

**DE 18-142**  
**Enel X North America f/k/a EnerNOC**

Petition for Approval of Use of Live, Online Reverse Auction in Electric Procurement  
Enel X's Responses to OCA Data Requests – Set 1

Date Request Received: 12/7/18  
Request No. OCA 1-1

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 5 of 34, Lines 19-20. Please provide a short narrative on the compromise reached in “the highly debated” MA-DPU 17-146 docket.

RESPONSE:

In MA DPU docket 17-146, there was debate between different parties regarding who should have capacity rights over solar + storage projects that receive funding through the “Solar Massachusetts Renewable Target.” Utilities, including Eversource and National Grid, five companies, including Enel X, the Mass Department of Energy Resources, the Mass Attorney General’s Office, and the Northeast Clean Energy Council met for several hours before reply comments were due in the docket in late July to see if they could reach a compromise solution.

Ultimately, a compromise solution was reached between all parties that included a “buyout” price for certain solar customers/owners to buy the capacity rights to the solar from the utilities based on its approximate capacity value in ISO-NE. The compromise also allowed customers/owners to have the capacity rights over energy storage projects without a buyout from the utilities. There was also a compromise reached between all parties (except the utilities) urging the DPU to modify the requirement that utilities enroll behind-the-meter solar that is on net metering in ISO-NE.

The parties submitted the compromise to the MA DPU in their reply comments that were due on July 25, 2018. The MA DPU has not yet taken final action in the proceeding.

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Date Request Received: 12/7/18  
Request No. OCA 1-2

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 6 of 34, Lines 7-8. Please provide a short description of Enel X's substantive participation in "Docket Nos. RM16-23-000; AD16-20-000."

RESPONSE:

Enel X's substantive participation has included but is not limited to:

- Directly testifying on April 10, 2018 at a FERC technical conference on a panel entitled "Participation of DERs in RTO/ISO Markets." Note that RM-16-23-000 led to the direct creation of Docket RM18-9-000 after FERC issued a final Order (Order 841) on the energy storage component of the docket and set the Distributed Energy Resources component for technical conference (on April 10 and 11, 2018) and comments.
- Meeting with FERC Commissioners and staff on multiple occasions, including with and without trade associations.
- Actively engaging in the comment drafting process for multiple trade associations, including the Advanced Energy Management Alliance and Advanced Energy Economy.
- Participating in stakeholder discussions at ISO-NE, NYISO, and PJM regarding Order 841 compliance efforts.

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Text

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Date Request Received: 12/7/18  
Request No. OCA 1-3

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 7 of 34, Lines 9-12, footnote 3. Please provide analytical support for the assertion that “40 auctions have generated almost \$187,000,000 in benefit to New Hampshire.” If needed, provide necessary leads to relevant documents.

RESPONSE:

Please see the attached table of exact data to support that statement. The correct total number of auctions is 42 and total auction proceeds is \$140,768,526. Enel X apologizes for the unintentional clerical error and any confusion that may have caused.

Table OCA 1-3

<b>Auction #</b>	<b>Total Allowances Sold</b>	<b>Total Auction Proceeds</b>
Auction 1	--	--
Auction 2	1,189,610	\$ 4,020,882
Auction 3	1,276,461	\$ 4,440,427
Auction 4	1,276,460	\$ 4,021,351
Auction 5	1,276,460	\$ 2,767,655
Auction 6	1,425,941	\$ 2,911,034
Auction 7	1,571,954	\$ 3,236,107
Auction 8	1,573,863	\$ 2,957,125
Auction 9	1,175,405	\$ 2,186,253
Auction 10	900,236	\$ 1,674,439
Auction 11	1,746,273	\$ 3,300,456
Auction 12	487,427	\$ 921,237
Auction 13	263,886	\$ 498,745
Auction 14	944,201	\$ 1,784,540
Auction 15	1,021,008	\$ 1,970,545
Auction 16	1,047,521	\$ 2,021,716
Auction 17	1,069,204	\$ 2,063,564
Auction 18	868,680	\$ 1,676,552
Auction 19	1,821,863	\$ 5,101,216
Auction 20	1,650,162	\$ 5,297,020
Auction 21	1,650,162	\$ 4,405,933
Auction 22	1,650,164	\$ 4,950,492
Auction 23	1,081,406	\$ 4,325,624
Auction 24	648,741	\$ 3,256,680
Auction 25	648,741	\$ 3,165,856
Auction 26	648,741	\$ 3,379,941
Auction 27	848,829	\$ 4,592,165
Auction 28	943,809	\$ 5,190,950
Auction 29	1,370,698	\$ 8,251,602
Auction 30	848,830	\$ 6,366,225
Auction 31	820,469	\$ 4,307,462
Auction 32	913,075	\$ 4,136,230
Auction 33	820,469	\$ 3,724,929
Auction 34	820,469	\$ 2,912,665
Auction 35	792,817	\$ 2,378,451
Auction 36	882,443	\$ 2,232,581
Auction 37	792,817	\$ 3,448,754
Auction 38	792,818	\$ 3,012,708
Auction 39	765,857	\$ 2,902,598
Auction 40	853,761	\$ 3,432,119
Auction 41	765,857	\$ 3,446,357
Auction 42	765,858	\$ 4,097,340
<b>TOTAL</b>	<b>42,713,446</b>	<b>\$ 140,768,526</b>

Source: <https://www.rggi.org/auctions/auction-results>

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Date Request Received: 12/7/18  
Request No. OCA 1-4

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 7 of 34, Lines 12-13. Please provide the list of top five U.S. energy procurement companies. Also, provide their shares in total revenues and volume.

RESPONSE:

To Enel X, energy procurement specialists can refer to third party energy suppliers who procure and sell energy to customers in deregulated states, or to companies who have auction platforms where suppliers can compete for business to serve utility customers on default load. Enel X is one of the top U.S. energy procurement specialists for the latter category. While there is publicly available revenue and volume data<sup>1</sup> on the former category, there is limited public data on the latter, where Enel X competes. Thus, we do not have exact revenue and volume data ranking Enel X among its competitors. The ranking is from our experience. We view our largest competitors in that particular energy procurement space to be: Charles River Associates, Levitan Associates, Schneider, EMEX and Altenex. These companies provide specialized regulatory-&-procurement services, retail electric & gas, and/or renewable PPA procurement services.

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<sup>1</sup> See [https://www.eia.gov/electricity/sales\\_revenue\\_price/pdf/table16.pdf](https://www.eia.gov/electricity/sales_revenue_price/pdf/table16.pdf) for 2017 Retail Power Marketers Sales, for customer count, megawatt-hour sales, and revenue.

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Date Request Received: 12/7/18  
Request No. OCA 1-5

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 8 of 34, Lines 1-2. Please provide the list of Default and Standard Offer Service Programs that Enel X currently supports for both electric and natural gas utilities.

RESPONSE:

The utilities that allow Enel X to disclose who we support for Default and Standard Offer Service programs are:

Delmarva Power & Light Company  
Dominion East Ohio  
Columbia Gas Ohio  
Vectren Energy Delivery of Ohio

Enel X currently supports additional utilities who have not granted us permission to disclose our partnership.

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Date Request Received: 12/7/18  
Request No. OCA 1-6

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 8 of 34, Lines 12-14. Please provide the tally of how many sealed bid auctions, descending clock auctions, and live, online reverse auctions, respectively, Enel X has conducted over the last ten years.

RESPONSE:

Over the last ten years, Enel X has conducted 42,439 sealed bid events, 296 descending clock auctions, and 17, 939 live, online reverse auctions [data as of January 3, 2019].

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Date Request Received: 12/7/18  
Request No. OCA 1-7

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 8 of 34, Lines 17-19. Please indicate whether Enel X has ever quantitatively estimated to what extent live, online reverse auctions produce more competitive prices, relative to the other types of auctions. If the answer is in the affirmative, please provide the quantitative analysis. If the answer is no, please explain why this is the case.

RESPONSE: Yes, Enel X continuously tracks and quantifies results to demonstrate the higher level of competition our process and technology bring. Because Enel X runs auctions in many different markets, at all times of the year under varying market conditions, and for many different product types, the most illustrative quantitative data are:

- a) Comparing to a utility's internal Price to Compare (PTC) value,
- b) Comparisons with the Intercontinental Exchange (ICE), and
- c) Market information of more competitive results using auctions.

**a) Price to Compare (PTC)** – Utilities will often have an internal expectation of an energy commodity price that reflects their understanding of current market conditions for that commodity. When they go to market to buy this commodity, if that PTC threshold is achieved, they will transact. If not, they will not. As it reflects their current understanding of the market, if the PTC were achieved under a sealed bid model, the utility would accept the bid, and lose the additional downward pressure competitive auctions deliver. Therefore, the delta between a utility's PTC and the price that the Enel X process delivers is important. In some instances, utilities share their PTC with Enel X. In those instances, Enel X is able to assess the extent to which the procurement method is able to meet or exceed the utility's price expectations. In a recent supply auction run by Enel X for 2019 and 2020, the final auction prices, as compared to the PTC for those procurement events, was lower by a range of 6% to 27%. In another recent capacity auction, the average final auction results were 17.27% below the utility's internal PTC threshold. Enel X attributes those results to the head-to-head competition that our process fosters. Exceeding a utility's expectations on final prices is common and results in real savings to ratepayers.

**b) Intercontinental Exchange** – ICE is an electronic marketplace for energy commodities, similar to the New York Stock Exchange for corporate stocks. For certain products, utilities are able to log onto ICE and buy what they need. Prices update in real-time, just like the stock market, which suggests that the price on ICE is the prevailing market price for a commodity product. In a recent auction for a long-term partner, the exact same product in the Enel X auction was available on ICE. The price on ICE, at the same time of the auction, was \$39.90/MWh. Given that ICE is a good indicator of the market for a product at a specific point in time, one

would expect bidders to have only bid down to \$39.90. However, the competitive environment that Enel X's method provided drove the price to \$37.88/MWh, which meant the customer saved over \$2.00/MWh, and resulted in significant ratepayer savings.

**c) Market Information** – The Ohio Consumers' Counsel recently filed comments with the Ohio Public Utilities Commission recommending that all large natural gas utilities use competitive auctions to procure default service. The counsel noted that, "Recent and historical evidence suggest that customers pay less for natural gas through competitive auctions." The counsel noted that the LDCs in Ohio that used competitive auctions (all of which work with Enel X), have rates, on average, that are \$0.3333/Mcf lower than Duke Energy's rates, which does not use such auctions. The counsel argued that their recommendation, "will, among other things, help protect consumers from paying higher than just and reasonable prices for natural gas service."

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Date Request Received: 12/7/18  
Request No. OCA 1-8

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 9 of 34, Lines 4-5. With respect to an Eversource procurement event, please provide Enel X's expectation as to its involvement apart from focusing on automating and enhancing the bidding process with technology-enabled auctions.

RESPONSE:

The extent of Enel X's involvement would be determined by Eversource. Some of our utility partners turn to us for extensive support throughout the RFP process, including but not limited to supplier recruitment and engagement. Other utility partners turn to us simply for the automation of bidding with the competitive results Enel X delivers. We take direction from our partners on the depth of our involvement.

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Date Request Received: 12/7/18  
Request No. OCA 1-9

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 13 of 34, Lines 4-5.

- a) Please explain what is meant by “elimination of outlier bidding.”
- b) Also, using an example, please explain how DCA is able to avoid “winner’s curse.”

RESPONSE:

(a) This question and answer refers to Descending Clock Auctions (“DCA”), which is a different auction method than on-line reverse auctions. We are not advocating for Eversource to use DCAs but are glad to still answer these questions. Referring to the testimony on page 12 beginning on Line 16, in a DCA, the auction manager sets the price, not the bidders. Since the bidder never submits a price, there is not the same possibility for outlier bidding behavior as there is in other auction methods.

DCA bidders submit bids for volume, and not for price. If a bidder is willing to accept the price set by the auction manager, the bidder will submit the volume of the commodity they are willing to provide at that price. If the price is too low for the bidder, then the bidder withdraws from the bidding process. As no bidder can submit a bid, and can only choose to accept the price set by the auction manager, outlier bidding is eliminated.

(b) The DCA has a different design than a live, online reverse auction. Enel X is advocating the use of live, online reverse auctions for Eversource. That said, the “winner's curse” element can be described in an example using an ISO and a fictional Forward Capacity Market. Using a sealed bid method, a bidder (Bidder A) offers a volume of capacity at \$3 per kiloWatt-month (kW-mo) based on their expectation of market prices and capacity value, and wins the monthly capacity payment. Several other parties bid between \$6.25/kw-mo and \$7/kw-mo, nearly double of Bidder A, and those bids are not accepted. Bidder A has won the auction, and then, during the delivery year, regional market conditions are such that \$3/kw-mo is not adequate for Bidder A to turn a profit on the asset. If Bidder A had known how the other entities were bidding, Bidder A would have realized that it was valuing the market differently compared to competitors’ assessments. Because of incomplete information/no price discovery, Bidder A is said to have experienced “winner's curse.” As explained by Peter Cramton and highlighted on page 22 of our testimony, this fear of the winner’s curse can lead to conservative bidding behavior in the sealed bid.

With the DCA method, as the capacity price (set by the auction manager) drops to \$6/kW-mo, Bidder A would continue to indicate the volume of capacity Bidder A can provide, and the other bidding companies would indicate withdrawing from that price point of the DCA, as their business could not support operations at less than \$6.25/kW-mo. The auction manager, requiring

a set volume of capacity required to support the regional grid, ultimately halts the DCA at \$6.00/kw-mo, the price at which Bidder A still offered volume. Bidder A wins and will receive double the payment they were willing to receive.

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Date Request Received: 12/7/18  
Request No. OCA 1-10

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 13 of 34, Lines 17-19. Please provide analytical support (quantitative or otherwise) that supports the assertion that “[i]n EnerNOC’s experience, the inability to respond to price movements in the final moments of an auction leads to aggressive competition among bidders and pushes prices lower.”

RESPONSE:

With the Enel X live, online reverse auctions, two critical things occur:

- (1) Throughout the first nine or so minutes of a ten-minute auction, bidders are able to get just enough price information to improve their earlier bids.
- (2) In the final seconds, in the time it takes a bidder to enter their final bid, they lose that price discovery as a result of moving through the bid entry and confirmation screens. That, combined with the defined hard stop to each auction, creates a situation in which bidders – if they haven’t done so already – are compelled to offer their best-and-final offers if they want to meaningfully increase their chances of winning.

The table displays supplier bids for a 10-minute auction of an electric commodity. The table’s data are real bids, from an actual auction run by Enel X. Note, the left column “Bidder” are supplier companies who enter “Bid Amount” (middle column) at time listed in the right column “Time of Bid”, which counts down chronologically; the auction starts at 10:30 (top of table) and ends at 10:40.

In the final minute:

- 8 bidders place 15 bids;
- 4 bidders have each placed 2 bids;
- 1 bidder has placed 4 bids.

In the final 20 seconds, there are seven different bids all from different bidders.

This bidding activity illustrates that bidders benefit from price discovery. As their competitors offer better bids, bidders are driven to get more and more competitive themselves.

Bidder B bids \$35.00 at 10:39:18. With 40 seconds left, Bidder B gains price discovery as multiple bids come in right after Bidder B’s bid. In the last seconds, each bidder is compelled to submit a best and final bid. In this example, Bidder B, who is clearly competing to win, provides their best and final of \$32.65. In the time it took Bidder B to enter that bid, Bidder J was also entering their best and final of \$31.75. Bidder J had the ability to go the lowest, which is why Bidder J won the auction. Price discovery helps drive prices down and the sealed bid element compels bidders to be as aggressive as possible.

Bidder	Bid Amount	Time of Bid
	Auction Begins	10:30:00
Bidder A	\$39.90	10:30:19
Bidder B	\$39.50	10:30:27
Bidder C	\$39.97	10:30:35
Bidder D	\$40.00	10:30:43
Bidder E	\$39.75	10:30:59
Bidder F	\$40.00	10:31:13
Bidder G	\$38.00	10:31:22
Bidder D	\$39.25	10:31:25
Bidder H	\$40.00	10:31:26
Bidder E	\$39.25	10:31:41
Bidder D	\$37.75	10:31:47
Bidder I <sup>1</sup>	\$40.00	10:32:08
Bidder J	\$40.00	10:32:17
Bidder E	\$37.50	10:32:25
Bidder J	\$37.25	10:34:06
Bidder K	\$39.90	10:34:14
Bidder A	\$37.15	10:34:17
Bidder D	\$37.00	10:34:37
Bidder B	\$36.90	10:37:30
Bidder D	\$36.75	10:38:23
Bidder G	\$36.00	10:38:52
Bidder J	\$35.75	10:39:12
Bidder B	\$35.00	10:39:18
Bidder K	\$36.45	10:39:23
Bidder G	\$34.90	10:39:26
Bidder K	\$34.98	10:39:27
Bidder D	\$34.75	10:39:27
Bidder K	\$34.53	10:39:32
Bidder G	\$34.20	10:39:38
Bidder D	\$34.25	10:39:42
Bidder A	\$34.10	10:39:45
Bidder H	\$32.74	10:39:47
Bidder K	\$34.03	10:39:52
Bidder I	\$34.98	10:39:54
Bidder J	\$31.75	10:39:55
Bidder B	\$32.65	10:39:59
	Auction Ends	10:40:00

<sup>1</sup> Bidder I and Bidder J join the auction after 10:32, at the opening price level. Bidders have to submit a transactable bid to participate and see competitors’ bids.

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Date Request Received: 12/7/18  
Request No. OCA 1-11

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 14 of 34, Lines 4-6. Is it Enel X's position that "online reverse auctions" with "interactive technology platforms" that can automate many steps, necessarily produce more competitive prices? If the answer is in the affirmative, please explain the basis for that conclusion. If not, please explain under what conditions/features does an online reverse auction necessarily produce more competitive prices. If possible, please provide analytical or empirical support for the Company's assertion.

RESPONSE:

Yes, it is Enel X's position that live, online auctions necessarily produce more competitive prices. Please see responses to OCA 1-7 and OCA 1-10. Auctions have historically been run in live environments to induce greater competition; the interactive Enel X Exchange platform provides real-time price discovery for bidders where all bidders can see the prevailing low price in an auction until the final seconds and can offer increasingly aggressive bids to best their competitors. A sealed bid process simply does not have that competitive element. With a sealed bid model, bidders offer what bid they think will win within the bounds of what the bidder thinks the customer can afford, and not what the bidder can actually afford.

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Date Request Received: 12/7/18  
Request No. OCA 1-12

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 15 of 34, Lines 1-2.

- a. Is Enel X aware of any peer reviewed research that supports its assertion that “real-time, dynamic price discovery and short auction duration facilitates the most competitive auction outcome possible”? If so, please provide the leads or the relevant documents.
- b. Does Enel X have any support for the above assertion based on its own analysis? If so, please provide the supporting documents/analysis.

(a)

1. **Wyld, David C. *Reverse Auctioning – Saving Money and Increasing Transparency*. The IBM Center, 2011.**

Accessed 1/3/19 from:

<http://www.businessofgovernment.org/sites/default/files/Reverse%20Auctioning.pdf>

From the Executive Summary:

**“Benefits of Reverse Auctions**

This report begins with an overview of how reverse auctions work in the procurement context. Next, the benefits of reverse auctions are examined. These include:

- Driving prices down. Lowering the price to be paid by the organization across a wide swath of its procurement outlays for appropriate categories of goods and simple services
- Increased competition. Opening access to bidding from an expanding pool of suppliers to heighten competition in the procurement process
- Real-time market pricing. Since competitors can adjust their bids multiple times in response to other competitors' prices, the first and best offer can be improved to the benefit of both the buyer who saves hard dollars and the seller who ultimately gains the business.
- Process efficiencies. By leveraging the reverse auction tool, the acquisition function can be improved and generate soft-dollar savings through efficiency gains and more productive use of time, manpower, and resources.
- Time savings. Compressing the buying process from weeks or months to days or even hours, benefiting both sides of the procurement equation

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Date Request Received: 12/7/18  
Request No. OCA 1-13

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 17 of 34, Lines 13-19, and Page 18 of 34, 1-2.

- a. If the “sealed bid element” of bidding is captured in the waning moments, please explain why the live, online reverse auction can still produce outcomes that are more competitive than running a sealed bid auction right from the word go.
- b. In the event of a thinly participated technologically enabled live, online reverse auction, is it possible that the price discovery leads to an outcome wherein the sealed bid element in the waning moment actually produces a higher price than what would have been produced under the traditional sealed bid auction construct? If not, please clearly explain why so.

RESPONSE:

(a) In a sealed bid process, suppliers offer one bid with the hopes of winning the business. Suppliers develop their bids by considering the cost of the energy commodity, the profit margin the supplier hopes to gain, and risk premiums the supplier attaches to the product. Suppliers want to maximize their profit, but they know that their competitors may undercut them and win the business. As such, there is a push and pull where suppliers are driven to add a profit margin while not adding too much of a profit margin that results in them losing the business. Therefore, in a sealed bid process, the winning supplier is often just the best guesser – the supplier who guessed what their competitors would bid and offered a slightly better bid.

As illustrated in our response to OCA 1-10, live, online reverse auctions reveal to suppliers what the prevailing low bid is during a defined, brief, pre-determined bidding window. Suppliers see what the prevailing low bid is and compete head-to-head, driving prices down. If a supplier sees other bids coming in lower, they can adjust their profit margin and/or premiums in order to offer a lower price. Without price discovery, suppliers would not be compelled to dig deeper and offer a more competitive price.

In the final seconds of an auction, all bidders are able to enter their last bid. Because there is a hard stop to the auction, their last bid cannot be adjusted. They are motivated to best their competition and offer their best price.

At the end of an auction there will be a winner and there will be losers. To win, suppliers need to offer the best price. Price discovery helps suppliers better understand what they need to do to win.

- Increased number of suppliers. Encouraging new entrants into the contracting process to provide benefits to small businesses that enter
- Sustainable cost savings. Delivering not just cost savings in the initial round of reverse auctioning, but ensuring that the organization is paying a real-time market price on subsequent like acquisitions”

2. **Luiz T. A. Maurer, Luiz A. Barroso; with support from Jennifer M. Chang [et al]** *Electricity auctions: an overview of efficient practices*. Washington, DC: The World Bank, 2011

Accessed 1/3/19 from:

<https://www.ifc.org/wps/wcm/connect/8a92fa004aaba73977bd79e0dc67fc6/Electricity+and+Demand+Side+Auctions.pdf?MOD=AJPERES>

This study was written, in part, for, “...professionals interested in learning how to improve the competitiveness of existing electricity procurement mechanisms, taking into account recent academic and empirical evidence.”

Excerpts from the Executive Summary:

“Auctions represent a competitive and efficient form of procuring electricity. They are far superior to single sourcing, ‘beauty contests,’ or bilateral negotiations, which are not necessarily efficient and are more apt to be challenged when the political winds change.”

“A clock auction enables an efficient price discovery, and is therefore conducive to more aggressive behavior among bidders, thereby resulting in lower prices.”

“Well-designed auction systems should achieve the following goals:

- A fair, open, transparent, objective, non-discriminatory, and timely process;
- An efficient price discovery mechanism, minimizing information and transactions costs;
- An outcome in which bidders who can provide a product at the lowest cost will win, ensuring optimal use of resources;
- Minimization of the likelihood of challenges to the selection process and outcome, avoiding post-auction delays, and
- An attractive, less-disputable solution to the regulatory issue of establishing the prudent power purchase costs incurred by distribution utilities when serving their captive customers.”

3. For research that speaks to the impact of short-duration auctions on competition, see **Haruvy, E., & Popkowski Leszczyc, P. T.**, *The impact of online auction duration*. *Decision Analysis*, 7(1), 99–106 (2010).

[https://www.researchgate.net/publication/220210242\\_The\\_Impact\\_of\\_Online\\_Auction\\_Duration](https://www.researchgate.net/publication/220210242_The_Impact_of_Online_Auction_Duration)

(b) Yes, please see the response to OCA 1-7 and OCA 1-10.

A sealed bid process favors the best guesser. A live, online reverse auction favors the supplier who has the ability to offer the best price.

(b) We contend that price discovery delivers more competitive outcomes. We also assert that the best approach for delivering competitive outcomes is to be deliberate about the design of each auction, and to implement an auction architecture that yields the most competitive outcome.

Auctions result in competitors losing and at least one competitor winning. In that sense, auctions can be seen as binary – someone wins, someone loses. That dynamic compels bidders to be more aggressive than their competition, as demonstrated in our response to Question 10. In the final seconds of an auction, no bidder knows how low their competitor will bid. Therefore, bidders are compelled to offer their true best and final. A live, online reverse auction creates a more competitive dynamic where bidders go head-to-head with their rivals and are motivated to best their competition. Without price discovery, competitors are taking a shot in the dark to see if they win, stifling competition. With price discovery, Enel X observes back-and-forth activity where bidders are seeking to undercut the bids of their competition to win. That competitive element helps prevent prices in a live, online reverse auction from settling higher than would have been seen in a sealed bid process alone.

Determining the most appropriate auction architecture is paramount to maximizing the probability for a successful outcome. Please see response starting on Line 10 of P. 19 of Testimony, ending on Line 19 of P. 20. Significant effort is taken before an auction, such as a formal indicative bid round or informally polling suppliers, to determine the likelihood of a competitive outcome in the auction and to determine a starting price for the auction with which the utility feels comfortable.

**DE 18-142**  
**Enel X North America f/k/a EnerNOC**

Petition for Approval of Use of Live, Online Reverse Auction in Electric Procurement  
Enel X's Responses to OCA Data Requests – Set 1

Date Request Received: 12/7/18  
Request No. OCA 1-14

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 19 of 34, Lines 23-24.

- a. Provide a concrete example of how with only two bidders, one can design a live, online reverse auction that would still support a competitive outcome.
- b. Has there been any instance wherein Enel X has implemented a live, online reverse auction for energy procurement that has demonstratively produced a competitive outcome for ratepayers? If so, please provide the instance and supporting documents that corroborates the finding.

RESPONSE:

(a) Enel X has run 199 successful wholesale energy auctions where there have been just two unique bidders participating. Awards were given in all auctions, demonstrating the utilities' satisfaction with the outcome. Across successful two-bidder wholesale energy auctions, Enel X has averaged four unique bids per auction, with some auctions garnering up to 10 unique bids.

The reason auctions with only two bidders remain competitive is that no bidders know how many other bidders there are. They also do not know the number of bids. Bidders only know the prevailing best bid and if it belongs to them or not. Even with that knowledge, bidders never know that there aren't numerous other bidders waiting until the final moments of the auction to offer a lower price at the final seconds. As such, even with two bidders there can be competitive auctions.

(b) Yes, there are several instances. Please see responses to Questions 7 and 10.

For examples of an independent consultant stating that the Enel X live, online reverse auction demonstratively produced competitive outcomes, please refer to Pages 27-28 of our testimony and the statements from Liberty Consulting.

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Enel X's Responses to OCA Data Requests – Set 1

Date Request Received: 12/7/18  
Request No. OCA 1-15

Date of Response: 1/11/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 20 of 34, Lines 7-12. Given that bidders do not know how many other bidders are participating in an instant live, online reverse auction, please explain how greater price discovery could lead to an outcome that is more competitive than the outcome obtained with a traditionally run sealed bid auction. If necessary, please provide an example to lucidly support the point.

RESPONSE:

Price discovery in Enel X auctions is limited to the prevailing low bid. Bidders do not know how many competitors there are, who they are, or how many bids have been placed. That limited price discovery allows bidders to adjust their bids to win the business, but does not let them know who else is out there. Different bidders use different strategies to win. Some bidders, after entering an initial bid, will withhold subsequent offers, until the final seconds of an auction and then submit a low bid. All other bidders know of that threat and tend to offer their most competitive bids in the last moments to squeeze out competitors. In the final seconds of an auction, Enel X regularly observes the prevailing low bidder come in and undercut themselves in order to win. That is evidence that there is real concern bidders have about being beat out, which drives them to go to their absolute limit.

Here is an example from outside of the energy world that lucidly supports the point:

Buying a home traditionally uses what amounts to a sealed bid process. Offers are submitted bilaterally through a realtor and are either rejected or accepted by the seller. This is not a favorable model for either the buyer or the seller.

- It is bad for the seller because buyers submit the price that they think the seller will accept, not the price a buyer can afford. If Buyer A offered \$100,000 for the house and Buyer B offered \$110,000, Buyer B would get the house. However, Buyer A was just offering what she thought the seller would accept. Had Buyer A known Buyer B offered \$110,000, Buyer A could have easily offered \$120,000. In this example, the seller loses because without price discovery, no mechanism was there to push the price up where it could have gone. While the seller could have come back and asked for more bids, there would always be doubt on the buyers' part, asking, "is this a bluff, is there really a higher bid out there?" If an open, transparent auction were used, the actual prevailing best bid would be displayed. Buyers would have trust in the process and be able to get more aggressive to win.
- A sealed bid process is bad for the buyer because, just like in the example above, buyers do not have the ability to adjust their bids in response to other offers. Buyer A may have

desired the house and really wanted to get it, but perhaps Buyer A or her realtor just underestimated the market. Had they known the market was more aggressive and that somebody would likely offer more than \$100,000, Buyer A would have offered more. Unfortunately, people gauge markets differently and prices do not always reflect true demand. In an auction with price discovery, the market gets defined in real time and Buyer A could have converted her desire for the house into more and more competitive bids until she won. Without price discovery, it is the best guesser who wins in a sealed bid, not necessarily the bidder who could have outbid the rest.

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Date Request Received: 12/7/18  
Request No. OCA 1-16

Date of Response: 12/14/18  
Witness: Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 21 of 34, Line 18. Please provide a copy of the referenced document as cited in footnote 9.

RESPONSE: See attached: L. Maurer and L. Barraso, *Electricity Auctions, An Overview of Efficient Practices*, The World Bank, p. xvii (2011) eISBN: 978-0-8213-8824-2.  
<https://openknowledge.worldbank.org/bitstream/handle/10986/2346/638750PUB0Exto00Box0361531B0PUBLIC0.pdf;sequence=1>

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**Enel X North America f/k/a EnerNOC**

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Date Request Received: 12/7/18  
Request No. OCA 1-17

Date of Response: 12/14/18  
Witness: Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 25 of 34, Line 4. Please provide a copy of the referenced document as cited in footnote 15.

RESPONSE: See attached: Woo, Chi-Keung, Karimov, Rouslan, Horowitz, Ira. Energy and Environmental Economics, Inc and Warrington College of Business, University of Florida. 2004. *Managing Electricity Procurement Cost and Risk by a Local Distribution Company* p. 16. ("Woo, et. al.").

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Date Request Received: 12/7/18  
Request No. OCA 1-18

Date of Response: 12/14/18  
Witness: Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 26 of 34, Line 7. Please provide a copy of the referenced document as cited in footnote 18.

RESPONSE: See attached: Del PSC Order No. 7461, *In the Matter of the Provision of Standard Offer Supply to Retail Consumers in The Service Territory of Delmarva Power & Light Company after May 1, 2006*, Delaware PSC Docket No. 04-391, October 7, 2008, p. 4.

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Date Request Received: 12/7/18  
Request No. OCA 1-19

Date of Response: 12/14/18  
Witness: Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 27 of 34, Line 7. Please provide a copy of the referenced document as cited in footnote 20.

RESPONSE: See attached: Liberty Consulting Group, Technical Consultant's Final Report to the Delaware Public Service Commission, Delmarva Power & Light's 2015-16 Request for Proposals for Full Requirements Wholesale Electric Supply for Standard Offer Service, March 8, 2016, p. 6.

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Date Request Received: 12/7/18  
Request No. OCA 1-20

Date of Response: 1/18/19  
Witness: Sean Perry and Greg Geller

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REQUEST: Refer Testimony of Sean Perry and Greg Geller, Page 34 of 34, Lines 1-4. Please provide the basis for Enel X's assertion that "most of the suppliers who are currently participating in Full Requirements Energy Service procurements in New Hampshire are familiar with the live, online reverse auction process and EnerNOC's platform."

RESPONSE:

Enel X reviewed recent winning suppliers on the NH PUC website. Non-winning bidders are redacted from the site, so Enel X has not reviewed those. Based on the overlap between suppliers who participate on the Enel X Exchange and the aforementioned winners, Enel X is confident that winning bidders have used the Enel X Exchange platform.

Additionally, Enel X has compared the list of companies participating on the Enel X platform with the companies identifying as suppliers, as generators, and as alternate providers in the ISO-NE Customer Directory. That review makes us confident that suppliers serving the New Hampshire market are familiar with the process and our platform.

Finally, when Eversource sends out an RFP, all supplier emails are visible. Enel X reviewed the suppliers contained in Eversource's May 9, 2018 email, in which Eversource announced a RFP seeking default service. We found a significant overlap between those who received that email, especially the larger energy suppliers, and users of our platform.