

BEFORE THE
NEW YORK STATE
PUBLIC SERVICE COMMISSION

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Proceeding on Motion of the Commission as to the
Rates, Charges, Rules and Regulations of
Central Hudson Gas & Electric Corporation
for Electric Service

Case 14-E-____

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Proceeding on Motion of the Commission as to the
Rates, Charges, Rules and Regulations of
Central Hudson Gas & Electric Corporation
for Gas Service

Case 14-G-____

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**DIRECT TESTIMONY OF THE
REFORMING THE ENERGY VISION PANEL**

July 25, 2014

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1 Q. Please state the names of the members of the Reforming the Energy
2 Vision (“REV”) Panel.

3 A. Our names are Charles A. Freni and Anthony S. Campagiorni.

4 Q. Mr. Freni, please state the name of your employer and your business
5 address.

6 A. I am employed by Central Hudson Gas & Electric Corporation (“Central
7 Hudson” or the “Company”) and my business address is 284 South
8 Avenue, Poughkeepsie, New York 12601.

9 Q. Mr. Freni, in what capacity are you employed by Central Hudson?

10 A. I am employed by Central Hudson as its Senior Vice President –
11 Customer Services. In that capacity, I am responsible for the supervision
12 of the Customer Account Services, Gas Operations, Electric Transmission
13 and Distribution, Transmission and Distribution Operation Services and
14 Emergency Response, and the Business Development and Government
15 Affairs departments.

16 Q. Mr. Freni, what is your educational background and professional
17 experience?

18 A. I have a Bachelors of Science degree in Mechanical Engineering from
19 Union College and I have a Masters Degree from Union Graduate College
20 in Business Administration. I am Senior Vice President – Customer
21 Services. I was previously the Vice President of Engineering and

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1 Environmental Affairs. Prior to becoming an officer of the Company, I
2 served in a number of Manager positions in the Customer Services Group.

3 Q. Mr. Freni, have you previously testified before the New York State Public
4 Service Commission (“Commission”)?

5 A. No.

6 Q. Mr. Campagiorni, please state the name of your employer and your
7 business address.

8 A. I am employed by Central Hudson and my business address is 284 South
9 Avenue, Poughkeepsie, New York 12601.

10 Q. Mr. Campagiorni, in what capacity are you employed at Central Hudson?

11 A. I am employed by Central Hudson as its Vice President – Business
12 Development and Governmental Affairs. In that capacity, my
13 responsibilities include supervising the Energy Services and Gas
14 Marketing, Real Property Services, Natural Gas Expansion, New York
15 State Government Affairs, New Business and Commercial Account
16 Services functions at Central Hudson.

17 Q. Mr. Campagiorni, what is your educational background and professional
18 experience?

19 A. I hold a Bachelor of the Arts in Political Science from Syracuse University,
20 a Juris Doctor from Seton Hall University School of Law, and a Master of
21 Public Administration from Marist College. From 1995 to 1998, I was an
22 attorney practicing commercial litigation for the firm of Heller & Laiks, P.A.

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1 in Passaic, New Jersey. From 1998 to 2001, I worked for Empire State
2 Development both as Counsel to the Department of Economic
3 Development in Albany and Director of Business Development in the Mid-
4 Hudson Regional office. From 2001 to 2002, I was Manager of Business
5 Development at Mirant Corporation in Suffern, NY. I was Director, World
6 Trade Business Recovery at Empire State Development in New York City
7 from 2002 to 2003. I was President and CEO of the Hudson Valley
8 Economic Development Corporation from 2003 to 2009 in New Windsor,
9 NY. In 2009, I joined Central Hudson as Assistant Vice President with
10 responsibilities for Governmental Affairs and Economic Development.

11 In 2010, I was promoted to Vice President and assigned
12 responsibility for Central Hudson's Energy Efficiency programs. In 2011, I
13 assumed responsibility for the Company's Real Property Services
14 department. In 2012, I was promoted to Vice President – Business
15 Development and Government Affairs, responsible for New Business and
16 Commercial Account Services as well as Natural Gas Marketing for the
17 Company. As Vice-President of Business Development and Government
18 Affairs, I oversee several programs at Central Hudson, including Natural
19 Gas Marketing Initiatives.

20 Q. Mr. Campagiorni, have you previously testified before the Commission?

21 A. No.

22 Q. What is the purpose and scope of the REV Panel's testimony in this

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1 proceeding?

2 A. The purpose of the REV Panel’s testimony is to present for discussion
3 several programs that Central Hudson thinks are responsive to the
4 Commission’s vision for electric industry and regulatory reform as
5 expressed in the Order Instituting Proceeding (Issued and Effective April
6 25, 2014) in Case 14-M-0101, *Proceeding on Motion of the Commission in
7 Regard to Reforming the Energy Vision*. We believe that it is timely to
8 present these programs, although still under development, for
9 consideration in this case so that if the Commission is interested in the
10 proposed programs Central Hudson, New York State Department of
11 Public Service Staff (“Staff”) and other interested parties may work
12 together to further develop these programs for implementation. This
13 testimony represents Central Hudson’s initial thoughts regarding concepts
14 that are aligned with REV policy.

15 Q. Are you sponsoring any exhibits in support of your testimony?

16 A. No.

17 Q. What are the programs that Central Hudson is presenting for discussion?

18 A. Central Hudson is presenting four programs for discussion as follows:

- 19 1. A Community Solar Program whereby customers and/or Energy
20 Service Companies (“ESCO”) that want to purchase solar energy, but
21 are not able, or do not want to place solar panels at their residence,
22 can purchase energy blocks from a larger scale solar facility owned

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- 1 and operated by Central Hudson and receive the energy and
2 environmental attributes produced by the solar facility;
- 3 2. A Demand Response Program for all customers in targeted growth
4 areas of Central Hudson’s service territory that may allow Central
5 Hudson to delay or avoid traditional transmission and distribution
6 infrastructure investments;
- 7 3. A Microgrid Program that would provide customers who desire
8 increased resiliency and reliability with the opportunity to achieve those
9 goals through the installation of microgrids owned and operated by
10 Central Hudson. Customers may receive value from the microgrid in
11 the form of potential increases to system reliability and/or a reduction
12 to energy costs. Other customer and system benefits may also be
13 realized; and
- 14 4. A Smart Meter Opt-In Program that would permit customers that want
15 enhanced usage information and functionality to pay for and have
16 Central Hudson install a Smart Meter with two way communication
17 capability.

18 Q. Is Central Hudson proposing a rate allowance to recover costs associated
19 with any of the four listed programs?

20 A. No. If the Commission determines that Central Hudson should, in concert
21 with Staff, fully develop and implement any or all of the programs as part
22 of this proceeding, Central Hudson is ready and willing to do so. Costs

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1 associated with each program would represent incremental costs requiring
2 cost recovery through an appropriate rate allowance, direct customer
3 payment or other cost recovery mechanism.

4 Q. Please describe the Community Solar Program.

5 A. The Community Solar Program would be designed to offer all Central
6 Hudson customers the opportunity to purchase energy blocks from utility
7 scale and owned photo voltaic ("PV") solar generation facilities located
8 within communities throughout Central Hudson's service territory. The
9 overall goal of the Community Solar Program is to allow a greater
10 opportunity to obtain PV solar energy for all customers who otherwise may
11 not be able to install a customer sited PV solar facility.

12 For many customers, stand-alone rooftop solar installations are not
13 feasible, as they require significant up-front costs as well as long-term
14 expenses and commitments. Further, rooftop PV solar installations are
15 only available for certain property owners. Central Hudson customers,
16 who own their property but are located in areas where shading, rooftop
17 orientation or rooftop condition is not suitable are not able to participate,
18 nor are customers who reside in rental properties or multi-unit dwellings or
19 townhouses.

20 Additional benefits of the Community Solar Program that benefit all
21 customers include a lower carbon footprint, stimulation of local economies
22 via jobs creation, and an increase in tax base to the municipalities in which

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1 the solar installations are located. Participation in the Community Solar
2 Program would be entirely voluntary and available to all residential,
3 commercial and industrial Central Hudson customers taking service under
4 all metered rate classes. Under this Community Solar Program Central
5 Hudson would own and operate and work with local third parties to
6 construct these facilities.

7 Central Hudson has been actively engaged in discussions with
8 multiple third parties regarding the subscription part of this process.
9 Central Hudson anticipates that it will select a third party to manage the
10 subscription sales for this program. Initial subscription sales are a critical
11 component of the Community Solar Program because Central Hudson
12 would not construct the solar facility until it reached a target subscription
13 level of 70% of the total anticipated energy output. Central Hudson would
14 defer for future recovery any costs not recovered through the subscription.

15 Customers may enroll in the program at any time, which requires a
16 minimum two year participation period. Further, participation in the
17 program can be continued to a new service address, should the customer
18 move within Central Hudson's service territory.

19 Central Hudson would charge customers a fixed price per kWh for
20 the block of energy purchased and the rate would not change for the
21 period of the purchase agreement. The fixed price effectively acts as a
22 hedge against increases to commodity costs. Customers participating in

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1 the Community Solar Program would be able to purchase blocks of energy
2 in increments of 100 kWh, up to the customer's average monthly usage.

3 Central Hudson anticipates that the maximum term for a purchase
4 agreement would be twenty years, which is the approximate life of the
5 asset.

6 Q. Can you provide information that might be useful to further develop the
7 Community Solar Program?

8 A. Yes. The following is information that Central Hudson has developed
9 around this program:

- 10 1. Central Hudson has three sites initially identified;
- 11 2. The sites are located in Saugerties in Ulster County, New Windsor
12 in Orange County and Pleasant Valley in Dutchess County;
- 13 3. All three sites are locations where Central Hudson already owns
14 land that is cleared of trees and where interconnection to the
15 distribution circuit would be feasible and beneficial.
- 16 4. Central Hudson anticipates that the size of each solar installation will
17 be approximately 1.2 MW_{DC} based on the site size and location;
- 18 5. Based on preliminary analysis the installed cost of the utility scale
19 community solar project will be approximately \$2,900 per kW which
20 is about one-half the cost of a customer sited installation, excluding
21 the cost reduction effect of state and federal subsidies;

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- 1 6. A typical 6.5 kW customer sited PV system in Central Hudson's
- 2 service territory has a final installed cost of \$32,500, which equates
- 3 to \$5,000 per kW;
- 4 7. After a \$32,500 project receives the average state and federal
- 5 subsidy of \$17,800 the average subsidized cost is \$2,261/kW;
- 6 8. Identified subsidies include: (1) New York State Energy Research
- 7 and Development Authority ("NYSERDA") grant of \$1 per watt; (2)
- 8 Federal tax credit of up to 30% of the installed PV system cost; and
- 9 (3) New York State tax credit of up to 25% of the installed PV
- 10 system cost up to \$5,000;
- 11 9. If Central Hudson received the same subsidy as that available for
- 12 the average solar installation the cost to customers of the
- 13 Community Solar Program would be approximately \$161 per kW;
- 14 10. In order to place the Company's Community Solar Program on
- 15 equal footing with the average solar installation Central Hudson
- 16 would seek an allocation of NYSERDA's Renewable Portfolio
- 17 Standard ("RPS") Main Tier allocation or MW Block incentive from
- 18 the Customer Sited Tier;
- 19 11. The total cost of a 100 kWh block will include the annual cost of
- 20 service on the asset, less the estimated average annual capacity
- 21 and energy revenue.

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1 Q. Does the Panel have any additional thoughts or observations about the
2 Community Solar Program?

3 A. Yes. To allow the customer that participates in the Community Solar
4 Program to realize similar benefits to those customers that install PV solar
5 facilities at their location the Community Solar Program must receive a
6 reasonable subsidy from governmental sources. The amount of the
7 subsidy will determine the per kW price paid by customers that subscribe
8 to the program. Depending upon the level of subsidy, Central Hudson
9 would propose that a customer who subscribes to the Community Solar
10 Program be exempt from System Benefit Charges and RPS charges.

11 Q. Please describe the Demand Response Program.

12 A. Central Hudson proposes a Demand Response Program for all customers
13 in targeted areas of Central Hudson's service territory. The Demand
14 Response Program will serve two purposes consistent with the goals
15 expressed in the REV proceeding. First, demand response may
16 contribute to the goal of reducing statewide peak electric demand.
17 Second, demand response focused on transmission lines, substations and
18 specific circuits where peak summer loading is at or near capacity may
19 permit Central Hudson to defer or avoid capital investment that would
20 otherwise have been necessary.

21 The Demand Response Program will be a targeted program for
22 aggregated residential/small commercial and large

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1 commercial/industrial/institutional customers. The targeted areas have
2 been established based on identified distribution circuits, substations and
3 transmission regions of our service territory where Central Hudson
4 anticipates the need for growth related infrastructure projects in the next 5-
5 10 years, but could eliminate or defer the need with successful demand
6 response peak load reductions achieved through demand response.

7 Central Hudson will utilize a third party vendor for the Demand
8 Response Program implementation, including aggregation, management
9 and customer outreach. The vendor will have kW or MW reduction targets
10 in order to determine the number of customers by rate class needed for
11 program success.

12 A model to calculate the net present value of transmission,
13 substation and distribution circuit infrastructure deferralment was developed
14 to calculate a monthly reservation payment per kW or based on peak load
15 reduction amounts pledged during curtailment periods. The incentive
16 amounts will be established separately for each area identified.

17 The customers or aggregators will be responsible for providing
18 Central Hudson with sufficient load reduction measurement and
19 verification information. Central Hudson and or aggregators will provide
20 customers available incentives for the value of the avoided transmission
21 and distribution investment as well as, those incentives available through

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1 other available programs for load reductions. Customers and/or
2 aggregators will be required to participate by reducing their energy usage
3 when called upon. Failure to participate in the call for load reduction will
4 result in reduced customer incentives or penalties. The aggregator will be
5 responsible to verify the load reduction achieved during the curtailment
6 period and process the incentive payment.

7 Q. Can you provide information that might be useful to further develop the
8 Demand Response Program?

9 A. Yes. Central Hudson has identified the following information related to the
10 Demand Response Program:

11 1. Targeted areas in Central Hudson's service territory that may benefit
12 from the Demand Response Program include:

13 a. Northwest Area Transmission region, where 30 MW of load
14 reduction is sought, includes the Saugerties Substation,
15 Woodstock Substation, North Catskill Substation, Coxsackie
16 Substation, New Baltimore Substation, Westerlo Substation,
17 Freehold Substation, South Cairo Substation, and Lawrenceville
18 Substation;

19 b. Ellenville Area Transmission region, where 10 MW of load
20 reduction is sought, includes Neversink Substation, Grimley
21 Road Substation, Greenfield Road Substation, Clinton Avenue

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1 Substation, Honk Falls Substation, High Falls Substation, and
2 Galeville Substation;

3 c. Substation locations, where 8 MW of load reduction is sought,
4 include Ohioville Substation, Phillips Road Substation, Fishkill
5 Plains Substation and Shenandoah Substation; and

6 d. Distribution circuit locations, where 1.5 MW of load reduction is
7 sought, includes Coldenham 4023 circuit, Union Ave 4041
8 circuit, and Merritt Park 6063/8066 circuits.

9 2. Current estimates of the incentive amounts are in the range of \$5 to
10 \$10 per kW/month and will be established separately for each area
11 identified and will be based upon the avoided transmission and
12 distribution investment and the amount of load reduction required.

13 Q. Does the Panel have any additional thoughts or observations about the
14 Demand Response Program?

15 A. Yes. Central Hudson anticipates that there will be sufficient interest in the
16 Demand Response Program for implementation but if there is insufficient
17 interest it is likely the transmission and distribution reinforcements will
18 need to be constructed with sufficient time to permit and complete the
19 projects.

20 Q. Please describe the Microgrid Program.

21 A. Central Hudson will establish a Microgrid program for customers with a
22 total individual or aggregated load of 500 kW and above. Under a

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1 Microgrid Program customers will derive two primary benefits: (1) energy
2 assurance—the need for a stable energy supply at sites deemed critical
3 for public services and safety—especially during wide-scale outages and
4 natural disasters; and (2) enhanced reliability—the need for greater
5 resiliency and reliability at high priority commercial, industrial, military,
6 state, and other sites—where outages can cause serious disruption, risks,
7 and financial costs.

8 The microgrids would be designed, constructed, owned and
9 maintained by Central Hudson. Customers must enter into a service
10 agreement for a specified term under which the cost for these facilities
11 would be recovered. Central Hudson does not anticipate a revenue
12 requirement impact for the Microgrid Program.

13 For larger customers, Central Hudson will provide outreach to local
14 colleges, hospitals, prisons as well as large residential or corporate
15 campuses seeking the additional benefit of resiliency. For larger state
16 institutions and public schools, Central Hudson will be partnering directly
17 with the New York Power Authority (“NYPA”) to provide critical funding
18 and resources through NYPA’s Combined Heat and Power program.

19 The Microgrid Program could permit willing customers to form a
20 microgrid by jointly establishing an agreement for Central Hudson to install
21 generation capacity designed to meet critical power needs during an
22 outage. In addition to severe weather event resiliency, the microgrid

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1 installation may provide additional benefits including the integration of
2 storage, local renewable and distributed energy resources and local
3 demand response resources. Customers requiring an increased level of
4 service reliability and customers with combined heat and power potential
5 may benefit from the Microgrid Program.

6 Q. Please describe the Smart Meter Opt-In Program.

7 A. The Smart Meter Opt-In Program would offer residential and other non-
8 hourly priced customers who desire additional and more detailed energy
9 usage information and pricing options to better manage their energy bills.
10 Smart Meters permit two way communications between the customer and
11 the utility or other service provider. The two way communication may be
12 used to produce time differentiated energy usage reports, report outages
13 and service restoration, provide system alerts and many other services.
14 The potential barrier of customer information would be broken down with
15 customers who opt-in with Smart Meters. ESCOs could offer products
16 and services for customers wishing to achieve a number of diverse
17 benefits from Smart Meters.

18 The Smart Meter Opt-In Program would utilize a third party service
19 provider who would host a customer portal that provides detailed
20 information on electricity usage patterns which is beneficial for billing and
21 load shedding purposes. A variety of analytical charts would be available
22 by hour, day, or month, as are peak usage demand calculations. For

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1 customers, this portal is a “read-only” copy of their usage and energy
2 pricing data. Access to the customer portal would not provide any
3 connection to the secured servers actually issuing commands to the
4 meters, which are tightly secured for utility access only.

5 Customers who choose to subscribe to Smart Meter Opt-In would
6 pay for the incremental cost of the Smart Meter, communications charges,
7 and software charges. Central Hudson would establish a tariff rate for
8 customers that choose to opt-in to Smart Meters.

9 Q. Can you provide information that might be useful to further develop the
10 Smart Meter Opt-In Program?

11 A. Yes.

12 1. Central Hudson has identified one potential option for a Smart Meter,
13 the Nighthawk Web-connect. Nighthawk Web-Connect enable two-way
14 meters include the following features:

- 15 • Web-Based Remote Read / Disconnect / Reconnect
- 16 • ERT Drive-By / Walk-By AMR
- 17 • Outage and Tamper Notification Alerts with Mapping
- 18 • Changeable threshold “Sag-Swell” Voltage Alerts
- 19 • Time of Use Data for Load Profiles or Demand Billing
- 20 • Reports and Data Downloads in PDF or CSV Formats
- 21 • On-Demand or Pre-Scheduled Batch Commands
- 22 • Demand Response Program to Shed Load

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1 • Countdown-2-Cutoff for Pre-Pay or E. Vehicle Upgrades;

2 and

3 • Back-Feed Detection and Ability to Re-Zero the Meter.

4 2. Central Hudson estimates that the meter cost will be approximately

5 \$250 and monthly wireless communication charges will range from \$3

6 to \$5.

7 3. Central Hudson expects one time third party implementation costs of

8 approximately \$5,000 and annual third party maintenance costs of

9 approximately \$1,000.

10 Q. Why is the Company bringing forward these preliminary program

11 proposals as part of its delivery rate filing?

12 A. Central Hudson is committed to working with Staff, the Commission, and a

13 wide range of stakeholders to deliver and facilitate new value added

14 energy proposals in the REV proceedings, which are moving forward

15 contemporaneously with these cases. The Company is committed to work

16 with Staff and interested parties to further develop these proposals during

17 the pendency of these cases.

18 Q. Does this conclude the Panel's direct testimony at this time?

19 A. Yes, it does.