

BEFORE THE  
STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

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In the Matter of  
Central Hudson Gas & Electric Corporation  
Cases 08-E-0887 & 08-G-0888  
November 2008

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Prepared Testimony of:  
Staff Hourly Pricing Panel

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1 Q. Please state your names and business address.

2 A. Our names are Christopher L. Graves and Vijay  
3 Puran. Our business address is Three Empire  
4 State Plaza, Albany, New York 12223-1350.

5 Q. Mr. Graves, please describe your educational  
6 background.

7 A. I received a Bachelor of Science degree in  
8 economics from the Illinois State University in  
9 1990 and a M.A. in economics from the Southern  
10 Illinois University at Edwardsville in 1997.

11 Q. Mr. Graves, please summarize your professional  
12 experience.

13 A. I am a Principal Economist in the Office of  
14 Regulatory Economics of the Department of Public  
15 Service. I have been with the New York  
16 Department of Public Service (DPS) since January  
17 2002. I have provided analysis and testimony on  
18 electric and telecommunications issues  
19 including: renewable portfolio standard, demand  
20 response in electricity, hourly pricing of  
21 electricity, telecommunications mergers, and  
22 competition in the local exchange market.  
23 Before coming to the DPS, I worked in the

1           Telecommunications Division of the Illinois  
2           Commerce Commission as an Economic Analyst from  
3           1996 to 2002. I provided the Commission with  
4           independent analysis and recommendations  
5           regarding policy issues, tariffs, pricing, and  
6           the application of laws and regulations. Areas  
7           on which I concentrated included: unbundled  
8           network element (UNE) pricing, implementation of  
9           the Telecommunications Act of 1996, market  
10          competition, line sharing, and the effects of  
11          telecommunications mergers on competition in the  
12          local exchange market. While working on my  
13          master's degree, I worked for the Economic Group  
14          of Southwestern Bell Telephone Company as a  
15          researcher.

16    Q.    Mr. Puran, please summarize your educational  
17          background and experience.

18    A.    I graduated from the University of Guyana in  
19          October 1987 with a Bachelor of Engineering  
20          Degree in Electrical Engineering. In February  
21          1993, I graduated from the City College of New  
22          York with a Master of Engineering Degree in  
23          Electrical Engineering. I received a Master of

1 Public Administration Degree from the Nelson A.  
2 Rockefeller College, University at Albany, in  
3 December 2001.

4 I accepted employment with the Department of  
5 Public Service in November 1994. My duties  
6 include the technical analysis of utility rate  
7 filings, focusing mainly on cost allocation and  
8 rate design.

9 Q. Mr. Puran, have you appeared as a witness before  
10 this Commission?

11 A. Yes, I have testified in Cases 02-E-0198, 02-E-  
12 0551 and 03-E-0765.

13 Q. What is the purpose of the Panel's testimony?

14 A. The purpose of our testimony is to recommend  
15 that customers with maximum demands greater than  
16 500 kW be required to take service under Central  
17 Hudson Gas & Electric Corporation (Central  
18 Hudson or the Company) Hourly Pricing Provision  
19 (HPP) and to recommend changes on how the  
20 capacity charge component of the Company's UCAP  
21 charge should be collected from HPP customers.

22 Q. Are you sponsoring any Exhibits?

23 A. Yes, we are sponsoring two Exhibits; HPP-1 and

1 HPP-2.

2 Q. What are current tariff provisions regarding  
3 eligibility under the Company's HPP?

4 A. Under the Company's current tariff provisions,  
5 S.C. No 3 (Large Power Primary Service) and S.C.  
6 No. 13 (Substation and Transmission Service)  
7 customers purchasing their energy supply  
8 requirements from the Company are required to do  
9 so under the HPP. These customers generally  
10 have maximum demands exceeding 1,000 kW.

11 However, S.C. No. 2 (General Service - maximum  
12 demand less than or equal to 1,000 kW) customers  
13 purchasing their energy supply requirements from  
14 the Company can elect to do so under the HPP.  
15 Otherwise, they purchase their energy supply  
16 requirements under of the Company's Market Price  
17 Charge and Market Price Adjustment provisions.

18 Q. What is the Commission's policy towards  
19 expanding the class of customers on hourly  
20 pricing?

21 A. The Commission's Order Denying Petitions for  
22 Rehearing and Clarification in Part and Adopting  
23 Mandatory Hourly Pricing Requirements (MHP

1 Order), in Case 03-E-0641(issued April 24,  
2 2006), expanded or implemented hourly pricing  
3 for all New York's major utilities, except  
4 Central Hudson. Central Hudson was not required  
5 to implement Hourly Pricing because Central  
6 Hudson had already implemented Hourly Pricing  
7 Provisions for its largest customers a year  
8 earlier, in 2005, as directed by the April 18,  
9 2005 Order in Case 00-E-1273, Proceeding on  
10 Motion of the Commission as to the Rates,  
11 Charges, Rules and Regulations of Central Hudson  
12 Gas & Electric Corporation for Electric Service.  
13 Further, the benefits of hourly pricing, cited  
14 on page 1 of the MHP Order, were potential  
15 reductions to peak period prices, enhanced peak  
16 period reliability, wholesale market power  
17 mitigation, and a reduction in New York State's  
18 dependence on natural gas fueled generation.  
19 The Commission also noted on page 33 of the MHP  
20 Order that, "Hourly pricing also yields more  
21 equitable customer bills than does the existing,  
22 less exact, average energy rate." To summarize,

1           the Commission views hourly pricing as  
2           beneficial.

3    Q.    Are there more recent expansions of Hourly  
4           Pricing that give a sense of the Commission's  
5           attitude towards further expansion of hourly  
6           pricing?

7    A.    Yes.    In Case 07-E-0479, NYSEG proposed to  
8           reduce its demand threshold for MHP customers  
9           from 1,000 kW to 300 kW by 2010.    The Commission  
10          approved NYSEG's proposal by Order issued August  
11          29, 2007.    In Consolidated Edison's last  
12          electric rate case, it proposed to expand Hourly  
13          Pricing to customers with demand between 500 kW  
14          and 1.5 MW.    This proposal was accepted by the  
15          Commission in Case 07-E-0523 by Order issued  
16          March 25, 2005.    Earlier this year, in the  
17          Commission's Order in Case 07-E-0949 (issued  
18          July 23, 2008), Orange and Rockland was ordered  
19          to submit plans to expand Hourly Pricing to  
20          customers with demand between 500 kW and 1 MW.

21   Q.    Has Central Hudson proposed to expand its HPP  
22          such that customers with maximum demand less  
23          than 1,000 kW would be required to do so under

1 the HPP, if they purchase their energy supply  
2 requirements from the Company?

3 A. No.

4 Q. Are you proposing that Central Hudson expand its  
5 HPP such that customers with maximum demand less  
6 than 1,000 kW would be required to do so under  
7 the Company's HPP, if they purchase their energy  
8 supply requirements from the Company?

9 A. Yes. We are proposing that all Central Hudson  
10 customers with maximum demands greater than  
11 500 kW in any two months of the previous twelve-  
12 month period be required to do so under the  
13 Company's HPP, if they purchase their energy  
14 supply requirements from the Company.

15 Q. Why are you proposing an expansion of Hourly  
16 Pricing to customers with maximum demands  
17 greater than 500 kW?

18 A. To achieve more of the benefits that the  
19 Commission pointed out in the MHP Order,  
20 including potential reductions to peak period  
21 prices, enhanced peak period reliability,  
22 wholesale market power mitigation, a reduction  
23 in dependence on natural gas fueled generation,

1           and more equitable pricing of customer bills  
2           than provided by the existing, less exact,  
3           average energy rate.

4    Q.    How many electric customers would be affected by  
5           your proposed expansion?

6    A.    There are 118 customers comprising approximately  
7           64 MW of load that have a demand level above 500  
8           kW but below 1,000 kW.  Of those 118 customers,  
9           43 get their commodity from an ESCO, so 75 full  
10          service customers would be switched to the HPP  
11          tariff.  The 43 customers with ESCOs would  
12          remain on the rate they have agreed to with  
13          their ESCO.  All 118 customers would need  
14          interval meters to record each individual  
15          customer's hourly consumption.

16   Q.    Would the service to customers of ESCOs be  
17          changed by this expansion of HPP?

18   A.    No.  ESCO customers would continue to receive  
19          service at the rates agreed to with their ESCO.  
20          However, because individual customer hourly load  
21          data is available, the ESCO will be billed by  
22          the New York Independent System Operator for  
23          their customer's actual load instead of a class

1 average load shape. This will give ESCOs an  
2 incentive to develop time sensitive rates for  
3 their customers, although that decision would be  
4 up to the ESCOs and their customers.

5 Q. Why are you proposing a 500 kW threshold?

6 A. We are proposing a 500 kW threshold at this time  
7 because we would like to include those S.C. No.  
8 2 customers that are most likely to have the  
9 resources to monitor and react to hourly  
10 pricing. However, as customers gain experience  
11 in hourly pricing, we would like to see this  
12 threshold lowered gradually in the future.

13 Q. What are the thresholds for some other utilities  
14 in New York State?

15 A. In the MHP Order, National Grid, who like  
16 Central Hudson had already implemented Hourly  
17 Pricing, was ordered to reduce its demand  
18 threshold for MHP from 2,000 kW to 500 kW. In  
19 the Consolidated Edison electric rate case, the  
20 threshold was lowered to 500 kW. Likewise, in  
21 the O&R rate case, the Commission ordered O&R to  
22 reduce its threshold to 500 kW. In accordance  
23 with the Order in Case 07-E-0479, NYSEG will

1 lower its threshold to 300 kW over the next  
2 couple years.

3 **Meter Roll-Out and Data Requirements**

4 Q. What would drive the schedule for placing these  
5 new customers on HPP?

6 A. The schedule would be driven by how quickly  
7 Central Hudson could deploy new interval meters,  
8 outreach and education (O&E), and any required  
9 changes to back-office systems.

10 Customers transferring to Hourly Pricing should  
11 first be informed about how an Hourly Pricing  
12 tariff would work. Because the customers moving  
13 to the Hourly Pricing tariff will not have  
14 previously experienced time sensitive rates, it  
15 is important that they gain an understanding  
16 about their current load shapes and how Hourly  
17 Pricing would affect their commodity bill.

18 These customers will need to access their hourly  
19 load shapes, which can only be accessed after an  
20 interval meter is installed. The Company  
21 explained in response to Staff interrogatories  
22 DPS-201(a) and DPS-204(a), see Exhibit\_\_(HPP-1)  
23 and Exhibit\_\_(HPP-2), respectively, that of the

1 current 118 eligible customers, 108 would  
2 require interval meters. The 10 customers who  
3 do not need interval meters already have the  
4 meters installed for the Voluntary Hourly  
5 Pricing Program or for load research purposes.  
6 Ideally, customers should have access to a  
7 year's worth of hourly load data before moving  
8 onto the Hourly Pricing tariff, so they could  
9 examine their load patterns, and make  
10 adjustments in anticipation of the new Hourly  
11 Pricing tariff. In this way, customers would be  
12 able to see how their load is affected by  
13 season, production patterns, weather, and  
14 lighting needs. This would give customers the  
15 greatest ability to prepare for the tariff  
16 implementation. Also, in the MHP Order, the  
17 Commission stated that customers "need access to  
18 as much interval load data as possible to aid  
19 them in making informed decisions about hourly  
20 pricing."

21 Q. Is there any guidance that you could give to  
22 Central Hudson on meter roll-out?

23 A. Yes. In the first several months of 2006,

1 National Grid installed approximately 1,000  
2 "state-of-the-art" interval meters for its SC-3  
3 customers with demands between 500 kW to 1,999  
4 kW. Some of the lessons learned by National  
5 Grid from the experience with its meter roll-out  
6 were reported in the utility's July 30, 2007  
7 "Mandatory Hourly Pricing Six Month Evaluation"  
8 report. The report was filed in Case 03-E-0641  
9 and can be found on the PSC's website at:

10 [http://www.dps.state.ny.us/Mandatory\\_Hourly\\_Pricing.html](http://www.dps.state.ny.us/Mandatory_Hourly_Pricing.html)  
11

12 In summary, National Grid's findings with  
13 regards to meters were:

- 14 • Seven months was not enough time to  
15 procure, program, test and install  
16 1,000 state-of-the-art interval meters.
- 17 • With a one year lead time, the meter  
18 installation process could be more  
19 seamlessly incorporated into the work  
20 planning process.
- 21 • New meters should display all the  
22 information as old meters. (Some  
23 customers complained that new meters

1                    did not display demand like the old  
2                    meters did.)

3                    We understand that National Grid and Central  
4                    Hudson are two different companies and the  
5                    Central Hudson roll-out would involve installing  
6                    far fewer meters (approximately 108 meters), but  
7                    Central Hudson should review National Grid's  
8                    meter implementation experience. Central Hudson  
9                    should develop timetables for installation of  
10                   new meters that realistically take into account  
11                   its resources. Once the meters are installed  
12                   and are functioning properly, the expansion of  
13                   HPP should be effectuated one year later.

14                   **Outreach and Education**

15                   Q.    Do you have any guidance on what type of  
16                   outreach and education (O&E) should be conducted  
17                   by the Company?

18                   A.    Yes. Over the past couple years as utilities  
19                   across the state have implemented Hourly Pricing  
20                   for their largest customers, those utilities  
21                   have filed reports with the Commission on their  
22                   experience implementing Hourly Pricing. We will  
23                   go through the findings of some of those reports

1 here, in order to give some guidance on O&E for  
2 these customers.

3 Q. Please continue.

4 A. On January 24, 2007, Con Edison filed its report  
5 with the Commission entitled, "Consolidated  
6 Edison Company of New York, Inc. Mandatory  
7 Hourly Pricing Program Process Evaluation". The  
8 report was prepared by RWL Analytics for Con  
9 Edison and is on the PSC's website at:

10 [http://www.dps.state.ny.us/Mandatory\\_Hourly\\_Pric](http://www.dps.state.ny.us/Mandatory_Hourly_Pricing.html)  
11 [ing.html](http://www.dps.state.ny.us/Mandatory_Hourly_Pricing.html).

12 This report reviewed the implementation of  
13 Hourly Pricing through interviews with Con  
14 Edison's staff who implemented the program and  
15 through surveys of customers on the program.

16 Q. What recommendations did Con Edison's MHP  
17 Evaluation Report provide for future O&E efforts  
18 for MHP customers?

19 A. On pages 44 and 45 of the report, two  
20 recommendations regarding future O&E efforts  
21 were offered:

22 1. Consider offering another live information  
23 exchange in the future. A new information

1 exchange could provide market updates on  
2 real time pricing, tools and resources  
3 available for managing real time pricing  
4 and demand load management, both from the  
5 open marketplace, as well as from NYSERDA  
6 and the utility; as well as live  
7 testimonials from customers that have  
8 successfully switched to alternative  
9 sources.

10 2. The Company should continue to offer  
11 customer support. As indicated in the  
12 survey responses, the live seminars  
13 provided useful information for customers  
14 and the ESCOs. The Company should  
15 continue efforts to invite customers -  
16 directly and through their associations -  
17 and to contact their Account Executives  
18 for direct information on Day-Ahead Hourly  
19 Pricing and direction on use of the Con  
20 Edison energy management software tool. It  
21 may also be useful for the Company to  
22 consider continuing learning sessions with  
23 ESCOs and consultants.

1 Q. Are there any lessons learned from other  
2 utilities' implementation of Hourly Pricing that  
3 can be taken into account in Central Hudson's  
4 expansion of Hourly Pricing?

5 A. Yes. In September 2006, National Grid  
6 transferred approximately 800 customers with  
7 demands above 500 kW onto hourly pricing. As  
8 will be the case with the proposed Central  
9 Hudson customers, National Grid customers had no  
10 previous experience with hourly pricing and also  
11 required installation of new interval meters.  
12 On July 30, 2007, National Grid filed its six-  
13 month report, "Mandatory Hourly Pricing Six  
14 Month Evaluation", wherein the following O&E  
15 lessons learned activities were identified:

- 16 1. Workshops with customers were extremely  
17 helpful in preparing customers for the  
18 transition to MHP.
- 19 2. The Company should provide access to a  
20 video or webcast of workshops for those  
21 unable to attend and for new customers  
22 becoming eligible for the first time.
- 23 3. O&E should expand coverage on energy

1 efficiency, distributed generation, and  
2 the use of financial hedges.

3 4. Energy management software was not used  
4 by customers as much as expected.

5 Q. In your review of other utilities'  
6 implementation of hourly pricing, do you have  
7 any recommendations with regards to what Central  
8 Hudson's O&E efforts should focus on to inform  
9 new HPP customers?

10 A. Yes. Central Hudson's O&E efforts should  
11 incorporate the following:

- 12 • Use of live seminars to provide  
13 information on HPP to customers,  
14 consultants, and ESCOs.
- 15 • Seminars should include testimonials from  
16 customers already on HPP.
- 17 • Customers with demands above 1 MW should  
18 be invited to a seminar for updates on the  
19 program.
- 20 • Workshops should be scheduled close to the  
21 launch of HPP tariff expansion.
- 22 • Webcast/video of outreach workshops should  
23 be archived and accessible on the

- 1           Company's website.
- 2           • Training should be offered to both retail
- 3           access and full service customers.
- 4           • O&E should offer expanded coverage on the
- 5           topics of energy efficiency, distributed
- 6           generation, and use of financial hedges.
- 7           • A monthly newsletter should be considered,
- 8           similar to National Grid's "Business and
- 9           Energy" which provides customers more in-
- 10          depth information on topics such as energy
- 11          efficiency, distributed generation, and
- 12          how to use financial hedges that may be
- 13          helpful to HPP customers. An electronic
- 14          newsletter can be targeted more directly
- 15          to the energy managers or building
- 16          engineers and would likely have more
- 17          impact than the current bill inserts.
- 18          • The Company should communicate with
- 19          customers and vendors to determine if
- 20          there are any ways to make the energy
- 21          management software package more appealing
- 22          and useful to customers.

1 Q. Do you have any suggestions regarding energy  
2 management software?

3 A. Yes. Central Hudson developed load management  
4 software, called Energy Manager, with Enerwise  
5 Global Technologies for its current Hourly  
6 Pricing customers to examine their hourly load  
7 and hourly pricing data. The Company provided  
8 this software to its Hourly Pricing customers  
9 for two years without charge. We recommend that  
10 the Company should at least provide this  
11 software free of charge to new HPP customers  
12 during the period from installation of the  
13 interval meters to when the customers are billed  
14 under the HPP.

15 **Cost of Expansion**

16 Q. Have you estimated the cost of expanding the HPP  
17 tariff to customers with demands above 500 kW?

18 A. No. Staff has not undertaken an estimation of  
19 these costs at this time, as it would be more  
20 appropriate to do this evaluation when Central  
21 Hudson files its plan, as recommended below, to  
22 implement the expanded application of its HPP.  
23 The costs will be scrutinized at that time.

1           **Cost Recovery and Implementation**

2    Q.    How would you recommend that Central Hudson  
3           recover the cost of these meters?

4    A.    We recommend that the meter costs be recovered  
5           via a tariffed incremental meter charge in  
6           conformance with the Commission's April 2006 MHP  
7           Order. On page 31 of that Order, the utilities  
8           were directed to "recover incremental metering  
9           costs from the affected customers over time in  
10          conformance with normal amortization periods."

11          The Commission subsequently approved National  
12          Grid's proposal to recover metering costs  
13          through an incremental metering charge. It is  
14          appropriate for Central Hudson to recover its  
15          metering costs in a similar manner in this case.

16   Q.    Do you have any further recommendations  
17          regarding cost recovery and implementation?

18   A.    Yes. We propose that Central Hudson be directed  
19          to file an implementation plan within 60 days of  
20          a Commission Order in this case to expand its  
21          hourly pricing program. The plan should include  
22          draft tariff amendments to effectuate the  
23          expansion to all customers with maximum demands

1 greater than 500 kW in any two months of the  
2 previous twelve-month period, an outreach and  
3 education program consistent with our  
4 discussions above, an estimate of costs and  
5 proposed cost recovery terms, and meter data  
6 provisions consistent with our discussions  
7 above.

8 Once filed, the plan will be subject to comments  
9 and Commission approval before implementation.  
10 We estimate based on our discussions above, that  
11 customers with demand in excess of 500 kW will  
12 be placed on mandatory hourly pricing in early  
13 2011.

14 **Generation Capacity Costs**

15 Q. What are generation capacity costs?

16 A. As part of the electricity market in New York,  
17 Load Serving Entities (LSEs), such as Central  
18 Hudson, are required by the New York Independent  
19 System Operator (NYISO) to purchase generation  
20 capacity (sometime referred to as Installed  
21 Capacity or ICAP) to make sure the electric  
22 system has sufficient generation capacity to  
23 maintain reliable electric supply and to avoid

1           blackouts. The amount of generation capacity  
2           LSEs are required to purchase is known as  
3           unforced capacity (UCAP), which is ICAP adjusted  
4           for generators' average availability.  
5           The UCAP requirement is based on the peak load  
6           demanded by the LSE's customers at the time of  
7           the NYISO's overall system peak hour and the  
8           cost associated with the UCAP requirement is  
9           called the generation capacity cost. Thus,  
10          customer demand that occurs during the system  
11          peak hour contributes to the LSE's generation  
12          capacity cost while demand at other times will  
13          not contribute to the LSE's generation capacity  
14          cost. For example, a ski resort that has a  
15          large demand during the winter, but closes down  
16          during the summer, would have no impact on the  
17          amount of generation capacity needed to serve  
18          the system peak (which occurs in the summer),  
19          and therefore, would not have contributed to the  
20          LSE's UCAP requirement and its associated  
21          generation capacity cost.

1 Q. Can you briefly explain how the LSE's capacity  
2 requirement for the following year is  
3 determined?

4 A. The NYISO forecasts next summer's system peak  
5 load. Each LSE is allocated a portion of the  
6 forecast system peak load, based on the LSE's  
7 share of last summer's peak load. The LSEs are  
8 required to procure sufficient capacity to meet  
9 the forecast summer peak load, including a  
10 minimum reserve margin to allow for the chance  
11 of outages. Thus, any customer load at the time  
12 of the system peak causes its proportionate  
13 share of these capacity costs for the following  
14 year; customer load at any other time during the  
15 year does not have any causal affect on these  
16 costs.

17 Q. Can you briefly explain how LSEs are charged for  
18 capacity?

19 A. LSEs must procure sufficient capacity to meet  
20 their requirements each month. LSEs may procure  
21 capacity in advance from bilateral markets or  
22 forward auctions. If LSEs have not procured  
23 sufficient capacity in advance, they are

1           required to purchase their remaining  
2           requirements in the spot market. The NYISO  
3           holds spot market auctions each month to  
4           determine the price and quantity of capacity  
5           purchases required (if the supply of generation  
6           capacity is greater than the minimum capacity  
7           requirement, the LSEs are required to purchase  
8           more capacity, but at a lower price).

9    Q.    How does Central Hudson recover capacity costs  
10       from its HPP customers?

11   A.    Central Hudson recovers this cost as part of the  
12       Company's "HPP UCAP Charge," which is  
13       administered on a per kWh basis. Central  
14       Hudson's tariff PSC No. 15 Leaf 202.1 (SC-3) and  
15       Leaf 267.1 (SC-13) describes the calculation as  
16       follows:

17                An allocation of capacity charges  
18                calculated by taking the sum of HPP  
19                customers' estimated unforced capacity  
20                (UCAP) requirements multiplied by the  
21                monthly average UCAP rate per kW as  
22                otherwise included in the Market Price  
23                Charge and dividing the result by an

1 estimate of the sales to be billed under  
2 the HPP during the month.

3 Thus, the total costs assigned to the entire HPP  
4 class are based on the class' UCAP requirements.  
5 Then these total costs are divided by total  
6 estimated sales in each and every month and  
7 charged to customers volumetrically.

8 Q. Does the way that Central Hudson collects the  
9 capacity costs from HPP customers reflect the  
10 way that the costs were incurred?

11 A. No. This is easily seen when looking at the ski  
12 resort example that we used above. In our  
13 example above, we posited that the ski resort,  
14 which is closed during the summer, would not  
15 contribute to the UCAP requirement of the LSE.  
16 But, under the Central Hudson tariff, the ski  
17 resort would pay for the capacity with every kWh  
18 of electricity it used. There is not  
19 necessarily a correlation with the monthly usage  
20 of customers and their demand at peak. This can  
21 lead to shifting cost from customers that are  
22 responsible for the capacity requirement to

1           those who did not contribute to the capacity  
2           requirement.

3    Q.    Does the Central Hudson tariff produce price  
4           signals that give the correct incentive to  
5           customers regarding capacity charges?

6    A.    No.    The current tariff signals HPP customers to  
7           reduce capacity charges by reducing their  
8           monthly kWh usage.  As was explained above, the  
9           only usage that matters in determining the  
10          capacity cost incurred by Central Hudson is kWh  
11          usage during the system peak hour.

12          Under the Company's current HPP pricing regime,  
13          were an HPP customer to reduce its usage during  
14          the system peak hour by shifting its usage to  
15          another time, while the Company would pay less  
16          for its capacity requirement, the customer's  
17          billed capacity cost may not go down at all.  
18          The customer's savings would depend primarily on  
19          the customer's monthly kWh usage, which may not  
20          be at all related to usage during the system  
21          peak hour.

22          With the existing tariff, if a customer were  
23          able to reduce the capacity requirement of the

1 class by cutting back on the peak hour, any  
2 savings would be socialized across all members  
3 of the class. The current capacity recovery  
4 mechanism in the tariff gives a very weak signal  
5 to customers to reduce demand on the system  
6 peak.

7 Q. Is there a better way to recover capacity cost?

8 A. Yes. Generation capacity cost should be  
9 recovered through a kW demand charge based on  
10 each customer's individual demand during the  
11 system peak hour. That is, the customer should  
12 be responsible for its share of the LSE's UCAP  
13 requirement determined at the time of the  
14 statewide coincident peak load. Because HPP  
15 customer's load is recorded for every hour of  
16 the year, it is possible to track each HPP  
17 customers' contribution to the system peak hour  
18 load.

19 New York State Electric and Gas Corporation  
20 (NYSEG), for example, charges for generation  
21 capacity based on the customer's specific load  
22 during the system peak hour. The capacity  
23 charge for each customer is calculated by

1 multiplying the customer's individual UCAP  
2 requirement (based on each individual customer's  
3 load during the system annual peak hour) by the  
4 monthly capacity auction price. Each customer's  
5 individual UCAP requirement is determined in  
6 April of each year by looking at the previous  
7 year's coincident peak load for that customer.  
8 This single UCAP requirement is used throughout  
9 the year for that customer until it is reset  
10 again the following April. This mirrors the way  
11 capacity cost is calculated for, and collected  
12 from, LSEs by the NYISO.

13 Q. What should be done about a customer without any  
14 historical individual UCAP requirement?

15 A. NYSEG's tariff addresses this issue by stating  
16 that, "When hourly data is not available the  
17 appropriate service class profile will be used  
18 to determine the customer's capacity  
19 responsibility." Central Hudson should adopt a  
20 similar policy.

21 Q. Are there adjustments that must be made to the  
22 customer's individual capacity requirement?

1 A. Yes. The NYISO measures LSE requirements at the  
2 transmission level. The individual customer's  
3 capacity requirement is measured at its meter.  
4 The aggregate reading of all the retail meters  
5 will differ from the NYISO's measurement because  
6 energy is lost in the transport of electricity  
7 from the transmission system, over the  
8 distribution system, to the customer. To adjust  
9 for losses, the customer's capacity requirement  
10 needs to be adjusted upward by a factor of  
11 adjustment. The factor of adjustment will vary  
12 according to the voltage level at which the  
13 customer is served. However, at the present  
14 time, the Company utilizes a single factor of  
15 adjustment for all customers.  
16 Staff witness Puran in his direct testimony at  
17 pages 22-24 recommends that the Company conduct  
18 a loss allocation study to calculate the factors  
19 of adjustment at the secondary, primary,  
20 substation and transmission voltage levels.  
21 While the studies to support the appropriate  
22 factors of adjustment for the specific voltage  
23 levels will not be ready in time for the

1 implementation of this tariff, the appropriate  
2 factors of adjustment should be used when the  
3 studies are completed and approved.

4 As we explained above, LSEs are required to  
5 purchase a quantity of capacity equal to their  
6 forecast peak load, plus a minimum reserve  
7 requirement. This minimum factor is set for  
8 each capability period, winter or summer, and  
9 can be found on the NYISO's website. LSEs may  
10 also be obligated to procure an excess above the  
11 minimum requirement, as determined by the NYISO  
12 spot auctions. These can also be found on the  
13 NYISO's website. These two factors should be  
14 multiplied together and multiplied by the  
15 appropriate loss factor to determine the  
16 customer's capacity requirement.

17 The historic metered load at the time of the  
18 NYISO system peak is used in the determination  
19 of the forecast of peak load for the following  
20 year. Because this forecast is based on a  
21 historic actual number it needs to be adjusted  
22 for variations in the weather and projected  
23 growth. Adjustments for weather are done

1 through weather normalization and growth is  
2 estimated through a company specific growth  
3 factor.

4 Q. To what extent do Central Hudson's existing  
5 charges reflect these factors?

6 A. Based on Staff's review of the current HPP  
7 provisions contained in the tariff, performed as  
8 part of its review of the Company's recent  
9 tariff filing in Case 08-E-1365, Staff  
10 determined that Central Hudson either currently,  
11 or commencing November 2008, includes weather  
12 normalization, anticipated growth, reserve  
13 requirements, excess above reserve, and losses  
14 when total generation capacity costs are  
15 calculated for the HPP group of customers as a  
16 whole. Central Hudson's recent tariff filing,  
17 in conformance with the Commission's Statement  
18 of Policy on Further Steps Toward Competition in  
19 Retail Energy Markets (at p. 32) in Case  
20 00-M-0504 (issues August 25, 2004), proposes  
21 modification of the capacity rate utilized in  
22 the determination of HPP customers' total  
23 generation capacity from the current rate of the

1 "monthly average UCAP rate per kW as otherwise  
2 included in the Market Price Charge" to the  
3 "monthly NYISO Spot Auction Price for the New  
4 York Control Area".

5 The significant change we are advocating in this  
6 testimony is to allocate these total costs to  
7 individual HPP customers in a new way. As  
8 discussed above, based on cost causation  
9 principles, these costs should be allocated to  
10 customers based on each customer's load during  
11 the system peak hour.

12 Q. What signal does a capacity charge based on the  
13 customer's coincident peak hour demand, as you  
14 recommend above, send to customers?

15 A. This sends the appropriate signal to reduce  
16 demand during system peak to reduce capacity  
17 charges throughout the year. Because the  
18 capacity charge becomes an explicit item on the  
19 customer's bill, customers are more likely to  
20 develop strategies to manage the cost. Any  
21 reductions that customers make to their  
22 contributions to system peak load translate into  
23 direct savings to them. The actions of other

1 customers in the class do not affect a  
2 customer's capacity charge under this system.

3 Q. What actions could be taken by HPP customers to  
4 reduce capacity charges?

5 A. Customers could try to anticipate the system  
6 peak and reduce their demand at those times.  
7 System peaks are usually accompanied by a rise  
8 in the hourly price of electricity. The system  
9 peak almost always occurs during the summer in  
10 the afternoon when the outside temperature is at  
11 its hottest and air-conditioning loads are at  
12 their peak. Such days are reasonably  
13 predictable just by staying attune to the  
14 weather reports. Customers could adjust their  
15 operations to minimize their electric usage at  
16 these times.

17 Customers could sign up for one of the NYISO or  
18 Company Demand Response programs. Demand  
19 Response Providers can provide customers  
20 assistance in participating in these programs  
21 and signal them when demand response events  
22 occur; some response can even be automated to  
23 assist customers. These programs pay customers

1 to reduce their load when the system is short of  
2 generation capacity. It is likely that DR  
3 events will be called on a system peak day.  
4 Demand Response Providers may also help  
5 customers develop strategies to anticipate  
6 system peaks.

7 Customers may find it cost effective to install  
8 distributed generation to run at times of system  
9 peak and provide emergency back up power.

10 Q. Is it problematic that UCAP demand is determined  
11 in the previous year?

12 A. It is not problematic to the calculation of the  
13 generation capacity charge; this is the same  
14 methodology use by the NYISO. It may be  
15 difficult for the HPP customer to understand  
16 that the changes that are made to reduce demand  
17 during the system peak will not affect their  
18 capacity charge until the following May. An  
19 additional immediate benefit of customers  
20 reducing their usage at times of system peak  
21 would be a reduction in their electric commodity  
22 charges, because the system peak usually  
23 coincides with some of the highest hourly

1 electric prices of the year. Customers will  
2 need to be made aware of the fact that reducing  
3 capacity charges will take planning and is a  
4 long term process.

5 Q. Will this proposal have an impact on how much  
6 Central Hudson collects for capacity?

7 A. Eventually, as customers in the aggregate  
8 respond to the price signals by reducing their  
9 demand during the peak hour, it will reduce the  
10 amount of costs Central Hudson will need to  
11 collect for UCAP compared to what those costs  
12 otherwise would have been. A further impact will  
13 be to change how much is collected from specific  
14 customers. It will redistribute cost onto the  
15 customers who are responsible for the cost.

16 Q. Do you have any recommendations regarding  
17 implementation of your proposal above?

18 A. Yes. We propose that applicable customers be  
19 charged for generation capacity costs consistent  
20 with our discussion above starting May 2010,  
21 given that the UCAP requirement for each  
22 customer will be established in April 2010.

1           The Company should also develop an outreach and  
2           education plan to explain this tariff change to  
3           customers. The strategy for outreach and  
4           education should include strategies to notify  
5           customers of probable system peak hours.

6 Q.   Does this conclude your direct testimony?

7 A.   Yes, it does.