

Executive Summary

In accordance with Commission direction, New York State Electric & Gas Corporation (“NYSEG” or “the Company”) is implementing mandatory hourly pricing (“MHP”) for its largest customers. In its April 24, 2006 Order (the “April Order”)¹, the Commission directed the Company to survey new hourly pricing customers after the first six months of program implementation and submit a report to the Director of the Office of Electricity and the Environment. The Commission directed NYSEG to:

- 1.) summarize the short-term results,
- 2.) summarize customer reactions,
- 3.) summarize party complaints and issues,
- 4.) summarize areas for improvement or action,
- 5.) describe experiences in implementing hourly pricing and
- 6.) describe issues raised by other parties,
- 7.) suggest improvement opportunities and issues requiring further analysis.²

It should be noted that the Commission also approved a Joint Proposal regarding NYSEG’s supply program in its Order Establishing Commodity Program, Issued and Effective August 29, 2007 (“Supply Service JP”). One of the provisions in the Supply Service JP related to accelerated transfer of large customers to MHP. Customers with demands of 500 kW or greater will move to MHP in 2008; those with demands of 400 kW or greater will move to MHP in 2009; and those with demands of 300 kW or greater will move to MHP in 2010, all subject to existing exemptions.

The recommendations included in this report were based partially on responses to surveys that were only sent to customers in August 2007. Consequently, some of the findings were not available until after the Supply Service JP was filed. It is important to note, however, that the Company is in no way distancing itself from its commitment to accelerate implementation of MHP in accordance with the schedule in the Supply Service JP. Rather, it is complying with the

¹ April 24, 2006, *Order Denying Petitions for Rehearing and Clarification in Part and Adopting Mandatory Hourly Pricing Requirements*, Case 03-E-0641, Proceeding on Motion of the Commission Regarding Expedited Implementation of Mandatory Hourly Pricing for Commodity Service.

² Ibid, p. 38.

provisions of the April Order to report on survey results, issues, possible improvement opportunities and areas for further analysis.

There were 162 customer accounts that qualified for the first phase of MHP implementation. Surveys were sent to all 162 customer accounts and 75 responses were received.

Based on the findings described in this report, the Company offers the following recommendations for consideration:

Survey-Related Recommendations

Recommendations based on customers' ability to react to hourly pricing:

- Customers need targeted, practical help to identify and implement energy savings measures that will not require changes in their operations. As NYSEG continues to implement efficient pricing mechanisms it will also investigate opportunities to help customers take advantage of these pricing mechanisms.
- Customers – especially smaller customers – should continue to have the option of choice of supplier since these customers value rate stability more highly than larger customers. Therefore, NYSEG encourages the Commission to reconsider whether the Company should be prohibited from offering a fixed price option to these customers.
- The Company proposes to work with trade associations and industry groups to find effective ways to inform their members about new metering capabilities, pricing options, and ways to take advantage of those opportunities. As new metering and pricing become available to more customers, the Company will explore improved, user-friendly means of making usage and pricing information available on a timely basis.

Recommendations based on customers' need for information:

- NYSEG expects that customer hourly pricing communications materials will be improved substantially with experience.
- Educational materials should be user-friendly and available as and when customers would find it useful.
- ESCOs, Staff, NYSERDA, NYISO, and consultants/trade associations should continue to be encouraged to inform and educate their constituents.

Recommendations based on customers' use of Energy Profiler On-line ("EPO"):

- It is not clear whether the price of EPO or its usefulness dissuaded customers from continuing to use the software, or whether customers simply lacked the internal resources to take advantage of the tool. Account managers will contact customers that participated in the free-EPO trial offer to identify their reasons for discontinuing this service.

Implementation-Related Recommendations

Recommendations based on installation of telephone lines.

- Rather than implement interval metering and/or time-based pricing by customer size or service class, implementation by geographic area would allow NYSEG to pursue a network solution with desired reliability and two-way communications capability. Traditional telephone service is not a practical solution for interval metering and/or time-based pricing on a larger scale

Recommendations based on reliability of telephone lines.

- In order to minimize incremental cost and enable rapid implementation, NYSEG chose to expand the use of meter technology already present on the Company's system. Advances in meter hardware and software technology have taken place since the Company first began to use those meters. NYSEG encourages the Commission to consider metering solutions that would better support the commodity pricing, customer information, and customer response applications envisioned today.

Recommendations based on need to rebill customers.

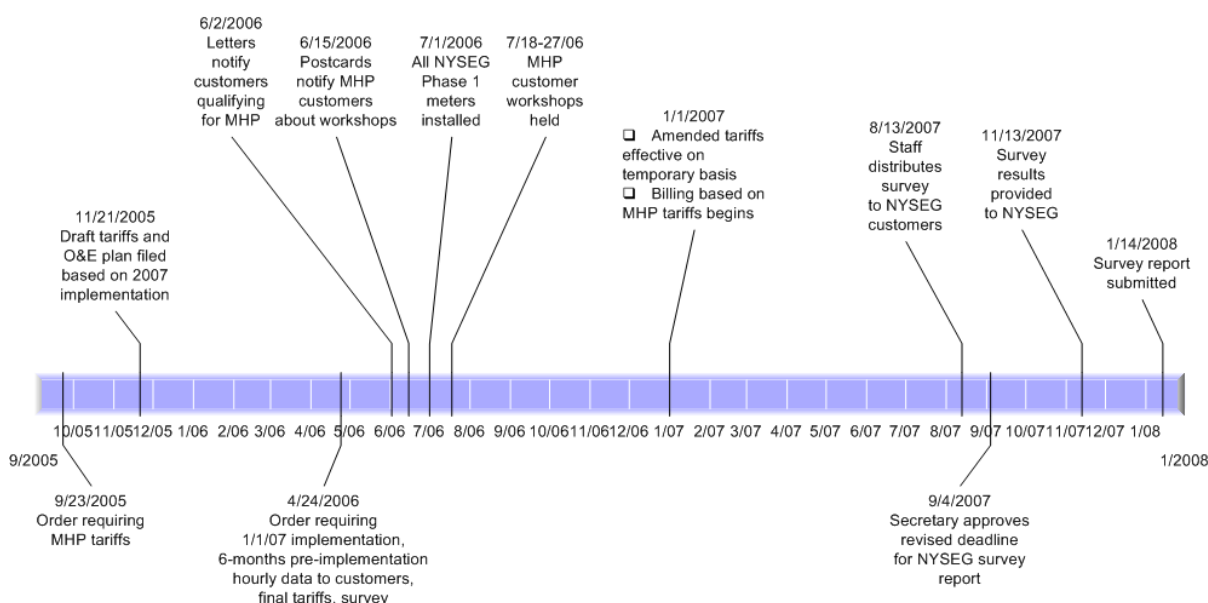
- NYSEG has learned from this experience that the rapid installation of meters is of limited value unless related software and business practices are fully developed and tested by the time those meters come online. New metering, meter communications, software, and applications capabilities should be fully coordinated.

Background

In accordance with Commission direction, New York State Electric & Gas Corporation (“NYSEG” or “the Company”) is implementing mandatory hourly pricing (“MHP”) for its largest customers in phases. 214 customer accounts were identified as having reached demands of 1,000 kW or more at least twice during the calendar year 2005. 52 of these customer accounts were exempt from mandatory hourly pricing; the remaining 162 customer accounts are subject to MHP³. These 162 accounts provide service to 134 customers (businesses). One NYSEG facility also met the MHP criteria.

MHP customers are required to have interval meters with telecommunication access, regardless of whether the customer purchases electricity supply from an energy services company (“ESCO”) or from NYSEG. The Company provides the required meter and assists in the process of obtaining the required telecommunication equipment. The customer pays an incremental meter charge, and is responsible for the installation of and ongoing costs of the telecommunication equipment. If the customer purchases their own interval meter they are exempt from the monthly MHP meter charge.

Figure 1: NYSEG MHP Regulatory and Implementation Timeline



^{3 3} These 162 customers may or may not pay an hourly price for commodity. If they purchase their commodity from NYSEG, hourly pricing is mandatory. If they purchase their commodity from a competitive provider, hourly pricing is not mandatory. Regardless of their source of commodity, these customers must pay a monthly charge for hourly metering. Appendix B provides information concerning the actual pricing choices made by these customers.

In its April 24, 2006 Order (the "April Order")⁴, the Commission directed National Grid, New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Consolidated Edison Company of New York, Inc., and Orange & Rockland Utilities, Inc. ("the Companies") to "survey new hourly pricing customers after the first six months of program implementation and submit a report to the Director of the Office of Electricity and the Environment within 60 days thereafter, or as the Secretary may require, summarizing the short-term results, customer reactions, party complaints and issues and areas for improvement or action".⁵ In addition, the Commission directed the Companies to describe their "experience in implementing hourly pricing and issues raised by other parties" in that report, and to suggest improvement opportunities and issues requiring further analysis.⁶

This report is provided in response to the Commission's directive.

It should be noted that the Commission also approved a Joint Proposal regarding NYSEG's supply program in its Order Establishing Commodity Program, Issued and Effective August 29, 2007 ("Supply Service JP"). One of the provisions in the Supply Service JP related to accelerated transfer of large customers to MHP. Customers with demands of 500 kW or greater will move to MHP in 2008; those with demands of 400 kW or greater will move to MHP in 2009; and those with demands of 300 kW or greater will move to MHP in 2010, all subject to existing exemptions.

The recommendations included in this report were based partially on responses to surveys that were only sent to customers in August 2007. Consequently, some of the findings were not available until after the Supply Service JP was filed. It is important to note, however, that the Company is in no way distancing itself from its commitment to accelerate implementation of MHP in accordance with the schedule in the Supply Service JP. Rather, it is complying with the provisions of the April Order to report on survey results, issues, possible improvement opportunities and areas for further analysis.

⁴ April 24, 2006, *Order Denying Petitions for Rehearing and Clarification in Part and Adopting Mandatory Hourly Pricing Requirements*, Case 03-E-0641, Proceeding on Motion of the Commission Regarding Expedited Implementation of Mandatory Hourly Pricing for Commodity Service.

⁵ Ibid, p. 42.

⁶ Ibid, p. 38.

Surveys

NYSEG sent letters in June 2006 directly to qualifying customers explaining the program and the availability of the EPO service or pulse output to help them transition to the program⁷. An NYSEG customer representative's name and phone number was also given to answer questions. The letters were sent to customers currently with ESCOs as well as customers receiving supply from NYSEG.

In mid-June 2006, customers with demands of 1000 kW and greater were sent post card notification of five July 2006 MHP workshops held by the Company. The post card listed the time, dates, and locations of the workshops. Both Rochester Gas and Electric Corporation ("RG&E") and NYSEG customers were invited to attend any of the five meetings. The New York State Energy Research and Development Authority ("NYSERDA"), the New York Independent System Operator ("NYISO"), Department of Public Service Staff ("Staff"), and ESCOs were invited to the workshops. A customer participant survey was distributed at those workshops. That survey is included in Attachment A.

During the introduction of the MHP workshop, the Commission goals and potential benefits of reducing system peak demand and shifting load to off-peak periods were presented.

The introduction was followed by a presentation on "Understanding Hourly Pricing". During the first meeting, this section was presented by a representative from the NYISO; at later meetings the presentation was given by a NYSEG/RG&E representative. This section described the

⁷ As part of its Outreach and Education Plan, the Company installed interval meters at MHP customers' premises by July 2006, so that MHP customers would be able to gain access to their hourly load data prior to the effective date of the hourly pricing on customers' bills. Letters were sent to customers in August 2006 to inform customers that did not already subscribe to the EPO service that a free-trial offer was being made to MHP customers. This offer applied to both the basic EPO and the new Day Ahead Hourly Pricing Module. For those customers already subscribing to EPO, NYSEG sent a letter offering a free-trial of a new Day Ahead Hourly Pricing Module. Eighty-eight customers (54%) enrolled in the EPO service as part of the MHP program. After January 1, 2007, if customers wished to continue the EPO service, the customer was charged a monthly fee. Customers that chose not to continue EPO service have the option to access their data through a pulse output at the meter. There is a one-time installation fee for the installation of the pulse output equipment. Seventy-seven of the eighty-eight customers that enrolled in the EPO service discontinued the service at the end of the free-trial.

NYISO, how the power markets work, gave an overview of the NYISO website, and showed attendees where to find the day-ahead zonal pricing.

The next section of the workshop described the details of the program including energy pricing, telecommunication requirements, and a billing overview. The Company explained and gave a demonstration of its Energy Profiler Online energy management tool. The Company's demand response programs were reviewed. New York State Energy Research and Development Authority (NYSERDA) provided an overview of energy savings programs during each of the workshops.

One hundred twenty four participants representing NYSEG customers attended the workshops, out of a total attendance of 180 people representing NYSEG and RG&E businesses (customers could send multiple representatives). The evaluation survey in Attachment A was completed by 125 people.

In 2006, NYSEG collaborated with the Companies and Staff to survey MHP customers in compliance with the April Order. As specified in the Order, Staff worked with the Companies in developing the surveys and the evaluation design, distributed the survey to all of the mandatory hourly pricing customers in New York State, compiled the customer responses, and provided the results to the appropriate utility. The survey was finalized in July 2007, distributed to customers beginning on August 13 (enabling most customers to have received six bills with hourly pricing before completing the survey), and results were provided to NYSEG on November 13, 2007⁸. The NYSEG survey instrument is provided in Attachment A.

Staff sent the MHP survey to 134 NYSEG customers, equivalent to one hundred and sixty-two customer accounts. Staff received responses from 75 customers (46%).

⁸ The Commission directed the Company to submit the report with the survey results sixty days after the first six months of MHP service. For NYSEG, the six month period ended September 2007. Given the distribution date of mid-August, the time needed to collect responses, compile the survey results, evaluate the results, and prepare the report, the Company requested an extension of time to complete their evaluation report. The Company requested authorization to file the report summarizing the survey results and the Company's implementation experiences 60 days after the date NYSEG received the compiled survey results from PSC Staff. The Company's request was granted by the Secretary on September 4, 2007.

About half of the 2007 respondents were manufacturing companies, with about three quarters of those firms running a three-shift operation. Roughly one quarter of the respondents were evenly split between health care and colleges/universities. The remaining respondents represent a wide variety of business categories, including government, schools (K-12), an energy/telecom utility, a railroad, a critical data center, lodging/entertainment, ski center, offices, data center, apartment complex, mineral processing, and water treatment/sanitation, warehouse/distribution, correctional, and recreational facilities.

The results of both surveys are summarized in Attachment B.

The key findings and recommendations based on Attachment B are provided in Table 1.

Table 1: Survey-related Findings and Recommendations

#	Finding	Actions/Recommendation(s)
1	<ul style="list-style-type: none"> • Almost one-third of the 2007 survey respondents have chosen a fixed price from ESCOs. • Half the 2006 respondents reported that they are unable to shift and/or curtail load. More than three-quarters of the 2007 respondents lack the flexibility to shift operations in response to hourly prices. Less than 20 percent of respondents in 2006 and less than 15 percent in 2007 consider hourly pricing clearly beneficial to their business. • More than half of the 2007 survey respondents may need more information to develop a strategy to respond to hourly pricing. Unfortunately, one third of the respondents who face barriers to responding to hourly pricing said they have insufficient resources to pay attention to those prices. 	<ul style="list-style-type: none"> • Customers who have taken (or plan to take) action in response to hourly pricing largely focused on energy efficiency, energy audits, and NYSEERDA programs. This suggests that customers need targeted, practical help to identify and implement energy savings measures that will not require changes in their operations. As NYSEG continues to implement efficient pricing mechanisms it will also investigate opportunities to help customers take advantage of these pricing mechanisms. • NYSEG does believe that customers – especially smaller customers – should continue to have the option of choice of supplier since these customers value rate stability more highly than large customers. Therefore, NYSEG encourages the Commission to reconsider whether the Company should be prohibited from offering a fixed price option to these customers. • The Company proposes to work with trade associations and industry groups to find effective ways to inform their members about new metering capabilities, pricing options, and ways to take advantage of those opportunities. This will be particularly important as new metering and pricing becomes available to smaller customers, who cannot practically be targeted with customized solutions. • The Company cannot substitute for customer

#	Finding	Actions/Recommendation(s)
		personnel. However, as new metering and pricing become available to more customers, the Company will explore improved, user-friendly means of making usage and pricing information available on a timely basis.
2	Although it appears that the usefulness of educational materials could be improved, it is also true that for many customers, lack of resources to devote to development of a strategy to respond to MHP presents a barrier to the use of those materials, and different customers identified different gaps in their knowledge.	<ul style="list-style-type: none"> • The Company's and others (e.g., ESCO) retail access communications materials have improved substantially with experience. NYSEG expects that continued improvement will happen over time with improved metering capabilities, time-based pricing, and energy efficiency/demand response materials as well. • Educational materials should be user-friendly, and available as and when customers would find it useful – neither too soon nor too late. • The 2006 RG&E/NYSEG workshops were particularly notable for the cooperation among various sources of information for customers: the utilities, ESCOs, Staff, NYSERDA, NYISO, and consultants/trade associations. The Company recommends that all these participants continue to be encouraged to inform and educate their constituents.
3	Few customers retained Energy Profiler Online (EPO) after the free trial.	It is not clear whether the price of EPO or its usefulness dissuaded customers from continuing to use the software, or whether customers simply lacked the internal resources to take advantage of the tool. Account managers will contact these customers to identify their reasons for discontinuing this service.

Implementation Experience and Party Issues

Several findings emerged from NYSEG's implementation experience and a review of the party issues in the April Order; these findings and recommendations are provided in Table 2.

Consistent with the April Order, NYSEG reviewed its implementation experience, which resulted in the findings and recommendations are provided in Table 2. The April Order also directed the utilities to identify progress on transparency and standardization⁹ and to report on

⁹ April Order, page 25

procedures in place to deal with billing and metering accuracy issues¹⁰. These matters are addressed in Table 3

Table 2: Other Findings and Recommendations

#	Finding	Actions/Recommendation(s)
1	The single greatest source of delays and data quality issues during Phase 1 was the telecommunications solution for MHP. In particular, a) delays occurred in the installation of telephone communications (resulting in the need for manual meter reads), and b) traditional telephone lines proved an unreliable medium for transmitting hourly data.	<ul style="list-style-type: none"> When interval metering is installed on a customer-by-customer basis, it is uneconomic to pursue a high-quality network solution that allows reliable, two-way communications between meter and utility, with sufficient bandwidth to allow the utility and others to take full advantage of new meter technologies. Rather than implement interval metering and/or time-based pricing by customer size or service class, implementation by geographic area would allow NYSEG to pursue a network solution with desired reliability and two-way communications capability. Traditional telephone service is not a practical solution for interval metering and/or time-based pricing on a larger scale
2	Lightning strikes, insufficient memory at the meter, lack of short-term distributed data storage capability or memory redundancy, and similar problems also impacted the ability to obtain complete, timely data from meters, which in turn created data validation and billing issues.	<ul style="list-style-type: none"> In order to minimize incremental cost and enable rapid implementation, NYSEG chose to expand the use of meter technology already present on the Company's system. Advances in meter hardware and software technology have taken place since the Company first began to use those meters. NYSEG encourages the Commission to consider metering solutions that would better support the commodity pricing, customer information, and customer response applications envisioned today.
3	NYSEG was unable to fully reconcile and debug all its MHP billing practices and software before roll-out, resulting in rebills.	<ul style="list-style-type: none"> Although the billing concerns have been resolved, NYSEG learned from this experience that the rapid installation of meters is of limited value unless related software and business practices are fully developed and tested by the time those meters come online. In other words, new metering, meter communications, software, and applications capabilities should be fully coordinated.

¹⁰ April Order, page 37.

Table 3: Transparency, Standardization, and Accuracy Issues and Findings

#	Issue	Finding(s)
1	Standardized hourly prices in each of the utility's programs should be based on the same Day-Ahead zonal hourly wholesale prices from the NYISO.	The Company has addressed this issue, MHP electric supply pricing is calculated based on the NYISO Zone prices at the point of delivery to the customer. The Company does not have any additional recommendations.
2	Transparent tariff language that explains commodity-related cost elements.	The Company has addressed this issue; tariffs filed in December 2006 describe the formula used to derive the hourly pricing. The Company does not have any additional recommendations.
3	Delivery of customer's hourly data to ESCOs in an electronic format.	The Company has addressed this issue; ESCOs have access to their customer's hourly data through the Company's secured website. The Company does not have any additional recommendations.
4	Additional steps toward standardization and transparency since implementation of MHP.	None to date. The Company does not recommend any additional standardization or transparency at this time.
5	The Company has not received any reports of customers having difficulty verifying their hourly bills. Customers can access their hourly usage and the energy price for that hour at the time of billing for their personal verification of the bill.	The Company does not see a need change its verification process at this time.
6	The Company has not experienced any new meter accuracy issues. If an interval meter is missing data, the Company has an established procedure that was in place for all customers before the beginning of the MHP program.	The Company does not see a need change its procedure to deal with missing data at this time.

Conclusion

The experience of MHP Phase 1 at NYSEG suggests that time-based pricing can encourage customers to become more aware of their energy consumption and use energy more efficiently and effectively. In turn, changes in their consumption can reduce or defer the need for supply-side construction. Unfortunately, time-based pricing could be confusing and frustrate customers, if the technology involved falls short of expectations, or if time-based pricing is launched without effective customer solutions support.

In addition to the specific recommendations NYSEG has made in the body of this report, the Company suggests that new metering and pricing, communications and software, and energy efficiency and demand response efforts be linked to maximize their mutual value and effectiveness.

2006 Workshop Survey**NYSEG/RG&E MHP Workshop Evaluation**

(form updated 6/21/06)

Date _____

Participant Name (optional) _____

Location _____

1. How were you notified of the workshop?
 - ☐ Phone
 - ☐ Letter
 - ☐ Postcard
 - ☐ Email
2. Was the notification adequate? ☐ Yes ☐ No
3. Did you get enough information from the workshop on these topics?
 - a. Hourly pricing concept ☐ Yes ☐ Somewhat ☐ No
 - b. Metering/ telecommunication ☐ Yes ☐ Somewhat ☐ No
 - c. Billing info ☐ Yes ☐ Somewhat ☐ No
 - d. Hourly pricing data analysis ☐ Yes ☐ Somewhat ☐ No
 - e. NYSERDA Presentation ☐ Yes ☐ Somewhat ☐ No
 - f. Regulatory Requirements ☐ Yes ☐ Somewhat ☐ No

Suggestions for improvement: _____

4. Does your organization have the ability to shift load? ☐ Yes ☐ No
5. Does your organization have the ability to curtail load? ☐ Yes ☐ No
6. Would you like to meet with your account manager to discuss this further?
 - ☐ Yes ☐ No
7. How do you think Mandatory Hourly Pricing will benefit your organization?

2007 MHP Customer Survey

New York State Public Service Commission Department of Public Service

You may complete an electronic version of the survey online at:
<http://www.dps.state.ny.us/NYSEGPricingSurvey.htm>

Your Profile:

1. While New York State Electric and Gas (NYSEG) distributes your electricity, from whom do you purchase your electric supply?
New York State Electric and Gas
An Energy Services Company (ESCO)
Another organization (Please explain) _____
2. Have you discussed alternative electricity pricing arrangements with one or more suppliers other than NYSEG, also known as Energy Service Companies, or ESCOs?
Yes
No
3. If you switched to an ESCO, did you switch suppliers because of the change in NYSEG's electricity supply billing to hourly pricing? If you purchase electric supply from NYSEG, please skip questions 3 and 4 and go to question 5.
Yes
No
4. If you switched to an ESCO, how does your ESCO or alternative supplier charge for electricity supply? If you purchase electric supply from NYSEG, please skip this question and go to question 5.
(check one)
Fixed price
Hourly prices
Blend of fixed and hourly prices
Not sure
Other, please explain _____
5. What description best reflects your organization? Please check one.
Manufacturing (one-shift operation)
Manufacturing (two-shift operation)
Manufacturing (three-shift operation)
Water Treatment/Sanitation Facilities
Warehouse/Distribution Facilities

Utility - Energy/Telecommunications
Power Generator
Commercial Office Building
Hospital, Nursing Home or other Health Care
Government

Correctional Facility
 Religious Organization
 Farm/Food Processor
 Education K-12
 Education College/University
 Retail
 Lodging/Entertainment
 Other, please explain _____

6. What percent of total annual operating costs do total electricity costs (delivery plus supply) represent?

(Check only one)

- Less than 1%
- 1% - 5%
- 6% - 10%
- 11% - 20%
- Greater than 20%
- Do not know

Education and Outreach:

7. We would like to know what organizations, over the past 12 months, provided you or another member of your organization with information about hourly electricity pricing and the usefulness of the information. For each organization listed, please rate the usefulness of the information on a 1-5 scale with 1 being "Not at all useful" and 5 being "Very useful" or check "Did not provide information" if no information was provided by the organization.

Did not provide information Not at all useful Somewhat useful Very useful
 1 2 3 4 5

NYSEG ☐ ~ ~ ~ ~ ~

Energy Service Companies (ESCOs) ☐ ~ ~ ~ ~ ~

New York Independent System Operator (NYISO) ☐ ~ ~ ~ ~ ~

NYS Department of Public Service (Public Service Commission staff) ☐ ~ ~ ~ ~ ~

New York State Energy Research and Development Authority (NYSERDA) ☐ ~ ~ ~ ~ ~

Industry association ☐ Not applicable
or consultant

8. Did you attend an hourly electricity pricing workshop sponsored by NYSEG?

Yes, I attended
No, but I was aware of the workshop *[Go to question 9]*
No, I was not aware of the workshop *[Go to question 9]*

8a. How helpful did you find the workshop in providing useful information regarding hourly electricity commodity billing?

Not at all helpful Somewhat helpful Very helpful
1 2 3 4 5
Not applicable Not applicable Not applicable Not applicable

8b. Did you request that a NYSEG account manager provide additional information on hourly electricity pricing?

Yes *[Go to question 8c]*
No *[Skip question 8c and go to question 9]*

8c. Did your NYSEG account manager follow-up with you to provide additional information on hourly electricity pricing?

Yes
No Unsure

9.The purpose of this question is to help us better design future Outreach and Education sessions regarding hourly pricing.

Please tell us your level of understanding in the following areas related to making decisions regarding the purchase of electricity supply.

Indicate your level of understanding using a 1-5 scale with 1 representing the lowest level of understanding and 5 the highest level of understanding, and check the appropriate boxes if you think additional information in that particular area would be helpful.

Do not Understand Topic	Somewhat Understand Topic	Thorough Understanding of Topic	More Information would be Helpful		
1	2	3	4	5	
How wholesale energy prices are set	~	~	~	~	<input type="radio"/>
How your monthly electricity commodity bill is calculated	~	~	~	~	<input type="radio"/>
Using load management software	~	~	~	~	<input type="radio"/>
Securing electricity from a supplier other than your utility (e.g., ESCOs)	~	~	~	~	<input type="radio"/>
Purchasing financial hedges to offset electricity price risk	~	~	~	~	<input type="radio"/>
Understanding energy efficiency opportunities	~	~	~	~	<input type="radio"/>
NYISO Demand Response programs	~	~	~	~	<input type="radio"/>
NYSERDA Technical Assistance Services (e.g., audits or load analysis)	~	~	~	~	<input type="radio"/>

NYSERDA incentives
for energy efficiency/
demand response
measures ☐

NYSERDA programs
for installing on-site
or distributed generation ☐

Your View:

10. Does your facility have the flexibility to shift operations in response to hourly prices?

Yes
No
Unsure

11. Do you feel it is helpful to be able to view NYSEG's hourly commodity prices a day in advance?

Yes
No Unsure

12. Do you feel you have the necessary information to develop a strategy for responding to hourly pricing?

Yes
No

you think hour
Positively
Not very mu
Negative

13a. Please explain your response to the previous question.

Your Actions:

14. What barriers has your facility experienced in responding to hourly electricity supply prices? (If your organization does not currently face hourly prices, please indicate which barriers you feel your facility would face.) Please check all that apply.

Insufficient resources to pay attention to hourly prices

Inflexible labor schedule
 Managing electricity use is not a priority in my organization
 The cost of responding outweighs the savings
 Negative previous experience with day-ahead hourly pricing
 No barriers have been encountered
 Other (please specify): _____

15. In your response to NYSEG's hourly electricity pricing program, what actions have you already taken during the past 12 months, or anticipate taking during the next 12 months? Please check all that apply or select "None":

past 12 next 12

Energy audit ☐ ☐
 Improve energy efficiency ☐ ☐
 Shift electricity demand ☐ ☐
 Purchase financial hedges ☐ ☐
 Use load management software ☐ ☐
 Participate in NYSERDA program(s) ☐ ☐
 Participate in NYISO load management programs ☐ ☐
 Switch to an electricity supplier other than your local utility ☐ ☐
 Install on-site or distributed generation ☐ ☐
 None ☐ ☐

Additional Comments:

16. Do you have any additional comments you would like to share with us about your experience with hourly pricing thus far?

Optional:

We plan to send a follow-up reminder to those from whom we do not receive a completed survey. We would appreciate you giving us your name and your organization's name so that we can avoid sending you this reminder. Your responses to the survey will remain anonymous and the individual information will be kept confidential.

Name _____
 Organization _____

Thank You for completing this survey!

Please return by August 27, 2007 in the enclosed postage paid addressed envelope to:

*Consumer Assistance
NYS Department of Public Service
3 Empire State Plaza - Ste 1401
Albany, NY 12214-0234*

OR

You may complete an electronic version of the survey online at:

<http://www.dps.state.ny.us/NYSEG Pricing Survey.htm>

If you have any questions or would like assistance with completing this survey, please contact Bill Saxonis (518-474-5368 or william_saxonis@dps.state.ny.us) at the Department of Public Service.

Would you like additional information?

If you would like additional information on Hourly Pricing or NYSEDA Programs, please check the appropriate boxes below, fill in your contact information and return this form in the enclosed return envelope.

NOTE: This form will be processed separately from the survey and will not be used to track survey responses.

Hourly Pricing:

I would like more information on hourly pricing sent to me from New York State Electric and Gas (NYSEG).

I would like to speak with someone from New York State Electric & Gas to get a more detailed explanation about the Hourly Pricing program.

Neither

NYSEDA Programs:

I would like more information sent to me on NYSEDA programs that may assist my organization in evaluating and responding to hourly prices.

I would like to speak with someone from NYSEDA about programs that may assist my organization in evaluating and responding to hourly prices.

Neither

Please provide your contact information below so that the above requested information can be provided:

Name/Contact _____

Organization _____

Address _____

Phone No. _____

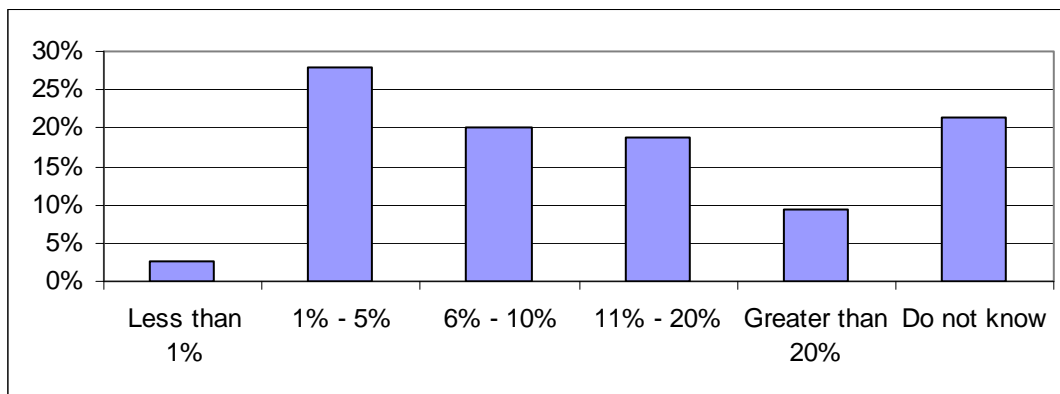
E-mail address _____

Customer Survey Responses and Analysis

Respondents to 2007 Survey

Of the respondents who knew how much of their operating costs are spent on electricity (including both delivery and supply), roughly one third spend five percent or less on electricity, and roughly two thirds spend more (see Figure B1). Seven customers devote more than 20 percent of their operating budget to electricity. The customers spending more than 20 percent of their operating costs on electricity included two three-shift manufacturers, a four-shift manufacturer, an elderly/disabled apartment complex, and multi-tenant warehouse/office, health care, and correctional facilities.

Figure B1: Electric Costs As Percentage Of Operating Expenses (2007 Survey)



MHP has no impact on customers' delivery bills, other than the monthly meter charge. If a customer purchases commodity from NYSEG, supply and capacity are charged separately under MHP. If a customer purchases commodity from another supplier, any form of pricing is allowed; the ESCO is settled based on the customer's hourly load rather than the service class profile. As shown in Table B1, most respondents do not purchase their electric supply from NYSEG.

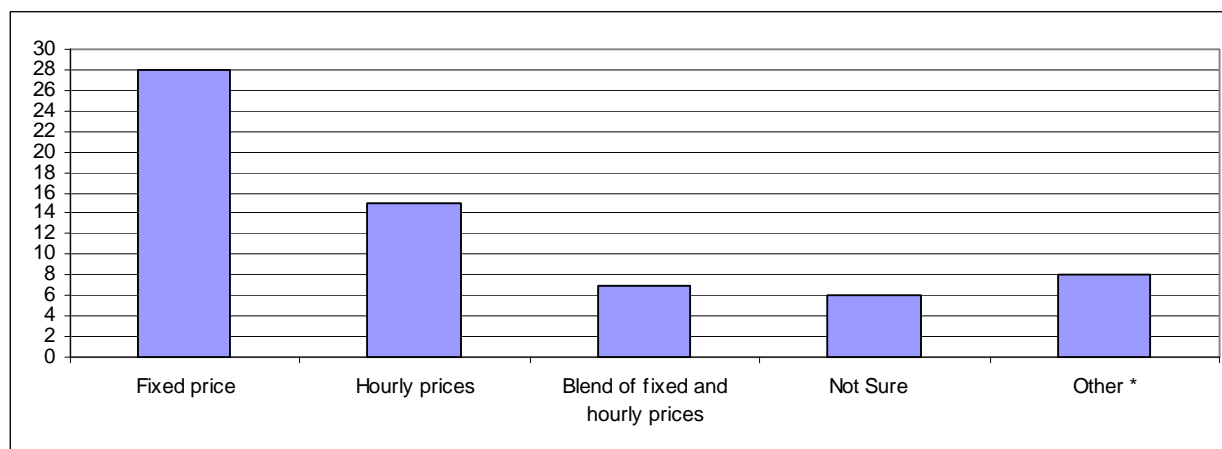
Table B1: Supply Providers (2007 Survey)

Source of Electric Supply	Responses	
	Number	Percent
NYSEG	11	15%
Energy Services Company (ESCO)	57	76%
NYISO	7	9%

Of the 64 customers who purchase their electric supply from a provider other than NYSEG, 11 customers (17%) switched to another provider because of the NYSEG change to MHP.

Figure B2 identifies how the 64 non-NYSEG customers are now paying for electric supply. Roughly 45% the customers are paying a variable rate, hourly rate, or a blend of fixed and hourly prices; roughly 45% are paying a fixed price. A variety of different customer types have chosen a fixed price, including most of the customers who switched specifically to avoid MHP. (Two customers who switched, both manufacturing facilities, have the ability to partially fix their prices.)

Figure B2: Commodity Pricing (2007 Survey)



* Other was described as:

1. Ability to fixed a block based on day ahead market
2. Indexed Pricing
3. Variable
4. Variable LBMP + adder pricing and fixed block

Outreach and Education

More than three quarters of the 2007 survey respondents either attended or were aware of the 2006 workshops (Table B2).

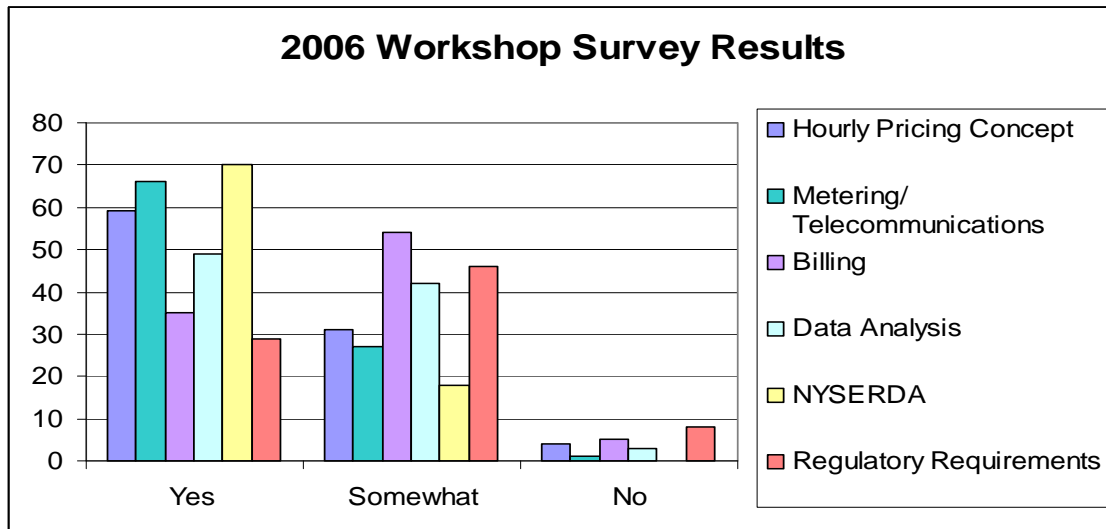
Table B2: Knowledge of 2006 Workshop (2007 Survey)

Knowledge of Workshop	Respondents	
	Number	Percent
Yes, I attended	24	32%
No, but I was aware of the workshop	35	47%
No, I was not aware of the workshop	16	21%

On the 2006 workshop survey, two-thirds of attendees asked an account manager to contact them after the workshop (attendees were not asked which matters the customer wished to discuss with the account manager). Of the 2007 survey respondents who attended, almost half said that they asked that a NYSEG account manager provide additional information on hourly electricity pricing, and all except one of those said that an account manager did follow up on their request (one customer was unsure if the follow-up occurred).

At the workshop, 63% of the 2006 survey respondents said that they received enough information about hourly pricing, and only 4% found the pricing information inadequate (Figure B3). In general, the information gaps at the workshop were in the areas of billing and regulatory requirements, not pricing.

Figure B3: Enough Information Provided at Workshop (2006 Survey)



On a scale of 1 (not at all useful) to 5 (very useful), respondents to the 2007 survey gave the usefulness of the hourly electricity commodity billing information provided at those workshops an average score, in hindsight, of 3.33.

Most 2007 survey respondents reported receiving information about hourly pricing from either NYSEG or ESCOs (Table B3). (Five percent of respondents reported receiving no information from any of these sources; most respondents received information from two to six sources.) The usefulness of this information was scored as 3.46 and 3.47, respectively. Information received from consultants or industry associations was found to be slightly less useful.

Table B3: Pricing Information Availability and Usefulness (2007)

Information Provider	Percent of Respondents who Received Information	Average Information Usefulness Rating
NYSEG	87%	3.46
Energy Service Companies (ESCOs)	65%	3.47
New York Independent System Operator (NYISO)	24%	2.83
NYS Department of Public Service (PSC Staff)	12%	2.33

Information Provider	Percent of Respondents who Received Information	Average Information Usefulness Rating
New York State Energy Research and Development Authority (NYSERDA)	24%	3.00
Industry association or consultant	27%	3.35

The 2007 customer survey also asked customers about their level of understanding on a variety of pricing issues (again using a 1-5 scale), and asked whether additional information on each of those issues would be helpful in making decisions regarding the purchase of electricity supply (Figures B4 and B5).

For each topic, (a) up to 18 customers said they had no understanding, (b) up to 23 customers said they had a thorough understanding, and (c) the remaining customers scored their understanding in the mid-range. On average, customers claimed the lowest understanding (2.63) of purchasing financial hedges to offset electric price risk, and the highest understanding (3.96) of securing electricity from a supplier other than their utility (e.g., ESCOs). (This high score reflects the many years of retail access and Voice Your Choice outreach and education at NYSEG, as well as the high percentage of respondents who currently purchase their supply from a provider other than the Company.)

Up to one third of responding customers stated that they would find additional information useful on any of these topics. About one-third of customers were interested in more information on NYSERDA programs (for technical assistance services including audits and load analysis, for energy efficiency and demand response incentives, and for installing on-site or distributed generation), and the fewest customers (15%) expressed interest in more information on securing electricity from a supplier other than their utility (e.g., ESCOs).

Figure B4: Customer Understanding of Pricing

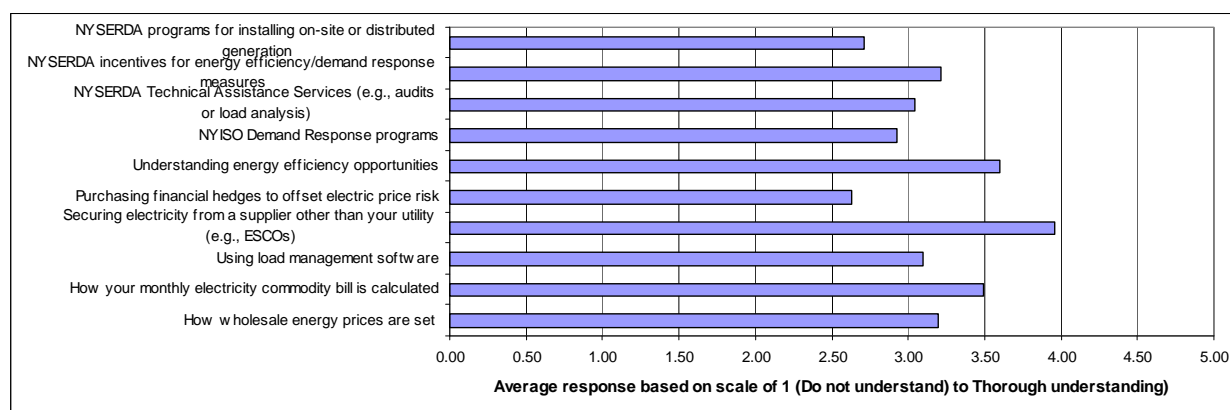
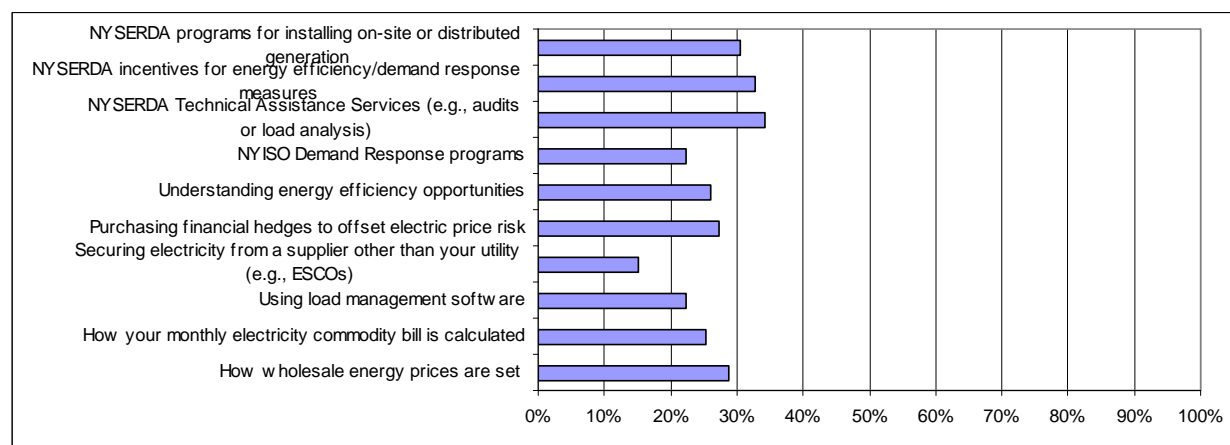


Figure B5: Customer Interest in Additional Pricing Information



Price Responsiveness

As shown in Table B4, roughly half the respondents to the 2006 workshop survey believed that they had the ability to curtail or shift load, and about half did not. More than three quarters of the respondents to the 2007 survey (Table B5) said that they did not have the ability to shift operations in response to hourly prices.

Table B4: Load Curtailment/Shifting (2006 Survey)

Load Management Activities	Respondents	
	Number	Percent
Able to shift load		
Yes	39	48%

Load Management Activities	Respondents	
	Number	Percent
No	43	52%
Able to curtail load		
Yes	43	54%
No	37	46%

Table B5: Load Curtailment/Shifting (2007 Survey)

Load management activities	Respondents	
	Number	Percent
Facility has the flexibility to shift operations in response to hourly prices		
Yes	8	11%
No	63	84%
Unsure	4	5%

Workshop survey participants in 2006 were asked how hourly pricing would benefit their organization. Table B6 summarizes their responses. Most respondents were unable to determine a meaningful benefit from this program in 2006, although a significant fraction did find potential in the new pricing. Table B7 provides the responses to a similar question in the 2007 survey, which also produced diverse responses.

Table B6: Benefits Of Hourly Pricing (2006 Survey)

Level of Benefits	Number of comments	Details
Benefit	13	<ul style="list-style-type: none"> • Long term energy planning/improvements • Improve energy use awareness • Incentive to evaluate & change energy consumption practices • Knowing profile will lead to money-saving improvements • Help shift load to lower operating costs • Encourage summer pre-cooling • Manage peak load
No/small benefit	14	

Level of Benefits	Number of comments	Details
Harm	8	<ul style="list-style-type: none"> • Increase costs • Cannot reduce peak; may need to consider moving facility • Redirect funds from core business
Not sure/ too early	23	

Table B7: Impact of Hourly Prices (2007 Survey)

Impact	Number of Respondents	Details
Positive	9	<ul style="list-style-type: none"> • Favorable current load profile • Try to manage usage or on-site generation to reduce load during high-priced periods • Might be able to schedule around prices, given sufficient advanced notice • On-site generation could allow us to respond • Shed load using an energy management control system
Not much	28	
Negative	18	<ul style="list-style-type: none"> • Increase costs • Operating hours and/or customer product/service demands that cannot be changed drive usage • Priorities other than energy prices drive operating decisions • Flat load with little or no ability to reduce peak
Unsure	20	

Customers were also asked in the 2007 survey whether it is helpful to be able to view NYSEG's hourly commodity prices a day in advance, and whether they had the necessary information to develop a strategy for responding to hourly pricing (Table B8). Roughly one-third of respondents answered positively.

Table B8: Additional Customer Information

Additional Information	Respondents	
	Number	Percent
Helpful to have day-ahead NYSEG hourly commodity prices		
Yes	27	36%
No	34	45%
Unsure	14	19%
Have information to develop pricing response strategy		
Yes	26	35%
No	27	36%
Unsure	22	29%

The 2007 survey probed to determine what actions respondents have taken or planned to take in response to hourly pricing, and the barriers they have encountered. Tables B9 and B10 provide the results. Improving energy efficiency and participating in NYSERDA programs were the most common actions, while the most common barriers were an inflexible labor schedule or insufficient resources to pay attention to hourly energy pricing.

Table B10: Actions Taken in Response to Hourly Pricing

Actions	When	
	Past 12 months	Next 12 months
Improve energy efficiency	25	31
Participate in NYSERDA program(s)	24	24
Switch to an electricity supplier other than your local utility	24	14
Energy audit	21	14
Participate in NYISO load management programs	13	14
Use load management software	12	11
Install on-site or distributed generation	6	8
Shift electricity demand	4	8
Purchase financial hedges	3	9
None	16	12

Table B11: Barriers to Action to Respond to Hourly Pricing

Barriers	Number of Respondents	Details
Insufficient resources to pay attention to hourly prices	43	
Inflexible labor schedule	42	
The cost of responding outweighs the savings	15	
Other	14	<ul style="list-style-type: none"> • Fixed hours and/or inflexible operations • Management option to move production to facilities located elsewhere • Market price volatility • Lack of cooling capability on generator • NYSEG delay in providing billing and usage data • Lack of knowledge
Managing electricity use is not a priority in my organization	7	
Negative previous experience with day-ahead hourly pricing	2	
No barriers have been encountered	6	