BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF ENBRIDGE GAS UTAH TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS	)	Docket No. 25-057-06

PHASE II REBUTTAL TESTIMONY OF LANCE D. KAUFMAN, PH.D.

ON BEHALF OF

NUCOR STEEL-UTAH, A DIVISION OF NUCOR CORPORATION

October 16, 2025

Nucor Exhibit 2.0

TABLE OF CONTENTS TO THE
PHASE II REBUTTAL TESTIMONY OF LANCE D. KAUFMAN, PH.D.

EXHIBIT LIST

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Lance D. Kaufman, Ph.D., and my business address is 2623 NW Bluebell Place, Corvallis, Oregon 97330.

Q. PLEASE STATE YOUR OCCUPATION AND ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am the owner and principal economist of Western Economics, LLC. I provide economic and statistical consulting in utility proceedings and civil litigation. I am appearing in this matter on behalf of Nucor Steel-Utah, a Division of Nucor Corporation ("Nucor"), a transportation service customer of Enbridge Gas Utah ("Enbridge").

Q. ARE YOU THE SAME LANCE D. KAUFMAN, PH.D. WHO PREFILED PHASE II DIRECT TESTIMONY ON BEHALF OF NUCOR IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR PHASE II REBUTTAL TESTIMONY?

A. My testimony responds to several class cost of service study, cost allocation, and rate design issues raised by the Utah Association of Energy Users ("UAE"), the Federal Executive Agencies ("FEA"), and the American Natural Gas Council ("ANGC"). In response, I also update my proposed rate design for the Transportation Service Large ("TSL") rate class.

Q. PLEASE SUMMARIZE YOUR PRINCIPAL RECOMMENDATIONS AND CONCLUSIONS ON REBUTTAL.

A. In my rebuttal testimony, I make the following recommendations:

1) **Class Cost of Service Study**. I continue to recommend that the Commission modify Enbridge's as-filed class cost of service study to use winter throughput, defined as throughput in November, December, January, February, and March, for the 40 percent throughput component of the F230 allocation factor applied to feeder mains, compressor stations, and measuring and regulating stations. However, the proposals of UAE witness Courtney Higgins to adopt a peak-and-average allocation method utilizing

Enbridge's actual load factor (using a 66 percent demand/34 percent throughput) and the proposal of FEA witness Matthew Smith to adopt an Excess Design-Day Demand allocation method are other valid proposals as a step using gradualism toward allocating these costs as they are incurred, based on Design Day Demand.

2) Rate Design

a) I recommend the Commission adopt ANGC witness Bruce Oliver's proposal to set the Basic Service Fee equal to cost.

b) I recommend the Commission reject ANGC witness Bruce Oliver's proposal to set Transportation Service demand charges further below the cost of service and instead increase the demand charge equal to cost as indicated in Enbridge's as-filed cost of service study.

c) I recommend the Commission reject proposals to align Transportation Service with Firm Sales Service which would take Transportation Service further away from cost of service.

II. COST OF SERVICE STUDY

Q. HOW DO FEA AND UAE PROPOSE TO ALLOCATE FEEDER MAINS IN THE COST OF SERVICE STUDY?

A. FEA witness Smith recommends allocating the costs of large-diameter IHP mains, high-pressure feeder mains, compressor stations, and measuring and regulating stations using an Excess Design-Day Demand plus throughput allocator, rather than Enbridge's Peak and Average (P&A) method.[1] FEA argues that feeder and related facilities are sized to meet Design Day peaks, and that throughput-based allocation unfairly penalizes high load factor customers who use capacity efficiently.[2]

UAE witness Higgins similarly recommends that weight placed on throughput when allocating feeder mains be reduced. UAE proposes basing the throughput weighting of the feeder main allocation on the system load factor of 34 percent rather than 40 percent.[3]

[1] FEA Exhibit 2.0 at 3:36-42.

[2] *Id.* at 12.

[3] UAE Exhibit 2.0 at 18.

Q. DO THE TESTIMONIES OF FEA AND UAE AGREE ON THE ROLE OF DESIGN DAY DEMAND IN ALLOCATING PLANT IN THE COST OF SERVICE?

A. Yes. While none of these consumers propose a Design Day Demand allocation method for use in this proceeding, FEA and UAE concur that Design Day Demand is the proper cost driver for demand-related facilities, including feeder mains, compressors, measuring, and regulating stations.[4]

Q. DOES NUCOR PROPOSE TRANSITIONING TO A FULL DESIGN DAY DEMAND ALLOCATION METHOD IN THIS PROCEEDING?

A. Nucor supports moving toward the full Design Day Demand allocation method, but advocates for gradualism in this proceeding via a moderate transition. Specifically, in my Direct Testimony in this proceeding, I propose to retain the current 60/40 structure but replace the 40% annual throughput component with Winter Throughput.[5] This approach reduces distortions from annual throughput averages while avoiding immediate abrupt changes that may result from a shift to the cost-based Design Day Demand approach.[6]

Q. ARE FEA AND UAE'S PROPOSALS ACCEPTABLE ALTERNATIVES TO NUCOR'S PROPOSED PEAK AND WINTER THROUGHPUT APPROACH?

A. Yes. While Nucor's Winter Throughput adjustment represents the preferred path for a gradual transition, the Commission may view FEA's Excess Design-Day approach or UAE's shift in the weighting of annual throughput and design day amounts for Allocation Factor 230 and the addition of a Distribution Design-Day component for large-diameter IHP mains as acceptable alternatives. Both proposals are consistent with the principle that peak demand, not throughput, drives the sizing of feeder mains and related facilities. Thus,

[4] *See* FEA Exhibit 2.0 at 12:218-13:248; UAE Exhibit 2.0 at 7:87-104.

[5] *See* Nucor Exhibit 1.0 at 3:53-58.

[6] *Id.*

both better reflect cost causation than the P&A allocation method as filed by Enbridge in this proceeding.

III. RATE DESIGN

A. Basic Service Fees

Q. WHAT ARE ANGC'S POSITIONS ON BASIC SERVICE FEES?

A. ANGC witness Oliver notes that the basic service fees are substantially below cost and recommends the Commission reject Enbridge's as filed proposed basic service fees.[7]

Q. DOES NUCOR SUPPORT AN ALTERNATE BASIC SERVICE FEE CHARGE?

A. Yes, Nucor agrees that the service fee should be cost based, and supports the monthly charge indicated on line 17 of EGU Exhibit 5.08 for TSL customers, which is included here in Table 1.

Table 1: EGU Exhibit 5.08 Cost Based Monthly Basic Service Fee

Meter Category	Monthly Charge
BSF #1	$7.50
BSF #2	$24.00
BSF #3	$126.00
BSF #4	$1,000.00

Q. HOW DOES UPDATING THE BASIC SERVICE FEES TO COST AFFECT YOUR PHASE II DIRECT TESTIMONY?

A. Increasing the basic service fees reduces the revenue necessary to recover through volumetric rates. Table 3 below updates Nucor's proposed rate design to accommodate ANGC's proposed treatment of the basic service fee as well as increase the proposed demand charge as discussed further herein.[8]

[7] ANGC Exhibit 1.0 at 37.

[8] Please note that Nucor's proposed rate design utilizes EGU's as-filed revenue requirement because no updated model was provided as part of the Phase I Settlement and Stipulation.

B. Transportation Service Demand Charge

Q. WHAT IS ANGC'S POSITION ON THE TSL DEMAND CHARGE?

A. ANGC states that the Company's proposed demand charge, where applicable, is set above cost in Enbridge's as-filed cost of service study.[9] This assertion appears to flow from ANGC witness Oliver's finding that basic service charges are too low, although ANGC witness Oliver does not appear to provide additional evidence to support this assertion.

Q. WHAT ARE TSL DEMAND COSTS ACCORDING TO ENBRIDGE'S COST OF SERVICE STUDY MODEL?

A. Under Enbridge's cost of service study model, TSL demand costs could properly be set at $105.29 per therm-year, or $8.77 per therm-month, of contract demand. This amount can be calculated as the difference between the TSL revenue requirement as filed in Enbridge Exhibit 5.14, and the results of said exhibit when one therm of contract demand is added to the TSL class.[10]

Q. IS YOUR CALCULATION DIFFERENT FROM THAT PUT FORWARD BY ENBRIDGE?

A. Yes. Enbridge states that demand costs for the transportation class as a whole are $12,288,263, and that the cost per therm is calculated by dividing this cost by the total contract demand for the transportation class.[11] Under this approach, the demand cost is $4.69 per month.[12] Enbridge's approach to contract demand is problematic because it does not account for the impact of demand on the allocation of distribution plant. The table below illustrates how Enbridge calculated $12 million in demand costs for transportation

[9] ANGC Exhibit 1.0 at 39:841-844.

[10] *See* Nucor Workpaper 3, EGU Exhibit 5.14 – Electronic Model Incremental TSL Demand.

[11] Enbridge Exhibit 5.14, tab "Sum-Win & Demand Charge", cell D18.

[12] *Id.* at cell D22.

schedules. Note that the column "Distribution Plant" is by far the largest category of cost. Much of these costs are demand-driven, even under Enbridge's method of ascribing 40 percent of feeder costs to throughput.

Table 2: Enbridge Distribution Plant is not Properly Classified[13]

	Customer	Distribution Plant	Throughput	Demand	Total
TSS	2,461,379	8,608,364	3,454,817	4,225,156	18,749,716
TSM	2,124,403	11,335,570	5,960,309	3,856,793	23,277,074
TSL	2,283,813	11,898,167	9,295,143	4,206,314	27,683,437
Total	**6,869,595**	**31,842,102**	**18,710,269**	**12,288,263**	**69,710,228**

Q. IS ENBRIDGE'S PROPOSED DEMAND CHARGE OF $4.69/CONTRACT THERM-MONTH SET ABOVE COST?

A. No. This rate only reflects a portion of the demand costs. Under Enbridge's as filed cost of service study, the demand charge should be set at $8.77 per therm-month. However, as noted above, Nucor, FEA, and UAE all agree that Enbridge's cost of service study model places too much weight on throughput. When demand is given greater weight in cost allocations, the TSL demand costs are found to be higher than Enbridge's proposed demand charge. In fact, it is cost justified to increase the demand charge substantially.

Q. WHAT ARE TSL DEMAND COSTS UNDER A COST OF SERVICE STUDY MODEL THAT ASSIGNS FEEDER MAINS, COMPRESSOR STATIONS, AND MEASURING AND REGULATING STATIONS BASED ON 100 PERCENT DESIGN DAY DEMAND?

A. Under a 100 percent Design Day Demand cost allocation model, demand costs are $175 per therm-year or $14.58 per therm-month of contract demand.[14] As discussed above and in my Direct Testimony, Design Day Demand is how Enbridge plans and builds its

[13] *Id.*, tab "Classification."

[14] This is calculated by modifying Enbridge Exhibit 5.14, tab "COS Input", cell M9, to 100%, then calculating the incremental revenue requirement assigned to TSL when contract demand is increased by 1 therm.

distribution system; thus, it is logically consistent to set demand charges consistent with that method.

Q. DOES NUCOR RECOMMEND A HIGHER DEMAND CHARGE?

A. Yes, upon further review, I recommend that the demand charge increase to $8.77/therm-month, as this charge represents a middle ground between the current and actual demand costs, and is consistent with Enbridge's as filed cost of service study model.

Q. IF THE COMMISSION APPROVES A LOWER REVENUE REQUIREMENT, DO YOU SUPPORT REDUCING THE DEMAND CHARGE?

A. No, a reduction to the demand charge is not warranted even at the revenue requirement included in the Phase I Stipulation, $604 million. To demonstrate this, I tested the incremental revenue requirement for TSL customers from an incremental therm of contract demand under UAE's Phase II Direct Testimony cost model, which includes a total revenue requirement of $602.5 million. Under UAE's Phase II Direct Testimony model, an incremental unit of contract demand from TSL customers increases costs by $8.88 per month, indicating that a Demand Charge of $8.88 per therm per month could be justified.[15]

Q. HOW DOES INCREASING THE TSL DEMAND CHARGE AFFECT YOUR PROPOSED RATE DESIGN?

A. Increasing the TSL demand charge decreases the revenue necessary to collect through volumetric charges. I continue to support my Phase II Direct Testimony proposal for revised block volumes and a 30 percent price discount at each block. Table 3 below illustrates how rates would be calculated under Enbridge's as-filed revenue requirement. I have not made calculations under the settled revenue requirement because the stipulation does not specify how the agreed revenue requirement is functionalized.

[15] UAE Attachment A Direct RR & COS Model.

Table 3: Nucor Rate Design Under As Filed Revenue Requirement, Nucor Cost of Service Model, ANGC Basic Service Fee Charge, and Nucor Demand Charge

Utah TSL			Forecasted Revenues at Current Rates Tariff Effective 02/01/25					Revenue Requirement			
Volumetric Rates			**Dth**	**Dth**	**Curr. Rate**	**Revenues**		**Dth**	**Dth**	**Prop. Rate**	**Revenues**
	Block 1	First	10,000	4,134,650	$0.68034	$2,812,968	First	20,000	8,053,424	$0.73134	$5,889,791
	Block 2	Next	112,500	18,952,256	$0.64600	$12,243,157	Next	20,000	5,819,428	$0.51194	$2,979,186
	Block 3	Next	477,500	4,591,808	$0.49318	$2,264,588	Next	40,000	5,633,761	$0.35836	$2,018,895
	Block 4	Over	600,000	0	$0.21061	$0	Over	80,000	8,172,101	$0.25085	$2,049,968
Total Volumetric Charges				27,678,714		$17,320,713			27,678,714		$12,937,928
Fixed Charges				**Meter Count**	**Curr. Rate**	**Revenues**			**Meter Count**	**Prop. Rate**	**Revenues**
Administrative Fee		Primary		348	$200.00	$69,600	Primary		348	$250.00	$87,000
		Secondary		84	$100.00	$8,400	Secondary		84	$125.00	$10,500
				432		$78,000			432		$97,500
BSF	BSF #1			0	$6.75	$0			0	$7.50	$0
	BSF #2			12	$18.25	$219			12	$24.00	$288
	BSF #3			36	$63.50	$2,286			36	$126.00	$4,536
	BSF #4			432	$420.25	$181,548			432	$1,000.00	$432,000
				480		$184,053			480		$436,824
	Low Pressure Surcharge								120	$7,407.08	$888,850
Annual Demand Charges per Dth of				**Contract Dth**	**Rate**	**Revenues**			**Contract Dth**	**Rate**	**Revenues**
Contract Firm Transportation				891,132	$3.37	$2,999,367			891,132	$8.77	$7,815,228
Total Fixed Charges						$3,261,420					$9,238,401
Utah TSL Total						$20,582,133					$22,176,330
Utah MT Total				0		$0			0		$0
TSL Total Revenue Collection						$20,582,133					$22,176,330
Lakeside Revenue Allocation						$192,986					$192,986
Utah TSL TOTAL						$20,775,119					$22,369,315

C. Alignment of Transportation and Firm Sales Service Rate Design

Q. WHAT IS ANGC'S POSITION REGARDING THE ALIGNMENT OF TRANSPORTATION AND FIRM SALES CUSTOMER RATE DESIGNS?

A. ANGC witness Oliver argues that there are unjust differences between the rate design for Firm Sales service and Transportation service such that smaller transportation customers must reach a higher annual throughput to "break even" compared to Firm Sales service due to the Administrative Charge and Demand Charge.[16]

[16] ANGC Exhibit 1.0 at 67-68.

Q. DO YOU AGREE WITH THE IMPLIED GOAL OF ALIGNING RATE DESIGN ACROSS CLASSES?

A. No. I agree that the rate design of the two classes is not parallel, and I agree that rates should be cost based; however, I do not agree that the design of one class of customers should drive the design of a different class of customers. At a minimum, the goal of designing parallel rates across customer classes should not be used to justify moving TSL rates away from cost. From an efficiency perspective, any movement regarding rate design should move classes' rates *closer to*, rather than *further from*, cost causation.

For example, introducing a demand charge for GS and FS customers is reasonable because it will cause these customer classes to internalize the high demand costs they place on the system and over time this will help to slow the growth of Enbridge's Design Day peak demand, benefiting all customers. However, moving to a 100 percent Design Day Demand cost allocation for feeder mid-mains in the class cost of service study would also cause these customers to internalize more of the design costs that they cause. To the extent that the Commission prefers to move towards more efficient rates, the Commission should first address the allocation of feeder mains, compressor stations, and measuring and regulating stations, as this would have a more immediate impact on fairness and efficiency.

Q. DOES THIS CONCLUDE YOUR PHASE II REBUTTAL TESTIMONY?

A. Yes.