UTILITY INTERVENTION UNIT OF THE

NEW YORK STATE DEPARTMENT OF STATE

FIRST SET OF INFORMATION REQUESTS TO JOINT UTILITIES

Issue Date: 03/12/2018 Responses Due: 03/22/2018

Unless noted otherwise, each of the following information requests pertains to the Joint Utilities (Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., New York State Electric & Gas Corporation, and Rochester Gas and Electric Corporation). As the VDER Value Stack and Rate Design Working Group Process and 2018 Schedule (updated February 6, 2018) acknowledges on page 4, "new rate design options must consider component elements (e.g., fixed charges, time-varying rates) as part of a coherent package rather than as stand-alone issues." The Working Group was tasked with building a common fact base by reviewing various rate design elements including: 1) time varying energy and capacity rates; 2) demand charges, 3) fixed charges; 4) non-bypassable charges; 5) locational rates; and 6) standby design. The Joint Utilities' ("JU") March 6th Presentation "ECOS Analysis" adds to this fact base but more information is required to ensure all parties have the information necessary to propose and evaluate future rate design changes. UIU observes that the JU presentation illustrated ECOS results from only one rate case for each utility in slides 3-16. Yet many of the ECOS methodologies presented in these slides reflect changes that occurred during the rate case process and/or in preceding rate cases. To understand the transition in underlying ECOS approaches and inform the upcoming rate design and bill impact discussions, UIU asks the following interrogatories. UIU observes that these factbased interrogatories are similar in nature to those UIU has asked during rate cases to level set UIU's understanding of a utility's historical use of ECOS methodologies. Additionally, UIU has expanded some questions to gather the information necessary for the upcoming discussions regarding mass market rate design.

1. Since 2002 to present (which for most utilities will be approximately 5 rate cases), please indicate if the Company uses a historic embedded costs of service (ECOS), pro-forma (forecasted) ECOS, marginal cost of service (MCOS), or any other combination as a guide to allocate costs to service classes during an electric rate case. In addition, please describe how each study or multiple studies are used to develop customer charges and costs in each electric rate case.

Case	Type of Cost of Service Used	Explanation
18-E-xxxx	Combination of Pro- Forma ECOS, Historic ECOS, MCOS	
17-E-xxxx		
16-E-xxxx		
15-E-xxxx		
14-E-xxxx		

ſ	Etc.	

- 2. Please explain in detail any changes in methodology used in each of the Company's electric ECOS studies conducted since 2002. If methodology and/or allocators have changed throughout the various steps of each rate case, please indicate the change in methodology:
 - as filed in Direct Testimony
 - as per MOU, Stipulation Agreement, etc.
 - as modified per Joint Proposal
 - as modified per Commission Order

The table below can be used as a template for a response.

Case	Methodology Change [as proposed in Utility Direct Testimony]	Methodology Change [as per Joint Proposal]	Methodology Change [as per Commission	Methodology Change [as per MOU, Stipulation
			Order]	Agreement, etc.]
18-E-				
XXXX				
17-E-				
XXXX				
16-E-				
XXXX				
15-E-				
XXXX				
Etc.				

3. Please identify, in table format as illustrated below, the degree to which the Company classified costs associated with the specified FERC accounts as "demand-related" or "customer-related" or "other-related" (at both primary and secondary voltage facilities) in each electric embedded cost of service (ECOS) study it filed from 2002 to present. For example, a cell might read, "100% demand/0% customer." If any electric ECOS study employed a different demand/customer/other (please specify "other" in your answer) classification between primary and secondary voltage facilities within the same FERC account, please include such separate demand/customer classifications for each voltage facility.

I KIMIKI I LKC ACCOUNTS		Demand/Customer/Other Dreakdown			
Case	FERC	FERC	FERC	FERC	FERC
	Account	Account	Account	Account	Account
	364	365	366	367	368
18-E-xxxx	50% demand				

PRIMARY FERC ACCOUNTS - Demand/Customer/Other Breakdown

	50% customer		
17-E-xxxx			
16-E-xxxx			
15-E-xxxx			
14-E-xxxx			
Etc.			

*Note: The total customer/demand/other split for each FERC Account should equal 100%

Case	FERC	FERC	FERC	FERC	FERC
	Account	Account	Account	Account	Account
	364	365	366	367	368
18-E-xxxx	100%				
	demand				
17-E-xxxx					
16-E-xxxx					
15-E-xxxx					
14-E-xxxx					
Etc.					

SECONDARY FERC ACCOUNTS - Demand/Customer/Other Breakdown

*Note: The total customer/demand/other split for each FERC Account should equal 100%

- 4. In each of the Company's electric ECOS models filed from 2002 to present, please explain how the demand/customer/other split was derived for primary and secondary distribution FERC accounts 364-368. Was there a special study performed by the Company to obtain the demand/customer/other split for primary and secondary distribution accounts 364-368? If yes, please provide a copy of the special study and the workpapers with formulas unlocked. If no special study was performed to derive the split, indicate how the answer was derived (<u>i.e.</u>, previous rate case Joint Proposal, Rate Design Stipulation Agreement, MOU). Please explain in detail and provide all documents to support your answer.
- 5. Compared to the electric ECOS study the Company filed in the most recent rate case, did any electric ECOS study the Company filed in previous rate cases since 2002 employ a different cost classification (customer, demand, energy, etc.) for any electric FERC account other than accounts 364, 365, 366, 367, and 368? If so, please illustrate such demand/customer classifications for each such FERC account in table format as illustrated below.

Proceeding	FERC Account [X]	FERC Account [Y]	Etc.
18-E-xxxx			
17-E-xxxx			
16-E-xxxx			
15-E-xxxx			
14-E-xxxx			

6. As a follow-up to the Joint Utilities presentation on March 6, 2018, please provide the following detailed information for each utility from the Company's latest ECOS model:

Functionalization Step:

During the Functionalization step in the Company's most recent electric ECOS model, please list <u>ALL</u> FERC Accounts and respective costs. If the FERC Accounts are further broken down by primary and secondary accounts, please indicate the costs for each. See below for a template example.

FERC Accounts	Costs
	[\$ M]
364 – Primary	\$8,000
364 - Secondary	\$10,000
365 - Primary	
365 - Secondary	
Etc.	

Classification Step:

During the Classification step in the Company's most recent electric ECOS model, please provide the percent classification of costs for each FERC Account (i.e., customer related, demand related, energy related, labor related, etc.). See below for a template example.

FERC	% of	% of	% of	Etc.	Total
Account	Customer	Demand	Energy		Costs
riccount	Related	Related	Related		[%]
	Costs	Costs	Costs		
364 -	50%	50%	0%	0%	100%
Primary					
364 -	20%	80%	0%	0%	100%
Secondary					
Etc.					

Allocation Step

During the Allocation step in the Company's most recent electric ECOS model, please provide the allocation of costs for each FERC Account broken down by each Service Class and subclass defined in the Company's ECOS model. Please also list the type of allocator used (<u>i.e.</u>, customer allocator, primary demand allocator, secondary demand allocator ...). See below for a template example.

FERC Account	Type of Costs	Type of Allocator	SC-1 Non- heating Cost Allocation [%]	SC-1 Heating Cost Allocation [%]	SC-2 Cost Allocation [%]	SC-3 Cost Allocation [%]	Etc.	Total Cost Allocation [%]
364 –	Demand	NCP-						100%
Primary		Primary	10%	30%	20%	35%		

	Customer	Customer-			5%	2%	100%
		Primary	3%	85%			
364-	Demand	NCP-					
Secondary		Secondary					
	Customer	Customer-					
		Primary					
Etc.							

Please provide the resulting customer charges for each service class from the Company's ECOS model. If the Company used multiple ECOS models, please provide the answer from each model.

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	SC-1	SC-2	SC-3	Etc.
	Cost	Cost	Cost	
Customer				
Charge				
Number				
of				
Customers				

~	~ ~ ~		~ ~
Resulting Custome	r Charge (losts from	the ECOS model
Resulting Custome	i Charge C	Josts Hom	the LCOS model

- 7. Please list all the components that constitute the monthly residential electric customer charges (<u>i.e.</u>, administrative costs, postage, building rent costs, etc.). If the utility has multiple residential service classes (or subclasses), please provide the customer component breakdown for each service class or subclass.
- 8. Are there service classes (or subclasses) that are analyzed separately (<u>i.e.</u>, in the allocation step) in the utility's ECOS study and then combined with another service class prior to the revenue allocation step? If so, please identify the service classes this applies to, the variation in the rate of returns before and after combining service classes or subclasses, and explain why the Company follows this practice.
- 9. Please explain if each utility tracks the load profiles for net metered residential customers? If the answer is no, when does the utility plan on obtaining this information?
- 10. Please explain how many residential customers are currently and historically enrolled in Time of Use (TOU) rates? What percentage does this represent out of the entire electric residential customer population? How many of these customers have Plug-In Electric Vehicles? Please breakdown the number of customers by service class and/or sub classes.
- 11. Please explain if current and historical TOU rates are a) derived revenue neutral to the entire electric residential service class (generally known as SC1 in a utility ECOS model) or b) based on a separate service class from the electric ECOS cost profile. Please explain your answer in detail and include data such as the resulting rate of returns of the residential TOU class vs. SC1 class if applicable.

- 12. Please explain the different usage profile and cost profile of residential customers under (a) the standard residential service class (generally known as SC1) and (b) residential customers under Time of Use Service Classes (i.e., Niagara Mohawk's SC-1C, Central Hudson's SC-6, etc.).
- 13. Please explain how many residential customers are currently net metered residential customers in the utility service territory from 2006 to present? What percentage does the present number of net metering residential customers represent out of the entire electric residential population? Please breakdown the number of customers by service class and/or sub classes.
- 14. How many customers does the Company forecast to:
 - a. Install solar on customer premise in the next 3 years?
 - b. Install geothermal unit on customer premise in the next 3 years?
 - c. Buy an electric vehicle in the next 3 years?
- 15. Please explain if the Company has billing indicators that distinguish between electric heating and non-heating residential customers.
- 16. Please explain if the Company has load profiles of various electric residential customers (<u>i.e.</u>, heating, non-heating, low income, customer with solar, customers with electric vehicles, customers with geothermal technology, etc.). If the Company currently has this information, please provide the range of current and historic load factor values for the various types of residential customers.
- 17. Please provide the monthly bill usages ranging from 0 to the maximum usage experience in <u>each</u> residential and small commercial (non-demand) service class and subclass for January and July 2017. Please also provide the number of customers and number of lowincome customers (residential only) in each billing usage range. If this information is not available during the requested time period, provide the latest year that the data is available. Please note, most utilities have provided this information in utility rate cases and it did not seem to be an issue for them to obtain the information.
- 18. Approximately how many residential heating and non-heating customers are currently in the Company's service territory that are (1) multifamily and (2) single family? Does the Company currently have the ability to extrapolate this information from its CIS system?