

**BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS
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IN THE MATTER OF THE APPLICATION
OF MINNESOTA PIPE LINE COMPANY,
LLC FOR A CERTIFICATE OF NEED FOR
THE MINNESOTA PIPE LINE
RELIABILITY PROJECT TO INCREASE
PUMPING CAPACITY ON THE LINE 4
CRUDE OIL PIPELINE IN HUBBARD,
WADENA, MORRISON, MEEKER,
MCLEOD AND SCOTT COUNTIES

Docket No. PL5/CN-14-320

OAH Docket No. 68-2500-31889

**INITIAL BRIEF OF THE MINNESOTA
DEPARTMENT OF COMMERCE**

April 9, 2015

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INTRODUCTION

The Minnesota Department of Commerce, Division of Energy Resources (“Department” or “DOC”) respectfully submits this Initial Brief in order to provide the Administrative Law Judge (“ALJ”) and the Minnesota Public Utilities Commission (“Commission”) with analysis of the facts and law pertaining to the request for a Certificate of Need (“CN”) for the Minnesota Pipe Line Reliability Project (the “Project”), filed by the Minnesota Pipe Line Company, LLC (“MPL” or “Applicant” or “Company”). Through its analysis of the record, the Department concludes that MPL has met its burden of demonstrating that the proposed Project is needed under Minn. Stat. § 216B.243 (2014) and Minnesota Rules part 7853.0130 (2013). The Department and MPL disagree, however, on whether granting a CN should be conditioned on requiring MPL to implement an environmentally neutral footprint policy regarding conservation of natural resources and incremental energy used by the Project through either purchasing green power or participating in other programs to offset any increased energy use.

PROCEDURAL HISTORY

This matter initially began when the Applicant filed a proposed Notice Plan on April 17, 2014. On May 6, 2014, the Department reviewed the proposed Notice Plan and recommended that the Commission approve it, subject to MPL providing additional information and clarification as to certain items. MPL submitted Reply Comments on May 27, 2014, responding to the Department’s requests. On June 6, 2014, the Department indicated that after review of MPL’s Reply Comments, MPL had satisfied the Department’s conditions, and recommended that the Commission approve MPL’s revised Notice Plan.

On June 26, 2014, the Commission issued an Order Approving the revised Notice Plan. In addition, the Commission required MPL to include the revised Project Overview Map to landowners, residents, and government officials along the entire pipeline alignment and to

provide notice maps, including the Project Overview Map and the applicable detailed aerial map, to landowners and residents who own or live on land abutting the pump stations.

On July 25, 2014, MPL filed an Application for a Certificate of Need (“Application”) for the Project. The proposed Project would increase the pumping capacity of MPL’s Line 4 from approximately 165,000 barrels per day (“bpd”) to its original design capacity of approximately 350,000 bpd by upgrading two existing pump stations and by adding six new pump stations along Line 4.

On August 19, 2014, the Department filed Comments on the completeness of the Application. The Department reviewed the Application and determined that it was substantially complete, pending MPL’s submission and clarification of certain information in the Application. The Department recommended that the Commission refer this matter to the Office of Administrative Hearings (“OAH”) for a contested case proceeding.

On August 29, 2014, MPL filed Reply Comments on the completeness of the Application. In addition, while stating that the Application was complete as filed, it submitted additional information and provided clarification as to certain items in response to the Department’s Comments on completeness. Finally, MPL indicated that a contested-case proceeding would not be necessary.

On September 9, 2014, the Department submitted a letter expressing that the Commission could deem the Application complete after MPL submitted additional information and clarification as it requested.

On October 17, 2014, the Commission issued an Order Finding Application Substantially Complete and Notice and Order for Hearing. In this Order, the Commission deemed MP’s Application substantially complete and referred the matter to OAH for a contested case

proceeding. In addition, the Commission requested that the Minnesota Department of Commerce, Division of Energy Environmental Review and Analysis (“DOC-EERA”) conduct an environmental review by analyzing the potential effects of the proposed Project, and of the alternatives identified in the Application, on the natural and socioeconomic environment.

On October 27, 2014, the ALJ assigned to this matter, Jeanne M. Cochran, held a prehearing conference.

On October 29, 2014, ALJ Cochran issued a First Prehearing Order, setting procedures for parties in the case, and establishing the following schedule:

Milestone	Timing
MPL Direct Testimony	November 17, 2014
DOC-DER Direct Testimony (and any other party)	January 9, 2015
All Parties’ Rebuttal	February 6, 2015
DOC-EERA Environmental Analysis	By February 6, 2015
All Parties’ Surrebuttal	February 27, 2015
Public Hearings	Week of February 23, 2015
Contested Case Hearings (1-2 days)	March 10-12, 2015
Public Comment Period Closes	March 20, 2015
Initial Briefs	April 9, 2015
Reply Briefs and Proposed Findings of Fact	April 23, 2015
ALJ Findings of Fact, Conclusions of Law, and Recommendation	May 27, 2015

On November 17, 2014, MPL filed the Direct Testimony of Robert L. O’Hair, President of MPL, Terry Baker, Growth/Capital Projects Leader for Koch Pipeline Company, L.P. (“KPL”), Luther Ottaway, Managing Director of Business and Commercial Development for

KPL, and Daniel W. Jones, a Certified Senior Environmental Scientist with the Barr Engineering Company.

On January 9, 2015, DOC filed the Direct Testimony of Laura B. Otis, a Public Utilities Rates Analyst with DOC.

On February 6, 2015, DOC-EERA filed its Environmental Report.

On February 6, 2015, MPL filed the Rebuttal Testimony of Robert L. O’Hair and Terry Baker.

On February 27, 2015, DOC filed the Surrebuttal Testimony of Laura B. Otis.

On March 10, 2015, the ALJ held a one-day evidentiary hearing at the Commission.

STATEMENT OF THE ISSUES

The main issue before the Commission is whether MPL has shown that the proposed Project satisfies the applicable statutory and rule criteria for a CN, or whether a more reasonable and prudent alternative to the proposed Project has been demonstrated. The Department recommends that the Commission approve MPL’s Application for a CN because the Department concludes that MPL has met its burden of demonstrating that the proposed Project is needed under the need criteria found in Minnesota Rules part 7853.0130 (2013). Also at issue is whether granting a CN should be conditioned on requiring MPL to implement an environmentally neutral footprint policy regarding conservation of natural resources and incremental energy used by the Project through either purchasing green power or participating in other programs to offset any increased energy use.

BURDEN OF PROOF

MPL bears the burden of proof by a preponderance of the evidence that it has satisfied Minnesota legal criteria for issuance of a CN. Minn. Stat. § 216B.243, subd. 3 (2014); Minn. R. 7853.0130 (2013).

ANALYSIS

I. MPL HAS SATISFIED THE LEGAL CRITERIA FOR A CERTIFICATE OF NEED UNDER MINN. STAT. § 216B.243 AND MINN. R. 7853.0130

The principal requirements for a large petroleum pipeline CN are set forth in Minnesota Statutes section 216B.243, subdivision 3 and Minnesota Rules parts 7853.0130A–D. Essentially, Minnesota law requires MPL to demonstrate that the proposed Project is needed and requires that “a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant” *See* Minn. Stat. § 216B.243, subd. 3; Minn. R. 7853.0130(B). As discussed further below, the Department concludes that MPL has met these legal requirements.

Given that Minnesota Rules, where provided, are more detailed than corresponding statutory need criteria, the rule criteria found in Minnesota Rules part 7853.0130 are used in the Department’s Initial Brief as a framework for evaluating MPL’s compliance with the legal criteria.

A. Summary of the Proposed Project

MPL has proposed to increase the capacity of its 305-mile Line 4, the newest pipeline on the MPL System, from its current throughput capability of approximately 165,000 bpd to its original design capacity of approximately 350,000 bpd. The proposed Project would not change the pipeline itself, but it would change the potential throughput capability to 106,750 bpd-miles (350,000 bpd x 305 miles). The Project involves upgrading two existing pump stations on MPL Line 4 (in Clearbrook and Albany, Minnesota) and installing six new pump stations along the current MPL Line 4 route. The new pump stations are proposed to be located in rural areas in the counties of Hubbard, Wadena, Morrison, Meeker, McLeod, and Scott. MPL has not

proposed installing any new pipeline and it has not proposed to acquire a new pipeline right-of-way.

MPL needs a CN for the proposed Project because the proposed Project would increase the capacity of Line 4 in excess of over 20% of its rated capacity (350,000 bpd is in excess of 120% of the current throughput capability of 165,000 bpd) and the proposed Project qualifies as a large energy facility. Ex. 100 at 2 (Otis Direct) and Minn. R. 7853.0030(D) (2013). In addition, the size of the expansion also means that the Applicant must provide all information required by Minnesota Rules Chapter 7853. Minn. R. 7853.0030.

B. Minn. R. 7853.0130(A): The Probable Result of Denial Would Adversely Affect the Future Adequacy, Reliability, or Efficiency of Energy Supply to the Applicant, the Applicant's Customers, or to the People of Minnesota and the Neighboring States

According to MPL, and as the Project's name indicates, the proposed Project would make the MPL System, as a whole, more reliable by increasing throughput capability, which for the MPL System is presently operating near its capacity of 465,000 bpd. MPL Ex. 2 at 2 (Application). By increasing throughput capability on Line 4, the MPL System would be more flexible by allowing MPL to transfer crude oil shipments from older Lines 1 through 3 to the newer Line 4 for various reasons, including for maintenance or outages, without disrupting crude oil supplies, and to address an increase in forecasted energy demand. *Id.* at 2–3, 23–25.

1. MPL Forecasts Average Daily Energy Demand to Increase

MPL forecasts average daily demand to increase from historical levels (approximately 344,000 bpd in 2013) to 360,000 bpd in 2015 (increase of 16,000 bpd) and 400,000 bpd in 2029 (an additional increase of 40,000 bpd). *Id.* at 23–25. According to the Company, the forecast is

informed by information from several sources, including the Minnesota refiners,¹ the Canadian Association of Petroleum Producers (“CAPP”), and the North Dakota Pipeline Authority. *Id.* at 24. MPL did not provide replicable forecast data, but it did provide historical throughput on the MPL System (Application Table 7853.0510-A) and historical nomination data. *Id.* at 19; MPL Ex. 28 at RLO, Sched. 2 at 11–12 (Trade Secret) (O’Hair Direct).

The Department analyzed the reasonableness of MPL’s demand forecast from two perspectives. DOC Ex. 100 at 7 (Otis Direct). First, the Department compared the forecasted values with historical throughputs on the MPL System. *Id.* Then, because the Minnesota refiners are the only shippers on the MPL System, the Department performed research on expected expansions or efficiency improvements at the Minnesota refineries. *Id.* at 7–8.

Using the historical throughput data provided in the Application, the Department calculated that actual throughput (actual annual daily nominations) on the MPL System has increased by an average of 2.56% per year between 2010 and September, 2014, which can be seen in Table 1, below. *Id.* at 8. As the data for 2014 is only through September, the expected total for 2014 is higher, which would result in a higher average annual percent increase. *Id.* Thus, the estimate of 2.56% may be conservative. *Id.*

Table 1: Historical Daily Throughput (Through September, 2014)

Year	Avg. Daily Actual bpd	Annual Increase bpd	% Annual Increase
2010	320,101		-
2011	329,294	9,193	2.87%
2012	341,859	12,565	3.82%
2013	344,574	2,715	0.79%
2014	354,083	9,509	2.76%
Average		8,496	2.56%

¹ Flint Hills Resources, LP and Northern Tier Energy, LLC.

MPL provided forecasted daily throughput values in section 7853.0520 of the Application. MPL Ex. 2 at 23–25 (Application). The Department compared the forecast to the historical data presented in Table 1, above, and concluded that MPL forecasts an average yearly increase in system throughput of 1.87% between 2014 and 2020, as demonstrated by the following table and figure:

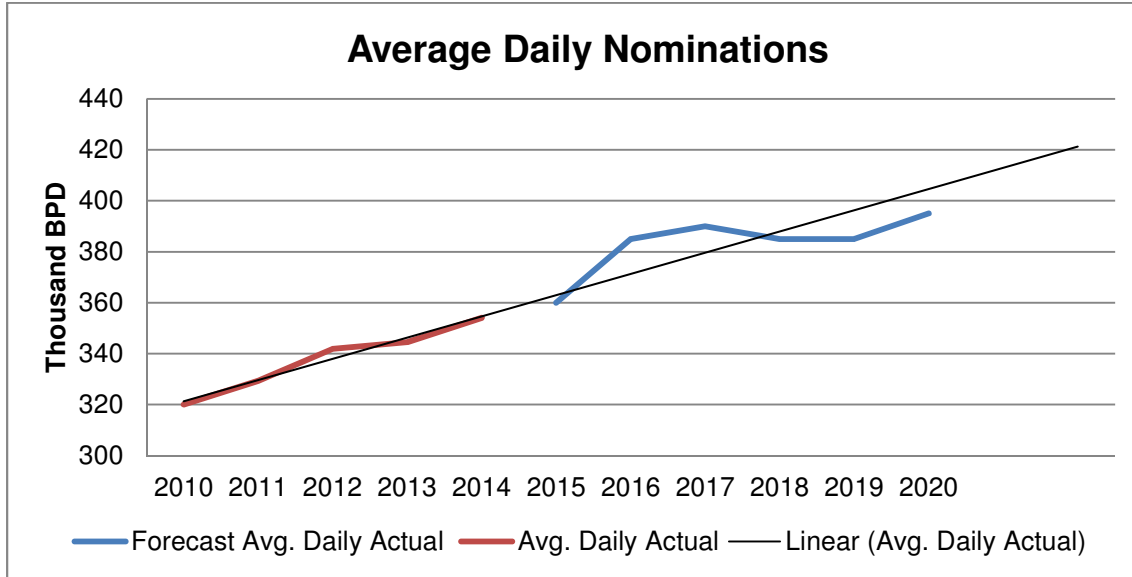
Table 2: Projected Daily Throughput

Year	Avg. Daily Actual	Annual Increase bpd	% Annual Increase
2014	354,083		-
2015	360,000	5,917	1.67%
2016	385,000	25,000	6.94%
2017	390,000	5,000	1.30%
2018	385,000	-5,000	-1.28%
2019	385,000	0	0.00%
2020	395,000	10,000	2.60%
Average		6,820	1.87%

DOC Ex. 100 at 9 (Otis Direct).

As illustrated in Figure 1, below, the projected average daily nominations generally fall along the linear trend estimated from the historical data. *Id.* MPL projects throughput to increase slightly faster than the historical average in 2016 and 2017 before the rate of increase falls below historical levels in 2018 and beyond. *Id.*

Figure 1: Average Daily Nominations



Based on these comparisons between recent actual data and forecasted values, the Department concluded that MPL’s forecasted crude oil throughput demand is reasonable. *Id.* at 10.

In addition, the Department understands that one of Minnesota’s refineries, the Flint Hills Resources’ Pine Bend refinery (“Pine Bend”), is currently undergoing a \$400 million construction project that will increase the operating efficiency of the refinery so that the refinery will operate close to its nameplate capacity of 320,000 bpd. DOC Ex. 101 at LBO-1 (Otis Direct Attachments). Pine Bend and Minnesota’s other refinery, Northern Tier Energy’s St. Paul Park (“St. Paul Park”), are the only shippers on the MPL System; therefore, throughput on the MPL system will increase only if these refiners increase demand through capacity expansions or increases in utilization or efficiency rates. DOC Ex. 100 at 10 (Otis Direct).

Pine Bend has been operating at between 82% to 90% capacity in recent years—between 262,400 and 288,000 bpd (total capacity of 320,000 bpd). *Id.* Once Pine Bend completes its

efficiency upgrades, crude oil demand at Pine Bend could increase by up to 45,000² bpd. DOC Ex. 100 at 10 (Otis Direct). A more conservative estimate, however, would estimate an increase in demand of between 19,000 bpd and 45,000 bpd. *Id.* This range assumes maximum average yearly utilization of 96%.³ *Id.* at 10–11. Evidence of Pine Bend’s efforts to improve utilization provides support for MPL’s forecast of modest growth in refinery demand for crude oil shipments on the MPL System. *Id.* at 11.

MPL’s forecasted energy demand is substantially similar to the level of growth that the MPL System has seen in the past five years. *Id.* While MPL projects lower growth in daily throughput over the forecast period than it experienced over the last five years, it forecasts growth in energy demand nonetheless. *Id.* In addition, evidence from outside sources confirms ongoing efforts by Pine Bend to increase utilization, which will lead to increased demand for crude oil deliveries from the MPL System; thus, the Department concluded that MPL’s forecast is reasonable. DOC Ex. 100 at 11 (Otis Direct).

2. The Proposed Project Would Make the MPL System More Reliable

Because MPL frames the proposed Project as addressing reliability—rather than merely increasing throughput capacity—MPL states that denial of its Application would negatively impact the reliability of the MPL System. MPL Ex. 2 at 6–10 (Application). As the MPL System is currently the only pipeline system serving Minnesota’s two refineries, as indicated above, reliability problems on the MPL System could negatively affect the reliability of the crude oil

² An increase from 82% utilization to 96% utilization would result in an increased throughput of approximately 50,000 bpd (96% - 82% = 14%; 320,000 × 14% = 44,800).

³ Refinery utilization in Minnesota’s sub regional refining group (MN, SD, ND, and WI) dropped below 96% nine times in the last 15 years, with five of the nine occurrences happening around the time of the recent recession (2006–2010). Refinery utilization has only dropped below 93% three times in that period.

supply to them and, in turn, negatively affect the reliability of the refined product supply to the people of Minnesota and surrounding states. *Id.*

Specifically, MPL is concerned about reliability issues that would arise when one of its older lines, such as Lines 1 or 2, experiences a planned or unplanned outage. *Id.* at 8. Because those lines are older, they require more frequent inspections and maintenance, both of which require temporary outages. *Id.* at 8–9. The MPL System also lacks sufficient sprint capacity, which is excess capacity used to transport surplus barrels to refineries when needed to satisfy a sudden increase in demand or to make up for prior production or pipeline outages. *Id.* at 8.

Over the past five years, planned and unplanned outages on the MPL System have resulted in an average of 216 hours of outages per year on Lines 1, 2, and 3, and 127 hours of outages per year on Line 4. DOC Ex. 101 at LBO-3, LBO-4 (Otis Direct Attachments). Outages over the past five years have interrupted 2.5% of yearly throughput capacity on Lines 1, 2, and 3, and 1.5% of capacity on Line 4. *Id.*

In addition to lost throughput, the MPL System also experiences throughput loss due to unplanned events that cause system slowdowns. For the twelve months ending November, 2014, the MPL System experienced an average of 13.7 slowdowns per month, lasting an average of 17.2 hours and causing an average loss to potential throughput of 20,471 bpd per event.⁴ *Id.* at LBO-3.

The Department's witness testified that MPL's reliability concerns are credible. DOC Ex. 100 at 13 (Otis Direct). The Department reviewed MPL's data regarding recent and projected outages. Given that MPL's demand forecast is reasonable, as indicated above, and

⁴ Because the average slowdown lasted only 17.2 hours, the average event resulted in a loss to potential throughput of 14,670 barrels.

given that MPL's Lines 1 and 2 each have a capacity of 110,000 bpd, Table 7853.0520-B in the Application is a realistic representation of the expected crude oil shortages that Minnesota refiners would experience under an outage of Line 1 or Line 2.⁵ *Id.* at 13; DOC Ex. 101 at LBO-3 (Otis Direct Attachments); MPL Ex. 2 at 24 (Application). The consequence of denial of the Application for a CN would likely lead to continued reliability problems on the MPL System, which would likely increase as demand increases. DOC Ex. 100 at 13 (Otis Direct). Reliability problems would have negative consequences for MPL, its customers (specifically, the Minnesota refineries), and to the people of Minnesota and neighboring states. *Id.* at 13–17.

Negative consequences experienced by the people of Minnesota and surrounding states would be caused by a decrease in crude oil supplies available to the Minnesota refineries. *Id.* at 15. If the Minnesota refineries are forced to cut production of refined petroleum products, the people who live in areas that depend on the Minnesota refiners for petroleum product supplies would experience higher prices in response to decreased supply. *Id.* The people of Minnesota would be significantly affected, as the two Minnesota refineries jointly produce the vast majority of petroleum products consumed in Minnesota. *Id.* Pine Bend alone is estimated to produce about half of Minnesota's gasoline and diesel supplies, along with 80% of the jet fuel used at the Minneapolis-St. Paul airport. *Id.* Surrounding states are also heavily dependent on the Minnesota refiners for transportation fuels supplies; for example, Pine Bend supplies 30% to 40% of the transportation fuels consumed in Wisconsin. DOC Ex. 100 at 15 (Otis Direct); DOC Ex. 101 at LBO-5 (Otis Direct Attachments).

⁵ MPL's response to Department discovery establishes that the MPL system experienced an average of 69 outages per year on Lines 1, 2, and 3 and 65 outages per year on Line 4. DOC Ex. 101 at LBO-3 (Otis Direct Attachments).

An example of the price increases that could occur when Minnesota refiners are forced to cut production was the forced outage Pine Bend experienced in one of its coking units in May, 2013. *Id.* at LBO-7. The coking unit was taken out of service for an unplanned outage that lasted several weeks. *Id.* at LBO-8. During that time, gasoline prices in Minnesota climbed well above the national average and increased by approximately 65 cents per gallon, from around \$3.60 to nearly \$4.30 per gallon. *Id.* at LBO-9. This event provides an example of the real impacts that decreased production from the Minnesota refineries have on the prices Minnesotans pay for refined petroleum products. DOC Ex. 100 at 16 (Otis Direct). Decreased production at the Minnesota refineries, whether caused by equipment outages at the refinery, or by constraints on the MPL System, negatively impact the people of Minnesota and surrounding states that depend on the Minnesota refineries for refined petroleum products. *Id.*

C. Minn. R. 7853.0130(B): A More Reasonable and Prudent Alternative to the Proposed Facility Has Not Been Demonstrated by a Preponderance of the Evidence

MPL examined several alternatives to the proposed Project and analyzed how each compared to the proposed Project, as required by Minnesota law. Minn. R. 7853.0540 (2013). Part 7853.0540 requires MPL to discuss the design, area, and estimated in-service date, method of operation, cost, economic life, and reliability of possible alternatives. A CN applicant is also required to summarize its reasons for rejecting each alternative. Minn. Stat. § 216B.243, subd. 3(6) (2014). In the Application, MPL provided a detailed discussion of the following alternatives:

- Taking no action;
- Shipping by truck;
- Shipping by rail;

- Building a new pipeline; and
- Restarting the Wood River pipeline.

In addition, the Department requested that the Applicant discuss whether a storage alternative would be more reasonable and prudent. MPL provided information stating several credible reasons as to why a storage alternative would not be feasible, which is discussed *infra*. DOC Ex. 101 at LBO-11 (Otis Direct Attachments).

1. The No-Action Alternative

MPL rejects the no-action alternative, based on its assertion of a need for increased capacity on Line 4, to avoid reliability problems on the MPL System. DOC Ex. 2 at 33–34 (Application). The Applicant asserted that the no-action alternative is not viable because, absent the additional capacity the proposed Project would add, if one of the other lines on the system is taken out of service for maintenance, the remaining lines would not be able to meet the Minnesota refineries' current and expected demands for crude oil. *Id.*

The Department agrees that this alternative is not reasonable. DOC Ex. 100 at 19 (Otis Direct).

2. Non-Pipeline Alternatives: Trucking and Railroad Transport

MPL discussed the following aspects truck and rail alternatives for crude oil transport: cost, projected in-service date, economic life, and reliability.

In terms of cost, both alternatives have significant fixed costs (upfront capital expenditures on rail cars or trucks, loading and unloading facilities, and rail tracks and road upgrades) and variable costs (maintenance and labor from engineers, drivers, and loading crews) over the expected economic life of the Project that would make these alternatives unreasonable. MPL estimates that the trucking alternative would cost between \$7.50 and \$9.25 per barrel and

that the rail alternative would cost approximately \$8.00 per barrel,⁶ while the incremental shipping costs added by the proposed Project would be no more than \$0.25 per barrel, with total costs to ship between Clearbrook and the Minnesota refineries remaining below \$2.00 per barrel.⁷ The proposed Project would merely add pumping capacity on a line that is already in the ground and operational (albeit at a lower capacity), while the trucking and rail alternatives would require infrastructure additions, higher labor costs, and strain Minnesota's existing road and railroad infrastructure.

The Applicant states that it does not have a projected in-service date for the trucking alternative, but notes that the necessary loading and unloading terminals would have to be constructed and a fleet of over 1,000 trucks would have to be obtained. MPL Ex. 2 at 35 (Application). In addition, road upgrades between Clearbrook and the Twin Cities may be necessary prior to the implementation of the trucking alternative to support the increase in traffic. DOC Ex. 100 at 20–21 (Otis Direct).

For the rail alternative, the same timing issue with construction of loading and unloading facilities exists. *Id.* at 21. The Applicant would also have to acquire over 2,000 rail cars and states that it is unable to estimate an in-service date for completing those activities. MPL Ex. 2 at 37 (Application). Importantly, the date would likely be pushed back due to rail car shortages. DOC Ex 100 at 21 (Otis Direct). Due to increased rail transport of crude oil in recent years, the industry is experiencing full use of tank car manufacturing capacity and a backlog of over 120,000 cars as of September, 2014, a situation that is expected to persist through 2015. *Id.* at 21;

⁶ Estimated trucking and rail costs do not include capital recovery on loading and unloading facilities.

⁷ All estimated per-barrel costs are for transport between Clearbrook and the Twin Cities.

DOC Ex. 101 at LBO-7 (Otis Direct Attachments). This delay would likely push the in-service date for the rail alternative past the projected in-service date for the proposed Project. *Id.*

Environmental disadvantages to the trucking and rail alternatives generally come in three forms: 1) both truck and rail transport result in more emissions from transport per barrel shipped; 2) construction of loading and unloading facilities and possible expansion of roads or railways would likely require new land acquisition and potentially disrupt local wildlife; and 3) increased overland traffic on road or rail routes would likely increase disturbances to wildlife living in the vicinity. *Id.* at 21. The social disadvantages due to the trucking or rail alternatives are caused by the disturbances from increased truck or rail traffic: traffic congestion, increased exhaust emissions, and noise pollution. *See* DOC Ex. 101 at LBO-13 at 29–30 (Otis Direct Attachments). While MPL did not discuss safety of trucking and rail as compared to shipment by pipeline, data indicates that pipeline transport of crude oil is safer than truck transport. *Id.* at 22. Since 1996, rail transport has had fewer spills relative to pipelines for the most recent data available, but this data was collected before the increase in unit train transport of crude oil in the last five years. DOC Ex. 101 at LBO-5 (Otis Direct Attachments). Recent rail incidents have raised concerns about human safety, and most notably, a 2013 derailment in Lac Mégantic, Quebec that resulted in 47 fatalities, but also derailments in 2013 and 2014 in Gainford, Alberta, Aliceville, Alabama, Casselton, North Dakota, Plaster Rock, New Brunswick, Philadelphia, Pennsylvania, Vandergrift, Pennsylvania, and Lynchburg, Virginia. DOC Ex. 100 at 22 (Otis Direct).

Regarding the economic life of trucking and rail alternatives, MPL expects that loading and unloading infrastructure required for these alternatives would have an economic life of twenty or more years. MPL Ex. 2 at 36, 38 (Application). The expected economic life of the

trucks and railcars is considerably less, however: MPL projects an economic life of no more than five years for trucks and five to ten years for rail cars. *Id.*

For both alternatives, MPL discussed possible reliability issues that could be encountered due to weather, mechanical reliability, labor shortages, and road or rail line congestion. *Id.* The Department agrees that these issues would be more pronounced under the alternatives than with the proposed Project. DOC Ex. 100 at 23 (Otis Direct); DOC Ex. 101 at LBO-14 (Otis Direct Attachments).

3. Pipeline Alternatives

MPL considered two pipeline alternatives to the proposed Project: 1) construction of a new 24-inch pipeline, which would add 165,000 bpd⁸ of capacity to the MPL System, and which would likely run parallel to the existing Line 4 and would require acquisition of new right of way for at least part of the route; and 2) reactivation of the Wood River pipeline (“WRPL”), which runs 580 miles from Hartford, IL to the Twin Cities, with a capacity of 90,000 bpd. MPL states that WRPL was taken out of service in 2013 due to lack of shipper demand and due to its longer transit time and the inferior pricing of crude oil accessible via WRPL. MPL Ex. 2 at 40–42 (Application).

The alternative of building a new 24-inch pipeline is not reasonable due to the additional costs associated with it and the increased impacts to the natural environment. DOC Ex. 100 at 24–25 (Otis Direct). Given that the proposed Project consists of merely using existing pipeline design capacity, building a new pipeline would be an inefficient use of resources. *Id.*

MPL identified several aspects of the WRPL alternative that would be issues if the WRPL alternative were used instead of the Project: capacity constraints; unattractive market

⁸ 20,000 bpd less than the 185,000 bpd of capacity that the Project would add to the system.

conditions for the crude oil available for transport on WRPL; operational considerations; and costs. MPL Ex. 2 at 40–42 (Application).

After reviewing the information provided by MPL, and after conducting independent research on the subject, the Department concluded that the WRPL alternative is not preferable to the proposed Project for several reasons. DOC Ex. 100 at 30 (Otis Direct). First, the WRPL alternative would not offer the capacity flexibility that MPL seeks to mitigate its reliability issues because the WRPL alternative requires a minimum of 30,000–40,000 bpd of shipments per day: an amount that current demand levels could not consistently maintain. *Id.* Second, the WRPL alternative is problematic for meeting sprint capacity—even if Lines 1 and 2 were both operational on days when demand for sprint capacity peaks, the WRPL would not ensure adequate capacity on the MPL System. *Id.* Third, WRPL would impose higher transportation costs on the Minnesota refiners. *Id.* at 29–30.

4. Storage Alternative

In response to Department information requests, MPL provided several reasons as to why the storage alternative would not be feasible. DOC Ex. 100 at 31 (Otis Direct). MPL stated that it does not own any land on which tanks adjacent to the Minnesota refineries could be constructed, and that it would be prohibitively expensive to both procure the land and build the tanks necessary for the storage alternative to be implemented. *Id.* The Department agrees with the Company's assessment. *Id.*

5. Effect of the Proposed Facility upon the Natural and Socioeconomic Environments Compared to the Effects of Reasonable Alternatives

In this matter, DOC-EERA evaluated the proposed Project's impact on the natural and socioeconomic environments. *See generally* DOC-EERA Ex. 200 (Environmental Report). DOC-EERA stated that each of the alternatives studied in the Environmental Analysis, including

the no-action alternative, were deemed inferior due to combinations of one or more the following tradeoffs:

- Higher costs,
- Increased socioeconomic impacts,
- Increased natural environment impacts,
- Construction impacts,
- Operations impacts, and/or
- Failure to meet the stated need.

Id. at 22–23. DOC-EERA concluded that the best way to meet the stated need with the fewest environmental impacts would be through the proposed Project. *Id.* at 22.

6. Summary of Alternatives Analysis

None of the alternatives discussed above would be preferable to the proposed Project. The no-action alternative is unacceptable because there is a need for additional capacity into the Twin Cities to mitigate reliability concerns. The trucking and rail alternatives are unacceptable for a variety of reasons, including environmental and cost concerns. The WRPL is not reasonable because it would not address the reliability concerns on the MPL System as well as the proposed Project does, and it would impose higher costs on Minnesota refiners. Finally, the storage alternative should be rejected due to the fact that it would require MPL to purchase land adjacent to the Minnesota refineries that it does not have, in addition to the cost of constructing the actual storage tanks.

D. Minn. R. 7853.0130(C): The Consequences to Society of Granting the Certificate of Need Are More Favorable than the Consequences of Denial

1. Relationship of the Proposed Facility, or a Suitable Modification of It, to Overall State Energy Needs

The Department could not identify any negative consequences to overall state energy needs with going forward with the proposed Project with any certainty. DOC Ex. 100 at 33 (Otis Direct). The only identified negative effect is that the proposed Project would increase transportation costs on the MPL System by approximately \$0.25 per barrel. MPL Ex. 2 at 26 (Application). The Department would not expect this increase to impact retail product prices in Minnesota, as this amount is small relative to other input costs and the \$20 and higher crack spreads that Chicago area⁹ refiners are currently receiving.¹⁰ DOC Ex. 101 at LBO-27 (Otis Direct Attachments). The Department would, in fact, expect the proposed Project to result in a gain for the Minnesota refiners, and through lower prices, the people of Minnesota, because the proposed Project represents the lowest-cost option for supplementing the supply of crude oil to the Minnesota refiners. DOC Ex. 100 at 34 (Otis Direct); MPL Ex. 2 at 42 (Application).

The Department concluded that the proposed Project would benefit state energy needs by ensuring a more reliable crude oil supply, which would allow for a more reliable supply of transportation fuels in Minnesota. DOC Ex. 100 at 34 (Otis Direct).

⁹ The Minnesota refinery market is connected via product pipeline to the Chicago market its prices are generally linked to Chicago's. *See* Otis Direct in Docket No. PL-9/CN-13-153.

¹⁰ A crack spread measures the difference between the purchase price of refinery inputs (crude oil) and the selling price of finished products that are produced from the crude oil.

2. Effect of the Proposed Facility, or a Suitable Modification of It, Upon the Natural and Socioeconomic Environments Compared to the Effect of Not Building the Facility

a. Building the Proposed Project is More Reasonable and Prudent than Not Building the Facility

As indicated above, DOC-EERA concluded that that best way to meet the stated need with the fewest environmental impacts would be through the proposed Project. DOC-EERA Ex. 200 at 22 (Environmental Review). Because a no-action alternative would not address the stated need, DOC-EERA did not find that option to be reasonable, as MPL would be forced to use other means of transporting crude oil, such as truck or rail, both of which would have greater environmental impact than the proposed Project. *Id.* at 10.

MPL could, however, minimize or offset the effects of the proposed Project on the natural environment by employing a neutral footprint policy and by considering the purchase of renewable energy for the electricity used in its new pumping stations. DOC Ex. 100 at 39, 45–46, 49–50 (Otis Direct); DOC Ex. 102 at 5–6, 11 (Otis Surrebuttal).

In his rebuttal testimony, MPL witness Terry Baker described environmental programs and initiatives in which MPL, and its parent company KPL, are involved. Mr. Baker also provided a brief discussion of the electric power it intends to use to run the proposed pump stations. According to Mr. Baker, programs that receive support from MPL and KPL include:

- Project Green Fleet, a collaborative initiative with the Environmental Initiative to retrofit Minnesota school buses, heavy duty trucks, and other diesel equipment with pollution control equipment;
- The Environmental Initiative Clean Air Dialogue, which MPL/KPL sponsors as a collaboration of business, nonprofit, and government agencies;

- Friends of the Mississippi, KPL/MPL partners with this group to restore habitats around the Mississippi river near KPL’s Pine Bend refinery; and
- Ducks Unlimited, MPL/KPL works with this organization that protects Minnesota’s lakes, wetlands, and grasslands.

MPL Ex. 31 at 2–3 (Baker Rebuttal).

The Department concluded that this information demonstrates that MPL and KPL currently support programs that enhance and protect Minnesota’s natural environment. DOC Ex. 102 at 4 (Otis Surrebuttal).

b. Ensuring that the Proposed Project Does Not Increase the Environmental Footprint of the MPL System

If MPL completes the proposed Project, the MPL System may increase its electricity use, as well as increase the amount of crude oil that MPL ships from Clearbrook to the Twin Cities. *Id.* at 4–5. While MPL states that transferring crude oil transport from older lines on the MPL System to Line 4 will make the system more efficient as a whole—at least in the short term—whether the MPL System actually reduces its energy footprint will depend on shipper activity. Tr. Vol. 1 at 16 (O’Hair). Because the proposed Project will increase crude oil throughput capability on the MPL System by 185,000 bpd, a scenario where shipper activity causes the MPL System to use more energy than it does today is not unlikely. *See, e.g.*, DOC Ex. 100 at 7 (Otis Direct); MPL Ex. 2 at 8 (Application) (“Both Minnesota Refineries have improved their utilization and increased their crude oil rates to meet market demand, which has increased demand on the MPL System.”) (“The MPL System also currently has insufficient pumping capacity to send surplus volumes to refineries when needed to respond to sudden increases in demand or to make up for supply disruptions.”). The Department, therefore, recommends that to the extent that energy use on the MPL System increases, the Commission should condition its

approval on requiring MPL to generate a kWh of renewable energy for every incremental kWh of energy consumed by the project by purchasing green power or participating in other programs to offset the incremental energy it consumes at the Project's pump stations. In addition, the Commission should require MPL to conserve an acre for every acre of natural habitat protected and plant a tree for every tree that must be removed to build new facilities. DOC Ex. 102 at 11 (Otis Surrebuttal); Tr. Vol. 1 at 41, 46–47 (Otis). One way for MPL to accomplish this condition would be for MPL to purchase renewable energy credits ("RECs"), which would be tracked by the Midwest Renewable Energy Tracking System ("MRETS"), and for MPL to retire the RECs through MRETS. *Id.* at 41.

The Commission is familiar with this recommendation, as it ordered a similar condition in a recent docket. In granting a CN for a similar pipeline proposal to add pump stations to an existing pipeline, the Commission required the applicant there to conserve an acre for every acre of natural habitat protected, plant a tree for every tree that must be removed to build new facilities, and generate a kWh of renewable energy for every kWh of energy consumed by the project. *In the Matter of the Application of Enbridge Energy, Limited Partnership for a Certificate of Need for the Line 67 (Alberta Clipper) Station Upgrade Project – Phase 2 – in Marshall, Clearwater, Itasca, Kittson, Red Lake, Cass, and St. Louis Counties*, Order Granting Certificate of Need at 32, Docket No. PL-9/CN-13-153 (Nov. 7, 2014) (the "13-153 Docket"). The instant case is similar to the 13-153 Docket in that both upgrades are designed to allow a crude oil pipeline to operate at its maximum-designed capacity. Tr. Vol. 1 at 33 (Baker). While MPL frames this matter as a reliability project, the fact remains that the MPL System throughput capacity will increase by 185,000 bpd and be able to handle an increase in demand. MPL Ex. 2 at 8 (Application); DOC Ex. 100 at 7 (Otis Direct). As in the 13-153 Docket, this condition will

directly benefit the natural and socioeconomic environments in this case, too. The Department encourages the Commission to adopt its recommendation in this case.

c. Ensuring that MPL Employees Comply with Environmental and Safety Rules or Regulations

In order to ensure that its employees and contractors abide by all environmental and permit provisions, MPL uses a combination of training, ongoing education, and certification programs to ensure that its employees and contractors are able to fully comply with environmental and safety permit provisions. DOC Ex. 102 at 6 (Otis Surrebuttal). KPL provides its employees with yearly trainings that equip them to comply with permit provisions in situations that may be encountered while working on the MPL system. *Id.* KPL contractors must certify that they have undergone training, including training on the contents of KPL technical manuals and guidelines. *Id.* at 6–7. KPL verifies the certification status and safety record of all contractors it hires through a contractor website database. *See* ISN, <https://www.isnetworld.com> (last visited Apr. 3, 2015).

In addition to training and certification of employees and contractors, KPL stations an inspector charged with overseeing work and ensuring regulatory compliance at every jobsite. DOC Ex. 102 at 7 (Otis Surrebuttal). KPL also conducts field audits to ascertain whether overall compliance, performance, and safety standards are being upheld by its employees and contractors. *Id.*

When non-compliance is identified, inspectors, or site supervisors, have the authority to halt work until acceptable standards can be satisfied. *Id.* Individual employees are incentivized to meet safety and environmental standards through a system that rewards compliance with additional responsibilities and decision-making rights, which are lost when expectations are not met. *Id.* In addition, continued employment and compensation for employees are contingent on

their ability to meet performance expectations, which include complying with environmental standards. *Id.*

Contractors are subject to similar consequences—if a contractor’s performance is not up to KPL or MPL’s standards, he or she will be removed from a job until he or she can prove that his or her performance is no longer deficient. *Id.*

Regarding minimizing the probability of spills, KPL/MPL has an integrity management program and uses industry benchmarking and partnerships with pipeline inspection companies. In his Rebuttal Testimony, Mr. O’Hair provided a list of several safety and environmental protection awards that KPL has received in recent years. MPL Ex. 32 at 6–7 (O’Hair Rebuttal).

KPL has several practices in place that allow for rapid response to spill events, which include shutting down an entire pipeline if an abnormal event or release is detected. *Id.* at 7–9. Another practice is the retainer agreements KPL has entered into with oil spill response organizations in the area surrounding its pipelines. *Id.* KPL also provides training for its employees and local first responders as well as organizing and participating in emergency response trainings. *Id.* In addition to these resources, KPL maintains an Incident Management Team (“IMT”) and Incident Command System tasked with managing and coordinating emergency response. *Id.* The IMT receives regular training for emergency response. *Id.*

In response to a DOC information request, MPL provided copies of its Integrated Contingency Plan and Emergency Response Action Plan, which are required by and submitted to the Pipeline and Hazardous Materials Safety Administration (“PHMSA”). DOC Ex. 103, 104 at LBO-S1, LBO-S2 (Otis Surrebuttal Attachments). In addition, PHMSA has approved KPL’s Minnesota Zone Oil Spill Response Plan. DOC Ex. 105 at LBO-S3, LBO-S4 (Otis Surrebuttal Attachments). The PHMSA letter, while noting one area of improvement, grants approval of the

emergency response plans for the five-year period beginning July 9, 2013. *Id.* The Department has no reason to dispute PHMSA’s finding that MPL’s response plans are adequate. *Id.*

Mr. O’Hair’s testimony, coupled with PHMSA required plans, provide an adequate record of MPL’s spill prevention and response plans. DOC Ex. 102 at 9 (Otis Surrebuttal).

3. Effect of the Proposed Facility, or a Suitable Modification of It, On Inducing Future Development

Induced development includes construction or expansion of existing infrastructure resulting from completion of the Project in question. Infrastructure expansions that would fall under the scope of induced development could include utilities (water, electric, natural gas), roads, or even housing or agriculture due to displacement of housing units or agricultural lands to accommodate a project. DOC Ex. 100 at 41 (Otis Direct). MPL discussed five possible areas of induced development in the Application: utility, water, vehicular traffic, agriculture, and relocation of persons. MPL Ex. 2 at 66–69 (Application).

The Department concludes that the effect of the proposed Project on inducing development would be minimal, with the exception of the electric utility infrastructure that may be required to connect the new pump stations to the grid. DOC Ex. 100 at 44 (Otis Direct). Relocation of human populations would not be necessary, and water and road use would be limited to the construction period and would appear to be minimal enough to be serviced by existing infrastructure. *Id.* Some farmland is expected to be lost, but the area lost would be minimal as well. *Id.* Therefore, development induced by the proposed Project would be limited to electric utility infrastructure additions and possibly renewable power facilities (either greater use of existing facilities or development of new facilities). *Id.*

4. Socially Beneficial Uses of the Output of the Proposed Facility, Including Its Uses to Protect or Enhance Environmental Quality

As the proposed Project is intended to make the MPL System more reliable, it would help ensure that the crude oil supply required by the Minnesota refineries is consistently available. *Id.* at 45. In turn, this increased reliability would help ensure that gasoline, diesel, and jet fuel are readily available to the people of Minnesota and surrounding states, who would also be better protected against price shocks. *Id.* In addition, use of renewable energy for incremental energy used at new pump stations would provide additional benefits to Minnesota, as discussed above. DOC Ex. 100 at 45 (Otis Direct).

MPL did not show how the proposed Project's output would directly protect or enhance environmental quality, but MPL did show that the proposed Project would result in less damage to the environment than its alternatives. MPL Ex. 2 at 43–49 (Application). MPL also provided an analysis of the electric energy requirements that the Project would require as opposed to the older MPL lines. *Id.* at 9. MPL estimates that the Project would improve the overall efficiency of the MPL System and that by shifting capacity to the more efficient Line 4, the Project would reduce power consumption on the MPL System on a per barrel basis by approximately 37%. *Id.*

The Department agrees that the proposed Project would provide a benefit to society (the people of Minnesota and surrounding states) by ensuring the adequacy of an essential feedstock to the Minnesota refineries to produce essential transportation fuels used by society. DOC Ex. 100 at 46 (Otis Direct). Further, use of renewable electricity at new pumping stations would provide additional benefits to Minnesota and surrounding states. *Id.* Based on the information in the record, including the Environmental Report, the Department concludes that the proposed Project would provide an overall socioeconomic benefit to society, when conditioned as the Department recommends to the extent energy use on the MPL System increases.

E. Minn. R. 7853.0130(D): It Has Not Been Demonstrated on the Record that the Design, Construction, or Operation of the Proposed Facility Will Fail to Comply with those Relevant Policies, Rules, and Regulations of Other State and Federal Agencies and Local Governments

MPL provided information regarding relevant policies, rules, and regulations with which it must comply regarding the proposed Project. MPL Ex. 2 at 4–5 (Application). This information includes the names of all agencies or authorities with whom MPL must file, or the titles of permits or certificates MPL must obtain, for the proposed Project, along with filing and anticipated decision dates. *Id.*

The Department requested that MPL provide a status update for Table 7853.0230-A of the Application. In its response, MPL stated that there are no changes to the status of the permits listed in the table in the Application and that it expects the permit applications to be submitted on the timeframes indicated in the Application. DOC Ex. 101 at LBO-32 (Otis Direct Attachments).

To date, the record in this proceeding provides no information that the final design, construction, or operation of the proposed Project will fail to comply with relevant policies, rules, and regulations of other local, state, and federal governments. DOC Ex. 100 at 48 (Otis Direct).

CONCLUSION

The Department concludes, after analysis of the record under Minnesota Rules part 7853.0130 and Minnesota Statutes section 216B.243, subdivision 3, that the proposed Project is needed in Minnesota, neighboring states, and the region and that a more reasonable and prudent alternative has not been demonstrated. Therefore, the Department recommends that the Commission approve the proposed Project and grant MPL a CN. In addition, the Department recommends that to the extent energy use on the MPL System increases, the Commission should condition its approval on requiring MPL to generate a kWh of renewable energy for every

incremental kWh of energy consumed by the project by purchasing green power or participating in other programs to offset the energy it consumes at the Project's pump stations, in addition to requiring MPL to conserve an acre for every acre of natural habitat protected, plant a tree for every tree that must be removed to build new facilities. As noted above, one way for MPL to accomplish this condition would be to purchase RECs, which would be tracked by MRETS, and to retire the RECs through MRETS.

Dated: April 9, 2015

Respectfully submitted,

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