

## 6.0 HISTORICAL ENERGY DATA

Minn. R. 7853.0510

### Subpart 1: Products, Usage, & Suppliers

For the geographical area to be served by the proposed facility, the applicant shall provide the following:

#### A. Petroleum Products Transported

A list of the petroleum products by major categories (such as crude oil, gasoline, fuel oil, and so forth) transported or distributed by the applicant in that geographical area during the five most recent calendar years:

Pursuant to Enbridge's tariff on file with the FERC, the Lakehead System transports crude oil.

#### B. Annual & Peak Day Quantities

For each category listed in response to item A and for each of the five most recent calendar years, a list of the annual and peak day quantities transported or distributed in the appropriate units of measure:

The Commission issued an order on January 27, 2015 granting Enbridge's request for an exemption from Minn. R. 7853.0510, subp. 1(B) because Enbridge does not track peak day quantities of crude oil transported. Rather, Enbridge operates on a monthly nomination schedule. Accordingly, and in compliance with the January 27, 2015 order, Enbridge is providing monthly and annual volumes of Verified Nominations and actual throughput data for the most recent five calendar years.<sup>1</sup> Verified Nominations reflect the changes made to initial nominations as a result of conducting upstream feeder verification and destination verification. Verified Nominations do not reflect reductions to shipper nominations as a result of apportionment.

Table 6.1.B-1 provides the volumes of Verified Nominations for crude oil transported on the Enbridge Mainline System on a monthly and annual basis between 2010 and 2014.

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<sup>1</sup> In light of the fact that nomination forms are voluminous, the Department of Commerce, Division of Energy Resources (DOC-DER), has agreed that it would not be helpful for Enbridge to file them with this application. However, Enbridge will provide nomination forms upon DOC-DER's request.

**Table 6.1.B-1: 2010-2014 Verified Nominations**

2010 (kbpd)	1	2	3	4	5	6	7	8	9	10	11	12	Average Daily (kbpd)	Annual Total (kbbl)
HVY	1,108	1,101	1,176	1,087	1,151	1,210	1,152	1,043	980	1,077	1,210	1,345	1,137	414,856
LGT	994	886	884	1,013	1,077	1,070	1,102	1,038	1,074	991	1,101	1,217	1,037	378,609
NGL	169	180	160	150	135	114	179	153	187	201	228	174	169	61,725
CND	86	93	84	65	74	85	85	93	90	85	87	76	84	30,518
REF <sup>2</sup>	77	73	71	111	59	53	45	50	52	59	44	71	64	23,239
Monthly	2,434	2,333	2,375	2,425	2,496	2,532	2,562	2,377	2,382	2,413	2,670	2,883	2,490	908,947

2011 (kbpd)	1	2	3	4	5	6	7	8	9	10	11	12	Average Daily (kbpd)	Annual Total (kbbl)
HVY	1,359	1,242	1,134	1,144	1,139	1,203	1,173	1,182	1,229	1,169	1,180	1,190	1,097	400,562
LGT	1,166	1,119	981	890	966	960	997	1,065	1,071	1,179	1,167	1,213	981	358,219
NGL	272	183	219	154	119	158	134	116	129	124	225	229	161	58,643
CND	77	91	79	85	71	84	83	84	95	89	91	86	78	28,342
REF	63	63	67	65	53	52	50	49	44	48	71	81	55	19,989
Monthly	2,937	2,698	2,479	2,338	2,348	2,457	2,437	2,496	2,568	2,608	2,734	2,799	2,372	865,755

2012 (kbpd)	1	2	3	4	5	6	7	8	9	10	11	12	Average Daily (kbpd)	Annual Total (kbbl)
HVY	1,175	1,297	1,206	1,242	1,269	1,338	1,303	1,232	1,215	1,289	1,350	1,571	1,291	472,387
LGT	1,333	1,207	1,368	1,332	1,087	1,191	1,243	1,150	1,115	1,098	1,106	1,152	1,199	438,696
NGL	220	199	206	216	173	156	199	140	143	162	207	205	186	67,937
CND	79	79	78	90	78	65	93	93	95	85	87	85	84	30,732
REF	90	87	98	105	57	57	66	67	69	53	48	47	70	25,770
Monthly	2,897	2,869	2,955	2,986	2,663	2,808	2,905	2,683	2,638	2,688	2,798	3,060	2,829	1,035,522

<sup>2</sup> REF stands for Refined Products that are nominated for transport in Canada for delivery in Canada.

**Table 6.1.B-1: 2010-2014 Verified Nominations (cont'd)**

2013 (kbpd)	1	2	3	4	5	6	7	8	9	10	11	12	Average Daily (kbpd)	Annual Total (kbbl)
HVY	1,537	1,513	1,376	1,328	1,350	1,444	1,430	1,422	1,445	1,552	1,684	1,668	1,479	539,800
LGT	1,076	1,075	999	941	1,036	1,111	1,086	1,217	1,236	1,193	1,284	1,190	1,120	408,894
NGL	185	185	165	129	153	154	143	138	115	132	175	155	152	55,650
CND	93	97	82	79	75	60	94	103	96	98	102	89	89	32,480
REF	64	67	54	55	59	50	44	49	49	50	55	59	54	19,846
Monthly	2,954	2,936	2,676	2,531	2,673	2,819	2,797	2,929	2,940	3,024	3,300	3,161	2,895	1,056,672

  

2014 (kbpd)	1	2	3	4	5	6	7	8	9	10	11	12	Average Daily (kbpd)	Annual Total (kbbl)
HVY	1,723	1,756	1,679	1,625	1,728	1,914	2,064	2,058	1,910	2,104	2,641	2,620	1,985	724,592
LGT	1,125	1,057	1,108	1,124	1,063	1,128	1,103	1,096	1,185	1,233	1,231	1,376	1,153	420,665
NGL	157	177	162	165	162	200	178	184	142	186	207	164	174	63,359
CND	95	98	93	84	86	87	106	102	100	106	102	92	96	34,926
REF	54	58	48	52	58	53	43	48	43	42	46	51	50	18,136
Monthly	3,154	3,146	3,090	3,050	3,097	3,382	3,495	3,487	3,378	3,671	4,227	4,303	3,457	1,261,678

Enbridge has provided the monthly and annual deliveries of crude oil transported through Minnesota for deliveries<sup>3</sup> to Clearbrook, Minnesota and Superior, Wisconsin in TRADE SECRET Appendix F. Redacted versions of the tables are provided in PUBLIC Appendix F.

<sup>3</sup> Enbridge is unable to transport all nominated volumes on the Mainline System due to:

- (1) Nominations exceeding available capacity, resulting in apportionment;
- (2) Batch cuts to protect quality;
- (3) Minor differences in batch size scheduled to actual size injected;
- (4) Voluntary pressure restrictions; and
- (5) Shipper change requests.

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## **C. Sources of Supply of Petroleum Products Transported**

A list of sources of supply of petroleum products for transportation during the five most recent calendar years, designated as either in-state or as out-of-state, the dates and durations of the contracts with the 25 largest suppliers or shippers, the categories of petroleum products and quantities involved, and for sources of crude oil, the geographical areas of origin of the crude oil:

### **Sources & Geographical Area of Origin of Supply of Petroleum Products**

The Project, when complete, will transport heavy and light crude oil sourced either from the WCSB or the Bakken Formation in Canada and North Dakota.

### **Dates and Durations of Contracts with 25 Largest Shippers**

On January 27, 2015, the Commission issued an order granting Enbridge's request for a partial exemption from Minnesota Rule 7853.0510, subp. 1(C), which requires, in relevant part, "the dates and durations of the contracts with the 25 largest suppliers or shippers." In lieu of contract information, concurrently with filing this Application, Enbridge is filing tables showing the top twenty-five shippers' Verified Nominations and actual deliveries on the Enbridge Mainline System to Clearbrook and downstream of Clearbrook on a monthly and annual basis for the past five years in Docket No. PL-9/CN-15-340 pursuant to the Highly Sensitive Protective Order issued by the Commission on April 13, 2015. Redacted versions of the tables are provided in PUBLIC Appendix G.

To ship on Enbridge's pipelines, shippers complete monthly nomination forms. The nomination forms contain the shippers' identities, the dates, volumes, product type, and delivery points for nominations and estimated tariff costs. A copy of a blank nomination form is included in Appendix H. Enbridge verifies capacity available to each nominating shipper, and accepts initial nominations up to each shipper's Verified Nomination.<sup>4</sup> Once the nominations have been verified, Enbridge then compares the Verified Nominations for a specific crude type to available capacity for that crude type and if they exceed capacity, then Enbridge calculates apportionment and informs the shippers of the volume that will be allocated to them. Shippers then submit an allowed nomination for its allocated volume. Enbridge uses the allowed nominations to build the schedule for the shippers for that month, which is used to schedule actual deliveries.

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<sup>4</sup> Due to the large number of Verified Nomination forms each month, DOC-DER and Enbridge have agreed that Enbridge will make prior nomination forms available to the DOC-DER in Docket No. PL-9/CN-15-340 pursuant to the Highly Sensitive Protective Order to the extent necessary for verification.

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## **D. Percentage of In-State Delivery**

**For each of the five most recent calendar years and for each category of petroleum product, the percentage of in-state delivery of the annual amounts given in response to item B.**

The annual percentage of in-state deliveries for the five most recent calendar years on the Lakehead System is provided in TRADE SECRET Appendix I. Redacted versions of the tables are provided in PUBLIC Appendix I.

## **Subpart 2: Facilities & Maps**

**List each large oil or LPG storage facility, location, gas plant, large pipeline facility, and oil refinery associated with the transportation or distribution of the categories of petroleum products named in response to subpart 1, item A. Provide maps that represent the locations and interconnections of these facilities.**

A map of the U.S. portion of the Enbridge Mainline System is included as Figure 1.2-3. See also Table 8.3.E-2 Refineries Served Directly or Indirectly by Enbridge.

## **Subpart 3: Use of Design Capacity**

**For each large energy facility or location listed in response to subpart 2, located in Minnesota and owned or operated by the applicant, the average percentage of use of its full design capacity during the summer season and during the winter season.**

Table 6.3-1 below provides the average percentage of use of nameplate capacity, also referred to as annual average capacity, which is 90 percent of full design capacity, of Enbridge's Mainline System in Minnesota by month.

**Table 6.3-1: Average Utilization by Month in 2010-2014 per Line**

2010		1	2	3	4	5	6	7	8	9	10	11	12	Peak Utilization
	Line 1	72%	64%	64%	62%	75%	74%	79%	75%	59%	58%	73%	63%	79%
	Line 2	73%	70%	69%	79%	76%	87%	84%	83%	75%	63%	62%	70%	87%
	Line 3	80%	80%	84%	84%	95%	90%	92%	74%	71%	49%	80%	78%	95%
	Line 4	83%	87%	91%	82%	92%	87%	87%	68%	64%	81%	75%	73%	92%
	Line 65	95%	90%	88%	99%	103%	100%	98%	105%	100%	100%	92%	84%	105%
	Line 67									7%	42%	55%	67%	67%
	System	80%	80%	82%	81%	88%	87%	87%	77%	59%	65%	71%	72%	88%
2011		1	2	3	4	5	6	7	8	9	10	11	12	Peak Utilization
	Line 1	72%	68%	71%	64%	53%	63%	65%	61%	60%	59%	65%	71%	72%
	Line 2	58%	74%	60%	66%	56%	67%	67%	62%	57%	60%	63%	63%	74%
	Line 3	77%	58%	46%	55%	57%	53%	55%	58%	67%	68%	71%	71%	77%
	Line 4	75%	83%	76%	72%	82%	76%	78%	77%	71%	69%	74%	71%	83%
	Line 65	83%	77%	79%	79%	75%	73%	78%	81%	81%	78%	79%	77%	83%
	Line 67	69%	72%	65%	59%	48%	57%	73%	78%	71%	85%	77%	72%	85%
	System	72%	74%	66%	66%	64%	66%	70%	71%	68%	70%	72%	70%	74%
2012		1	2	3	4	5	6	7	8	9	10	11	12	Peak Utilization
	Line 1	74%	69%	67%	76%	65%	64%	65%	68%	70%	60%	68%	72%	76%
	Line 2	70%	71%	75%	58%	63%	61%	49%	66%	62%	55%	52%	65%	75%
	Line 3	77%	72%	69%	82%	72%	83%	61%	75%	78%	79%	76%	80%	83%
	Line 4	80%	73%	69%	68%	75%	73%	79%	72%	72%	65%	72%	77%	80%
	Line 65	82%	80%	80%	78%	81%	75%	77%	73%	65%	69%	72%	67%	82%
	Line 67	67%	78%	76%	75%	76%	83%	83%	77%	59%	78%	77%	89%	89%
	System	75%	74%	72%	71%	72%	74%	70%	72%	68%	68%	70%	76%	76%

**Table 6.3-1: Average Utilization by Month in 2010-2014 per Line (cont'd)**

2013		1	2	3	4	5	6	7	8	9	10	11	12	Peak Utilization
	Line 1	65%	71%	66%	56%	57%	67%	62%	64%	70%	68%	65%	68%	71%
	Line 2	50%	60%	53%	51%	53%	61%	64%	58%	70%	67%	60%	74%	74%
	Line 3	86%	86%	86%	65%	67%	74%	84%	81%	85%	82%	95%	93%	95%
	Line 4	74%	78%	70%	66%	69%	70%	76%	70%	74%	82%	72%	79%	82%
	Line 65	70%	57%	62%	58%	56%	65%	61%	59%	66%	64%	62%	67%	70%
	Line 67	97%	97%	87%	87%	91%	76%	87%	106%	95%	87%	86%	90%	106%
	System	75%	77%	71%	65%	68%	69%	75%	75%	78%	78%	75%	80%	80%
2014		1	2	3	4	5	6	7	8	9	10	11	12	Peak Utilization
	Line 1	75%	77%	70%	61%	68%	72%	69%	66%	72%	72%	70%	74%	77%
	Line 2	73%	66%	72%	60%	64%	72%	69%	73%	78%	78%	78%	84%	84%
	Line 3	90%	88%	84%	86%	84%	94%	88%	96%	81%	86%	82%	88%	96%
	Line 4	78%	75%	89%	83%	75%	93%	92%	90%	92%	86%	83%	89%	93%
	Line 65	68%	64%	63%	65%	64%	68%	69%	71%	65%	68%	69%	86%	86%
	Line 67	88%	103%	94%	96%	105%	105%	104%	102%	84%	82%	89%	93%	105%
	System	80%	80%	82%	78%	78%	88%	86%	86%	83%	81%	81%	87%	88%