to-1	1-to-1

In addition to creating a greater incentive for participants to reduce their energy consumption during the more expensive peak hours, the proposed higher energy charge will make the experimental rate more revenue neutral with LIPA's standard non-time-differentiated residential¹ rate. Under a revenue-neutral rate design, staff would ordinarily expect approximately half of a set of randomly selected customers to pay more and the other half to pay less. However, when staff examined a random sample of residential non-Time-of-Use customers to see how their bills compared under the Modified Time-of-Use (MTOU) price structure, it was found that 60 out of 62 customers achieved savings under current MTOU rates, which indicates the existing MTOU rates generate less revenue, on average, than standard non-TOU rates. In addition, under the AMI Pilot Service experiment in Bethpage and Hauppauge, all of the residential participants paid less than they would have under standard rates in 2010, and all but one paid less than they would have in 2011. Staff's proposal to increase the on-peak delivery price to 40.72¢ per kWh is designed to achieve revenue neutrality with LIPA's standard rates, which would make the experimental rate more sustainable in the long term, if it were applied to large numbers of residential customers.

Associated with this proposed change in the summer on-peak energy rate for the AMI Pilot Service, staff also proposes several administrative changes to Service Classification No. 16.

¹ As with the current rate design, the modified small general service time-of-use (M288) rate will be set equal to the modified residential time-of-use (M188) rate. This makes the small general service time of use rates easier to administer and does not create a significant revenue impact on LIPA.

- Staff proposes to extend the general authorization for the AMI Pilot Service for an additional five years, through September 30, 2018 so that the revised rate design can be experienced over several years by the participants that are only now volunteering for the pricing experiment. The current authorization from the Trustees expires on September 30, 2013.
- Staff proposes to allow existing sample customers in Bethpage and Hauppauge under the AMI Pilot Service to be enrolled in the new experimental rate, at the higher summer on-peak price, to see if the higher price changes their behavior relative to their behavior in 2011 and 2012. Since these continuing participants will experience higher prices than when they initially enrolled, staff requests that the customers be treated as new enrollees, resetting their eligibility to participate for another three years, as specified under the existing program rules, and renewing the guarantee to pay no more than the standard residential for the first 12 months.
- Staff proposes to specifically reference the Energy Efficiency Cost Recovery Rate (also known as the “Efficiency and Renewables Charge”) under this Service Classification and specifically reference rate codes M188, M288, M282, M284 and M285 on the relevant tariff leaves for the Energy Efficiency Cost Recovery Rate. Rate codes M282, M284 and M285 are already subject to the Energy Efficiency Cost Recovery Rate under Service Classification Nos. 2-VMRP and 2-MRP, but all the modified rate codes (with the prefix “M”) should be referenced to clarify the current policy.
- Staff also proposes to insert a reference to the New York State Assessment under Adjustments to Rates and Charges on leaves 279I and 279J. The applicability of the New York State Assessment to all service classifications, including SC-16, was authorized by the Trustees effective January 1, 2010, and stated on leaf 182H, but not cross-referenced in Service Classification No. 16.
- Staff proposes to remove a reference to Service Classification No. 2-VRTP. The Voluntary Real Time Pricing (VRTP) pilot was terminated with approval from the Trustees in December 2010.

Financial Impacts:

Staff expects the financial impact from the proposed higher rates to be minimal, or slightly favorable. Total enrollment is intended to be small, with possibly about 1,000 of the participants also electing to participate in the proposed AMI Pilot Service experimental rates. Based on the proposed rate design, staff expects that half the participants would save approximately \$60 per year under the experimental rate and the other half would spend more, but made whole under the hold-harmless provision of the experiment. Because staff proposes that customers be held harmless in the first year, the gross revenue impact to LIPA would be equal to the customer bill savings, which is expected to be about \$30,000 for the first year, or \$30 per participant based on the average loss of revenue.

This impact, it should be emphasized, comes from application of the experiment to additional participants coupled with the hold-harmless provision in the first year of

participation only. In subsequent years, where the hold-harmless provision doesn't apply, staff expects that revenues from some individual participants paying more will offset the other participants pay less, and revenues will return closer to their current non-time-of-use (revenue-neutral) levels. To the extent that customers use more or less energy under experiment, the simultaneous change in revenues and power supply expenses will be evaluated under the experiment to determine their impact on LIPA and all other ratepayers, but it is expected that the savings in fuel expense will more than offset the loss of revenue.

Proposed Tariff Change:

- 1. Increase the summer on-peak energy charge for Rate Codes M188 and M288 under the Service Classification No. 16 AMI Pilot Service and modify the maximum charge provision.**

Affected Tariff Leaf: Leaf No. 279I

Reason for Tariff Change:

To encourage additional behavioral changes under the experimental pilot service and prevent potential negative bill impacts to customers voluntarily renewing their participation during the first year of their participation under the proposed higher rate.

- 2. Extend the AMI Pilot Service for an additional five years**

Affected Tariff Leaf: Leaf No. 279G

Reason for Tariff Change:

To extend participation to cover the expected duration of the AMI experiment.

- 3. Insert references to the New York State Assessment**

Affected Tariff Leaves: Leaf Nos. 279I and 279J

Reason for Tariff Change:

To clarify that the existing Tariff recovery rate for the New York State Assessment applies to the experimental rate.

- 4. Incorporate the modified rate codes in the definitions for the Energy Efficiency Cost Recovery Rate and reference the Energy Efficiency Cost Recovery Rate under Service Classification No. 16**

Affected Tariff Leaves: Leaf Nos. 182C, 279I and 279J

Reason for Tariff Change:

To clarify that other existing Tariff recovery rates apply to the experimental rate.

5. Delete reference to Service Classification No. 2-VRTP

Affected Tariff Leaves: Leaf Nos. 182C, 279H, 281 and 316

Reason for Tariff Change:

To incorporate modifications that were already authorized elsewhere in the Tariff to these specific leaves.

Summary of Proposed Changes:

In summary, LIPA proposes to modify the on-peak energy charge for residential and small commercial rates under Service Classification SC-16 AMI. Changes to the on-peak energy charge under the SC-16 AMI tariff are necessary to ensure that the time-of-use rates are revenue neutral to standard residential and small general service rates and consistent with marginal costs. The proposed revised tariff leaf nos. 182C, 279G, 279H, 279I, 279J, 281 and 316 are attached.

VII. ADJUSTMENTS TO RATES AND CHARGES OF SERVICE (continued):**F. Energy Efficiency Cost Recovery Rate (continued):****4. Calculation of the Energy Efficiency Cost Recovery Rate**

The Energy Efficiency Cost Recovery Rate will be calculated separately for Small Customers and Large Customers. For Small Customers and Large Customers separately, the Energy Efficiency Cost Recovery Rate will be calculated as the sum of the eligible costs and lost revenues for that group of customers divided by the forecasted energy sales to that group of customers.

- a) The Authority will prepare and retain on file a "Statement of Energy Efficiency Cost Recovery Rate". The Statement will be available at the Authority's Business Offices.
- b) The Statement will show the authorized amounts to be recovered from Small Customers and Large Customers separately, and the expected energy sales over which the authorized amounts will be recovered.
- c) The Energy Efficiency Cost Recovery Rate will be set annually, effective January 1st of each year.
- d) The Energy Efficiency Cost Recovery Rate may be reset during the year, based on updated values that have been approved by the LIPA Board of Trustees.
- e) The Energy Efficiency Cost Recovery Rate will be rounded to the nearest 0.0001 cents per kWh.

5. Definition of Small and Large Customers

For purposes of the Energy Efficiency Cost Recovery Rate, the following definitions of Small Customers and Large Customers will apply.

- a) The Small Customer Energy Efficiency Cost Recovery Rate applies to:
 - 1) Service Classification No. 1 (Rate Codes: 180, 183, 186, 380, 480, 481, 580, 581, 880, 881, 882, 883)
 - 2) Service Classification No. 1-VMRP (Rate Codes: 181, 182, 184, 188)
 - 3) Service Classification No. 2 (Rate Code 280)
 - 4) Service Classification No. 2-VMRP (Rate Code 288)
 - 5) Service Classification Nos. 5, 7, 7A and 10 (Rate Codes 980, 780, 781, 782, 1580, 1581)
 - 6) Service Classification No. 16-AMI (Rate Code M188 and M288)
- b) The Large Customer Energy Efficiency Cost Recovery Rate applies to:
 - 1) Service Classification Nos. 2-L, 2-H and 2-VMRP (Rate Codes 281, 283, 290, 291, 293, 282, M282)
 - 2) Service Classification Nos. 2-MRP and 2-VRTP (Rate Codes 284, 285, M284, M285, ~~279~~)
 - 3) Service Classification Nos. 12, 13 and 15 (Rate Codes 680, 681, 273, 278)
 - 4) Service Classification No. 16-AMI (Rate Codes M282, M284, M285)
- c) Retail Customers participating in the Long Island Choice or Green Choice program are subject to the Energy Efficiency Cost Recovery Rate according to their base rate Service Classification.
- d) Energy Service Companies (ESCOs) receiving service under Service Classification No. 14 are not subject to the Energy Efficiency Cost Recovery Rider.
- e) Energy delivered under the Recharge NY Power Program is not subject to the Energy Efficiency Cost Recovery Rider.

VIII. SERVICE CLASSIFICATIONS (continued):**S. SERVICE CLASSIFICATION NO. 16- AMI
Advanced Metering Initiative Pilot Service:
(Rate Codes: M188, M288, M282, M284, M285)**1. Objective

This AMI pilot service is intended to test both a new Advance Metering Infrastructure (AMI) system and time-differentiated rates for residential and non-residential customers in certain geographical areas. Also, the pilot service will allow LIPA to investigate customers' interest in and response to experimental time-differentiated rate structures. The pilot service will be structured as a series of individual experiments, with each experiment evaluating the performance of AMI technology and alternative rate structures in a specific geographic location for a specific mix of residential and/or nonresidential customers. Authorization for this Pilot Service will terminate on September 30, ~~2013~~2018 and all individual experiments must be terminated by LIPA Staff on or before that date.

2. Program Requirements

- a) LIPA Staff may, at its sole discretion, create or extend any experiment under this Service Classification that meets the program objective, subject to the following limitations:
 - (1) Enrollment in any one geographic location shall be limited to 2,000 participants.
 - (2) Total enrollment in all experiments shall not exceed 10,000 participants at any one time.
 - (3) Compensation and incentives for participation shall not exceed the value of the electric service provided to the participant, measured using the rates and charges from participant's former Service Classification. Equipment or services provided to the participant by LIPA, and subsequently removed or discontinued at the termination of participation in the experimental program, shall not be included in the measurement of the compensation or incentive value.
 - (4) Participation in experimental pricing programs must be voluntary on the part of the customer.
- b) LIPA Staff may, at its sole discretion, terminate any experiment under this Service Classification at any time.
- c) The program's specific operational requirements will be identified on a "LIPA Statement of Advanced Metering Initiative Pilot". That Statement will define, for each separate experiment:
 - (1) The geographic location of the experiment.
 - (2) The duration of the experiment.
 - (3) The eligible rate codes for the experiment.
 - (4) The maximum number of participants from each rate code.
 - (5) Any usage or other customer characteristics which are necessary for participation in the experiment.
 - (6) The specific compensation for participation, if any.
 - (7) Any other terms or conditions which are necessary to ensure the usefulness and applicability of the experiment and/or its results.

VIII. SERVICE CLASSIFICATIONS (continued):**S. SERVICE CLASSIFICATION NO. 16- AMI
Advanced Metering Initiative Pilot Service (continued):
(Rate Codes: M188, M288, M282, M284, M285)**

- d) Eligible participants will be required to enter into a signed agreement that specifies the terms of participation in the pilot program, including the duration of participation, applicable rates and charges, compensation (if any), program operational requirements and the conditions for early release from the pilot program.

3. Program Eligibility/Non-Eligibility

- a) Residential and non-residential Customers who volunteer for the pilot program must be located in the geographic areas where the pilot program is being tested.
- b) Qualified participants will be chosen on a first come, first served basis, except that:
- (1) LIPA Staff has the option to deny participation in the pilot program to any Customer it deems as not contributing to the objectives or requirements of the pilot program.
 - (2) LIPA may deny participation to Customers taking residential service for religious, supervised community residences or veteran's organizations if the number of residential applicants exceeds the maximum number established for residential participation in that specific experiment.
- c) Customers who are not eligible to participate in the program include:
- (1) Customers who receive service under provisions related to Residential Off-Peak Energy Storage served under Service Classification No. 1.
 - (2) Customers who receive some or all of their electric requirements from the New York Power Authority (NYPA).
 - (3) Customers who sell power to the Authority as Qualifying Facilities or are treated as Solar and Wind Electric Generators.
 - (4) Customers who receive unmetered service.
 - (5) Customers who receive service under Service Classification Nos. ~~2-VRTP, 11, 12,~~ 13, or 15.

VIII. SERVICE CLASSIFICATIONS (continued):

S. SERVICE CLASSIFICATION NO. 16-AMI

Advanced Metering Initiative Pilot Service (continued):
(Rate Codes: M188, M288, M282, M284, M285)

4. ~~Residential and Small General Service Commercial Customer~~ Time-Differentiated Pricing

Residential and Small ~~General Service (rate codes 280 and 288) Commercial Customers~~ participating in the Pilot Service will be charged the rates as stated below.

a) Schedule of Rates (Rate Code M188 and M288)

	<u>June to September Inclusive</u>	<u>October to May Inclusive</u>
Service Charge per day	\$.3600	\$.3600
Meter Charge per day	\$.1000	\$.1000
	<u>June to September Inclusive</u>	<u>October to May Inclusive</u>
Energy Charge per kWh		
	<u>Period 1</u>	<u>Period 2</u>
7 p.m. to 2 p.m. weekdays and all day Saturday and Sunday	\$.0578	\$.0437
	<u>Period 3</u>	<u>Period 4</u>
2 p.m. to 7 p.m. Weekdays	\$.2735 \$.4072	\$.0888

All the terms and conditions will apply as described in the Customer's previous rate and Service Classification.

b) Adjustments to Rates and Charges

Each Customer's bill will be adjusted for the Fuel and Purchased Power Cost Adjustment Rate, Increases in Rates and Charges to Recover PILOT Payments, ~~and the Shoreham Property Tax Settlement Rider,~~ the New York State Assessment Factor and the Energy Efficiency Cost Recovery Rate.

c) Minimum Charge

The Minimum Charge is the Service and Meter charge, plus Adjustments to Rates and Charges.

d) Maximum Charge

~~On an annual basis,~~ For the first 12 months of participation under these rates, the Maximum Charge is no more than what the Customer would have paid under their previous rate and Service Classification for the amount of service actually received over that annual period. Following 12 consecutive months of participation, the Maximum Charge may increase to the amount actually billed to the Participant, so long as that condition is included in the signed agreement with the Customer.

VIII. SERVICE CLASSIFICATIONS (continued):**S. SERVICE CLASSIFICATION NO.16-AMI****Advanced Metering Initiative Pilot Service (continued):
(Rate Codes: M188, M288, M282, M284, M285)****Rates and Charges (continued):**5. Non-Residential Time-Differentiated Pricing

Non-Residential customers may choose to sign up for the Commercial Modified Time-Differentiated Pricing Program.

- a) Non-Residential customers participating in the Commercial Modified Time-Differentiated Pricing program will be eligible to take service under Service Classification Nos. 2L-VMRP or 2-MRP utilizing the modified rating periods as described on Leaf Nos. 212, 213, 226 and 227, depending on the size of the participant's load. All the terms and conditions will apply as described in the above stated service classifications.

b) Adjustments to Rates and Charges

Each Customer's bill will be adjusted for the Fuel and Purchased Power Cost Adjustment Rate, Increases in Rates and Charges to Recover PILOT Payments, ~~and the Shoreham Property Tax Settlement Rider,~~ the New York State Assessment Factor, and the Energy Efficiency Cost Recovery Rate.

c) Maximum Charge

On an annual basis, the Maximum Charge is no more than what the Customer would have paid under their previous rate and Service Classification for the amount of service actually received over that annual period. Following 12 consecutive months of participation, the Maximum Charge may increase to the amount actually billed to the Participant, so long as that condition is included in the signed agreement with the Customer.

6. Special Provisionsa) Exit Provisions

- (1) A participant may return to its previous rate at any time with forfeiture of payments, incentives or other specified benefits as may be stipulated in the agreement between LIPA and Participants. In this situation, either:
- (a) The participant's billing will be adjusted to the beginning of their most recent anniversary date, or
- (b) If the participant's billing is for an entire twelve (12) month period (based on their anniversary date); the billing will not be adjusted.
- (2) LIPA may return a participant to their previous rate, and make the adjustments to the customer's billing as stated above, if they do not maintain their account in good standing.

IX. Long Island Choice Program (continued):**A. General Provisions (continued):**2. Who is Eligible

- a) In order to participate in the Long Island Choice Program, an Eligible Customer is a Customer who is eligible for service under Service Classification Nos. 1, 1-VMRP(L), 1-VMRP(S), 2, 2-VMRP, 2L, 2L-VMRP, 2-H, or 2-MRP, 5, 7, 7A, 10 and:
- (1) Receives metered or authorized unmetered electric service from the Authority, and
 - (2) Receives all of their electric requirements from a single supplier except for the output from Solar or Wind Electric Generating Equipment that qualifies for net metering, and
 - (3) Is not explicitly excluded in 2.b), below, and
 - (4) Is licensed by the Authority as a Direct Retail Customer (DRC) or contracts with a licensed Energy Services Company (ESCO) to act as its agent for the scheduling and delivery of Electric Generation Service, and
 - (5) During those phases of the Program where total participation is limited, has been accepted into the Program by the Authority.

b) Customers who are not eligible to participate in the LI Choice Program are:

- (1) Customers who receive service under Service Classification Nos. ~~2-VRTP~~, 11, 12, 13 or 15.
- (2) Customers who sell power to the Authority as Qualifying Facilities or Solar, Farm Waste, Micro-Combined-Heat-and-Power, Fuel Cells and Wind Customer-Generators that do not qualify for net metering.
 - (3) Customers who receive a portion of their electric requirements from self-generation or on-site generation that does not qualify for net metering, and require supplemental, backup or maintenance service from the Authority.
 - (4) Customers who receive service under provisions related to Residential Offpeak Energy Storage served under Service Classification No. 1.

X. LIPA Green Choice Program:**A. General Provisions**1. Program Description and Definitions

The LIPA Green Choice Program is a voluntary program in which the Authority's Customers may elect to purchase environmental attributes from Renewable Energy Options Providers, hereafter referred to as "Green Marketers", who meet the eligibility criteria. The purpose of this program is to stimulate the development of renewable energy generation resources through the sale of environmental attributes associated with such generation in New York State or in areas that would be specified by the New York State Public Service Commission's ("NYPSC") Renewable Portfolio Standard when it becomes effective.

2. Who is Eligible

a) In order to participate in the LIPA Green Choice Program a Customer must:

- (1) Take service under Service Classification Nos. 1, 1-VMRP(L), 1-VMRP(S), 2, 2-VMRP, 2L, 2L-VMRP, 2-H, or 2-MRP, 5, 7, 7A, 10, 13, 16-AMI and:
- (2) Receive metered or authorized unmetered electric service from the Authority.

b) Customers who are not eligible to participate in the LIPA Green Choice Program are:

- (1) Customers who receive service under Service Classification Nos. ~~2-VRTP~~, 11, 12, or 15. These include Customers who receive a portion of their electric requirements from self-generation or on-site generation and require supplemental, backup or maintenance service from the Authority.
- (2) Customers who receive part of their electric requirements from an Economic Development Power program through a municipal distribution agency
 - (3) Customers who sell power to the Authority as Qualifying Facilities.
 - (4) Customers who are in arrears for sixty or more days.