

**STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION**

**Case 14-E-0318, Case 14-G-0319: Proceeding on Motion of the  
Commission as to the Rates, Charges, Rules and Regulations of  
Central Hudson Gas & Electric Corporation  
for Electric and Gas Service**

**Comments regarding the Joint Settlement Proposal and the  
proposed resolution of Cases 14-E-0318 and 14-G-0319  
the Central Hudson Electric and Gas Rate Cases.**

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## **I. Introduction**

The Public Utility Law Project of New York, Inc. (Utility Project) submits these comments regarding the proposed resolution of Cases 14-E-0318 and 14-G-0319, the Central Hudson Electric and Gas Rate Cases, and to present important issues both relevant and germane to the outcome of this case. The comments include analysis of the following topics:

- 1) The erosion of the economic health of approximately 30% of the customers in the Company's service area, between 2009 and the present;
- 2) The effect of the rate design set forth in the joint proposal upon the Company's low income, low usage and fixed income customers, and how its effects are exacerbated given the decline in fiscal health of large numbers of the Company's customers;
- 3) Whether adopting inclining block rates would promote New York State policy to encourage conservation and reduce greenhouse gas emissions;
- 4) Whether adopting inclining block rate structures would affect savings that could be used to provide additional relief to the low income, fixed income and low usage residential customers in the Company's service territory;
- 5) Whether the impact of a "California CARE" style low income rate effecting a 35% bill reduction could be significantly mitigated with inclining block rate structures; and
- 6) The effect of the increasing deployment of individual household distributed energy generation technology, mainly solar panels, upon the Company's revenues and its reliance

upon large increases in its “basic service charges” that appear to function analogously to capacity charges.

In one of the fourteen comments listed in the Department of Public Service's (DPS) DMM system for case management, a Company customer states that:

“I live on a very fixed income. This is totally unfair for those of us who live on a fixed income that don't get raises because they don't work anymore... It has been proven that when people have to pay more for their utilities that it comes out of their food money plus causing them not to be able to eat food I know this is the case for me... People who have been told conserve energy and who actually do conserve energy should not be penalized or punished by having to pay for conserving. People who are out of their house during the day because they work should not have to pay increase that they're not even using. This is not fair to those of us who live on fixed income who go into their food money to pay raises in utilities...” (See, comments of Nancy J. Selig, filed 2/27/2015, DPS DMM system.)

The Project believes that these comments and the analysis herein speak not only to the truth behind Ms. Selig's comments, but are also indisputably persuasive as to the need to consider altering the proposed rates contained in the Joint Proposal, and to consider providing reduced bills for the Company's low income, fixed income and low usage customers by establishing a robust and more fully funded low income rate program similar to California's “California CARE” program. In fact, we believe it would be hard to act otherwise, given the facts set forth in the analysis provided below. In consequence, we believe these comments will be potentially issue-determinative in this proceeding, and will contribute strongly to more fully developing the record concerning rate designs in Central Hudson's service territory.

**II. Central Hudson's delivery rates are already unaffordable for the 30% of its residential electric customers' households that earn less than \$35,000 annually.**

According to the U.S. Census Bureau’s American Community Survey, from 2009 through 2013, the economic circumstances of the population in Central Hudson’s service area deteriorated sharply. The number of households receiving public assistance such as SNAP soared dramatically, and the unemployment rate increased by almost 50%, among other indicators of increased economic challenges to working families. At the same time, the economic divide sharply worsened, with households making above \$100,000 and households making below \$35,000, increasing dramatically in percentage of population.

Table 1 shows the impact of the financial crisis and great recession on residents in Central Hudson’s service area:

**Table 1 - Selected Economic Characteristics in Central Hudson Service Area (2009 - 2013)**

Characteristic	+Increase/ -Decrease	2013	2009
<b><i>Individuals:</i></b>			
Population 16 and Over	+1.7%	723,845	711,781
Unemployed	+48.5%	42,793	28,813
Percent Unemployed	+300 basis points	9.3%	6.3%
Labor Participation Rate	-150 basis points	63.8%	64.8%
<b><i>Households:</i></b>			
Total Households	-4.2%	302,257	315,641
Median Household Income	+0.05%	\$65,253	\$64,953
Households Earning Less Than \$35,000	+8.4%	89,943	82,939
% of Households Earning Less Than \$35,000	+350 basis points	29.8%	26.3%

Households Earning \$35,000 - \$100,000	-6.1%	134,329	143,061
% of Households Earning \$35,000 - \$100,000	-90 basis points	44.4%	45.3%
Households Earning More Than \$100,000	+158.8%	90,652	35,023
% of Households Earning Over \$100,000	+1,870 basis points	47.1%	28.4%
<b><i>Households With Public Assistance:</i></b>			
Supplemental Security Income (SSI)	+47.7%	15,835	10,724
Cash Public Assistance	+99.9%	9,945	4,975
Food Stamps/SNAP Benefits	+75.7%	35,264	20,075

**Source:** U.S. Census Department, *American Community Survey* (2009 and 2013).

The data in Table 1 present two opposing realities, the implications of which must be appreciated to understand the stakes for low income customers in the current Central Hudson rate case:

- i. While the number of households in Central Hudson's service territory *declined* 4.2% from 2009 to 2013, the number of households earning less than \$35,000 *rose* 8.4%. The percent of total households represented by households earning less than \$35,000 rose from 26.3% to 29.8%. Unemployment among individuals and all forms of public assistance to households experienced increases ranging from 47.7% to 99.9% between 2009 and 2013.
- ii. From 2009 – 2013, the number of households in Central Hudson's service territory earning at least \$100,000 soared 158.8% (**2 ½ times**). The percent of total households represented by households earning at least \$100,000 ballooned from 28.4% to 47.1%.

Caseload statistics of the New York State Office of Temporary and Disability Assistance (OTDA) corroborate the census data for low income Central Hudson customers, showing double-digit increases in the number of households receiving Home Energy Assistance (HEAP) from 2009-13. *Critically, although HEAP caseloads increased, Table 2 shows that program benefit levels dropped, resulting in a sharp reduction (30+%) in HEAP grants per household.*

**Table 2 - New York State Households Receiving Home Energy Assistance – Dutchess, Greene, Orange and Ulster Counties, 2009 – 2014**

<b>Characteristic</b>	<b>+Increase/- Decrease From 2009</b>	<b>2014</b>	<b>+Increase/- Decrease From 2009</b>	<b>2013</b>	<b>2009</b>
Households Receiving HEAP Benefits	+18.5%	58,881	+18.6%	58,906	49,680
Grant Amounts Of HEAP Benefits	-15.1%	\$22,331,580	-20.0%	\$21,029,706	\$26,306,153
HEAP Grant Per Household	-28.4%	\$379.27	-32.6%	\$357.00	\$529.51

**Source:** New York State Office of Temporary and Disability Assistance, *Temporary and Disability Statistics*, September 2009, 2013, 2014

The impact of deteriorating economic circumstances on the ability of Central Hudson customers to pay their utility bills without hardship and retain uninterrupted utility service is unsurprising

and is shown in collections data provided by the Company to the New York State Public Service Commission. (See Table 3 below.)

**Table 3 – Central Hudson Residential Customer Collection Measures, August 2005 – August 2014**

Collection Measure	Total	Annual Rate	Year			
	Change 2005-14		2014	2013	2009	2005
<i>Arrears &gt; 60 Days (As Of August 31)</i>						
% of Customers	+158 Bps	n/a	9.03%	9.10%	10.65%	7.45%
# of Customers	26.4%	2.6%	23,259	19,999	25,758	18,396
\$ Amount (millions)	4.3%	0.5%	\$31.8	\$32.9	\$26.4	\$30.5
\$s Per Customer	-17.5%	-2.1%	\$137	\$164	\$103	\$166
<i>Final Termination Notices (Total From September 1 - August 31)</i>						
Notices Issued	30.5%	3.0%	309,714	302,561	269,119	237,379
% of Customers	+259 Bps	n/a	10.6%	11.3%	9.2%	8.0%
<i>Terminations (Total From September 1 - August 31)</i>						
Accounts Terminated	137.1%	10.1%	11,113	12,276	10,063	4,688
% of Accounts	+255 Bps	n/a	4.6%	5.5%	4.1%	2.0%
% of Accounts With Arrears > 60 Days	+2,563 Bps	n/a	50.5%	61.2%	38.3%	24.9%
<i>Deferred Payment Agreements (As Of August 31)</i>						
Number	250.8%	15.0%	8,692	5,641	4,357	2,478
\$ Amount (millions)	389.0%	19.3%	\$14.2	\$8.1	\$6.9	\$2.9
% of Customers With Arrears > 60 Days	+2,390 Bps	n/a	37.4%	28.2%	16.9%	13.5%
% of Arrears > 60 Days	+3,502 Bps	n/a	44.5%	24.6%	26.0%	9.5%
% of Total Customers	--120 Bps	n/a	2.2%	2.7%	3.3%	3.4%
\$s Per Customer	286.8%	16.2%	\$609	\$405	\$267	\$157

**Source: Utility Reports to New York State Public Service Commission**

**Bps = Basic points (one hundredths of one percent)**



*a. Has the economic recovery helped the average Central Hudson low-income customer?*

In sum, economic indicators and Company collections data from 2009 – 2013 overwhelmingly point to hardship among many Central Hudson customers, and their objective, consequent inability to afford essential utility service. Although there was a slight improvement in 2014, it is still indisputable that, since 2005, there have been significant increases in both the number *and* percent of customers:

- With arrears older than 60 days,
- Receiving final termination notices,
- Experiencing termination, and
- Requiring deferred payment agreements

All categories have increased significantly since 2005. Further, any assertion that these circumstances have eased for Central Hudson's customers since the purported end of the Great Recession in 2009 must be reconciled to the fact that, since 2009:

- The number and percent of customers with arrears older than 60 days has declined only modestly, while the dollar amount of arrears and arrears per customer has increased sharply,
- Both the number and percent of final termination notices (FTNs) have jumped 15% to almost 310,000 annually. Over 10% of Central Hudson customers received an FTN in 2014,

- The annual number of terminations has increased 10%. As a percent of customers with arrears older than 60 days, terminations have soared from 38.3% to 50.5%. Of total customers, the percent has increased from 4.1% to 4.6%, and
- Arrears balances subject to deferred payment agreements have more than doubled, as have the percent of customers with arrears older than 60 days. The average dollar amount subject to deferred payment agreements has spiked 128% (287% since 2005).

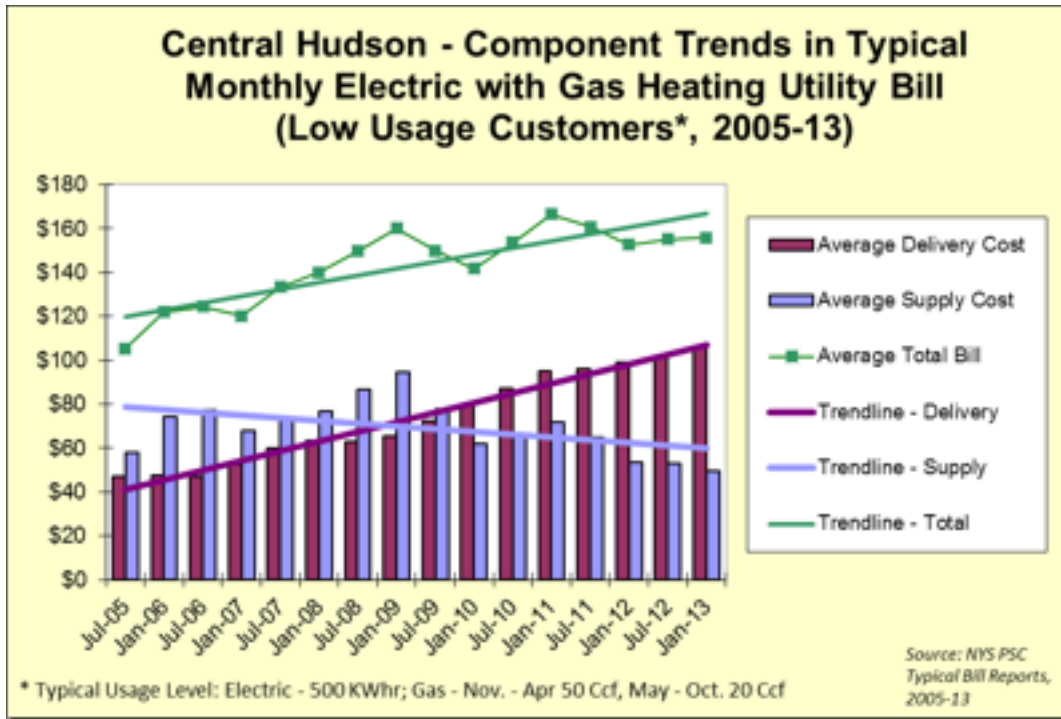
In other words, there has been no economic recovery for low income Central Hudson customers since 2009. In fact, their economic circumstances are much worse, a situation mirrored throughout New York State's low income population.

The average Central Hudson low income customer is also a *low usage* customer, a group that has been especially hard hit by rapidly rising delivery costs since 2005 (Chart 1), and by increases in the "basic service charge."<sup>1</sup>

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<sup>1</sup> On average, low income electric and gas customers used 8% and 12% less than non-low income customers, respectively in the twelve months ending July 31, 2014 (Staff Electric Rates Panel Exhibit ERP\_1, Schedule C).

Chart 1



Much of the rising cost of delivery service for low usage customers of Central Hudson as reflected in Chart 1 is the result of ever-increasing basic service charges that are now the highest among all of New York’s investor-owned utilities (Table 4).

**Table 4 – New York State Basic Service Charges as of January 1, 2013**

Utility	Electric	Gas	Gas Non-
		Heating	Heating
<b>Average</b>	<b>\$18.41</b>	<b>\$17.84</b>	<b>\$16.40</b>
<b>Central Hudson</b>	<b>\$24.00</b>	<b>\$23.00</b>	<b>\$23.00</b>
Con Edison	\$15.76	\$20.40	\$18.60
Coning Natural Gas	n/a	\$16.75	\$16.75
KeySpan Long Island	n/a	\$18.33	\$14.99
KeySpan New York	n/a	\$18.19	\$13.74
National Fuel Gas	n/a	\$15.54	\$15.54
Niagara Mohawk	\$16.21	\$17.85	\$17.85
NYSEG	\$15.11	\$16.30	\$12.30
Orange & Rockland	\$18.00	\$18.63	\$16.30
Rochester Gas & Electric	\$21.38	\$16.30	\$16.30
St. Lawrence Gas Company	n/a	\$15.00	\$15.00

*Source:* New York State Public Service Commission Typical Bill Report – January 1, 2013

**As much as 44% and 58% of the electric and gas delivery costs, respectively, of the typical Central Hudson customer whose usage is represented by Chart 1 was comprised of basic service charges as of January 1, 2013. The consequence: about half of these delivery costs are beyond the customer’s ability to control through conservation.**

Not only is such a result unconscionable since the low-income customers can literally do nothing to lower this cost that represents the largest part of their bill, it is also directly contrary to the State of New York's policy to lower its greenhouse gas footprint through conservation, among other things. They are fixed costs incurred simply to keep the electricity and gas connected.

***b. The impact upon low-income customers of rates designed to punish conservation and reward overuse***

A further burden on low usage/low income customers is a per ccf delivery rate of gas that’s higher than the delivery rate for higher blocks of usage (per ccf ). Under this “*declining block*” rate design, as customers use more service, their average cost per unit of service declines.

Unfortunately for low usage customers, however, they never get the benefit of such a price break. Add this to the Company’s flat delivery rate of electricity and there’s little a low usage customer can do to control the delivery cost component of their combined utility bill (Table 5). As alluded to above, this sort of rate design rewards profligate use and punishes conservation, and is disproportionately most severe in its effects upon low-income customers.

**Table 5 – Central Hudson Delivery Rates as of January 1, 2013**

Electric	\$0.04964	Per KWH	<b>(Flat Rate)</b>
Gas:			
0-2 CCF	Included in Basic Service Charge		
3-50 CCF	\$0.86030	Per CCF	<b>(Declining Block Rate)</b>
Over 50	\$0.39440	Per CCF	

**Source:** New York State Public Service Commission Typical Bill Report – January 1, 2013

Given the economic circumstances of low income customers in the Company’s service area, the one-two punch burdens of high fixed costs and higher or flat per unit delivery costs of energy have likely been a principal driver of higher overall arrears among Central Hudson customers since 2005, even among households whose economic circumstances might have improved since 2009. These increasing arrears have, in turn, propelled the Company’s termination and other aggressive collection measures as shown in Table 3.

**III. Any increase in rates, without changes in rate design, will put more Central Hudson low income customers at risk of higher arrears and subject to expanded late payment charges, and more service interruptions.**

The settling parties in this rate case<sup>2</sup> propose that Central Hudson's basic service charges be raised yet again – this time by 21% for electric service (from \$24 to \$29 per month) and 13% for gas service (from \$23 to \$26 per month). These double-digit increases were suggested despite the fact that the Company's basic service charges are already an undue burden on the Company's low income rate payers. When coupled with increased volumetric delivery rates in both electric service (24%) and gas service (18%), the potential added burden on low income, low usage customers is apparent and devastating:

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<sup>2</sup> See Joint Proposal for Settlement, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric and Gas Service, Cases 14-E-0318 and 14-G-0319, dated February 6, 2015.

**Table 6: Typical Bill Impact of Proposed Tariff Changes on Central Hudson Low Usage Customers, 2015-17 (RY1 – RY3)**

<b>14-E-0318/14-G-0319 - Typical Bill Impacts</b>									
<b>(Low Usage Customers)</b>									
		Proposed		Current	RY1	RY3	Current	RY1	RY3
				250	250	250	500	500	500
Electricity	Current	RY1	RY3	KWhrs	KWhrs	KWhrs	KWhrs	KWhrs	KWhrs
Typical Bill				\$58.10	\$60.72	\$66.26	\$91.48	\$93.50	\$102.53
Percent Change from Current				N/A	4.5%	14.0%	N/A	2.2%	12.1%
Changed Components:									
Basic Service Charge	\$24.00	\$27.00	\$29.00	\$24.00	\$27.00	\$29.00	\$24.00	\$27.00	\$29.00
Delivery Charge	\$0.04963	\$0.05202	\$0.06174	\$12.41	\$13.01	\$15.44	\$24.82	\$26.01	\$30.87
MFC Admin Charge	\$0.00183	\$0.00165	\$0.00163	\$0.46	\$0.41	\$0.41	\$0.92	\$0.83	\$0.82
MFC Supply Charge	\$0.00186	\$0.00238	\$0.00236	\$0.47	\$0.60	\$0.59	\$0.93	\$1.19	\$1.18
Electric Bill Credit	\$0.00000	-\$0.00469	-\$0.00073	\$0.00	-\$1.17	-\$0.18	\$0.00	-\$2.35	-\$0.37
Total Changed Components				\$37.33	\$39.84	\$45.25	\$50.66	\$52.68	\$61.50
Percent Change from Current				N/A	6.7%	21.2%	N/A	4.0%	21.4%
Basic Service Charge as a Percent of Total Bill									
				41.3%	44.5%	43.8%	26.2%	28.9%	28.3%
				Current	RY1	RY3	Current	RY1	RY3
				2	2	2	8	8	8
Gas	Current	RY1	RY3	CCF	CCF	CCF	CCF	CCF	CCF
Typical Bill				\$25.51	\$26.47	\$28.58	\$36.57	\$37.55	\$40.54
Percent Change from Current				N/A	3.8%	12.0%	N/A	2.7%	10.8%
Changed Components:									
Basic Service Charge (includes 0-2 CCF)	\$23.00	\$24.00	\$26.00	\$23.00	\$24.00	\$26.00	\$23.00	\$24.00	\$26.00
Delivery Service (3-50 CCF)	\$0.86030	\$0.89220	\$1.01120	\$0.00	\$0.00	\$0.00	\$5.16	\$5.35	\$6.07
Merchant Function Admin Charge	\$0.00960	\$0.00449	\$0.00434	\$0.02	\$0.01	\$0.01	\$0.08	\$0.04	\$0.03
Merchant Function Supply Charge	\$0.01214	\$0.01342	\$0.01251	\$0.02	\$0.03	\$0.03	\$0.10	\$0.11	\$0.10
Electric Bill Credit	\$0.00000	-\$0.02715	\$0.00000	\$0.00	-\$0.05	\$0.00	\$0.00	-\$0.22	\$0.00
Total Changed Components				\$23.04	\$23.98	\$26.03	\$28.34	\$29.28	\$32.20
Percent Change from Current				N/A	4.1%	13.0%	N/A	3.3%	13.6%
Basic Service Charge as a Percent of Total Bill									
				90.2%	90.7%	91.0%	62.9%	63.9%	64.1%
Total Electric & Gas				\$83.61	\$87.19	\$94.84	\$128.06	\$131.05	\$143.07
Percent Change from Current				N/A	4.3%	13.4%	N/A	2.3%	11.7%

**Source:** Joint Proposal, Appendix K – Case 14-E-0318, 14-G-0319 (Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric and Gas Service)

As can be seen in Table 6, the full impact on low usage customers only becomes effective on July 1, 2017 when the proposed increases in electric and gas basic service charges and volumetric delivery rates are fully phased in and bill credits are largely exhausted. At that point, more than 40% of the average low income customers' typical bill will be comprised of fixed costs of service (i.e., from delivery charges and steeply increased basic service charges). As stated above therefore, these customers will have little ability to control their utility bills through conservation efforts, unlike every other customer class in Central Hudson's service area. Ratepayers using 500 KWH of electricity per month will pay over 12% more for electricity (assuming static supply costs) than at June 30, 2015; while ratepayers using 8 CCF of gas per month will pay almost 11% more for their gas than they do currently. Worse, due to the sharp jump in fixed basic service charges for electricity and gas delivery service, lower usage customers will face bill increases of 15% or more.

Most egregiously, the proposals perpetuate and dramatically increase fixed basic costs and volumetric delivery rates for both electricity and gas, at a percentage that is more than twice the expected rate of consumer price inflation. With over 40% of their typical bill comprised of fixed costs of service by July 1, 2017, these customers will be trapped - having little ability to control their utility bills through conservation efforts. The cycle of higher arrears and aggressive collection practices will therefore continue at this heightened pace until it reaches a breaking point.

The joint proposal would also continue the current rate design which features flat delivery rates for electricity and declining block rates for gas. In general, flat rates of delivery reduce incentives for energy efficiency and conservation; while declining block rates can actually encourage higher usage. These incentives are sure to become more ingrained as longer payback periods settle in for efficiency investment - brought about by recent declines in energy commodity costs.



In summary, the Utility Project concludes that Central Hudson's rate design makes increasing portions of its customer bill non-usage sensitive, and does not reward reductions in fossil fuel usage. It also directly conflicts with New York's policies and goals of programs promoting energy efficiency and greenhouse gas reduction, and renders at least partly moot large expenditures made to encourage customer investment in energy efficiency measures.

#### **IV. Lowering Arrears through a properly designed Inclining Block Rate Structure**

Conversely, the Project believes and argues that a substantially different approach to rate design than the one Central Hudson has proposed should be instituted in this case. Such an Inclining Block rate structure would be designed around consistent principles of energy efficiency and conservation. It would offer a chance to *reduce* electric and gas basic service charges for all customers and volumetric delivery rates for low usage customers. Importantly, these opportunities could be achieved while leaving Central Hudson the potential to achieve any additional delivery revenue that may be allowed by the Commission in resolution of this rate case.

When properly designed, an *inclining* block rate structure has the potential to incentivize energy efficiency and conservation, aligning the way Central Hudson charges its customers for energy to the benefit of lower usage customers, without a detrimental effect on the Company's delivery revenues. Revenues priced at the highest blocks of usage could, net of usage reduced through efficiency and conservation, be used to offset the revenue impact of reduced basic service charges and lower delivery rates at low usage levels for all customers.

The Utility Project readily acknowledges that to assume no drop in usage as a result of implementation of inclining block rates would be unrealistic. The whole point of inclining block rates is the tactical use of demand elasticity: as price increases, demand drops. Two important

mechanisms serving the goals of efficiency and conservation need to be considered in this regard. First, New York State's "Reforming the Energy Vision" (REV) initiative offers the Company a unique opportunity to dramatically update its rate design so as to align with the principles of efficiency and conservation, without significant loss of revenue. Through REV, the hypothesis can be tested that an equilibrium point will be reached where increased prices and lessened demand balance out to less drop in revenue than naysayers might forecast. Additionally, forecasts of how a new rate design would change customer usage behavior are not essential for guaranteeing Central Hudson its revenue requirement. When delivery revenues guaranteed in rate cases such as this one don't materialize, the difference gets settled through something called the "Revenue De-Coupling Mechanism" (RDM), a per-kilowatt hour charge that delivery customers pay monthly to insure the utility gets its rate case-authorized revenue. If inclining block rates are designed with the proper incentives, these RDM adjustments can be largely minimized for conservation-minded ratepayers.

If customer and minimum charges - and lowest energy block delivery rates - go down for all customers in a new rate design, low usage customers will see lower bills, and the revenue impact of reducing rates further for low income customers will be less. For example, If everyone's customer charge for electric had already been reduced to \$16 (from \$24 currently and \$29 proposed) and the minimum charge for gas had been reduced to \$6.50 (from \$23 currently and \$26 proposed), it would cost much less to eliminate or further reduce the customer charges for low income customers. Aligning rate design with the efficiency and conservation principles of REV can, therefore, ultimately lower the cost of additional assistance that needs to be provided to low income customers.

This is the time to take advantage of such an opportunity. With stagnant incomes, continued elevated levels of unemployment, and severe constraints on public assistance programs, the burden of Central Hudson's proposed increase would be too much to bear for its low income customers. The joint proposal would result in higher arrears and risk greater disruptions of

service through shutoffs and other aggressive collections efforts by the Company. Instead, Central Hudson's delivery rates should be re-designed to align customer behavior with the other, broader goals of energy efficiency and conservation under discussion in REV, and the State's "Clean Energy Fund" (CEF) and "Energy Affordability for Low Income Customers" (Affordability) proceedings. All Central Hudson ratepayers would have the potential to experience lower utility bills through such a rate re-design. The additional assistance low income customers would need would be far less than if simply administered against the Company's current, antiquated and "non-Green" rate structure. Finally, contrast the opportunity in such a forward-looking rate design against the Utility Project's certainty that Central Hudson low income customers cannot bear the burden of the proposed higher rates and antiquated rate designs with only the Company's existing low income assistance programs as a buffer and last resort, as detailed below.

**V. Central Hudson's low income assistance programs are neither appropriately designed nor adequately funded to provide a meaningful safety net to offset the increased risks of unaffordability presented by the proposed rate increase.**

Central Hudson sponsors two low income assistance programs: an "Enhanced Powerful Opportunity Program" (EPOP) and a "Low Income Bill Discount Program" (LIDP).

***a. Enhanced Powerful Opportunity Program (EPOP)***

The EPOP provides low-income customers of Central Hudson with discounted budget bills, arrears forgiveness, and incentive reward credits with the stated goal of helping participants pay off their arrears and stay current with future monthly budget bills. Participants are also referred to NYSERDA's EmPower NY program where they are provided with measures to reduce their energy consumption.

However, EPOP is a highly selective program with numerous eligibility criteria set forth by the Company, the most important of which is the Company's determination that applicants "*have the financial ability to pay a discounted budget bill each month*" (*Central Hudson's Enhanced Powerful Opportunity Program (EPOP) Rate Year End Report, July 1, 2013 – June 30, 2014*, page 6).

The average number of participants in the EPOP program in 2013-14 was 1,066, versus an average of 967 in 2009-10 (a 10.2% increase). This contrasts this with the data in Table 2, showing that from 2009 – 2014, households receiving HEAP in the four counties that make up the majority of CH's service territory increased 18.5%, while their average HEAP grant amount *declined* 28.4%. In 2013-14, only about 4% of the Company's customers whose HEAP benefits were credited directly to their Central Hudson accounts were participants in EPOP.

More broadly, as Table 1 shows, households in Central Hudson's service area were more likely in 2014 than in 2009 to include unemployed working age individuals, have median incomes less than \$35,000, and be receiving supplemental security income, cash public assistance, or food stamps than in 2009. As much as EPOP is described as resulting in successful outcomes for a percentage of those participants able to complete it, the program is not appropriately designed nor adequately funded to provide a meaningful safety net to offset the increased risks of unaffordability presented by the proposed rate increase.

***b. Low Income Bill Discount Program (LIDP)***

The LIDP was initiated by Staff and approved by the Commission in Cases 08-E-0887 and 08-G-0888 to address the needs of low-income customers receiving assistance through HEAP that do not necessarily qualify for EPOP. The intent of the program is to provide assistance in the form of a monthly bill credit to all low-income customers who receive HEAP benefits and who may be sacrificing other basic needs to keep their payments current. The program was enhanced and continued through the Company's next rate proceeding, Cases 09-E-0588 and 09-G-0589

and the Fortis Acquisition Order in Case 12-M-0192. As of July 1, 2014 the discounts available were:

Service Type	Electric Only	Gas Only	Both Electric & Gas
Heating	\$17.50	\$17.50	\$23.00
Non-Heating	\$5.50	\$5.50	\$5.50

For the period of 7/1/13 – 6/30/14, \$1,779,121 was distributed to 95,888 active customer accounts *that received a HEAP benefit on their Central Hudson account during the 2013/2014 winter season in the form of a monthly bill credit*. The rate allowance for the low-income monthly bill credit was \$1,531,000, which excludes \$450,000 funded by Fortis per the Acquisition Order, and the total Bill Discount Program expenditures for the same period were \$1,779,121 (see Low Income Bill Discount and Reconnection Waiver Report). It is important to note that one-time funds arising from the Fortis merger were used to fund at least part of this program activity.

Even under its current design – one that excludes from eligibility all low income customers except those that direct their HEAP grants to be applied directly to their Central Hudson account – the rate increases proposed by the settling parties in this case would likely add dramatically to an emerging structural deficit funding for the LIDP program. The reasons for this are twofold: no changes in funding for the program are proposed; and the “one-time” supplemental funding that was part of the terms of the settlement in 12-M-0192 are likely to be exhausted shortly after the effective date of the new rate plan.

***c. The impact of tariff changes upon the bills of low usage customers***

As shown in Table 6, the typical bill impact of proposed tariff changes on Central Hudson low usage customers, many of whom are low income and/or senior citizens, will be much higher the

impact on average usage customers, especially after June 30, 2017. Thanks to the expiration of most of the proposed bill credits, as of July 1, 2017 low usage electricity customers of 500 KWhs or less per month can expect to pay 12-14% or more extra monthly for electricity delivery. Low usage gas customers can of 8ccf or less per month can expect to pay 10-12% or more extra per month for gas delivery. Overall, a combined electric and gas customer at low usage levels can expect to pay 11-13% or more extra after the expiration of the bill credits.

Absent any economic improvement for low income residents of Central Hudson's service area (where Table 2 shows as many as 58,881 (19.5%) of households in Dutchess, Greene, Orange, and Ulster counties received HEAP in 2014, it is indisputably that such bill increases would cause more of the Company's customers to apply for HEAP during the period of the proposed rate plan.

Out of Central Hudson's 257,616 residential customers at August, 2014 (about 85% of total households in these four counties), a rough approximation of HEAP-eligible customers would be 50,000. The highest enrollment in the LIDP in 2013-14 occurred in the quarter ended June 30, 2014 at 25,891, about 52% of the potentially HEAP-eligible households. A 10 – 20% increase in HEAP applications would therefore be plausible, especially in light of recent harsh winters and the higher electricity supply costs resulting from the creation of a new capacity zone in Central Hudson's service area.

Page 15 of the Company's *Enhanced Powerful Opportunities Program Report for 2013-14* shows that \$1,779,121 of discounts were provided through the Low income Bill Discount Plan from July 1 2013 - June 30, 2014, versus a rate allowance of \$1,531,000. On a continuing basis, therefore, the program spent more than its rate allowance by \$248,121. Thanks to \$450,000 provided by Fortis under the terms of the Commission's order in 12-M-0192, however, the Company reported that discount plan has an "over-collected" balance of \$201,879 – a carryover that could be applied to fund plan benefits after 2013-14.

Page 8 of the Company's quarterly *Enhanced Powerful Opportunities Program Report as of September 30, 2014* shows discounts under the plan were \$452,150 versus \$395,597 in 2013 (a 14.3% increase), causing the rate allowance for the quarter to be exceeded by benefits by \$70,150 (vs. \$13,597 in 2013). In one quarter alone, therefore, \$70,150 of the \$201,879 carryover (34.7%) of the \$450,000 allocated in 12-M-0192 was used up. Page 9 the same report as of December 31, 2014 shows some moderation of this trend: discounts under the plan were \$391,785 versus \$429,832 in 2013 (an 8.9% decrease). However, discounts still exceeded the rate allowance for the quarter by \$18,785 (vs. \$56,832 in 2013). At this rate, the remaining 12-M-0192 carryover would be exhausted during the quarter ending December 31, 2015 – just in time for another harsh winter, and under the increased rates proposed by the settling parties.

It is true that case 12-M-0192 provided that any operating shortfall in the low income discount program, "...the shortfall would be made up from funds previously deferred for the benefit of the low-income programs, with any excess deferred as a regulatory asset." However, given that the LIDP appears to be structurally underfunded at the current rate allowance, and the rate increases proposed in this proceeding are likely to place a disproportionate burden on low usage customers, many of whom are low income or senior citizens, the structural shortfall can be expected to become much more apparent after December 31, 2015. At that point, the carryover of one-time supplemental funding from 12-M-0192 will almost certainly be exhausted and LIDP require attention so as to avoid the build-up of excessive deferrals. As presently designed therefore, the low income discount program is significantly underfunded on an operating basis – a shortfall that would continue to worsen as rates go up under the joint proposal for new rates.

It is worth noting that this underfunding is occurring even as the LIDP isn't reaching much more than an estimated 50% of Central Hudson's customers who receive HEAP. Because the Company requires HEAP customers to direct payment of their benefits as credits to their Central Hudson account, those that don't – perhaps because they heat with oil or are natural gas

customers of another utility such as NYSEG – are excluded from the discount program. It is possible that the PSC intended to include only those Central Hudson customers that were *both* HEAP recipients and heating customers in this plan when it ruled in 08-E-0887 / 08-G-0888 that:

*“...we will modify the RD’s recommendation by directing that the \$500,000 increase in the rate allowance for low income programs be used to fund a monthly discount of \$5.00 for customers on whose behalf Central Hudson receives a HEAP payment.” (Order at 73)*

If that’s the case, then it’s self-evident that the LIBP is ***not*** a broad-based discount program; there are only about 75,000 qualifying electric or gas heating customers, 30% of Central Hudson’s 250,000 total residential customers. However, of those enrolled in the LIDP in the quarter ended June 30, 2014, 84% were heating customers.

As with the EPOP program, the LIDP may result in successful outcomes for a significant percentage of its participants, but the program is neither appropriately designed nor adequately funded to provide a meaningful safety net to offset the increased risks of unaffordability presented to a broad base of low income Central Hudson customers by the proposed rate increase. Comprehensive remediation of the effects of the proposed rate increase upon low income customers can only be accomplished by both expanding eligibility criteria to include all customers who are recipients of HEAP, SNAP, SSI, TANF, SafetyNet and Medicaid, significantly increasing funding for low income assistance, and implementing automatic enrollment through OTDA matching.<sup>3</sup>

***d. With a new rate design, expanding low income assistance would require less revenue reallocation to low-income customers from other customers and customer classes.***

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<sup>3</sup> See, e.g., the low income rate and eligibility criteria specified by the Utility Project in: Comments of the AARP and Public Utility Law Project in case 14-M-0565, filed on March 4, 2015.



As is well known, one of the Utility Project's goals (as stated, e.g., in Case 14-M-0565), is to advocate for more robust low income rates, with broader eligibility, in the interest of delivering real support to low income energy customers. This is particularly true where, as in Central Hudson's territory, the need for such assistance has increased or is otherwise direly needed. And as previously discussed, under a new rate design featuring significantly lower basic service charges and inclining block rates that encourage energy efficiency and conservation, an expansion of Central Hudson's low income bill discount plan would require less reallocation of revenue than would simply expanding eligibility and increasing benefits on top of the Company's current rate design.

The reason for this is straightforward: low income assistance would no longer have to provide relief from an increasingly antiquated, illogical, and unjust rate design. Instead, assistance could be applied to an updated rate design that is updated to make sense in the context of new energy policy initiatives such as REV. Enrollment criteria and benefits additionally could be more efficiently targeted to address the broader affordability problems faced by a significant percent of Central Hudson's customers.

As reflected in Tables 1 and 2 above, the broader affordability problems of many of Central Hudson's customers can be seen in the large jumps in unemployment, median wage stagnation, and the need for benefit assistance from 2009 to 2013. Importantly, despite the need for HEAP benefits by 18.5% more households over that period (Table 2), the grant per household receiving HEAP actually ***declined 28.4%*** from 2009 – 2013. Given this combination of negative economic circumstances, it's clear that broader eligibility and expanded benefits under the Company's low income discount plan are absolutely necessary.

With a new inclining block rate design such as the one proposed by the Utility Project, there would be resources to pay for broader eligibility and expanded benefits. By significantly lowering basic service charges for ***all*** customers ***and*** decreasing delivery rates at lower usage

blocks, the component of the typical bill of customers using the average amount of electric and gas represented by basic service charges plus volumetric delivery charges could decline approximately 16% from current rates for electricity and 30-70% for gas. Electric and gas rates could also be 32% and 36%, respectively, less than the new rates proposed by the Company for these components.

***e. How would such a rate re-design look?***

Appendices E & G demonstrate one model that could be used to re-design the Company's rates. They show how an inclining block rate would work and reconcile to the electric and gas base revenue requirement offered in the joint proposal by the settling parties.

Appendix E (electric) suggests more affordable lowest block rates that would cover the first 620 KWhs of usage each month. (This is the Company's estimate of average non heating electric usage for the typical residential customer – Company Forecasting and Rates Panel Exhibit FRP\_14 Schedule A). Inclining prices are suggested for each additional block of usage.

However, such a design would have to take into account that about 10% of Central Hudson's electric customers use electricity for heating. This complicates re-design for a number of reasons, of which one significant reason stands out: no rate design that limited a first usage block to 620 KWhs in the cold weather months in the Northeast is likely to be affordable for low income heating customers.

***f. A proposed inclining block rate for electricity***

One way around this problem is to provide all electricity customers – heating and non-heating – the same prices; but change the prices and usage blocks for everyone between warm and cold weather seasons. In Appendix E, from May 1 through October 31, delivery of the first two usage blocks (250 and 370 KWhs) would be priced 30% and 5%, respectively lower than the JP's proposed rate of \$.06164. From November 1 through April 30, the rate in these blocks would be 30% lower than the rate proposed by the JP. Usage blocks over 620 KWhs would be set at

inclining rates up to 300% of the JP delivery rate. The revenue generated by usage at these inclining block rates would offset the revenues lost at the discounted lowest blocks.<sup>4</sup> It would also leave room to lower the monthly basic service charge for electric service to \$16, 33% less than the current amount and 45% less than the amount proposed by the JP. We note that setting rates in this manner would provide savings at usage levels up to 1,000 KWhs in non-heating months and 1,250 KWhs in heating months. Additionally, the JP's electric base revenue net of EEPS losses is achieved to within 1% of the JP requirement<sup>5</sup>.

***g. A proposed inclining block rate for gas***

Savings under inclining block rates for gas would be even more dramatic low usage customers, and the policies of the state's greenhouse gas reductions goals would be furthered. Instead of rewarding more usage, conservation would now be encouraged. There would be no need to charge separate and non-heating month rates because – except for certain limited other uses for gas than heating such as cooking and clothes drying – the applications and usage amounts for gas are fairly limited – at least in comparison to the usage amounts of gas for heating.

Appendix G shows that the revenue requirement for gas as proposed by the JP can be achieved by setting a 2<sup>nd</sup> block (2 – 23 ccf) rate at 5% below the proposed JP rate, a 3<sup>rd</sup> block (24-50 ccf) that's 3% lower than the JP rate, and simply charging the JP proposed rate for the 2-50 ccf block for usage above 50 ccf. With this design, the minimum charge for gas can be reduced to \$6.50 per month. **This would create a reduction of (72% less than the current amount of \$23 and 75% less than the JP amount of \$26).** Further, the Utility Project notes that only heating and non-heating gas customers who used more than 50 ccf would experience delivery charges under

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<sup>4</sup> Subject to usage assumptions beyond the ability of the Utility Project to determine, due to data and forecasting limitations. The utility should be required to propose revenue neutral rate design changes to accomplish the recommended changes. For the gas segment, however, the Utility Project used the Staff Gas Rates Panel projections. The utility should be required to file revenue-neutral rate design changes to achieve the recommended inclining block rates, subject to further review and approval.

<sup>5</sup> See Appendices E and G.

the inclining block rate proposed in Appendix G greater than those proposed by the JP for the same usage<sup>6</sup>.

***h. The effect of a broad based low-income rate similar to California's 35% reduced rate***

The effect of the inclining block rate proposed in appendices E and G would be to render savings to low usage customers. It would also create direct savings to all low income customers at these usage levels. The Utility Project estimates that the typical bills of low income customers would be reduced by at least \$22 million - about 15 times the current rate allowance of the Company's low income bill discount plan.

At 16% off current rates, this savings alone is almost half the discount provided under the California CARE low income discount plan.<sup>7</sup> If under a new low income discount plan the qualifying eligibility criteria for Central Hudson low income customers were broadened to include substantially all customers whose median household income was less than \$35,000 per year, then as many as 75,000 Central Hudson customers could be made eligible, based on the 30% rate of households earning less than \$35,000 per year in Table 1.

To achieve the maximum benefit provided by California's CARE program (35%) through re-designed rates plus low income discounts, another \$26 million would have to be provided in rates, a cost of approximately \$8 per bill for all customers in firm classes. Average annual benefits per low income customer under the new discount plan would be approximately \$350 *in addition to* almost \$300 lower basic service charges and volumetric delivery charges. Total savings – at \$650 annually – would represent a 35% discount from current rates and at least 50% lower than the rates for low income, low usage customers proposed by the settling parties.

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<sup>6</sup> See Appendix G

<sup>7</sup> See, <http://www.cpuc.ca.gov/PUC/energy/Low+Income/care.htm>.

The rate requirement needed from low usage, non-low income customers to fund a new, broad-based low income discount plan would be more than offset by the savings to those customers under a new rate design featuring reduced basic service charges and delivery rates on lowest usage blocks. Customers with typical monthly bills of \$150 could expect a 16% savings (\$24) as a result of re-designed rates – **three times the \$8 that would be charged to fund the new low income discount.**

The Utility Project acknowledges there are many as yet untested assumptions that go into a proposal such as this, due in part to our inability in this and other proceedings to access all of the data the utility uses in crafting its rates. To address the possibility that different outcomes may occur, some of which could be material, the Project refers to its suggestions in Case 14-M-0565 that a fund could be created statewide that could buffer those variables that could impact low income customers of Central Hudson under a new low income discounts plan. Such a fund could be financed from unspent funds resulting from SBC, EEPS and RPS surcharges, proposed to be repurposed as a Clean Energy Fund (CEF).<sup>8</sup>

**VI. Absent vastly expanded discounts and subsidies, Central Hudson’s low income customers will stand to gain little if anything from the structural changes in the policy of delivery of energy generation and delivery by utilities in New York State utilities proposed by the REV proceeding. They are more likely to face additional financial hardship as a result of these policy changes, on top of the damage threatened by proposed higher delivery rates.**

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<sup>8</sup> Much of these unspent funds represent amounts targeted for the benefit of low income customers that were never used for such purposes, and which now are in jeopardy of being “re-purposed” to fund a CEF, making them no longer available to assist low income customers in the transition to new rate designs, technologies, etc. as a result of the REV proceeding. See, comments submitted by AARP and the Utility Project in Cases 14-M-00941 and 14-M-0101.

***a. Expansion of solar adoption will drive larger use of the revenue decoupling mechanism (RDM)***

Data provided by the Company suggest that by June 30, 2016, deployment of net metered residential solar power will accelerate, as will the decline in delivery revenue that deployment precipitates. But unlike the RDM adjustment to delivery rates that results from inclining block rates - under which cost-efficient conservation measures more accessible to all ratepayers are rewarded, and which tend not to allow for the possible loss of most or all delivery revenue from any given customer - revenue shortfalls under current rate designs that must be recouped due to solar adoption fall disproportionately on those who cannot afford solar or don't control the adoption decision because they are renters.

Importantly, the RDM adjusts the price of *remaining* volumes of energy delivered. Lower deliveries mean higher RDMs for remaining volumes. Put another way, the more customers adopt solar, the less *those* customers need energy delivered, and the *more* everyone else pays to have the delivery of their energy. Customers that cannot afford to adopt individual solar installations therefore ***are more likely to face additional financial hardship as a result of these policy changes, on top of the damage threatened by proposed higher delivery rates.***

***b. Central Hudson's low income customers will not adopt solar in proportionate numbers***

Not unexpectedly, Central Hudson's low income customers are falling behind in the race to adopt solar. One reason for this is their inability to afford the up-front cost of installing solar systems - ***a situation worsened by state policies and incentives that are more useful to affluent adopters.***

Another reason is their lower rate of home ownership. This impediment offloads adoption decisions from ratepayers to landlords, whose solar investment considerations differ markedly from those of their utility-customer tenants. If a landlord's financial interests are not sufficiently served by adopting solar, for example, the tenant-ratepayer is left paying for utility-delivered energy.

Chart 2 below shows that Central Hudson communities whose household median incomes were below the state median household income were 35% less likely to have installed residential solar systems from 2003 – 2014. Chart 3 compares per-household investment in solar between higher and lower Central Hudson communities.

Chart 2

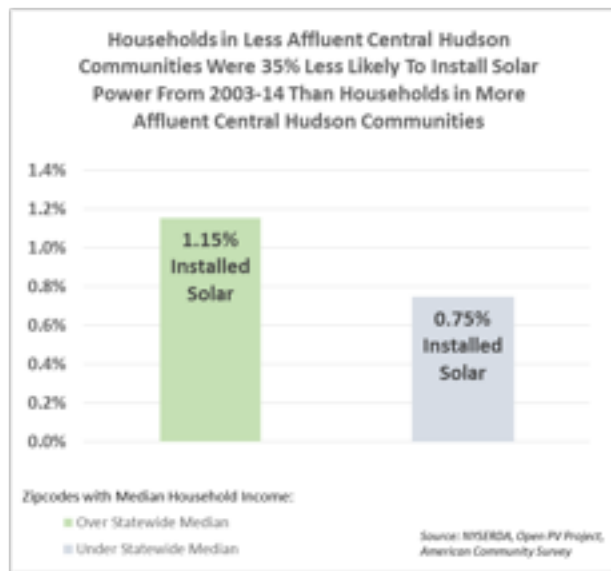
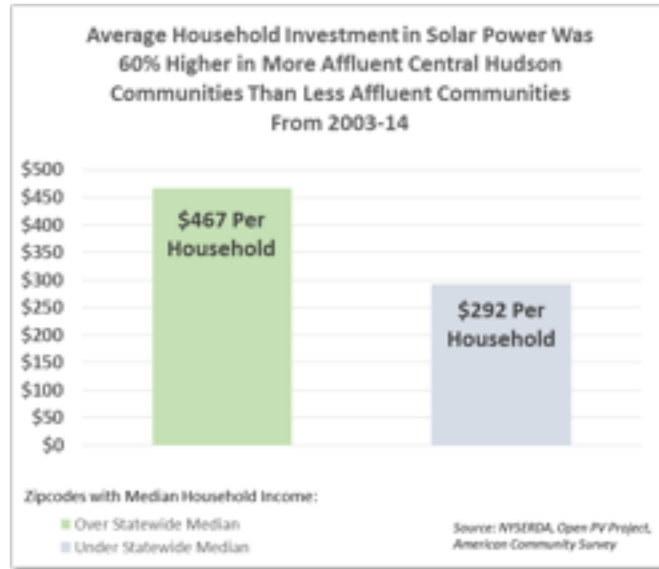


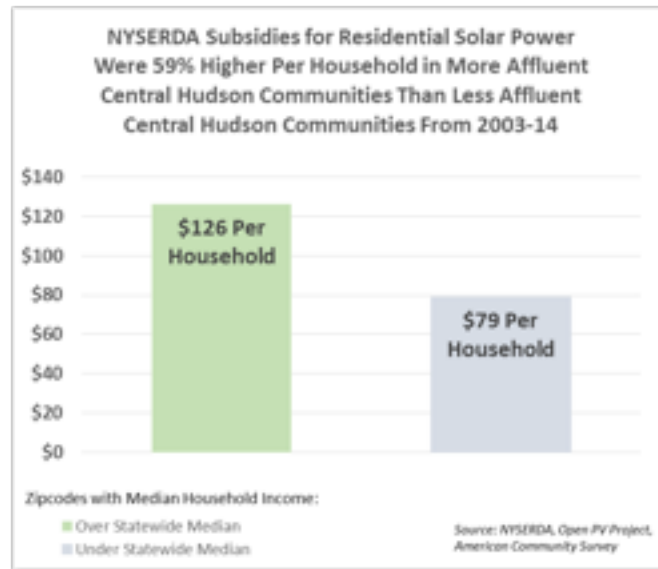
Chart 3



NYSERDA programs pre-dating NY SUN could have focused on equalizing the adoption percentages in low income and affluent communities. Instead, as Chart 4 shows, the opposite has occurred in Central Hudson’s service area:



Chart 4



However, less access to NYSERDA subsidies is not the only way low income households are losing out on state incentives offered to residential customers to deploy solar. The state also offers a non-refundable tax credit of up to \$5,000 for residents that install qualifying customer sited solar power, regardless of size of the system. This tax credit can increase state subsidies by up to \$200 per KW for a 25 KW system and \$2,500 per KW for a 2 KW system. This brings the total potential cost of state incentives for solar installation in Central Hudson’s service area to \$1,200 - \$3,500 per KW of capacity installed.

But how many low income customers are taking advantage of the combination of NYSERDA and state tax incentives? As Chart 2 shows, certainly not enough in comparison to more affluent customers. Much of this disparity likely results from the non-refundable nature of the state’s solar tax credit. Low income customers are less likely to overcome the capital cost barrier of installing solar if they can’t take full advantage of the state tax credit of \$5,000 in the year they install their system.

Many if not most low income New Yorkers don't incur state income tax liabilities of \$5,000 in any given year however, and therefore wouldn't qualify for the entire subsidy. They would have to wait to re-coup their investment over several years (enough to have incurred \$5,000 of state tax liability). Most low income customers do not have the resources to wait such an extended time period.<sup>9</sup> Furthermore, residential net meter generated electricity must be sold to the utility at the residential tariff rate for electricity, creating a market distortion that favors small scale distributed generation over larger-scale distributed generation such as community solar. It does so by providing an additional, indirect subsidy to the residential solar industry that allows them to price their product on the basis of returns on investment (ROI's) using retail, not wholesale prices.

While there is a survivability argument that suggests the more distributed the generation the better, in the case of net metering all excess customer-sited electricity generated must be fed back into the grid for sale to meet *nearby* loads. It is an open question whether resilience is that much more increased by having individual customers install solar on their rooftops than by obtaining solar generated electricity from larger scale, professionally cared for - but still distributed - sources such as community solar.

***c. Central Hudson's data shows the effect of increasing solar encroachment in its service territories***

The Company's *Summary of Electric Sales, Base Revenues and Customers by Service Classification for the Twelve Months Ended March 31, 2014, December 31, 2014, December 31,*

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<sup>9</sup> A simple fix to this problem, albeit one that would require legislation to amend the incentive provided in the state's tax code, would be to make the solar tax credit "refundable". The Utility Project has proposed such legislation to the State Legislature. On the added value of a refundable versus a traditional non-refundable credit, see, e.g., <http://www.renewableenergyworld.com/rea/blog/post/2012/04/refundable-federal-tax-credit-could-remove-barrier-to-community-wind>.

2015, and June 30, 2016 (Exhibit FRP-2 Schedule A Sheet 1) shows that the contribution of SC1 electric sales lost to customer-sited solar installation is expected to increase from 8,601 to 20,618 MWhs from June 2014 to June 2016, a 139.7% increase. At the time the Company's analysis was being prepared (summer, 2014), major policy initiatives were getting underway in New York State that sought in part to increase dramatically the installation of customer-sited solar power by residential utility customers.<sup>10</sup> Therefore there is every reason to assume this shift will be larger and with wider effect than the Company's forecasts cited above.

**Table 7: Cumulative Residential Customer-Sited Solar Power Capacity Installed In Central Hudson Service Area, 2003 – 2014**

Year	Projects	Nameplate KW	Expected KWhr Annual Production	Total Project Costs	Total Incentives
2003	6	28	33,167	\$248,040	\$127,870
2004	28	134	157,088	\$1,071,065	\$553,036
2005	23	171	200,387	\$1,353,376	\$699,094
2006	44	327	383,670	\$2,776,860	\$1,333,998
2007	83	509	597,466	\$4,505,966	\$2,036,556
2008	79	450	527,973	\$3,910,754	\$1,725,954
2009	133	807	947,802	\$7,025,617	\$2,973,900
2010	145	821	963,697	\$6,245,377	\$2,187,032
2011	93	564	661,932	\$3,790,578	\$988,436
2012	259	1,780	2,089,786	\$9,761,643	\$2,271,637
2013	369	2,635	3,092,557	\$12,767,215	\$3,097,279
<b>2014</b>	<b>940</b>	<b>7,662</b>	<b>8,992,944</b>	<b>\$35,215,022</b>	<b>\$7,060,700</b>
<b>Grand Total</b>	<b>2,202</b>	<b>15,888</b>	<b>18,648,468</b>	<b>\$88,671,514</b>	<b>\$25,055,490</b>

*Source: NYSERDA Solar Photovoltaic PV Projects Map Beginning 2003*

Table 7 confirms the Company's summer forecast for installed residential solar capacity by the end of 2014 (16,131 KW), although in addition to the 15,888 KW of capacity actually installed

<sup>10</sup> Statewide initiatives to expand the adoption of residential solar power culminated in the transitioning of the state's multiple solar programs to the single, statewide NY-Sun Incentive Program, as announced on August 21, 2014 (<http://www.governor.ny.gov/news/governor-cuomo-announces-new-initiative-accelerate-deployment-clean-energy-technology-long>). This effort is designed to add 3,000 megawatts (MW) to the State's solar capacity by 2023, which is almost 10 times the 316 MW cumulative capacity that had been installed to date.

by year-end, there was another 2,206 KW backlog of projects that weren't completed until January, 2015. Taking together, the "committed" capacity by the end of 2014 was 18,094 KW, about 12% higher than the Company's forecast.

**d. The effect of NY SUN upon Central Hudson's need to increase use of the RDM**

Even with the 2014 installation surge – which almost doubled the amount of all prior installation -- statewide NYSEERDA data suggest that only a tiny fraction of the potential residential solar installation adoption under the statewide NY-Sun Incentive Program has been accomplished. If NY-Sun is even remotely successful, and it is difficult to imagine otherwise, delivery volumes lost to net metering could far exceed the Company's projections for the year ended June 30, 2016 and thereafter. Since the RDM is a per KWh charge adjusting *remaining delivery volumes*, as the percent of delivery KWhs lost to solar increases, the RDM increase needed to make up for each additional KWh lost accelerates. Though a 1% KWh loss would be offset by about the same 1% in a higher delivery rate, by the time 50% of delivery volumes were lost, delivery rates would need to rise 100% to make up for lost revenue. Table 8 and Chart 5 show this parabolic relationship using a hypothetical example:

**Table 8 – Impact on Per KWh Delivery Rate of Delivery KWhs Lost To Customer Sited Solar Power**

Lost To Customer Sited Solar		Remaining Delivery		
Percent KWhs	KWhs	KWhs	Price Per KWh After RDM Adjustment	Cumulative Percent Change in Price
0%	0	20,000,000	\$0.05000	0
10%	2,000,000	18,000,000	\$0.05556	11.1%
20%	4,000,000	16,000,000	\$0.06250	25.0%
30%	6,000,000	14,000,000	\$0.07143	42.9%
40%	8,000,000	12,000,000	\$0.08333	66.7%
50%	10,000,000	10,000,000	\$0.10000	100.0%

**Chart 5**

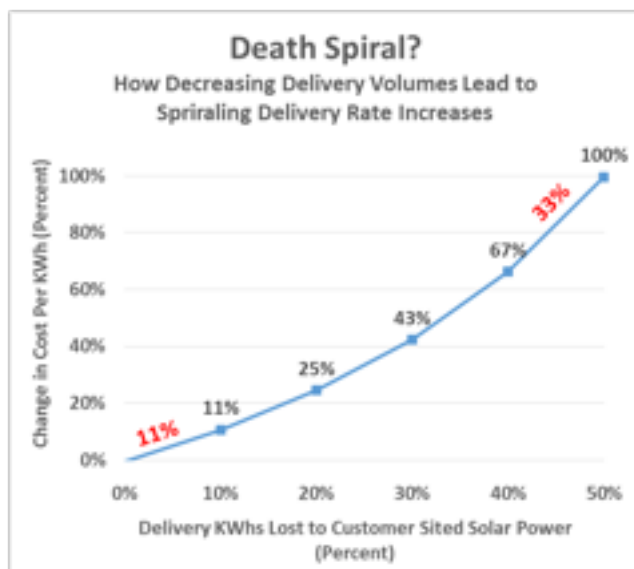


Table 8 and Chart 5 show that the first 10% loss of delivery kWhs to customer sited solar power results in an 11% increase in delivery charges to those that continue to rely on the utility’s infrastructure for delivery of their electricity. As additional delivery kWhs are lost, however, each next 10% lost requires that delivery charges be raised by greater percentages to make up for the additional loss. This logic proceeds to the point where the 10% lost in the interval from 40% to 50% requires a 33% increase – from 67% over the original delivery rate to 100% (twice) the original delivery rate.

Central Hudson forecasts that the 20,618 SC1 MWhs lost to PV in 2016 (1.24% of total volume) will reduce delivery revenues by \$1,099,380 (1.25%). But what if 20%, 30% or 40% of delivery revenues disappear? Can remaining customers, many of whom will be low income, really be expected to absorb an accelerating delivery rate increase of 25%, 43%, or 67% without adjusting their usage behavior in what some have termed a “utility death spiral”?

***e. Do Central Hudson's increases in basic service charges function as “stealth capacity charges?”***

It's this very threat to utility revenues that the Utility Project believes was the driver of the outsized request for increases in basic service charges by Central Hudson. Low income customers can't be expected to pay higher prices without making every effort to curtailing their already low usage even further. In such a situation, the only way for the Company to avoid a “death spiral” is to impose ever increasing fixed basic costs of service.

***f. Flaws in the design of incentive systems to adopt solar make Central Hudson's low income customers much more vulnerable to higher distribution rates in the future.***

Flaws in the design of incentive systems to adopt solar make Central Hudson's low income customers much more vulnerable to higher distribution rates in the future. Because they lack the resources to install solar, they must remain on the Company's distribution system while more affluent customers migrate much of their usage off the Company's distribution system, which nonetheless must be kept safe and reliable for their use during intermittent renewable energy generation periods. Low income customers are most susceptible to the accelerating increases in delivery charges made necessary by the lost revenues from more affluent customers who adopt solar.

The possibility even exists that low income customers will be left with a disproportionate share of the cost burden of upkeep of the Company's entire distribution infrastructure – ironically, bearing the cost of keeping the utility grid functional for the affluent customers who have “left” the grid. All of the data presented heretofore makes clear this is an added burden the Central Hudson low income customers simply cannot bear.

## **VII. Since Reliability is not a “Free Good,” is an actual capacity charge inevitable?**

Distribution system costs, much of which are fixed, don't disappear when customers generate some of their electricity with solar panels. Even customers who can produce enough to meet all their needs while the sun is shining still rely on the infrastructure supported by delivery rates when the sun goes behind a cloud and at night, on cloudy days, or if their solar systems ever happen to malfunction. They do knowing that lights can still be turned on, appliances will still work, and children still can do their homework with the internet as a resource – all thanks to electricity delivered by the Company's infrastructure.

The Utility Project argues that this redundancy, or stand-by capacity, which is a fundamental component of reliability in any complex system, and a legal duty for the utilities under state and federal law, has economic and social value to all customers; not just those who remain users of energy solely through the Company's delivery system. It also has cost. Otherwise, customers adopting solar would disconnect from the Company's system altogether, going “off the grid”. Tellingly, they don't – the implication being that there is inherent value to remaining on the grid, value that would involve cost to replace. That value can be summed up in one word: “reliability”.

However, under current rate designs, solar customers are permitted to avoid much of the cost of maintenance, upgrade and expansion of the very infrastructure that would otherwise be recovered through delivery charges for energy supply, but for the fact that the Company no longer delivers as much (or any) energy to them.<sup>11</sup> Such an illogical situation in which the benefits and costs of reliability are not matched among all system users, where in fact only a subset of customers (a substantial number of whom are least able to afford it) are burdened with bearing a disproportionate cost of stand-by capacity, smacks of “capitalizing the benefits, while

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<sup>11</sup> Other states have examined solutions to this problem by instituting “capacity charges,” such as Arizona and Wisconsin, among others. See, <http://www.acore.org/files/pdfs/states/Arizona.pdf>, and see, <http://www.rtoinsider.com/wisconsin-utilities-solar/>.

socializing the costs”. The benefits of participating in solar generation should not include the uneconomic and unfair avoidance of fixed and sunk distribution system costs, or the shift of such costs to non-participating customers, who tend to have lower incomes.<sup>12</sup>

### **VIII. Would a capacity charge facilitate a rate design that does not balance the Company's budget on the backs of the most vulnerable customers?**

The Utility Project believes the solution to this increasingly serious trend, and the Joint Proposal's rate design's defects, could lie in the establishment of a capacity charge mechanism that recovers the cost of lost delivery volumes caused by solar adoption in proportion to the installed capacity of those systems. These are calculations that can be done entirely using data that's readily available.

The Company knows the capacity of residential solar capacity installed on its system (16,131 KW at the end of 2014) and can therefore reliably estimate its lost delivery revenue due to each of its net-metered customers. Instead of burdening other ratepayers, particularly those with low and/or fixed incomes, with the cost of recovering this lost revenue, the next (just and reasonable) step is to design a capacity charge that solar customers pay for their share of overall revenue lost to solar deployment. This makes economic sense because it treats stand by capacity for what it is – an “*economic good*”.

The Utility Project argues that for the Company not to do so places no value on the stand by reliability of the Company's infrastructure ready to be used at a moment's notice by every solar customer connected to the distribution grid. Not recognizing and recovering this value through rate design would be inexplicable, and would perpetuate rate designs that penalize low

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<sup>12</sup> See [CAPUC REPORT: ROOFTOP SOLAR “NET METERING” PROGRAM BENEFITS HIGHER INCOME CUSTOMERS AND IS SHIFTING ADDITIONAL COSTS TO LOWER INCOME CUSTOMERS](#), New York's Utility Project | May 20, 2014.



income households for their inability to take advantage of subsidies that favor affluent households in the adoption of renewable energy.

A re-design of Central Hudson's rates, with an emphasis on reducing basic service charges, lowering volumetric delivery rates for low usage customers, and taking a serious look at implementing capacity charges for residential customers installing solar systems, will make it easier to reduce the burden of higher rates on low income customers through robust improvements in low income reduced rate programs.

## **VIII. Conclusion**

The Utility Project began these comments by stating that it believed they would present important issues both relevant and germane that had not been raised and should be considered in this rate proceeding. As such, the comments are demonstrably in the public interest, even if submitted by a non-party.

In the body of the comments we used evidence in the record, regularly filed reports of Central Hudson to the Commission, and U.S. census data to show the economic distress of a large percentage of the Company's residential customers, and how the proposed rates would wreak additional harm upon their financial health. In the course of that analysis, we proposed a different rate design that, unlike the design proposed in the Joint Proposal, would promote energy conservation, lower greenhouse gas emissions, provide actual relief to the bills of low and fixed income, and low usage customers.

We also examined the growing need for a solar customer capacity charge to recover lost contributions to fixed utility costs due to the current reliance on volumetric delivery charges for recovery of fixed costs for standby service to solar generation customers, and concluded that the

Company's reliance upon increasingly large basic service charges might function as a de facto capacity charge levied upon all customers to offset revenue lost to distributed renewable energy deployment, and definitely function to penalize low usage customers for their low usage, and low income customers for their inability to deploy solar generation technology.

In conclusion, we believe the Project's comments provided both evidence and analysis that was not presented by any of the parties, but which are vital to the development of a record that will address recent trends and serve the public interest. These comments also provide a vital service to adding analysis to the eloquence of Ms. Selig quoted above, and to the anonymous ratepayer who stated in his comments:

“I can no longer sustain an additional increase in Utility rates, and I wonder why it is so important that Central Hudson has to have a revenue increase of 20.2 million dollars paid for by financially struggling senior citizens. There should be special provisions for citizens over 65 who do not qualify for HEAP or other assistance programs. With a \$360.00 yearly increase in rent and an additional increase in future utility rates that eventually would add over \$200.00 more a year and could be much more depending on usage, my quality of life will be greatly diminished. As it stands now, at a time when more and more senior citizens are urged to become more active, those of us who have no additional assets from stock market investments, IRAs, etc. are spending all of the income on food and utilities (gas, electric, cable, television, and telephone), and doctor's bills, and prescriptions.”

We respectfully ask therefore that the ALJ and the Commission take notice of these comments and give them sufficient weight to warrant a differing rate design and low income rate design that will provide relief to the economically suffering households in the Company's service territory, and to the low income, low usage and fixed income residential customers who will descend further into arrears and financial crisis if a more robust low income rate does not arise in this rate proceeding.

**Public Utility Law Project of New York, Inc.  
Central Hudson Electric & Gas Case 14-E-0018  
Impact of Electric Incentive Block Rates on Delivery Revenue Available To  
Reduce Basic Service Charges and Lowest Usage Block Rate**

**Non-Heating Months (Non-Heating Customers)**

KWh Usage Block	Upper Bound	Block Interval	% Increase per Proposal Tier Rate	Block Rate Base On \$0.00174	Percent Usage At Interval	Block Revenue
0 - 250	250	250	-30.000%	\$0.04322	20%	\$7,589
251 - 520	520	270	-6.000%	\$0.05988	20%	\$16,479
521-800	800	280	45.000%	\$0.08982	20%	\$16,742
801-1000	1000	200	100.000%	\$0.12948	10%	\$10,868
1001-1250	1250	250	175.000%	\$0.18979	10%	\$14,807
>1250	1500	250	250.000%	\$0.21609	10%	\$18,098
<b>Total</b>					<b>100%</b>	<b>\$65,583</b>

Forecast (Proposed) 2017-18 Electric Base Revenue for Residential Non-Heating Customers less Basic Charge	\$64,291
+/- Forecast 2017-18 Residential Non-Heating Delivery Revenue	\$29,312
Revenue Lost by Reducing Basic Service Charge to \$15	\$18,001
Remaining Requirement	-\$10,001

**Assumptions:**

Forecast Usage 2017-18 for Residential Non-Heating (Differs Net of EEP's Loss) (Joint Proposal Appendix L, Sheet 13)	876,190
Forecast 2017-18 Average Residential Non-Heating Customers (Joint Proposal Appendix L, Sheet 18)	329,128
Forecast 2017-18 Electric Base Revenue Residential Non-Heating Customers Net of EEP's Loss (Joint Proposal Appendix L, Sheet 14)	\$67,898
Proposed Delivery Rate	\$0.00174
Forecast/Proposed Delivery Revenue	\$64,291
Forecast Base Revenue Minus Delivery Revenue	\$43,367
Calculated Basic Service Charge Revenue Based On Forecast Average Customers	\$38,808
45% of Average (Amount of Revenue Lost by Reducing Basic Service Charge to \$15)	\$18,001

**Public Utility Law Project of New York, Inc.  
Central Hudson Electric & Gas Case 14-E-0018  
Impact of Electric Inclining Block Rates on Delivery Revenue Available To  
Reduce Basic Service Charges and Lowest Usage Block Rate**

**Non-Heating Months (Heating Customers)**

KWh Usage Block	Upper Bound	Block Interval	% Increase per Proposal Tier Rate	Block Rate Base On \$0.00174	Percent Usage At Interval	Block Revenue
0 - 250	250	250	-30.000%	\$0.04322	20%	\$679
251 - 520	520	270	-6.000%	\$0.05988	20%	\$1,776
521-800	800	280	45.000%	\$0.08982	20%	\$1,807
801-1000	1000	200	100.000%	\$0.12948	10%	\$1,347
1001-1250	1250	250	175.000%	\$0.18979	10%	\$1,714
1250-1500	1500	250	250.000%	\$0.21900	10%	\$2,181
1500-1750	1750	250	250.000%	\$0.21900	0%	\$0
1750-2000	2000	250	275.000%	\$0.29158	0%	\$0
> 2000	2500	250	300.000%	\$0.34098	0%	\$0
<b>Total</b>					<b>100%</b>	<b>\$8,598</b>

Forecast (Proposed) 2017-18 Electric Base Revenue for Residential Heating Customers less Basic Charge	\$8,238
+/- Forecast 2017-18 Residential Heating Delivery Revenue	\$3,260
Revenue Lost by Reducing Basic Service Charge to \$15	\$1,804
Remaining Requirement	-\$1,201

**Assumptions:**

Forecast Usage 2017-18 for Residential Non-Heating (differs Net of EEP's Loss) (Joint Proposal Appendix L, Sheet 13)	100,940
Forecast 2017-18 Average Residential Non-Heating Customers (Joint Proposal Appendix L, Sheet 18)	28,280
Forecast 2017-18 Electric Base Revenue Residential Non-Heating Customers Net of EEP's Loss (Joint Proposal Appendix L, Sheet 14)	\$8,598
Proposed Delivery Rate	\$0.00174
Forecast/Proposed Delivery Revenue	\$8,238
Forecast Base Revenue Minus Delivery Revenue	\$3,460
Calculated Basic Service Charge Revenue Based On Forecast Average Customers	\$4,880
45% of Average (Amount of Revenue Lost by Reducing Basic Service Charge to \$15)	\$1,804

**Public Utility Law Project of New York, Inc.  
Central Hudson Electric & Gas Case 14-E-0018  
Impact of Electric Incentive Block Rates on Delivery Revenue Available To  
Reduce Basic Service Charges and Lowest Usage Block Rate**

**Heating Months (Non-Heating Customers)**

KWh Usage Block	Upper Bound	Block Interval	% Increase per Proposal Tier Rate	Block Rate Base On \$0.00174	Percent Usage At Interval	Block Revenue
0 - 250	250	250	-30.000%	\$0.04322	20%	\$7,580
251 - 520	520	270	-30.000%	\$0.04322	20%	\$11,360
521-800	800	280	40.000%	\$0.00044	20%	\$16,160
801-1000	1000	200	50.000%	\$0.00051	10%	\$8,142
1001-1250	1250	250	54.000%	\$0.00038	10%	\$8,308
>1250	1500	250	100.000%	\$0.12948	10%	\$10,308
<b>Total</b>					<b>100%</b>	<b>\$61,556</b>

Forecast (Proposed) 2017-18 Electric Base Revenue for Residential Non-Heating Customers less Basic Charge	\$64,261
+/- Forecast 2017-18 Residential Non-Heating Delivery Revenue	\$7,274
Revenue Lost by Reducing Basic Service Charge to \$17	\$16,001
Remaining Requirement	\$11,267

**Assumptions:**

Forecast Usage 2017-18 for Residential Non-Heating (differs Net of EEP's Loss) (Joint Proposal Appendix L, Sheet 13)	876,190
Forecast 2017-18 Average Residential Non-Heating Customers (Joint Proposal Appendix L, Sheet 16)	226,126
Forecast 2017-18 Electric Base Revenue Residential Non-Heating Customers Net of EEP's Loss (Joint Proposal Appendix L, Sheet 14)	\$67,998
Proposed Delivery Rate	\$0.00174
Forecast/Proposed Delivery Revenue	\$64,261
Forecast Base Revenue Minus Delivery Revenue	\$43,267
Calculated Basic Service Charge Revenue Based On Forecast Average Customers	\$36,008
46% of Average (Amount of Revenue Lost by Reducing Basic Service Charge to \$16)	\$16,001

**Public Utility Law Project of New York, Inc.**  
**Central Hudson Electric & Gas Case 14-E-0018**  
**Impact of Electric Incentive Block Rates on Delivery Revenue Available To**  
**Reduce Basic Service Charges and Lowest Usage Block Rate**

**Heating Months (Non-Heating Customers)**

KWh Usage Block	Upper Bound	Block Interval	% Increase per Proposal Tier Rate	Block Rate Base On \$0.00174	Percent Usage At Interval	Block Revenue
0 - 250	250	250	-30.000%	\$0.04322	20%	\$7,589
251 - 520	520	270	-30.000%	\$0.04322	20%	\$11,369
521-800	800	280	40.000%	\$0.00044	20%	\$16,199
801-1000	1000	200	80.000%	\$0.00001	10%	\$8,142
1001-1250	1250	250	64.000%	\$0.00008	10%	\$8,308
>1250	1500	250	100.000%	\$0.12948	10%	\$10,308
<b>Total</b>					<b>100%</b>	<b>\$61,595</b>

Forecast (Proposed) 2017-18 Electric Base Revenue for Residential Non-Heating Customers less Basic Charge	\$64,291
+/- Forecast 2017-18 Residential Non-Heating Delivery Revenue	\$7,274
Revenue Lost by Reducing Basic Service Charge to \$17	\$16,001
Remaining Requirement	\$11,267

**Assumptions:**

Forecast Usage 2017-18 for Residential Non-Heating (differs Net of EEP's Loss) (Joint Proposal Appendix L, Sheet 13)	876,199
Forecast 2017-18 Average Residential Non-Heating Customers (Joint Proposal Appendix L, Sheet 16)	229,126
Forecast 2017-18 Electric Base Revenue Residential Non-Heating Customers Net of EEP's Loss (Joint Proposal Appendix L, Sheet 14)	\$67,998
Proposed Delivery Rate	\$0.00174
Forecast/Proposed Delivery Revenue	\$64,291
Forecast Base Revenue Minus Delivery Revenue	\$43,267
Calculated Basic Service Charge Revenue Based On Forecast Average Customers	\$36,008
46% of Average (Amount of Revenue Lost by Reducing Basic Service Charge to \$16)	\$16,001

**Public Utility Law Project of New York, Inc.**  
**Central Hudson Electric & Gas Case 14-E-0818**  
**Impact of Electric Inflation Block Rates on Delivery Revenue Available To**  
**Reduce Basic Service Charges and Lowest Usage Block Rate**

**Non-Heating Months (Non-Heating Customers)**

Appendix E\_M1\_U

10th Usage	Utility Project										
	Block	Block Del \$	Can BR \$	BR0	BR0-Del	+JP	+Cur	Block Del \$	Can BR \$	BR0	BR0-Del
0 - 250		\$10.80	\$10.80	\$16.00	\$26.80	-36.7%	-26.4%	\$16.44	\$16.44	\$26.00	\$44.00
251 - 520		\$21.70	\$32.51	\$16.00	\$48.51	-27.9%	-11.4%	\$32.84	\$38.28	\$26.00	\$67.00
521-800		\$16.11	\$48.82	\$16.00	\$64.82	-17.9%	1.4%	\$11.11	\$49.39	\$26.00	\$76.00
801-1000		\$24.70	\$73.32	\$16.00	\$89.32	-1.8%	21.3%	\$12.35	\$61.74	\$26.00	\$90.00
1001-1250		\$42.45	\$115.78	\$16.00	\$131.78	24.1%	53.1%	\$16.44	\$77.18	\$26.00	\$108.00
>1250		\$64.82	\$198.79	\$16.00	\$186.79	62.8%	86.7%	\$16.44	\$82.81	\$26.00	\$121.00

**Non-Heating Months (Heating Customers)**

Appendix E\_M1\_U

10th Usage	Utility Project										
	Block	Block Del \$	Can BR \$	BR0	BR0-Del	+JP	+Cur	Block Del \$	Can BR \$	BR0	BR0-Del
0 - 250		\$10.80	\$10.80	\$16.00	\$26.80	-36.7%	-26.4%	\$16.44	\$16.44	\$26.00	\$44.00
251 - 520		\$21.70	\$32.51	\$16.00	\$48.51	-27.9%	-11.4%	\$32.84	\$38.28	\$26.00	\$67.00
521-800		\$16.11	\$48.82	\$16.00	\$64.82	-17.9%	1.4%	\$11.11	\$49.39	\$26.00	\$76.00
801-1000		\$24.70	\$73.32	\$16.00	\$89.32	-1.8%	21.3%	\$12.35	\$61.74	\$26.00	\$90.00
1001-1250		\$42.45	\$115.78	\$16.00	\$131.78	24.1%	53.1%	\$16.44	\$77.18	\$26.00	\$108.00
>1250		\$64.82	\$198.79	\$16.00	\$186.79	62.8%	86.7%	\$16.44	\$82.81	\$26.00	\$121.00

**Heating Months (Non-Heating Customers)**

Appendix E\_M1\_U

10th Usage	Utility Project										
	Block	Block Del \$	Can BR \$	BR0	BR0-Del	+JP	+Cur	Block Del \$	Can BR \$	BR0	BR0-Del
0 - 250		\$10.80	\$10.80	\$16.00	\$26.80	-36.7%	-26.4%	\$16.44	\$16.44	\$26.00	\$44.00
251 - 520		\$16.89	\$26.80	\$16.00	\$42.80	-36.4%	-21.9%	\$32.84	\$38.28	\$26.00	\$67.00
521-800		\$16.56	\$42.35	\$16.00	\$58.35	-25.0%	-8.4%	\$11.11	\$49.39	\$26.00	\$76.00
801-1000		\$16.82	\$60.88	\$16.00	\$76.88	-16.9%	4.4%	\$12.35	\$61.74	\$26.00	\$90.00
1001-1250		\$23.77	\$84.85	\$16.00	\$100.85	-6.2%	17.9%	\$16.44	\$77.18	\$26.00	\$108.00
>1250		\$30.87	\$115.82	\$16.00	\$131.82	8.1%	39.8%	\$16.44	\$82.81	\$26.00	\$121.00

**Heating Months (Heating Customers)**

Appendix E\_M1\_U

10th Usage	Utility Project										
	Block	Block Del \$	Can BR \$	BR0	BR0-Del	+JP	+Cur	Block Del \$	Can BR \$	BR0	BR0-Del
0 - 250		\$10.80	\$10.80	\$16.00	\$26.80	-36.7%	-26.4%	\$16.44	\$16.44	\$26.00	\$44.00
251 - 520		\$16.89	\$26.80	\$16.00	\$42.80	-36.4%	-21.9%	\$32.84	\$38.28	\$26.00	\$67.00
521-800		\$16.56	\$42.35	\$16.00	\$58.35	-25.0%	-8.4%	\$11.11	\$49.39	\$26.00	\$76.00
801-1000		\$16.82	\$60.88	\$16.00	\$76.88	-16.9%	4.4%	\$12.35	\$61.74	\$26.00	\$90.00
1001-1250		\$23.77	\$84.85	\$16.00	\$100.85	-6.2%	17.9%	\$16.44	\$77.18	\$26.00	\$108.00
>1250		\$30.87	\$115.82	\$16.00	\$131.82	8.1%	39.8%	\$16.44	\$82.81	\$26.00	\$121.00

**Public Utility Law Project of New York, Inc.  
Central Hudson Electric & Gas Case 14-E-0018  
Impact of Electric Incentive Block Rates on Delivery Revenue Available To  
Reduce Basic Service Charges and Lowest Usage Block Rate**

**Heating Months (Non-Heating Customers)**

KWh Usage Block	Upper Bound	Block Interval	% Increase per Proposal Tier Rate	Block Rate Base On \$0.00174	Percent Usage At Interval	Block Revenue
0 - 250	250	250	-30.000%	\$0.04322	20%	\$7,589
251 - 520	520	270	-30.000%	\$0.04322	20%	\$11,369
521-800	800	280	40.000%	\$0.00044	20%	\$16,199
801-1000	1000	200	50.000%	\$0.00051	10%	\$8,142
1001-1250	1250	250	54.000%	\$0.00038	10%	\$8,308
>1250	1500	250	100.000%	\$0.12948	10%	\$10,308
<b>Total</b>					<b>100%</b>	<b>\$61,595</b>

Forecast (Proposed) 2017-18 Electric Base Revenue for Residential Non-Heating Customers less Basic Charge	\$64,291
+/- Forecast 2017-18 Residential Non-Heating Delivery Revenue	\$7,274
Revenue Lost by Reducing Basic Service Charge to \$17	\$16,001
Remaining Requirement	\$11,267

**Assumptions:**

Forecast Usage 2017-18 for Residential Non-Heating (differs Net of EEP's Loss) (Joint Proposal Appendix L, Sheet 13)	876,199
Forecast 2017-18 Average Residential Non-Heating Customers (Joint Proposal Appendix L, Sheet 16)	229,126
Forecast 2017-18 Electric Base Revenue Residential Non-Heating Customers Net of EEP's Loss (Joint Proposal Appendix L, Sheet 14)	\$67,998
Proposed Delivery Rate	\$0.00174
Forecast/Proposed Delivery Revenue	\$64,291
Forecast Base Revenue Minus Delivery Revenue	\$43,267
Calculated Basic Service Charge Revenue Based On Forecast Average Customers	\$36,008
46% of Average (Amount of Revenue Lost by Reducing Basic Service Charge to \$16)	\$16,001



**Public Utility Law Project of New York, Inc.**  
**Central Hudson Electric & Gas Case 14-CV-0019**  
**Impact of Gas Non-Heating Increasing Block Rates on Delivery Revenue Available To**  
**Reduce Basic Service Charge and Lowest Usage Block Rates**

CCF Usage Block	Upper Bound	Block Interval	% Increase per Proposal Tier Rate	Block Rate Base On \$1.01120	Percent Usage At Interval	Block Revenue
0-2	2	2	0.000%	\$0.00000	10%	\$0
3-23	23	21	-6.000%	\$0.00004	30%	\$408
24-50	50	27	-3.000%	\$0.00008	30%	\$423
>50	100	77	0.000%	\$1.01120	30%	\$817
<b>Total</b>					<b>100%</b>	<b>\$1,147</b>
<b>Forecast (Proposed) 2017-18 Gas Non-Heating Base Revenue for Residential Non-Heating Customers less Basic Charge</b>						<b>\$995</b>
<b>+/- Forecast 2017-18 Residential Gas Non-Heating Delivery Rev.</b>						<b>\$182</b>
<b>Revenue Lost by Reducing Basic Service Charge to \$5.50</b>						<b>\$1,011</b>
<b>Remaining Requirement</b>						<b>\$1,459</b>
<b>Assumptions:</b>						
<b>Forecast Usage 2017-18 for Residential Non-Heating (Bcf)</b> (Joint Proposal Appendix L, Sheet 20)						<b>130,528</b>
<b>Forecast 2017-18 Average Residential Non-Heating Customers</b> (Joint Proposal Appendix L, Sheet 20)						<b>7,027</b>
<b>Forecast 2017-18 Gas Non-Heating Base Revenue Residential Heating Customers</b>						<b>\$1,286</b>
<b>Proposed Delivery Rate</b>						<b>\$0.76206</b>
Block 1 \$0.00000 10%						
Block 2 \$1.01120 60% Weighted Avg.						
Block 3 \$0.39440 30%						
<b>Forecast Usage by Block Based On Derived % Usage By Block in JP Appendix K Sheet 5 (10%, 60%, 30%)</b>						
<b>Forecast/Proposed Delivery Revenue</b>						<b>\$995</b>
<b>Forecast Base Revenue Minus Delivery Revenue (a)</b>						<b>\$2,103</b>
<b>Calculated Basic Service Charge Revenue Based On Forecast Average Customers (b)</b>						<b>\$2,182</b>
<b>75% of Average of (a), (b)</b>						
<b>(Amount of Revenue Lost by Reducing Basic Service Charge to \$5.50)</b>						<b>\$1,011</b>

**Public Utility Law Project of New York, Inc.  
Central Hudson Electric & Gas Case 14-G-0019**

Appendix G\_102

**Impact of Gas Non-Heating Inflation Block Rates on Delivery Revenue Available To  
Reduce Basic Service Charges and Lowest Usage Block Rates**

Block Del \$	Com BR \$	Utility Project				Block Del \$	Com BR \$	JP	
		BR0	BR0-Del	+L JP	+L Del			BR0	BR0-Del
\$0.00	\$0.00	\$0.00	\$0.00	-70.0%	-70.0%	\$0.00	\$0.00	\$05.00	\$05.00
\$20.17	\$20.17	\$0.00	\$20.57	-43.0%	-30.0%	\$21.24	\$21.24	\$20.00	\$47.24
\$26.48	\$46.00	\$0.00	\$53.10	-26.7%	-19.2%	\$27.30	\$46.04	\$20.00	\$74.04
\$77.86	\$124.02	\$0.00	\$131.02	15.0%	20.0%	\$35.00	\$84.20	\$20.00	\$110.20

Appendix G\_102

**Impact of Gas Heating Inflation Block Rates on Delivery Revenue Available To  
Reduce Basic Service Charges and Lower Usage Block Rates**

Block Del \$	Com BR \$	Utility Project				Block Del \$	Com BR \$	JP	
		BR0	BR0-Del	+L JP	+L Del			BR0	BR0-Del
\$0.00	\$0.00	\$0.00	\$0.00	-70.0%	-70.0%	\$0.00	\$0.00	\$05.00	\$05.00
\$20.17	\$20.17	\$0.00	\$20.57	-43.0%	-30.0%	\$21.24	\$21.24	\$20.00	\$47.24
\$26.48	\$46.00	\$0.00	\$53.10	-26.7%	-19.2%	\$27.30	\$46.04	\$20.00	\$74.04
\$77.86	\$124.02	\$0.00	\$131.02	15.0%	20.0%	\$35.00	\$84.20	\$20.00	\$110.20

Dated: March 4, 2015

Respectfully submitted,

/s/

Richard Berkley  
Executive Director  
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