

Staff Briefing Papers

Meeting Date April 22, 2021 Agenda Item 3**


Company Otter Tail Power Company

Docket No. **E0-17/M-21-99**

In the Matter of Otter Tail Power Company's Petition for Approval of the Customer Eligibility, Updated Baseline and Annual Update to its Energy-Intensive, Trade-Exposed Rider Surcharge Rate, Rate Schedule 13.09

- Issues
1. Should the Commission approve Otter Tail Power Company's Petition for its renewal of four-year customer eligibility and annual update to its Energy-Intensive, Trade-Exposed (EITE) Rider Surcharge Rate?
 2. Should the Commission approve Otter Tail's baseline and annual update to its EITE Rider?

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 Relevant Documents	Date
Otter Tail Power – Initial Filing (TS)	February 1, 2021
OTP-EITE Large Industrial End-Users (OTP-EITE)	
Comments (TS)	February 2, 2021
Testimony – Mark Rasmussen	February 2, 2021
Report – Mark Rasmussen (TS)	February 2, 2021

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.



Relevant Documents

Date

Errata Report - Mark Rasmussen (TS)	February 5, 2021
Affidavit - Mark Rasmussen	February 2, 2021
Affidavit - David Goetz - Cass Forest Products (TS)	February 2, 2021
Affidavit - Cameron Lewis - Norboard (TS)	February 2, 2021
Affidavit - Wade Semeliss – PotlatchDeltic – Affidavit (TS)	February 2, 2021
Affidavit - Michael Birkeland - Minnesota Forest Industries and Minnesota Timber Producers Association	February 2, 2021
Department of Commerce (DOC-DER) – Comments (TS)	March 19, 2021
Office of Attorney General (OAG-RUD) - Letter	March 19, 2021
Otter Tail Power – Reply Comments	March 29, 2021
OTP-EITE - Reply Comments	March 29, 2021
DOC-DER - Supplemental Comments (TS)	April 5, 2021
Otter Tail Power – Response to Supplemental Comments	April 12, 2021

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I. Statement of the Issues

- Should the Commission approve Otter Tail Power Company's Petition for its renewal of four-year customer eligibility and annual update to its Energy-Intensive, Trade-Exposed (EITE) Rider Surcharge Rate?
- Should the Commission approve Otter Tail's baseline and annual update to its EITE Rider?

II. Background

On February 1, 2021, Otter Tail Power Company (OTP) filed a Petition with the Public Utilities Commission for the approval of its request to update and extend its rider for the Competitive Rate for Energy-Intensive, Trade-Exposed (EITE) Electric Utility Customers, under Minn. Stat. § 216B.1696.

On February 2, 2021, the OTP-EITE Customers submitted comments, testimony, a report and five affidavits in support of the Petition. OTP-EITE is an ad-hoc consortium of large industrial end-users of electric energy that meet the definition of EITE under Minn. Stat. § 216B.1696. Mark Rasmussen of Mason, Bruce, and Girard, Inc., submitted expert testimony and a report on behalf of OTP-EITE. Each of the three industrial customers (Cass Forest Products, Norboard, and PotlatchDeltic) applying for Otter Tail Power's EITE tariff submitted affidavits in favor of renewal of the EITE statute. Michael Birkeland of Minnesota Forest Industries and the Minnesota Timber Producers Association also submitted an affidavit in favor of renewal of the EITE statute.

On February 5, 2021, Mark Rasmussen filed an Errata to the Expert Report to correct for inconsistencies between data downloaded from the Minnesota Department of Employment and Economic Development (DEED) and DEED's website. The corrections do not change assumptions in the case.

On March 19, 2021, the Minnesota Department of Commerce, Division of Energy Resources (Department) submitted Comments without taking a position on the Petition.

On March 19, 2021, the Minnesota Office of Attorney General, Residential Utilities and Anti-trust Division, submitted a Letter without taking a position on the Petition.

On March 29, 2021, OTP-EITE submitted Reply Comments in a letter supporting the application of the OTP-EITE customers.

On March 29, 2021, OTP submitted Reply Comments in response to a series of questions submitted by the Department.

On April 5, 2021, the Department submitted Supplemental Reply Comments in response to OTP's request to delay the decision on the 2016 baseline standard.

On April 13, 2021, Otter Tail Power submitted its response to the Department’s supplemental reply comments.

III. History of the EITE Statute and Related Dockets

A. EITE Statute - Minn. Statute § 216B.1696

The Energy-Intensive, Trade-Exposed (EITE) statute, which was enacted in 2015 during the special session, was intended to provide a mechanism for applying Minnesota energy policy to the state’s natural resources industries.¹ Specifically, the EITE statute was designed to provide economic relief to qualified firms in the iron ore, steel, and forest products sectors via discounted rates on electricity sales by investor-owned electric utilities. The desired result was to make Minnesota electricity rates competitive in globally competitive markets for qualified members of these industries. The statute authorized smaller investor-owned electric utilities such as Minnesota Power and Otter Tail Power to propose and offer special tariffs for the purpose of keeping electric rates competitive.

The competitive pressure of global competition was the impetus for offering tariffs to these resource industries. The prospect of large firms shutting down across northern Minnesota would have wide-ranging, harmful economic effects in many communities.

There are four kinds of EITE qualified companies, one of which is the forest products industry, which includes sawmills, paper mills, wood products manufacturer, or oriented strand board manufacturer. Membership in this category is sufficient for consideration of an invitation from the utility to apply for an EITE rate. The utility has the statutory ability to propose an EITE rate schedule that includes a variety of tariffs, including rates to encourage utilization of clean energy technology.

Commission approval of an EITE tariff is contingent on a finding of net benefit to the utility or the state. The term “state” is understood to be the economy of Minnesota. The statute also gives the utility the authority to recover the cost of an EITE tariff from non-exempt ratepayers, which excludes the EITE customers and low-income residential customers. The cost to recover is equal to the difference between what would have been collected under the regular tariff and what was collected under the EITE tariff. Upon filing for the EITE tariff, the utility must deposit \$10,000 into a Commission-approved account for the expansion of outreach of the Commission-approved affordability program.

Regarding the key concept of a finding of ‘net benefit’, the Commission stated in its Order in OTP’s first petition,

The statute is clear and unambiguous – the Commission must make a finding on the net benefit of the Company’s proposal. The Commission must give effect to the word “net,” and it will do so using the direction the Legislature has provided...

¹ Minn. Laws 2015, 1st Special Session, Ch. 1, Art. 3 § 26; codified at Minn. Stat. § 216B.1696.

The Commission concludes that the Legislature’s use of the phrase “net benefit” is distinct from uses of the word “benefit” alone. The benefit must be netted against something.

The natural and ordinary conclusion is that a “net benefit” is the benefit, net of corresponding negative consequences. The Legislature expects, and has required, that the Commission balance the benefits and the detriments of EITE rate proposals.

The Commission rejects the arguments that the ‘net benefit’ test is meant to be a low threshold, easily satisfied, or that the Commission should seek the Legislature’s intent somewhere other than the statute itself. It is not necessary to look beyond the plain language of the statute to understand the test the Commission is meant to apply. A net benefit to the utility or the state – not only to EITE Customers – must be established.²

In addition, the ‘Notwithstanding’ clause of the statute provides sufficient legal justification for the ‘net benefit’ test as the most important factor in the decision to approve an EITE tariff. The Commission stated in its Order in docket E-017/M-17-257,

The Commission must approve an EITE rate schedule and any corresponding EITE rate “upon a finding of net benefit to the utility or the state,” and must do so “[n]otwithstanding Minnesota Statutes, section 216B.03, 216B.05, 216B.06, 216B.07, or 216B.16.” Thus, the Commission evaluates EITE rate proposals without reference to factors it would ordinarily consider in setting rates, such as section 216B.03’s requirement that every rate must be just and reasonable and its prohibition on unreasonably preferential or prejudicial rates.

In other words, the EITE statute limits the Commission’s consideration to one issue— whether the proposed EITE rate will result in a net benefit to either the petitioning utility or the state. If so, and assuming the utility has satisfied the previously mentioned statutory prerequisites, the Commission must approve the EITE rate schedule and corresponding EITE rate.³

B. Initial Request for EITE rate - Docket 16-533

On June 27, 2016 OTP filed its first petition for approval of an EITE rate under the newly enacted statute. The Department and the OAG recommended against the petition because it lacked necessary detail or did not sufficiently prove net benefit to the utility or the state. The Commission found that OTP had not met the evidentiary burden showing net benefit. The

² ORDER DENYING PETITION WITHOUT PREJUDICE, In the Matter of a Petition by Minnesota Power for a Competitive Rate for Energy-Intensive Trade-Exposed (EITE) Customers and an EITE Cost Recovery Rider, Docket No. E-015/M-15-984 (March 23, 2016) pp. 9-10.

³ ORDER APPROVING EITE RATE AND ESTABLISHING COST-RECOVERY PROCEEDING, In the Matter of Otter Tail Power Company’s Petition for Approval of an Energy-Intensive Trade-Exposed (EITE) Customer Rate, Docket E-017/M- 17-257 (November 17, 2017) p. 3.

Commission denied without prejudice the petition on the basis of insufficient evidence of a finding of 'net benefit'. Although OTP spoke of general positive economic impacts to EITE customers, it did not address the overall net benefit to the utility or the state of the proposed EITE tariff.⁴

C. Second Request for EITE Rate - Docket 17-257

On April 3, 2017, OTP filed its second petition for approval of an EITE tariff. In this petition, OTP made a number of revisions to the filing. Among the revisions, the most important for a finding of 'net benefit' was a more robust analysis, including workpapers for ratepayer benefits.⁵ Other significant improvements included a communication plan to identify potential EITE rate eligible customers, the addition of NAICS codes, and the provision of alternative funding locations for the low income deposit.

In its Order, the Commission found that OTP satisfied the eligibility criteria for its EITE rate application and provided sufficient evidence of net benefit to the utility or the state.⁶ In exchange for a 20 percent rate reduction for EITE customers, non-exempt, non-EITE rate payers would experience a 0.544 percent average rate increase, about \$5.07 annually for residential customers. OTP concluded that the probability of closing without the EITE discount would have to be greater than 43 percent for the benefit of the EITE tariff to outweigh the cost. The Commission found that OTP would experience a revenue shortfall of \$2,571,126, net of avoided EITE customer costs, if the EITE customers were to shut-down. Although the certainty of such a possibility was impossible to predict, it found a reasonable likelihood that that the 20 percent EITE discount would help these customers stay open.

As for cost recovery from non-exempt ratepayers, the Commission concluded that the per-kWh charge was the best choice, compared to a surcharge factor of 0.544 percent proposed by OTP. The per-kWh charge would allow customers more control over the variable portion of their bill, allowing them to control costs and conserve energy.

Regarding the low-income outreach deposit of \$10,000, the Commission decided to give OTP 120 days to find a program within its territory that met the EITE statutory criteria. If the Commission approves the application, then the funds would be divided among those agencies listed in the application. Otherwise, the \$10,000 deposit would be made to the Roseville Salvation Army.

This four-year customer eligibility pilot expires November 30, 2021.

⁴ ORDER DENYING PETITION WITHOUT PREJUDICE In the Matter of a Petition by Otter Tail Power for a Competitive Rate for Energy-Intensive Trade-Exposed (EITE) Customers and an EITE Cost-Recovery Rider, Docket No. E-017/M-16-533 (December 21, 2016)

⁵ Initial Petition, Docket No. E-017/M-17-257, April 3, 2017.

⁶ Order in Docket 17-257, November 17, 2017

IV. OTP Petition

A. Introduction

OTP filed a third petition under its EITE statute rider, effective for one year, from December 1, 2021 to November 30, 2022. As with OTP's filings, this Petition is filed under Minn. Stat. § 216B.1696, known as the EITE statute, which is discussed in more detail above.⁷

In addition, OTP has filed annual compliance reports on its EITE rider. OTP's annual report for 2018 was approved in Docket No. E-017/M-19-199, and its annual report for 2019 was approved in Docket No. E-017/M-20-338.

B. EITE Customer Eligibility

OTP has requested this petition on behalf of the same three wood product manufactures listed in its prior petition—Norbord, Potlatch-Deltic, and Cass Forest Products.⁸ No other eligible customers have applied for the EITE statute. All three wood products manufacturers meet the criteria as EITE electric utility customers defined under Minn. Stat. §216B.1696, subd. 1(c)(2).

Norbord, headquartered in Toronto, Canada, produces wood paneling under the North American Industry Classification System (NAICS) code 321219 (Reconstituted Wood Product Manufacturing). Among other wood products, Norbord produces about 525,000,000 board-feet⁹ (on a 3/8" basis) of oriented strand board (OSB) (which is similar to plywood) annually near Bemidji, MN along with fourteen other OSB facilities.

Potlatch-Deltic is a publicly traded Real Estate Investment Trust (REIT) that produces wood products and manages forests across the United States. It has a sawmill in Bemidji, MN that produces about 148,000,000 board-feet of cut studs annually. Its NAICS code is 321113 (Sawmills).

Cass Forest Products, the smallest of the three applicants, is a wood products manufacturer with locations with electric service provided by OTP in Cass Lake, Minnesota. The firm produces about 8,000,000 board-feet of finished lumber products, with NAICS codes 321912 (Cut Stock, Resawing Lumber, and Planning), 321113 (Sawmills), and 321918 (Millwork and Flooring Manufacturing).

C. EITE Rate Effects

All three OTP customers present the case for a 20 percent reduction in electric rates by stating that it will help them to be more competitive suppliers of wood products. In addition, the

⁷ Minn. Stat. § 216B.1696

⁸ In the Matter of Otter Tail Power Company's Petition for Approval of an Energy-Intensive Trade-Exposed (EITE) Customer Rate, Docket E-017/M- 21-99 (February 1, 2021).

⁹ A board with 12" by 12" by 1" dimensions is the equivalent of one "board-foot".

reduction in electric rates will assist their efficiency improvement efforts and investments in plant overall. The cost of the EITE tariff would be recovered from non-exempt, non-EITE rate payers. The average residential rate payer would experience an annual cost increase of \$3.53. Table 1 below lists the annual EITE rate recovery cost by class.¹⁰

Class	Average Annual Electric Cost (\$)	Annual Cost Increase
Residential	\$919	\$3.53
Farms	\$2,567	\$8.74
General Service	\$3,139	\$11.39
Large General Service	\$188,944	\$1,101.47
Irrigation	\$1,830	\$6.78
Lighting	\$2,086	\$4.74
OPA	\$3,106	\$14.89
Controlled Service Water Heating	\$217	\$0.93
Controlled Service Interruptible	\$1,263	\$8.63
Controlled Service Deferred	\$979	\$6.61

D. EITE Customer Baseline

The EITE statute provides for a true-up to track the difference between what would have been collected under OTP's standard tariff and the EITE rate schedule. OTP is entitled to recover costs or refund savings related to the EITE tariff. The baseline is a projection of what would have been collected under the standard tariff, and thus determines the estimated sales against which to recover costs or refund savings. The current EITE baseline, approved by the Commission in 2018 in Docket E-017/M-17-257, is a representative amount of sales to the same three EITE applicants from the 2016 test year in OTP's rate case in Docket E-017/GR-15-1033. OTP recommends a 2.18 percent decrease in the baseline based on forecasted usage, which is based on sales derived from the 2021 test in the current rate case, Docket E-017/GR-20-719. This proposed decrease in the baseline for all three applicants combined means that OTP would recover 2.18 percent less in costs for this new EITE tariff.

E. EITE Tracker

OTP's tracker balance consists of the proposed revenue requirement, a carrying charge, and the projected over/under recovery based on the latest forecast. Total projected revenue requirement divided by projected kWh sales for the recovery period yield the proposed surcharge rate for non-exempt, non-EITE ratepayers. For example, for the year beginning December 1, 2021, OTP proposes a recovery rate of \$0.00039 per kWh.

¹⁰ In the Matter of Otter Tail Power Company's Petition for Approval of an Energy-Intensive Trade-Exposed (EITE) Customer Rate, Docket E-017/M- 21-99 (February 1, 2021), p. 8.

V. OTP-EITE Member Comments

A. Cass Forests Products

Cass Forest Products (CFP) CEO David Goetz submitted an affidavit on February 2, 2021 in support of the renewal of its EITE tariff in this docket.¹¹ Between its two locations, veteran-owned CFP employs 35 people. According to an economic impact study at the UMD Labovitz School of Business entitled “2020 Economic Contribution Study of Minnesota Agriculture and Forestry”, every sawmill job supports another 3.69 jobs in various related sectors of the local economy.¹² The conceptual framework of this economic impact study states that income receipts and related expenditures circulate across local sectors of the economy, generating additional income and expenditure at each stage of the economic cycle. Thus, wage income for CFP’s 35 workers circulates to provide additional income for another 111 workers in the area. CFP also contributes to the Minnesota economy by paying significant amounts of property, payroll, workers’ compensation, wood, sales and excise taxes. CFP argues these relationships show that it makes a positive impact on the local and state economy. This beneficial relationship is evident in the number of local, chambers of commerce, and trade associations it is involved in.

However, CFP faces competitive forces partly due to the high cost of its electricity, amounting to at least 10 percent of production costs, the qualifying threshold in the EITE statute. Since energy costs can make the marginal difference to profitability, CFP has invested in projects to minimize its energy consumption and thus strengthen its economic position. Nonetheless, CFP continues to face strong domestic competition, which may be attributable to a higher cost of energy. A failure to renew the EITE statute could weaken CFP’s competitive position.¹³

If CFP were to shut down, the regional economy would suffer the loss of wage income and tax revenues. However, approval of the EITE tariff would increase the likelihood of maintaining CFP’s economic viability.

B. Norbord

Norbord Minnesota, LLC General Manager, Cameron Lewis, submitted an affidavit on February 2, 2021 in support of the renewal of its EITE tariff in this docket.¹⁴ The Norbord Mill, located in Solway, Minnesota, employs 134 people. Norbord cites the same UMD Labovitz School of Business study, which concludes that reconstituted wood products manufacturers like Norbord with a multiplier of 3.09 support about 425 direct jobs and another 870 indirect or induced

¹¹ Docket E-017M-21-99, Affidavit of David Goetz, February 2, 2021.

¹² AgriGrowth, 2020, 2020 Economic Contribution Study of Minnesota Agriculture and Forestry, September 2020. Prepared by Decision Innovation Solutions.

¹³ Not only does CFP experience relatively higher energy costs, CFP also faces marginally higher costs to effectively treat its red pine lumber. However, this superior chemical treatment requires higher quality and more expensive metal fasteners which better resist the corrosive effects of the chemical treatment.

¹⁴ Docket E-017M-21-99, Affidavit of Cameron Lewis, February 2, 2021.

jobs, totaling 1,295 jobs. As part of its production operations, Norbord has significant direct expenditures in northwest Minnesota for inputs such as wood and timber, contract and full-time labor, energy, and miscellaneous items. In addition, the company has regularly paid Minnesota income taxes. Norbord employees have also contributed about \$334,000 to local charities over the last 10 years.

Norbord, at its expense, has also maintained its certification in the Sustainable Forestry Initiative, which promotes responsible forestry.

As energy costs are a significant share of production cost, Norbord Mill Minnesota argues that that it faces domestic competition from other Norbord mills across the U.S. and Canada, in addition to other international competition. The present EITE rate discount has made a marginal difference in Norbord's cost structure relative to the company's other operations.

In response to global competition, Norbord has in place the "Marginal Improvement Program", which is designed to continually improve its cost structure. This initiative addresses main cost drivers such as raw materials. In addition, it has improved efficiencies in the areas of electric lighting and equipment, and operations modernization. Reliance on natural gas and propane was reduced as well. The EITE rate discount made these investments possible, while maintaining a competitive cost structure.

If the Norbord Mill were to shut down, the northwestern Minnesota economy would suffer a loss of jobs, tax revenues, and community involvement. Yet, approval of the EITE rate discount would increase the likelihood that that electric rates would continue to be a factor in keeping Norbord a going concern.

C. Potlatch-Deltic

Potlatch-Deltic Lumbermill Manager, Wade Semeliss, submitted an affidavit on February 2, 2021 in support of the renewal of its EITE tariff in this docket.¹⁵ Potlatch-Deltic is the largest lumber producer in Minnesota, producing precision cut boards and employing about 110 people in 2020. According to the UMD Labovitz School of Business study (see above), every sawmill job in Minnesota directly and indirectly supports an additional 3.69 jobs, meaning that an additional 406 jobs in the surrounding community are sustained by the 110 jobs at Potlatch-Deltic. In 2020, the company paid property, Minnesota income, mill, and other taxes.

Potlatch-Deltic purchases most of Minnesota's red pine located on public agency land. If the lumbermill was not operating, higher value red pine, which is used for boards, would fall in valuation to the level of pulpwood. Potlatch-Deltic's provision of a market for red pine creates its own multiplier effect in the regional economy. In addition, because of its careful stewardship of forest resources, the company creates other valuable markets for recreational use. Also, employees have been active in a number of local charities, with the company offering attractive matching funds.

¹⁵ Docket E-017M-21-99, Affidavit of Wade Semeliss, February 2, 2021.

Potlatch-Deltic argues that electricity rates are uncompetitive for its Minnesota lumbermill. Relative to other company mills across the U.S., higher electric rates put this mill in a competitive disadvantage. According to the U.S. Energy Information Agency, Minnesota's rate of growth in energy costs has exceeded that of other timber-producing states. Because of these circumstances, uncompetitive electric rates place the Minnesota Mill at a competitive disadvantage compared to domestic competitors.

Potlatch-Deltic also faces intense international competition from Canadian mills, which benefit from favorable trade protections, Canadian government subsidies, a weak Canadian Dollar, and less rigorous environmental standards. These advantages are illustrated by an increase from 41% to 57% in the Canadian market share for lumber over the last decade.

If the Minnesota Mill shut down because of the unfavorable competitive position, the regional economy would face the multiplied effects of a larger slump in economic activity. The approval of the EITE rate discount would increase the likelihood that that electric rates would continue to be a factor in sustaining the Minnesota Mill's operations.

D. Minnesota Forest Industries and Minnesota Timber Producers Association

Michael Birkeland, Executive Vice President of Minnesota Forest Industries (MFI) and the Minnesota Timber Producers Association (TPA) submitted an affidavit on February 2, 2021 in support of renewal of the EITE rate.¹⁶ MFI is an association representing forest products companies such as sawmills. TPA is an association of loggers, truckers, small sawmills, and related businesses. Norbord and Potlatch-Deltic are members of MFI and Cass Forest Products is a member of TPA.

Mr. Birkeland's presentation is based on a study conducted by Decision Innovation Solutions (DIS) entitled "2020 Economic Contribution Study of Minnesota Agriculture and Forestry" (September 2020) (the "DIS Study"). This study, funded by AgriGrowth and its partners, estimates the economic impact of forest products companies. Forest products is the 5th largest manufacturing industry in Minnesota, contributing \$7.3 billion to state GDP, and employing about 29,000 people.

The industry is a clean energy producer, generating 47% of the industry's total electricity consumption through renewable sources such as self-generated biomass, by-product recovery boilers, or hydroelectric generation.

Minnesota has lost its competitive edge in the forest products industry due to an increasing trend in electric rates over recent years compared to other forest industry states, namely Wisconsin, Washington, North Carolina, and Oregon. Minnesota remains above the national average for industrial rates. The EITE rate is one factor that Minnesota can control.

¹⁶ Docket E-017M-21-99, Affidavit of Michael Birkeland, February 2, 2021.

Combining the three wood products applicants, the consequences of a failure to approve the EITE rate discount could amount to the loss of 930 direct and indirect jobs, \$26 million in payrolls, \$4 million in state tax revenues, and \$430,000 in contributions to local communities. Therefore, MFI and TPA strongly urge approval of the EITE rate application.

E. Rasmussen Expert Testimony

1. Estimation of Quantitative Net Benefits

Forestry economists Mark Rasmussen and Tom Baribault of consulting firm Mason, Bruce & Girard, Inc. were commissioned by OTP-EITE to conduct an economic study on the question of whether the EITE rate discount demonstrates a net benefit to the state of Minnesota.¹⁷ As in the previous EITE rate discount petition before the Commission, this study does not consider the certainty that the benefits will materialize, but rather the reasonable likelihood that such benefits will occur.¹⁸ This study applied the same reasonable likelihood standard to answer the question of net benefit to the state.

The reasonable likelihood standard provides a quantitative estimate to the subjective definition of net benefit. The first step in this analysis was to estimate the net economic benefit of the OTP-EITE company operations. Together, OTP-EITE generated direct contributions of about \$248 million in gross sales, along with directly providing 274 jobs and paying \$4.3 million in state and local taxes. The \$248 million in output or final sales represents an addition to GDP.

These combined operations instigated indirect and induced economic activity, which is estimated by applying IMPLAN study multipliers for 2018 from the DIS study.¹⁹ The study applies a weighted average multiplier of 1.87 from the 2018 IMPLAN model to the \$248 million OTP-EITE output. The resulting total output—direct, indirect, and induced—is \$463 million, meaning that the combined OTP-EITE output of \$248 million creates an additional 87 percent or \$215 million in state-wide economic output.

Next, the same procedure is applied to value added, which is the sum of all forms of income received by the factors of production—labor, land, capital, and entrepreneurial ability. In an effort to estimate more conservative impacts, value added was limited to labor income only, which represents the Minnesota economy. Total labor income for OTP-EITE was \$26 million. Applying the weighted average 2018 IMPLAN model multiplier of 2.48 to \$26 million value added yields a total value added, including direct, indirect, and induced value added, of \$65 million. This is to say, an additional 148% or \$83 million of value added labor income is

¹⁷ Net Impact of the Proposed EITE Rate for Minnesota Woods Products Manufacturers, February 1, 2021, Docket E-017/M-21-99.

¹⁸ Minnesota Public Utilities Commission, 2017, *Order Approving EITE Rate and Establishing Cost-Recovery Proceeding*, Docket No. E-017/M-17-257, November 17, 2017.

¹⁹ AgriGrowth, 2020, *2020 Economic Contribution Study of Minnesota Agriculture and Forestry*, September 2020. Prepared by Decision Innovation Solutions.

generated along various supply chains in the Minnesota economy as a result of the initial labor income earned by workers at the OTP-EITE companies.

The study next found the cost to rate payers of the EITE discount by applying the output multiplier to the estimated cost recovery, which made the cost impact greater in a negative way. The amount of annual cost recovery for the EITE 20% discount was estimated to be \$1,015,245, about a 0.57 percent increase for the average residential rate payer. This total cost recovery amount is multiplied by the same 1.87 multiplier to yield a total direct, indirect, and induced cost equaling \$1,898,508. In this case, the multiplier works in “reverse”, meaning that the initial increase in cost recovery negatively multiplies indirect and induced cost effects as rate payers face marginally tighter budgets. As a result, an additional 87 percent or \$883 thousand of indirect and induced expenditures do not occur since rate payers have slightly less disposable income.

The final step in the estimation of net benefit to the state is to compare the computed cost to ratepayers with the benefit to OTP-EITE. Since certainty regarding any outcome is unknown, the study estimates the probability of cost and benefit being equal. If the reasonable likelihood of staying in business is estimated to be greater than this ratio, then there would appear to be a net benefit to the state. First, the multiplied cost to ratepayers of the EITE discount was estimated to equal \$1,898,508. Next, the multiplied benefit to OTP-EITE was estimated to equal \$463 million. Thus, the ratio of cost to benefit is (\$1.899 million: \$463 million), equal to 0.41 percent (less than one-half of one percent). This is to say, if the probability of OTP:EITE companies staying open with the EITE discount is exactly 0.41 percent, then the expected benefit would exactly offset the expected cost to ratepayers. Since 0.41 percent is a very low ratio (almost zero) of cost to benefit, then there exists a reasonable likelihood that the probability of OTP-EITE companies staying open with the EITE discount is greater than 0.41 percent. The study concludes that it is likely, but not absolutely certain, that these companies would stay open with the EITE discount, all else equal.

The study applies the similar multiplier methodology to employment at the mills. Applying a 3.38 multiplier to total OTP-EITE employment of 274 persons yields an indirect and induced employment in Minnesota of 926 jobs.

2. Evaluation of Qualitative Benefits

Extension of the EITE discount may provide additional subjective benefits for the state of Minnesota. These benefits are not easily measurable, but nonetheless can make an impact on the health of timberland assets and quality of life. The mills listed in this petition are within 25 miles of each other and are located in three counties—Beltrami, Cass, and Hubbard. According to data from Minnesota Employment and Economic Development, these counties had 2,450 manufacturing jobs, including 542 wood products manufacturing jobs. If the OTP-EITE firms were to shut down, the local job market would experience an increased supply of displaced labor and face downward pressure on wages. This prospect would weaken incomes across the region,

Another qualitative benefit extends to forest owners, who are the suppliers of logs to wood manufactures. If the OTP-EITE firms were to shut down, demand for trees would fall and lead to a decrease in stumpage prices.²⁰ Without higher value sawmill demand, the market price for quality trees such as red pine could retreat to lower values based on the pulp wood value of timber, a lower value-added product. In addition, since the three OTP-EITE facilities are located on the western edge of Minnesota's northern forests, they provide more valuable local demand for timber with shorter hauling distances compared to competing mills further to the east.

A second qualitative benefit accrues to the owners of Minnesota forestlands—private landowners, the state, and counties. Private landowners earn revenue to help pay for ownership expenses such as property taxes.

The state owns forestlands managed by the Minnesota DNR Forestry Division and designated as School Trust Lands. Net revenue from the sale of timber on these lands is given to the Permanent School Fund. In 2019, for example, net timber sales equaled \$3.77 million. \$25.39 million of interest and dividend income earned on the funds was distributed to school districts in 2019.

Timber harvests on county-owned lands supply a large volume of logs and also generate an average of 1.74 percent of county revenues.

The closure of the OTP-EITE facilities would not only reduce revenues for private, state, and county forestlands, but also reduce the market value of these lands. The reduction of timber sales would decrease the availability of funds for the management of private lands, the Permanent School Fund, and county budgets.

A third significant qualitative benefit of forest product operations is the contribution to healthy forests, especially in areas hit by wildfires and wind storms. OTP-EITE firms have volunteered in salvage operations in such cases as the Palsburg Fire of 2015. Sawmills are the only operations willing and able to accept charred timber. In addition, wind storms such as the 2011 storm that struck forests of the St. Croix Valley knocked down wide swaths of trees. Left unattended, these dead trees would have created an environment for wildfires, disease, and pest infestation. The salvage efforts of forest products companies transformed economic losses into useful gains for not only the industry, but also the region's forests.

In conclusion, Rasmussen and Baribault estimated the quantitative and qualitative benefits of the EITE rate discount to the state of Minnesota. Quantitatively, they found a net benefit to exist based on a comparison of the reasonable likelihood of benefits accruing to the OTP-EITE facilities compared to the cost to non-excluded, non-EITE ratepayers. They also identified qualitative benefits on behalf of private, state, and county landowners, as well as local communities.

²⁰ Stumpage value is the value of standing timber, prior to being harvested and transported. It is the price a timber buyer will pay a landowner, with consideration given to costs such as logging and hauling.

VI. Parties' Comment on Issues in the Commission's Request for Comment

Nine issues that were identified in the Commission's March 19, 2021 Notice of Comment Period on Otter Tail Power Company's Request for Approval of the Customer Eligibility, Updated Baseline and Annual Update to its Energy-Intensive, Trade Exposed Rider Surcharge Rate, Rate Schedule 13.09. The Department submitted comments.²¹ OTP submitted Reply Comments to additional questions from the Department.²² The OAG also submitted a letter to address the question of adjusting the Baseline Rate.²³

The Department Comments, OTP Reply Comments, and the OAG Letter contributions to the record for each issue raised in the Notice of Comment Period are synthesized below in the order in which the Department first addressed the issues. The following is the list of issues.

1. What criteria should the Commission use to evaluate whether OTP's proposed extension of the EITE rate schedule provides a net benefit to the utility or to the state as required by Minnesota Statutes §216B.1696, subd. 2(b)?
2. Has OTP demonstrated that its proposed EITE rate schedule provides such net benefit?
3. Is OTP's previous deposit of \$10,000 for low-income funding sufficient for the continuation of the EITE Rider and to comply with Minn. Stat. § 216B.1696, subd. 3?
4. Under Minnesota Statutes §216B.1696, subd. 2(d), the Commission shall allow recovery of costs in the next general rate case or through an EITE cost recovery rate rider between general rate cases. Should the Commission allow OTP to continue to implement its EITE surcharge factor and EITE tracker account outside of a general rate case? Or, should the Commission require recovery of costs in the present general rate case?
5. Should the Commission approve OTP's request to extend its EITE Rider for four more years?
6. Is OTP's request to adjust the EITE Customer Baselines reasonable?
7. Is OTP's request to adjust the EITE revenue requirement and surcharge rate reasonable?
8. Should the Commission approve OTP's annual 2020 EITE Rider Update?
9. Are there any other issues relevant to the Commission's review of OTP's petition?

The following is the synthesized discussion of each issue.

- A. Issues 1 and 2: What criteria should the Commission use to evaluate whether OTP's proposed extension of the EITE rate schedule provides a net benefit to the utility or to the state as required by Minnesota Statutes §216B.1696, subd. 2(b)? Has OTP demonstrated that its proposed EITE rate schedule provides such net benefit?**

²¹ DOC Comments March 19, 2021, p. 4

²² OTP Reply Comments, March 29, 2021

²³ OAG letter, March 19, 2021

The Department observed that OTP employed the same methodology to answer this question as it did in its last EITE rate application in 2017, as detailed in the Commission's Order.²⁴ The Commission stated in the Docket 17-257 Order at pages 8 and 9,

Having reviewed the Company's revised petition and expanded record in support of the petition, the Commission finds that Otter Tail's proposed EITE rate schedule and EITE rate, discounting the current rates by 20 percent, can be expected to yield a net benefit to the utility by keeping the EITE Customers, and their associated revenue on Otter Tail's system.

The Commission concludes that Otter Tail has identified the relevant potential benefits and costs to the utility and has quantified them to the extent practicable. The Company estimated that, if the EITE Customers were to shut down and leave its system, it would experience an annual revenue shortfall of \$2,571,126 (derived from expected EITE Customer sales net of avoided EITE Customer costs). In the short run, this cost would be borne by Otter Tail; in the longer term, it would be redistributed among the Company's remaining customers in a rate case. . . .

In sum, the Commission finds that Otter Tail has made the necessary showing of a net benefit to the utility. Therefore, as required by Minn. Stat. § 216B.1696, subd. 2(b), approval of an EITE rate schedule requires a finding of a net benefit either to the utility or to the state; since the first requirement is met, the Commission did not go further.

The Department believes that the same net benefit analysis methodology used in this Petition as used in the prior Petition provides sufficient evidence to conclude that the EITE discount for 2012-2025 provides a net benefit to the state.

B. Issue 3. Is OTP's previous deposit of \$10,000 for low-income funding sufficient for the continuation of the EITE Rider and to comply with Minn. Stat. § 216B.1696, subd. 3?

The Department refers to staff analysis from the prior EITE application Briefing Papers in Docket No. E-017/M-17-257, dated April 11, 2018, where at page 8 Commission staff noted:

It is unclear to staff how a \$10,000 payment in support of outreach for a commission-approved affordability program relates to the revenues impacted by the EITE rate schedule. They appear to be two separate and distinct items with the \$10,000 requirement

²⁴ ORDER APPROVING EITE RATE AND ESTABLISHING COST-RECOVERY PROCEEDINGS, issued November 17, 2017

being a simple pay-to play provision; if a utility wants to petition the Commission for approval of an EITE rate schedule, it must make this payment to do so.

OTP did not discuss this topic in its original Petition. The Department interprets the EITE statute as requiring another \$10,000 deposit with each new application. The Department recommends that OTP confirm whether it has made another \$10,000 deposit to a Commission-approved low income program prior to filing its reply comments.

In March 29, 2021 Reply Comments, OTP agreed that the statute was silent on whether another \$10,000 contribution was required for re-applications. OTP up to this time had not made a contribution, but agreed to promptly make such a deposit and make an informational filing in this docket confirming the same.

In April 5, 2021 Supplemental Reply Comments, the Department agreed with OTP's proposal, and this issue has been resolved.

C. Issue 4. Under Minnesota Statutes §216B.1696, subd. 2(d), the Commission shall allow recovery of costs in the next general rate case or through an EITE cost recovery rate rider between general rate cases. Should the Commission allow OTP to continue to implement its EITE surcharge factor and EITE tracker account outside of a general rate case? Or, should the Commission require recovery of costs in the present general rate case?

According to the Department, the crux of this issue is the nature of the interaction between a general rate case with all of its possible modifications to sales forecasts, rate design, decoupling mechanisms, and revenue true-up mechanisms, and the EITE Petition. In information request 2, the Department asked OTP how its EITE Petition was to be consistent with the current general rate case underway in Docket E-017/GR-20-719.

OTP responded that the effect of the EITE mechanism on the general rate case will be minimal because the EITE discount and cost recovery amounts offset each other, and any actual difference between the two is collected or refunded in a true-up.

Related to the General Rate Case, OTP recommended a decrease of 1,437 MWh or 2.18 percent to the EITE baseline based on more recent and accurate forecasted sales for the 2021 test year. A decrease in the baseline lowers the threshold level for calculation of the 20 percent discount, and also affects the true-up.

The Department concludes that because the estimated and actual sales will be trued-up under the EITE mechanism, the impact on OTP's rate case sales forecast is believed to be minimal.

D. Issue 5. Should the Commission approve OTP's request to extend its EITE Rider for four more years?

The Department recommends that the Commission approve this request on the condition that OTP make the required \$10,000 contribution and one additional trade secret adjustment.

E. Issue 6. Is OTP's request to adjust the EITE Customer Baselines reasonable?

In order to compute the baseline sales for EITE, the Company first forecasted sales for OTP-EITE customers. Two factors affected this forecast. First, the Department observed that over the course of OTP's first EITE discount, CIP efforts of the OTP-EITE companies contributed to a reduction in forecast sales for this Petition. Second, the results of the Trade Secret Table 1 sales analysis were added to determine weather-normalized sales. The effect of these factors convinced the Department that OTP's EITE sales forecast was reasonable. In addition, the Department requested that OTP update its low-income sales average kWh per year for use in the 2021-2025 period.

In its reply, OTP corrected a labeling error to the update of its low-income average per kWh per year sales forecast requested by the Department.²⁵

On March 19, 2021, the OAG submitted a letter focusing on the baseline calculation.²⁶ In OTP's first EITE application, the Commission directed the Company to use 2016 sales as the baseline since it was the year before the EITE discount became effective. In the current Petition, OTP recommends a reduction to the baseline of 1,437 MWh, or 2.18 percent to the baseline. A reduction in the baseline is favorable for non-EITE ratepayers since the refundable difference between actual and baseline sales is greater. Thus, the OAG is in favor of the baseline reduction. However, it believes a future increase in the baseline above the 2016 sales level would not be reasonable since such an increase would diminish one of the original intents of the EITE statute, which was to refund any increased OTP sales revenue to EITE Surcharge-paying ratepayers.

In response to the preceding OAG letter comments, OTP asked in its March 29, 2021 Reply Comments to not decide at this time the issue of the 2016 sales cap. OTP believes there may be a case for increasing the baseline above the 2016 sales level if an OTP-EITE company were to increase production capacity with an addition of labor or capital resources, for example, that would result in an increase in electric sales.

In Supplemental Reply Comments filed on April 5, 2021, the Department responded to OTP's production capacity increase exception to the 2016 EITE sales level baseline limit.²⁷ First, the Commission has clearly set the standard for the "pre-EITE" baseline at the 2016 sales level. Secondly, a production capacity increase is indeed evidence that the EITE statute's intent is working. An increase in capacity is one piece of evidence for a healthier, more profitable production operation. Whatever else may have occurred in the market to spur this increase, it is certain that the EITE discount contributed to the increase in production. Therefore, it is

²⁵ OTP Reply Comments, March 29, 2021.

²⁶ OAG Letter, March 19, 2021.

²⁷ DOC Supplemental Reply Comments, April 5, 2021

reasonable for EITE Surcharge ratepayers to be entitled to a refund of some or all of the surcharge costs that made, at least partially, the increase in production possible. If non-EITE ratepayers were required to pay via an increased baseline, they would ironically be paying for the success of the OTP-EITE facilities that they originally made possible through the Surcharge.

F. Issue 7. Is OTP’s request to adjust the EITE revenue requirement and surcharge rate reasonable?

The Department found OTP’s request reasonable, based on its analysis of the Company’s EITE rate calculation. For the first year of the proposed EITE discount, ending November 30, 2022, OTP provided this table in response to the Department’s information request:²⁸

Table 2: Otter Tail’s EITE Rate Calculation	
Item	December 2021- November 2022
Revenue Requirement	\$ 963,491
Carrying Charge	\$167
Estimated Beginning Rider Balance	\$ 51,580
Total Revenue Requirements	\$ 1,015,245
Projected Sales kWh	2,619,644,245
Proposed Rate Per kWh	\$ 0.00039

The proposed rate is an increase of \$0.00006 per kWh from the current rate of \$0.00033 per kWh, or about \$3.53 annually for a residential customer and represents an 18.2 percent increase over the current rate.

G. Issue 8. Should the Commission approve OTP’s annual 2020 EITE Rider Update?

The first consideration according to the Department is the procedural question of completeness. The Department found that the EITE filing meets the completeness requirements for miscellaneous tariff filings in Minnesota Rules, part 7829.1300.

Secondly, the Department requested a correction to OTP’s proposed customer notice. The notice should read “...approved our request to increase” rather than “to decrease”.

Regarding sales and revenues from EITE customers, the Commission’s 2018 ORDER AUTHORIZING COST RECOVERY WITH CONDITIONS in Docket No. E-017/M-17-257 established a baseline sales number for EITE customers. Any additional sales to OTP from EITE customers above the baseline resulting from the EITE discount are to be refunded to non-EITE, non-exempt ratepayers. OTP provided a calculation of the variance from the baseline in Attachment 5 of the Petition. According to the Order, OTP is required to refund any increased EITE customer revenues from increased customer operations after the four-year discount term is completed in 2021. The total refund due to EITE Surcharge rate payers for 2020 is \$116,898.

²⁸ DOC Comments, March 19, 2021, p. 11

To conclude, the Department recommends the Commission accept OTP's 2020 Update to its EITE Rider Surcharge Rate.

H. Issue 9. Are there any other issues relevant to the Commission's review of OTP's petition?

The Department had no further issues for the Commission's review.

VII. Staff Analysis

A. Introduction

This analysis is based on interpretations drawn from the EITE statute. Definitions in Subdivision 1 serve the important role of guiding the application of the EITE statute. For the purpose of who qualifies as an EITE Customer for the EITE discount under the EITE rider and statute, the sufficient qualification is that the applicant be a "paper mill, wood products manufacturer, sawmill, or oriented strand board manufacturer".²⁹

The fourth qualification defines an EITE company as having 'peak electrical demand of at least 10,000 kilowatts', and is '. . . subject to global competitive pressures and whose electric energy costs are at least ten percent of the customer's overall cost of production.' While this Petition refers to global competitive pressures and a sizable cost share of electricity, according to the language of the statute, the fourth qualification is sufficient, but not necessary, just like the other three qualifications. However, the legislature may have intended that any sawmill of sufficient size could be offered an EITE rate by OTP, and that OTP had the discretion to limit the offering of the EITE rate to these larger customers.

EITE applicant companies reference the cost of OTP electricity compared to the cost in other forestry industry states. Staff notes the assumption behind these references is that domestic competition among the States falls under the criterion of globally competitive pressures.

The definition of "competitive electric rates for energy-intensive trade-exposed customers" in Subd. 2. (a) is assumed to refer to the cost of OTP electricity relative to the cost of electricity in other regional jurisdictions that host forest product manufacturing in the United States, Canada, and elsewhere.

The Notwithstanding clause means that if the Commission finds a net benefit to the utility or the state, the listed Statutes do not apply to the implementation of the EITE Statute. Please see the Briefing Papers in Docket E-017/M-17-257 for an in-depth discussion.³⁰

²⁹ Minn. Stat. § 216B.1696, subd. 1(c)(2).

³⁰ For more discussion, see In the Matter of the Petition by Otter Tail Power Company for Approval of an Energy-Intensive, Trade-Exposed Customer Rate, Docket No. E017/M-17-257, April 3, 2017, p. 10.

B. Finding of Net Benefit

The finding of ‘net benefit’ is central to the Commission approving an EITE rate schedule and any corresponding rates. Net benefit can easily be confused with economic impact. Economic impact is the accounting for the effect of some economic activity, focusing more on the idea of cause and effect. Net benefit measures two opposing valuations—cost and benefit—arising from a specified action. Every benefit has an economic cost necessary for the creation of the benefit. Net benefit is the difference between the benefit and cost of the action.³¹

The EITE Statute does not prescribe a method for finding “net benefit”.³² Some costs and benefits are quantitative—easily measured in dollars, while others are subjective or qualitative. Qualitative analysis helps to capture benefits that may not necessarily have associated market valuations.

C. The Rasmussen Study

The OTP-EITE consortium commissioned the Rasmussen study to answer the question of whether there is a finding of net benefit to the state. The study did not consider whether there was a finding of net benefit to the utility.

It is important to understand the capabilities of economic models. A model is like a map that tells you how to get to your destination. A map will not tell you what your destination should be, but it will give you the best route to get there. To be realistic, a map would have to have a 1:1 scale, which of course is not practical. Yet, a map is of value because it helps you successfully reach your destination. Similarly, an economic model of the northwestern Minnesota economy is not realistic, yet it may provide useful guidance to make a wise decision.

As with any economic analysis, keep in mind the existence of embedded or hidden assumptions that support the model.

The net benefit analysis drew upon the results of the “2020 Economic Contribution Study of Minnesota Agriculture and Forestry”, by Decision Innovation Solutions (DIS).³³ This study estimated multiplier values of industries using an input-output (I-O) matrix in which every expenditure in a given industry is allocated to every other industry as income. This income for each industry is in turn spent on several inputs needed in the production of its own output. Thus, total inputs and total outputs across all industries are equal by definition. These coefficients provide the basis for estimating the multipliers for each industry.

³¹ For more discussion, see In the Matter of the Petition by Otter Tail Power Company for Approval of an Energy-Intensive, Trade-Exposed Customer Rate, Docket No. E017/M-17-257, April 3, 2017, p. 14.

³² For more discussion, see In the Matter of the Petition by Otter Tail Power Company for Approval of an Energy-Intensive, Trade-Exposed Customer Rate, Docket No. E017/M-17-257, April 3, 2017, p. 13.

³³ AgriGrowth, 2020, 2020 Economic Contribution Study of Minnesota Agriculture and Forestry, September 2020. Prepared by Decision Innovation Solutions.

The multipliers estimate the circulation of expenditures and income across numerous related production chains within the state of Minnesota. Thus, the multipliers estimate the value of expenditures in the raw materials, manufacturing, and marketing stages of a given industry such as precision cut lumber. By definition, the sum of these intermediate expenditures is greater than the final goods value. The magnitude of this difference relates to the complexity and length of production processes.

The study estimates two types of multipliers for value added and output. Value added is the amount of income earned in the form of wages, rents, interest and profits. Rasmussen makes a conservative assumption by choosing Minnesota-based employee compensation to represent income in the supply side of each industry. The other sources of income are excluded from the analysis of value added.

The output multiplier measures the direct, indirect, and induced effects of the OTP-EITE output, also called final retail sales or GDP.

Rasmussen applies another multiplier, derived in the DIS study, on the value of final goods output. This output multiplier measures the direct, indirect, and induced effects of OTP-EITE output, also called final goods expenditures or GDP. In this case, final goods expenditures on output create similar pathways of additional income and subsequent expenditures.

Table 3 lists the DIS multipliers and Rasmussen's total extended expenditures:

All OTP-EITE Mills	Actual	Multiplier	Total
Value Added Total	\$26,132,435	2.48	\$64,749,981
Output Total	\$248,216,400	1.87	\$463,120,408

One assumption to keep in mind is that the savings rate remains constant. In the short-run, a higher than expected savings rate would reduce the income multiplier by withdrawing funds available for expenditure. A lower rate of savings would release more funds into the economy as workers spend more money.

1. Cost Analysis

Rasmussen estimated the total annual cost of the EITE Surcharge to non-exempt EITE ratepayers to be \$1,898,508 by applying the value added multiplier (2.48) derived from OTP-EITE labor income. This amount, which includes direct, indirect, and induced effects, represents the cost of the EITE twenty-percent (20%) discount defused across OTP's non-exempt ratepayers. Although this increase in cost amounts to only a few dollars per year, it nonetheless increases non-exempt ratepayers' costs.

2. Benefit Analysis

Rasmussen estimates the multiplied benefits to the state of the OTP-EITE companies staying open to be \$463 million. Note that this benefit is a continuation of current business operations, the avoidance of a loss to state output (GDP). Additionally, this benefit is concentrated across three of the largest forest product manufacturers in the state.

However, at this point it may be important to note that firms with international operations and headquarters in foreign jurisdictions can legally use transfer pricing rules to record revenues and expenses in such a way so as to minimize tax incidence across the whole company. In the current Petition, it is not clear if, and if so, how transfer pricing policies affect the distribution of EITE customers' revenues and expenses in their Minnesota facilities. This information would be useful to have in applying this model to future time periods.

3. Net Benefit Analysis

Rasmussen found a net benefit for the state by a statistical process of estimating the reasonable likelihood of OTP-EITE mills closing, as detailed earlier in these Briefing Papers. The ratio of cost to benefit was 0.41 percent. From an expected value point of view, if the expected probability of all the OTP-EITE firms staying open was greater than 0.41 percent, then it would be reasonable to incur the cost to the non-EITE ratepayers in exchange for the benefits of the mills staying open.

The maximum net benefit to the state would be the estimated \$463 million in continued state GDP, on a fully multiplied basis.

D. Assumptions

It is a good practice to be mindful of assumptions underlying conceptual results. The first economic assumption is *ceteris paribus*.³⁴ Rasmussen's study is static in nature, not allowing for dynamic changes in the economy. One such possible source of change is the future trend of COVID-19. The virus has disrupted trade and consumption across the world. Another application of *ceteris paribus* is that the competitive landscape will not change. Energy is just one factor, in this case at least a 10 percent share, in the cost structure of forest product manufacturers.

It is possible that changes in other cost components could tip the mills into a loss position. Without financial statements on the cost of production, it is difficult to know understand the risks associated with a given cost structure.

Staff agrees with the Rasmussen study that a finding of net benefit does not convey any sense of certainty regarding the tenure of the OTP-EITE mills. The extremely low value of the ratio supporting the reasonable likelihood outcome does not imply that electricity is a sufficiently

³⁴ Ceteris Paribus is a Latin phrase meaning "other things equal or "other things held constant".

determinative factor in the decision to stay open or shut down. The observation that Minnesota lumber mills pay more for electricity compared to other states does not necessarily imply that they are high marginal cost producers. In sum, Staff notes that the calculation of relative probabilities in an uncertain environment is the best one can expect from such an analysis.

In addition, the analysis and the EITE statute assume no obligation on the part of the mills to do anything in exchange for the EITE rate discount beyond making the \$10,000 low income outreach deposit.

Another implied assumption in the analysis is that the choice is binary for all three mills: all stay open or all shut down. While it certainly is possible that they could shut down, it is also more likely that just one could shut down. These outcomes are uncertain as well.

Other insights could inform the Commission's understanding of the competitive posture of OTP-EITE mills. For instance, economic theory states that high marginal cost producers are usually the first to shut down. Low cost producers can continue to profitably operate through a cyclical downturn, and then capture the market share the high cost producers abandoned upon shutting down. It would be beneficial to know where the OTP-EITE mills are on the marginal cost or supply curve—high or low cost.

Another assumption behind the analysis is that if the mills were to shut down, no competitors would arise to fill the void in supply. It is possible for new operators to enter the market or expand with a new strategy that includes a less costly production plan. If new competitors were to enter the market, they would most likely demand electricity from OTP, thus offsetting the loss of sales. Yet, this prospect is uncertain as well.

Capacity utilization is another useful indicator of the risk of shutting down. The higher the rate of capacity utilization, the busier the mill is and thus less likely to shut down. If the mills are operating near capacity, it would be reasonable to expect a cap in refunds to non-EITE ratepayers because fixed plant resources would constraint expansion of production in the short run.

E. The \$10,000 Low Income Deposit

On the question of whether OTP needs to make another \$10,000 deposit to a Commission-approved low income outreach program, the Department agreed with the staff analysis on page 8 of Commission Briefing Papers in OTP's previous EITE filing, E-017/M-17-257. A new application would trigger another \$10,000 low income outreach deposit.

Staff raises another question of whether OTP would need to make another \$10,000 deposit if a fourth mill applied for the EITE discount. In its Petition, OTP stated that additional applications should be submitted in a new petition in a new Docket. According to the same reasoning, the answer would appear to be yes.

F. Nature of EITE Cost Recovery

According to the EITE statute, OTP is entitled to cost recovery. The Department was satisfied with OTP's statement that there would be a sufficient amount of separation from the general rate case. A designated true-up mechanism ensures this degree of independence.

Staff raises the question of whether non-EITE mills in OTP territory would pay the EITE Surcharge in support of their larger OTP-EITE competitors, who may already have a competitive advantage by virtue of scale economies that come with size.

G. Reasonableness of Adjustments to EITE Customer Baselines

This Petition has drawn a significant amount of discussion over adjustments to the baseline, which is a complex question. The Department, the OAG, and OTP maintain differing views on the topic. All parties agree with the rationale for lowering the baseline to adjust for trends in electric sales. However, the conflict of opinion is over the upper limit for raising the baseline, which would be a favorable move for OTP-EITE and unfavorable for non-EITE ratepayers.

Staff notes there are two opposing forces affecting the baseline. First, continuing CIP advances will reduce OTP-EITE sales, and over time reduce future sales forecasts. Second, production driven growth among the OTP-EITE mills will naturally increase electric sales.

OTP believes it is reasonable to increase the baseline to a level higher than the original 2016 test year to reflect production capacity growth. The OAG maintains the statute limits upward moves from the 2016 level.

This issue remains open.

H. Reasonableness of Adjustments to the EITE Revenue Requirement and Surcharge Rate

The Department agrees that adjustments to the EITE Revenue Requirement and Surcharge Rate are reasonable. Staff notes that the proposed rate of \$0.00039 per kWh for 2021-2022 is 18.2 percent higher than the current rate, a steep rate of increase.³⁵

³⁵ DOC Comments, March 19, 2021, p. 11

VIII. Decision Alternatives

OTP's 2020 Annual Update (Report)

1. Approve OTP's 2020 Annual Update. (OTP, DOC)

or

2. Do not approve OTP's 2020 Annual Update.

Extension of OTP's EITE Rider

3. Approve OTP's request to renew its EITE rider and rate for a four-year period. (OTP, OTP-EITE, DOC)

or

4. Do not approve OTP's request to renew its EITE rider and rate for a four-year period.

EITE Rider Customer Baseline

5. Cap the OTP EITE Customer Group's Annual kWh baseline usage at the amount identified in Docket No. E-017/M-17-257 in Attachment A of the Company's Reply Comments dated February 15, 2018 beginning in 2021. (OAG, DOC)

or

6. Take no action. (OTP)

Contribution to Low-Income Agency

7. Require OTP to provide a compliance filing that verifies that it has made a \$10,000 contribution to a low-income agency consistent with Minnesota Statute. (DOC, OTP)

or

8. Choose another alternative.

Customer Notification

9. Approve OTP's revised customer bill message for the new EITE surcharge. (OTP, DOC)

Compliance Filing

10. Require OTP to submit revised EITE rider tariff language in a compliance within 10 days of the date of the Commission's Order. (PUC staff)