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March 31, 2022

--Via US and Electronic Mail --

Steven M. Kahl, Executive Director
North Dakota Public Service Commission
State Capitol Building, Dept. 408
600 East Boulevard
Bismarck, ND 58505-0480

RE: 2022 TRANSMISSION COST RIDER (TCR) RATE ADJUSTMENT
COMMISSIONER REQUEST FOR INFORMATION ON MISO PROJECTS
CASE NO. PU-21-396

Dear Mr. Kahl:

During the February 1, 2022 Informal Hearing on the Company's most recent Transmission Cost Rider (TCR), questions were raised about costs relating to Midcontinent Independent System Operator Inc. (MISO) Regional Expansion Criteria and Benefits (RECB). Northern States Power Company, a Minnesota corporation doing business as Xcel Energy (NSP or the Company), provides to the North Dakota Public Service Commission and its staff the following explanations and cost information in response.

By way of background, each year, we file details about the Company's RECB charges in Attachment 11 of our annual North Dakota TCR filing. For convenience, this same attachment from our most recent TCR filing, Case No. PU-21-396, is reproduced below as Figure 1. This schedule shows the NSP System's¹ total RECB revenue was forecast to be nearly \$147 million and the expenses were forecast to be approximately \$134 million. The net result was a forecasted credit of approximately \$12.5 million, with the North Dakota jurisdictional portion of that credit being approximately \$638,000. As can be seen from Attachment 11, these revenues and expenses are split between two MISO tariff Schedules: Schedule 26 and 26A.

¹ The NSP System is the Company and its affiliate Northern States Power Company, a Wisconsin corporation.

**Figure 1: Attachment 11 from Company’s 2022 TCR,
estimating RECB Revenue Requirements**

Northern States Power Company
State of North Dakota
Transmission Cost Rider (TCR)
Regional Expansion Criteria and Benefits (RECB)

Case No. PU-21-____
Application
Attachment 11
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Line No:		2020	2021	2022
		Actual	Forecast	Forecast
1	Revenue			
2	Schedule 26	\$ 54,646,742	\$ 63,672,781	\$ 71,552,011
3	Schedule 26(a)	\$ 66,122,041	\$ 77,961,668	\$ 75,235,600
4	Total Revenue	\$ 120,768,783	\$ 141,634,449	\$ 146,787,611
5				
6	Expense			
7	Schedule 26	\$ 56,291,650	\$ 69,113,469	\$ 69,435,757
8	Schedule 26(a)	\$ 65,174,227	\$ 67,055,109	\$ 64,878,380
9	Total Expense	\$ 121,465,877	\$ 136,168,578	\$ 134,314,137
10				
11	Net Revenue/Expense	\$ 697,095	\$ (5,465,871)	\$ (12,473,474)
12	Demand Allocator - State of ND Jur.	5.12%	5.04%	5.11%
13	Net RECB Revenue Requirements	\$ 35,701	\$ (275,441)	\$ (637,617)

At a high level, Schedule 26 relates to the costs of transmission projects that have a more localized benefit. Accordingly, the costs of these types of transmission projects are paid by customers served by utilities within the MISO pricing zone(s) that benefit from the project. MISO’s pricing zones are named with a designated host transmission owner, but they do not correspond directly with the utility’s service territory boundaries. In fact, the NSP System has load in six different MISO pricing zones across the MISO footprint as demonstrated by Table 1 below:

Table 1: MISO Pricing Zones in which NSP System has Load

<u>Pricing Zone</u>	<u>NSP System Approximate Load</u>
Northern States Power	75.50%
Ottertail Power	20.62%
Dairyland Power	12.84%
Great River Energy	5.28%
ITC Midwest	0.18%
Minnesota Power	0.02%

Essentially Table 1 means that in the Northern States Power pricing zone, the NSP System makes up approximately 75.50 percent of the load in that pricing zone. Other

utilities (e.g., other investor owned utilities, cooperatives, and municipalities) make up the remaining 24.50 percent. By contrast, the NSP System makes up only approximately 0.02 percent of the Minnesota Power pricing zone; other utilities (predominantly, Minnesota Power) make up the remaining 99.98 percent of the load in the Minnesota Power pricing zone.

Table 1 is important because it not only provides the load ratios, but also the relative percentages the NSP System will pay for transmission projects that benefit a particular pricing zone. Hypothetically, if the Company builds a transmission project with a \$1 million revenue requirement and it is determined to benefit only the Northern States Power pricing zone, then the cost the NSP System pays to MISO would be based on its load ratio share (75.50 percent) or \$755,000 and appears in Attachment 11 as a Schedule 26 expense. The remaining \$245,000 would be paid to MISO by other utilities in the Northern States Power pricing zone. MISO distributes the \$1 million revenue requirement to the NSP System, and it appears in Attachment 11 as a Schedule 26 revenue. Correspondingly, if *another* utility built a transmission project in the Northern States Power pricing zone that was determined to benefit only the Northern States Power pricing zone, the NSP System would pay 75.50 percent of the costs of that project as a Schedule 26 expense.

Schedule 26A relates to costs for transmission projects that have region-wide benefits. For these types of projects, the NSP System's cost is based on the monthly net actual energy withdrawal (i.e., the sum of load volume, export, and wheel-through physical schedules volumes). As a rule of thumb, the NSP System represents approximately nine percent of the entire MISO footprint. Projects that benefit the entire MISO footprint tend to be large transmission projects, like the CapX2020 Brookings line, but hypothetically, if the Company builds a transmission project with a \$1 million revenue requirement and it is determined to benefit the entire MISO region, then the cost to the NSP System would be based on its energy withdrawal ratio share of nine percent, or \$90,000. The remaining \$910,000 would be paid for by other utilities in MISO and appear in Attachment 11 as a Schedule 26A revenue for the NSP System. Correspondingly, if *another* utility built a transmission project that was determined to benefit the entire MISO region, then the NSP System's energy withdrawal ratio share of the project (again, \$90,000) would be reflected as a Schedule 26A expense.

To summarize, in Attachment 11, the Total Revenue (Line 4) shows the monies distributed to NSP System by MISO for transmission projects the Company constructed and are recovered through the Schedule 26 and Schedule 26A revenue requirement. The Total Expense (Line 9) shows the monies the NSP System is paying for both the projects it constructed and the projects other utilities have constructed that benefit the NSP System.

With that background, we thought it would be helpful to provide more detail about the numbers that make up Attachment 11. Attachment A (Summary tab) to this filing ties to Attachment 11 from the TCR filing, but provides more details on the specific projects—for both the Company and other utilities—that make up the revenues and expenses related to RECB (Attachment A, Tabs A-D).² It also allocates all of the revenues and expenses to the Company’s North Dakota jurisdiction. Attachment A shows that the RECB revenues the NSP System receives from other utilities currently exceed the NSP System’s RECB expenses, resulting in a net \$638,000 credit. Concurrent with this filing, we have sent a “live” version of this spreadsheet, with additional detail about the individual transmission projects, to Commission staff.

Diving into even more detail in Attachment A, the Huntley-Wilmarth 345 kV transmission project is currently being recovered through Schedule 26 and included in the Company’s TCR. MISO determined that the Huntley-Wilmarth transmission line benefits over 20 MISO pricing zones in some way, and is allocating the project to those pricing zones based on the relative benefits those pricing zones were expected to receive. The NSP System is paying for approximately 17 percent of the revenue requirements for the Huntley-Wilmarth project. NSP’s North Dakota jurisdictional share of costs is approximately \$354,000 and is currently being recovered through the Company’s TCR Rider. The remaining approximately 83 percent of the revenue requirements for the Huntley-Wilmarth project are being paid for by other utilities throughout the MISO footprint. The amount other utilities are paying MISO for their share of the project are distributed by MISO to the NSP System as a Schedule 26 revenue.

Finally, there may be changes coming to MISO’s cost allocation process. On February 4, 2022, in FERC Docket No. ER22-995, MISO and the MISO Transmission Owners (TOs) jointly filed to revise the tariff to add a subregional cost allocation for certain projects currently recovered under Schedule 26A. MISO and the MISO TOs requested an effective date of May 19, 2022. But as of the date of this filing, FERC has not made a determination on MISO and the MISO TOs’ request. The Company has employees who engage regularly in stakeholder processes at MISO, relating not only to cost allocation, but also planning for the transmission projects that are ultimately recovered through RECB. Therefore, if it would be helpful to set up an informal meeting at some point in the future to discuss this topic further and in more detail, we are happy to do so.

² Attachment A, Tab A lists the NSP System’s Schedule 26 projects; Tab B lists the NSP System’s Schedule 26A projects; Tab C lists other utilities’ Schedule 26 projects; and Tab D lists other utilities’ Schedule 26A projects.

Please contact me if you have any questions or comments.

Sincerely,



DAVID H. SEDERQUIST
SR. CONSULTANT, REGULATION/FINANCE

/s/

CHASE LUEDTKE
MANAGER, TRANSMISSION ACCOUNTING

c: Adam Renfandt

Enclosures

The purpose of this section is to illustrate RECB revenue and expenses derived from NSP and Other Utilities Investments. The revenue and expenses are bifurcated between the NSP and other utility investments. The total agrees to what was filed in Case No. PU-21-396 on Attachment 11-RECB. The letters next to values designate which tab provides further support and details on the projects that are included.

RECB Bifurcated by NSP & Other Utilities Investments	NSP - Att 11 RECB			North Dakota - Allocated - Att 11 RECB		
	2022			2022		
	NSP Investments	Other Utilities Investments	Total	NSP Investments - RECB	Other Utilities Investments - RECB	Total - RECB
Revenue						
Schedule 26	71,552,012	A -	71,552,012	3,657,583	A -	3,657,583
Schedule 26(a)	75,235,601	B -	75,235,601	3,845,880	B -	3,845,880
Total Revenue	<u>146,787,613</u>	<u>-</u>	<u>146,787,613</u>	<u>7,503,463</u>	<u>-</u>	<u>7,503,463</u>
Expense						
Schedule 26	30,512,484	A 38,923,274	C 69,435,757	1,559,732	A 1,989,673	C 3,549,405
Schedule 26(a)	6,274,086	B 58,604,295	D 64,878,381	320,718	B 2,995,724	D 3,316,442
Total Expense	<u>36,786,570</u>	<u>97,527,568</u>	<u>134,314,138</u>	<u>1,880,449</u>	<u>4,985,397</u>	<u>6,865,846</u>
Net Revenue/Expense	(110,001,043)	97,527,568	(12,473,475)	(5,623,014)	4,985,397	(637,617)
Demand Allocator - State of ND	5.11%	5.11%	5.11%			
Net RECB Revenue Requirements	<u>(5,623,014)</u>	<u>4,985,397</u>	<u>(637,617)</u>	<u>(5,623,014)</u>	<u>4,985,397</u>	<u>(637,617)</u>

The purpose of this section is to show the impact of RECB and the one RECB project that is currently included in the TCR for North Dakota electric customers.

ND - MISO Projects in RECB & TCR	North Dakota Customer Bill Impact
RECB	2022
NSP Investments - Projects in Base	(5,323,133)
NSP Investments - Huntley-Wilmarth project in TCR	A (299,881)
Other Utility Investments - Expense to ND Customers	4,985,397
RECB Impact on ND Customer Bills	<u>(637,617)</u>
TCR - Huntley-Wilmarth Revenue Requirement	A <u>353,857</u>
Net Impact	<u>(283,760)</u>

The purpose of this section is to show the how the gross plant amounts are used in the 2022 MISO filings.

Gross Plant of MISO Projects in RECB	2022		
	NSP Investments	Other Utilities Investments	Total
Schedule 26	636,620,040	A 2,170,653,155	C 2,807,273,196
Schedule 26(a)	689,503,601	B 5,356,265,551	D 6,045,769,152
Total	<u>1,326,123,641</u>	<u>7,526,918,706</u>	<u>8,853,042,347</u>

This tab represents the 2022 forecasted Attachment GG - Transmission Expansion Plan revenue requirement (column l) and corresponding expense (column k) associated with the NSP investments. MISO allocates NSP's revenue requirement based on the relative benefit to each pricing zone, further described in the MISO Tariff Attachment FF. NSP currently has load in 6 different pricing zones; therefore, NSP will incur an expense depending on the allocation of projects to those pricing zones. The 'NSP %' represents NSP's expense based on the allocation of the revenue requirement.

Attachment GG - Xcel Energy														a	b	c	d	e	f	g	h	
ND TCR Project Name	Att GG Project Name	Rev Requirement Collection: Base or Rider	Att	Project Gross Plant	MTEP Project Number	First Year of Charges	NSP - Projected MISO 2022 Revenue Requirement	NSP%	NSP - MISO Expense	ND Allocation	ND - Projected MISO 2022 Revenue Requirement	ND - MISO Expense	ND - Net Margin (Credit) / Expense to ND Customers	2022 TCR - Revenue Requirement	All-In View							
							(a x b)		(a x d)		(c x d)		-(e - f)		(g + h)							
	Yankee (Colvill) Gen Station	Base	GG	7,072,819	1366	2008	702,003	77.98%	547,452	5.1118%	35,885	27,985	(7,900)	-	(7,900)							
	Cannon Falls	Base	GG	3,487,898	1456	2008	346,788	77.98%	270,440	5.1118%	17,727	13,824	(3,903)	-	(3,903)							
	Nobles Gen Station	Base	GG	4,462,295	1457	2010	466,696	77.86%	363,348	5.1118%	23,856	18,574	(5,283)	-	(5,283)							
	St. Cloud / Sauk River	Base	GG	7,706,681	1953	2010	806,016	54.46%	438,975	5.1118%	41,202	22,439	(18,762)	-	(18,762)							
	Bemidji	Base	GG	30,467,969	279	2012	3,254,462	32.91%	1,070,936	5.1118%	166,361	54,744	(111,617)	-	(111,617)							
CAPX2020 - Fargo	Twin Cities - Fargo	Base	GG	207,433,562	286	2015	23,045,135	42.68%	9,835,500	5.1118%	1,178,017	502,769	(675,248)	-	(675,248)							
CAPX2020 - La Crosse*	Twin Cities - Rochester	Base	GG	218,027,468	1024	2015	24,762,308	41.72%	10,331,239	5.1118%	1,265,795	528,110	(737,685)	-	(737,685)							
	G349 37774-01 Upgrades for G349	Base	GG	468,202	1458	2010	48,981	77.36%	37,893	5.1118%	2,504	1,937	(567)	-	(567)							
	Ulik Wind Farm (G185)	Base	GG	127,736	2765	2009	13,012	77.98%	10,147	5.1118%	665	519	(146)	-	(146)							
	G809 Network Upgrades	Base	GG	47,487	2109	2008	4,607	77.98%	3,593	5.1118%	235	184	(52)	-	(52)							
	G417 Network Upgrades	Base	GG	230,828	2119	2008	23,013	77.98%	17,947	5.1118%	1,176	917	(259)	-	(259)							
	Pleasant Valley	Base	GG	4,271,587	2178	2012	450,791	44.74%	201,675	5.1118%	23,043	10,309	(12,734)	-	(12,734)							
Glencoe - Waconia	Glenco Waconia	Base	GG	22,200,964	1285	2013	2,403,620	66.44%	1,596,915	5.1118%	122,868	81,631	(41,237)	-	(41,237)							
	Wilmarth Sub	Base	GG	309,681	3104	2010	32,573	5.90%	1,923	5.1118%	1,665	98	(1,567)	-	(1,567)							
Minn Valley	Minnesota Valley Kerkhoven	Base	GG	15,310,379	3312	2014	1,688,575	56.97%	961,935	5.1118%	86,316	49,172	(37,144)	-	(37,144)							
Kohlman Lake-Goose Lake 2nd ckt	Kohlman Lake	Base	GG	18,711,272	3317	2014	2,065,535	77.98%	1,610,793	5.1118%	105,586	82,340	(23,245)	-	(23,245)							
	Coudry Osprey	Base	GG	37,116,160	3775	2015	4,166,451	51.23%	2,134,404	5.1118%	212,980	109,106	(103,874)	-	(103,874)							
	GIP 826 Crandal	Base	GG	672,603	9523	2015	75,695	8.65%	6,549	5.1118%	3,869	335	(3,535)	-	(3,535)							
	St Cloud Loop	N/A	GG	-	2307	Cancelled	-	54.84%	-	5.1118%	-	-	-	-	-							
	Hawk's Nest	Base	GG	911,623	11645	2017	159,248	8.80%	14,021	5.1118%	8,140	717	(7,424)	-	(7,424)							
Huntley - Wilmarth	Huntley - Wilmarth	Rider	GG	57,582,827	11883	2021	7,036,503	16.63%	1,170,031	5.1118%	359,691	59,809	(299,881)	353,857	53,976							
	*								(113,231)	5.1118%	-	(5,788)	(5,788)	-	(5,788)							
Total				636,620,040			71,552,012		30,512,484		3,657,583	1,559,732	(2,097,851)	353,857	(1,743,994)							

*difference is due to there being slightly different estimated load in the 6 pricing zones in which NSP has load.

This tab represents the 2022 forecasted Attachment MM - Multi-Value Projects (MVP) (column l) and corresponding expense (column k) associated with the NSP investments. MISO allocates MVPs on region-wide basis (i.e. across the entire MISO footprint). The MVP charge is based on total NSP monthly net actual energy withdrawal (MNAEW) defined as the sum of load volume, and export and wheel-through physical scheduled volumes. In general, NSP's MNAEW is approx 8-9%, meaning that for any project allocated on a region-wide basis, NSP would be responsible for 8-9% as reflected in column J below.

Attachment MM - Xcel Energy						a		b	c		d	e		f	g		h	
ND TCR Project Name	Att MM Project Name	Rev Requirement Collection: Base or Rider	Att	Project Gross Plant	MTEP Project Number	First Year of Charges	Projected MISO 2022 Revenue Requirement	NSP%	NSP - MISO Expense	ND Allocation	ND - Projected MISO 2022 Revenue Requirement	ND - MISO Expense	ND - Net Margin (Credit) / Expense to ND Customers	2022 TCR - Revenue Requirement	All-In View			
									(a x b)				(c x d)	-(e - f)		(g + h)		
CAPX2020 - Brookings	Brookings	Base	MM	451,848,771	1203	2015	48,254,163	8.61%	4,154,303	5.1118%	2,466,648	212,359	2,254,289	-	2,254,289			
Big Stone-Brookings	Big Stone South to Brookings	Base	MM	63,483,918	2221	2017	6,973,704	8.61%	600,381	5.1118%	356,481	30,690	325,790	-	325,790			
La Crosse - Madison 345 kV Lin	N LaCrosse-N Madison-Cardinal-Spring Green	Base	MM	174,170,912	3127	2018	20,007,734	8.61%	1,722,508	5.1118%	1,022,752	88,051	934,701	-	934,701			
	Sched 26A - RT MVP DIST								(203,105)	5.1118%	-	(10,382)	10,382	-	10,382			
Total				689,503,601			75,235,601		6,274,086		3,845,880	320,718	3,525,163	-	3,525,163			

This tab represents the Attachment GG (Schedule 26) billing determinants obtained from the MISO website (link below). The Transmission Owners listed in Column A have projects which are allocated to the pricing zones in which NSP has load (see NSP's approximate % of each pricing zone in cell F6:10). The description of the projects can be obtained from each Transmission Owner's Attachment GG per the MISO website (link below). The NSP expense is shown in column H below based on NSP portion of the respective pricing zones.

Zonal Rate and Determinants (Feb 2022)	MISO Transmission Settlements and Pricing (misoenergy.org)	Zone ID	Pricing Zone	NSP's Load Portion
Transmission Owner Rate Data	Transmission Owner Rate Data (misoenergy.org)	1	ITC Midwest LLC	0.18%
		8	Great River Energy	5.28%
		14	Minnesota Power	0.02%
		16	Northern States Power	75.50%
		18	Otter Tail Power	20.62%
		26	Dairyland Power	12.84%

Other Utilities Bill to Xcel Energy - 2022 Attachment GG

Transmission Owner	Project ID	Gross Plant	Revenue Requirement	True-Up Adj	Adjusted Revenue Requirement	Revenue Requirement Allocation	NSP Expense	ND Allocation	ND - MISO Expense
Allete, Inc. dba Minnesota Power	277	20,749,285	3,032,499	(41,139)	2,991,360	2,991,360	342,179	5.11%	17,491
Allete, Inc. dba Minnesota Power	279	10,517,546	1,528,028	(68,388)	1,459,640	1,393,749	464,994	5.11%	23,769
Allete, Inc. dba Minnesota Power	286	90,007,332	13,795,329	(286,596)	13,508,733	11,085,093	5,581,799	5.11%	285,329
Allete, Inc. dba Minnesota Power	2634	4,942,462	779,261	(9,792)	769,469	769,469	49,641	5.11%	2,538
Allete, Inc. dba Minnesota Power	3373	5,400,733	836,697	(22,909)	813,788	747,312	67,515	5.11%	3,451
Ameren Illinois Company	2068	23,525,945	2,288,261	(105,756)	2,182,505	73,761	33,071	5.11%	1,691
Ameren Illinois Company	2069	30,474,485	3,045,039	(60,168)	2,984,871	63,049	28,268	5.11%	1,445
Ameren Illinois Company	2472	53,804,554	5,447,797	(2,863)	5,444,934	162,705	71,834	5.11%	3,672
Ameren Illinois Company	2829	5,304,172	513,778	(57,000)	456,778	41,726	18,422	5.11%	942
Ameren Illinois Company	13619	974,758	102,869	(56,369)	46,500	9,966	4,045	5.11%	207
Ameren Missouri	2306	59,046,868	6,203,479	-	6,203,479	145,058	60,082	5.11%	3,071
Ameren Transmission Company of Illinois	13619	20,204	2,236	588	2,824	605	246	5.11%	13
Ameren Transmission Company of Illinois	15325	1,085,193	122,997	-	122,997	18,805	7,676	5.11%	392
Ameren Transmission Company of Illinois	16548	946,019	106,465	82,772	189,237	28,932	11,810	5.11%	604
American Transmission Company LLC	345	141,526,081	14,331,331	305,863	14,637,194	985,256	484,365	5.11%	24,760
American Transmission Company LLC	352	88,185,651	8,701,268	189,176	8,890,444	209,987	107,046	5.11%	5,472
American Transmission Company LLC	356	141,104,838	14,899,654	325,004	15,224,658	595,650	220,880	5.11%	11,291
American Transmission Company LLC	2793	8,871	28,250	(168)	28,082	970	417	5.11%	21
American Transmission Company LLC	2837	520,818	61,683	1,202	62,885	2,172	934	5.11%	48
American Transmission Company LLC	2846	121,121,804	14,026,141	276,583	14,302,724	387,784	89,489	5.11%	4,574
American Transmission Company LLC	3206	26,117,242	3,070,176	46,454	3,116,630	192,958	82,674	5.11%	4,226
American Transmission Company LLC	3679	227,348,465	26,419,071	629,716	27,048,787	1,084,898	527,981	5.11%	26,989
American Transmission Company LLC	12284	7,453,661	884,208	23,918	908,126	103,326	3,838	5.11%	196
American Transmission Company LLC	13103	20,352,576	2,458,085	(963,631)	1,494,454	154,018	50,596	5.11%	2,586
Big Rivers Electric Corp	10142	6,965,829	947,439	-	947,439	105,571	40,911	5.11%	2,091
City of Rochester - A Minnesota Municipal Corp.	1024	24,249,223	3,322,627	630,817	3,953,444	2,598,388	1,580,425	5.11%	80,788
Dairyland Power Cooperative	3397	18,813,435	2,807,463	514,037	3,121,500	2,967,866	1,026,585	5.11%	52,477
Duke Energy Indiana, LLC	1263	6,064,285	621,367	-	621,367	21,041	9,168	5.11%	469
Duke Energy Ohio, LLC	91	17,687,496	2,606,993	-	2,606,993	33,468	14,483	5.11%	740
First Energy	1326	-	912,269	-	912,269	30,552	13,222	5.11%	676
First Energy	890	-	1,615,033	-	1,615,033	22,421	9,703	5.11%	496
Great River Energy	279	15,100,648	2,312,485	108,622	2,421,107	2,311,813	771,286	5.11%	39,426
Great River Energy	286	154,664,166	24,418,385	1,138,080	25,556,465	20,971,308	10,559,913	5.11%	539,800
Great River Energy	1022	6,818,430	1,008,848	47,605	1,056,453	1,056,453	120,847	5.11%	6,177
Great River Energy	1471	28,133	4,086	194	4,280	4,280	226	5.11%	12
Great River Energy	1472	41,615	6,045	287	6,332	6,332	335	5.11%	17
Great River Energy	1542	88,942	13,167	622	13,789	13,789	729	5.11%	37
Great River Energy	2097	2,057,111	301,760	14,344	316,104	316,104	19,567	5.11%	1,000
Great River Energy	2562	4,890,470	737,201	34,745	771,946	771,946	227,500	5.11%	11,629
Great River Energy	2634	17,239,730	2,790,378	130,535	2,920,913	2,920,913	188,440	5.11%	9,633
Great River Energy	3104	-	13,311	14,967	28,278	23,599	1,615	5.11%	83
Great River Energy	3105	79,584	12,449	585	13,034	13,034	689	5.11%	35
Great River Energy	11645	22,782	3,721	174	3,895	815	332	5.11%	17
Indianapolis Power & Light Company	3212	5,480,547	880,920	-	880,920	36,687	14,878	5.11%	761
International Transmission Company	686	11,798,749	1,653,097	(32,417)	1,620,680	3,613	1,547	5.11%	79
International Transmission Company	910	24,205,661	3,421,183	(55,493)	3,365,690	12,425	5,320	5.11%	272
International Transmission Company	911	7,889,033	1,136,357	(14,688)	1,121,669	34,287	14,683	5.11%	751
International Transmission Company	4364	3,923,527	597,519	(8,435)	589,084	23,784	9,542	5.11%	488
International Transmission Company	4365	4,224,046	649,710	(8,824)	640,886	25,867	10,377	5.11%	530
International Transmission Company	4713	4,288,611	659,108	(9,303)	649,805	26,236	10,526	5.11%	538
International Transmission Company	10425	9,961,005	1,587,869	(9,148)	1,578,721	5,940	2,381	5.11%	122
International Transmission Company	11043	39,973	6,290	(200)	6,090	1,255	504	5.11%	26
International Transmission Company	11583	4,952,267	796,980	1,213	798,193	31,962	12,783	5.11%	653
International Transmission Company	11584	-	-	(703,209)	(703,209)	(30,041)	(12,292)	5.11%	(628)
International Transmission Company	17364	9,447,691	1,587,735	-	1,587,735	48,704	20,185	5.11%	1,032
International Transmission Company	17995	8,952	1,477	1,178	2,655	81	33	5.11%	2
International Transmission Company	18313	505,175	83,579	-	83,579	2,564	1,063	5.11%	54
International Transmission Company	19508	4,070,015	685,477	-	685,477	21,196	8,809	5.11%	450
International Transmission Company	19509	2,810,271	473,479	-	473,479	14,641	6,085	5.11%	311
International Transmission Company	19585	508,105	85,190	-	85,190	2,634	1,095	5.11%	56
International Transmission Company	19586	1,069,522	179,255	-	179,255	5,543	2,304	5.11%	118
ITC Midwest LLC	1147	4,575,079	539,902	(2,448)	537,454	537,454	964	5.11%	49
ITC Midwest LLC	1287	9,535,603	1,070,227	(11,078)	1,059,149	943,959	6,500	5.11%	332
ITC Midwest LLC	1288	6,985,243	793,201	(5,586)	787,615	787,615	31,803	5.11%	1,626
ITC Midwest LLC	1522	18,654,888	2,357,792	(29,445)	2,328,347	2,328,347	4,178	5.11%	214
ITC Midwest LLC	1541	1,681	1,175	18	1,193	1,193	2	5.11%	0
ITC Midwest LLC	1618	31,150,168	3,687,994	(84,035)	3,603,959	3,603,959	1,699,350	5.11%	86,867
ITC Midwest LLC	1775	2,010,396	227,224	(1,397)	225,827	225,827	405	5.11%	21
ITC Midwest LLC	2108	2,315,274	279,852	(1,182)	278,670	278,670	500	5.11%	26
ITC Midwest LLC	2339	21,421,167	2,520,595	(15,253)	2,505,342	2,452,056	126,879	5.11%	6,486
ITC Midwest LLC	2372	2,301,428	274,805	(814)	273,991	273,991	492	5.11%	25
ITC Midwest LLC	2786	24,543,047	2,888,398	(18,043)	2,870,355	2,870,355	49,838	5.11%	2,548
ITC Midwest LLC	3191	7,413,921	860,161	(4,274)	855,887	719,630	14,894	5.11%	761
ITC Midwest LLC	3192	1,316,796	150,234	(866)	149,368	149,368	28	5.11%	14
ITC Midwest LLC	3193	59,852	6,725	(42)	6,683	6,683	12	5.11%	1
ITC Midwest LLC	3195	1,876,966	217,058	(1,121)	215,937	215,937	387	5.11%	20
ITC Midwest LLC	3196	1,074,563	122,438	(705)	121,733	121,733	218	5.11%	11
ITC Midwest LLC	3629	12,340,535	1,518,382	(3,187)	1,515,195	1,515,195	6,985	5.11%	357
ITC Midwest LLC	3783	1,038,878	120,363	(647)	119,716	119,716	215	5.11%	11
ITC Midwest LLC	3784	1,890,078	219,268	(1,140)	218,128	218,128	391	5.11%	20

Transmission Owner	Project ID	Gross Plant	Revenue Requirement	True-Up Adj	Adjusted Revenue Requirement	Revenue Requirement Allocation	NSP Expense	ND Allocation	ND - MISO Expense
ITC Midwest LLC	3786	1,877,544	214,754	(1,192)	213,562	213,562	383	5.11%	20
ITC Midwest LLC	3787	1,591,671	184,251	(992)	183,259	183,259	329	5.11%	17
ITC Midwest LLC	3825	2,270,843	257,143	(1,476)	255,667	255,667	459	5.11%	23
ITC Midwest LLC	11883	58,491,710	7,680,029	-	7,680,029	4,029,978	1,236,383	5.11%	63,201
ITC Midwest LLC	12167	1,054,854	135,028	(6,492)	128,536	26,709	10,817	5.11%	553
ITC Midwest LLC	13644	32,990	4,383	(4,670)	(287)	(69)	(32)	5.11%	(2)
ITC Midwest LLC	20035	1,005,077	134,926	-	134,926	20,861	8,670	5.11%	443
ITC Midwest LLC	20685	29,129	3,843	-	3,843	594	247	5.11%	13
Michigan Electric Transmission Company, LLC	481	8,440,606	1,184,669	(15,550)	1,169,119	24,969	10,698	5.11%	547
Michigan Electric Transmission Company, LLC	1817	22,746,010	3,131,757	(922)	3,130,835	54,802	24,407	5.11%	1,248
Michigan Electric Transmission Company, LLC	1828	5,220,043	707,342	(9,565)	697,777	24,646	10,772	5.11%	551
Michigan Electric Transmission Company, LLC	3835	5,346,792	771,689	(13,556)	758,133	31,769	12,846	5.11%	657
Michigan Electric Transmission Company, LLC	10743	557,354	81,586	2,996	84,582	17,550	7,057	5.11%	361
Michigan Electric Transmission Company, LLC	13444	2,317,421	369,531	(19,935)	349,596	14,727	5,989	5.11%	306
Michigan Electric Transmission Company, LLC	15496	742,215	115,713	34,434	150,147	6,497	2,622	5.11%	134
Michigan Electric Transmission Company, LLC	19606	574,580	84,359	-	84,359	2,619	1,088	5.11%	56
Michigan Electric Transmission Company, LLC	19625	846,548	124,289	-	124,289	3,858	1,604	5.11%	82
MidAmerican Energy Company	3721	600,441	61,542	241	61,783	12,777	5,217	5.11%	267
MidAmerican Energy Company	10867	179,232	19,747	90	19,837	4,124	1,672	5.11%	85
MidAmerican Energy Company	10868	425,180	46,791	213	47,004	9,772	3,961	5.11%	202
MidAmerican Energy Company	11203	61,834	6,394	25	6,419	1,334	541	5.11%	28
MidAmerican Energy Company	11204	245,471	25,704	114	25,818	5,367	2,176	5.11%	111
MidAmerican Energy Company	12665	666,744	77,510	-	77,510	16,211	6,607	5.11%	338
MidAmerican Energy Company	12723	760,818	90,111	-	90,111	18,847	7,681	5.11%	393
MidAmerican Energy Company	12725	2,107,729	251,173	-	251,173	52,532	21,410	5.11%	1,094
MidAmerican Energy Company	13584	675,390	81,592	-	81,592	17,065	6,955	5.11%	356
MidAmerican Energy Company	13644	1,215,115	146,581	-	146,581	30,657	12,495	5.11%	639
MidAmerican Energy Company	13645	79,451	9,590	-	9,590	2,006	817	5.11%	42
MidAmerican Energy Company	14625	1,438,292	177,685	-	177,685	38,080	15,458	5.11%	790
MidAmerican Energy Company	18125	187,938	23,224	-	23,224	3,562	1,476	5.11%	75
MidAmerican Energy Company	18174	40,652	5,026	-	5,026	771	319	5.11%	16
MidAmerican Energy Company	18188	8,769	1,071	-	1,071	164	68	5.11%	3
Missouri River Energy Services	286	68,421,599	8,789,603	116,913	8,906,516	7,308,573	3,680,166	5.11%	188,122
Missouri River Energy Services	11645	6,983	956	13	969	203	83	5.11%	4
Montana-Dakota Utilities Co.	1355	16,851,377	1,956,812	14,378	1,971,190	43,639	9,000	5.11%	460
Montana-Dakota Utilities Co.	15304	334,128	40,260	18,452	58,712	8,976	3,664	5.11%	187
Montana-Dakota Utilities Co.	16825	34,368	4,142	1,284	5,426	830	339	5.11%	17
Montana-Dakota Utilities Co.	17304	68,376	8,171	4,671	12,842	1,970	816	5.11%	42
Northern Indiana Public Service Company	612	5,766,738	571,461	14,816	586,277	4,980	2,170	5.11%	111
Northern Indiana Public Service Company	18484	309,251	38,071	-	38,071	5,839	2,420	5.11%	124
Otter Tail Power Company	279	16,331,201	1,846,009	47,866	1,893,875	1,808,382	603,327	5.11%	30,841
Otter Tail Power Company	286	78,184,054	8,964,034	204,909	9,168,943	7,523,917	3,788,601	5.11%	193,665
Otter Tail Power Company	1462	52,613	5,901	117	6,018	6,018	1,241	5.11%	63
Otter Tail Power Company	2750	720,137	84,982	1,776	86,758	86,758	17,892	5.11%	915
Otter Tail Power Company	3156	7,039,948	798,587	18,561	817,148	817,148	153,006	5.11%	7,821
Otter Tail Power Company	3481	13,828,467	1,621,476	43,658	1,665,134	1,664,128	354,536	5.11%	18,123
Otter Tail Power Company	8240	204,232	24,367	496	24,863	5,115	2,083	5.11%	106
Otter Tail Power Company	11645	4,935	602	13	615	129	52	5.11%	3
Otter Tail Power Company	15304	438,452	54,301	3,374	57,675	8,818	3,600	5.11%	184
Otter Tail Power Company	16445	5,336	656	(403)	253	39	16	5.11%	1
Otter Tail Power Company	16805	695,835	86,409	(39,305)	47,104	7,202	2,940	5.11%	150
Otter Tail Power Company	16825	30,016	3,717	1,003	4,720	722	295	5.11%	15
Otter Tail Power Company	16964	892,515	110,831	208	111,039	16,977	6,930	5.11%	354
Republic Transmission, LLC	10142	50,735,609	6,346,384	638,489	6,984,873	778,310	301,611	5.11%	15,418
Southern Minnesota Municipal Power Agency	1024	33,691,031	6,640,134	-	6,640,134	4,364,206	2,654,453	5.11%	135,690
Vectren Energy	1004	25,061,496	2,289,888	179,933	2,469,821	18,069	7,819	5.11%	400
Vectren Energy	1257	107,277,664	10,533,388	800,359	11,333,747	379,574	164,260	5.11%	8,397
Vectren Energy	3212	1,611,400	164,260	12,255	176,515	7,351	2,981	5.11%	152
Vectren Energy	10142	3,828,521	406,169	238,216	644,385	71,803	27,825	5.11%	1,422
WPPI Energy	1024	15,348,275	1,901,333	-	1,901,333	1,249,645	760,075	5.11%	38,853
Grand Total		2,170,653,155	268,782,585	4,107,355	272,889,940	104,390,079	38,923,274		1,989,673

This tab represents the Attachment MM - Multi-Value Projects (MVP) (column G) projects from other Utilities with NSP's expense reflected in column I. MISO allocates MVPs on region-wide basis (i.e. across the entire MISO footprint). The MVP charge is based on total NSP monthly net actual energy withdrawal (MNAEW) defined as the sum of load volume, and export and wheel-through physical scheduled volumes. In general, NSP's MNAEW is approx 8-9%, meaning that for any project allocated on a region-wide basis, NSP would be responsible for 8-9%.

Transmission Owner	Billing ID	Gross Plant	Revenue Requirement	True Up Adjustment	Net Revenue Requirement	NSP approx. MNAEW	NSP Expense	ND Allocation	ND Expense
Ameren Illinois Company	AMIL	114,338,270	11,241,946	523,301	11,765,247	8.61%	1,012,895	5.11%	51,777
Ameren Transmission Company of Illinois	ATXI	1,559,902,823	181,551,598	11,339,105	192,890,703	8.61%	16,606,368	5.11%	848,881
American Transmission Company LLC	ATC	440,237,116	44,706,745	2,294,713	47,001,458	8.61%	4,046,455	5.11%	206,846
Cedar Falls Utilities (CFU)	CFU	3,818,770	520,625	44,872	565,497	8.61%	48,685	5.11%	2,489
Central Minnesota Municipal Power Agency	UPLS	3,781,984	7,224,514	251,897	7,476,411	8.61%	643,660	5.11%	32,902
Dairyland Power Cooperative	DPC	23,685,121	3,063,184	(330,574)	2,732,610	8.61%	235,256	5.11%	12,026
Duke Energy Indiana, LLC	CIN	14,322,845	1,489,235	-	1,489,235	8.61%	128,211	5.11%	6,554
Great River Energy	GRE	122,419,967	16,703,541	1,110,654	17,814,195	8.61%	1,533,662	5.11%	78,397
ITC Midwest LLC	ITCM	897,703,669	108,581,989	5,263,986	113,845,975	8.61%	9,801,240	5.11%	501,018
International Transmission Company	ITC	505,367,126	75,216,611	3,453,906	78,670,517	8.61%	6,772,911	5.11%	346,216
Michigan Electric Transmission Company, LLC	METC	377,946	54,408	1,626	56,034	8.61%	4,824	5.11%	247
MidAmerican Energy Company	MEC	508,114,268	57,184,322	3,780,320	60,964,642	8.61%	5,248,575	5.11%	268,296
Missouri River Energy Services	MRES	36,965,722	4,566,521	312,675	4,879,196	8.61%	420,060	5.11%	21,473
Montana-Dakota Utilities Co.	MDU	123,920,445	13,369,767	891,284	14,261,051	8.61%	1,227,764	5.11%	62,761
Northern Indiana Public Service Company LLC	NIPS	567,945,862	63,938,431	3,447,520	67,385,951	8.61%	5,801,399	5.11%	296,555
Otter Tail Power Company	OTP	205,365,806	23,211,963	1,284,103	24,496,066	8.61%	2,108,918	5.11%	107,803
Pioneer Transmission, LLC	PION	190,703,859	22,081,946	1,162,602	23,244,548	8.61%	2,001,172	5.11%	102,296
Southern Minnesota Municipal Power Agency	SMP	30,104,678	5,933,303	-	5,933,303	8.61%	510,811	5.11%	26,112
WPPI Energy	WPPT	7,189,274	938,920	-	938,920	8.61%	80,834	5.11%	4,132
* Variance from Forecast					4,304,639	8.61%	370,595	5.11%	18,944
Totals		5,356,265,551	641,579,569	34,831,990	680,716,198		58,604,295		2,995,724

* NSP utilizes the indicative rates files posted by MISO as an estimate for the Schedule 26A expense; whereas, projects listed herein are from the posted rates. The difference is attributed to changes in other Schedule 26A revenue requirements and formula rate true ups.

Transmission Owner	Billing ID	MVP Project #	Project Description	MISO Board Approval Date	Gross Plant	Project Revenue Requirement	Project True Up	Project Total	Billing Start Date	Billing End Date
Ameren Illinois Company	AMIL	2237	Pana-Mt. Zion-Kansas-Sugar Creek 345 kV line	12/1/2011	44,357,502	4,339,023	211,812	4,550,835	1/1/2022	12/31/2022
Ameren Illinois Company	AMIL	2239	Sidney to Rising 345 kV line	12/1/2011	7,381,012	733,476	29,221	762,697	1/1/2022	12/31/2022
Ameren Illinois Company	AMIL	3017	Palmyra-Quincy-Meredosia-IPava & Meredosia	12/1/2011	40,086,309	3,951,672	169,245	4,120,917	1/1/2022	12/31/2022
Ameren Illinois Company	AMIL	3022	Fargo-Oak Grove 345 kV line	12/1/2011	3,857,161	381,065	16,034	397,099	1/1/2022	12/31/2022
Ameren Illinois Company	AMIL	3169	New Pawnee to PANA 345kV line	12/1/2011	18,656,286	1,836,710	96,989	1,933,699	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	2237	Pana-Mt. Zion-Kansas-Sugar Creek 345 kV line	12/1/2011	346,252,980	37,410,811	1,220,187	38,630,998	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	2239	Sidney to Rising 345 kV line	12/1/2011	81,272,460	8,707,877	399,157	9,107,034	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	2248	Adair - Ottumwa 345	12/1/2011	114,837,557	13,150,586	1,697,980	14,848,566	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	3017	Palmyra-Quincy-Meredosia-IPava & Meredosia	12/1/2011	705,482,021	75,896,735	4,032,634	79,929,369	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	3022	Fargo-Oak Grove 345 kV line	12/1/2011	125,694,185	13,694,160	786,762	14,480,922	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	3169	New Pawnee to PANA 345kV line	12/1/2011	113,489,054	12,151,152	687,315	12,838,467	1/1/2022	12/31/2022
Ameren Transmission Company of Illinois	ATXI	3170	West Adair-Palmyra Tap 345 kV line	12/1/2011	72,874,566	20,540,277	2,515,070	23,055,347	1/1/2022	12/31/2022
American Transmission Company LLC	ATC	2844	Pleasant Prairie-Zion Energy Center 345 kV line	12/1/2011	33,509,843	3,449,065	334,149	3,783,214	1/1/2022	12/31/2022
American Transmission Company LLC	ATC	3127	N LaCrosse-N Madison-Cardinal-Spring Green	12/1/2011	406,727,273	41,257,680	1,960,564	43,218,244	1/1/2022	12/31/2022
Cedar Falls Utilities (CFU)	CFU	3213	Winco-Lime Creek-Emerly-Blackhawk-Hazelton	12/1/2011	3,818,770	520,625	44,872	565,497	1/1/2022	12/31/2022
Central Minnesota Municipal Power Agency	UPLS	1203	Brookings SD -SE Twin Cities 345 kV	12/1/2011	3,781,984	7,224,514	251,897	7,476,411	1/1/2022	12/31/2022
Dairyland Power Cooperative	DPC	3127	N LaCrosse-N Madison-Cardinal-Spring Green	12/1/2011	23,685,121	3,063,184	(330,574)	2,732,610	1/1/2022	12/31/2022
Duke Energy Indiana, LLC	CIN	2202	Reynolds to Greentown 765 kV line	12/1/2011	2,152,780	248,052	-	248,052	6/1/2021	5/31/2022
Duke Energy Indiana, LLC	CIN	2237	Pana-Mt. Zion-Kansas-Sugar Creek 345 kV line	12/1/2011	12,170,065	1,241,183	-	1,241,183	6/1/2021	5/31/2022
Great River Energy	GRE	1203	Brookings SD -SE Twin Cities 345 kV	12/1/2011	122,419,967	16,703,541	1,110,654	17,814,195	1/1/2022	12/31/2022
ITC Midwest LLC	ITCM	2248	Adair - Ottumwa 345	12/1/2011	60,033,103	7,303,498	402,922	7,706,420	1/1/2022	12/31/2022
ITC Midwest LLC	ITCM	3127	N LaCrosse-N Madison-Cardinal-Spring Green	12/1/2011	25,983,554	3,141,639	68,449	3,210,088	1/1/2022	12/31/2022
ITC Midwest LLC	ITCM	3205	Lakefield-Burt & Sheldon-Webster 345 kV line	12/1/2011	414,893,763	50,273,739	2,645,313	52,919,052	1/1/2022	12/31/2022
ITC Midwest LLC	ITCM	3213	Winco-Lime Creek-Emerly-Blackhawk-Hazelton	12/1/2011	396,793,249	47,863,113	2,147,302	50,010,415	1/1/2022	12/31/2022
International Transmission Company	ITC	3168	Michigan Thumb Wind Zone	12/1/2010	505,367,126	75,216,611	3,453,906	78,670,517	1/1/2022	12/31/2022
Michigan Electric Transmission Company, LLC	METC	3168	Michigan Thumb Wind Zone	12/1/2010	377,946	54,408	1,626	56,034	1/1/2022	12/31/2022
MidAmerican Energy Company	MEC	2248	Adair - Ottumwa 345	12/1/2011	58,692,553	6,778,294	1,147,221	7,925,515	1/1/2022	12/31/2022
MidAmerican Energy Company	MEC	3022	Fargo-Oak Grove 345 kV line	12/1/2011	65,085,146	7,389,594	438,827	7,828,421	1/1/2022	12/31/2022
MidAmerican Energy Company	MEC	3205	Lakefield-Burt & Sheldon-Webster 345 kV line	12/1/2011	241,735,131	27,105,081	1,581,119	28,686,200	1/1/2022	12/31/2022
MidAmerican Energy Company	MEC	3213	Winco-Lime Creek-Emerly-Blackhawk-Hazelton	12/1/2011	142,601,438	15,911,353	613,153	16,524,506	1/1/2022	12/31/2022
Missouri River Energy Services	MRES	1203	Brookings SD -SE Twin Cities 345 kV	12/1/2011	36,965,722	4,566,521	312,675	4,879,196	1/1/2022	12/31/2022
Montana-Dakota Utilities Co.	MDU	2220	Ellendale to Big Stone South	12/1/2011	123,920,445	13,369,767	891,284	14,261,051	1/1/2022	12/31/2022
Northern Indiana Public Service Company LLC	NIPS	2202	Reynolds to Greentown 765 kV line	12/1/2011	171,738,082	18,614,807	939,068	19,553,875	1/1/2022	12/31/2022
Northern Indiana Public Service Company LLC	NIPS	3203	Reynolds to E. Winnamac to Burr Oak to Hiple	12/1/2011	396,207,780	45,323,624	2,508,452	47,832,076	1/1/2022	12/31/2022
Otter Tail Power Company	OTP	1203	Brookings SD -SE Twin Cities 345 kV	12/1/2011	26,281,767	2,904,338	167,435	3,071,773	1/1/2022	12/31/2022
Otter Tail Power Company	OTP	2220	Ellendale to Big Stone South	12/1/2011	106,352,524	12,095,777	581,523	12,677,300	1/1/2022	12/31/2022
Otter Tail Power Company	OTP	2221	Big Stone South to Brookings	12/1/2011	72,731,515	8,211,848	535,145	8,746,993	1/1/2022	12/31/2022
Pioneer Transmission, LLC	PION	2202	Reynolds to Greentown 765 kV line	12/1/2011	190,703,859	22,081,946	1,162,602	23,244,548	1/1/2022	12/31/2022
Southern Minnesota Municipal Power Agency	SMP	3127	N LaCrosse-N Madison-Cardinal-Spring Green	12/1/2011	30,104,678	5,933,303	-	5,933,303	6/1/2021	5/31/2022
WPPI Energy	WPPT	3127	N LaCrosse-N Madison-Cardinal-Spring Green	12/1/2011	7,189,274	938,920	-	938,920	6/1/2021	5/31/2022
Totals					5,356,265,551	641,579,569	34,831,990	676,411,559		