

[EXTERNAL] Case No. 24-00266-UT- 2025-05-16- Rebuttal Testimony of Christopher A. Erickson

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IN THE MATTER OF THE JOINT APPLICATION)	
FOR APPROVAL TO ACQUIRE)	
NEW MEXICO GAS COMPANY, INC.)	
BY SATURN UTILITIES HOLDCO, LLC.)	Docket No. 24-00266-UT
)	
JOINT APPLICANTS)	
)	

Attached for filing today, May 16, 2025, is the attached Rebuttal Testimony of Christopher A. Erickson in the above referenced case.

If you have any questions regarding this filing, please contact Anita Hart at 505-697-3838 anita.hart@nmgco.com or Brian Buffington at 505-697-3879 brian.buffington@nmgco.com.

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IN THE MATTER OF THE JOINT)
APPLICATION FOR APPROVAL TO)
ACQUIRE NEW MEXICO GAS COMPANY,)
INC. BY SATURN UTILITIES HOLDCO, LLC.) Case No. 24-00266-UT
)
JOINT APPLICANTS)
)

REBUTTAL TESTIMONY AND EXHIBITS OF DR. CHRISTOPHER A. ERICKSON

NMPRC CASE NO. 24-00266-UT INDEX TO THE REBUTTAL TESTIMONY OF DR. CHRISTOPHER A. ERICKSON

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JA EXHIBIT CAE-1 (Rebuttal) May 2025 Addendum to October 2024 Analysis
AFFIRMATION

1		I. <u>INTRODUCTION AND PURPOSE</u>
2	Q.	PLEASE STATE YOUR NAME AND A BRIEF HISTORY OF YOUR ACADEMIC
3		QUALIFICATIONS.
4	A.	My name is Christopher A. Erickson. I am the Garrey E. and Katherine T. Carruthers Chair
5		for Economic Development at New Mexico State University (NMSU). I have researched
6		the New Mexico economy for more than 35 years, including having authored or co-
7		authored more than 35 economic studies for clients mostly located in New Mexico.
8		
9	Q.	HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS CASE?
10	A.	Yes. I submitted Direct Testimony in this case on behalf of the Joint Applicants on October
11		28, 2025.
12		
13	Q.	IN WHAT CAPACITY DO YOU APPEAR HERE?
14	A.	I appear here in my capacity as a private consultant. The opinions I express are my own
15		and do not necessarily reflect the views of the NMSU administration or Board of Regents.
16		
17	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?
18	A.	The purpose is to provide a summary and rebut the direct testimonies of Dwight D.
19		Etheridge, Naomi A. Velasquez, Mark Garrett and Dr. Larry Blank concerning my October
20		2024 Economic Impact Analysis (October 2024 Analysis) filed in this proceeding. I also
21		present an Addendum to my October 2024 Analysis (2025 Addendum) attached to this

Rebuttal Testimony as JA Exhibit CAE-1 (Rebuttal), which analyzes the economic impacts of: (1) a third scenario where 20 jobs are relocated to New Mexico; (2) a \$15 million rate credit is provided to NMGC customers over 12 months; and (3) an additional \$5 million in targeted economic development investments to be made by New Mexico Gas Company (NMGC). The 2025 Addendum is based on the foregoing additional benefits that the Joint Applicants are presenting in their rebuttal testimony.

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II. RESPONSE TO THE DIRECT TESTIMONY OF DWIGHT D. ETHERIDGE

- Q. MR. ETHERIDGE STATES THAT HE WAS ABLE TO INDEPENDENTLY REPLICATE YOUR IMPLAN MODELING RESULTS WITH ONLY MINOR DIFFERENCES. WHAT IS THE IMPORTANCE OF THIS?
- 12 Mr. Etheridge's independent replication of our IMPLAN-based economic output estimates Α. 13 affirms the technical validity of the modeling conducted by my team. His confirmation that the methodology, assumptions, and resulting projection—specifically, the estimate of 14 approximately \$40.2 million in annual economic output—are consistent with his own 15 16 analysis is significant. In regulatory proceedings, it is uncommon for parties representing different interests to independently reach such close alignment in quantitative modeling. 17 This concurrence indicates that the projected benefits to New Mexico are not the result of 18 19 modeling error or bias, but rather reflect a sound and defensible application of standard 20 input-output techniques.

21

1 III. RESPONSE TO THE DIRECT TESTIMONY OF DR. LARRY BLANK

2 Q. BRIEFLY SUMMARIZE DR. BLANK'S ASSESSMENT OF YOUR STUDY.

Several issues are raised in Dr. Blank's assessment of my October 2024 Analysis, including: (1) the magnitude of the economic impact to New Mexico, which he believes is high, and he believes the value added figure in my analysis represents double counting; (2) the implied multiplier, calculated as a function of direct labor income to total value added impacts and direct labor income to total economic output, which Dr. Blank believes is too high and offers long-term economic figures for New Mexico to support this argument; (3) Dr. Blank's claims that there will be no profits associated with returning shared services jobs, and no additional property tax, gross receipts tax, or income taxes; (4) Dr. Blank's belief that there will be increased costs associated with returning shared services to New Mexico that should be factored into our analysis to offset the economic impacts of the returning jobs; and (5) Dr. Blank's belief that economic development contributions do not create any direct benefit for NMGC customers, and he believes my impact analysis should have considered the economic impacts of prior economic development grants offered by NMGC.

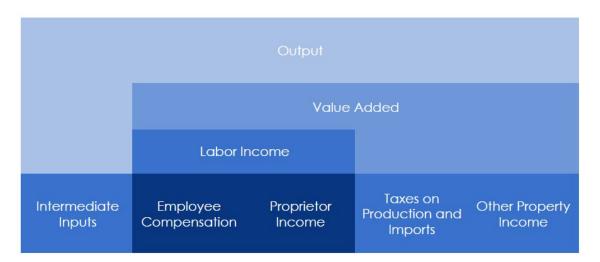
Α.

Q. DO YOU AGREE WITH DR. BLANK'S ASSESSMENT THAT THE MAGNITUDE OF THE ECONOMIC IMPACT IS TOO HIGH?

A. No, because of several inaccuracies in his arguments supporting this opinion, specifically regarding value added, the implied multiplier, and tax generation.

Regarding value added, labor income is a subcomponent of value added, which is explicitly taken into account in calculating economic impacts. We did not double count. The relationship between labor income and value added is given in JA Exhibit CAE-1, CAE Figure 1, page 5 attached to my Direct Testimony. The same diagram also illustrates how value added and output are calculated. From CAE Figure 1, it is clear that value added is calculated by adding labor income, taxes on production and imports, and other property income.

Figure 1: "Components of Economic Output" JA Exhibit CAE-1



CAE Figure 1 is essentially the same as the figure included on page 15 of Dr. Blank's testimony, which he obtained from IMPLAN (https://support.implan.com/hc/enus/articles/360017144753-Understanding-Value-Added-VA). This diagram illustrates how IMPLAN calculates value added. We used the IMPLAN software to create our model.

The results we show are precisely the output from IMPLAN. Moreover, our estimates are free of technical errors, as was demonstrated by Mr. Etheridge, meaning that the numbers reported are in fact the output from IMPLAN. Dr. Blank simply misunderstood what we did.

A.

Q. DO YOU AGREE WITH DR. BLANK'S ASSESSMENT THAT THE IMPLIED

MULTIPLIERS ARE TOO HIGH?

Regarding the multiplier, it is atypical to calculate multipliers across impact variables (Jobs, Labor Income, Value Added, Output). The two most common multipliers used in the literature are the Type I and Type SAM multipliers. Type I multipliers are calculated by the following formula: (Direct Effects + Indirect Effects) / Direct Effects. Type SAM multipliers are calculated by the following formula: (Direct Effects + Indirect Effects + Indirect Effects + Indirect Effects) / Direct Effects. Both of these multipliers would be calculated individually for the impact variable that generates the direct effect (Jobs, Labor Income, Value Added, Output). For example, the Type SAM multiplier for Total Output in Scenario 1 is 1.72 (= \$40,376,364/\$23,365,454). Since Labor Income is a subcomponent of Output, calculating the multiplier as Total Output / Direct Labor Income will produce a larger multiplier than Direct Output. Thus, the multipliers Dr. Blank reports seem large because of the atypical way they are calculated, compared to what is routinely reported using conventional methodology. See https://blog.implan.com/understanding-implan-multipliers.

1	Q.	DO YOU AGREE WITH DR. BLANK'S ASSESSMENT THAT THE RETURNING
2		BACK-OFFICE OPERATIONS WILL RESULT IN INCREASED COSTS THAT
3		MIGHT BE PASSED ON TO RATEPAYERS?
4	A.	Regarding cost differences resulting from back-office operations returning to New Mexico
5		and any resulting effects on rates, this was beyond the scope of my analysis, which focused
6		on the economic impact of jobs returning to New Mexico and economic development grant
7		programs.
8		
9	Q.	DO YOU AGREE WITH DR. BLANK'S ASSESSMENT THAT PROPRIETOR
10		INCOME AND OTHER PROPERTY INCOME WERE TREATED
11		INCORRECTLY?
12	Α.	Dr. Blank argues that the addition of employees at NMGC does not generate profit,
13		property income, or most types of tax revenue. Accordingly, he contends that IMPLAN
14		value-added components such as "proprietor income" and "other property income" are not
15		applicable in this context, and that the only relevant tax impacts are those associated with
16		employee compensation (e.g., payroll taxes).
17		
18		Dr. Blank is correct in noting that NMGC, as a corporation, does not generate proprietor
19		income directly. However, it is important to recognize that proprietor income can still arise
20		in the model through indirect and induced effects, as some of the affected entities may
21		include sole proprietorships.

1		To address Dr. Blank's concern, the model was re-estimated with proprietor income set to
2		zero. The change in estimated impacts was de minimis (less than 2%) and did not materially
3		affect our overall conclusions.
4		
5	Q.	DO YOU AGREE WITH DR. BLANK'S ASSESSMENT THAT THE PROPOSED
6		ECONOMIC DEVELOPMENT GRANT PROGRAMS WILL NOT BENEFIT
7		NMGC CUSTOMERS?
8	A.	I disagree with Dr. Blank's assessment. He asserts that economic development programs
9		do not create direct benefits for NMGC customers and suggests that prior programs should
10		be evaluated. In contrast, I maintain that economic development programs implemented
11		within NMGC's service territory clearly provide indirect benefits to customers by
12		supporting broader economic growth. In many cases, customers may also directly benefit,
13		particularly if they are employed by, own, or otherwise interact with businesses that receive
14		support from such programs.
15		
16		It is reasonable to compare the benefits of economic development programs to other
17		mechanisms, such as rate credits, to assess relative effectiveness and fairness. However,
18		dismissing economic development programs as offering no customer benefit overlooks
19		both economic theory and real-world outcomes.

20

It is true that economic development initiatives inherently involve some level of uncertainty and therefore cannot be evaluated with the same precision as direct spending, such as labor income generated by returning shared services, where financial flows are more predictable. Nonetheless, when well-designed and effectively administered, economic development programs can yield returns that are several multiples of the original grant amount. As shown in the analysis included in JA Exhibit CAE-1, we assumed a conservative job creation cost of \$10,000 per job, a benchmark commonly achieved by the New Mexico Economic Development Department. At that rate, a \$5 million grant program could support approximately 500 direct jobs—a number that is 15 times greater than the number of jobs supported through direct spending on grants alone. We chose not to conduct a detailed analysis of all past economic development programs funded by Emera because of the difficulty in tracking specific outcomes over time across diverse projects. However, anecdotal evidence from one of our team members (Dr. Winingham) illustrates the potential. The team member was involved in the administration of an NMGC-sponsored economic development grant sponsored by Emera. That grant achieved a cost per job created of just \$2,300, supporting 217 jobs—a level of performance that strongly supports the potential for substantial economic benefits.

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For comparison, if the same \$5 million were distributed as a rate credit, it would yield a one-time \$10 credit per customer payout for approximately 500,000 customers. While this would distribute benefits evenly and predictably—either on a per-customer or usageweighted basis—it lacks the potential economic multiplier effect offered by well-executed development grants. A \$10 credit increases disposable income, but it does not generate additional employment, business activity, or long-term economic growth. In short, economic development programs, when effectively implemented, can produce significantly greater long-term benefits for both the economy and NMGC customers than a flat rate credit. IV. RESPONSE TO THE DIRECT TESTIMONY OF MR. MARK GARRETT Q. BRIEFLY SUMMARIZE MR. GARRETT'S ASSESSMENT OF THE OCTOBER 2024 ANALYSIS. A. Mark Garrett criticizes the October 2024 Analysis on several grounds: (1) failure to include offsetting capital expenditure and training cost; (2) application of a 5.2x multiplier to labor income without accounting for corresponding economic outflows, inflating the net benefit; (3) the grant program analysis presents unverified and likely short-term job creation estimates from economic development grants.

1	Q.	DO YOU AGREE WITH MR. GARRETT'S ASSESSMENT THAT CAPITAL AND
2		TRAINING COSTS ARE OFFSETTING COSTS THAT NEED TO BE
3		SUBTRACTED FROM YOUR ECONOMIC IMPACT ANALYSIS?
4	A.	No. Our model includes an estimated capital consumption allowance and training costs,
5		based on industry averages for comparable operations and adjusted for local New Mexico
6		conditions. If actual capital or training costs exceed the average, this would not reduce
7		economic benefit but instead enhance it, as these expenditures represent new spending
8		within the state. Training also generates economic value in multiple ways: it supports
9		employment for trainers, whether internal staff or contracted specialists, and it increases
10		the skill levels and long-term productivity of the employees trained. If training services are
11		outsourced, the associated spending would be captured as Indirect Impacts in the IMPLAN
12		model. For these reasons, it is incorrect to characterize capital and training costs as offsets
13		to the economic benefits from the returning jobs.
14		
15	Q.	WHAT ARE YOUR CONCLUSIONS REGARDING GARRETT TABLE 2 ON
16		PAGE 42 OF HIS DIRECT TESTIMONY?
17	A.	I do not accept the premise that the "System Stand Up Rev. Req." should be treated entirely
18		as an offsetting expense, as our model includes a capital consumption allowance. However,
19		without conceding that point, I proceed with the analysis.
20		

1 To estimate economic impact using IMPLAN, the model requires a direct input value— 2 typically one of the following: Direct Employment, Direct Labor Income, or Direct Output. For example, in constructing Tables 6 and 7 in JA Exhibit CAE-1, we began with Direct 3 Labor Income. For those results, we used Direct Labor Income figures provided by 4 5 Bernhard Capital Management Partners, LP (BCP Managment), which yielded an implied 6 Total Output multiplier of 5.2. 7 8 In contrast, the values cited in Mr. Garrett's Table 2 for "System Stand Up Rev. Req." and 9 "New Owner Profits" represent Direct Output, not Direct Labor Costs. (The value of Direct 10 Output being imputed from Expenditures.) The appropriate multiplier for Direct Output is 11 1.7, not 5.2—less than one-third of the multiplier used by Mr. Garrett. When recalculated 12 using the correct multiplier, the estimated net economic benefit is approximately \$21.6 13 million. 14 15 Q. DO YOU AGREE WITH MR GARRETT'S ASSERTION THAT THE 16 RETURNING SHARED SERVICES WILL RESULT IN INCREASED RATES? Regarding any changes to NMGC rates, this is beyond the scope of my analysis, which 17 A. 18 focused on the economic impact of jobs returning to New Mexico and of economic 19 development grant programs.

20

1	Q.	WHAT IS MR. GARRETT'S ASSESSMENT OF PROPOSED \$5 MILLION
2		ECONOMIC DEVELOPMENT GRANT PROGRAM?
3	A.	Mr. Garrett agrees with Dr. Blank that the programs have little value. I have addressed this
4		argument in my response to Dr. Blank.
5		
6	V	. RESPONSE TO THE DIRECT TESTIMONY OF MS. NAOMI A. VELASQUEZ
7	Q.	MS. VELASQUEZ ASSERTS THAT THERE WILL THERE BE ADDITIONAL
8		COSTS SUCH AS EMPLOYEE BENEFITS, EQUIPMENT, HOUSING COSTS
9		AND SO ON ASSOCIATED WITH THE NEW JOBS. ARE THESE ACCOUNTED
10		FOR IN THE OCTOBER 2024 ANALYSIS?
11	A.	There will be additional costs and these costs are captured in the October 2024 Analysis
12		Costs associated with hiring labor, such as wages, pensions, health insurance, and other
13		benefits, are components of Employee Compensation and are included in Labor Income in
14		the October 2024 Analysis. Costs related to purchases from suppliers, such as
15		transportation, office supplies, and rent, are categorized as Indirect Effects by the model
16		Household spending—on items such as housing, groceries, and clothing—is captured as
17		part of Induced Effects in the model. This last category is not a cost to the Joint Applicants
18		but to the employee.
19		

1		VI. <u>2025 ADDENDUM</u>
2	Q.	PLEASE EXPLAIN THE PURPOSE OF THE 2025 ADDENDUM.
3	A.	The 2025 Addendum is a continuation of the October 2024 Analysis which analyzed the
4		economic benefits of the addition of between 51 and 61 new jobs and \$5 million in
5		economic development investments. The 2025 Addendum incorporates three subsequent
6		proposals addressed in the rebuttal testimony of the Joint Applicants. These three rebuttal
7		proposals are: (1) the introduction of a third employment scenario (Scenario 3) which
8		involves the addition of 20 new jobs in New Mexico; (2) a \$15 million rate credit to NMGC
9		customers; (3) a \$5 million investment in renewable energy initiatives.
10		
11	Q.	PLEASE COMPARE THE RESULTS OF THE 2025 ADDENDUM WITH THE
12		RESULTS OF THE OCTOBER 2024 ANALYSIS.
13	A.	A comparison of the results of the 2025 Addendum with the results of the October 2024
14		Analysis are presented in JA Table CAE-1 Rebuttal below.
15		

JA Table CAE-1 (Rebuttal)

Economic Impacts on New Mexico of BCP's Acquisition of NMGC

Impact	Scenario 1 High FTE	Scenario 2 Low FTE	Scenario 3 Partial Shared Services	\$5M Economic Development Grant ¹	\$15M Rate Credit	\$5M Renewable Energy
Direct Jobs	64	52	21	33	12	29
Total Jobs	162	150	44	54	81	43
Labor Income	\$13,191,679	\$13,111,862	\$3,601,651	\$3,739,897	\$3,614,682	\$2,610,546
Value-Added Production	\$22,694,302	\$22,522,394	\$5,969,461	\$4,907,739	\$7,840,798	\$4,786,870
Economic Output	\$40,376,364	\$40,048,926	\$9,698,587	\$8,609,323	\$12,749,344	\$8,201,029
Total Taxes	\$5,107,741	\$5,066,709	\$1,182,228	\$1,192,139	\$1,776,771	\$1,195,107
Local	\$611,524	\$605,196	\$103,484	\$101,958	\$250,170	\$166,631
State	\$1,623,242	\$1,607,087	\$294,040	\$274,034	\$673,911	\$403,008
Federal	\$2,872,975	\$2,854,427	\$784,704	\$816,147	\$852,690	\$625,468

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Q. PLEASE DESCRIBE SCENARIO 3 RELATING TO NEW JOBS IN NEW MEXICO.

A. BCP Management initially provided two alternative scenarios representing differing assumptions about the level of net new job creation in New Mexico: Scenario 1 – High FTE and Scenario 2 – Low FTE. These new jobs would result from the relocation to New Mexico of certain back-office shared services provided to NMGC by affiliates of Emera Inc. Under Scenario 3 – Partial Shared Services, it is assumed that only a portion of shared services jobs would be relocated to New Mexico, while the remainder would continue to

[.]

¹ Resulting impacts of the economic development grant and the programs the grant would support are not included, only grant expenditures. Resulting impacts of economic development grants can be significant, but can also vary greatly. For this reason they were excluded from our calculations. Broader estimates are included in the methodology section of the October 2024 Analysis for reference.

1		be provided by employees of a sister utility located outside the state. Specifically, Scenario
2		3 assumes that NMGC will add 20 new full time equivalent jobs in New Mexico.
3		
4	Q.	WHAT IS THE ESTIMATED ECONOMIC IMPACT FROM THE ADDITION OF
5		20 NEW FULL TIME JOBS IN NEW MEXICO UNDER SCENARIO 3?
6	A.	The estimated economic output under Scenario 3 is \$9,698,587 on an annual basis as long
7		as the new jobs are maintained. The estimated overall tax revenues from Scenario 3 are
8		\$1,182,228.
9		
10	Q.	DID YOU USE THE SAME METHODOLOGY IN ANALYZING SCENARIO 3
11		THAT YOU USED IN ANALYZING SCENARIOS 1 AND 2 IN THE OCTOBER
12		2024 ANALYSIS?
13	A.	Yes. The IMPLAN model was used in the analysis. For consistency and for comparison
14		purposes, the analysis for Scenario 3 used IMPLAN's 2022 data model year and 2024
15		dollars which were used in the October 2024 Analysis.
16		
17	Q.	PLEASE DESCRIBE THE ECONOMIC IMPACT FROM THE \$15 MILLION
18		CUSTOMER RATE CREDIT.
19	A.	The \$15 million rate credit results in a total economic output of \$12,749,344 based on a
20		per capita distribution among all of NMGC's customers. The per-customer rate credit
21		totals \$27.31.

I	Q.	DOES THE LOCATION OF THE NMGC CUSTOMER HAVE AN EFFECT ON
2		YOUR ANALYSIS?
3	A.	Yes. The county of residence, particularly for residential customers, will have an effect on
4		the results of the analysis. This is because households with different incomes have different
5		marginal propensities to consume. The higher the marginal propensity to consume, the
6		greater the economic impact. To account for this, we considered the number of NMGC
7		customers in specific New Mexico counties. Residential rate credits were distributed to
8		each county based on average household income ranges for the county.
9		
10	Q.	WAS THE IMPLAN MODEL USED TO ANALYZE THE ECONOMIC IMPACTS
11		FROM THE RATE CREDIT?
12	A.	Yes.
13		
14	Q.	WHAT IS THE ESTIMATED ECONOMIC IMPACT FROM THE \$5 IN
15		RENEWABLE ENERGY INVESTMENTS?
16	A.	The total economic output for the \$5 million in renewable energy investments is
17		\$8,201,029.
18		
19	Q.	WHAT DID YOU ASSUME ABOUT THE NATURE OF THE RENEWABLE
20		ENERGY INVESTMENTS?

1	A.	We were informed that the most likely renewable energy investments would be related to
2		solar energy. That is why we modeled the development of a solar facility.
3		
4	Q.	DID YOU USE THE IMPLAN MODEL IN ASSESSING THE ECONOMIC
5		IMPACT FROM THE \$5 MILLION RENEWABLE ENERGY INVESTMENTS?
6	A.	Yes. We used data from the National Renewable Energy Laboratory (NREL) for several
7		of our inputs, which is a recognized authoritative source.
8		
9		VII. <u>CONCLUSION</u>
10	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
11	A.	Yes.

Economic Impact on New Mexico of the Acquisition of NM Gas Company by Bernhard Capital Partners - Addendum

May 2025

Prepared by

Dr. Kramer Winingham

Dr. Christopher A. Erickson

Dr. Lucinda Vargas

Sponsored by Bernhard Capital Partners

About the Authors¹

Dr. Kramer Winingham is the Director of Economic Analysis at Arrowhead Center at New Mexico State University (NMSU). Dr. Winingham has extensive experience with strategic planning, conducting economic analyses and leading economic development programs. In 2021, Dr. Winingham served as the lead author of the "Economic Impact of the Santa Teresa Port of Entry and the Santa Teresa Industrial Parks," which estimated the economic benefits of economic activity in Santa Teresa to New Mexico and Texas. In 2022, Dr. Winingham served as the lead author of the binational "Border Task Force Report: Paso del Norte Region" that presented strategic initiatives from the Paso del Norte region (Southern New Mexico, West Texas, and Northern Chihuahua, Mexico) to form an aligned strategy for developing regional capacities and competitive advantages. Dr. Winingham holds a master's degree in Business Administration with specializations in Finance and Information Systems and a Doctorate of Economic Development from NMSU. His doctoral thesis, "Economic Development through Technology Transfer," developed a novel approach to technology transfer incorporating design thinking. Dr. Winingham is an adjunct faculty member in the College of Business at NMSU and is an IMPLAN Certified Economist.

Dr. Christopher A. Erickson is the founding Director of the Center for Border Economic Development (C-BED) and is the Garrey E. and Katherine T. Carruthers Chair for Economic Development at NMSU. Dr. Erickson's research includes U.S.-Mexico border issues, the New Mexico economy, and the role of finance in economic development. He has researched the New Mexico economy for over 35 years, including having authored or co-authored more than 40 economic studies for clients concerning New Mexico. He was a co-Pl on a recently completed NSF grant to develop a system dynamics model for New Mexico. Other recently completed New Mexico-related studies include a report for the Border Task Force to identify needed infrastructure investment in the Paso del Norte region, an investigation into the economic impact of the Santa Teresa port of entry, and several studies concerning infrastructure projects for New Mexico communities. Dr. Erickson has a bachelor's degree from Willamette University and a Ph.D. from Arizona State University, both in Economics. He has been a member of the NMSU faculty since 1987. His teaching duties include lecturing graduate students on economic impact methodology.

Dr. Lucinda Vargas is the Associate Director of the Center for Border Economic Development (C-BED) at NMSU. Dr. Vargas has worked as an economist in the public, private, and non-profit sectors. She was Senior Economist at the Federal Reserve Bank of Dallas, Senior Economist and Director of International Services at CIEMEX-Wharton (an economic forecasting company based in the Philadelphia area), and held research positions at the U.S. Treasury Department in Washington, D.C. and at UT-El Paso's Center for Inter-American and Border Studies. Dr. Vargas was also the founding director and CEO of Plan Estratégico de Juárez, A.C. a private-sector-led nonprofit organization in Juárez, Mexico. In this role, she oversaw a strategic planning effort for the City of Juárez, which involved large-scale citizen and stakeholder participation. She also was a key author and main editor of the various reports behind the Juárez Strategic Plan, the largest community development plan of its kind in Mexico at the time of its completion. She has authored numerous articles for various Fed publications focusing on topics related to the Mexican economy, U.S.-Mexico trade, the maquiladora industry, and the U.S.-Mexico border economy. As a Fed economist, Dr. Vargas also engaged widely with regional community stakeholders from the cities of El Paso, Texas; Juárez, Mexico; and Las Cruces, New Mexico. Dr. Vargas has a bachelor's degree in Economics from UT-El Paso, a master's in Economics from Penn State University, and a Doctorate of Economic Development from NMSU. Beyond her role at C-BED, where she has participated as co-author on numerous reports, including the "Border Task Force Report: Paso del Norte Region," Dr. Vargas is also a College Professor of Economics at NMSU

¹ This report was prepared by the authors in their private capacity. The opinions expressed may not be shared by the Board of Regents and administration of New Mexico State University.

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This report was prepared by the authors in their private capacity. The opinions expressed are the authors' own and may not be shared by the views of the Board of Regents and administration of New Mexico State University.

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Executive Summary

This supplemental² report has been prepared in continuation of an earlier economic impact analysis commissioned by Bernhard Capital Partners (BCP) to evaluate the anticipated effects of BCP-managed funds' acquisition of New Mexico Gas Company (NMGC) on the New Mexico economy. The original report, completed in October 2024, established baseline estimates based on information available at that time. The present addendum, developed in May 2025, incorporates three subsequent proposals that materially affect the original analysis: (1) the introduction of a third employment scenario (Scenario 3), (2) a proposed \$15 million rate credit to NMGC customers, and (3) a \$5 million investment in renewable energy initiatives. These developments represent newly available information and are addressed herein to provide a more comprehensive and updated assessment of the acquisition's economic implications.

The primary impact of the proposed acquisition is 20 to 61 net new full-time equivalent (FTE)³ positions in New Mexico, all expected to be located in Bernalillo County. These positions involve back-office functions and stem from BCP's plan to relocate business operations to New Mexico. Under current ownership by Emera, NMGC business operations are centralized outside of New Mexico. The acquisition by the BCP funds is expected to reverse this pattern, internalizing those functions within New Mexico and thereby generating a recurring, localized economic benefit through increased employment and associated multiplier effects.

BCP initially provided two alternative scenarios representing differing assumptions about the level of net new job creation in New Mexico: **Scenario 1 – High FTE** and **Scenario 2 – Low FTE**. To this now has been added a third alternative, designated **Scenario 3 – Partial Shared Services**. Under this scenario, it is assumed that only a portion of shared services would be relocated to New Mexico, while the remainder would continue to be provided by employees of a sister utility located outside the state.

BCP had originally proposed the consideration of a \$5,000,000 economic development grant program. To this is now added two additional programs, which are a \$15,000,000 rate credit, and \$5,000,000 for renewable energy projects. For none of these will NMGC seek rate recovery from customers.

² This report was prepared by the authors in their private capacity. The opinions expressed are the authors' own and may not be shared by the views of the Board of Regents and administration of New Mexico State University.

³ IMPLAN models present both full- and part-time jobs based on the typical ratio of these job types for a particular industry. Industry specific conversion figures were used to adjust FTE job figures to total job figures. This accounts for higher direct job figures used in our analysis, and is explained fully in the methodology section of the original report.

Table 1a summarizes our main results. The table reproduces the results previously reported for Scenario 1 and Scenario 2, and for the \$5 million economic development grant. Added are results for Scenario 3, a \$15 million rate credit, and a \$5 million renewable energy project.

Table 1a: Economic Impacts on New Mexico of BCP's Acquisition of NMGC

Impact	<u>Scenario 1</u> High FTE	Scenario 2 Low FTE	Scenario 3 Partial Shared Services	\$5M Economic Development Grant ⁴	\$15M Rate Credit	\$5M Renewable Energy
Direct Jobs	64	52	21	33	12	29
Total Jobs	162	150	44	54	81	43
Labor Income	\$13,191,679	\$13,111,862	\$3,601,651	\$3,739,897	\$3,614,682	\$2,610,546
Value-Added Production	\$22,694,302	\$22,522,394	\$5,969,461	\$4,907,739	\$7,840,798	\$4,786,870
Economic Output	\$40,376,364	\$40,048,926	\$9,698,587	\$8,609,323	\$12,749,344	\$8,201,029
Total Taxes	\$5,107,741	\$5,066,709	\$1,182,228	\$1,192,139	\$1,776,771	\$1,195,107
Local	\$611,524	\$605,196	\$103,484	\$101,958	\$250,170	\$166,631
State	\$1,623,242	\$1,607,087	\$294,040	\$274,034	\$673,911	\$403,008
Federal	\$2,872,975	\$2,854,427	\$784,704	\$816,147	\$852,690	\$625,468

⁴ Resulting impacts of the economic development grant and the programs the grant would support are not included, only grant expenditures. Resulting impacts of economic development grants can be significant, but can also vary greatly. For this reason they were excluded from our calculations. Broader estimates are included in the methodology section of the original report for reference.

Methodology

This section will detail the methodology used to estimate the new pieces of our analysis. For full details on our methodology, please see the original report. Since the release of our original report, BCP provided a third scenario and several updates to the proposed business development contributions. The third scenario, Scenario 3 - Partial Shared Services, assumes the IT jobs would not be located in New Mexico. Tables 5a summarizes the inputs used for Scenario 3. For consistency, IMPLAN modeling in the addendum was performed using the IMPLAN's 2022 data model year and 2024 dollars to maintain comparability with the original report, filed in October 2024, which used these settings.

Table 5a: Model Assumptions for Scenario 3 - Partial Shared Services

Job Role	New FTE Jobs	New Total Jobs	Labor Income
Finance and Accounting	12	13	\$1,487,160
Human Resources	4	4	\$437,400
Other	4	4	\$437,400
Total	20	21	\$2,361,960

BCP has also proposed: (1) the implementation of a \$5,000,000 economic development grant to support community and economic development in New Mexico over seven years; (2) a \$15,000,000 rate credit; and (3) \$5,000,000 for renewable energy projects over seven years.

The economic development grant proposal has been updated to be distributed over seven years instead of five years as contemplated in the original report. This does not change our original findings because the time value of money was not incorporated in our analysis.

The proposed \$15,000,000 customer rate credit was modeled assuming an evenly distributed per-capita allocation. Our analysis was based on 2024 NMCG customer data, county-level industry data from BLS QCEW⁵, and county-level household income data included in IMPLAN. Table 5b shows NMGC's county-level average customer counts by type for 2024.

Residential rate credits were distributed to each county based on the average household income ranges in each county. Household income is an important consideration because households with different income levels have different marginal

⁵ (Bureau of Labor Statistics, 2024)

propensities to consume (MPC). A higher MPC will produce a higher economic impact than a lower MPC.

Commercial rate credits were distributed by industry at the county level. IMPLAN's 2- Digit NAICS Code Aggregation Scheme was used to correspond with available BLS QCEW data. The rate credits were applied to each industry as Output. For this analysis, Intermediate Inputs and Employee Compensation fields were set to zero. The reason for this is to accurately reflect how the rate credit would flow through the individual business and the local economy. An increase in Output without this adjustment would result in Labor Income for employees and purchases from other industries (Intermediate Inputs) to produce the business's typical product and services. Since the rate credit does not require production of any additional products or services to be received, Employee Compensation and Intermediate Inputs should not be included in the analysis.

Table 5c shows the allocation amount per customer type and the per-capita rate calculations. Based on the number of existing customers, a \$15,000,000 overall rate credit program would provide a per-customer rate credit of \$27.31.

Table 5b: NMGC Customer Counts by County, 2024 Average

Job Role	Residential	Commercial	Total
Bernalillo County	234,981	17,886	252,867
Chaves County	12,598	1,326	13,923
Cibola County	5,313	586	5,899
Curry County	8,436	1,032	9,468
Doña Ana County	12,389	574	12,963
Eddy County	12,444	1,509	13,953
Grant County	8,365	876	9,240
Lea County	3,749	462	4,211
McKinley County	7,787	1,176	8,963
Otero County	14,617	1,039	15,656
Quay County	1,676	269	1,946
Rio Arriba County	13,841	2,148	15,989
Roosevelt County	2,045	334	2,379
San Juan County	28,383	3,231	31,614
Sandoval County	50,278	1,803	52,081
Santa Fe County	50,161	5,120	55,281
Sierra County	4,516	508	5,024
Taos County	9,991	1,321	11,311
Union County	1,061	256	1,317
Valencia County	23,950	1,247	25,197
Total	506,581	42,703	549,284

Table 5c: NMGC Rate Credit Per-Capita Allocation

Category	Residential	Commercial	Total
Total Rate Credit	\$13,833,853	\$1,166,147	\$15,000,000
Customers	506,581	42,703	549,284
Per-Capita Rate Credit	\$27.31	\$27.31	\$27.31

NMGC's proposed \$5,000,000 renewable energy contribution has the goal to advance or develop renewable energy projects designed to align with the environmental goals of New Mexico. Table 5b shows the inputs for these renewable energy projects. The economic impact of this project was estimated based on a typical solar facility that could be built for \$5M and the associated operations and maintenance (O&M) employment levels. Based on NREL's most recent U.S. Solar Photovoltaic System and Energy Storage Cost Benchmarks, a \$5M utility-scale solar facility would have roughly a 5 MW capacity using the modeled market price (MMP) benchmark (\$5,000,000 / \$1.16/W_{dc}), and require roughly 1 employee for O&M using the MMP Benchmark (5,000 kW_{dc} * \$16.58/kW_{dc}/year = \$82,900).6 The NREL JEDI Model shows labor costs are about 59% of O&M costs for a 5 MW solar facility which would indicate an employee compensation of \$48,911 for O&M at this facility.

Table 5d: IMPLAN Inputs for Renewable Energy Projects

Category	IMPLAN Code	IMPLAN Description	Total	Input Type
Construction	52	Construction of new power and communication structures	\$5,000,000	Output
O&M	42	Electric power generation - Solar	\$48,911	Employee Compensation

⁶ (Ramasamy et al., 2023)

⁷ (NREL, 2021)

Analysis of Impacts

The estimated impacts of BCP's acquisition of NMGC on New Mexico for Scenario 3, and the new proposed business development contributions are shown in the following tables. The jobs in the three scenarios and the renewable energy projects O&M jobs are ongoing, so the impacts are annual rather than one-time. The jobs from the remaining business development contributions would represent one-time impacts and in practice, may spread over several years. The **economic impacts** are shown in Table 7a (Scenario 3 - Partial Shared Services), Tables 8a to 8c (rate credits), and Tables 8d to 8f (renewable energy projects). Annual **tax impacts** are shown in Table 10a (Scenario 3 - Partial Shared Services), Tables 11a to 11d (rate credits), and Tables 11e to 11f (renewable energy projects).

Table 7a: Annual Economic Impact on New Mexico, BCP's Acquisition of NMGC,
Scenario 3 - Partial Shared Services

Impact	Employment	Labor Income	Value Added	Output
Direct	21	\$2,361,960	\$3,717,458	\$5,636,000
Indirect	10	\$569,452	\$958,517	\$1,829,672
Induced	13	\$670,239	\$1,293,486	\$2,232,915
Total	44	\$3,601,651	\$5,969,461	\$9,698,587

Table 8a: Total Economic Impact on New Mexico,
BCP's Proposed \$15M Rate Credit, Residential

Impact	Employment	Labor Income	Value Added	Output
Direct	0	\$0	\$0	\$0
Indirect	0	\$0	\$0	\$0
Induced	67	\$3,279,425	\$6,582,208	\$11,417,913
Total	67	\$3,279,425	\$6,582,208	\$11,417,913

Table 8b: Total Economic Impact on New Mexico, BCP's Proposed \$15M Rate Credit, Commercial

Impact	Employment	Labor Income	Value Added	Output
Direct	12	\$287,335	\$1,166,147	\$1,166,147
Indirect	0	\$0	\$0	\$0
Induced	1	\$47,921	\$92,444	\$165,284
Total	14	\$335,256	\$1,258,591	\$1,331,431

Table 8c: Total Economic Impact on New Mexico, BCP's Proposed \$15M Rate Credit, Total

Impact	Employment	Labor Income	Value Added	Output
Direct	12	\$287,335	\$1,166,147	\$1,166,147
Indirect	0	\$0	\$0	\$0
Induced	68	\$3,327,346	\$6,674,651	\$11,583,197
Total	81	\$3,614,682	\$7,840,798	\$12,749,344

Table 8d: Total Economic Impact on New Mexico, BCP's Proposed \$5M Renewable Energy Project, Construction

Impact	Employment	Labor Income	Value Added	Output
Direct	29	\$1,812,920	\$3,146,393	\$5,000,000
Indirect	5	\$275,351	\$553,155	\$1,136,063
Induced	9	\$421,327	\$838,242	\$1,472,646
Total	42	\$2,509,598	\$4,537,789	\$7,608,710

Table 8e: Total Economic Impact on New Mexico, BCP's Proposed \$5M Renewable Energy Project, O&M

Impact	Employment	Labor Income	Value Added	Output
Direct	1	\$48,705	\$124,696	\$312,245
Indirect	0	\$35,651	\$91,380	\$222,065
Induced	0	\$16,593	\$33,005	\$58,009
Total	1	\$100,949	\$249,081	\$592,319

Table 8f: Total Economic Impact on New Mexico, BCP's Proposed \$5M Renewable Energy Project, Construction and Year 1 O&M

Impact	Employment	Labor Income	Value Added	Output
Direct	29	\$1,861,624	\$3,271,088	\$5,312,245
Indirect	5	\$311,002	\$644,535	\$1,358,128
Induced	9	\$437,920	\$871,247	\$1,530,655
Total	43	\$2,610,546	\$4,786,870	\$8,201,029

Table 10a: Annual Tax Impact on New Mexico, BCP's Acquisition of NMGC, Scenario 3 - Partial Shared Services

Impact	Local	State	Federal	Total
Direct	\$49,538	\$150,407	\$509,543	\$709,487
Indirect	\$18,378	\$51,122	\$122,669	\$192,169
Induced	\$35,569	\$92,511	\$152,492	\$280,572
Total	\$103,484	\$294,040	\$784,704	\$1,182,228

Table 11a: Total Tax Impact on New Mexico, BCP's Proposed \$15M Rate Credit, Residential

Impact	Local	State	Federal	Total
Direct	\$0	\$0	\$0	\$0
Indirect	\$0	\$0	\$0	\$0
Induced	\$179,784	\$493,312	\$761,946	\$1,435,042
Total	\$179,784	\$493,312	\$761,946	\$1,435,042

Table 11b: Total Tax Impact on New Mexico, BCP's Proposed \$15M Rate Credit, Commercial

Impact	Local	State	Federal	Total
Direct	\$67,752	\$173,550	\$79,264	\$320,565
Indirect	\$0	\$0	\$0	\$0
Induced	\$2,634	\$7,049	\$11,481	\$21,164
Total	\$70,386	\$180,599	\$90,745	\$341,729

Table 11c: Total Tax Impact on New Mexico, BCP's Proposed \$15M Rate Credit, Total

Impact	Local	State	Federal	Total
Direct	\$67,752	\$173,550	\$79,264	\$320,565
Indirect	\$0	\$0	\$0	\$0
Induced	\$182,418	\$500,361	\$773,427	\$1,456,206
Total	\$250,170	\$673,911	\$852,690	\$1,776,771

Table 11d: Total Tax Impact on New Mexico, BCP's Proposed \$5M Renewable Energy Project, Construction

Impact	Local	State	Federal	Total
Direct	\$100,640	\$247,187	\$427,986	\$775,814
Indirect	\$23,545	\$55,320	\$67,340	\$146,206
Induced	\$25,643	\$62,613	\$103,223	\$191,479
Total	\$149,829	\$365,121	\$598,549	\$1,113,499

Table 11e: Total Tax Impact on New Mexico, BCP's Proposed \$5M Renewable Energy Project, O&M

Impact	Local	State	Federal	Total
Direct	\$11,689	\$25,909	\$13,247	\$50,845
Indirect	\$4,103	\$9,513	\$9,608	\$23,224
Induced	\$1,010	\$2,465	\$4,065	\$7,539
Total	\$16,802	\$37,887	\$26,919	\$81,608

Table 11f: Total Tax Impact on New Mexico, BCP's Proposed \$5M Renewable Energy Project, Total

Impact	Local	State	Federal	Total
Direct	\$112,330	\$273,096	\$441,233	\$826,659
Indirect	\$27,648	\$64,833	\$76,948	\$169,429
Induced	\$26,653	\$65,079	\$107,287	\$199,019
Total	\$166,631	\$403,008	\$625,468	\$1,195,107

Conclusion

In August 2024, Emera Inc. (Emera) (TSX:EMA), an international energy and services company, announced it entered into an agreement to sell its wholly-owned operating company, New Mexico Gas Company, Inc. (NMGC), to BCP, a services and infrastructure-focused private equity management firm, for an aggregate transaction value of \$1.252 billion USD, including the assumption of approximately \$500 million USD of debt and subject to customary closing adjustments.⁸ The transaction is subject to regulatory approval by the New Mexico Public Regulation Commission ("NMPRC") and pursuant to the Hart-Scott-Rodino Antitrust Improvements Act. The transaction is expected to close in late 2025 but will not close before September 30, 2025, unless otherwise authorized by the NMPRC.⁹

The purpose of this report is to outline the economic impacts of BCP's acquisition of NMGC on New Mexico. Three scenarios were provided by BCP on net new job creation for New Mexico in full-time equivalent (FTE) employment terms: Scenario 1 - High FTE, Scenario 2 - Low FTE, and Scenario 3 - Partial Shared Services. Additionally, BCP has proposed: (1) a \$5,000,000 economic development grant program; (2) a \$15,000,000 customer rate credit; and (3) \$5,000,000 for renewable energy projects. For none of these will NMGC seek rate recovery from customers.

Table 12 summarizes our main economic impact estimates for the three scenarios and business development contributions. It should be noted that all scenarios reflect recurring impacts. Net new jobs will be ongoing jobs for the foreseeable future, continuing as long as NMGC is a going concern.

⁸ (Bernhard Capital Partners, 2024)

⁹ (Bernhard Capital Partners, 2024)

Table 12: Estimated Economic Impact on New Mexico of BCP's Acquisition of NMGC,
Alternative Scenarios

Impact	<u>Scenario 1</u> High FTE	Scenario 2 Low FTE	Scenario 3 Partial Shared Services	\$5M Economic Development Grant ¹⁰	\$15M Rate Credit	\$5M Renewable Energy
Direct Jobs	64	52	21	33	12	29
Total Jobs	162	150	44	54	81	43
Labor Income	\$13,191,679	\$13,111,862	\$3,601,651	\$3,739,897	\$3,614,682	\$2,610,546
Value-Added Production	\$22,694,302	\$22,522,394	\$5,969,461	\$4,907,739	\$7,840,798	\$4,786,870
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Local	\$611,524	\$605,196	\$103,484	\$101,958	\$250,170	\$166,631
State	\$1,623,242	\$1,607,087	\$294,040	\$274,034	\$673,911	\$403,008
Federal	\$2,872,975	\$2,854,427	\$784,704	\$816,147	\$852,690	\$625,468

¹⁰ Resulting impacts of the economic development grant and the programs the grant would support are not included, only grant expenditures. Resulting impacts of economic development grants can be significant, but can also vary greatly. For this reason they were excluded from our calculations. Broader estimates are included in the methodology section of the original report for reference.

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Glossary

Direct effects are the immediate (or first-round) consequences of a change in economic activity or policy. For example, if a firm spends \$1 million on the construction of a new building, the direct effect on output (sales) in the construction sector is \$1 million. If eight workers are employed in the construction of the building, then those eight workers are also a direct effect.

Employment refers to jobs. Jobs may be full- or part-time, and a single worker may be employed at multiple jobs.

Indirect effects occur as industries purchase inputs from other industries. If a construction project requires steel beams, there will be indirect effects on iron mining and coke-producing industries.

Induced effects result from households spending the wage and salary income received by those employed directly or indirectly on a new activity.

Input-output model refers to a type of economic model designed to capture relationships among industries and ultimate consumers.

Intermediate spending refers to the demand of industry for the goods and services produced by other industries that will be used in the production process.

Labor income consists of employee compensation (including benefits), supplements to wages and salaries (such as employer contributions to pension funds), and proprietor's income.

Multi-Regional Input-Output (MRIO) expands the region of study to include more than one region of study, allowing for spillover effects to be calculated between regions.

Output refers to gross industry sales or expenditures, depending on the consequences.

Total effects refer to the sum of direct, indirect, and induced effects.

Value added refers to the change in value of a good or service during each stage of production. Gross Domestic Product is a value-added concept.¹¹

¹¹ (NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts | U.S., 2021)

IN THE MATTER OF THE JOINT)
APPLICATION FOR APPROVAL TO)
ACQUIRE NEW MEXICO GAS COMPANY,)
INC. BY SATURN UTILITIES HOLDCO,) Case No. 24-00266-UT
LLC.)
JOINT APPLICANTS)

CERTIFICATE OF SERVICE

I CERTIFY that on this date I sent via email a true and correct copy of Rebuttal Testimony and Exhibits of Dr. Christopher A. Erickson

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Ana C. Kippenbrock, Law Clerk	Ana.Kippenbrock@prc.nm.gov;

DATED this May 16, 2025.

/s/Anita Hart
Anita Hart
Director, Regulatory Affairs
505-697-3838
anita.hart@nmgco.com

IN THE MATTER OF THE JOINT APPLICATION)
FOR APPROVAL TO ACQUIRE	
NEW MEXICO GAS COMPANY, INC.	
BY SATURN UTILITIES HOLDCO, LLC.)
) Docket No. 24-00266-UT
)
JOINT APPLICANTS)
)

ELECTRONICALLY SUBMITTED AFFIRMATION OF DR. CHRISTOPHER A. ERICKSON

In accordance with 1.2.2.35(A)(3) NMAC and Rule 1-011(B) NMRA, Dr. Christopher A. Erickson, affirms and states under penalty of perjury under the laws of the State of New Mexico: I have read the foregoing Rebuttal Testimony and Exhibits. I further affirmatively state that I know the contents of my Rebuttal Testimony and Exhibits and they are true and accurate based on my personal knowledge and belief.

SIGNED this 16th day of May 2025.

/s/Dr. Christopher A. Erickson
Dr. Christopher A. Erickson