STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission To Examine Policies Regarding the Expansion of Natural Gas Service

Case 12-G-0297

COMMENTS OF

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Background

Pursuant to the November 30, 2012 *Order Instituting Proceeding and Establishing Further Procedures*, the Commission directed the initiation of a new proceeding to examine policies concerning the use of natural gas and the expansion of natural gas delivery systems. To accomplish this, the Secretary issued a *Notice of Technical Conference and Notice Soliciting Comments*, directing NYS Department of Public Service Staff to convene a Technical Conference to discuss these issues, and also invited interested stakeholders to submit comments, and respond to twenty one specific questions under six broad categories.

Central Hudson Gas & Electric Corporation ("Central Hudson") participated in the January 9th Technical Conference, providing an overview of its gas system, current gas marketing and gas expansion initiatives, and some of the customer and cost barriers encountered in seeking to extend and expand its gas distribution facilities. Central Hudson is also actively participating in the three Working Groups established following the Technical Conference to focus separately on expansions to customers within 100' of existing gas facilities, customers beyond 100' of existing gas facilities, and customers outside existing service franchises. Additionally, Central Hudson hereby submits its general comments and initial responses to the specific questions invited in the *Notice*.

Barriers to Extension and Expansion of Natural Gas Facilities

1. **Please explain your understanding (and for utilities, your implementation) of Commission regulations and the Natural Gas Expansion Policy including your views on whether they encourage or deter expansion of the natural gas delivery system in New York State. Do you feel that the Commission regulations and Policy should be modified and if so, how?**

Response:

With a significant price differential between the cost of natural gas versus oil and the emergence of shale gas reserves, there is enormous opportunity for significant

economic, environmental and customer benefits for an oil to natural gas conversion program. Similar to RPS, SBC, Net Metering, and EEPS, the furtherance of State energy policy goals for a clean and efficient energy future requires the balancing of costs and benefits. The opportunity to create customer, economic, and environmental benefits as a result of abundant and affordable natural gas supply requires a re-evaluation of current PSC policies to re-consider an appropriate incentive to achieve net economic and environmental benefits for the State and for gas customers.

Currently, franchise expansion proposals are reviewed on existing terms of five years which conflicts with gas expansion policy within existing franchise areas for terms of ten years. Attracting new conversion customers and new business gas customers in new franchise areas requires a term in excess of five years. The existing franchise expansion policy puts the utility at risk of any shortfall from a full allowed rate of return with an economic financial evaluation term of five –years and limits the upside opportunity to the level that would achieve a full return. While the utility is allowed to levy a surcharge on all sales in the new franchise area during the five-year development period at a level no greater than that needed to recover the imputed five –year revenue shortfall, the surcharge may be counter – productive as it could greatly reduce the customers economic advantage of and interest in converting from oil to gas.

At a minimum, gas franchise expansion policy terms should be increased to at least a 15 year time frame to allow utility investments and new customer acceptance in franchise expansion opportunities. Central Hudson finds that the currently policy deters natural gas franchise expansion, and does not account for the substantial environmental benefits of an oil to natural gas conversion.

2. **Regarding the Commission's regulations of the natural gas delivery system and the system itself, do you believe that the interests of utility shareholders, ratepayers, and the State as a whole are aligned? Please explain.**

Response:

Central Hudson believes that the Commission's regulations with respect to the operation of the natural gas delivery system generally balance the interests of the three identified stakeholder groups. However, as discussed further in this response and the others contained herein, the Company does not feel that the interests of the three identified stakeholders are optimally aligned with respect to certain other natural gas regulatory aspects including, the System Benefits Charge and Energy Efficiency Portfolio Standard (SBC/EEPS), the Temporary State Energy and Utility Service Conservation Assessment implemented pursuant to Public Service Law §18-a(6) (18-a surcharge), and the structure of gas revenue decoupling mechanisms (RDMs) with regard to large-scale marketing/conversion strategies and franchise expansions.

While the SBC/EEPS programs are designed to meet State goals, the resulting customer bill impact is not necessarily offset by a concomitant realized energy savings benefit or a socioeconomic benefit, on either an individual customer basis or regional basis, as SBC/EEPS collections are mostly disbursed across, rather than within, service territories. This creates a misalignment between the interests of ratepayers and the State, as well as a misalignment between the interests of ratepayers and utility shareholders as the utility's ability to fund identified programs or projects that produce direct customer benefits is diminished by the addition of increased SBC/EEPS funding requirements.

Imposition of the 18-a surcharge provides another example of a regulation that creates misalignment among the three identified stakeholders. The New York State Budget for 2009-2010 enacted on April 7, 2009 required the Department of Public Service to collect the 18-a surcharge for five years. While the stated purpose of the 18-a surcharge is to encourage conservation of energy and other resources provided by electric, gas, steam and water utilities, the State Comptroller is required to pay the funds collected to the State's General Fund. As a result, utility ratepayers fund State programs through their utility bills which may not be proportionate to the benefits received. Moreover, the collection of these amounts from utility customers creates bill pressure,

diminishing the utility's ability to fund identified programs or projects that produce direct customer benefits.

As noted in more detail below, the environmental benefits of oil to natural gas conversion are substantial, but these benefits are not recognized in current Commission Policy and Regulations, resulting in less than optimal incentive structure for oil to natural gas conversions. Finally, as discussed more fully below, the structure of gas RDMs, and in particular the Company's current residential customer target and deferral provisions, creates misalignment among the three identified stakeholders as a utility may not necessarily retain sufficient revenues from new customers to cover incremental costs, thus creating a disincentive for the utility to pursue large scale marketing/conversion strategies and franchise expansion opportunities. As a result, prospective customers may be precluded from realizing potential energy savings, current ratepayers may be precluded from potential reduced rate pressure as embedded costs are allocated over a larger customer base, and State energy goal achievement is diminished.

3. **Are there provisions of current policies or regulations that appropriately incentivize the expansion of the natural gas delivery system in New York State? Are these sufficient? If not, please suggest alternatives.**

Response:

Central Hudson does not believe that any of the provisions of current policies or regulations provide incentives for the expansion of the natural gas delivery system. Current gas extension and expansion policies and regulations, as they pertain to natural system growth, endeavor to balance a utility's obligation to serve with the need to protect current ratepayers and utility shareholders. This type of growth commonly entails connection of customers on an individual or limited group (development) basis in response to a customer request, with the economics of such connection analyzed pursuant to the relevant regulations and/or policies, ensuring uniform and equitable consideration and treatment of prospective customers, protection of current ratepayers from potential

subsidization while also providing the utility the opportunity to earn its allowed return on its capital investment.

The expansion of New York State's natural gas infrastructure includes significant customer savings, increased economic activity and substantial environmental benefits. The benefits of those three factors (substantial savings for new customers, increased economic activity, and substantial environmental benefit) exceed the potential incremental costs to all existing ratepayers by a large margin. Therefore, the welfare of the entire customer base would be enhanced by further incentivizing conversions from oil to gas.

Low natural gas prices have functioned as a tax reduction and boosted consumer spending by increasing disposable income. Central Hudson currently estimates that there are approximately 8,000 potential residential conversions along its existing gas mains in the service territory. Assuming that half of the available homes convert from oil to gas with an annual savings of $1,250 per customer, the corresponding benefit would equate to a $5 million boost to the local economy annually. Expanding this analysis on a statewide basis to one half of the 550,000 households in New York State as stated in the notice in this proceeding would equate to a $344 million annual injection in the New York State economy. As total energy costs decline due to conversions to natural gas, households and businesses would have more income to spend, and increased spending is likely to have a multiplier effect.

The state should also look at the value of the green jobs created by natural gas conversions and the total economic value of the supply chain. An average home heating conversion cost of $8,500 per residential natural gas conversion plus the utility cost of $10,000 per main extension/service would yield $74 million in expenditures for the Central Hudson service territory. The statewide numbers under the same analysis converting one-half of the current customers on main would yield an economic impact of $5 billion. It should be noted that the economic and environmental benefits exceed the

level of expenditure and are self-justified. The job creation is a bonus – but one that is most needed.

This economic activity would benefit plumbers, wholesalers and distributors of heating equipment, manufacturers of equipment, and salespeople. In addition, utilities would have additional work and would employ more construction crews.

In 2009, the Political Economy Research Institute (PERI) evaluated the effect of public infrastructure improvements in the U.S. on employment using the IMPLAN input – output model. [1] Table 1 shows the number of jobs created for every one million dollars invested (2000 constant dollars).

Table 1 PERI United States Infrastructure Employment per $1 Million Invested

	Total
Natural Gas Pipeline Construction	**21.9**

The estimated potential job creation using this model could reach 60,225 jobs if we assume that half of the existing 550,000 households within 100 feet of a gas main convert at a gas utility construction cost of $10,000 for gas main and service construction.

The environmental impact of oil to natural gas conversion is compelling from a state policy perspective as well. Central Hudson is currently designing and implementing a comprehensive residential natural gas conversion program, targeted at customers who are currently using other fossil fuels as a primary domestic fuel source, but are within close proximity to a Central Hudson gas main.[2] As part of this program, the company has conducted an analysis of the various benefits of converting to natural gas. While our analysis is specific to the Central Hudson service territory, the demonstrated substantial

[1] Economic Impacts of Energy Infrastructure Investments.
Edward J. Bloustein School of Planning and Public Policy Rutgers, The State University of New Jersey, October 2010

[2] Central Hudson's gas conversion program is designed to convert both space and water heating.

environmental benefits resulting from residential customers converting from fuel oil to natural gas are probably similar or greater throughout upstate New York.[3]

Annual Residential Fuel Usage & Associated Emissions [4,5]				
Fuel	Annual Usage (MMBTU)	CO_2 (lb)	SO_2 (lb)	No_x (lb)
Fuel Oil	114.9	18,329	58.2	14.7
Natural Gas	102.1[6]	12,017	0.0	9.5
Reduction	12.8	6,311	58.2	5.2
(%) Reduction	11%	34%	100%	35%

The analysis shows that the associated CO_2 and NO_x emissions are reduced by over 1/3 for converting from oil to natural gas. Additionally, 100% of the SO_2 emissions associated with fuel oil are eliminated.

Comparison to the Environmental Benefits of Distributed Solar Generation

To demonstrate the significance of this reduction, these findings are compared with the environmental benefits of residential solar electricity generation. Central Hudson's data on residential solar generation sites indicates an average annual generation of 7,207 kWh[7] per site. According to the EPA, each kWh consumed in a particular region has a quantifiable emissions signature. To quantify the emissions reductions attributed to distributed solar, this logic is used to determine the emissions signature of the grid-based generation that has been displaced. The estimated annual environmental benefits of residential solar are shown in the table below.

[3] Customers who heat with propane and other fuel types are also targeted, but this analysis focuses squarely on customers using fuel oil.
[4] Emissions factors sourced from U.S. Department of Energy - EMISSIONS FACTORS FOR FUEL COMBUSTION FROM NATURAL GAS, LPG, AND OIL-FIRED RESIDENTIAL FURNACES AND BOILERS http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/furnaces_boilers/fb_tsd_appendixw_0906.pdf
[5] Secondary emissions benefits exist as a result of conservation of diesel fuel needed to deliver fuel oil.
[6] An energy demand reduction of 11% is assumed for conversions based on the increased efficiency of new natural gas heating units as compared to existing oil heating units (from 80% AFUE to 90% AFUE)
[7] Central Hudson estimate based on an internal study of customer data

Environmental Benefits of Residential Photovoltaic Generation		
Pollutant	lb/MWh[8]	Annual Emissions Reduction (lb)
CO_2	498	3,589
NO_x	0.4	2.9
SO_2	0.98	7.1

The table below demonstrates a direct comparison of the emissions reductions from both natural gas conversion and solar generation.

	Comparison of Annual Emissions Reductions		
	CO_2 (lb)	SO_2 (lb)	No_x (lb)
Solar Generation	3,589	7.1	2.9
Natural Gas Conversion	**6,311**	**58.2**	**5.2**

The annual reduction in each pollutant is substantially higher for natural gas conversion than for solar. Considering CO_2 emissions alone, the savings is 76% greater.

Central Hudson has supported and continues to support distributed solar generation within the company's service territory. This analysis does not imply competition or mutual exclusivity of these two emission reduction streams. The key conclusion is that natural gas conversion presents a significant opportunity for environmental benefits, evidenced by its favorable comparison with solar, the benefits of which have already been widely accepted and are being actively pursued.

[8] Regional emissions resulting from electrical generation sourced from U.S. Environmental Protection Agency http://www.epa.gov/cleanenergy/energy-and-you/how-clean.html

Financial Comparison

The substantiated benefits of distributed solar have justified a large state investment in customer incentive programs through the Renewable Portfolio Standard. The current incentive available to residential customers is $1.50/Watt up to a maximum of $10,500.[9] Central Hudson estimates that this subsidy typically defrays approximately 30% of the overall cost.

A similarly designed subsidy for gas conversion would have a substantially higher proportionate impact due to the relatively low cost of natural gas conversion. Central Hudson's residential installation data indicates an average customer conversion cost of approximately $8,500. For comparison, a subsidy designed to defray 30% of a customer's natural gas conversion cost would be valued at only $2,550. In effect, the same subsidy traditionally allotted to one solar installation, could fund nearly 4 gas conversions, each with an individually greater environmental impact, and collectively with 6 times the reduction in CO_2 emissions per dollar of subsidy.

The table below shows the comparative environmental benefits of solar and gas conversion, normalized per dollar of state subsidy, based on the proposed model of a 30% subsidy.

	Cost Per Pound Annual Emissions Reductions		
	CO_2	SO_2	No_x
Solar	$2.59	$1,316.73	$3,225.99
Gas Conversion	$0.45	$48.64	$545.38

Using the current RPS funded solar program as a baseline, the proposed program is a highly cost effective way to reduce carbon emissions in New York State.

[9] Central Hudson estimates the average sized residential solar installation within the service territory to be eligible for approximately $9,300 in state incentives under the current model.

Opportunity in New York State

With oil being the most prevalent domestic heating fuel source, the opportunity for emissions reductions in New York State through gas conversions is substantial. There are approximately 550,000 residential customers in the state who burn fuel oil and are located within 100 feet of a natural gas main, the maximum distance for required service by tariff. Central Hudson believes it is realistic to design a subsidy program which aims to convert 50% of these customers statewide over the next 10 years. The overall cost of this program, at maximum achievement, would be approximately $779 million. The estimated environmental benefits of converting these 275,000 residential customers to natural gas are shown in the table below.

Emissions Reductions Estimates For Proposed Statewide Gas Conversion Program		
CO_2 (tons)	SO_2 (tons)	No_x (tons)
867,822	8,009	714

Central Hudson would like the opportunity to pilot a gas conversion program developed around state incentives distributed to customers, funded from a source to be deemed appropriate by the PSC. This program would accelerate the realization of both economic and environmental benefits that more than justify its cost.

Because of the compelling customer savings, economic activity and job creation, and the overwhelming environmental benefits of converting from oil to natural gas on a statewide basis, the current Commission policies should be revised to allow utilities longer time frames to connect to natural gas customers (up to 20 years) and a system wide benefit fund (whether a reallocation of SBC/EEPS/RPS or new fund) to further encourage oil to natural gas conversions statewide should be instituted so that society can achieve all the economic and environmental benefits.

4. **Identify current barriers inhibiting conversion to natural gas usage from other heating fuels - other than the cost of replacing heating equipment. Please explain how the barrier inhibits conversion and provide suggestions for reducing or eliminating the barrier – including the cost of replacing heating equipment.**

Response:

The main barriers inhibiting the conversion to natural gas include: the uncertainty of the oil versus natural gas price differential, the reluctance of customers to take on more debt, and the lack of clarity of the cost and benefits of natural gas. Also, customers do not fully appreciate the environmental benefits of natural gas, because education about such benefits has not been conducted.

Natural gas utilities should be permitted to enter into longer term contracts on gas supply so that gas prices can be "locked up" for a time period that would exceed the customer payback period of a natural gas conversion. Although "locking in" for a period of time in the future, five years for example, would cost customers more than variable prices in the short term, it facilitates assuring that savings can be guaranteed to the customer over the period of time.

Moreover, the state should allow system benefit charge funds to be used as a zero percent revolving loan fund to exceed the payback period of the natural gas conversion--essentially making projects cash flow positive. This strategy has been successfully deployed in the commercial energy efficiency lighting programs across New York State making the offer sufficiently compelling to accelerate the penetration rate of beneficial conversions.

Customers also need to be educated about the convenience of natural gas, the cost differential versus oil or propane, the positive environmental impact of natural gas, and the payback period of customer expenditures for converted equipment. All this information could be set forth in a detailed proposal. Central Hudson is providing this

information through its current marketing and outreach efforts as part of its Simply Better program.

In order to eliminate other barriers, Central Hudson suggests that the state consider a tax law change which allows customers to obtain a New York State income tax deduction for unused customer oil if the oil is donated to a low income person in need of fuel oil, such as HEAP customers. Central Hudson often finds that a tank filled with oil is a barrier to a customer natural gas conversion. In some cases, it may take months for a customer to use the remaining oil in a tank. NYS should provide a tax incentive for a customer's unused oil especially when it is benefitting a low income customer.

5. **Please identify the outreach and education efforts currently employed by the utility for the purposes of gauging interest in natural gas service and/or soliciting new customers in areas where interest in the possibility of obtaining service has been expressed. Are the efforts sufficient? How can they be improved? Would expanded or improved outreach and education programs increase conversion to natural gas by customers who reside within the 100 feet zone of existing utility infrastructure (and, accordingly would not pay for the extension)? How can the utility identify, communicate and engage with such customers? When an individual customer requests service, please describe the utility's efforts to communicate with or solicit other customers in the neighborhood/area.**

Response:

Central Hudson regularly informs and educates customers about the benefits of natural gas service, encouraging them to save money on heating bills by converting to natural gas service from oil and propane. The Company has active marketing campaigns in all five of its operating districts. Using a targeted marketing approach, Central Hudson actively communicates to customers located within 100 feet of existing natural gas main using media outreach such as informational postcards and letters, public meetings, weekly e-newsletters, a dedicated website, a contact center (for inbound and outbound

calls), email service, and in-person appointments at customer locations. Central Hudson's Simply Better website informs customers about the benefits and capability of natural gas service, and includes an online "savings calculator" for customers to compare the cost of their current usage (oil or propane) to natural gas.

Central Hudson initiated in November 2012 a state-of-the-art natural gas marketing project that utilizes a GIS-based system in concert with available demographic information to intelligently identify, codify, prioritize and geographically arrange residential customers that may be more receptive to a natural gas heat conversion. The analysis includes a geographic overlay of our existing distribution gas network, which is readily available to identified customers. A separate (but similar) analysis is also being conducted for areas of our service territory where expansion of our gas distribution network may be considered.

Central Hudson actively pursues areas of the service territory where an extension of gas main has a high likelihood to resonate with customers in terms of their interest and desire to convert to natural gas. Other operating data is also reviewed to ensure that a prospective gas main extension is sustainable for the Company, customers and affected stakeholders. In 2012, Central Hudson extended gas mains in several of its operating districts to serve up to several hundred new gas customers. Central Hudson will continue to market the benefits of gas service to applicable customers in these areas, and seek new opportunities in 2013 to extend gas main in other areas of the service territory.

To maximize customer awareness of marketing campaigns, Central Hudson also maintains strategic partnerships with local companies to underscore the advantages of gas conversions. In particular, Central Hudson works closely with a local marketing company to help facilitate fresh and imaginative customer messaging for marketing campaigns as noted above. Central Hudson also works closely with another local company that facilitates an option for customers to participate in a turn-key gas conversion program.

Central Hudson's Simply Better natural gas conversion program offers customers the option of a comprehensive turn-key opportunity to convert their heating system to

natural gas. The turn-key package provides customers with a connection to the existing gas system, a pre-qualified and licensed local contractor to install the new heating equipment, available rebates for energy-efficient equipment, flexible financing options, a comprehensive written proposal (inclusive of a scope of work, cost-and-payback summary, equipment summary and warranty coverage), account set up with Central Hudson, and a single point of contact for the customer from start to finish on their project.

Central Hudson continuously strives to improve the quality and positioning of its natural gas marketing initiatives. In particular, the Simply Better website was recently upgraded with an informational video to further educate customers about the benefits and availability of natural gas service. This is used at informational meetings with customers to further educate them about the value of natural gas service. Central Hudson's staff provides a formal presentation regarding the costs and benefits of converting to natural gas, followed by a question-and-answer period. At the conclusion of the meetings, customers can sign up to receive a free, no obligation proposal so they have specific details about their prospective gas conversion project. A newly launched initiative offers customers a free $25 gift card for obtaining a proposal to convert their heating system to natural gas service. A similar initiative is also being launched, which will provide qualified customers with a $25 gift card for any customer referral that results in a conversion to natural gas.

When an individual customer requests gas service, Central Hudson actively communicates with nearby customers by engaging in a door-to-door information campaign. Signage is also placed at the location of the gas service installation to inform nearby customers of the project and to encourage them to contact Central Hudson (via phone or email) for more information. In addition, Central Hudson also works with one of its strategic partners to initiate a marketing campaign to the affected neighborhood using the techniques identified in the first paragraph of this response.

6. **Please identify the typical flow of communication and information between the utility and a customer requesting service that would require extension of a gas main sufficient to require a surcharge. Please provide any examples of written communication.**

Response:

Residential and commercial customers request natural gas service by contacting the Company Call Center and speaking with a Customer Service Representative (CSR), or by visiting the Company website at www.centralhudson.com. The website includes links to our "Specifications and Requirements for Gas Installations" and to service requests forms that are completed and submitted by either mail or fax. Service request processing and communication is continued when a CSR generates a gas service request order that is assigned to a Supervisor, New Business Services, or Commercial Representative to determine gas availability to serve the customer. A field appointment is made, and a Company Representative instructs the customer or customer representative of the responsibilities of both parties. The Company installs the gas main, gas service and meter in accordance with filed rate tariffs. The customer is responsible for the installation of their heating or process equipment in accordance with the National Fuel Gas Code and the Company's Operations and Maintenance Procedures.

If after receiving the gas service request, or during our field visit, the Company representative determines that providing natural gas service will involve an extension of our gas main, we must establish whether the proposed main extension meets or exceeds the service allowance the Company is obligated to provide in accordance with Gas Tariff Leaf 14. In the case of a gas main extension whose costs exceeds the tariff allowed revenue based entitlement, we communicate with the customer either by e-mail, phone, or in person, regarding the option of paying for the costs in excess of the allowance. In these instances the Company also mails natural gas conversion information to customers along the proposed route to determine if there is interest from additional customers that if connected, would reduce the portion of the gas main installation that exceeds the Company allowance. If an insufficient number of customers commit to natural gas

service to support a main extension, the estimated main extension costs are calculated and the customer is informed of their requirement to pay a contribution in aid of construction (CIAC) or surcharge. The amount of the CIAC or surcharge is calculated based upon tariff surcharge provisions (Leaf 16, 5.C.). The CIAC is paid prior to the start of the gas main installation, or a 10-year surcharge payment is billed annually in equal installments. In both instances the customer is informed that if additional customers connect to the gas main within a 10-year period, the contribution or surcharge will be recalculated. (Attachment 1) In our experience, the prospect of surcharge is a significant deterrent to attracting customers, even if the project seems to be net beneficial with a surcharge.

7. **What issues should be given consideration prior to expansion of the natural gas delivery system? Should such considerations include protections for a group or groups of customers? If so, what should be and what types of protections should be considered?**

Response:

In addition to the direct economic and environmental issues, current ratepayer impact concerns and utility shareholder return opportunities related to the delivery aspect of each project must be addressed. In addition to the review of routine operational considerations to ensure the maintenance and/or enhancement of reliability levels, the operational analysis of large-scale projects needs to consider the location of the project and the ability for timely response to emergency and operational issues. Additionally, the analysis should address the need for and availability of pipeline capacity and the impact that incremental capacity procurement might have on current and prospective ratepayers.

Franchising and permitting processes should be reviewed and coordinated as applicable to expedite the process and improve flexibility to address unforeseen changes in a timely manner. Regional and statewide goals regarding socioeconomic benefits, including, but not limited to, redirection of fuel savings into the economy, improved competitiveness due to lower fuel costs, and environmental benefits should also be considered and coordinated.

8. **Are there existing utility specific pilot programs focused on new approaches to line extensions or new franchise expansions of the natural gas delivery system? If so, please describe the pilot program. If not, could such a pilot program be beneficial and, how would it be designed?**

Response:

Central Hudson's Simply Better natural gas conversion program offers customers the option of a comprehensive turn-key opportunity to convert their heating system to natural gas service. The turn-key package provides customers with a connection to the existing gas system, a pre-qualified and licensed local contractor to install the new heating equipment, available rebates for energy-efficient equipment, flexible financing options, a comprehensive written proposal (inclusive of a scope of work, cost-and-payback summary, equipment summary and warranty coverage), account set up with Central Hudson, and a single point of contact for the customer from start to finish on their project.

Central Hudson initiated a natural gas marketing project in November 2012 that utilizes a GIS-based system in concert with available demographic information to intelligently identify, codify, prioritize and geographically arrange residential customers that may be more receptive to a natural gas heat conversion (from oil or propane). The analysis includes a geographic overlay of our existing distribution gas network combined with customer data points that will be sorted and prioritized for upcoming marketing campaigns. A separate, but similar analysis is also being conducted for areas of our service territory where expansion of our gas distribution network may be considered. The overall goal is to selectively identify the most fitting residential customer base to proactively market natural gas to, prospectively resulting in the highest rate of natural gas conversions achieved in the shortest period of time.

Central Hudson also initiated a marketing project in November 2012 that tests the functionality, efficiency and operational effectiveness of an independent (3rd party) Gas

Heating Conversion Specialist to complete natural gas heating system conversion estimates at designated customer locations. The Gas Marketing Department currently utilizes a contractor-based model to provide a turn-key natural gas conversion solution to eligible customers, inclusive of the option to have a qualified Trade Ally perform the conversion work for customers. This project is testing the feasibility of a Gas Conversion Heating Specialist to develop an independent cost specification for the labor and materials required to perform a customer conversion project. The participating Trade Allies would be given an opportunity to accept the proposal (with identified cost and equipment operating specifications) as defined by the Gas Conversion Heating Specialist. The overall goal and objective of the program is to target customers with the best opportunity for customer acceptance to convert to natural gas and to minimize our efforts that do not produce positive conversion results.

Rate and Ratepayer Considerations

9. **The Commission's regulations (§230.2[f]) provide that "each corporation may, in its tariff schedules, extend such obligation [to provide certain main and service line extensions without cost to the customer], to the extent the provision of additional facilities without charge is cost-justified." Identify whether the utility ever provides residential customers with more than 100 feet of gas main or service line without surcharge. Please explain why and under what circumstances or, if never, why not. Is the utility aware of any geographic areas in its service territory where potential cost justified extensions of greater than 100 feet are currently un-served? If not, has the utility ever attempted to ascertain or develop such information? What should be the appropriate length of main and/or service provided without surcharge? Please explain.**

Response:

There are circumstances where the company may provide a new customer more than 100 feet of gas main or service line without a surcharge. Some examples include cost sharing without payment by the customer, such as the customer providing the

trenching on their property, unusually easy trenching (sand conditions), or larger than typical gas loads that justify a greater footage allowance.

As part of its Simply Better program, the company has made accommodations to extend a gas service more than 100 feet in order to entice large scale conversions of a neighborhood. The company will continue to analyze where it can extend gas services more than 100 feet where it is economically justified for the corporation to do so.

The company is not aware of geographic areas in the service territory where potential cost justified extensions of greater than 100 feet are un-served. Central Hudson has not attempted to develop this information since gas extensions greater than tariff requirements are all subject to a financial analysis in order to ensure they are prudent, do not have a negative impact on the company's customer base, and allow the company its allowed rate of return.

10. Does the utility provide programs that could assist low income customers or those on a fixed income to overcome the barriers to conversion to natural gas?

Response:

Many low income customers rent homes and apartments from a landlord, thereby reducing the capability of those customers from taking advantage of the benefits of converting to natural gas. For low income/fixed income customers that do own their own homes, offering subsidies collected through Systems Benefit Charges to assist them with offsetting the cost of converting may help overcome the financial barrier.

Central Hudson also suggests that if federal or state assistance is being provided to an owner/landlord on behalf of a low income customer then there should be a mandate for an owner/landlord to lower its operating costs by converting to natural gas when feasible. If owner/landlords are going to be subsidized by the federal or state government, they also should have a continuing obligation to lower their operating costs.

11. Are there potential funding mechanisms for expansion of the natural gas delivery system other than through utility rates or direct customer payments (surcharges, CIACs or other)?

Response:

Potential funding mechanisms for expansion of natural gas delivery systems include municipally created natural gas districts similar to water and sewer districts created by municipalities throughout NYS and potentially new taxing mechanisms.

Nearly two decades ago, the New York State Environmental Facilities Corporation was created to protect the environment by providing the residents of New York State access and funding to clean drinking water and wastewater. NYSEFC has funded more than $14 billion in projects since inception. Since there are corresponding environmental attributes of oil to natural gas conversions (as demonstrated in Response 3), the state should view natural gas conversions as essential to the environment as clean drinking water and wastewater treatment. Such a mechanism would allow an agency of NYS to partner with natural gas utilities to expand natural gas into new areas by providing long term financing to augment utility financing on projects. NYS assistance would be essential for projects that have particularly difficult circumstances such as long distances to existing gas main but a potentially large demographic area and for areas with difficult terrain conditions such as excessive rock.

Since there are customer savings, economic and environmental benefits to natural gas as well, New York State should advance the promotion of natural gas through additional tax levy on every gallon of home heating oil used by customers. Those revenues could be placed in a "lockbox" for future gas expansion projects recognizing that oil produces a far greater detriment to the environment than natural gas.

The extension of natural gas lines also provides additional tax revenue to municipalities such as village, towns, and counties. Enhanced revenues due to natural gas extensions for municipalities could be set aside for additional future expansion which

could be akin to a tax increment financing (TIF) plan. Oil and propane provide no such benefits to municipalities.

12. **Are existing natural gas efficiency programs adequate and optimal to serve the expansion of customers within 100 feet of existing utility infrastructure? If not, what changes, including possibly the level of funding, could be made to improve the existing efficiency programs? Would efficiency programs targeted to conversion customers result in increased energy savings, and if so, how?**

Response:

The existing natural gas efficiency programs are largely inadequate to serve the expansion of customers within the 100 feet of existing utility infrastructure. Natural gas efficiency programs need to be more robust especially in the commercial sector to help offset not only the higher cost of efficiency but also the cost to convert from oil to gas. The current (EEPS) budget limitation of 38% for an oil-to-gas incentive payments for installation of high efficiency furnaces or boilers should be eliminated. This safeguard, which was established to prevent an inequitable amount of energy efficiency funds from being spent on conversion customers, is now seemingly inconsistent with the new mission to induce more customer participation with gas service. Arguably, an oil-to-gas conversion creates far more social and financial benefits for all stakeholders compared to an upgrade of an existing gas heating unit (to an energy efficient unit).

Minimally, the incentive levels for energy efficient equipment in Central Hudson's Residential Natural Gas Program as originally authorized in the Energy Efficiency Portfolio Standard (EEPS, issued/effective on April 9, 2009), should be restored to the originally stated levels for furnaces and boilers. Comparatively, the currently established incentive levels for this equipment are approximately thirty percent (30%) less, per the applicable EEPS Order that was issued/effective on June 24, 2010.

Under the original Residential Natural Gas Program, Central Hudson's customer participation experienced stellar results for all stakeholders; in fact, the original program was temporarily suspended due to depletion of program resources. However, following the re-implementation of the Residential Natural Gas Program with reduced incentive levels for furnaces and boilers, Central Hudson's customers have not participated at nearly the same level. As a result, all stakeholders fall short of desired results. Incentive levels must be large enough to create a "customer tipping point", and this is not happening with the current incentive levels.

The current established incentive levels for furnaces and boilers in Central Hudson's Small and Mid-Size Commercial Natural Gas Program, as originally authorized in the Energy Efficiency Portfolio Standard (EEPS, issued/effective on June 24, 2012), should minimally be changed to a scaleable level that is based on the BTU rating of the installed (energy efficient) equipment. Due consideration should be given to this recommendation since commercial operating requirements can vary greatly in terms of the size and scope of a project, which can greatly impact the cost of the new natural gas heating equipment.

13. Do Revenue Decoupling Mechanisms (RDMs) impact expansion of the natural gas delivery system?

Response:

Central Hudson believes that RDMs can, to some extent, impact decisions regarding the expansion of the natural gas delivery system. Generally, the Commission has applied the unit per customer (UPC) or revenue per customer methodologies when implementing gas RDMs. Under such RDM models, the utility retains the average per customer forecast delivery revenue (RDM revenue target) for the customers incremental to the RDM target. However, the current gas extension and expansion regulations and policies do not reflect RDM implementation. As a result, while the regulatory and/or required economic analyses continue to correctly estimate the overall project return based on the estimate of total revenue, the revenue that the Company will actually retain is

limited to the RDM revenue target. This portion retained may not be sufficient to offset the incremental costs incurred, preventing the utility from having the opportunity to earn a reasonable return on its capital investment.

Additionally, pursuant to Case 09-G-0589, Central Hudson has a customer dead band that is applied to its residential RDM (the lower threshold of the dead band is the number of customers utilized in determining the UPC for the RDM with the upper level set utilizing Staff's customer forecast). As a result, all RDM revenue target revenue on the number of customers in this dead band is deferred for return to customers. To the extent that the Company is currently operating within this dead band, it is prohibited from retaining revenue that would offset the additional costs associated with incremental connections.

As a result, RDMs can provide a disincentive for utilities to actively promote large scale marketing/conversion and franchise expansion projects, as well as pursue the connection of large usage customers unless they are redesigned to eliminate the disincentive effects. In spite of this potential disincentive, Central Hudson remains committed to pursuing natural gas conversion for its customers.

Economic Development

14. Does the utility have any information or estimates concerning the existence of commercial or industrial customers who may add and/or retain jobs if they could switch their process or heating fuel to natural gas? If so, how many jobs might be added or retained?

Response:

The Company does not track job retention based on alternate fuel to natural gas conversions. However, when applicable the use of economic development funding for conversions to natural gas for industrial and large commercial customers will provide for reduced customer bills due to the price differential between oil and gas. This savings will accrue to business owners where new investments in equipment and jobs may occur. In

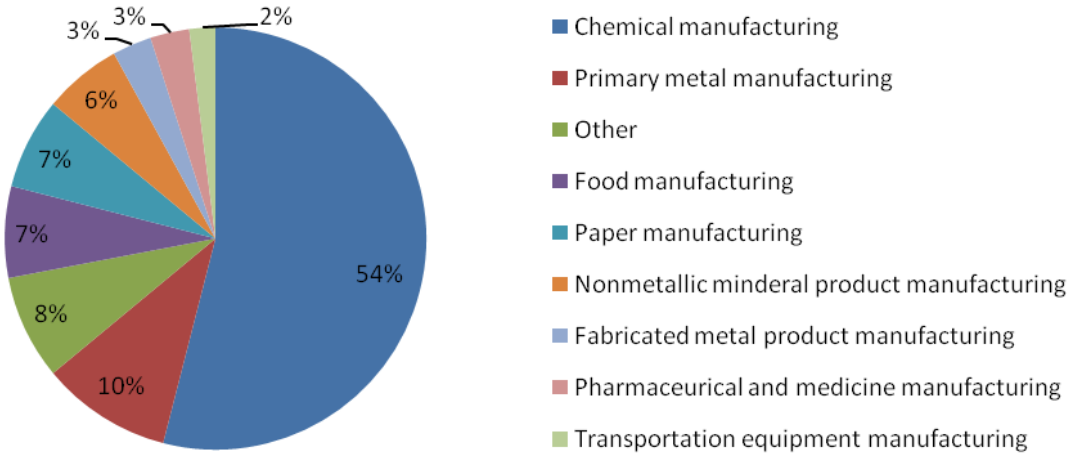
addition, an expanded customer base will permit utilities to spread fixed costs to a larger number of customers. This will have a dampening effect on future rate increases for existing customers.

15. Are there specific industries in the State that would benefit from an expanded natural gas delivery system? Please describe.

Response:

There are some specific industries in the State that would benefit from an expanded natural gas delivery system. The graph below depicts the distribution of New York industrial gas customer annual consumption in 2007. While the graph is not representative of Central Hudson's industrial customer usage or available industrial conversion opportunities, one type of industrial customer that is actively being pursued for conversion from oil to gas are asphalt plants.

[10]Distribution of New York Industrial Gas Annual Consumption in 2007



Asphalt plants are one prime example since there are both price and carbon emissions related benefits for an oil to gas conversion. Importantly, asphalt plant owners are also "off peak" gas consumers meaning that they operate their facilities from March

10

NYSERDA COMMERCIAL/INDUSTRIAL NATURAL GAS MARKET CHARACTERIZATION, Navigant Consulting, Inc. October 2012

to December and free up capacity to serve firm gas customers during the peak heating season.

In addition, New York State should require state institutions to study the cost/benefit of oil to natural gas conversions of prisons, schools, and state buildings. There will be both financial and environmental benefits of doing so. The state has a history of extending water and sewer lines for the greater societal benefit. It would be inconsistent for the state to not do so now with compelling reasons to switch to natural gas.

Public/Private Partnerships

16. **Are there potential partnerships between various entities involved in the energy and heating markets in New York State that could facilitate expansion of the natural gas delivery system? If so, please provide examples and whether your organization would be willing to take part in such a partnership. Who would be best suited for encouraging and developing such partnerships? What role should the public sector play?**

Response:

Partnerships between heating equipment suppliers and utilities could play an important role in passing on reduced costs to customers converting to natural gas. Central Hudson is currently establishing a partnership with a local heating distributor to obtain the lowest price possible on heating equipment currently as part of its Simply Better initiative.

Potential partnerships between utilities and Natural Gas Vehicle (NGV) manufacturers or large fleet managers that are looking to capitalize on the advantages of NGV could facilitate expansion of the natural gas delivery system. Tax credits could be used to incentivize fleet owners to purchase and operate any qualified NGV used in a trade or business.

Central Hudson has previously participated in the installation and connection of NGV refueling stations within its service territory. The Company purchased and installed an NGV refueling station at the United States Military Academy at West Point during the early 1990's, and connected NGV refueling stations for the New York State Department of Transportation at two locations in addition to a connection at the New York State Thruway in New Paltz. Additionally the Company operated an NGV refueling station at its corporate headquarters in Poughkeepsie until 2011.

17. Are there programs currently administered by utilities or federal, state or local agencies that assist customers with heating fuel conversions? Are there roles that other agencies, such as the New York State Energy Research and Development Authority (NYSERDA), should play in expansion of the natural gas delivery system? Should the Energy Efficiency Portfolio Standard (EEPS) programs be expanded or modified to encourage conversions to natural gas before end-of-life replacements?

Response:

The Energy Efficiency Portfolio Standard (EEPS) for natural gas programs has opportunity for expansion. In particular, the Residential and Commercial Gas HVAC programs are currently limited to prescriptive incentive rebate allowances, which are available only for energy efficient gas heating equipment. Unfortunately, current rebate allowances do not offer a substantive reduction on the total cost of a typical gas conversion project. While the average rebate amount is less than $1,000 per heating unit the total cost of a residential gas conversion project can be upward of $10,000, and the total cost for a commercial gas conversion project can be upward of $30,000 or more.

More customers may be induced to convert to natural gas service if incentive levels were raised to cover a substantive portion of the equipment cost. In addition, the cost of trade ally (contractor) labor should have a substantive portion of incentive coverage provided by EEPS or other similar funding mechanism. Customer response

would likely reach a favorable tipping point if half (30%) of the total conversion cost was covered by incentives.

Minimally, the incentive levels for energy efficient equipment in Central Hudson's Residential Natural Gas Program as originally authorized in the Energy Efficiency Portfolio Standard (EEPS, issued/effective on April 9, 2009), should be restored to the originally stated levels for furnaces and boilers. Comparatively, the currently established incentive levels for this equipment are approximately thirty percent (30%) less, per the applicable EEPS Order that was issued/effective on June 24, 2010.

Under the original Residential Natural Gas Program, Central Hudson's customer participation experienced stellar results for all stakeholders; in fact, the original program was temporarily suspended due to depletion of program resources. However, following the re-implementation of the Residential Natural Gas Program with reduced incentive levels for furnaces and boilers, Central Hudson's customers have not participated at nearly the same level. As a result, all stakeholders fall short of desired results. Incentive levels must be large enough to create a "customer tipping point", and this is not happening with the current incentive levels.

The currently established incentive levels for furnaces and boilers in Central Hudson's Small and Mid-Size Commercial Natural Gas Program, as originally authorized in the Energy Efficiency Portfolio Standard (EEPS, issued/effective on June 24, 2012), should minimally be changed to a scaleable level that is based on the BTU rating of the installed (energy efficient) equipment. Due consideration should be given to this recommendation since commercial operating requirements can vary greatly in terms of the size and scope of a project, which can greatly impact the cost of the new natural gas heating equipment.

A pilot program as covering 30% of total home heating conversion costs as stated in response #3 should be considered because the customer savings, economic benefits, and environmental benefits are so substantial. The pilot program could use a small

portion of the nearly $1.2 billion that will be collected in the next four years via the RPS. Central Hudson would like the opportunity to pilot such a program.

Also, the current (EEPS) budget limitation of 38% on oil-to-gas incentive payments for installation of high efficiency furnaces or boilers should be eliminated. This safeguard, which was established to prevent an inequitable amount of energy efficiency funds from being spent on conversion customers, is now seemingly inconsistent with the new mission to induce more customer participation with gas service. Arguably, an oil-to-gas conversion creates more social and financial benefits for all stakeholders compared to an upgrade of an existing gas heating unit (to an energy efficient unit).

18. Are there opportunities to coordinate natural gas delivery system expansion projects with other available resources, such as economic development, energy efficiency, or environmental protection? Please provide specific examples, if possible.

Response:

There are opportunities to coordinate natural gas delivery system expansion with the installation of other necessary infrastructure that encourage new business development and expansion in areas seeking economic growth. This can be accomplished by coupling funding assistance for gas distribution main installations in areas that require water, sewer, storm sewer, and road construction.

There may also be opportunities within the State to expand gas infrastructure in coordination with NYSDOT road paving and restoration projects. In all cases, economic development, energy efficiency, and environmental protection monies should be considered to further the expansion and use of natural gas to displace oil.

Environmental Impact

19. Are there changes that could be made to the environmental impact review process involved in granting or expanding gas franchise areas that could improve or streamline the process?

Response:

Central Hudson has not experienced significant franchise expansion over the past 10 years however there are multiple regulatory agencies and environmental reviews to be considered when developing a new project. Expansion of gas distribution lines could potentially require a State Pollutant Discharge Elimination System (SPDES) permit for stormwater discharge in addition to stream and wetland permitting from the New York State Department of Environmental Conservation (NYSDEC). Wetland permitting through the U.S. Army Corps of Engineers might also apply. Each town or municipality could require additional permitting if it is found that the project is subject to State Environmental Quality Review (SEQR). If the franchise expansion required a new gas transmission line to feed the project, an Article VII certificate from the PSC could be required in addition to the permits described above. Given the costly and time consuming environmental review potentially required, an easing or streamlining of this permitting and regulatory burden could aid in increasing the opportunities for franchise expansion.

20. Please identify, if any, areas of the State where provision of natural gas delivery service is unrealistic because of environmental constraints, construction permitting requirements or other factors and explain why service to such areas is believed to be unrealistic. Are there any areas of the State that require special consideration regarding expansion of the natural gas system?

Response:

There are certain areas of Central Hudson's service territory where installing gas distribution pipelines to serve customers is economically unrealistic. These areas are primarily comprised of low density housing in rural areas, home sites with long road frontage, and soil and rock characteristics non-conducive to economically trenching and installing gas pipelines.

Planning

21. Please explain your utility's natural gas delivery system expansion planning process including any large-scale and or long-term plans that are in place or are being considered.

Response:

The engineering and construction planning process for expansion of the natural gas delivery system involves 3 major areas of consideration; a source of gas, a route to move the gas to the new load center, and sizing the main supply line to be installed.

The source of gas is normally the nearest existing gas line with sufficient capacity to deliver the expected volumes of gas to the take-off point for the main supply line at pressures adequate for delivery to the end user. Typically these are transmission gas mains or distribution gas mains operating at 120 psig when the question is applied to new franchise areas and/or supply of gas service to municipalities without current service. Intrinsic to this planning analysis is the question as to the availability of capacity in the proposed source line to supply the load. Planning studies are used as the basis for reinforcement of these existing systems to be used in a source mode.

Routes to be followed by new main supply lines are analyzed with a focus on limiting the total distance to be traversed (limiting construction costs) and maximizing proximity to potential new loads. Route selection is also effected by the availability of

private easements and the proximity of environmentally sensitive areas along the route such as wetlands or reservoir water sheds.

Main supply lines to any new major load center are sized to supply the identified new load driving the expansion request as well as loads reasonably expected to be added to the system during the planning horizon (20 years).

The Company is currently analyzing the feasibility of three new expansion projects, two of which would require new gas distribution franchise approvals.

The first project consists of a 12,500 foot, 60 psig distribution main extension to serve two industrial customers in the Town and Village of Athens (Phase 1). The second phase of the project, a 5,825 foot gas main extension, could potentially provide gas service to the residential and commercial population within the Village of Athens. This phase is tentative pending customer commitments to gas conversion and an acceptable financial return on the gas main extension.

The second project which would require a gas distribution franchise is to serve the Green Haven Prison in the Town of Beekman. This tentative project consists of installing 21,000 feet of new main. Discussions with the Department of Corrections regarding this project are ongoing.

A third gas expansion project under review is within the existing franchise area of the Hamlet of Wallkill and entails extending 36,000 feet of new main to serve two schools in the Wallkill School District in addition to the Shawangunk Prison which currently burns #6 fuel oil at their central steam plant.

Anthony S. Campagiorni, Esq.
Vice President
Business Development and Governmental Affairs

(Attachment 1)

Dear Customer
Address
Kingston, NY 12401

Re: Natural Gas Main Extension

Dear Customer:

Thank you for your interest in natural gas service. Central Hudson has completed the design work for the proposed 520' gas main extension along Ringtop Road to serve your home and four of your neighbors. We have reviewed the scope of work with the city of Kingston and have received their approval.

I am writing to outline what is required from you and your neighbors in order to proceed with final plans for this project. Central Hudson is providing 100' of main, and up to 100' of gas service, to each customer based on your commitment to convert to natural gas heating. This must be heating, and not just for cooking or water heating. We will require a security deposit of $1,500 that will be fully refundable (without interest) as soon as a gas meter is installed to supply your new heating appliance. If the heating system is not installed within one year of the in service date of the new gas main, the $1,500 will be forfeited and used to offset the cost of the main extension. If you haven't already done so, now is a good time to contact heating contractors who can provide proposals and prices to install the gas-heating appliance.

In addition, because the main required is 520' rather than the allowed 500' (5 customers times 100' each) we must charge a non-refundable payment of $500. This represents the expected cost per foot of the main times the additional 5' over the allowance.

A check in the amount of $2,000 may be made payable to Central Hudson and sent to my attention at the address below. Please contact me by e-mail at mmulpeter@cenhud.com, or by calling 845-334-3513 if you have any questions or concerns.

We look forward to providing natural gas service to you and your neighbors on Ringtop Rd.

Sincerely,

Supervisor, New Business Services

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