Nucor Exhibit 3.0
Docket No. 22-057-03
Witness: Bradley G. Mullins

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF DOMINION ENERGY UTAH TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS	)	Docket No. 22-057-03

PHASE II SURREBUTTAL TESTIMONY OF BRADLEY G. MULLINS

ON BEHALF OF

NUCOR STEEL-UTAH, A DIVISION OF NUCOR CORPORATION

November 3, 2022

Nucor Exhibit 3.0

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I. INTRODUCTION AND SUMMARY

Q. ARE YOU THE SAME WITNESS THAT FILED PHASE II DIRECT TESTIMONY AND PHASE II REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes. I previously filed Phase II Direct Testimony and Phase II Rebuttal Testimony on behalf Nucor Steel-Utah, a Division of Nucor Corporation ("Nucor"), discussing cost of service and rate design issues.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I respond to the Phase II Rebuttal Testimony of witnesses: Austin Summers on behalf of Dominion Energy Utah ("Dominion"); Kevin Higgins on behalf of the Utah Associated Energy Users ("UAE"); Brian Collins on behalf of the Federal Executive Agencies ("FEA"); James Daniel on behalf of the Office of Consumer Services ("OCS"); Abdinasir Abdulle on behalf of the Utah Division of Public Utilities ("DPU"); and Timothy Oliver on behalf of the American Natural Gas Council, Inc. ("ANGC").

Q. PLEASE PROVIDE A SUMMARY OF YOUR SURREBUTTAL, INCLUDING YOUR PRINCIPAL CONCLUSIONS AND RECOMMENDATIONS.

A. *Rate Spread:* Parties' Rebuttal Testimony shows divergent party perspectives on the cost of service study, as well as the corresponding revenue spread. I recommend the Commission continue its practice of considering a range of guiding principles when evaluating the reasonableness of revenue spread and not solely the cost of service study. Considering the impact on differently situated customers, it is reasonable to narrow the range of rate impacts in this docket. While there are multiple ways to do this, my recommendation is as follows:

1) *Given the unique circumstances in this docket, I recommend a revenue spread that gives General Service ("GS") customers an average rate increase and applies a cap to remaining schedules equal to 1.5 times the average rate increase.*

TS Definition and Rate Design: There are several reasons why the current structure of the Transportation Service ("TS") rate class has been, and continues to be, reasonable. For example, absent a similar split for high load factor customers in the GS class, price signals may get distorted.

2) *Accordingly, I continue to recommend the Commission decline to split the TS class; and*

3) *I also continue to recommend the Commission adopt a balanced TS rate design based on equal percentage increases to volumetric rates and the demand charge.*

Cost of Service Study Assumptions: I continue to support the use of the assumptions discussed in my Phase II Direct Testimony and Phase II Rebuttal Testimony. Specifically, I continue to support the following recommendations:

4) *I continue to recommend that core distribution costs be allocated based on design-day demand, and that the peak and average method be rejected.*

5) *I continue to recommend that both distribution and general plant depreciation expenses be allocated by FERC account in a manner that is consistent with the underlying plant.*

II. RATE SPREAD

Q. DID DOMINION MODIFY ITS PROPOSED REVENUE SPREAD IN REBUTTAL TESTIMONY?

A. Dominion witness Summers continued to recommend that the revenue spread be based on its cost of service study results, although witness Summers expressed an openness to "gradualism" and would support an adjustment that would phase-in the rate increase to highly impacted customer classes over time.[1]

[1] DEU Exh. 4.0R at 21:387-23:442.

Q. IS A GRADUALISM ADJUSTMENT NECESSARY?

A. Many parties discuss gradualism as a factor the Commission might consider when evaluating the reasonableness of the revenue spread in this docket.[2] Notwithstanding, the need for a gradualism adjustment in revenue spread depends on one's perspective regarding the economic assumptions used in the class cost of service study. Based on my study assumptions, updated for Dominion's rebuttal, the TS rate class would require a 10.1% rate reduction to reach parity.[3] A similar result using my cost of service study assumptions is reached even if the TS class were to be split. The need for a gradualism adjustment, using Dominion's study assumptions and viewing the TS class as a whole (i.e., without the TS split), also suggests only a small need for a gradualism adjustment. Dominion's study without the TS split would require a 20.3% rate increase for TS customers, relative to the 15.5% overall system rate increase.[4] It is only after splitting the TS rate schedule that the truly exceptional rate impacts would begin to show up. Thus, to the extent that a gradualism adjustment exists, it is being driven mostly by the proposal to split the TS rate schedule and not necessarily the economic assumptions in the cost of service study. If there is a thing that needs to be graduated, it is the TS class split, not the cost study.

Q. ARE COST OF SERVICE STUDY ASSUMPTIONS THE ONLY THING THE COMMISSION CONSIDERS WHEN DEVELOPING A REVENUE SPREAD?

A. No. The Commission has a history of using a cost of service study as a general guide, but has not necessarily relied exclusively on the cost of service study results when evaluating

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2 *See, e.g.*, OCS Exh. 4R at 10:227-13:297; DPU Exh. 4.0R at 8:194-9:206; DEU Exh. 4.0R at 21:387-23:442.

3 *See* Nucor Exh. 3.2, Updated Cost of Service Study.

4 *See* DEU Exh. 4.21R, Tab "COS Sum TS TTL." Calculated by comparing percentage difference between line 57 and line 3. Note that this value conflicts with the percentages in Tab "Rev Neutral," because the Rev Neutral tab included General Related Other Revenue in the denominator when calculating the rate increase percentage.

the reasonableness of a revenue spread.[5] The Commission has avoided solely relying on the cost of service study results in circumstances where "cost-of-service studies on [the] record are not completely reliable" and "cost-of-service studies [show] a wide divergence of earnings results across classes."[6] The Commission recently reaffirmed that approach for the cost of service study in Rocky Mountain Power's 2020 General Rate Case ("GRC"), where it adopted the recommendation of OCS, stating:

> [O]ur rate spread findings have been, and continue to be influenced by interrelated principles, including: (i) the desirability of a gradual pace of change toward improved alignment of costs of service and rates, and (ii) the equitable treatment of all customer classes when overall revenue requirement increases such that, in general, a given class does not suffer an unduly large, disproportionate increase.[7]

Q. GIVEN PARTIES' RECOMMENDATIONS ON GRADUALISM, WHAT DO YOU RECOMMEND?

A. When considering revenue spread, it is important to recognize that, in the context of the cost of service study, the GS class contributes the largest amount of revenue of any rate class by far. Approximately 88.5% of test period margin revenues were from the GS class.[8] Because of this, minor changes to costs allocated to the GS rate class produce impacts on other schedules that are disproportionately large. Mathematically, a 1.0% margin reduction to GS rates results in an average 7.7% margin increase to the other schedules. One's view of the GS class has major impacts on the revenue spread for the other, smaller rate classes.

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[5] *See* In the Matter of the Application of PacifiCorp for Approval of Its Proposed Electric Rate Schedules and Electric Service Regulations, Docket No. 99-035-10, Report and Order at 75 (May 24, 2000).

[6] *Id.*

[7] *See* Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations, Docket No. 20-035-04, Redacted Order at 71.

[8] *See* DEU Exh. 4.21R, Tab titled "COS Sum TS Split" ($383,478,856/$433,402,504 = 88.5%).

Therefore, considering the reasonableness of the GS class rate design as a first step will better inform one's decision on the other schedules.

Q. WHAT IS THE RANGE OF RECOMMENDATIONS FOR THE GS CLASS?

A. Different parties' cost of service studies support differing GS revenue spreads. The variance between the recommendations, however, is not as significant as it is for the other, smaller rate classes. In my study, for example, the GS rate class would require an above average increase of 17.7%.[9] In the Dominion study, the GS rate class would require a below average increase of 14.6%.[10]

Q. HOW DO YOU RECOMMEND HANDLING THE GS CLASS?

A. Given that the GS class is such a large portion of system costs, my recommendation is to allocate a system average rate increase to the GS rate schedule. Relative to the cost study, this creates a revenue surplus or shortfall, depending on the allocation factor assumptions used. These surplus or shortfall revenues must be allocated to other customers, and in my analysis, I allocate the surplus or shortfall revenues in proportion to revenues.

Q. WHAT DO YOU RECOMMEND FOR OTHER SCHEDULES?

A. Rather than a gradualism adjustment, per se, I recommend the Commission apply a cap to highly impacted rate schedules. This recommendation is similar to the recommendation of FEA witness Collins, with a few exceptions.[11] Given the magnitude of the increase sought, I support FEA's recommendation for a cap at 1.5 times the average rate increase. In my

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9 *See* Nucor Exh. 3.1, Nucor Proposed Rate Spreads Using Nucor and Dominion Cost of Service Studies.

10 *See* DEU Exh. 4.21R, Tab "Rev Neutral".

11 FEA Exh. 2.0 at 30:7-31:2.

analysis, however, I used a floor to recover the shortfall revenues, rather than a proportional allocation.

Q. WHAT IS THE SPREAD RESULTING FROM YOUR RECOMMENDATION?

A. The calculation of my recommended rate spread may be found in **Nucor Exhibit 3.1**. **Table 1-SR** below details the results of my recommendation, based on my cost of service study.

Table 1-SR
Nucor Proposed Revenue Spread
Rate Increase %, Using Nucor Cost of Service Study[12]

GS	15.53%
FS	23.30%
IS	13.54%
TS	13.54%
TBF	23.30%
NGV	23.30%
Total	**15.53%**

The Commission may adopt this approach using whatever cost of service and class structure it finds reasonable. For example, in **Table 2-SR**, I have modified this approach to be based on Dominion's cost of service study assumptions.

[12] Nucor Exh. 3.1.

Table 2-SR
Nucor Proposed Revenue Spread
Rate Increase %, Using Dominion Cost of Service Study[13]

GS	15.53%
FS	23.30%
IS	9.09%
TSS	9.09%
TSM	12.33%
TSL	23.30%
TBF	23.30%
NGV	12.62%
Total	**15.53%**

III. TS CLASS DEFINITION AND RATE DESIGN

Q. HOW DID DOMINION RESPOND TO YOUR RECOMMENDATION TO RETAIN A SINGLE TS RATE CLASS?

A. Dominion states that "splitting these customers into three classes and performing the Company's CCOS studies shows that there are intra-class subsidies in the existing TS class."[14] The Phase II Rebuttal Testimony of ANGC and DPU also make similar statements supporting their recommendation to split the TS class.[15]

Q. DO YOU AGREE THAT THERE IS AN INTRA-CLASS SUBSIDY?

A. No. The extent of an intra-class subsidy depends on one's perspective on the cost study. My study, for example, shows that there were no material intra-class subsidies between the three subsets of customers in the TS class, and if a subsidy were to exist, it was to the benefit of medium sized TS customers. Given the reliability of the various cost studies at

[13] Nucor Exh. 3.2.

[14] DEU Exh. 4.0R at 23:445-452.

[15] ANGC Exh. 2R at 27:578-29:638; DPU Exh. 4.0R at 1:22-4:97.

issue, they are not a valid starting point to begin making wholesale changes to the TS class definition, which has been in place over many years.

Q. ARE ALL INTRA-CLASS SUBSIDIES TO BE AVOIDED?

A. Not necessarily. Every rate spread and rate design will produce some level of subsidy, depending on one's perspective. In fact, the cost of service study in this case contains explicit subsidies for the transportation bypass customers, as well as the Lakeside special contract. As another example, the GS class has been known for many years to have an intra-class subsidy benefitting small, low load factor customers at the expense of commercial customers.[16] There are also many cases in which intra-class subsidies are necessary to achieve other rate making objectives, such as sending appropriate price signals, addressing practicality concerns, and promoting conservation. Dominion and the other parties proposing the TS class split have focused solely on their cost studies and have ignored any other relevant factors.

Q. WHY HAVE DOMINION'S RATE SCHEDULES BEEN DESIGNED THE WAY THEY HAVE?

A. The current structure of Dominion's rate classes has been in place for an extended time. In Docket No. 02-057-02, Questar's 2002 GRC, parties stipulated to the creation of a task force to consider, among other things "[t]ransportation rate design, including transportation service for smaller customers."[17] This, however, was not the only change under

[16] In the Matter of the Application to Increase Distribution Non-Gas Rates and Charges and Make Tariff Modifications, Docket No. 07-057-13 ("2008 GRC"), QGC Exh. 7.0U at 18:464-21:544.

[17] In the Matter of the Application of Questar Gas Company for a General Increase in Rates and Charges, Docket No. 02-057-02, Report and Order at 43 (Dec. 30, 2002).

consideration. Another primary consideration in that docket was the "[p]ossible separation of the current GS-1 residential and commercial customer class into separate classes."[18]

Q. DID THE 2002 TASK FORCE REACH AN AGREEMENT?

A. No. There was no agreement reached in the taskforce created after the 2002 GRC.[19]

Q. HOW WAS RATE SPREAD RESOLVED AFTER THE 2002 GRC TASK FORCE?

A. In the next full general rate case, Docket No. 07-057-13, Questar and other Parties proposed several changes to Questar's rate structure.[20] With respect to the TS rate design at issue in this proceeding, the DPU proposed adopting a single volumetric rate for the TS class, rather than the descending block rates that continue to be in effect today.[21] Arguably, the most significant and controversial change, however, was Questar's proposal to split the GS class into residential and commercial customer classes. It was noted that the "GS-1 rate design has included an intra-class subsidy from larger customers to smaller customers."[22] Notwithstanding concerns of a potential intra-class subsidy, however, the Commission declined to adopt DPU's recommendation for a single volumetric rate, citing Dominion's testimony supporting descending block rates.[23] The Commission also declined to split the GS class into residential and commercial classes in the 2007 GRC, citing fairness concerns.[24] There was no need for a gradualism adjustment or a phase-in in that case.

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18 *Id.* at 42.

19 Docket No. 02-057-02, QGC COS & Rate Design Task Force Report (June 17, 2004).

20 Docket No. 07-057-13, QGC Exh. 7.0U at 7:181-16:378.

21 Docket No. 07-057-13, DPU Exh. 7.0, Direct Testimony of Glen Gregory at 24:444-26:481.

22 Docket No. 07-057-13, QGC Exh. 7.0U at 21:540-541.

23 Docket No. 07-057-13, Report and Order on Cost of Service and Rate Design at 54-57 (Dec. 22, 2008).

24 *Id.* at 6-7.

Q. DOES THE ESTABLISHED TS CLASS COMPOSITION AND RATE STRUCTURE CONTINUE TO BE REASONABLE?

A. Yes. It is not unexpected that splitting the TS class, with its descending block rates, will produce dramatic impacts on large volume customers relative to a peak and average cost of service study. The established rate structure continues to be reasonable, however, considering the overall class structure that the Commission has designed. In this respect, I agree with UAE witness Higgins that it is problematic to consider restructuring the TS class in isolation, without considering an overhaul of the established cost allocation approach for all schedules.[25]

For example, absent a corresponding change to split the GS class into residential and commercial classes, splitting the TS rate class will likely produce an artificial price signal for GS customers to migrate to transportation service. Questar found in the 2007 GRC that the current structure of the GS rate class provides a subsidy from the large commercial customers to smaller customers in that class.[26] Given the GS schedule volumetric rate design, I don't expect that to have changed. If paying more than cost on the GS schedule, commercial customers in the GS class will otherwise be provided with an inappropriate price signal to transition to TSS rates, irrespective of underlying gas costs.

Q. IS DOMINION ALSO PROPOSING DRAMATIC RATE DESIGN CHANGES TO THE TS CLASS, IN THE EVENT IT IS NOT SPLIT?

A. Yes. In my Phase II Direct Testimony, I noted concerns with the large impacts from Dominion's proposed rate design assuming no split of the TS class. Dominion continued to propose splitting the TS class, and therefore, did not respond to these rate design

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25 UAE Exh. COS 2.0 at 21:395-396.

26 Docket No. 07-057-13, DEU Exh. 7.0 at 21:540-541.

concerns. Under Dominion's TS rate design proposal, the third and fourth volumetric block rates would increase by 80.6% and 217.8%, respectively.[27] By way of illustration, a large customer with a 5,000 dth/day of demand and a 100% load factor would see a 94.9% rate increase under this proposed rate design.[28] Passing on exceptional increases to a small group of customers is unreasonable in this case, regardless of whether it is done through the class definition or rate design. It is also unjustified based on the cost study I performed, as well as the many other factors the Commission considers when evaluating rate design. Therefore, I continue to recommend that the Commission adopt the rate design identified in my Phase II Direct Testimony. Specifically, I recommended that the deficiency allocated to the TS rate schedule be recovered through equal percentage increases to volumetric rates and the demand charge.

Q. IS IT REASONABLE TO GO FROM ONE TO THREE SCHEDULES IN A SINGLE CASE?

A. No. ANGC takes issue with UAE witness Higgins' recommendation for "consolidation of the TSM and TSL" rate class.[29] This may have been an error, as my understanding was that witness Higgins recommendation was to "maintain[] a single class for small and medium TS customers or overhaul[] DEU's cost allocation approach."[30] In either case, I agree that going from one to three schedules in a single rate case is problematic. If making major changes to the rate structure, moving from one to two TS classes would be a more gradual approach than moving from one to three TS classes, although to be clear I do not

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27 *See* Nucor Exh. 3.1 Tab "Dominion TS RS Illustration."

28 *Id.*

29 *See* ANGC Exh. 2R at 30:643-644.

30 *See* UAE Exh. COS 2.0 at 21:395-396.

believe that any split is necessary. I disagree, however, with UAE's recommendation to consolidate the proposed TSS and TSM rate schedules. The more reasonable step would be to construct the classes more the way ANGC described it, consolidating the proposed TSM and TSL classes. Other than their size, the characteristics of the proposed TSL and TSM customers are not materially different, and having a TSL class with just 29 customers is problematic for other reasons.[31]

IV. COST OF SERVICE STUDY ASSUMPTIONS

Q. HAVE YOU PREPARED AN UPDATED COST OF SERVICE STUDY?

A. Yes. In **Nucor Exhibit 3.2**, I provide an updated cost of service study based on Dominion's Rebuttal Testimony with the assumptions discussed below.

a. Core Distribution Mains

Q. HOW DID DOMINION RESPOND TO YOUR RECOMMENDATION TO USE DESIGN DAY DEMAND TO ALLOCATE CORE DISTRIBUTION MAINS?

A. Dominion witness Summers continues to recommend using the peak and average method for allocated core distribution mains, including the associated pressure, measuring and regulating stations.[32] Dominion opposed my recommendation, as well as that of FEA witness Collins, to allocate core distribution mains based on design-day demand.[33] In response, Dominion stated that "allocating costs 100% on demand ignores the fact that the high load factor customers are indeed using the system."[34]

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31 Nucor Exh. 1.0 at 9:159-167.

32 DEU Exh. 4.0R at 9:180-188.

33 *Id.* at 6:136-141.

34 *Id.* at 6:139-140.

Q. DOES A DEMAND ALLOCATOR IGNORE THE FACT THAT HIGH LOAD FACTOR CUSTOMERS ARE USING THE SYSTEM?

A. No. It is not disputed that high load factor customers use the distribution system. My testimony, however, was that the cost associated with that use is most accurately measured using the design day demand allocator, not whether high-load factor customers are using the system. For the reasons discussed in my Phase II Direct Testimony, design-day demand fairly represents usage because it represents the maximum amount of firm demand that a customer or group of customers may use before requiring system interruption.[35] Since it is the maximum capability, it fairly represents usage in every hour of the year, as well as system capability built for a particular customer class, which is not used in each hour.

Q. DO OTHER PARTIES AGREE WITH USING DESIGN DAY DEMAND TO ALLOCATE CORE DISTRIBUTION COSTS?

A. Yes. FEA witness Collins also continues to support allocating core distribution costs based on design day demand, stating the following:

> The DEU system is designed to meet Design Day Demand, and not average demand. As a result, the P&A method does not appropriately reflect class cost causation on the DEU system.[36]

Similarly, UAE witness Higgins found the approach to be reasonable stating, "Mr. Collins' and Mr. Mullins' proposals to allocate feeder-line system costs based on Design-Day demand have merit, . . . because these facilities were designed to meet demand on an extremely cold day."[37]

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35 Nucor Exh. 1.0 at 12:234-13:266.

36 FEA Exh. 4.0 at 3:11-13.

37 UAE Exh. COS 4.0 at 3:45-48.

Q. WILL YOUR RECOMMENDATION DISPROPORTIONATELY HARM RESIDENTIAL CUSTOMERS?

A. No. DPU witness Abdulle dismisses the recommendation to use design day because it would "disproportionately harm the low load factor customers."[38] Dominion also stated that this proposal would "place a lot of costs on residential customers and others with a low load factor."[39] I disagree. If a disproportionate impact on residential customers is a reason to adopt the DPU and Dominion cost of service assumptions, the disproportionate impact on large volume customers is also a reason to adopt the cost of service assumptions of Nucor and FEA. As noted previously, small changes to the GS class produce disproportionately large impacts to the other classes, which is why I proposed increasing the GS rates by the system average and adjusting the remaining schedules around the average.

Q. HOW DID ANGC RESPOND TO YOUR RECOMMENDATION?

A. ANGC witness Oliver takes issue with an illustration I provided in my Phase II Direct Testimony, where I stated "[i]f distribution capacity has been built to serve a particular customer, it is not equitable to provide the customer a discount if it uses that capacity less frequently."[40] ANGC objected to this, stating, "DEU's distribution capacity is **not** generally built to serve a particular customer."[41] That distinction, however, is wrong and irrelevant. ANGC is wrong because distribution capacity is in fact built in many cases, but not always, to serve a *particular customer*. As ANGC validly asserts, however, distribution

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38 DPU Exh. 4.0R at 8:183-193.

39 *Id.* at 6:141.

40 ANGC Exh. 2R at 14:290-292.

41 *Id.* at 14:292-293.

capacity is most often built for *groups of customers*. The referenced citation was just an illustration, and the conclusion does not change if one inserts the words "*particular group of customers"* in place of "*particular customer."* If distribution capacity has been built to serve a particular group of customers, it is not equitable to provide those customers a discount if they use that capacity less frequently.

Q. GIVEN THESE RESPONSES, WHAT DO YOU RECOMMEND?

A. I continue to recommend that the design-day demand be the allocation factor used for core distribution costs.

b. <u>Depreciation Expenses</u>

Q. WHAT WAS YOUR RECOMMENDATION REGARDING DEPRECIATION EXPENSES IN YOUR PHASE II DIRECT TESTIMONY?

A. I recommended that depreciation on distribution plant be allocated in a manner consistent with the underlying plant, rather than the gross plant allocation factor.[42] In my Phase II Rebuttal Testimony, I clarified that this approach could also be used for general plant, as OCS recommended.[43]

Q. HOW DID DOMINION RESPOND?

A. Dominion found my recommendation to be justifiable but stated "[t]he gross plant allocation factor has been consistently used as a reasonable allocation factor for distribution depreciation, is a reasonable allocation methodology, and does not need to be changed."[44]

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42 *See* Nucor Exh. 1.0 at 14:274-15:293.

43 Nucor Exh. 2.0 at 5:83-88.

44 DEU Exh. 4.0R at 16:283-288.

Q. DO YOU AGREE?

A. No. Regardless of how the underlying plant is allocated, it is necessary for there to be consistency between the allocation of the plant and the allocation of the corresponding depreciation expenses. Otherwise, some customers will be required to provide cost recovery on investments for which they have no cost responsibility under the cost of service study. Different FERC accounts depreciate at different rates, so using the gross plant factor does not necessarily result in an allocation of depreciation expenses that is consistent with how the underlying plant is being allocated. **Nucor Exhibit 3.2** includes an updated tab allocating depreciation expenses for both distribution and general plant by FERC account.

Q. DOES THIS CONCLUDE YOUR PHASE II SURREBUTTAL TESTIMONY?

A. Yes.