

O'Reilly, Ann (OAH)

From: Luis Contreras <doccontreras@gmail.com>
Sent: Wednesday, December 03, 2014 2:51 PM
To: *OAH_Routecomments.oah
Cc: grnews@mx3.com; msfair@northwinds.net; norlight@wikel.com;
wpioneer@centurytel.net
Subject: < Public Comment - E-015/CN-12-1163 and OAH 65-2500-31196 > attachments for my
comment part 2
Attachments: MTEP11 App A - B - C.xlsx

Honorable Ann O'Reilly,

Attached, please find

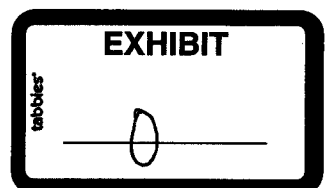
the attachments to my

comment for the Certificate of Need application for the "Great Northern Transmission Line." - docket
numbers E-015/CN-12-1163 and OAH 65-2500-31196

Respectfully,

Dr. Luis Contreras

Eureka Springs, AR



Project Table Field Legend

Appendix A contains projects which are being or have been approved by MISO Board of Directors. Transmission Owners are obligated to make a good faith effort to construct projects in Appendix A.

Appendix B projects have been reviewed by MISO staff for need and effectiveness.

Appendix C projects are new to planning process or conceptual

Project table has blue highlighted header. A project may have multiple facilities.

Facility table has beige highlighted header. A project's facilities may have different in service dates.

Project Table Field Legend

Field	Description
Target Appendix	Target appendix for the MTEP11 planning cycle. "A in MTEP11" projects were reviewed and approved in MTEP11. This column also indicates what projects were approved in prior MTEPs that are not yet in service.
Region	MISO Planning Region: Central, East or West
Geographic Location by TO Member System	Project geographic location by Transmission Owner member systems
PrjID	Project ID: MISO project identifier
Project Name	Project name (short name)
Project Description	A description of the project's components
State 1	State project is located or first state if in multiple states
State 2	If applicable, the second state the project is located
Allocation Type per FF	Project Type per Attachment FF of Tariff. BaseRel is Baseline Reliability, GIP is Generator Interconnection Project, TDSP is Transmission Delivery Service Project, RegBen is Regionally Beneficial Project, Other is non of the above. Preliminary project types may be designated for Appendix B and C projects
Share Status	Projects moving to Appendix A in current planning cycle are eligible for cost allocation per terms in Attachment FF. Projects are Shared, Not Shared or Excluded. Preliminary sharing designations may be input for Appendix B or C projects.
Other Type	Indicates the project driver behind Other type projects.
Estimated Cost	Total estimated project cost from Facility table
Expected ISD (Min/Max)	Dates when project is expected to be in service. Min and Max dates. Expected ISD are in Facility table.
Plan Status	Indicates where project is in planning or implementation. Proposed, Planned, Under Construction, In Service. Minimum of information in Facility table
Max kV	Maximum facility voltage in project. Summary information from Facility table
Min kV	Minimum facility voltage in project. Summary information from Facility table
App ABC	Appendix the project is in. B>A or C>B for projects moving during this planning cycle.
MISO Facility	Y for facilities under MISO functional control. NT for non-transferred facilities under Agency Agreements

Appendices A, B, C: Project Table 9/7/2011

Project Summary Information from Facility table

Target Appendix	Planning Region	Geographic Location by TO Member System	PRID	Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share	Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
A in MTEP11	West	ATC LLC	2055	Clear Lake-Woodmin 115 kV	Construct a 7.5 mile 115 kv line from Clear Lake to a new Woodmin distribution substation	WI		Other		Not Shared	Reliability	\$21,331,000	6/1/2012	6/1/2012	Planned	115		B>A	Y
A in MTEP11	West	ATC LLC	2800	Uprate Arpin-Hume 115-kV	Marshfield Electric & Water Department project to increase ground clearance to operate the line at 200 Deg F	WI		BaseRel		Not Shared		\$191,000	9/10/2010	9/10/2010	In Service	115		B>A	Y
A in MTEP11	West	ATC LLC	2820	Replace Bluemound 230/138kV transformer T1	Replace Bluemound 230/138kV transformer T1 with a 400 MVA unit	WI		Other		Not Shared	Condition	\$8,200,000	5/31/2012	5/31/2012	Planned	230	138	B>A	Y
A in MTEP11	West	ATC LLC	2842	Uprate Spring Green-Stepe Coach 69-kV	Uprate Spring Green-Stepe Coach 69-kV	WI		Other		Not Shared	Reliability	\$6,957,394	4/8/2011	4/8/2011	In Service	69		B>A	Y
A in MTEP11	West	ATC LLC	2844	Proposed MVP Portfolio 1 - Pleasant Prairie-Zion Energy Center 345 kV line	Construct a new Pleasant Prairie-Zion Energy Center 345-kV line	WI	IL	MVP		Shared	Reliability	\$28,856,000	3/16/2014	3/16/2014	Planned	345		C>B>A	Y
A in MTEP11	West	ATC LLC	2846	Straits power flow control	Install AC-DC-AC Back to Back Voltage Source Converterpower (VSC) flow controller at the Straits 138-kV substation	MI		BaseRel		Shared		\$90,000,000	5/1/2014	5/1/2014	Planned	138	138	A	Y
A in MTEP11	West	ATC LLC	3095	Uprate 9Mile-Roberts 69 kV line 6952	Increase ground clearance for the 9Mile-Roberts 69 kV line 6952 to 176 deg f clearance for all seasons & Install Arresters, Replace Select Components	MI		Other		Not Shared	Reliability	\$19,743,032	4/1/2012	4/1/2012	Planned	69		B>A	Y
A in MTEP11	West	ATC LLC	3108	Rebuild Pine River-Straits 69kV dbi ckt line	Rebuild Pine River-Straits 69kV dbi ckt line with 12.477 ACSR	MI		Other		Not Shared	Reliability	\$40,804,513	6/1/2014	6/1/2014	Planned	69		B>A	Y
A in MTEP11	West	ATC LLC	3126	Install a 2nd Chandler Transformer	Install a 2nd Chandler Transformer & reconfigure bus to 138 kV Ring bus	MI		Other		Not Shared	Reliability	\$9,700,000	12/9/2012	12/9/2012	Planned	138	69	C>B>A	Y
A in MTEP11	West	ATC LLC	3157	Line Y-95 Fount Valley-Fountain Valley Tap-Red Granite Tap-ACEC Spring Lake Tap-Silver Lake-Wautoma Uprate	Line Y-95 Fount Valley-Fountain Valley Tap-Red Granite Tap-ACEC Spring Lake Tap-Silver Lake-Wautoma Uprate	WI		Other		Not Shared	Reliability	\$362,468	6/17/2011	6/17/2011	In Service	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3160	G706-H012 Line X-6 Portage-Hamilton-Staff-Friesland-North Randolph 138 kV Uprate	G706-H012 Line X-6 Portage-Hamilton-Staff-Friesland-North Randolph 138 kV Uprate	WI		GIP		Not Shared		\$1,447,679	12/31/2011	12/31/2011	Planned	138		C>B>A	Y
A in MTEP11	West	ATC LLC	3161	G749 EcoMont Wind Farm	New EcoMont substation tapped into Belmont Tap-Rewey Tap 69 kV Line for G749	WI		GIP		Not Shared		\$4,569,183	11/30/2012	11/30/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3188	Pleasant Prairie-Zion 345-kV uprate	Replace 345kV Wave traps at the CornEd Zion SS and Jumpers	IL		Other		Not Shared	Economic	\$1,544,571	3/25/2011	3/25/2011	In Service	345		B>A	Y
A in MTEP11	West	ATC LLC	3206	G833-4 J022-3 Long Term Solution	T1 Construct a new Barnhart 345 & 138 kV substation2)	WI		GIP		Shared		\$173,308,000	6/1/2018	6/1/2018	Planned	345		B>A	Y
A in MTEP11	West	ATC LLC	3395	Milwaukee Co T-D	Install a new Milwaukee Co T-D substation by looping in line 5042 (Bluemound-Everett 138kV)	WI		Other		Not Shared	Distribution	\$33,500,000	4/1/2015	4/1/2015	Planned	138	13.2	C>B>A	Y
A in MTEP11	West	ATC LLC	3396	Uprate Blue River Tap-Muscoda 69 kV	Uprate Blue River Tap-Muscoda 69 kV line by increasing clearance at a distribution crossing to 564 Amps	WI		Other		Not Shared	Condition	\$580,000	11/15/2010	11/15/2010	In Service	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3427	Nordic-Perch Lk Uprate (AM)	Increase ground clearance for the Nordic-Perch Lk 138 kV line	MI		BaseRel		Not Shared		\$1,543,040	3/7/2011	3/7/2011	In Service	138		C>B>A	Y
A in MTEP11	West	ATC LLC	3428	Stage Coach-Timberlane 69kV uprate	Increase ground clearance for the Stage Coach-Timberlane 69kV line	WI		Other		Not Shared	Reliability	\$35,000	4/8/2011	4/8/2011	In Service	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3432	Uprate Stoughton-Oregon 69kV line	Uprate Stoughton-Oregon 69kV line	WI		Other		Not Shared	Reliability	\$570,000	4/21/2011	4/21/2011	In Service	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3433	Uprate Stagecoach-Mt Horeb NE-Mt Horeb 69 kV line Y-128	Uprate Stagecoach-Mt Horeb NE-Mt Horeb 69 kV line Y-128	WI		Other		Not Shared	Reliability	\$36,505	12/31/2011	12/31/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3447	Ontonagon 138/69kV Tr uprate	Retap CT related to Ontonagon 138/69 kV Tr to obtain a higher rating	MI		Other		Not Shared	Reliability	\$12,410	12/7/2010	12/7/2010	In Service	138	69	C>B>A	Y
A in MTEP11	West	ATC LLC	3446	Ontonagon 138/69kV Tr Replacement	Replace the Ontonagon 138/69 kV Tr with a larger unit	MI		Other		Not Shared	Reliability	\$935,786	12/1/2011	12/1/2011	Planned	138	69	C>B>A	Y
A in MTEP11	West	ATC LLC	3449	Rebuild the Atlantic-M38 69kV line	Rebuild the Atlantic-M38 69kV line with a larger conductor	MI		Other		Not Shared	Reliability	\$18,678,963	12/31/2013	12/31/2013	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3451	Y-136 Mt Horeb-Verona 69kV Rerate	Increase ground clearance on the Mt Horeb-Verona 69kV line	WI		Other		Not Shared	Reliability	\$710,000	11/1/2011	11/1/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3452	Y-158 Bass Ck-Sheepskin 69kV Rerate	Increase ground clearance on the Bass Ck-Sheepskin 69kV line	WI		Other		Not Shared	Reliability	\$920,000	11/1/2011	11/1/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3453	Y-25 Waupun-S Fond du Lac 69kV Rerate	Increase ground clearance on the Waupun-S Fond du Lac 69kV line	WI		Other		Not Shared	Reliability	\$2,186,630	2/28/2012	2/28/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3457	GIC J060 Garden City Wind Phase I	Interconnect GIC J060 Garden City Wind	MI		GIP		Not Shared		\$4,779,758	12/30/2011	12/30/2011	Planned	138	0.69	C>B>A	Y
A in MTEP11	West	ATC LLC	3458	Aurora 115-69kV T3 Replacement	Aurora 115-69kV T3 Replacement	WI		Other		Not Shared	Condition	\$2,858,914	6/3/2011	6/3/2011	In Service	115	69	C>B>A	Y
A in MTEP11	West	ATC LLC	3459	A-157 Hume-Wildwood 115kV Uprate	Increase ground clearance on the Hume-Wildwood 115kV line	WI		BaseRel		Not Shared		\$50,000	4/12/2011	4/12/2011	In Service	115		C>B>A	Y
A in MTEP11	West	ATC LLC	3460	Y-93 Berlin-Ripon 69kV Uprate	Increase ground clearance on the Berlin-Ripon 69kV line	WI		Other		Not Shared	Reliability	\$1,389,745	2/28/2011	2/28/2011	In Service	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3461	N-144 McMillan-Wildwood 115kV Uprate	Increase ground clearance on the McMillan-Wildwood 115kV line	WI		BaseRel		Not Shared		\$50,000	2/28/2011	2/28/2011	In Service	115		C>B>A	Y
A in MTEP11	West	ATC LLC	3472	Pleasant Prairie Bus Reconfiguration	Construct a new 6-rung breaker-and-a-half 345 kV bus at the P4 site adjacent to the existing P4 yard.	WI		Other		Not Shared	Reliability	\$39,400,000	3/22/2013	3/22/2013	Planned	345		C>B>A	Y
A in MTEP11	West	ATC LLC	3479	Progress-Aviation 138 kV Uprate	Increase ground clearance for the Progress-Aviation line to 187 degrees F	WI		Other		Not Shared	Condition	\$482,563	3/1/2012	3/1/2012	Planned	138		C>B>A	Y
A in MTEP11	West	ATC LLC	3480	Engadine Load Move	Construct a new radial 69-kV tap from the existing Indian Lake-Hawatha 69-kV line 6913 to the Engadine Substation	WI		Other		Not Shared	Reliability	\$810,804	10/1/2012	10/1/2012	Planned	138		C>B>A	Y
A in MTEP11	West	ATC LLC	3488	Uprate Brick Church to Walworth 69 kV line	Asset management project to uprate Y-159 from Brick Church to Walworth 69 kv Line	WI		Other		Not Shared	Condition	\$532,000	3/1/2012	3/1/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3489	Uprate Y-34 Jennings Road to Darlington 69 kV line	Asset management project to uprate Y-34 from Jennings Road to Darlington 69 kv Line	WI		Other		Not Shared	Condition	\$314,000	3/1/2012	3/1/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC	3504	Y-80 Omro to Winneconne Rerate	Rerate Line Y-80 conductor from Omro sub to Winneconne sub to a rating of 580 amps	WI		Other		Not Shared	Condition	\$205,000	12/1/2012	12/1/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ATC LLC, XEL, ITCM	3127	Proposed MVP Portfolio 1 - N LaCrosse-N Madison-Cardinal - Spring Green - Dubuque area 345-kV	N LaCrosse- N Madison - Cardinal 345-kV & Dubuque County - Spring Green - Cardinal 345 kv line. Spring Green and Briggs Road transformers	IA	WI/IA	MVP		Shared		\$678,260,000	12/31/2018	12/31/2020	Planned	345	138	B>A	Y

Appendices A, B, C: Project Table 9/7/2011

Project Summary Information from Facility table

Target Appendix	Planning Region	Geographic Location by TO		Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISO (Min)	Expected ISO (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
		Member System	ProjID															
A in MTEP11	West	DPC	3397	Genoa to La Crosse Tap 161 Rebuild	Rebuild of the 161 kV line from Genoa to the La Crosse tap.	WI		BaseRel	Shared		\$18,000,000	6/1/2014	6/1/2014	Planned	161		C>B>A	Y
A in MTEP11	West	DPC	3434	Lufkin 161 kV substation	Build a new 161 kV substation on the Alma to Elk Mound 161 line in the Eau Claire area.	WI		Other	Not Shared	Reliability	\$2,184,000	9/1/2012	9/1/2012	Planned	161		C>B>A	Y
A in MTEP11	West	GRE	2571	MN Pipeline-Menahga 8.0 mile line	MN Pipeline-Menahga 8.0 mile line. Built 115 kV but will be operated at 34.5.	MN		Other	Not Shared	Distribution	\$4,199,990	11/15/2014	11/15/2014	Planned	115		C>B>A	Y
A in MTEP11	West	GRE	2599	Shell Lake (IM) 5.0 mile, 115 kV line	Shell Lake (IM) 5.0 mile, 115 kV line	MN		Other	Not Shared	Distribution	\$4,201,000	10/31/2014	10/31/2014	Planned	115		C>B>A	Y
A in MTEP11	West	GRE	2643	Parkers Prairie 115 kV conversion	Parkers Prairie 115 kV conversion, New Distribution tap	MN		Other	Not Shared	Distribution	\$1,220,998	5/1/2013	5/1/2013	Planned	115		C>B>A	Y
A in MTEP11	West	GRE	2679	Ramsey-Grand Forks (81.02 mi.) 230 kV Rebuild	Ramsey-Grand Forks (81.02 mi.) 230 kV Rebuild	MN		Other	Not Shared	Condition	\$40,500,000	11/1/2019	11/1/2019	Planned	230		C>B>A	Y
A in MTEP11	West	GRE	3467	MISO G604	Connect Oak Glen Wind Farm to 69 kV system	MN		GIP	Not Shared		\$1,722,484	7/1/2011	7/1/2011	Under Constr	69		B>A	Y
A in MTEP11	West	GRE	3468	MISO H062	Connect H062 Wind Generation	MN		GIP	Not Shared		\$1,312,741	9/1/2011	9/1/2011	Under Constr	69		B>A	Y
A in MTEP11	West	GRE	3469	MISO H061	Connect H061 Wind generation	MN		GIP	Not Shared		\$192,530	10/1/2011	10/1/2011	Planned	69		B>A	Y
A in MTEP11	West	GREIMP	2634	Savanna-Cromwell	Savanna-Cromwell	MN		BaseRel	Shared		\$30,000,225	11/2/2012	12/1/2014	Planned	115		B>A	Y
A in MTEP11	West	ITCM	3191	S164-Lakefield Jct 345 kV Breaker & Half	Convert the Lakefield 345kV ring bus to breaker and a half.	MN		GIP	Shared		\$8,148,000	4/29/2011	4/29/2011	In Service	345		B>A	Y
A in MTEP11	West	ITCM	3192	G604-Ellendale 69 kV Switch Station	Construct a new Ellendale 69kV four terminal breaker station. The Hayward-West Owatonna 69kV line will be rerouted into the Ellendale breaker station. Then change the N.O. point on the line to closed.	MN		GIP	Shared		\$1,913,706	8/15/2010	12/31/2011	In Service	69		B>A	Y
A in MTEP11	West	ITCM	3193	G741-Martin Co Waste Heat	Construct a new 69kV tap to the G741 customer. Tap the Trimont (IPL)-Sherburn(SCREC) 69kV line.	MN		GIP	Shared		\$223,884	10/1/2010	10/1/2010	In Service	69		B>A	Y
A in MTEP11	West	ITCM	3194	G798-Story County Upgrades	Expand the ring bus at Story County.	IA		GIP	Shared		\$422,664	7/31/2010	7/31/2010	In Service	161		B>A	Y
A in MTEP11	West	ITCM	3195	G870-Freeborn	Tap the Hayward-Winnebag Jct 161kV and construct a new Freeborn 161kV three terminal breaker station. Approximately 4 mile tap will connect Freeborn to the new G870 customer substation.	MN		GIP	Shared		\$3,516,163	10/1/2010	10/1/2010	In Service	161		B>A	Y
A in MTEP11	West	ITCM	3196	H007-Bond Breaker Station	Tap the Hayward-Winnebag Jct 161kV and construct a new Bond 69kV three terminal breaker station.	IA		GIP	Shared		\$3,560,163	7/1/2011	7/1/2011	In Service	69		B>A	Y
A in MTEP11	West	ITCM	3406	Adams-Rochester Terminal Upgrades	Upgrade the Adams terminal equipment to winter conductor limit	MN		Other	Not Shared	Reliability	\$360,000	4/29/2011	4/29/2011	In Service	161		C>B>A	Y
A in MTEP11	West	ITCM	3407	Bluff Substation Additions	Add 69kV breakers to the Bluff Substation 69kV and install associated relay equipment.	IA		Other	Not Shared	Distribution	\$1,920,000	12/31/2011	12/31/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3408	BooneQuartz Sustation	This project performs the conversion of the Boone Quartz substation from 34.5kV to 69kV as part of the overall rebuild and conversion of the 34.5kV system. The Boone Quartz substation was constructed with a dual high side transformer and the high side was laid out for 69kV operation in preparation for the conversion. Two 69kV line breakers will be installed at the Boone Quartz substation. Existing 69kV lines and 34.5kV lines already constructed for 69kV operation will be re-configured along with installation of 69kV taps into the Boone Quartz substation to make the change to 69kV. No new load is being added during the conversion to 69kV.	IA		Other	Not Shared	Reliability	\$1,700,000	12/31/2011	12/31/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3409	Bricelyn-Walters Rebuild	The recommended project is to completely rebuild a 5 mile section of the Bricelyn - Walters 69 kV line with standard T2-477 construction and shield wire.	IA		Other	Not Shared	Condition	\$2,625,000	12/31/2013	12/31/2013	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3410	Bridgeport Terminal Upgrades	Upgrade the Bridgeport-Ottumwa 161kV terminal equipment.	IA		BaseRel	Not Shared		\$200,000	12/31/2011	12/31/2011	Planned	161		C>B>A	Y
A in MTEP11	West	ITCM	3411	Bridgeport T8	Add a 69kV breaker to the Bridgeport North 69kV ring and install associated relay equipment.	IA		Other	Not Shared	Distribution	\$360,000	12/31/2011	12/31/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3412	Fort Madison Interconnection	Install tap capable of double circuit 69kV to Fort Madison substation and install associated relay equipment.	IA		Other	Not Shared	Distribution	\$360,000	12/31/2012	12/31/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3413	Gladbrook 161kV tap	Install a 161kV tap pole in the Marshalltown to Traer line with two line switches. Construct a 161kV tap line to the new Gladbrook substation.	IA		Other	Not Shared	Distribution	\$300,000	12/31/2013	12/31/2013	Planned	161	161	C>B>A	Y
A in MTEP11	West	ITCM	3414	Magnolia 7.1 MVAR 69kV Cap	ITCM will move the existing Lewisville 69kV 7.1 MVAR capacitor to the 69kV bus at Magnolia. Recent system changes have opened up a 69kV bay at Magnolia and this will be used for the capacitor bank and 69kV breaker.	IA		Other	Not Shared	Reliability	\$480,000	12/31/2012	12/31/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3415	Marion Terminal Upgrades	Upgrade 115 kV breaker 3710 terminal equipment at Marion.	IA		BaseRel	Not Shared		\$10,000	12/31/2011	12/31/2011	In Service	115		C>B>A	Y
A in MTEP11	West	ITCM	3416	Marion Circuit 0410 Rebid to 69kV	This project rebuilds the sections (approximately 25 miles) of Marion circuit 0410 that will be utilized in the overall 34.5kV to 69kV conversion plan but have not yet been constructed for 69kV operation.	IA		Other	Not Shared	Distribution	\$10,500,000	12/31/2012	12/31/2012	Planned	34	34	C>B>A	Y
A in MTEP11	West	ITCM	3417	Marshalltown East Nevada	Construct a 1-2 span 34.5kV tap, install new relays for Marshalltown circuits 1810 and 2620, and upgrade terminal limit to address overload during contingency. Remove two normally open switches to limit system configuration to address system protection coordination issues which can occur when rural and city circuits are tied together.	IA		Other	Not Shared	Reliability	\$260,000	12/31/2011	12/31/2011	In Service	34		C>B>A	Y

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A in MTEP11	West	ITCM	3418	Mount Vernon Circuit 6420 Rebuild to 69kV	This project rebuilds the sections (approximately 17 miles) of Mount Vernon circuit 6420 that will be utilized in the overall 34.5kV to 69kV conversion plan but have not yet been constructed for 69kV operation.	IA		Other	Not Shared	Distribution	\$7,150,000	12/31/2013	12/31/2013	Planned	34	34	C>B>A	Y
A in MTEP11	West	ITCM	3419	Bertram 161kV tap	The new transformer high side voltage is 69/34.5kV; it will need a 0.5 mile tap line built to the substation from the existing 34.5kV system with the future plans of 69kV rebuild. Adding the double-circuit tap to the substation will allow connection to the new transformers. The double circuit tap will provide additional reliability, with switching, to have the ability to separate the parallel transformers in the situation a transformer fails, no load will be lost.	IA		Other	Not Shared	Distribution	\$270,000	12/31/2012	12/31/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3420	OGS Breaker	Install new 345kV breaker in the Ottumwa Generating Station substation to replace the failed 345kV circuit switcher. Replace the transformer lockout/breaker control panel. Replace the existing 345kV relay panel with two new panels and one lockout panel, which will allow for the retirement of an existing transfer trip scheme. The new line panels will implement a new redundant transfer trip scheme. Install second set of battery back up.	IA		Other	Not Shared	Condition	\$1,350,000	12/31/2011	12/31/2011	Planned	345		C>B>A	Y
A in MTEP11	West	ITCM	3421	Centerville 7.1 MVAR 69kV Cap	Install a 7 MVAR 69 kV capacitor, breaker with synchronous closing control, switch, and 0.5 mH reactor. 69 kV breakers 0-6961-1 and 0-6921-2 will be replaced due to condition. A 69 kV bus tie breaker and switch will be added for reliability between transformers 2 and 3.	IA		Other	Not Shared	Reliability	\$1,350,000	12/31/2011	12/31/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3422	South Broadway TEQ	Install Sub	IA		Other	Not Shared	Distribution	\$150,000	12/31/2012	12/31/2012	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3423	Truro Line Rebuild	Rebuild the line between the Truro substation and the White Oak tap and operate the line at 69 kV.	IA		Other	Not Shared	Reliability	\$3,360,000	12/31/2011	12/31/2011	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3425	VMEUJ Interconnect	Install line switches at the interconnection point.	IA		Other	Not Shared	Reliability	\$110,000	12/31/2011	12/31/2011	In Service	34		C>B>A	Y
A in MTEP11	West	ITCM	3426	DPC/ITC Interconnect move	The recommended project is to move the existing interconnection point approximately 0.6 miles south. ITC will install a laminate structure and associated equipment to accommodate DPC's project.	IA		Other	Not Shared	Distribution	\$0	12/31/2013	12/31/2013	Planned	69		C>B>A	Y
A in MTEP11	West	ITCM	3499	NERC Alert Facility Ratings for 2011	Verify and remediate facilities as required due to the industry-wide NERC alert.	IA		BaseRel	Not Shared			12/31/2011	12/31/2011	Planned			C>B>A	Y
A in MTEP11	West	MDU	3199	G359, 38073-01	230 kV line from project interconnection to Ellendale Jct substation and new 230/115 kV transformer at Ellendale	ND		GIP	Not Shared		\$19,130,000	3/21/2011	12/1/2011	Planned	230	115	B>A	Y
A in MTEP11	West	MEC	3268	Lehigh: 345 kV 50 MVAR Reactor	Add a 345 kV, 50 MVAR reactor	IA		BaseRel	Not Shared	Reliability	\$2,750,000	11/1/2012	11/1/2012	Planned	345		C>B>A	Y
A in MTEP11	West	MEC	3270	CBEC-River Bend 161 kV Rebuild	Increase 161 kV line rating.	IA		Other	Not Shared	Reliability	\$675,000	8/1/2011	8/1/2011	Planned	161		C>B>A	Y
A in MTEP11	West	MEC	3271	River Bend-Bunoe 161 kV Rebuild	Increase 161 kV line rating.	IA		Other	Not Shared	Reliability	\$700,000	8/1/2011	8/1/2011	Planned	161		C>B>A	Y
A in MTEP11	West	MEC	3272	Raun 345 kV Breaker Replacement	Replace existing SFA 345 kV breaker 0170 with a new unit.	IA		Other	Not Shared	Condition	\$500,000	6/1/2011	6/1/2011	Planned	345		C>B>A	Y
A in MTEP11	West	MEC, ITCM	3205	Proposed MVP Portfolio 1: Lakefield Jct. - Winnebago - Winco - Burt area & Sheldon - Burt Area - Webster 345 kV line	New 345 kV line from Lakefield Junction to Burt via Winnebago and Winco and a new 345 kV line from Sheldon to Webster via Burt. Includes 161 kV rebuild as underbuild along portions of the route.	IA	MN/IA	MVP	Shared		\$514,069,787	12/31/2015	12/1/2016	Planned	345	161	B>A	Y
A in MTEP11	West	MEC, ITCM	3213	Proposed MVP Portfolio 1 - Winco to Hazelton 345 kV line	Winco to Lime Creek to Floyd to Blackhawk to Hazelton 345 kV line and Lime Creek, Floyd and Black Hawk transformers	IA		MVP	Shared		\$591,551,532	12/1/2015	12/31/2015	Planned	345	161	B>A	Y
A in MTEP11	West	MP	2549	16L Upgrade	Thermal Upgrade of MP Line #15	MN		Other	Not Shared	Reliability	\$3,179,000	6/1/2014	6/1/2014	Planned	115		C>B>A	Y
A in MTEP11	West	MP	3373	9 Line	Thermal Upgrade	MN		BaseRel	Shared	Reliability	\$8,000,000	12/30/2012	12/30/2012	Planned	115		C>B>A	Y
A in MTEP11	West	MP	3374	Greenway	Re-energize existing 115/23 kV substation	MN		Other	Not Shared	Distribution	\$700,000	11/1/2012	11/1/2012	Planned	115	23	C>B>A	Y
A in MTEP11	West	OTP	2856	Victor-New Effington 41.6 kV Line Upgrade	Rebuild Existing 4-Mile 41.6 kV Line	SD		Other	Not Shared	Reliability	\$200,000	6/30/2011	6/30/2011	In Service	41.6		C>B>A	Y
A in MTEP11	West	OTP	3466	Project J-035 5 MW Wind Farm on OTP Doran 41.6 kV line	Add 3 Way Switch on 41.6 kV line between Doran 41.6 kV substation to Doran Jct.	MN		GIP	Not Shared		\$140,000	8/1/2012	8/1/2012	Planned	41.6		B>A	Y
A in MTEP11	West	OTP	3481	Buffalo - Casselton 115 kV Line	Construct 16 mile 115 kV line from Buffalo - Casselton (ND); Replace Buffalo 345/115 kV Transformer, Rebuild portion of Sheyenne - Mapleton 115 kV Line	ND		BaseRel	Shared		\$14,000,000	7/1/2013	12/31/2014	Planned	345	115	C>B>A	Y
A in MTEP11	West	OTP, MDU	2220	Proposed MVP Portfolio 1 - Ellendale to Big Stone South	Big Stone to Ellendale 345 kV double circuit line	ND	SD/NC	MVP	Shared		\$326,164,000	12/31/2019	12/31/2019	Planned	345	230	B>A	Y
A in MTEP11	West	OTP, XEL	2221	Proposed MVP Portfolio 1 - Big Stone South to Brookings	Brookings to Big Stone 345 kV double circuit	SD		MVP	Shared		\$226,720,000	12/31/2017	12/31/2017	Planned	345	230	B>A	Y
A in MTEP11	West	XEL	3309	Buffalo Ridge Substation Equipment Upgrade	Upgrade the wave traps and line switches at Buffalo Ridge to 2000 A going to Lake Yankton and Pipestone. Retap the Pipestone CTs to 2000 A going to Buffalo Ridge.	MN		BaseRel	Not Shared		\$286,000	8/1/2011	8/1/2011	Planned	115		C>B>A	Y
A in MTEP11	West	XEL	3310	Highway 212 Corridor upgrade	This project is to complete the conversion of 69 kV line between Scott County and West Waconia substation to 115 kV. The scope also involves building new West Creek distribution substation and converting the Chaska, Victoria and Augusta substations to 115 kV.	MN		Other	Not Shared	Distribution	\$19,450,000	6/1/2012	6/1/2012	Planned	115		C>B>A	Y
A in MTEP11	West	XEL	3312	Minn Valley - Maynard - Kerkhoven tap upgrade	This project is to upgrade the Minn Valley - Maynard - Kerkhoven tap 115 kV line to 795 ACSS conductor	MN		BaseRel	Shared		\$13,660,000	6/1/2014	6/1/2014	Planned	115		C>B>A	Y

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A in MTEP11	West	XEL	3313	New Prague switch	This project is to install a 69 kV 1 way switch to provide SMMPA's New Prague substation a new interconnection point. The existing interconnection would require cutting the line jumpers physically when the New Prague - Vestie line is out of service.	MN		Other	Not Shared	Reliability	\$180,000	6/1/2012	6/1/2012	Planned	69		C>B>A	Y	
A in MTEP11	West	XEL	3314	Kohlman Lake - Long Lake 2nd circuit	This project is to convert the Kohlman Lake - Long Lake 115 kV bifurcated line to double circuit with separate line terminations at Kohlman Lake and Long Lake	MN		BaseRel	Not Shared		\$3,000,000	6/1/2014	6/1/2014	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3315	Chisago County 2nd 345/115 kV transformer	This project is to install a 2nd 345/115 kV transformer at Chisago County	MN		BaseRel	Not Shared		\$7,000,000	6/1/2014	6/1/2014	Planned	345	115	C>B>A	Y	
A in MTEP11	West	XEL	3316	Riverside - Apache line upgrade	This project is to upgrade Riverside - Apache line to 360 MVA and upgrade Apache switch to 2000A	MN		BaseRel	Not Shared		\$3,000,000	6/1/2014	6/1/2014	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3317	Goose Lake - Kohlman Lake 2nd circuit	This project is to convert the single circuit line between Goose Lake and Kohlman Lake to double circuit.	MN		BaseRel	Shared		\$6,000,000	6/1/2014	6/1/2014	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3318	Parkers Lake Overstressed Breakers	This project replaces some of the 115 kV breakers at Parkers Lake with 63 kA rated breakers	MN		BaseRel	Not Shared		\$1,900,000	10/1/2011	10/1/2011	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3319	Split Rock Overstressed Breakers	This project replaces some of the 115 kV breakers at Split Rock with 63 kA rated breakers	SD		BaseRel	Not Shared		\$1,344,000	12/1/2011	12/1/2011	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3320	Split Rock Reactor Replacement	This project is needed to replace the failed 50 MVAR reactor and associated breaker.	SD		BaseRel	Not Shared		\$100,000	12/1/2011	12/1/2011	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3321	Chemolite Breaker Addition	This project adds two breakers at Chemolite to insure only one line at a time will be removed from service during a breaker failure.	MN		BaseRel	Not Shared		\$580,000	1/14/2011	1/14/2011	In Service	115		C>B>A	Y	
A in MTEP11	West	XEL	3322	Cedar Falls - Clear Lake Rebuild	Rebuild 43 Miles of 69 kV line to 477 ACSR	WI		Other	Not Shared	Reliability	\$14,000,000	6/1/2013	6/1/2013	Planned	69		C>B>A	Y	
A in MTEP11	West	XEL	3323	Park Falls Bio-Refinery	Build radial 115 kV line from Park Falls sub to a new customer and install a new distribution sub for the customer	WI		Other	Not shared	Distribution	\$23,769,000	12/1/2012	6/1/2013	Planned	115	13.8	C>B>A	Y	
A in MTEP11	West	XEL	3324	Eau Claire Overstressed Breakers	Replace overstressed Eau Claire 69 kV breakers, 4E185, 4E166, 4E167, 4E188, 4E189, 4E190, 4E191, 4E192, 4E193, 4E195	WI		Other	Not Shared	Reliability	\$1,683,000	12/1/2011	12/1/2011	Planned	69		C>B>A	Y	
A in MTEP11	West	XEL	3325	Orono 115 kV conversion	This project will move the supply for Orono from its current 69 kV supply to the 115 kV line from Medina to Crow River	MN		Other	Not Shared	Reliability	\$5,340,000	12/1/2012	12/1/2012	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3326	Black Dog Outlet	This line will rebuild the 115 kV line from Black Dog to Savage to 795 ACSR conductor.	MN		BaseRel	Not Shared		\$4,564,000	6/1/2012	6/1/2012	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL	3327	Eau Claire - Madison Street Rebuild	This project will replace 1 mile of 4/0 Cu conductor with 795 ACSR on the 69 kV line between Eau Claire - Sterling - Madison St.	WI		Other	Not Shared	Reliability	\$1,600,000	12/1/2011	12/1/2011	Planned	69		C>B>A	Y	
A in MTEP11	West	XEL	3473	Sioux Falls 115 kV Phase 1	This project re-constructs 10 miles of existing 69 kV line in Sioux Falls, SD to 115 kV; 6 miles of the new line will be double circuit with existing 69 kV.	SD		Other	Not Shared	Reliability	\$35,000,000	6/1/2014	6/1/2014	Planned	115	13.8	C>B>A	Y	
A in MTEP11	West	XEL	3474	Adams 345 kV Reactor Installation	Installing a 50 MVAR reactor at Adams substation on the Pleasant Valley line, along with a breaker and disconnect switch	MN		Other	Not Shared	Reliability	\$2,280,000	6/1/2012	6/1/2012	Planned	345		C>B>A	Y	
A in MTEP11	West	XEL	3475	Prairie 3rd transformer	This project is to install a 3rd 230/115 kV transformer at Prairie substation	ND		BaseRel	Not Shared		\$12,000,000	6/1/2014	6/1/2014	Planned	230	115	C>B>A	Y	
A in MTEP11	West	XEL	3476	Maple River - Cass County 345 kV line	This project is to build a new 4.5 mile 345 kV line from Maple River to Cass County substation along with the 345/115 kV transformer at Cass County substation.	ND		BaseRel	Not Shared		\$13,226,000	6/1/2014	6/1/2014	Planned	345	115	C>B>A	Y	
A in MTEP11	West	XEL	3509	Stinson to Bayfront 115 kV line rebuild	Rebuild approximately 33 miles of 115 kV line from 336 ACSR to 795 ACSR	WI		Other	Not Shared	Condition	\$15,400,000	1/1/2013	1/1/2013	Planned	115		C>B>A	Y	
A in MTEP11	West	XEL, GRE	1203	Proposed MVP Portfolio 1 - Brookings, SD - SE Twin Cities 345 kV	Brookings City-Lyon City (Single Ckt 345 kV); Lyon City-Cedar Mountain-Helena (Double Ckt 345 kV); Helena-Lake Marion-Hampton Corner (Single Ckt 345 kV); Lyon City-Hazel (Single Ckt 345 kV); Hazel-Minnesota Valley (Single Ckt 345 kV, initially operate at 230 kV); Cedar Mountain-Franklin (Single Ckt 115 kV)	MN	SD/MN	MVP	Shared		\$738,400,000	6/1/2011	2/16/2015	Planned	345	69	B>A	Y	
A in MTEP11	West	XEL, GRE	3454	Hollydale 115 kV upgrade	This project will upgrade the 69 kV line from GRE's Medina to Plymouth substations. A new switching station will be added on GRE's 115 kV line between Parkers Lake and Elm Creek north or south of the Plymouth Substation depending on the permitted location. Joint project with GRE P3394 at Medina	MN		Other	Not Shared	Reliability	\$24,676,164	5/1/2013	6/1/2013	Planned	115	13.8	C>B>A	Y	
A in MTEP10	Central	AmerenIL	1528	Rising Substation - Increase Xfmr Rating	Increase rating of existing 345/138 kV 450 MVA Transformer	IL					\$5,000,000	6/1/2012	6/1/2012	Proposed	345	138	A	Y	
A in MTEP10	Central	AmerenIL	1535	Wood River-Stallings	Replace terminal equipment at Stallings, reconductor 6 miles of 138 kV Line 1456 and upgrade Stallings bus conductor to a minimum capability of 1200 A	IL		BaseRel	Not Shared		\$2,036,000	6/1/2012	6/1/2012	Planned	138		A	Y	
A in MTEP10	Central	AmerenIL	2064	South Bloomington - Old Danvers 138 kV line - Reconductor	S Bloomington-Old Danvers 138 kV Line 1364 Reconductor 3.33 miles from S. Bloomington to West Washington. (S Bloomington to Diamond Star Tap)	IL		BaseRel	Not Shared		\$2,113,000	6/1/2012	6/1/2012	Planned	138		A	Y	
A in MTEP10	Central	AmerenIL	2288	Washington Street Substation 'In-Out'	Re-Route S. Bloomington to Danvers Line 1364 through the West Washington St. Substation with an 'in-and-out' arrangement Replace existing tap to 138 kV Line 1326 with 'in and out' arrangement.	IL		Other	Not Shared	Reliability	\$4,155,000	6/1/2012	6/1/2012	Planned	138		A	Y	

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A in MTEP10	Central	AmerenIL	2937	Edwards-Tazewell 138 kV Line 1373	Edwards-Tazewell 138 kV Line 1373 - Re-conductor 1.57 miles of 795 kcmil ACSR conductor and 7.5 miles of 927 kcmil ACAR conductor with conductor capable of carrying 1600 A under summer emergency conditions. Replace a 1200 A wavetrax and CT's at the Edwar	IL		BaseRel	Not Shared		\$121,000	12/31/2012	12/31/2012	Planned	138		A	Y
A in MTEP10	Central	AmerenIL	2988	North Alton Substation Supply	North Alton 138-34.5 kV Substation Supply - Supply new 138-34.5 kV Substation from an in-out by tapping the existing Wood River to Stallings 138 kV line ("in and out"). Build approximately 4 miles of double-circuit 138 kV line to the new North Alton Substation connection to the Wood River-Stallings-1456 138 kV line. Approximately 4 miles of double-circuit 138 kV line needed.	IL		Other	Not Shared	Distribution	\$12,891,000	6/1/2014	12/1/2015	Planned	138		A	Y
A in MTEP10	Central	AmerenIL	2992	Bondville-S.W. Campus	Bondville-S.W. Campus 138 kV - Construct 8 miles of new 138 kV line. Construct 138 kV Ring Bus at Bondville (2 new PCB's) and a 138 kV Ring Bus at Champaign S.W. Campus (4 new PCB's).	IL		Other	Not Shared	Distribution	\$10,000,000	6/1/2014	6/1/2014	Planned	138		A	Y
A in MTEP09	Central	AmerenIL	2273	Supply to LaFarge Customer Substation	Provide 161 kV supply to customer substation	IL		Other	Not Shared	Distribution	\$570,000	6/1/2013	6/1/2013	Planned	161		A	Y
A in MTEP09	Central	AmerenIL	2276	Grand Tower-Steeleville 138 kV Re-conductor	Reconductor 6.15 miles of 477 kcmil ACSR to carry 1200 A under summer emergency conditions	IL		BaseRel	Not Shared		\$1,866,000	10/5/2011	10/5/2011	Planned	138		A	Y
A in MTEP09	Central	AmerenIL	2472	New 345kV Supply at Fargo Substation	Tap existing 345kV line from Duck Creek to Tazewell and create new Maple Ridge Substation (\$6.5M) Build a new supply line to the Fargo Substation by extending 20 miles of 345kV from the new Maple Ridge Substation (\$50.1M) Create Fargo Station and install 560 MVA 345/138kV Transformer (\$9.4M)	IL		BaseRel	Shared		\$78,168,000	12/1/2016	12/1/2016	Planned	345	138	A	Y
A in MTEP08	Central	AmerenIL	1529	Brokaw-State Farm Line 1596 - Re-conductor	Reconductor 3.3 miles of 138 kV line to 2000 A Summer Emergency capability	IL		BaseRel	Not Shared		\$2,566,900	12/22/2011	12/22/2011	Planned	138		A	Y
A in MTEP08	Central	AmerenIL	2060	East Peoria - Flint - Increase Clearances to ground	Reconductor 4.54 miles of 477 kcmil ACSR with conductor capable of carrying 1200 A under summer emergency conditions	IL		BaseRel	Not Shared		\$2,113,000	6/1/2012	6/1/2012	Planned	138		A	Y
A in MTEP08	Central	AmerenIL	2068	Latham - Oreana 345 kV line	Convert Oreana 345 kV Bus to 6-Position Ring Bus with 3000 A Capability; Construct 8.5 miles of 345 kV line (2-954 kcmil ACSR conductor or equivalent capability) from Oreana Substation to 345 kV Line 4571 tap to Latham Substation. 3-345 kV PCB's at Oreana Substation.	IL		BaseRel	Shared		\$35,077,000	12/1/2014	12/1/2014	Planned	345		A	Y
A in MTEP08	Central	AmerenIL	2069	South Bloomington - Install new 560 MVA 345/138 Xlfr	South Bloomington Area 345/138 kV Substation - Install 345/138 kV, 560 MVA Transformer. Extend new 345 kV line approximately 5 miles from Brokaw Substation to South Bloomington Substation. Install 1-138 kV PCB at South Bloomington Substation, and 2-345 kV PCB's at Brokaw Substation	IL		BaseRel	Shared		\$20,029,000	12/1/2014	12/1/2014	Planned	345	138	A	Y
A in MTEP06	Central	AmerenIL	739	Franklin County Power Plant Connection	Franklin County Power Plant Connection - Tap 345 kV Line 4561 Tap, and Install new 345 kV ring bus	IL		Other	Not Shared (Pre-RECB 1)		\$6,410,900	11/1/2012	11/1/2012	Planned	345		A	Y
A in MTEP05	Central	AmerenIL	725	LaSalle Area Development	N. LaSalle-Wedron Fox River 138 kV - 24 miles new line, 2-138 kV breakers at N. LaSalle, 1 138 kV Breaker at Wedron Fox River.	IL		Other	Excluded		\$21,357,530	4/26/2012	4/26/2012	Planned	138		A	Y
A in MTEP05	Central	AmerenIL	726	LaSalle Area Development	Ottawa-Wedron Fox River 138 kV - Construct 9 miles new 138 kV line, 1 new 138 kV breaker at Ottawa	IL		Other	Excluded		\$8,962,967	7/30/2013	7/30/2013	Planned	138		A	Y
A in MTEP10	Central	AmerenMO	2972	Sandy Creek-Joachim Reconducting	Sandy Creek-Joachim 1 138 kV Line - Reconductor 8.2 miles of 795 kcmil ACSR with conductor having 1600 A summer emergency capability between Sandy Creek and Bailey Substations	MO		BaseRel	Not Shared		\$3,305,700	6/1/2012	6/1/2012	Planned	138		A	Y
A in MTEP10	Central	AmerenMO	2976	Central Substation Relocation	Central 138-34.5 kV Substation - Move Central 138-34 kV Substation approximately one-half mile and reterminate existing 138 kV supply lines (Cahokia-Central-1&2 and Central-Watson-1)	MO		Other	Not Shared	Relocation	\$4,632,900	12/1/2012	12/1/2012	Planned	138		A	Y
A in MTEP10	Central	AmerenMO	3107	Arnold Substation : Install 4-138 kV Breakers	Install 4-138 kV Breakers at Arnold Substation. Install 138 kV breaker on the Arnold-Meramec-3 line position. Establish 138 kV Bus #3, Install 138 kV Bus 2-3 tie breaker, and rearrange the existing Tyson-Meramec-4 line connection to an in-out arrangement	MO		BaseRel	Not Shared		\$2,283,200	6/17/2011	6/17/2011	Planned	138		A	Y
A in MTEP09	Central	AmerenMO	1240	Reconductor Sioux-Huster-1 and -3 138 kV	Reconductor 9.1 miles of 138kV line on Sioux-Huster 1 and 3 lines	MO		BaseRel	Shared		\$11,100,000	6/1/2012	6/1/2012	Planned	138		A	Y
A in MTEP08	Central	AmerenMO	1235	Fredericktown-AECI Fredericktown	Increase ground clearance on 12 miles	MO		Other	Not Shared		\$1,200,000	6/1/2016	6/1/2016	Planned	161		A	Y
A in MTEP08	Central	AmerenMO	1238	GM-Point Prairie 161 kV to AECI Enon Sub.	Extend 1 mile of 161 kV to AECI Enon Substation	MO		BaseRel	Not Shared		\$1,896,500	11/17/2011	11/17/2011	Planned	161		A	Y
A in MTEP07	Central	AmerenMO	152	Big River-Rockwood 138 kV	Big River-Rockwood 138 kV - Construct new line	MO		BaseRel	Shared		\$13,381,100	11/30/2011	11/30/2011	Planned	138		A	Y
A in MTEP10	Central	DEM	1520	Durin 230/69	Construct a new Durin 230/69kv 150mva substation with 2 69kv line terminals.	IN		Other	Not Shared	Reliability	\$7,000,000	6/1/2017	6/1/2017	Planned	230	69	A	Y
A in MTEP10	Central	DEM	1903	Fishers N. to Fishers 69kV reconductor	Reconductor 1.05 miles 69kV line from Fishers No to Fishers with 954ACSR@100C conductor	IN		Other	Not Shared	Reliability	\$455,229	6/1/2014	6/1/2014	Planned	69		A	NT
A in MTEP10	Central	DEM	2050	Dresser 345/138kV Bank 3 addition	Add a 3rd 345/138kV transformer at Dresser Sub	IN		BaseRel	Shared		\$2,980,000	12/31/2011	12/31/2011	Under Constr	345	138	A	Y
A in MTEP10	Central	DEM	2123	Bloomington to Martinsville 69kV Rebuild	Bloomington to Martinsville 69kV - 6903 ckt. - Rebuild 9.2 miles of 336ACSR with 954ACSR@100C	IN		Other	Not Shared	Reliability	\$2,020,000	6/1/2012	6/1/2012	Planned	69		A	NT

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Target Appendix	Planning Region	Geographic Location by TO		Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
		Member System	Pri/D															
A in MTEP10	Central	DEM	2134	Bloomington 230 to Needmore Jct 69kV reconductor	Bloomington 230kV Sub to Needmore Jct (Pole #825-3379) reconductor 6949 line with 954ACSR 100C conductor and replace (2) Needmore Jct. 69kV - 600 amp switches with 1200 amp switches.	IN		Other	Not Shared	Reliability	\$2,712,500	6/30/2013	6/30/2013	Planned	69		A	NT
A in MTEP10	Central	DEM	2136	Greenwood HE Honey Creek Jct to Frances Creek Jct 69kV Uprate	Greenwood HE Honey Creek Jct to Frances Creek Jct uprate 69kV - 69102 line 1.12 mile for 100C	IN		Other	Not Shared	Reliability	\$63,533	6/30/2012	6/30/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2137	Greenwood Averitt Rd Jct to HE Honey Creek Jct 69 kV Uprate	Greenwood Averitt Rd Jct to HE Honey Creek Jct 69 kV - 69102 Uprate 1.05 mile line section of 477acsr for 100C conductor temperature operation	IN		Other	Not Shared	Reliability	\$53,461	6/30/2012	6/30/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2143	Frances Creek 345/69kV Bank 2	Add Frances Creek 345/69kV Bank 2 - 200MVA with LTC	IN		Other	Not Shared	Reliability	\$6,667,000	6/1/2014	6/1/2014	Planned	345	69	A	NT
A in MTEP10	Central	DEM	2858	Geist to Fortville 69kv - 69130 ckt. Reconductor	Reconductor 69kV 3.62 mile line from Geist sub to Fortville sub with 954ACSR conductor.	IN		Other	Not Shared	Reliability	\$1,820,000	6/1/2017	6/1/2017	Planned	69		A	NT
A in MTEP10	Central	DEM	2859	Peru Muni J to Wabash J 69kv - 6996 ckt. Reconductor	Peru Muni J to Wabash J 6996 Reconductor approx. 10.3 miles of 410 ACSR with 477 ACSR	IN		Other	Not Shared	Reliability	\$3,810,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2860	Brazil East to Reelsville J 69kv - 6938 ckt. Reconductor	Reconductor 6938 line from Brazil East to Reelsville Jct. with 477ACSR 100C conductor. Replace Reelsville Jct switches with 1200 amp switches.	IN		Other	Not Shared	Reliability	\$2,550,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2861	Greencastle Madison J to Greencastle East J 69kV - 6996 ckt. Reconductor	Reconductor 6996 line from Greencastle Madison Jct to Greencastle East Jct. with 954ACSR 100C conductor. Replace or upgrade 600 amp Greencastle East Jct switches to 1200amp.	IN		Other	Not Shared	Reliability	\$1,482,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2863	Carmel SE to new Jct in 69145 ckt - new 69kV line	Build new 69kV-954ACSR circuit from Carmel SE to new Jct in the 69145 line, completing a loop from Carmel 148th St to Geist.	IN		Other	Not Shared	Distribution	\$4,274,200	6/2/2012	6/2/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2865	Frankfort Burlington to Middlefork 69kV - 69133 ckt Uprate	Frankfort Bringin St to Midfrk - 69133 ckt - uprate 11.5 miles of 40ACSR to 100C and reconductor 1.0 mile of 200CUB7 to 954ACSR@100C	IN		Other	Not Shared	Reliability	\$582,035	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP10	Central	DEM	2869	Zimmer 345kV Gas Insulated Sub. Repl.	Replace 345kV gas insulated sub with an air insulated sub	OH		Other	Not Shared	Condition	\$4,032,000	6/1/2012	6/1/2012	Under Constr	345		A	Y
A in MTEP10	Central	DEM	2871	EKPC Hebron - 138kV ring bus	Add new EKPC Hebron 138/69kV transformer (outside DEM area 208). Includes 3 position - 138kV CB ring bus and associated Duke owned facilities (inside DEM area 208). 138kv Tie from DEM to EKPC is being revised slightly. 100% to be paid for by EKPC.	KY		Other	Not Shared	Reliability	\$3,345,000	12/31/2011	12/31/2011	Planned	138	69	A	Y
A in MTEP10	Central	DEM	2872	Manhattan Dist Sub 138kV tap switches	Install 1200A - 138kv line switching on both sides of proposed tap line to new joint use DEM/WVPA Manhattan distribution sub.	IN		Other	Not Shared	Distribution	\$525,723	12/31/2011	12/31/2011	Planned	138	12	A	Y
A in MTEP10	Central	DEM	2874	Noblesville to Geist 230kV - 23007 line relocate	Relocate section of 23007 between Noblesville and Geist to new RoW around expanding mine operation - approx. 0.6 mile of added line length	IN		Other	Not Shared	Relocation	\$1,766,218	12/1/2011	12/1/2011	Planned	230		A	Y
A in MTEP10	Central	DEM	2876	Edwardsville 138kV switches and tap line	Construct new Edwardsville 138/12kV distribution substation - single 22.4 MVA transformer	IN		Other	Not Shared	Reliability	\$467,387	12/31/2011	12/31/2011	Planned	138	12	A	NT
A in MTEP10	Central	DEM	2876	Redbank 345kV Gas Insulated Bus. Repl.	Replace 345kV gas insulated bus with an air insulated bus	OH		Other	Not Shared	Condition	\$3,467,832	6/1/2013	6/1/2013	Planned	345		A	Y
A in MTEP10	Central	DEM	2877	West End 138kV relocation for B.S. Bridge	Modifications to West End Substation facilities, 138 kV transmission lines and distribution lines to accommodate Brent Spence Bridge project	OH		Other	Not Shared	Relocation	\$13,780,000	12/31/2015	12/31/2015	Planned	138	13.2	A	Y
A in MTEP10	Central	DEM	2878	Miami Fort 345kV Gas Insulated Bus. Repl.	Replace 345kV gas insulated bus with an air insulated bus	OH		Other	Not Shared	Condition	\$1,440,000	6/1/2014	6/1/2014	Planned	345		A	Y
A in MTEP10	Central	DEM	2879	Brazil West 69kV tap switches and tap line	Construct Brazil West 10.5MVA 69/12kV sub in the 6902 line to be located on 900N east of 425W	IN		Other	Not Shared	Reliability	\$150,000	12/31/2012	12/31/2012	Planned	69	12	A	NT
A in MTEP10	Central	DEM	2882	Lateral replace CB 640	Replace bus tie breaker #840 and associated disconnect sw's - new limits will be CB - 3000A and D/S's - 2000A	OH		Other	Not Shared	Reliability	\$445,302	12/31/2012	12/31/2012	Planned	138		A	Y
A in MTEP09	Central	DEM	1647	Carmel SE 69/12 kV new distribution substation	Construct Carmel SE Bank 1 22.4MVA bank with 2 exits - extend a new radial 69kv from Carmel 148th St (no new bkr - share dist bk terminal)	IN		Other	Not Shared	Distribution	\$2,000,000	6/1/2012	6/1/2012	Planned	69	12	A	NT
A in MTEP09	Central	DEM	1880	Columbia 138kV-22.4MVA Sub	Columbia 138kV-22.4MVA Sub - New site or purchase and rebuild existing Siemens Sub #537- in F5484 between Warren and Mainville	OH		Other	Not Shared	Distribution	\$215,000	12/31/2012	12/31/2012	Planned	138	12	A	Y
A in MTEP09	Central	DEM	2127	Marlinsville 69163-1 switch replacement	69163-1 switch replacement near tap to HE Cope with 1200A switch	IN		Other	Not Shared	Reliability	\$40,000	6/1/2019	6/1/2019	Planned	69		A	NT
A in MTEP09	Central	DEM	2132	Frances Creek 69kV capacitor	Frances Creek Install 36MVAR 69kV capacitor bank	IN		Other	Not Shared	Reliability	\$615,500	6/30/2012	6/30/2012	Planned	69		A	NT
A in MTEP09	Central	DEM	2133	Franklin to Forsythe new 69kV line	Franklin 230 sub to Forsythe 69 sub - Build new 3.5 mile 69kV line; new line terminal at Forsythe end only	IN		Other	Not Shared	Reliability	\$1,030,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP09	Central	DEM	2148	Cadiz to Milner's Corner Jct 69kV reconductor	Cadiz to Markleville to Milner's Corner J - Reconductor 69kv - 69131 ckt - 9.24 mile section with 477ACSR@100C; Replace 69kv three way switch at Milner's Corner Jct with three one way 1200A switches; Upgrade the Markleville 600A switches #1 and #2 to 1200A	IN		Other	Not Shared	Reliability	\$3,206,251	5/1/2012	5/1/2012	Planned	69		A	NT
A in MTEP09	Central	DEM	2149	West End 138kV bus tie and 1389 line bkr	West End substation - Install a 138kV circuit breaker to tie the east and west 138 kV busses together and a line breaker in the 1389 ckt	OH		BaseRel	Not Shared		\$1,040,000	12/31/2011	12/31/2011	Under Constr	138		A	Y
A in MTEP09	Central	DEM	2153	Mohawk to Lee Hanna 69kV reconductor	Mohawk to Lee Hanna 69kV reconductor 69130 ckt (5.27 mi) with 954acsr@100C	IN		Other	Not Shared	Reliability	\$2,317,000	6/1/2017	6/1/2017	Planned	69		A	NT

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		Location by TO	Member System																
A in MTEP09	Central	DEM		2154	Carmel Rohrer Rd 69/12kv New Sub	Carmel Rohrer Rd 69/12-22.4MVA sub to looped through the 6989 ckt. at or near the existing Carmel Shell Oil tap	IN		Other	Not Shared	Distribution	\$591,143	12/31/2013	12/31/2013	Planned	69	12	A	NT
A in MTEP09	Central	DEM		2327	Speed to HE Bethany 69kv - 6955 Reconductor Ph1	Speed to HE Bethany 69kv - 6955 Reconductor Ph1 - Replace 5.2 miles of 3/0 ACSR with 477 ACSR (new limiter 4/0acsr)	IN		Other	Not Shared	Reliability	\$1,560,000	6/1/2013	6/1/2013	Planned	69		A	NT
A in MTEP09	Central	DEM		2331	Shelbyville NE to Knauf 69kv - 6946 ckt. Reconductor	Shelbyville NE to Knauf Reconductor 1.75 miles of 397ACSR on 6946 ckt. with 954acsr@100C	IN		Other	Not Shared	Reliability	\$777,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP09	Central	DEM		2332	Zionsville Turkeyfoot to Zionsville 96th St Jct 69kv - 69155 ckt. Reconductor	Zionsville Turkeyfoot to Zionsville 96th St Jct Reconductor 1.59 mile 69kv - 69155 ckt with 954ACSR@100C	IN		Other	Not Shared	Reliability	\$704,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP09	Central	DEM		2334	Fishers 106th St 69/12kv New Sub	New Fishers 106th St 69/12 kv sub: Construct 69kv line in and out of sub and 69kv bus including 69kv breaker	IN		Other	Not Shared	Distribution	\$174,000	6/1/2012	6/1/2012	Planned	69	12	A	NT
A in MTEP08	Central	DEM		834	Kingman 69kv Cap	Add 7.2 MVAR 69kv capacitor at Kingman	IN		Other	Not Shared		\$500,000	6/1/2014	6/1/2014	Planned	69		A	NT
A in MTEP08	Central	DEM		835	Pittsboro 69kv Cap	Add 14.4 MVAR 69kv capacitor at Pittsboro	IN		Other	Not Shared		\$422,362	6/1/2013	6/1/2013	Planned	69		A	NT
A in MTEP08	Central	DEM		841	Westwood Bk1 Limiting Equipment	Replace 1600A 138kV breaker with 3000A to allow full xfr rating	IN		BaseRel	Not Shared		\$141,623	6/1/2015	6/1/2015	Planned	345	138	A	Y
A in MTEP08	Central	DEM		1245	Frankfort Jefferson to Potato Creek new 69kv Line	Construct new 69kv line from Frankfort Jefferson to new Potato Creek switching station.	IN		Other	Not Shared		\$2,094,115	6/1/2014	6/1/2014	Planned	69		A	NT
A in MTEP08	Central	DEM		1501	Carmel 146th St 69kv Cap 2	Added second 36 MVAR 69kv capacitor at Carmel 146th St	IN		Other	Not Shared		\$624,145	6/1/2014	6/1/2014	Planned	69		A	NT
A in MTEP08	Central	DEM		1512	Ashland to Rochelle 138	Install underground 138 kv circuit from Ashland to Ridgeway (New Dist Sub) to Rochelle.	OH		BaseRel	Not Shared		\$9,634,051	6/1/2012	12/31/2012	Planned	138	13.1	A	Y
A in MTEP08	Central	DEM		1513	Metea 69kv Cap	Install 14.4MVAR 69kv capacitor at Metea.	IN		Other	Not Shared		\$665,946	7/15/2011	7/15/2011	Under Constr	69		A	NT
A in MTEP08	Central	DEM		1514	Wabash River to Staunton 230 100C Uprate	Uprate Wabash River to Staunton 23002 to 100C summer operating temperature and 80C winter (559MVA).	IN		Other	Not Shared		\$1,286,147	12/31/2011	12/31/2011	Under Constr	230		A	Y
A in MTEP08	Central	DEM		1519	Noblesville NE to Geist 69	Build a new 69kv line from Noblesville NE sub to tap the Fishers North - Geist 69kv line	IN		Other	Not Shared	Reliability	\$2,640,107	12/31/2012	12/31/2012	Planned	69		A	NT
A in MTEP08	Central	DEM		1580	Edwardsport 138kv cap	Install a 138kv 57.6MVAR capacitor at Edwardsport.	IN		BaseRel	Not Shared		\$709,293	7/15/2011	7/15/2011	Under Constr	138		A	Y
A in MTEP08	Central	DEM		1581	Kokomo Webster St 230kv Ring bus	Retire existing 1600A circuit switcher and complete the Webster St ring in order to utilize the full capacity of the bundled 477 ACSR wire on the 23016 line.	IN		Other	Not Shared		\$389,580	6/1/2012	6/1/2012	Planned	230		A	Y
A in MTEP08	Central	DEM		1564	Roseburg Switching Station cap	Install 69kv 21.6MVAR std capacitor	IN		Other	Not Shared		\$518,503	12/31/2011	12/31/2011	Planned	69		A	NT
A in MTEP08	Central	DEM		1568	Qualitech 345/138KV Transformer and breakers	Qualitech Sub- Install one 345/138kv, 300Mva Xtr and 2 345kv Bkrs and 1-138kv Bkr to provide second 138kv source to proposed Hendricks Co 138kv system	IN		Other	Not Shared	Reliability	\$4,561,674	6/1/2013	6/1/2013	Planned	345	138	A	Y
A in MTEP08	Central	DEM		1569	Qualitech to Pittsboro new 138kv line	Construct new 138kv line, Qualitech to Pittsboro, and connect to the Pittsboro-Brownsbg line to provide new 954ACSR outlet line from Qualitech 345/138kv Bank	IN		Other	Not Shared	Reliability	\$1,507,856	6/2/2013	6/2/2013	Planned	138		A	Y
A in MTEP08	Central	DEM		1570	Plainfield South to Pittsboro 69KV to 138KV Conversion	Convert the existing 69KV (69144) line from Plainfield S. to Pittsboro (and 4 distribution subs) over to 138KV operation and connect to the new Qualitech to Pittsboro 138KV line	IN		Other	Not Shared	Reliability	\$4,139,000	6/3/2013	6/3/2013	Planned	138		A	Y
A in MTEP08	Central	DEM		1650	Fairview to HE Fairview 13854 Reconductor	Fairview to HE Fairview 13854 Reconductor with 954ACSR @ 100C	IN		BaseRel	Not Shared		\$1,236,384	6/30/2014	6/30/2014	Planned	138		A	Y
A in MTEP08	Central	DEM		1861	Bloomington Rogers St - replace 13836 breaker	Bloomington Rogers St - replace 13836 breaker and WT; replace 13871 breaker, WT, and disc sw's - All 2000amp rated; Replace relays for 13836, 13837, 13871	IN		Other	Not Shared		\$1,051,992	12/31/2011	12/31/2011	Planned	138		A	Y
A in MTEP08	Central	DEM		1869	Danville to Danville Jct 69kv reconductor	Danville to Preswick Jct to Danville Jct - recon. 5.2 mi of the 6945 ckt. with 954acsr OVAL @100C and replace the 600 amp, two way switches at Danville Jct with two 1200 amp one way switches and replace the 600 amp switch at Preswick Jct with a 1200 amp	IN		Other	Not Shared	Reliability	\$1,622,359	6/23/2011	6/23/2011	Under Constr	69		A	NT
A in MTEP08	Central	DEM		1890	Geist to new Fishers N. Jct. 69kv line	Build new 69kv line - 69191 - 4 miles with 954ACSR along 129th St (completes approx 5.9 mile line section)	IN		Other	Not Shared	Reliability	\$1,977,421	8/16/2011	8/16/2011	Under Constr	69		A	NT
A in MTEP08	Central	DEM		1893	Mitchell Lehigh Portland to Bedford 25th St 695v rebuild	Reconductor 10.3 miles of 69kv - 6995 line with 477 ACSR@100C	IN		Other	Not Shared	Reliability	\$3,016,000	6/1/2013	6/1/2013	Planned	69		A	NT
A in MTEP08	Central	DEM		1895	Brownsburg to Avon East 138kv Reconductor	Brownsburg to Avon East 138kv Reconductor 4.2 miles of 138kv line with 954 ACSR - AFTER 138KV CONVERSION	IN		BaseRel	Not Shared		\$1,433,227	6/4/2013	6/4/2013	Planned	138		A	Y
A in MTEP08	Central	DEM		1896	Connorsville 138 sub to Connorsville 30th St 69kv uprate	Connorsville 138 sub to Connorsville 30th St 69kv Uprate to 100C - 4/0 acsr sections - 1.2 miles - 6981 ckt	IN		Other	Not Shared		\$16,493	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP08	Central	DEM		1897	Deedsville to Macy 69kv Reconductor	Reconductor Deedsville to Macy section of 6957 circuit with 477ACSR approx 2.5 miles; and replace Macy #1 and #2 - 600A line switches (1955 vintage) with 1200A	IN		Other	Not Shared		\$921,919	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP08	Central	DEM		1899	Macy to Rochester Metals Jct 69kv reconductor	Reconductor Macy to Rochester Metals Jct section of 6957 circuit with 477ACSR - approx 9.1 miles	IN		Other	Not Shared	Reliability	\$3,102,711	12/31/2013	12/31/2013	Planned	69		A	NT
A in MTEP08	Central	DEM		1901	Noblesville Station to Noblesville Jct 69kv line rebuild	Reconductor 69kv - 6984 & 6916 ckt. Noblesville Plant to Noblesville 8th St. to Noblesville Jct with 954ACSS @ 200C (5.47 miles)	IN		Other	Not Shared	Reliability	\$1,510,946	6/1/2013	6/1/2013	Planned	69		A	NT
A in MTEP08	Central	DEM		1902	Zionsville 69 to Zionsville 96th Jct 69kv reconductor	Reconductor .32 miles of the 69kv - 69155 line from Zionsville 69 sub to Zionsville 96th Jct with 954ACSR conductor; replace/upgrade 69kv switches, jumpers and bus at Zionsville 69 sub for a min. capacity of 152MVA (502G6709)	IN		Other	Not Shared		\$309,475	6/1/2012	6/1/2012	Planned	69		A	NT

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		Member System	PriID															
A in MTEP07	Central	DEM	852	Crawfordsville to Tipmont Concord to Lafayette SE 138 Reconnector	Reconductor 13819 circuit with 954ACSR 100C.	IN		BaseRel	Shared		\$8,919,730	6/1/2013	6/1/2013	Planned	138		A	Y
A in MTEP06	Central	DEM	851	Laf Cumberland to Laf AE Staley 138 Reconnector	Reconductor section of 13806 circuit with 954ACSR 100C.	IN		BaseRel	Not Shared		\$349,357	6/1/2013	6/1/2013	Planned	138		A	Y
A in MTEP06	Central	DEM	853	West Lafayette to Cumberland 138 Reconnector	Reconductor section of 13806 circuit with 954ACSR 100C.	IN		Other	Not Shared		\$706,921	6/1/2015	6/1/2015	Planned	138		A	Y
A in MTEP06	Central	DEM	1244	Cayuga to Frankfort 23013 Wave Trap Upgrade	Upgrade wave traps at Cayuga and Frankfort to increase line rating to 797 MVA	IN		BaseRel	Not Shared		\$167,560	6/1/2013	6/1/2013	Planned	230		A	Y
A in MTEP10	Central	HE	3080	Rocklane Tie to Duke 69kV	Build 69kV Transmission from HE Rocklane to Duke 69kV Transmission	IN		Other	Not Shared	Reliability	\$3,000,000	6/1/2011	6/1/2011	Planned	69		A	Y
A in MTEP08	Central	HE	1927	Hubbell Primary Ring Bus	138kV Ring Bus addition / Modification to Hubbell Primary	IN		Other	Not Shared	Reliability	\$3,000,000	9/1/2010	9/1/2010	Planned	138		A	Y
A in MTEP08	Central	HE	1928	Fairview Primary Ring Bus	138kV Ring Bus addition / Modification to Fairview Primary	IN		Other	Not Shared	Reliability	\$1,500,000	9/1/2011	9/1/2011	Planned	138		A	Y
A in MTEP08	Central	HE	1929	Georgetown Primary Ring Bus	138kV Ring Bus addition / Modification to Georgetown Primary	IN		Other	Not Shared	Reliability	\$1,250,000	9/1/2012	9/1/2012	Planned	138		A	Y
A in MTEP08	Central	HE	2092	Shelbyville Intel Park	138kV Substation and Tapline	IN		Other	Not Shared	Reliability	\$1,000,000	9/1/2009	9/1/2009	Planned	138	12.5	A	Y
A in MTEP08	Central	HE	2093	Wayne County Industrial Park	69kV Substation and Tapline	IN		Other	Not Shared	Reliability	\$750,000	9/1/2009	9/1/2009	Planned	69	12.5	A	NT
A in MTEP10	Central	IPL	2900	Northwest - Southwest 138 kV line rating upgrade	Increase line rating from 242 to 382 MVA	IN		BaseRel	Not Shared		\$1,500,000	6/1/2011	6/1/2011	Planned	138		A	Y
A in MTEP09	Central	IPL	2053	Petersburg 345/138kV East and West Autotransformers and 345 kV breaker	Replace and upgrade existing East and West 345/138kV autotransformer at Petersburg Substation. Add 345kV breaker.	IN		BaseRel	Shared		\$15,400,000	6/1/2012	6/1/2012	Planned	345	138	A	Y
A in MTEP08	Central	IPL	1639	General IPL Capacitor Additions	Add capacitors to the IPL General Distribution System	IN		Other	Not Shared		\$50,000	6/1/2013	6/1/2013	Planned			A	Y
A in MTEP08	Central	SIPC	1778	Hamilton 138kV Interconnect	Construct a 138kV line connecting SIPC Hamilton Substation to Ameren Norris City Substation. This project includes the construction of 18 miles of 138kV line.	IL		Other	Not Shared		\$5,000,000	7/1/2008	7/1/2008	Planned	138		A	Y
A in MTEP03	Central	SIPC	81	Carrier Mills 161kV	A new 25-mile 161kV transmission line from Southern Illinois Power Cooperative's power plant to a new 181/69kV substation located north of Carrier Mills, IL.	IL		Other	Excluded		\$10,200,000	9/1/2012	9/1/2012	Planned	161	69	A	Y
A in MTEP09	Central	Vectren (SIGE)	2461	Dubois Sub Z84 terminals	Add 1 new 138kV terminal to existing sub to avoid 3 term line, breaking up Duff - Dubois - Culley 138kV line	IN		BaseRel	Not Shared		\$1,000,000	6/1/2014	6/1/2014	Planned	138		A	Y
A in MTEP09	Central	Vectren (SIGE)	2465	Leibert Rd 138/12kV Substation	New 138/12kV Substation for load growth	IN		Other	Not Shared	Distribution	\$2,622,781	10/1/2011	10/1/2011	Planned	138	12.5	A	NT
A in MTEP09	Central	Vectren (SIGE)	2466	Roesner Rd 138/12kV Substation	New 138/12kV Substation for load growth	IN		Other	Not Shared	Distribution	\$3,000,000	6/1/2013	6/1/2013	Planned	138	12.5	A	NT
A in MTEP08	Central	Vectren (SIGE)	1002	New Northeast to Oak Grove to Culley Line 138 kV	New Northeast to Oak Grove to Culley Line 138 kV	IN		Other	Not Shared	Reliability	\$4,368,926	6/1/2012	6/1/2012	Under Constr	138		A	Y
A in MTEP08	Central	Vectren (SIGE)	1782	NorthEast Sub Bus re-config	Rebuild existing straight bus with more reliable breaker and half scheme	IN		Other	Not Shared	Reliability	\$7,000,000	12/31/2014	12/31/2014	Planned	138		A	Y
A in MTEP08	Central	Vectren (SIGE)	1784	Jasper#3 Sub Exp-Victory Line	Extend existing Victory line to new term at existing sub	IN		Other	Not Shared		\$3,625,000	6/1/2016	6/1/2016	Planned	69		A	NT
A in MTEP08	Central	Vectren (SIGE)	1785	Z83 Upgrade	Upgrade terminal equipment at NE and NW	IN		Other	Not Shared		\$100,000	12/31/2012	12/31/2012	Planned	138		A	Y
A in MTEP08	Central	Vectren (SIGE)	1787	Y75 - Dale to Santa Clause	New 69kV line from Dale Sub to Santa Clause Sub	IN		Other	Not Shared	Reliability	\$5,000,000	8/1/2014	8/1/2014	Planned	69		A	Y
A in MTEP08	Central	Vectren (SIGE)	1788	Y34 - St. Wendel to Mohr Rd	New 69kV line from St. Wendel Sub to Mohr Rd Sub	IN		Other	Not Shared	Reliability	\$2,750,000	8/1/2014	8/1/2014	Planned	69		A	NT
A in MTEP08	Central	Vectren (SIGE)	1789	Y56 - City of Boonville Loop	New 69kV line from Boonville Sub to Boonville Pioneer Sub	IN		Other	Not Shared	Reliability	\$1,400,000	8/1/2014	8/1/2014	Planned	69		A	NT
A in MTEP08	Central	Vectren (SIGE)	1790	Y52 rebuild and Sunbeam loop	Rebuild/Reconductor existing Y52 and loop into Sunbeam	IN		Other	Not Shared	Reliability	\$2,550,000	8/1/2014	6/1/2014	Planned	69		A	NT
A in MTEP08	Central	Vectren (SIGE)	1791	Y66-2 Angel Mounds to Eastside uprate	Uprate Y66-2 from Angel Mounds to East Side to increase transfer capacity	IN		Other	Not Shared		\$300,000	6/1/2012	6/1/2012	Planned	69		A	NT
A in MTEP06	Central	Vectren (SIGE)	1257	New Transmission Line Gibson (Cinergy) to AB Brown (Vectren) to Reid (BREC)	New 345 kV transmission line Gibson (Cinergy) to AB Brown (Vectren) to Reid (BREC)	IN	KY	BaseRel	Shared		\$46,284,114	6/1/2012	6/1/2012	Under Constr	345		A	Y
A in MTEP10	East	ITC	2918	Breaker Replacement Program 2012	Replace defective, damaged, or over dutied breakers throughout system.	MI		Other	Not Shared	Condition	\$6,000,000	12/31/2012	12/31/2012	Planned	345	120	A	Y
A in MTEP10	East	ITC	2919	NERC Relay Loadability Compliance 2012	Upgrade relays throughout system	MI		Other	Not Shared	Reliability	\$2,400,000	12/31/2012	12/31/2012	Planned	345	120	A	Y
A in MTEP10	East	ITC	2920	Potential Device Replacement 2012	Replace aging potential devices	MI		Other	Not Shared	Condition	\$300,000	12/31/2012	12/31/2012	Planned	345	120	A	Y
A in MTEP10	East	ITC	2921	Relay Betterment Program 2012	Replace aging and electromechanical relays throughout the system. Add OPGW where needed.	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2012	12/31/2012	Planned	345	120	A	Y
A in MTEP10	East	ITC	2922	Wood Pole Replacement 2012	Replace deteriorating wood pole	MI		Other	Not Shared	Condition	\$4,800,000	12/31/2012	12/31/2012	Planned	120		A	Y
A in MTEP10	East	ITC	2923	Capacitor Replacement 2012	Replace capacitor banks	MI		Other	Not Shared	Condition	\$600,000	12/31/2012	12/31/2012	Planned	120		A	Y
A in MTEP10	East	ITC	2925	Blanket for Customer Interconnection 2011	Throughout system	MI		Other	Not Shared	Distribution	\$2,000,000	12/31/2011	12/31/2011	Planned	120		A	Y
A in MTEP10	East	ITC	2926	Blanket for Customer Interconnection 2012	Throughout system	MI		Other	Not Shared	Distribution	\$2,000,000	12/31/2012	12/31/2012	Planned	120		A	Y
A in MTEP10	East	ITC	2927	Blanket for Customer Interconnection 2013	Throughout system	MI		Other	Not Shared	Distribution	\$2,000,000	12/31/2013	12/31/2013	Planned	120		A	Y
A in MTEP10	East	ITC	2928	Blanket for Customer Interconnection 2014	Throughout system	MI		Other	Not Shared	Distribution	\$2,000,000	12/31/2014	12/31/2014	Planned	120		A	Y
A in MTEP10	East	ITC	2929	Ariel Substation (formerly Holland)	Distribution Interconnection to add two new 120/13.2kV transformers at Holland. Connects to the Wheeler to Troy 120kV circuit.	MI		Other	Not Shared	Distribution	\$2,800,000	12/30/2012	12/30/2012	Planned	120		A	Y
A in MTEP10	East	ITC	2930	Upper Rouge	Distribution Interconnection to add a new 120/4.8kV transformer at Upper Rouge.	MI		Other	Not Shared	Distribution	\$1,900,000	12/30/2015	12/30/2015	Planned	120		A	Y
A in MTEP10	East	ITC	3168	Proposed MVP Portfolio 1 - Michigan Thumb Wind Zone	The proposed transmission line will connect into a new s	MI		MVP	Shared		\$510,000,000	12/31/2013	12/31/2015	Planned	345	120	A	Y
A in MTEP09	East	ITC	1872	Scio	Distribution Interconnection to add new 120/41kV transformer. Loops the Lark-Spruce 120kV circuit into the station.	MI		Other	Not Shared	Distribution	\$3,000,000	6/1/2013	6/1/2013	Planned	120		A	Y
A in MTEP09	East	ITC	2519	Breaker Replacement Program 2011	Replace defective, damaged, or over dutied breakers throughout system.	MI		Other	Not Shared	Condition	\$5,650,000	12/31/2011	12/31/2011	Planned			A	Y
A in MTEP09	East	ITC	2520	Cable Termination Replacement 2011	Replace high pressure gas filled underground cable terminations throughout system.	MI		Other	Not Shared	Condition	\$3,000,000	12/31/2011	12/31/2011	Planned			A	Y
A in MTEP09	East	ITC	2521	Relay Betterment Program 2011	Replace aging and electromechanical relays throughout the system. Add OPGW where needed.	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2011	12/31/2011	Planned			A	Y

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Target Appendix	Planning Region	Geographic Location by TO Member System			Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility	
		ProjID	ProjID	ProjID																
A in MTEP09	East	ITC		2525	Capacitor Replacement 2011	Replace capacitor banks	MI		Other	Not Shared	Condition	\$565,000	12/31/2011	12/31/2011	Planned			A	Y	
A in MTEP09	East	ITC		2528	Potential Device Replacement 2011	Replace aging potential devices	MI		Other	Not Shared	Condition	\$300,000	12/31/2011	12/31/2011	Planned			A	Y	
A in MTEP09	East	ITC		2531	Power Plant Control Relocation 2011	Relocate substation controls currently located in power plant control rooms	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2011	12/31/2011	Planned			A	Y	
A in MTEP09	East	ITC		2534	Wood Pole Replacement 2011	Replace deteriorating wood pole	MI		Other	Not Shared	Condition	\$9,000,000	12/31/2011	12/31/2011	Planned			A	Y	
A in MTEP09	East	ITC		2537	Synchronizing Sites 2011	New 120kV synchronizing sites	MI		Other	Not Shared	Operations	\$565,000	12/31/2011	12/31/2011	Planned			A	Y	
A in MTEP09	East	ITC		2539	NERC Relay Loadability Compliance 2011	Upgrade relays throughout system	MI		BaseRel	Not Shared	Condition	\$2,250,000	12/31/2011	12/31/2011	Planned		120	A	Y	
A in MTEP09	East	ITC		2541	Hunters Creek - Robin - Wabash	Install double groundwire peaks and second shield wire.	MI		Other	Not Shared	Condition	\$2,400,000	7/22/2011	7/22/2011	Under Constr		120	A	Y	
A in MTEP09	East	ITC		2545	Marathon/Navarre	New distribution interconnection served from Navarre substation	MI		Other	Not Shared	Distribution	\$640,000	9/1/2011	9/1/2011	Planned		120	A	Y	
A in MTEP08	East	ITC		1870	Clyde	Distribution Interconnection to add a new 120/41kV transformer at Clyde. Taps the Placid-Durant 120kV circuit	MI		Other	Not Shared	Distribution	\$2,750,000	6/1/2013	6/1/2013	Planned		120	A	Y	
A in MTEP08	East	ITC		1873	Tahoe	Distribution Interconnection to add a new 120/13.2kV transformer at Tahoe.	MI		Other	Not Shared	Distribution	\$2,800,000	5/31/2013	5/31/2013	Planned		120	A	Y	
A in MTEP06	East	ITC		1308	B3N Interconnection	Returns the Bunce Creek to Scott 220 kV circuit to service, and replaces the Phase Angle Regulator with 2 new phase angle regulating transformers in series	MI		Other	Not Shared	Distribution	\$25,000,000	9/30/2011	9/30/2011	Planned		220	A	Y	
A in MTEP06	East	ITC		1310	Breaker Replacement Program	Targets the replacement of breakers nearing their end of life where maintenance costs will be just as high as new breakers	MI		Other	Not Shared	Distribution	\$150,000	9/30/2011	9/30/2011	Planned		120	A	Y	
A in MTEP10	East	METC		2902	McGulpin Shunt Reactor	Install shunt reactor McGulpin	MI		BaseRel	Not Shared	Distribution	\$3,000,000	12/31/2011	12/31/2011	Planned		138	A	Y	
A in MTEP10	East	METC		2903	Battery Replacement 2012	Replace batteries and chargers	MI		Other	Not Shared	Condition	\$300,000	12/31/2012	12/31/2012	Planned			A	Y	
A in MTEP10	East	METC		2904	Breaker Replacement Program 2012	Replace defective, damaged, or over dated breakers throughout system.	MI		Other	Not Shared	Condition	\$6,000,000	12/31/2012	12/31/2012	Planned			A	Y	
A in MTEP10	East	METC		2905	NERC Relay Loadability Compliance 2012	Upgrade relay throughout system	MI		Other	Not Shared	Reliability	\$2,400,000	12/31/2012	12/31/2012	Planned			A	Y	
A in MTEP10	East	METC		2906	Potential Device Replacement 2012	Replace aging potential devices	MI		Other	Not Shared	Condition	\$300,000	12/31/2012	12/31/2012	Planned			A	Y	
A in MTEP10	East	METC		2907	Power Plant Control Relocation 2012	Relocate substation controls currently located in power plants control rooms	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2012	12/31/2012	Planned			A	Y	
A in MTEP10	East	METC		2908	Relay Betterment Program 2012	Replace aging and electromechanical relays throughout the system. Add OPGW where needed.	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2012	12/31/2012	Planned			A	Y	
A in MTEP10	East	METC		2909	Sag clearance 2012	Identify and remediate inherent sag limitations on heavily loaded METC transmission lines throughout the system.	MI		Other	Not Shared	clearance	\$3,600,000	12/31/2012	12/31/2012	Planned		345	138	A	Y
A in MTEP10	East	METC		2910	Wood Pole Replacement 2012	Replace deteriorating wood pole	MI		Other	Not Shared	Condition	\$4,800,000	12/31/2012	12/31/2012	Planned		138	A	Y	
A in MTEP10	East	METC		2912	Blanket for Customer Interconnections 2011	Throughout system	MI		Other	Not Shared	Distribution	\$2,500,000	12/31/2011	12/31/2011	Planned		138	A	Y	
A in MTEP10	East	METC		2913	Blanket for Customer Interconnections 2012	Throughout system	MI		Other	Not Shared	Distribution	\$2,500,000	12/31/2012	12/31/2012	Planned		138	A	Y	
A in MTEP10	East	METC		2914	Blanket for Customer Interconnections 2013	Throughout system	MI		Other	Not Shared	Distribution	\$2,500,000	12/31/2013	12/31/2013	Planned		138	A	Y	
A in MTEP10	East	METC		2915	Blanket for Customer Interconnections 2014	Throughout system	MI		Other	Not Shared	Distribution	\$2,500,000	12/31/2014	12/31/2014	Planned		138	A	Y	
A in MTEP10	East	METC		2916	Livingston - Vanderbilt 138 kV Rebuild	Rebuild 9.7 miles of 138 kV 266 ACSR to 954 ACSR FDC 230 kV construction.	MI		BaseRel	Shared	Distribution	\$12,734,400	6/1/2012	6/1/2012	Planned		138	A	Y	
A in MTEP10	East	METC		2917	David Jct - Hubbardson Jct - Bingham Sag Remediation	Improve sag clearance by replacing 16 wood poles with 138 kV FDC steel poles.	MI		BaseRel	Not Shared	Distribution	\$1,216,860	11/30/2011	11/30/2011	Planned		138	A	Y	
A in MTEP09	East	METC		646	Edenville Jct - Warren 138kV	Replace poles on the Edenville-Warren 138kV line to future-double-circuit, prebuilt to 230kV.	MI		Other	Not Shared	Reliability	\$12,500,000	12/1/2011	12/1/2012	Planned		138	A	Y	
A in MTEP09	East	METC		662	Weeds Lake	Loop the 345kV Argenta - Robinson Park 345kV circuit into a new 345/138kV EHV substation called Weeds Lake. Build 4 new (approximately 6 miles) 138kV circuits to loop the two Argenta-Milham 138kV lines into the substation.	MI		BaseRel	Shared	Distribution	\$45,026,457	6/1/2013	6/1/2013	Planned		345	138	A	Y
A in MTEP09	East	METC		1810	Iosco - East Tawas 138kV	Rebuild 12 miles of 138kV to 954 ACSR.	MI		Other	Not Shared	Condition	\$9,818,854	12/31/2011	12/31/2011	Planned		138	A	Y	
A in MTEP09	East	METC		1833	Sag clearance 2011	Identify and remediate inherent sag limitations on heavily loaded METC transmission lines throughout the system.	MI		Other	Not Shared	Clearance	\$3,400,000	12/31/2011	12/31/2011	Planned			A	Y	
A in MTEP09	East	METC		2475	Titus Lake	Distribution interconnection to add a second transformer at Titus Lake	MI		Other	Not Shared	Distribution	\$4,200,000	6/1/2015	6/1/2015	Planned		138	A	Y	
A in MTEP09	East	METC		2478	Capital Ave	New distribution interconnection served from Battle Creek - Verona #2 138kV (Line connection change to Battle Creek to Island Road)	MI		Other	Not Shared	Distribution	\$178,188	5/31/2012	5/31/2012	Planned		138	A	Y	
A in MTEP09	East	METC		2481	Forrest Grove	New distribution interconnection served from Campbell-Ransom 138kV circuit.	MI		Other	Not Shared	Distribution	\$170,000	6/1/2012	6/1/2012	Planned		138	A	Y	
A in MTEP09	East	METC		2482	Hawthorne	New distribution interconnection served from Four Mile-Blendon 138kV circuit.	MI		Other	Not Shared	Distribution	\$170,000	5/31/2013	5/31/2013	Planned		138	A	Y	
A in MTEP09	East	METC		2483	Maines Road	New distribution interconnection served from Marshall - Blackstone 138kV circuit.	MI		Other	Not Shared	Distribution	\$176,386	5/31/2012	5/31/2012	Planned		138	A	Y	
A in MTEP09	East	METC		2484	Scenic Lake	New distribution interconnection served from Cornell-Thart 138kV circuit.	MI		Other	Not Shared	Distribution	\$176,386	5/31/2012	5/31/2012	Planned		138	A	Y	
A in MTEP09	East	METC		2485	Ironwood	New distribution interconnection served from CE's 138kV spur on the Ransom-Buck Creek 138kV	MI		Other	Not Shared	Distribution	\$12,000	6/1/2013	6/1/2013	Planned		138	A	Y	
A in MTEP09	East	METC		2486	Haakwood	New distribution interconnection served from Riggsville-Livingston 138kV (on the Rondo-Vanderbilt section)	MI		Other	Not Shared	Distribution	\$170,000	5/31/2014	5/31/2014	Planned		138	A	Y	
A in MTEP09	East	METC		2487	Birchwood	New distribution interconnection served from Spaulding-Plaster Creek 138kV (on the Spaulding-Kraft section)	MI		Other	Not Shared	Distribution	\$170,000	6/30/2012	6/30/2012	Planned		138	A	Y	

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Project Summary Information from Facility table

Target Appendix	Planning Region	Geographic Location by TO Member System	ProjID	Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
A in MTEP09	East	METC	2469	Terminal Equipment upgrade at Tippy	Terminal Equipment upgrade at Tippy on the Tippy-Keystone 138kV line.	MI		BaseRel	Not Shared		\$60,215	9/30/2011	9/30/2011	Planned	138		A	Y
A in MTEP09	East	METC	2492	Battle Creek - Verona 138kV dkt. #2	Upgrade terminal equipment.	MI		BaseRel	Not Shared		\$200,000	6/1/2013	6/1/2013	Planned	138		A	Y
A in MTEP09	East	METC	2496	Bullock - Tittabawassee 138kV	Upgrade terminal equipment.	MI		BaseRel	Not Shared		\$368,000	8/1/2013	6/1/2013	Planned	138		A	Y
A in MTEP09	East	METC	2498	Breaker Replacement Program 2011	Replace defective, damaged, or over dutied breakers throughout system.	MI		Other	Not Shared	Condition	\$5,650,000	12/31/2011	12/31/2011	Planned			A	Y
A in MTEP09	East	METC	2499	Relay Betterment Program 2011	Replace aging and electromechanical relays throughout the system. Add OPGW where needed.	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2011	12/31/2011	Planned			A	Y
A in MTEP09	East	METC	2501	Northern Reactive	Install 3 capacitors in the northern part of Michigan	MI		BaseRel	Not Shared		\$2,700,001	8/1/2012	6/1/2012	Planned			A	Y
A in MTEP09	East	METC	2507	Alcona - Mio 138kV	Rebuild the line to 954 ACSR future-double-circuit (pre-built to 230kV)	MI		Other	Not Shared	Condition	\$24,500,000	6/1/2013	6/1/2013	Planned	138		A	Y
A in MTEP09	East	METC	2510	Wood Pole Replacement 2011	Replace deteriorating wood pole	MI		Other	Not Shared	Condition	\$6,000,000	12/31/2011	12/31/2011	Planned	138		A	Y
A in MTEP09	East	METC	2515	Thart - Oakland (Genoa) 138kV	Replace all line structures and insulators.	MI		Other	Not Shared	Condition	\$18,871,627	8/1/2011	8/1/2011	Planned	138		A	Y
A in MTEP09	East	METC	2517	NERC Relay Loadability Compliance 2011	Upgrade relay throughout system.	MI		BaseRel	Not Shared		\$2,250,000	12/31/2011	12/31/2011	Planned	138		A	Y
A in MTEP09	East	METC	2822	Power Plant Control Relocation 2011	Relocate substation controls currently located in power plants control rooms	MI		Other	Not Shared	Condition	\$1,200,000	12/31/2011	12/31/2011	Planned			A	Y
A in MTEP08	East	METC	1448	Simpson	Project to connect a distribution transformer at Simpson	MI		Other	Not Shared		\$2,200,000	6/1/2016	6/1/2016	Planned	138	12.5	A	Y
A in MTEP08	East	METC	1655	Breaker Repair or Replace Program	throughout system	MI		Other	Not Shared		\$480,000	12/31/2011	12/31/2011	Planned	138		A	Y
A in MTEP08	East	METC	1796	Twining - Alameda 138kV	Rebuild 22 miles of 138kV of 110 Cu to 954 ACSR. Prebuild to 230kV construction.	MI		BaseRel	Shared		\$22,819,200	12/31/2011	12/31/2011	Planned	138		A	Y
A in MTEP08	East	METC	1814	Tippy - Chase 138kV	Rebuild 30 miles of 138kV 110 CU to 954 ACSR. Prebuild to 230kV construction.	MI		BaseRel	Shared		\$26,970,000	12/31/2012	12/31/2012	Planned	138		A	Y
A in MTEP08	East	METC	1820	METC Communication and Relaying Upgrade	Throughout system	MI		Other	Not Shared		\$10,000,000	12/31/2011	12/31/2011	Planned			A	Y
A in MTEP08	East	METC	1834	Tirrell Road	New Distribution Interconnection served from Battle Creek - Island Rd. 138kV circuit.	MI		Other	Not Shared		\$200,000	12/15/2011	12/15/2011	Planned	138		A	Y
A in MTEP08	East	METC	1841	Eagles Landing	New Distribution Interconnection served from losco - Karn 138kV circuit.	MI		Other	Not Shared		\$178,188	5/3/2012	5/3/2012	Planned	138		A	Y
A in MTEP06	East	METC	988	Simpson - Batavia 138 kV line	Simpson - Batavia 138 kV line - Build 30 miles new 138 kV line, 795 ACSR	MI		BaseRel	Shared		\$37,100,000	12/31/2011	12/31/2011	Planned	138		A	Y
A in MTEP06	East	METC	1408	RTU / SCADA Re-direction Program	Install and/or upgrade RTU's and SCADA points throughout system	MI		Other	Not Shared		\$801,000	6/30/2013	6/30/2013	Under Constr	345	138	A	Y
A in MTEP06	East	METC	1434	Five Mile	Install bulk substation served from the Spaulding 138kV ring bus	MI		Other	Not Shared		\$750,000	6/1/2014	6/1/2014	Planned	138		A	Y
A in MTEP06	East	METC	1445	Emmet	Install a second distribution transformer at Emmet	MI		Other	Not Shared		\$2,750,000	12/31/2016	12/31/2016	Planned	138		A	Y
A in MTEP06	East	METC	1447	Horseshoe Creek (Deja)	Install bulk substation served from the Eureka-Deja-Vestaburg 138kV Line	MI		Other	Not Shared		\$2,200,000	6/1/2012	6/1/2012	Planned	138		A	Y
A in MTEP10	East	MPPA	3074	TC East - Parsons TLine	New 4.1 mi 69kV transmission line from new TC East Sub to existing Parsons Sub	MI		Other	Not Shared	Reliability	\$1,600,000	12/31/2012	12/31/2012	Planned	69		A	NT
A in MTEP10	East	MPPA, METC	3073	TC East Substation	New 138/69kV Substation Interconnection	MI		Other	Not Shared	Reliability	\$8,413,791	12/31/2011	12/31/2012	Planned	138	69	A	Y
A in MTEP10	East	NIPS	2322	Green Acres Sub. -345-138kV Transformer	Install a 560 MVA 345/138 kV transformer, (1) 345 kV and (1) 138 kV circuit breaker and associated equipment at Green Acres Substation.	IN		BaseRel	Shared		\$7,417,000	6/1/2011	6/1/2011	Planned	345	138	A	Y
A in MTEP08	East	NIPS	1996	Circuit 6980 - Angola Sub to Sw #644 - Rebuild w 336 KCM ACSR	Rebuild and upgrade 12 miles of Circuit 6980's existing 2/0 Cu to 336.4 KCM ACSR.	IN		Other	Not Shared		\$2,465,948	12/1/2012	12/1/2012	Under Constr	69		A	Y
A in MTEP08	East	NIPS	1997	Circuit 6977 - Goshen Jct to Model Sub Tap - Recond. 1.5 Miles	Upgrade (reconductor) 1.5 miles of 69 kV line to 336.4 KCM ACSR.	IN		Other	Not Shared		\$357,000	12/1/2015	12/1/2015	Planned	69		A	Y
A in MTEP10	East	WPSC	3060	Morley Capacitor Bank	Install a Capacitor Bank tap at the Morley substation	MI		Other	Not Shared	Reliability	\$260,000	12/31/2020	12/31/2020	Planned	69		A	Y
A in MTEP10	East	WPSC	3061	Tremaine	New Distribution Interconnection from the Burnips to Portland circuit.	MI		Other	Not Shared	Distribution	\$200,000	6/1/2012	6/1/2012	Planned	69		A	Y
A in MTEP10	East	WPSC	3062	Blendon Transformer Upgrade	Replace Blendon Transformer with a larger transformer	MI		Other	Not Shared	Reliability	\$3,750,000	12/31/2013	12/31/2013	Planned	138	69	A	Y
A in MTEP10	East	WPSC	3063	Redwood to Baseline Rebuild	Rebuild the Redwood to Baseline line section with a larger conductor	MI		Other	Not Shared	Reliability	\$2,500,000	12/31/2011	12/31/2011	Under Constr	69		A	Y
A in MTEP10	East	WPSC	3068	South Boardman Capacitor Bank	Install a Capacitor Bank at the South Boardman substation	MI		Other	Not Shared	Reliability	\$260,000	12/31/2014	12/31/2014	Planned	69		A	Y
A in MTEP10	East	WPSC	3069	Weidman Capacitor Bank	Install a Capacitor Bank at the Weidman substation	MI		Other	Not Shared	Reliability	\$260,000	12/31/2020	12/31/2020	Planned	69		A	Y
A in MTEP09	East	WPSC	2735	Alba-Westwood Line Rebuild	Alba - Mancelona - Westwood 69 kV line rebuild (11 miles) to 143 MVA	MI		Other	Not Shared	Reliability	\$4,800,000	12/31/2013	12/31/2013	Planned	69		A	Y
A in MTEP09	East	WPSC	2736	East Bay-South Boardman Line Rebuild	East Bay - South Boardman Dist - South Boardman 69 kV line rebuild (16 miles) to 143 MVA	MI		Other	Not Shared	Reliability	\$6,500,000	12/31/2014	12/31/2014	Planned	69		A	Y
A in MTEP09	East	WPSC	2770	Gilmore	New distribution interconnection served from Hersey to Vestaburg circuit.	MI		Other	Not Shared	Distribution	\$200,000	6/1/2012	6/1/2012	Planned	69		A	Y
A in MTEP08	East	WPSC	1222	Lake County 69kV Ring Bus and Transformer	Convert 4 breaker bus at Lake County to Ring Bus and add 168MVA transformer	MI		Other	Not Shared	Reliability	\$6,050,000	12/31/2011	12/31/2011	Under Constr	138	69	A	Y
A in MTEP08	East	WPSC	1274	Blendon to Osipoff	Blendon to Osipoff line rebuild	MI		Other	Not Shared	Reliability	\$7,400,000	12/31/2012	12/31/2014	Planned	69		A	Y
A in MTEP08	East	WPSC	1311	Copemish to Grawn	Copemish to Grawn line rebuild	MI		Other	Not Shared	Reliability	\$9,100,000	12/31/2012	12/31/2014	Planned	69		A	Y
A in MTEP08	East	WPSC	1313	Plains X to Hersey	Plains X to Hersey line rebuild	MI		Other	Not Shared	Reliability	\$11,450,000	12/31/2012	12/31/2015	Planned	69		A	Y
A in MTEP08	East	WPSC	1581	Alba to Advance 69 rebuild	Alba to Advance 69 kV line rebuild	MI		Other	Not Shared	Reliability	\$7,300,000	12/31/2011	12/31/2012	Planned	69		A	Y
A in MTEP08	East	WPSC	1586	Gaylord to Advance 69 kV line rebuild, Advance to Petoskey 69 kV line rebuild, Petoskey to Oden 69 kV line rebuild	Rebuild Overloaded line	MI		Other	Not Shared	Reliability	\$7,200,000	12/31/2015	12/31/2015	Planned	69		A	Y
A in MTEP08	East	WPSC	1967	Wayland to Portland	Rebuild Outdated line	MI		Other	Not Shared	Reliability	\$14,542,000	12/31/2020	12/31/2020	Planned	69		A	Y
A in MTEP06	East	WPSC	1272	Redwood 75MVA Transformer	Add 75MVA Transformer at Redwood Substation a separate line from Redwood Junction will be ran to energize the transformer.	MI		Other	Not Shared	Reliability	\$3,000,000	12/31/2012	12/31/2012	Planned	138	69	A	Y
A in MTEP10	West	ATC LLC	2451	Brodhead-S Monroe 69kV Rebuild	Rebuild Brodhead- S Monroe 69kV line with T2 477 kcmil ACSR	WI		Other	Not Shared	Reliability	\$11,800,000	3/1/2012	3/1/2012	Planned	69		A	Y
A in MTEP10	West	ATC LLC	2819	Replace Bluemound 230/138kV transformer T3	Replace Bluemound 230/138kV transformer T3 with a 400 MVA unit	WI		Other	Not Shared	Condition	\$8,000,000	12/27/2011	12/27/2011	Planned	230	138	A	Y

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A in MTEP10	West	ATC LLC	3122	Reconductor a portion of Dam Heights-Okeee Tap 69kV	Reconductor 1.94 mi of 3-0 and 336 ACSR line conductor with T-2 4-0 ACSR keeping the T-2 3-0 ACSR for the DHT-Okeee Tap section of line Y-8, replace 26 1919 vintage lattice towers and 4 wood poles	WI		Other	Not Shared	Condition	\$2,177,421	6/19/2012	6/19/2012	Planned	69		A	Y	
A in MTEP09	West	ATC LLC	2452	G706 Glacier Hills Wind Farm	G706 Glacier Hills Wind Farm; taps Friedland-Hamilton 138 kV line	WI		GIP	Shared			12/31/2011	12/31/2011	Planned	0.69		A	Y	
A in MTEP08	West	ATC LLC	366	Rockdale-West Middleton 345 kV	Construct a new 345/138 kV substation at Cardinal (next to the existing West Middleton sub), install a 345/138 kV 500 MVA transformer at Cardinal, construct 47.9 miles overhead 345 kV line from Albion to Cardinal/West Middleton, modifications to the existing West Middleton substation, construct a new Albion 345 kV switching station. Facility costs listed in the facility table are for the southern route.	WI		BaseRel	Shared		\$219,124,872	6/1/2013	6/1/2013	Planned	345	138	A	Y	
A in MTEP08	West	ATC LLC	574	Monroe County - Council Creek 161 kV line projects	Monroe County - Council Creek 161 kV line; Council Creek 161/138 kV transformer; Council Creek-Peterwell upgrade 138 kV	WI		Other	Not Shared		\$34,703,000	6/1/2014	6/1/2014	Planned	161	69	A	Y	
A in MTEP08	West	ATC LLC	1683	Rebuild Sunset Point-Pearl Ave 69 kV line	Rebuild 2.37 miles of 69 kV from Sunset Point-Pearl Ave with 477 ACSR	WI		Other	Not Shared	Reliability	\$4,128,701	3/1/2012	3/1/2012	Planned	69		A	Y	
A in MTEP10	West	GRE	1018	Little Falls - Pierz conversion to 115 kV	CWP Little Falls-MP Little Falls 115 kV line	MN		Other	Not Shared	Distribution	\$1,705,514	11/30/2012	11/30/2012	Planned	115		A	Y	
A in MTEP10	West	GRE	2564	Sartell (SEA) 3.0 mile, 115 kV line	Sartell (SEA) 3.0 mile, 115 kV line	MN		Other	Not Shared	Distribution	\$1,385,881	10/28/2012	10/28/2012	Planned	115		A	Y	
A in MTEP10	West	GRE	2565	Frazer Bay Development	Frazer Bay Development	MN		Other	Not Shared	Distribution	\$19,275,099	11/5/2012	11/5/2012	Planned	115	69	A	Y	
A in MTEP10	West	GRE	2566	Potato Lake (IM) 7 mile, 115 kV line	Potato Lake (IM) 7 mile, 115 kV line	MN		Other	Not Shared	Distribution	\$4,401,144	10/14/2011	10/14/2011	Under Constr	115		A	Y	
A in MTEP10	West	GRE	2567	Northport (BENCO) 1 mile, dbl ckt 115 kV line	Northport (BENCO) 1 mile, dbl ckt 115 kV line	MN		Other	Not Shared	Distribution	\$1,149,664	10/31/2012	10/31/2012	Planned	115		A	Y	
A in MTEP10	West	GRE	2570	Ravenna (DEA) 161 kV Substation	Ravenna (DEA) 161 kV Substation	MN		Other	Not Shared	Distribution	\$821,206	6/2/2014	6/2/2014	Planned	161		A	Y	
A in MTEP10	West	GRE	2574	St. Lawrence Substation and Tap - MVEC	St. Lawrence Substation and Tap - MVEC	MN		Other	Not Shared	Distribution	\$374,182	5/1/2017	5/1/2017	Planned	115		A	Y	
A in MTEP10	West	GRE	2575	Pokeama (LCP) 8.0 mile, 115 kV line	Pokeama (LCP) 8.0 mile, 115 kV line	MN		Other	Not Shared	Distribution	\$4,079,939	11/1/2011	11/1/2011	Under Constr	115		A	Y	
A in MTEP10	West	GRE	2577	Elmcrest (CE) 69 kV Substation	Elmcrest (CE) 69 kV Substation	MN		Other	Not Shared	Distribution	\$140,000	6/1/2012	6/1/2012	Planned	69		A	Y	
A in MTEP10	West	GRE	2579	Foster Lake (WH) 69 kV Substation	Foster Lake (WH) 69 kV Substation	MN		Other	Not Shared	Distribution	\$140,000	5/29/2015	5/29/2015	Planned	69		A	Y	
A in MTEP10	West	GRE	2589	Barnes Grove (DEA) 2.0 mile, 69 kV line	Barnes Grove (DEA) 2.0 mile, 69 kV line	MN		Other	Not Shared	Distribution	\$115,001	3/25/2014	3/25/2014	Planned	69		A	Y	
A in MTEP10	West	GRE	2605	Bunker Lake #2 (CE at GRE) 69 kV Substation	Bunker Lake #2 (CE at GRE) 69 kV Substation	MN		Other	Not Shared	Distribution	\$208,450	4/30/2012	4/30/2012	Planned	69		A	Y	
A in MTEP10	West	GRE	2621	Effie 230/69 kV source	Effie 230/69 kV transformer, Effie-Big Fork 69 kV line, Wirt Tap 3-way switch, Jessie Lake 3-way switch, Big Fork 3-way switch	MN		Other	Not Shared	Reliability	\$10,527,919	11/1/2013	11/1/2013	Planned	230	69	A	Y	
A in MTEP10	West	GRE	2624	Hudson 115 kV conversion	115 kV conversion	MN		Other	Not Shared	Distribution	\$381,006	2/29/2012	2/29/2012	Under Constr	115		A	Y	
A in MTEP10	West	GRE	2630	Resag Big Fork-Wirt Tap-Jessie Lake Retemp	Resag Big Fork-Wirt Tap-Jessie Lake Retemp	MN		Other	Not Shared	Reliability	\$1,289,999	4/24/2013	4/24/2013	Planned	69		A	Y	
A in MTEP10	West	GRE	2631	Resag Deer River-Jessie Lake Retemp	Resag Deer River-Jessie Lake Retemp	MN		Other	Not Shared	Reliability	\$1,339,996	4/24/2013	4/24/2013	Planned	69		A	Y	
A in MTEP10	West	GRE	2667	Rush City-Adrian Robinson Rush City Dist Retemp	Rush City-Adrian Robinson Rush City Dist Retemp	MN		Other	Not Shared	Reliability	\$299,001	9/30/2011	9/30/2011	Planned	69		A	Y	
A in MTEP10	West	GRE	2670	Schuster Lake 115/41.6 Source	Schuster Lake 115/41.6 Source	MN		Other	Not Shared	Reliability	\$4,480,714	4/14/2020	4/14/2020	Planned	115	41.6	A	Y	
A in MTEP10	West	GRE	2671	Soderville-Ham Lake-Johnsville (6.18 mi.) Retemp	Soderville-Ham Lake-Johnsville (6.18 mi.) Retemp	MN		Other	Not Shared	Reliability	\$282,809	12/30/2011	12/30/2011	Planned	69		A	Y	
A in MTEP10	West	GRE	2672	Rush City - Bear Creek - Effie Transformer Swap	Rush City - Bear Creek - Effie Transformer Swap	MN		Other	Not Shared	Reliability	\$500,000	11/1/2011	6/1/2012	Planned	230	69	A	Y	
A in MTEP10	West	GRE	2731	Blomkest (KEPCA) 3.0 mile, 69 kV line	Blomkest (KEPCA) 7.0 mile, 69 kV line	MN		Other	Not Shared	Distribution	\$1,140,342	9/3/2012	9/3/2012	Planned	69		A	Y	
A in MTEP10	West	GRE	2833	Lake Caroline	Lake Caroline (WH) 69 kV Distribution Substation	MN		Other	Not Shared	Distribution	\$675,000	10/21/2013	10/21/2013	Planned	69		A	NT	
A in MTEP10	West	GRE	2834	Rice Lake	Rice Lake (MKR) 69 kV Distribution Substation	MN		Other	Not Shared	Distribution	\$5,138,000	9/10/2013	9/10/2013	Planned	69		A	NT	
A in MTEP10	West	GRE	3106	Tamarac MISO Interconnection (G619)	Tamarac-Cormorant Junction	MN		GIP	Shared		\$728,000	9/3/2012	9/3/2012	Planned	115		A	Y	
A in MTEP09	West	GRE	2562	G362 - Pleasant Valley 345/161 kV transformer	G362 Network Upgrades - Pleasant Valley 345/161 kV transformer (GRE part of G362)	MN		GIP	Shared		\$1,006,365	3/30/2012	3/30/2012	Planned	161		A	Y	
A in MTEP09	West	GRE	2563	Athens to Martin Lake 69kV System Upgrades and Permitting	Athens to Martin Lake 69kV System Upgrades and Permitting	MN		Other	Not Shared	Reliability	\$6,234,719	11/30/2012	11/30/2012	Planned	69		A	NT	
A in MTEP05	West	GRE	599	Crooked Lake - Enterprise Park 115 kV line	Crooked Lake - Enterprise Park 115 kV line	MN		Other	Excluded		\$8,616,069	8/1/2013	6/1/2013	Planned	115		A	Y	
A in MTEP08	West	GRE, OTP	1033	Silver Lake 230/41.6 kV transformer	Silver Lake 230/41.6 kV transformer	MN		Other	Not Shared	Reliability	\$3,230,626	10/28/2011	10/28/2011	Under Constr	230	41.6	A	Y	
A in MTEP08	West	GRE, XEL, OTP, MP, MRES	286	Fargo, ND - St Cloud/Monticello, MN area 345 kV project	Bison - AlexandriaSS - Waite Park - Monticello 345 ckt 1, Sum rate 2085	MN	ND	BaseRel	Shared		\$564,747,000	12/15/2011	3/31/2015	Planned	345	115	A	Y	
A in MTEP10	West	ITCM	3046	SW Cedar Rapids 69kV System Upgrade (Phase 1) Near ADM	Re-route 69kV lines near the load to connect to the 161/69kV transformer at the Beverly substation. Install two breaker terminals and a main breaker to connect the re-routed lines. This adds significant capacity to the 69kV system with minimal line construction and no new transformer purchases	IA		Other	Not Shared	Reliability	\$1,800,000	12/31/2012	12/31/2012	Planned	69		A	Y	
A in MTEP10	West	ITCM	3047	IA Falls Industrial TRF	Upgrade the IA Falls Ind 115/69kV TRF with a dual high side (161-115kV)/69kV TRF	IA		Other	Not Shared	Reliability	\$1,980,000	8/30/2011	8/30/2011	Planned	161	69	A	Y	
A in MTEP10	West	ITCM	3048	Jefferson Co-Perlee 69kV Rebuild	Rebuild the Jefferson Co-Perlee 69kV line section.	IA		Other	Not Shared	Condition	\$2,700,000	12/31/2013	12/31/2013	Planned	69	69	A	Y	
A in MTEP10	West	ITCM	3049	Huxley Industrial Park Terminal Addition	Add a 161kV line terminal to tie to the rerouted Boone Jct-Huxley Park Ind 161kV line.	IA		Other	Not Shared	Reliability	\$750,000	12/31/2012	12/31/2012	Planned	161	161	A	Y	
A in MTEP10	West	ITCM	3050	Alden-Buckeye dist. Sub tap	Construct a new 3 mile 69kV tap to the new Alden-Buckeye dist. Sub from the CBPC Alden sub site.	IA		Other	Not Shared	Distribution	\$1,080,000	12/31/2011	12/31/2011	Planned	69	69	A	Y	
A in MTEP10	West	ITCM	3052	Washington 69kV Upgrades	Replace 69kV bus, 2 breakers, relays, and improve breaker configuration, add bus tie breaker, and install a new control building.	IA		Other	Not Shared	Reliability	\$2,400,000	12/31/2011	12/31/2011	Planned	69	69	A	Y	
A in MTEP10	West	ITCM	3053	Keokuk Hydro-Carbide 69kV Dbl Ckt	Build a new 69kV circuit from Keokuk Hydro-Carbide.	IA		Other	Not Shared	Reliability	\$3,240,000	12/31/2013	12/31/2013	Planned	69	69	A	Y	
A in MTEP10	West	ITCM	3054	Swisher Breaker Station	Construct a new 3 terminal breaker station.	IA		Other	Not Shared	Reliability	\$2,152,000	12/31/2011	12/31/2011	Planned	69	69	A	Y	

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A in MTEP10	West	ITCM	3055	Cedar Rapids 34kV Conversion Plan	ITCM, working with IP & L, has formed a plan to better serve Cedar Rapids load with new larger, 2-transformer substations that will allow retirement of the 4kV system along with several other small distribution substations. Most of these new substations will be served from a new 69 kV and 161 kV Cedar Rapids transmission system that will use the existing 34.5 kV system right-of-way. This will allow retirement of several existing 34.5kV lines while shifting distribution load to a higher voltage to allow better normal and contingency performance.	IA		Other	Not Shared	Reliability	\$24,760,000	12/31/2011	12/31/2014	Planned	161	69	A	Y	
A in MTEP10	West	ITCM	3056	Grundy Center-Reinbeck-Hicks tap 69kV line.	Construct a 16 mile 69kV line between Grundy Center and the Hicks tap 69kV line. Constructing this line will allow consolidation of the Dike and Morrison substations into a single new distribution substation and will allow retirement of more than 30 miles of 50 year old 34.5kV line.	IA		Other	Not Shared	Distribution	\$5,760,000	12/31/2012	12/31/2012	Planned	69	69	A	Y	
A in MTEP10	West	ITCM	3057	West Branch 34kV Load Shift Projects	Construct 69kV taps for the Moscow & New Liberty dist. Subs	IA		Other	Not Shared	Distribution	\$2,505,000	12/31/2013	12/31/2013	Planned	69	34	A	Y	
A in MTEP10	West	ITCM	3058	Vinton-Hazleton 34kV Conversion Plan	The plan includes rebuilding a line between Dundee and Vinton substations and converting this line to 69 kV operation. In order to operate this line at 69 kV a 161/69 kV transformer will need to be installed at Vinton. Also, an approximately 6 mile line will be built to connect the Hazleton source to the Dundee - Vinton line. This plan also includes rebuilding a line between Coggon and Hiawatha substations and converting this line to 69 kV operation. A 161/69 kV transformer will need to be installed at Coggon.	IA		Other	Not Shared	Distribution	\$21,988,000	12/31/2011	12/31/2013	Planned	161	69	A	Y	
A in MTEP10	West	ITCM	3059	West Branch & West Liberty Switch Stations	Construct two new 3 terminal 69kV breaker stations at West Branch and at West Liberty.	IA		Other	Not Shared	Reliability	\$3,120,000	12/31/2011	12/31/2011	Planned	69	69	A	Y	
A in MTEP09	West	ITCM	2339	G612-Marshalltown-Boone 115kV to 161kV	Construct a new Story Co 161kV switching station and rebuild the Marshalltown-Boone 115kV to 161kV.	IA		GIP	Shared		\$13,720,000	9/30/2011	5/30/2012	Planned	161		A	Y	
A in MTEP09	West	ITCM	2340	Grand Junction-Paton REC tap 34kV Rebuild	Rebuild the 34kV line from Grand Jct-Paton REC tap to 69kV. Retire Dana 34kV/dist sub and construct in & out taps for new Grand Jct North 69kV/dist. Sub. (still operate at 34kV)	IA		Other	Not Shared	Condition	\$1,103,527	12/31/2011	12/31/2011	Planned	34		A	NT	
A in MTEP09	West	ITCM	2341	Monticello-Amber Conversion & Lovell REC Rebuild	Rebuild 8.5 miles Monticello-Amber 34kV to 69kV, add 69kV bkr at Sand Springs, Monticello Industrial, & Amber. Operate Sand Springs-Amber at 69kV. Also rebuild 2.21 miles of 34kV to 69kV east of Lovell REC but continue operation of this portion at 34kV in 2009.	IA		Other	Not Shared	Condition	\$3,775,000	9/1/2011	10/30/2011	Under Constr	69		A	NT	
A in MTEP09	West	ITCM	2342	Boone-Jewell 34kV Rebuild	Rebuild 25.3 miles of 34kV line from Jewell to approximately 6 miles south of the Ridgeport dist. substation to 69kV standards. This line will continue to be operated at 34kV.	IA		Other	Not Shared	Condition	\$6,685,000	12/31/2011	12/31/2011	Under Constr	34		A	NT	
A in MTEP09	West	ITCM	2343	West Branch-West Liberty 34kV Rebuild	Rebuild 15.1 miles of 34kV line from West Branch-West Liberty to 69kV standards. This line will continue to be operated at 34kV.	IA		Other	Not Shared	Condition	\$4,146,850	12/31/2011	12/31/2011	Planned	34		A	NT	
A in MTEP09	West	ITCM	2344	Wyoming-Massillon 34kV Rebuild	Rebuild 12 miles of 34kV line from Wyoming-Massillon to 69kV standards. This line will continue to be operated at 34kV.	IA		Other	Not Shared	Condition	\$4,020,000	12/31/2012	12/31/2012	Planned	34		A	NT	
A in MTEP09	West	ITCM	2345	Eldora Area Rebuild & Breaker Station	Rebuild approx 20 miles of 34kV to 69kV from the Hubbard Rural sub to a new 4-terminal Eldora North 69kV switching station and operate at 69kV. The new switching station will tap the CBPC Pleasant-CBPC Eldora 69kV line. The 4th terminal will be needed in the near future to feed the Eldora North-Union-Conrad 69kV line after substations are ready for conversion. This line will be rebuilt to 69kV standard in 2009.	IA		Other	Not Shared	Condition	\$16,511,000	12/31/2012	12/31/2012	Under Constr	69		A	NT	
A in MTEP09	West	ITCM	2348	Beaver Rock 69kV Switching Station	Construct a new 3-terminal 69kV switching station along the Beaver Channel/Rock Creek 69kV line.	IA		Other	Not Shared	Reliability	\$1,593,178	12/31/2011	12/31/2011	Under Constr	69		A	NT	
A in MTEP09	West	ITCM	2353	Big River 69kV 3-terminal Switching Station	Construct a new 3-terminal 69kV switching station where the Big River REC line taps the Agency-Sawyer 69kV line.	IA		Other	Not Shared	Reliability	\$1,666,427	12/31/2011	12/31/2011	Planned	69		A	NT	
A in MTEP09	West	ITCM	2357	Hazleton-Fairbank REC 69kV line & breaker station	Construct a 69kV Hazleton-Fairbank line and a new 3-terminal 69kV switching station.	IA		Other	Not Shared	Distribution	\$5,731,385	12/31/2013	12/31/2013	Planned	69		A	NT	
A in MTEP09	West	ITCM	2358	Hazleton-Blackhawk 161kV Rebuild	Rebuild 12 miles of the Hazleton-Blackhawk 161kV line (ITC owned portion)	IA		BaseRel	Shared		\$5,400,000	12/31/2013	12/31/2013	Planned	161		A	Y	
A in MTEP09	West	ITCM	2363	Glenworth 161/69kV (Glenville Area)	Construct a new 161/69kV 100 MVA substation tapping the Hayward-Worth County 161 kV line. ITC will construct the 161kV portion including the TRF and low side protection. DPC will construct the 69kV portion.	MN		Other	Not Shared	Reliability	\$7,240,605	8/30/2011	8/30/2011	Under Constr	161	69	A	Y	
A in MTEP09	West	ITCM	2364	Thompson 2 mile 69kV dbl ckt	Rebuild 69kV double circuit line near Thompson, IA	IA		Other	Not Shared	Reliability	\$460,000	12/31/2011	12/31/2011	Planned	69		A	NT	
A in MTEP09	West	ITCM	2367	Anita Area 34kV to 69kV Rebuilds	Rebuild 5 miles from the Anita-Exira REC to 69kV. Also rebuild 4.7 miles of the Anita to the Anita-Wiota Joint sub. Rebuild 21.9 miles from Thompson- Redfield. These lines will continue to operate at 34kV.	IA		Other	Not Shared	Condition	\$7,895,000	12/31/2013	12/31/2013	Planned	34		A	NT	

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A in MTEP09	West	ITCM	2369	Fairfax-Williamsburg 34kV to 69kV Rebuilds	Rebuild 28.6 miles of 34kV line from the Fairfax sub to the Williamsburg 115kV sub to 69kV. These lines will continue to operate at 34kV.	IA		Other	Not Shared	Condition	\$6,903,000	12/31/2013	12/31/2013	Planned	34		A	NT	
A in MTEP09	West	ITCM	2370	Andrew Tap & Monmouth Rebuilds	Rebuild the 5.75 mile Andrew Tap & 2 miles of line in the Monmouth area. These lines will continue to operate at 34kV.	IA		Other	Not Shared	Condition	\$1,869,250	12/31/2011	12/31/2011	Planned	34		A	NT	
A in MTEP09	West	ITCM	2371	New Marengo 69kV Switching Station	Construct a new 3-terminal 69kV switching station at the existing Marengo 34kV sub.	IA		Other	Not Shared	Condition	\$1,900,000	12/31/2013	12/31/2013	Planned	69		A	NT	
A in MTEP08	West	ITCM	1340	Hazleton - Salem 345 kV line with a 2nd Salem 345/161 kV 448 MVA transformer.	Build a new Hazleton - Salem 345 kV line. Expand the Hazleton 345kV bus to a 5 position ring and expand the Salem 345kV ring to allow for a 2nd Salem 345/161 kV 448 MVA transformer. (option 1) The route will follow the existing Hazleton-Dundee-Liberty-Lore 161kV route.	IA		Other	Not Shared		\$119,010,000	12/31/2012	12/31/2012	Planned	345	161	A	Y	
A in MTEP08	West	ITCM	1618	Hm Lk-Lkfld 161kV Ckt 1 Rbld	Rebuild Heron Lake-Lakefield 161kV line, sum rate 446 MVA	MN		BaseRel	Shared		\$14,000,000	6/1/2013	6/1/2013	Planned	161		A	Y	
A in MTEP08	West	ITCM	1619	Grnd Mnd 161-69kV 2nd Xfmr & 161kV loop	Install a 2nd Grand Mound 161-69kV Xfmr (75 MVA) & build a 2.0 miles of new line from the Grand Mound sub to tap the E. Calamus-Maquoketa line (approx. 87% from Maq-E.Ca). The E. Calamus-new tap portion of line will be retired. Existing E.Cal-Maq bkr will feed to GMnd and a new GMnd bkr will feed to Maq. The three terminal line at E.Calamus will be eliminated.	IA		Other	Not Shared	Reliability		12/31/2011	12/31/2011	Planned	161		A	Y	
A in MTEP08	West	ITCM	1640	Marshalltown-Franklin 115kV conversion to 161kV.	Rebuild Marshalltown-Wellsburg-Eldora-Iowa Falls Industrial-Iowa Falls-Franklin 115kV to 161kV. This will also convert the Wellsburg, Eldora, Iowa Falls Industrial, and Iowa Falls substations to 161kV operation on the high side. The 161-115kV source at Franklin will be eliminated.	IA		Other	Not Shared		\$21,560,000	8/30/2011	12/31/2013	Planned	161	34	A	Y	
A in MTEP08	West	ITCM	1645	Leon 7.2 MVAR Cap Bank	Install a 69kV 7.2 MVAR cap bank at the Leon substation.	IA		Other	Not Shared	Reliability	\$2,511,808	12/31/2011	12/31/2011	Planned	69		A	NT	
A in MTEP08	West	ITCM	1744	Maquoketa-Grand Mound 161kV Reconductor	Reconductor 161kV from Maquoketa to Grand Mound (old East Calamus-Maquoketa 161kV line).	IA		BaseRel	Not Shared		\$10,150,000	12/31/2016	12/31/2016	Planned	161		A	Y	
A in MTEP06	West	ITCM	1747	Eik 161/69kV upgrades	Upgrade both Eik 161/69kV transformers and add a 161kV BKR between the new units. A 161kV breaker will be added looking toward Brewster	MN		Other	Not Shared	Reliability	\$6,998,396	5/31/2011	12/31/2011	Under Constr	161	69	A	Y	
A in MTEP06	West	ITCM	2109	G358-Fairbault County	Network upgrades for tariff service request	MN		GIP	Shared		\$4,216,848	10/31/2011	10/31/2011	Planned	161	34.5	A	Y	
A in MTEP06	West	ITCM	1289	Marshalltown - Toledo - Belle Plaine - Stoney Point 115 kV line rebuild	Marshalltown - Toledo - Belle Plaine - Stoney Point 115 kV line will be rebuilt/upgraded between 2008 and 2011	IA		Other	Not Shared		\$13,653,000	3/30/2012	12/31/2013	Planned	161		A	Y	
A in MTEP06	West	ITCM	1342	Lewis Fields 161 kV substation which taps the SwampFX - Coggon 115 kV line	Build a new 161 kV substation Lewis Fields to be tapped to the 115 kV line Swamp Fox - Coggon at 5% distance via a new 161/115 kV transformer. Also build a new 161 kV line from Hiawatha to Lewis Fields	IA		BaseRel	Not Shared		\$21,051,600	12/31/2014	12/31/2014	Planned	161	115	A	Y	
A in MTEP06	West	ITCM	1344	Build a new 345 kV Morgan Valley (Beverly) substation which taps the Arnold-Tiffin 345 kV line	Build a new 345 kV Morgan Valley (Beverly) Tap substation and tapped to 345 kV line Arnold -Tiffin at 40% distance away from Arnold. Add a new 335 MVA 345/161 kV transformer and build a new 161 kV line connecting the new substation to Beverly 161 kV bus. Tap Arnold-Fairfax 161kV line for in and out feeds from Morgan Valley	IA		Other	Not Shared		\$14,580,000	12/31/2014	12/31/2014	Planned	345	161	A	Y	
A in MTEP09	West	MDU	1355	Heskett - Additional 230/115 kV Switchyard and 115 kV Capacitor	Heskett - Additional 230/115 kV Switchyard 230 115 Switchyard in parallel w/ existing Heskett switchyard and Cap Bank	ND		BaseRel	Shared		\$11,000,000	9/30/2011	12/31/2014	Planned	230	115	A	Y	
A in MTEP10	west	MP	2547	Essar	Essar project adds a 95 MW new mine and taconite plant load in fall 2011 with 50 MW DRI facility fall of 2012 total demand to 145 MW. Future load additions could increase total demand to 300 MW	MN		Other	Not Shared	Distribution	\$34,100,000	6/30/2012	7/30/2014	Planned	230	14	A	Y	
A in MTEP10	West	MP	2761	Polymet	add new 138/14 kV substation off MP 138 KV Line #1.	MN		Other	Not Shared	Distribution	\$3,000,000	12/30/2012	12/30/2012	Planned	115	14	A	Y	
A in MTEP10	West	MP	2762	Airpark	New 115/34.5 and 115/14 kV Substation	MN		Other	Not Shared	Distribution	\$4,105,000	12/16/2012	6/30/2013	Under Constr	115	14	A	Y	
A in MTEP10	West	MP	3091	28L reroute	MP's 115 kV Line #28 (28L) must be moved as it crosses the area that Essar will be mining.	MN		Other	Not Shared	Relocation	\$3,190,000	5/30/2012	5/30/2012	planned	115		A	Y	
A in MTEP09	West	MP	2652	Skibo	Skibo-Hoyt Lakes 138 ckt 1, Sum rate 202	MN		BaseRel	Not Shared		\$2,540,000	12/1/2012	12/1/2012	Proposed	138		A	Y	
A in MTEP09	West	MP	2759	Laskin	Move Virginia 115/46 kV Transformer to Laskin	MN		Other	Not Shared	Distribution	\$500,000	6/1/2012	6/1/2012	Planned	115	46	A	Y	
A in MTEP09	West	MP	2763	LSP1 34.5	Add 115/34.5 kV Transformer and line exit to LSP1 115/14 kV Sub	MN		Other	Not Shared	Distribution	\$600,000	8/30/2011	8/30/2011	Under Constr	115	34.5	A	Y	
A in MTEP07	West	MP	1026	G519 - Mesaba	Network Upgrades associated with 600 MW coal gasification generating facility at the proposed Mesaba generating station. There is a G477 alternate site which is not described here.	MN		GIP	Shared		\$76,319,541	7/1/2012	7/1/2012	Planned	230	115	A	Y	
A in MTEP05	West	MP, GRE	600	Baxter - Southdale 115 kV line	Southdale-Scarcrville 115 kV line	MN		Other	Excluded		\$8,045,969	2/28/2012	6/1/2012	Under Constr	115		A	Y	
A in MTEP06	West	MPC, XEL, OTP, MP	279	Bernidji-Grand Rapids 230 kV Line	Boswell - Wilton 230 ckt 1, Sum rate 495, Addition of a 187 MVA 230/115 kV transformer at Cass Lake	MN		BaseRel	Shared		\$38,530,747	12/31/2012	12/31/2012	Planned	230		A	Y	

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		PriID	Project Name																
A in MTEP10	West	MPW	2834	Replace South 161/69 kV Transformer	Replace the existing 161/69 kV, 75 MVA transformer at South Sub with at least a 134 MVA transformer by 2011 (633301-633501). Also the 161 kV bus at South Sub will become a ring bus, splitting the three terminal 161 kV line into two sections between 633209 MPW Unit 9 - 633301 MPW South Sub and 633301 MPW South Sub - 636670 MEC Sub 18.	IA		Other	Not Shared	Reliability	\$5,400,000	8/1/2014	6/1/2014	Planned	161	69	A	Y	
A in MTEP10	West	NWE	3092	Webb Lake 69kV line	Rebuild 34.5kV line to Webb Lake at 69kV with horizontal post construction and #40 ACSR	WI		Other	Not shared	Condition	\$425,000	6/1/2011	6/1/2011	Planned	69		A	Y	
A in MTEP08	West	NWE	2011	Frederic-Lewis 34.5kV Rebuild	Rebuild the 34.5kV system between Frederic and Lewis sub at 69kV with 477ASCR and horizontal post construction.	WI		Other	Not Shared		\$350,000	6/1/2011	6/1/2011	Planned	69		A	Y	
A in MTEP08	West	NWE	2012	Falun-Penta 34.5kV Rebuild	Rebuild the 34.5kV system between Falun and Penta sub at 69kV with 477ASCR and horizontal post construction.	WI		Other	Not Shared		\$538,000	9/1/2011	9/1/2011	Under Constr	69		A	Y	
A in MTEP08	West	NWE	2013	Penta-Siren Tap 34.5kV Rebuild	Rebuild the 34.5kV system between Penta sub and Siren Tap at 69kV with 477ASCR and horizontal post construction.	WI		Other	Not Shared		\$175,000	6/1/2011	6/1/2011	Planned	69		A	Y	
A in MTEP08	West	NWE	2016	Frederic-Coffee Cup 69kV reconductor	Reconductor 69kV line with 477ASCR	WI		Other	Not Shared		\$100,000	1/1/2012	1/1/2012	Planned	69		A	Y	
A in MTEP08	West	NWE	2018	Balsam Lake-Centuria 69kV line	Build new 69kV line to Centuria and build Distribution Sub	WI		Other	Not Shared		\$1,200,000	6/1/2011	6/1/2011	Planned	69	12.5	A	Y	
A in MTEP10	West	OTP	3156	Cass Lake -Nary-Helga -Bemidji 115		MN		BaseRel	Shared		\$10,398,000	12/31/2012	12/31/2013	Planned	230	115	A	Y	
A in MTEP09	West	OTP	2751	New Perham 115/12.5 kV Substation	Build New 115/12.5 kV Substation at Perham to Serve as a Back-up Source for Outage of Primary Source	MN		Other	Not Shared	Distribution	\$400,000	12/31/2013	12/31/2013	Planned	115	12.5	A	Y	
A in MTEP10	West	OTP, MPC	2826	Enbridge Load Expansion Support	Install Capacitor Bank on 115 kV at Clearbrook, MN. One 34 MVAR. Install Capacitor Bank on 115 kV at Karlstad. One 14 MVAR. Install Capacitor Bank on 115 kV at Thief River Falls. One 15 MVAR.	ND		BaseRel	Not Shared		\$1,900,000	12/31/2012	12/31/2015	Planned	115		A	Y	
A in MTEP10	West	SMP	2166	City of St Peter, MN load serving upgrades	Adding approx 7.0 miles of new 69kV transmission line and a new load serving substation (Estimated in service June 2011)	MN		Other	Not Shared	Distribution	\$6,000,000	12/1/2011	12/1/2011	Under Constr	69	69	A	NT	
A in MTEP10	West	SMP	2167	City of Redwood Falls, MN load serving upgrades	Adding approx 5.2 miles of new 115kV transmission line and a new load serving substation (Estimated in service Dec 2011)	MN		Other	Not Shared	Distribution	\$4,000,000	12/1/2011	12/1/2011	Planned	115	115	A	NT	
A in MTEP10	West	SMP	2171	Mora Land Fill Gas Generator	Addition of 3 MW landfill gas generation and construction of approx 7.0 miles of 12.47kV distribution line.	MN		TDSP	Direct Assigned		\$3,700,000	8/1/2011	8/1/2011	Under Constr	12.5		A	Y	
A in MTEP10	West	XEL	2767	Fenton 115/69 kV Interconnection	This project is to install a new 115/69 kV transformer at Fenton substation. Break the existing 69 kV line between Chandler Tap and Lake Wilson to create an in and out to the Fenton substation.	MN		Other	Not Shared	Reliability	\$3,710,000	1/1/2012	1/1/2012	Planned	115	69	A	Y	
A in MTEP10	West	XEL	3097	Monroe County 2nd Transformer	Install second 161/69 kV 75 MVA transformer at Monroe County substation.	WI		Other	Not Shared	Reliability	\$3,680,000	6/1/2012	6/1/2012	Planned	161	69	A	Y	
A in MTEP10	West	XEL	3100	Westgate 115/69 kV TR upgrade	Upgrade Westgate 115/69 kV transformer #2 to 70 MVA	MN		Other	Not Shared	Distribution	\$2,070,000	6/1/2012	6/1/2012	Planned	115	69	A	Y	
A in MTEP09	West	XEL	2156	North Mankato 115 kV project	1) New 345/115 kV TR at the proposed Helena 345 kV switching station. 2) New 115 kV line from Helena - St. Thomas. 3) New 115/69 kV substation near St. Thomas. 4) New 69 kV switching station at Lesueur Tap.	MN		Other	Not Shared	Reliability	\$17,450,000	6/1/2011	6/1/2011	Planned	345	69	A	Y	
A in MTEP09	West	XEL	2157	Douglas Co 2nd TR	2nd Douglas Co 115/69 kV transformer	MN		Other	Not Shared	Reliability	\$4,435,000	11/1/2011	11/1/2011	Planned	115	69	A	NT	
A in MTEP09	West	XEL	2158	Upgrade Sauk Center - Osakis 69 kV line	Upgrade Sauk Center - Osakis 69 kV line to a lower impedance.	MN		Other	Not Shared	Reliability	\$4,514,000	9/30/2011	9/30/2011	Planned	69		A	NT	
A in MTEP09	West	XEL	2160	Park Falls TR upgrade	Upgrade the Park Falls 115/34.5 kV TR to 47 MVA	WI		Other	Not Shared	Reliability	\$3,355,800	6/1/2012	6/1/2012	Planned	115	34.5	A	NT	
A in MTEP09	West	XEL	2178	G362 Pleasant Valley XEL	G362 Network upgrades: New 161 kV line from Pleasant Valley - Byron 161 kV line	MN		GIP	Shared		\$10,007,181	12/1/2011	6/1/2012	Planned	161		A	Y	
A in MTEP09	West	XEL	2307	St. Cloud Loop	(1) New 4 mile 115 kV line from St. Cloud tap tap to Mayhew Lake substation.(2) Convert Benton Co - St. Cloud double circuit to bifurcated line and reterminarte into Mayhew Lake substation (3) Convert St. Cloud tap to Granite City into bifurcated line (this results in single 115 kV circuit from St. Cloud to Granite City).	MN		BaseRel	Shared		\$6,100,000	6/1/2012	6/1/2012	Planned	115		A	Y	
A in MTEP09	West	XEL	2308	Grove Lake - Glenwood line rebuild	This project is to rebuild 13 miles of 69 kV line from Grove Lake switching station to Glenwood to 477 ACSR	MN		Other	Not Shared	Reliability	\$16,350,812	9/1/2011	9/1/2011	Planned	69		A	NT	
A in MTEP09	West	XEL	2309	Maple Lake - Watkins line rebuild	This project is to rebuild 20 miles of 69 kV line from Maple Lake to Watkins in west Central Minnesota	MN		Other	Not Shared	Reliability	\$2,487,000	6/1/2012	6/1/2012	Planned	69		A	NT	
A in MTEP09	West	XEL	2772	South Minneapolis	New 115 kV distribution substation with four terminations tapping the Eliot Park - Southtown line, 1.25 new miles of double circuit 795 SAC to a new 115 kV distribution substation	MN		Other	Not Shared	Distribution	\$26,890,000	6/1/2012	6/1/2012	Planned	115	13.8	A	Y	
A in MTEP08	West	XEL	675	Rebuild Westgate to Scott County 69 kV to 115 kV	Upgrade 20.1 miles Westgate-Deephaven-Excelsior-Scott County 69kV to 115 kV using 795 ACSS conductor. Upgrade 2 miles Westgate-Eden Prairie 115kV #1 and #2 to 400MVA (PjID 608). Substation work at Deephaven, Excelsior and Scott County.	MN		Other	Not Shared		\$14,000,000	6/1/2014	6/1/2014	Planned	115		A	Y	

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		Member System	PriID															
A in MTEP08	West	XEL	1487	Somerset - Stanton 69 kV line 84 MVA	Construct 7 miles of 69 kV line using 477 SSAC conductor traveling north along 210th Avenue, interconnecting with a new stanton 69 kV substation on the Clear Lake - New Richmond 69 kV line and the New Summerset substation on the DPC Roberts - St. Croix Falls 69 kV line	WI		Other	Not Shared	Reliability	\$9,247,500	12/31/2011	12/31/2011	Planned	69		A	NT
A in MTEP08	West	XEL	1549	Eau Claire - Hydro Lane 161 kV Conversion	1.)Eau Claire 161 kV circuit breaker. 2.)Bring Wheaton-Presto Tap 161 kV line into Eau Claire substation. 3.)Reconductor Wheaton to Eau Claire 161 kV line to 795 ACS. 4.) Construct second circuit from Wheaton Tap to Wheaton substation. 5.New 50th Avenue substation near where Red Cedar to Wissola 161 kV line intersects 69 kV corridor from Eau Claire to Chippewa Falls. Construct a 4 breaker 161 kV ring bus, add two 161-69 kV transformers with at least 60 MVA capacity. Construct a strait bus 69 kV with a bus tie breaker between the transformers. 6.) Where the 161 kV line from Eau Claire to Presto crosses the double-circuit 69 kV line to Halle, tap the 161 kV line and convert the 69 kV lines to one 161 kV line with 795 ASCC conductor up to the new 50th Ave substation. 7.)Convert Halle Substation from 69 kV to 161 kV operation.	WI		Other	Not Shared	Reliability	\$3,070,000	9/1/2011	12/1/2011	Planned	161		A	Y
A in MTEP08	West	XEL	1957	New 161/69 kV Sub SW of Eau Claire where Alma - Elk Mound 161 kV intersects Shawtown - Naples 69 kV line. Rebuild 69 kV London/Madison to new substation. New 69 kV from new substation - DPC Union Sub. New 69 kV to DPC Brunswick Sub	New 161/69 kV Substation southwest of Eau Claire where Alma - Elk Mound 161 kV line intersects with Shawtown - Naples 69 kV line. Rebuild 69 kV line from London/Madison Tap to new substation. Construct 69 kV line from new substation to DPC Union Substation. Construct 69 kV line from new substation to DPC Brunswick Substation	WI		Other	Not Shared	Reliability	\$7,080,000	6/1/2012	6/1/2012	Planned	161	69	A	Y
A in MTEP08	West	XEL	1958	Stone Lake-Edgewater 161 kV line. A new radial 161 kV line and substation in Sawyer County, Wisconsin	Expand 161 kV ring bus at Stone Lake to accept new line termination. Construct 161 kV line from Stone Lake to Couderay Substation. Install 161/69 kV transformer at Couderay Substation. Install the following substation equipment at Couderay: -161 kV MOD -69 kV low-side transformer breaker -69 kV line breaker	WI		Other	Not Shared	Reliability	\$26,185,641	12/1/2012	12/1/2012	Planned	161		A	Y
A in MTEP06	West	XEL	1458	G349, 37774-01. Upgrades for G349	G349 Upgrades: Yankee substation, Brookings Co 345/115 substation, Hazel Run 53 Mvar capacitor, Brookings-Yankee 115 kV line	MN		GIP	Shared		\$2,202,000	11/30/2011	11/30/2011	Planned	34.5		A	Y
A in MTEP09	West	XEL, GRE	1952	Plato capacitor bank	This project is to add a 10 MVAR cap bank at Plato. This project is required to convert the existing 69 kV line from Young America - Glencoe to 115 kV (part of Glencoe - West Waconia 115 kV line project).	MN		Other	Not Shared	Reliability	\$700,000	12/1/2011	12/1/2011	Planned	69		A	NT
A in MTEP08	West	XEL, SMP, Non-MISO	1024	SE Twin Cities - Rochester, MN - LaCrosse, WI 345 kV project	Construct Hampton Corner-North Rochester-Chester-North LaCrosse 345 kV line, North Rochester - N. Hills 161 kV line, North Rochester-Chester 161 kV line, Hampton Corner 345/161 transformer, North Rochester 354/161 transformer, North LaCrosse 345/161 transformer	MN	WI	BaseRel	Shared		\$444,999,999	12/15/2012	9/30/2015	Planned	345	161	A	Y
B	Central	AmerenIL	1234	Havana, South-Mason City, West 138 kV	Increase ground clearance on 18.4 miles	IL		BaseRel			\$642,300	6/1/2014	6/1/2014	Proposed	138		B	Y
B	Central	AmerenIL	1533	Washington Street-S. Bloomington - Upgrade Terminal Equipment	Replace terminal equipment at S. Bloomington	IL		BaseRel			\$137,000	12/1/2013	12/1/2013	Proposed	138		B	Y
B	Central	AmerenIL	1537	Mt. Vernon, West-S. Centralia - Upgrade Terminal Equipment	Replace terminal equipment at S. Centralia	IL		BaseRel			\$200,000	6/1/2013	6/1/2013	Proposed	138		B	Y
B	Central	AmerenIL	2114	IP03	Network upgrades for tariff service request	IL		GIP	In Suspension		\$2,082,000	9/30/2009	12/1/2013	Planned	138		B	Y
B	Central	AmerenIL	2117	IP08	Network upgrades for tariff service request	IL		GIP	In Suspension		\$1,891,464	6/1/2014	6/1/2014	Planned	138		B	Y
B	Central	AmerenIL	2116	IP04, IP08	Network upgrades: Line #1382 & #1384: Project of replacing approximately 47.1 circuit miles of existing three phase, single conductor, 477 MCM 30/7 ASCR with three phase 556.5 MCM 26/7 ACSS conductor. Approximately 121 existing wood H-frame type structures will be replaced with new wood H-frame type structures to gain additional ground clearance.	IL		GIP	In Suspension			8/1/2014	6/1/2014	Planned	138		B	Y
B	Central	AmerenIL	2280	LaSalle-Ogiesby Main 138 kV Line 1496	Reconductor 2.16 miles of 477 kcmil ACSR and 336 kcmil ACSR to 1200 A summer emergency capability	IL		BaseRel	Not Shared		\$900,000	6/1/2013	6/1/2013	Planned	138		B	Y
B	Central	AmerenMO	2774	Adair Wind Farm	Connect Wind Farm at Adair Substation	MO		GIP	In Suspension			11/1/2020	11/1/2020	Proposed	161		B	Y
B	Central	DEM	1521	Bloomington 13836 Switches	Replace the Bloomington 13836 600A breaker disconnect switches with 2000A switches. New limit 800A Wave Trap.	IN		BaseRel	Not Shared		\$233,455	6/1/2016	6/1/2016	Planned	138		B	Y
B	Central	DEM	3381	Meldahl Dam Generator 345kV Interconnect	Install interconnection substation for Meldahl Dam generator. Install 3-breaker 345kV ring bus, 345-138kV 120 MVA transformer, loop Feeder 4545 through new substation. Connect independent generator per MISO requirements.	OH		GIP	Not Shared		\$8,949,798	12/31/2013	12/31/2013	Planned	345	138	B	Y

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B	Central	DEM, IPL	1558	Close Wheatland Breaker	Close the breaker at IPL's Wheatland - make upgrade to Petersburg - Francisco and the Petersburg - Thompson 345 kV to address 1st contingency limitations	IN		Other			\$11,435,000	5/1/2013	5/1/2013	Proposed	345		B	Y
B	Central	IPL, DEM	1557	Bloomington to Pritchard to Franklin to Hanna 345 kV line	Tap the Hanna - Stout 345 and Hanna - Francs 345 kV circuits into one new 345 kV Switching Station at the Franklin hwp site and build station at Pritchard. Also adds 345 kV single circuit from Bloomington - Pritchard - Franklin Twp station.	IN		RegBen			\$41,750,000	1/1/2014	1/1/2014	Proposed	345		B	Y
B	East	ITC	1850	Hancock 230/120kV Transformer	Cut the Wixom-Quaker 230kV circuit into Hancock Station, install a 230/120kV transformer.	MI		BaseRel	Shared		\$9,000,000	12/31/2013	12/31/2013	Proposed	230	120	B	Y
B	East	METC	2809	Garfield-Hemphill 138kV	Replace 9.1 miles of 336 ACSR with 1431 ACSR	MI		Other	Excluded		\$11,740,000	6/1/2014	6/1/2014	Proposed	138		B	Y
B	East	METC	2822	Edenville Jct. - Warren 138kV	Reconductor the Edenville-Warren 138kV line to 954 ACSR	MI		Other	Not Shared		\$7,000,000	12/1/2016	12/1/2016	Proposed	138		B	Y
B	East	NIPS	3154	Sheffield Substation - 13877 Reactors	Add 0.795 Ohm reactor on BP Whiting to Sheffield	IN		Other	Not Shared		\$897,141	12/1/2012	12/1/2012	Proposed	138		B	Y
B	West	ATC LLC	544	Bluemound 3x75 Cap Banks	Add 3x75 Cap Banks to 2 Bluemound buses	WI		Other	Not Shared		\$3,463,900	6/1/2015	6/1/2015	Conceptual	138		B	Y
B	West	ATC LLC	1269	Arcadian transformer replacement	Replace Arcadian 345/138kV transformer #3 with a 500MVA transformer.	WI		Other	Not Shared		\$3,500,000	6/1/2020	6/1/2020	Conceptual	345	138	B	Y
B	West	ATC LLC	1270	Rebuild Arcadian - Waukesha 138kV lines	Rebuild the two Arcadian - Waukesha 138kV lines	WI		Other	Not Shared		\$14,586,895	6/1/2016	6/1/2016	Proposed	138		B	Y
B	West	ATC LLC	1284	Tie the 138kV radial line Racine - Somers - Albers to the 138kV substation at Albers. Also upgrade the 138kV radial line to 345/477 summer normal/emergency ratings.	Tie the 138kV radial line Racine - Somers - Albers to the 138kV substation at Albers. Also upgrade the 138kV radial line to 345/477 summer normal/emergency ratings.	WI		BaseRel				6/1/2050	6/1/2050	Conceptual	138		B	Y
B	West	ATC LLC	1624	Uprate X-67 Portage-Trienda 138 kv line	Increase clearance and uprate SS equipment	WI			Not Shared			6/1/2022	6/1/2022	Conceptual	138		B	Y
B	West	ATC LLC	1687	Metomen 138-69 kV Transformer Replacement	Replace the Metomen 138-69 kV transformer to achieve a higher emergency rating	WI		Other	Not Shared		\$4,700,000	6/1/2017	6/1/2017	Planned	138	69	B	Y
B	West	ATC LLC	1946	2nd Spring Green 138-69 kV Transformer	Install a 2nd Spring Green 138-69 kV Transformer with a 100 MVA, summer normal rating	WI		Other	Not Shared		\$1,400,000	6/1/2018	6/1/2018	Conceptual	138	69	B	Y
B	West	ATC LLC	2044	Uprate Castle Rock-McKenna 69kV	Increase line clearance to 200 deg F, SN/SE	WI		Other	Not Shared		\$1,093,828	6/1/2017	6/1/2017	Conceptual	69		B	Y
B	West	ATC LLC	2454	G590 Story Brook	G590 G-T Interconnection From Techumseh Rd 138 kV bus. Upgrade Kaukauna Central tap - Tayco 138 kV line.	WI		GIP	In Suspension		\$1,610,720	5/1/2012	5/1/2012	Planned	138		B	Y
B	West	ATC LLC	3089	Nine Springs Pflaum Area Project	Uprate Fitchburg-Nine Springs and Royster-Pflaum lines to 275 deg F SE clearance and move AGA load onto Femite-Royster line and install 2-16.33Mvar cap banks at Nine Springs	WI					\$4,400,000	1/31/2013	1/31/2013	Proposed	69		B	Y
B	West	ATC LLC	3118	North Lake Geneva-South Lake Geneva 138kV	North Lake Geneva-South Lake Geneva 138kV line	WI					\$16,401,632	6/1/2016	6/1/2016	Proposed	138	69	B	Y
B	West	GRE	2098	G390, A252, A253	Network upgrades for tariff service request for G390, A252, A253	MN		GIP	In Suspension		\$6,272,080	4/1/2013	4/1/2013	Proposed	230		B	Y
B	West	ITCM	1147	G298, 37061-02	Net: The Transmission Owner shall install a new 161kV line breaker on the Triboji-Wisdom Line and a new 161kV transformer breaker located on the existing #1 Triboji 161/69kV transformer and are shown in Exhibit A2. Int: Generator shall construct a 161/34kV substation consisting of 161kV breaker, 161/34kV transformer, 34kV breakers and a 161kV line from (Bob what is name of Customer sub?) to the dead-end tower at the IPL Triboji substation.	IA		GIP	In Suspension		\$2,300,000	12/31/2011	12/31/2011	Planned	161		B	Y
B	West	ITCM	1741	G517: Dotson - Storden - Heron Lake 161kV	Network upgrades for G517. Build a new Heron Lake-Cottonwood Co 161 kV line and a new Cottonwood Co 161 kV switch station. Build Cottonwood Co to Dotson 161kV line.	MN		GIP	Shared		\$36,719,820	12/31/2012	12/31/2012	Planned	161		B	Y
B	West	MDU	1148	G297, 37664-01	Net: At the Glenham Jct Substation, two 115 kV line potential sources and sync-check relaying on breakers 7047 and 7050. At the Bowdle Jct Substation, five 41.6 kV line potential sources and sync-check relaying on breakers 500, 510, 5049, 5050 and 6470 Int.	SD		GIP	In Suspension			12/31/2012	12/31/2012	Planned	115	1	B	Y
B	West	MDU	1153	G311, 37689-01	Net: The Transmission Owner shall install a larger 115/34.5kV substation transformer, and relaying associated with the new transformer. Add 34.5kV PTs, 34.5kV station service transformer, SCADA RTU, 115kV CVTs and 115kV line relaying at Gascoyne. Add sync-check relaying on breaker 2132 at the Hettinger Jct Substation. Int: Generator shall cause to be constructed the following interconnection facilities at Transmission Owner's Gascoyne Jct Substation: 2-circuit breaker disconnect switches, 1- "intertie circuit breaker" and associated 34.5kV line and intertie protective relaying, meters, 34.5kV potential and current transformers, arresters, the associated high voltage bus work, grounding, foundations, conduit and control wiring.	ND		GIP	In Suspension			9/1/2012	9/1/2012	Planned	115	1	B	Y
B	West	MDU	3083	Dickinson 115 kV Loop	Complete 115 kV loop & new 115/41.6 substation in Dickinson area	ND		TBD			\$11,150,000	10/1/2014	10/1/2014	Planned	115	41.6	B	Y
B	West	MEC	2937	Sub 39 Add 2nd 345-161 kV Xfmr	Add a second 345-161 kV xfmr. Expand 345 kV and 161 kV buses.	IL		BaseRel	Shared		\$14,500,000	6/1/2014	6/1/2014	Proposed	345	161	B	Y

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		Member	System																
B	West	MEC		2938	Urrate Sub 39 - Cordova 345 kV Line	Change out structures to increase rating.	IL		BaseRel	Shared		\$400,000	6/1/2014	6/1/2014	Proposed	345		B	Y
B	West	MEC		2939	Raun-Sioux City 345 kV Line	Construct a 23 mile 345 kV line between the Raun and Sioux City Substations	IA		BaseRel	Shared		\$28,400,000	6/1/2016	6/1/2016	Proposed	345		B	Y
B	West	MP		1292	Raise tower height on ETCO-Forbes 115 kV line	Raise tower height on ETCO-Forbes 115 kV line so the 336 ACSR conductor rating can reach 122/134 MVA	MN		BaseRel	Not Shared		\$400,900	12/1/2012	12/1/2012	Planned	115		B	Y
B	West	OTP		549	Jamestown Reactor Addition	Jamestown 115 kV 25 MVAR reactor	ND		BaseRel	Not Shared		\$250,000	12/1/2015	12/1/2015	Proposed	115		B	Y
B	West	OTP		585	Pelican Rapids 115 kV Line Upgrade	Pelican Rapids - Pelican Rapids Turkey Plant 115 kV line	MN		Other	Not Shared	Reliability	\$856,869	12/31/2013	12/31/2013	Planned	115		B	Y
B	West	OTP		2824	Hensel Capacitor Bank	Install Capacitor Bank on 115 kV at Hensel, ND. Two 15 MVAR	ND		Other	Not Shared	Reliability	\$750,000	12/31/2014	12/31/2014	Proposed	115	41.6	B	Y
B	West	XEL		2107	G520	Network upgrades: Install new 3-position 115 kV substations (tapping Lake Yankton - Lyon County 115 kV line) with breakers, switches, buswork, steel, foundations, control house and associated equipment. Install new loop in-and-out tap, 3.5 miles of double circuit, 115 kV transmission line.	MN		GIP	In Suspension		\$5,930,926	4/2/2009	4/2/2009	Planned	115	34.5	B	Y
B	West	XEL		2115	G491	G491: One new 120 MVA, 118-36.2 kV transformer, three new 115 kV breakers and associated disconnect switches, one new 34.5 kV transformer low side main breaker and associated disconnect switches, control house expansion, structural steel and foundations associated with this new equipment, control and protection equipment associated with these new installations	MN		GIP	In Suspension		\$4,363,152	9/1/2010	9/1/2010	Planned	115		B	Y
B	West	XEL		3099	Franklin TR upgrade	Upgrade Franklin 115/69 kV Xfmr 1 and 2 to 70 MVA as part of the CapX underlying system upgrade	MN		Other	Not Shared	Reliability	\$4,800,000	6/1/2013	6/1/2013	Planned	115	69	B	Y
B in MTEP10	Central	AmerenIL		2964	Secure Energy Connection	Secure Energy - Provide connection to Secure Energy coal gasification plant with 5 PCB 138 kV ring bus substation. Plant would connect in the Decatur area to ADM North-North 27th Street 138 kV Line 1604 between ADM North and Caterpillar Substations.	IL		Other	Not Shared		\$5,966,000	6/1/2011	6/1/2011	Proposed	138	1	B	Y
B in MTEP10	Central	AmerenIL		2978	ESK Capacitor Bank	ESK Customer Substation - Install 32 Mvar, 138 kV capacitor bank to improve customer load power factor.	IL		BaseRel	Not Shared		\$1,521,000	6/1/2013	6/1/2013	Proposed	138		B	Y
B in MTEP10	Central	AmerenMO		2970	Apache Flats - Scruggs Delivery Point	Apache Flats 161 kV Substation - Install 1-161 kV, 2000 A PCB and necessary metering and relaying to provide a delivery point for Associated Electric's Scruggs 161-69 kV Substation.	MO		Other	Not Shared		\$1,035,000	6/1/2012	6/1/2012	Planned	161		B	Y
B in MTEP10	Central	IPL		3212	Wheatland - Breed 345kV rating upgrade and close Wheatland 345 kV tie breaker	Increase rating to 1386MVA on line Wheatland - Breed 345kV. Close Wheatland 345 kV Tie breaker	IN					\$12,000,000	1/1/2015	1/1/2015	Proposed	345		B	Y
B in MTEP10	East	ITC		1856	Belle River - Greenwood - Pontiac 345kV cut into Jewell	Cut the Pontiac section of the Belle River-Greenwood-Pontiac 345kV circuit into and out of Jewell station. Utilize an existing unused side of 345kV tower for one of the circuits into Jewell, and relocate the Jewell-Spokane 230kV circuit	MI		BaseRel	Shared		\$5,200,000	12/31/2015	12/31/2015	Proposed	345		B	Y
B in MTEP10	East	ITC		2932	St Antoine-Essex #2 120 kV	Construct 2nd underground cable from St Antoine to Essex (5.1 miles).	MI		BaseRel	Shared		\$54,800,000	6/1/2015	6/1/2015	Proposed	120		B	Y
B in MTEP10	East	METC		3210	Vanderbilt - Riggsville 138 kV Rebuild	Rebuild 30.3 miles of 138 kV 266 ACSR to 954 ACSR FDC 230 kV construction.	MI					\$33,254,000	6/1/2014	6/1/2014	Proposed	138		B	Y
B in MTEP10	West	MPW		2935	Reconductor 69 kV lines South - Wiggins - Power Plant (Lines 81 & 82)	The 2006 updated schedule changed the schedule for the 69 kV transmission line upgrades. MPW is looking at upgrading the 69 kV transmission lines from 633501 South Sub to 633511 Wiggins Road (Line 82) and from 633511 Wiggins Road to our 633408 Power Plant (Line 81) from 58 MW to at least 89 MW (636 ACSR) by 2014.	IA		Other	Not Shared	Reliability	\$300,000	6/1/2017	6/1/2017	Proposed	69		B	Y
B in MTEP10	West	XEL		3121	Lake Marion - Burnsville upgrade	Upgrade 13 miles of 115 kV line between Lake Marion and Burnsville to 2-795 ACSR conductor	MN		BaseRel	Shared		\$6,200,000	6/1/2016	6/1/2016	Planned	115		B	Y
B in MTEP10	West, Central, East	Midwest ISO		3200	RGOS 765 kV Strategy. In AMIL,AMMO,MEC,XEL,OTP,ALTE,GRE,WEC,MDU,MGE,ALTW,DPC,DEM,IPL,ITCT,SIGE,FE,WPS,Non-MISO	Build transmission throughout the Midwest ISO system that helps the facilitation of the collection and delivery of renewable energy to meet the current mandate needs. This strategy focuses on the introduction of 765 kV transmission throughout the Midwest ISO footprint. Further development and identification of timing needs will be dependent on further regional analysis and candidate MVP evaluation.	IA	WI	MVP			\$12,561,351,094	1/1/2025	1/1/2025	Conceptual	765	115	B	Y
B in MTEP10	West, Central, East	Midwest ISO		3202	RGOS Native Voltage Strategy. In AMIL,AMMO,MEC,XEL,OTP,ALTE,GRE,WEC,MDU,MGE,ALTW,DPC,DEM,IPL,ITCT,SIGE,FE,WPS	Build transmission throughout the Midwest ISO system that helps the facilitation of the collection and delivery of renewable energy to meet the current mandate needs. This strategy focuses on the development of transmission voltages that are already native to the areas. Further development and identification of timing needs will be dependent on further regional analysis and candidate MVP evaluation.	IA	WI	MVP			\$10,423,998,000	1/1/2025	1/1/2025	Conceptual	765	115	B	Y
B in MTEP11	Central	AmerenIL		2967	Grand Tower Capacitor Bank	Grand Tower Plant - Install 2-stage 80 Mvar (2 x 40 Mvar) 138 kV capacitor bank. 2-138 kV PCB's needed.	IL		BaseRel	Not Shared		\$2,715,000	6/1/2013	6/1/2013	Proposed	138		B	Y
B in MTEP11	Central	AmerenIL		2977	LaSalle Substation Relocation	LaSalle 138-34.5 kV Substation - Relocate Substation to avoid flooding and to permit remediation of manufactured gas plant site.	IL		Other	Not Shared		\$1,347,000	6/1/2013	6/1/2013	Proposed	138		B	Y

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		Member System	Pri/D															
B in MTEP11	Central	AmerenIL	2882	Washington Street-S. Bloomington Line 1326 - Upgrade Terminal Equipment	Washington Street-S. Bloomington 138 kV Line 1326 - Replace terminal equipment (w/retap, 3-CT's and bus conductor) at S. Bloomington with equipment capable of carrying minimum 2000 A under summer emergency conditions.	IL		BaseRel	Not Shared		\$137,000	12/1/2013	12/1/2013	Proposed	138		B	Y
B in MTEP11	Central	AmerenIL	3009	Newton-Hutsonville-Merom 345 kV Line	Newton-Hutsonville 345 kV line - New 40 mi. 3000 A summer emergency capability line. Hutsonville-Merom 345 kV line - New 12 mi. 3000 A summer emergency capability line. 345/138 kV 560 MVA transformer @ Hutsonville.	IL					\$110,000,000	6/1/2018	6/1/2018	Proposed	345	138	B	Y
B in MTEP11	Central	AmerenIL	3010	Baldwin-Grand Tower-N.W. Cape 345 kV Line	New 69 mile, single-circuit line (possible double circuit), 3000 A SE capability (Baldwin-Grand Tower - 45 miles; Grand Tower-N.W. Cape - 24 miles). Grand Tower 345/138 kV Substation - 1-560 MVA transformer, 345 kV Ring bus	IL					\$151,000,000	12/1/2025	12/1/2025	Proposed	345	138	B	Y
B in MTEP11	Central	AmerenMO	2971	Rolla Alferrmann Substation	Rolla Alferrmann Substation - Tap Clark-Osage-2 and Rivermines-Maries-1 138 kV lines to establish 138 kV supplies to new 138-34.5 kV Alferrmann Substation, owned by City of Rolla. Ameren to construct tapping structures. 2-138 kV, 1200 A disconnect switches	MO		Other	Not Shared		\$963,000	6/1/2012	6/1/2012	Planned	138		B	Y
B in MTEP11	Central	AmerenMO	2973	Howard Bend Substation Connection	Howard Bend 138-12 kV Substation - Provide 138 kV ring bus connection from Mason-Carrilton-8 138 kV line to new Howard Bend Substation. Install 1-138 kV, 2000 A PCB at Carrilton Substation as a bus-tie.	MO		Other	Not Shared		\$1,371,000	12/1/2016	12/1/2016	Proposed	138		B	Y
B in MTEP11	Central	AmerenMO	2979	Enon 345 kV Breaker Addition	Enon 345/161 kV Substation - Install 2-345 kV PCB's on incoming 345 kV lines.	MO		BaseRel	Not Shared		\$1,876,000	6/1/2013	6/1/2013	Proposed	345		B	Y
B in MTEP11	Central	AmerenMO	2988	Warrenton-Lincoln Bulk 161 kV Line	Warrenton-Lincoln Bulk Substation 161 kV - Establish a second 161 kV supply to Lincoln Bulk Substation from Warrenton Substation. 10 miles of new 161 kV line, 2-161 kV, 2000 A PCBs at Warrenton Substation.	MO		BaseRel	Shared		\$12,000,000	6/1/2016	6/1/2016	Proposed	161		B	Y
B in MTEP11	East	ITC	3282	Southfield - Sunset 120 kV Rebuild	Rebuild 6.4 mile 120 kV Line	MI		BaseRel	Shared		\$7,100,000	12/31/2013	12/31/2013	Planned	120		C>B	Y
B in MTEP11	East	METC	1803	Plum-Stover 138 kV Rebuild	Rebuild the 8.8 mile 138 kV line to 954 ACSR (Pre-build to 230 kV construction).	MI		BaseRel	Shared		\$10,900,000	12/31/2013	12/31/2013	Planned	138		C>B	Y
B in MTEP11	East	METC	1816	Chase - Mecosta 138kV Rebuild	Rebuild 7.2 miles of 138kV 110 and 115 CU to 954 ACSR. Prebuild to 230kV construction.	MI		BaseRel	Shared		\$8,900,000	12/31/2014	12/31/2014	Planned	138		C>B	Y
B in MTEP11	West	ATC LLC	2799	Kinross Load Interconnection	Construct a 3 mile line to connect the Kinross load	MI					\$3,882,248	7/1/2013	7/1/2013	Conceptual	69		C>B	Y
B in MTEP11	West	ATC LLC	3119	Uprate 6923 Pine River-9Mie 69kV	Increase ground clearance for 6923 Pine River-9Mie 69kV line to 167 deg 1 clearance	MI					\$2,000,000	6/1/2016	6/1/2016	Proposed	69		C>B	Y
B in MTEP11	West	ATC LLC	3209	Replace Edgewater 138/69kV Trs	Replace the Edgewater 138-69 kV Trs with 60 MVA units Replace the 4/0 Cu strain bus sections 1 & 2 with conductor capable of 75 MVA SE Remove 69 kV by-pass switches 1668A, 359A, 460A, and 368A Replace the following 69 kV disconnect switches with new GOAB switches 358L, 359B, 368L and 368B Add line side surge arresters to 69 kV lines Y-31, Y-55, and Y-142 Upgrade and/or replace relaying and protection systems Install new GCBs to the low side (69kV) positions of T31 and T32. Replace T31 and T32 transformer 69 kV disconnect switches 315A and 337A.	WI					\$5,409,471	10/25/2013	10/25/2013	Proposed	138	69	C>B	Y
B in MTEP11	West	ATC LLC	3490	Rebuild Y-20 Doylestown-Rio Pumping Station	Asset Management project to Rebuild Y-20 Doylestown to Rio Pumping Station	WI					\$7,400,000	4/15/2013	4/15/2013	Planned	69		C>B	Y
B in MTEP11	West	ATC LLC	3514	98th St Breaker and a half bus reconfiguration	Create 98ST 6-rung breaker and a half for zoo interchange relocation project	WI					\$28,000,000	9/1/2013	9/1/2013	Proposed	138		C>B	Y
B in MTEP11	West	ATC LLC	3519	RiverBend T-D Load Interconnection	Construct a 138 kV loop through River Bend distribution Substation on line 731.	WI		Other	Not Shared	Distribution	\$3,016,359	12/31/2012	12/31/2012	Proposed	138	24.9	C>B	Y
B in MTEP11	West	MEC	3214	Sub 17 and Sub 39 Replace Relays 161-17-39-1	Replace relaying and remove wave trap	IL		Other	Not Shared	Condition	\$225,000	12/1/2015	12/1/2015	Proposed	161		C>B	Y
B in MTEP11	West	MEC	3215	Sub 49 161 kV Capacitor	Add 50 MVar 161 kV capacitor	IL		BaseRel	Not Shared		\$840,000	6/1/2014	6/1/2014	Proposed	161		C>B	Y
B in MTEP11	West	MEC	3216	Plymouth-Sioux City 161 kV Line	Construct a 2 mile 161 kV line between the Plymouth and Sioux City Substations and associated substation equipment additions.	IA		BaseRel	Not Shared		\$2,400,000	6/1/2014	6/1/2014	Planned	161		C>B	Y
B in MTEP11	West	MEC	3265	Sub 55-89 161 Line Uprate	Increase 161 kV line rating.	IA		BaseRel	TBD		\$680,000	6/1/2016	6/1/2016	Proposed	161		C>B	Y
B in MTEP11	West	OTP	3431	Hankinson 230/41.6 kV Transformer Addition	Add a second 230/41.6 kV transformer at Hankinson Substation which will include the addition of 2 new 230 kV breakers.	ND					\$835,000	10/1/2012	10/1/2012	Planned	230	41.6	C>B	Y
B in MTEP11	West	OTP	3462	Project G-968 100 MW Wind Farm near Viking MN	Add 3 breaker 115 kV ring bus	MN					\$2,800,000	10/30/2012	10/30/2012	Proposed	115	115	C>B	Y
B in MTEP11	West	OTP	3464	Project G-873 20 MW Wind Farm on Donaldson 41.6 kV Line	Add 3 Way Switch on 41.6 kV line between Donaldson 115 kV substation to Donaldson distribution sub.	MN		GIP	Not Shared		\$160,000	12/1/2012	12/1/2012	Proposed	41.6		B	Y
B in MTEP11	West	OTP	3465	Project G-875 80 MW Wind Farm at Donaldson 115/41.6 kV Substation	Add 3 new 115 kV Breakers & expand substation to accommodate wind farm.	MN		GIP	Not Shared		\$1,500,000	12/31/2012	12/31/2012	Proposed	115	41.6	B	Y

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B in MTEP11	West, Central, East	AmerenMO, AMIL, MEC, XEL	3201	RGOS Identified DC Transmission	Build transmission throughout the Midwest ISO system that helps the facilitation of the collection and delivery of renewable energy to meet the current mandate needs. This strategy focuses on the introduction of HVDC transmission throughout the Midwest ISO footprint. Further development and identification of timing needs will be dependent on further regional analysis and candidate MVP evaluation.	IA	SD	MVP				\$5,401,519,474	1/1/2025	1/1/2025	Conceptual	800		B	Y
C	West	ATC LLC	3506	Vinburn T-D Interconnection	Construct a 69 kV loop through Vinburn distribution Substation on Line Y104. This project also includes rerouting the Hampden tap into Vinburn Substation.	WI						\$3,362,287	12/31/2012	12/31/2012	Proposed	69		C	Y
C	West	ATC LLC	3507	Shoto-Manrap Uprate	This project is a thermal uprate of C-55 (MANRAP - SHOTO 69KV)	WI						\$319,044	3/1/2012	3/1/2012	Proposed	69		C	Y
C	West	ATC LLC	3508	Revere-Northeast Uprate	This project is a thermal uprate of C-103 (Revere - Northeast 69KV)	WI						\$171,475	1/1/2012	1/1/2012	Proposed	69		C	Y
C	West	ATC LLC	3515	Granville Economic Project	Uprate 3443 Granville-Tosa 138kV & 3453 Granville-Butler 138kV	WI						\$1,136,322	12/31/2011	12/31/2011	Proposed	138		C	Y
C	West	GRE	3470	MISO G867		MN						\$118,182	12/1/2011	12/1/2011	Planned			C	Y
C	Central	AmerenIL	2283	South Bloomington 138-34.5 kV Substation	Install 2 new 2000 A, 138 kV Bus-Tie breakers	IL		Other				\$1,030,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	2289	Benton-W. Frankfort 138 kV Line	Reconductor 9.62 miles of 360 kcmil Cu to carry 1200 A under summer emergency conditions	IL		BaseRel				\$1,871,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	2290	Jopoa 345 kV Switching Station 2nd, Xlfr	Add 2nd, 345/161 kV, 560 MVA Transformer	IL		BaseRel	Not Shared			\$4,000,000	6/1/2015	6/1/2015	Proposed	345	161	C	Y
C	Central	AmerenIL	2293	N. LaSalle-LaSalle Jct. 138 kV Line 1556A	Reconductor 9.68 miles of 477 kcmil ACSR to 1600 A summer emergency capability	IL						\$2,515,000	4/17/11	4/17/11	Proposed	138		C	Y
C	Central	AmerenIL	2294	Stallings 345/138 kV Sub - 138 kV Bus-Tie CT Replacement	Reconnect or replace 1200 A CT in the 138 kV Bus-Tie Position 1302 to 2000 A capability.	IL		BaseRel					6/1/2013	6/1/2013	Proposed	138		C	Y
C	Central	AmerenIL	2295	W. Mt. Vernon-E. W. Frankfort 345 kV	Upgrade terminal equipment to 3000 A continuous capability	IL		Other				\$1,366,000	6/1/2015	6/1/2015	Proposed	345		C	Y
C	Central	AmerenIL	2299	Fargo 138-69 kV Substation	Install 138 kV Capacitor Bank	IL		BaseRel				\$1,500,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	2300	Hennepin Plant - 138 kV Bus-Tie Breakers	Install 2-3000 A, 138 kV Breakers as Bus-Ties in the Hennepin North and South Buses. Swap connection to Transformer TT2 with breaker position 1556 or 6101.	IL		BaseRel	Shared			\$9,124,000	6/1/2019	6/1/2019	Proposed	138		C	Y
C	Central	AmerenIL	2301	Hennepin-Ogleby 138 kV Line 1556	Reconductor 8.37 miles of 477 kcmil ACSR to 1600 A summer emergency capability	IL		BaseRel				\$4,215,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	2302	Madison Industrial-Madison State Street 138 kV	Reconductor 2.35 miles of 795 kcmil SAC conductor to 1200 A summer emergency capability	IL		BaseRel				\$710,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	2305	Monmouth Substation 138 kV Capacitor Bank	Install 30 Mvar, 138 kV capacitor bank	IL		BaseRel				\$1,022,000	6/1/2013	6/1/2013	Proposed	138		C	Y
C	Central	AmerenIL	3024	Bunsonville 2nd, 345/138 kV Transformer	Bunsonville 345/138 kV Substation - Install 2nd, 560 MVA Transformer.	IL						\$5,000,000	6/1/2015	6/1/2015	Proposed	345	138	C	Y
C	Central	AmerenIL	3336	Gilman-Watseka Reconductoring	Reconductor to 1600 A summer emergency capability	IL						\$4,763,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	3338	Lanesville Transformer Replacement	Replace existing transformer with 560 MVA unit	IL						\$4,000,000	6/1/2013	6/1/2013	Proposed	345	138	C	Y
C	Central	AmerenIL	3339	Pana, North-Taylorville, South Reconductoring	Reconductor to 1600 A summer emergency capability. Upgrade terminal equipment to match.	IL						\$4,073,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	3340	Pawnee, West-Taylorville, South Terminal Equipment	Replace bus conductor at both terminals to 1200 A summer emergency capability	IL						\$100,000	6/1/2016	6/1/2016	Proposed	138		C	Y
C	Central	AmerenIL	3341	Diamond Star-West Washington Street Reconductoring	Reconductor 336 kcmil ACSR conductor to 1200 A summer emergency capability	IL						\$375,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3342	Diamond Star-McClearn County Sw. Station - Increase Ground Clearance	Increase ground clearance on 2.4 miles of 477 kcmil ACSR conductor	IL						\$240,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3343	Increase Ground Clearance - Raab Rd. - White Oak Tap	Increase ground clearance on 3.92 miles of 477 kcmil ACSR conductor	IL						\$400,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3344	Increase Ground Clearance - El Paso Tap-Minonk	Increase ground clearance on 13.88 miles of 477 kcmil ACSR conductor	IL						\$1,300,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3345	Increase Ground Clearance - R.S. Wallace-E. Peoria	Increase ground clearance on 0.6 mile of 477 kcmil ACSR conductor.	IL						\$60,000	6/1/2016	6/1/2016	Proposed	138		C	Y
C	Central	AmerenIL	3346	Reconductor Mason-Holland	Reconductor 0.05 mile 795 kcmil ACSR to 1200 A summer emergency capability	IL						\$25,000	6/1/2016	6/1/2016	Proposed	138		C	Y
C	Central	AmerenIL	3347	Reconductor Mason-San Jose Rail	Reconductor 0.05 mile 795 kcmil ACSR to 1200 A summer emergency capability	IL						\$25,000	6/1/2016	6/1/2016	Proposed	138		C	Y
C	Central	AmerenIL	3351	Wood River 138 kV Bus-Tie Breakers	Install 2-2000 A, 138 kV bus-tie breakers	IL						\$2,000,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3352	West Tilton 138 kV Capacitor Bank	Install 40 Mvar, 138 kV capacitor bank.	IL						\$1,500,000	6/1/2013	6/1/2013	Proposed	138		C	Y
C	Central	AmerenIL	3353	Edwards-Keystone 138 kV - Breaker Replacement at Keystone	Replace 138 kV, 1200 A breaker and terminal equipment at Keystone terminal to 2000 A capability	IL						\$1,100,000	6/1/2012	6/1/2012	Proposed	138		C	Y
C	Central	AmerenIL	3354	Edwards-Caterpillar Sub 1 - Increase Ground Clearance	Increase ground clearand on 795 kcmil ACSR and 927 ACAR conductor	IL						\$950,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	3362	H100 Generator connection - Sidney-Rantoul Jct.	Install a 3-position ring bus to facilitate connection of wind farm (H100) to the Sidney-Rantoul Jct. 138 kV line.	IL						\$3,240,000	9/30/2013	9/30/2013	Proposed	138		C	Y
C	Central	AmerenIL	3369	Quincy, East Sub. - Replace Transformer #3	Replace 138-34.5 kV Transformer Bank #3 with a 112 MVA unit. Replace 600 A, 138 kV disconnect switch with minimum 800 A capability	IL						\$100,000	6/1/2012	6/1/2012	Planned	138		C	Y
C	Central	AmerenMO	2296	Belleau 345/138 kV Substation - 2nd, Xlfr	Install 2nd, 560 MVA, 345/138 kV Transformer	MO		BaseRel	Not Shared			\$8,335,000	6/1/2013	6/1/2013	Proposed	345	138	C	Y
C	Central	AmerenMO	2297	Belleau 345/138 kV Substation - Install 138 kV capacitor bank	Install 138 kV, 120 Mvar capacitor bank (as 2-60 Mvar stages) At Belleau Substation	MO		Other				\$3,071,000	6/1/2013	6/1/2013	Proposed	138		C	Y
C	Central	AmerenMO	2975	Dupo Ferry-Selma-1 - Connection to Wings Enterprises	Dupo Ferry-Selma-1 138 kV Line - Install 3 position 138 kV ring bus and extend 138 kV line to serve a customer substation (Wings Enterprises). 3-138 kV, 1200A PCB's	MO						\$1,141,000	12/1/2012	12/1/2012	Proposed	138		C	Y

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C	Central	AmerenMO	3350	Tegeler-Osage Disconnect Switch Replacement	Replace 138 kV disconnect switch at Freeburg with new 1200 A switch	MO						\$200,000	12/1/2012	12/1/2012	Planned	138		C	Y
C	Central	AmerenMO	3364	Prairie Dell Substation	Install 138 kV breakers, build 3.1 miles of new 138 kV double circuit line, reuse a total of 9.6 miles of 34.5 kV line at 138 kV to establish supplies to Prairie Dell Substation	MO						\$11,100,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenMO	3365	Delbridge Substation High-Side Transfer	Install 2000 A breaker and 2-2000 A 138 kV motor operated disconnect switches	MO						\$2,221,000	12/1/2011	12/1/2011	Proposed	138		C	Y
C	Central	AmerenMO	3368	Wallen Creek Substation High-Side Transfer	Install 2000 A breaker and 2-2000 A 138 kV motor operated disconnect switches	MO						\$2,221,000	12/1/2011	12/1/2011	Proposed	138		C	Y
C	Central	AmerenMO	3367	Pershall Substation	Install 4-2000 A breaker ring bus and connect to Berkeley-Sioux-1 138 kV to establish 138 kV connections for Pershall 138-12.47 kV Sub	MO						\$4,631,000	9/1/2013	9/1/2013	Proposed	138		C	Y
C	Central	AMRN	3197	Oak Grove - Kewanee 161 kV	Build new 161 kV circuit from Oak Grove to Kewanee	IL		MVP				\$61,000,000	5/1/2014	6/1/2017	Proposed	161	138	C	Y
C	Central	AMRN	3198	Oak Grove - Kewanee 345 kV	Build new 345 kV circuit from Oak Grove to Kewanee	IL		MVP				\$86,000,000	5/1/2014	6/1/2017	Proposed	345	138	C	Y
C	Central	DEM	2785	Pioneer 765	New 765 kV line from Rockport (AEP) to Greentown (DEM)	IN						\$1,000,000,000	5/1/2015	5/1/2015	Proposed	765		C	Y
C	Central	DEM	2862	Staunton to Lonestar Jct 138kV - 13802 okt. Uprate	Uprate Staunton to Greencastle Jct to Lonestar Jct 13802 circuit 336ACSR for 100C cond temp operation (Lone Star Jct switches may also need upgraded to 1200A)	IN						\$350,000	6/1/2016	6/1/2016	Planned	138		C	Y
C	Central	IPL, HE	2901	Hanna - Bloomington 345 kV Line Economic Project Portfolio	Add a new 345 kV line from IPL Hanna - IPL Franklin Township - HE Bloomington Substation, Close the Duke Wheatland Substation Tie Breakers and Upgrade the rating of the 345 kV line from IPL Petersburg - Duke Wheatland - AEP Breed to 1388 MVA. Closing the Duke Wheatland bus tie breakers connects the IPL Petersburg-Duke Wheatland-AEP Breed line into the Duke Wheatland 345 kV substation.	IN						\$70,900,000			Proposed	345		C	Y
C	West	ATC LLC	1689	Ripon Capacitor Banks	Upgrade 4.1 MVAR capacitor bank to 8.2 MVAR and install a new 8.2 MVAR capacitor bank at Ripon 69 kV substation	WI				Not Shared		\$895,300	6/1/2015	6/1/2015	Conceptual	69		C	Y
C	West	ATC LLC	1700	Ripon-Metomen 69 kV line	Construct a 69 kV line from SW Ripon to the Ripon-Metomen 69 kV line	WI				Not Shared			9/30/2015	9/30/2015	Conceptual	69		C	Y
C	West	ATC LLC	2779	New Chandler-18th Road 138 kV line + 18th Road 138/69 kV SS and xfmr	Build a new 6-mile 138 kV line from Chandler to 18th Road, add a new 138/69 kV SS and 138/69 kV 150 MVA xfmr at 18th Road	MI	WI	TBD		TBD		\$22,000,000	6/1/2014	6/1/2014	Proposed	138	69	C	Y
C	West	ATC LLC	3098	Uprate Inland line Munising-Blaney Park 69kV	Increase ground clearance for the Inland line Munising-Blaney Park 69kV to 167 deg (37 MVA) clearance	MI						\$21,003,000	6/1/2014	6/1/2014	Conceptual	69		C	Y
C	West	ATC LLC	3125	install a 345/138kV Tr at Amoid	Tap the Plains-Dead River 345kV line into the Amoid 138kV substation and add a 345/138kV transformer	MI						\$16,000,000	6/1/2015	6/1/2015	Proposed	345	138	C	Y
C	West	ATC LLC	3158	Peterwell 138/69kV Transformer Replacement	Peterwell 138/69kV Transformer Replacement	WI						\$3,246,000	6/1/2015	6/1/2015	Proposed	138	69	C	Y
C	West	ATC LLC	3159	West Middleton-Timberlane-Stage Coach Uprate	West Middleton-Timberlane-Stage Coach 69kV line Uprate	WI						\$1,808,043	6/1/2015	6/1/2015	Conceptual	69		C	Y
C	West	GRE	2669	Shoal Lake (Lawrence Lake) 115 kV line	Shoal Lake (Lawrence Lake) 115 kV line	MN		Other		Not Shared	Distribution	\$6,450,515	12/2/2013	12/2/2013	Planned	115		C	Y
C	West	GRE	2600	Big Sandy (LCP) 4.0 mile, 69 kV line	Big Sandy (LCP) 4.0 mile, 69 kV line	MN		Other		Not Shared	Distribution	\$5,149,000	10/30/2015	10/30/2015	Planned	69		C	Y
C	West	GRE	2632	Oniquum 115 kV Conversion	Oniquum 115 kV Conversion	MN						\$5,300,000	12/1/2013	12/1/2013	Proposed	115		C	Y
C	West	GRE	3393	Peterson 115 kV Distribution	Convert Peterson Substation from 24 kV to 115 kV operation	MN		Other		Not Shared	Reliability	\$742,680	11/1/2013	11/1/2013	Planned	115		C	Y
C	West	OTP, XEL, GRE, MP, MHEB	3085	Dorsey - Maple River - Helena 500kV	Dorsey - Maple River 50% series compensated 500kV line with one 500/345kV 1,200 MVA transformer at Maple River. Maple River - Helena 50% series compensated 500kV line with two 1,200MVA transformers at Helena.	MN		TDSP		Direct Assigned		\$1,180,000,000	6/1/2017	6/1/2017	Proposed	500	345	C	Y
C	West	ITCM	1746	Lakefield-Adams 161kV Rebuild	Rebuild Lakefield-Fox Lake-Rutland-Winnepago-Hayward-Adams 161kV line to double ckt 345 & 161kV. Allow for a 345kV line position for future use.	MN		BaseRel				\$97,580,000	12/31/2011	12/31/2015	Proposed	161		C	Y
C	West	OTP, XEL	3204	Sheyenne - Audubon 230 kV line	Sheyenne - Audubon 230 kV line	MN	ND					\$6,000,000	12/31/2015	12/31/2015	Planned	230		C	Y
C	West	ATC LLC	3510	Mukwonago-St Martins 138 kV Rebuild	Rebuild Mukwonago-Edgewood-St. Martins 138 kV Line, includes replacing jumpers at Edgewood and Mukwonago	WI						\$19,200,000	6/1/2017	6/1/2017	Proposed	138		C	Y
C	West	ATC LLC	3511	Edgewater-Saukville 345 kV Uprate	AM project to uprate Edgewater to Saukville line clearance issues	WI						\$1,798,252	11/14/2011	11/14/2011	Proposed	345		C	Y
C	Central	AmerenIL	1536	Latham-Mason City - Reconductor	Reconductor from Latham Tap to Kickapoo Tap	IL						\$4,870,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	1538	Pana, North-Ramsey, East - Rebuild Line	Reconductor 18.43 miles of line to 2000 A summer emergency capability.	IL						\$5,500,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	1539	Roxford Substation - Install 345 kV PCB	Install 345 kV PCB on Roxford-Stallings line position	IL						\$1,000,000	6/1/2015	6/1/2015	Proposed	345		C	Y
C	Central	AmerenIL	1540	Sidney-Windsor - Reconductor	Reconductor 13.1 miles to 1600 A Summer Emergency Capability	IL						\$3,900,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	2232	MTEP08 Reference Future EHV Overlay - East Moline to Kewanee	Build 345 kV circuit from East Moline to Kewanee in Illinois	IL						\$44,000,000	8/1/2018	8/1/2018	Conceptual	345	138	C	Y
C	Central	AmerenIL	2233	MTEP08 Reference Future EHV Overlay - Kewanee to Tazewell	Build 345 kV circuit from Kewanee to Tazewell in Illinois	IL						\$85,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	Central	AmerenIL	2242	MTEP08 Reference Future EHV Overlay - Norris City to Albion	Build 345 kV circuit from Norris City to Albion in Illinois	IL						\$50,000,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	Central	AmerenIL	2983	Mt. Carmel Capacitor Banks	Mt. Carmel - Install capacitor bank(s)	IL						\$1,500,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenIL	2985	Monmouth Blvd. Capacitor Bank	Monmouth Blvd 138/69 kV Substation - Install 138 kV 30 Mvar capacitor bank and circuit breaker.	IL						\$1,500,000	6/1/2014	6/1/2014	Proposed	138		C	Y

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C	Central	AmerenIL	2994	Gillespie Macoupin Substation - 2nd Transformer	Gillespie Macoupin 138-34.5 kV Substation - Tap Wood River-North Staunton 138 kV Line 1436 and make a 138 kV "in-out" arrangement at the substation with installation of the 2nd. 138-34.5 kV transformer. 2-2000 A. 138 kV PCB's needed.	IL						\$2,000,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	2995	Brokaw Substation Bus Conductor Replacement	Brokaw 345/138 kV Substation - Replace 477 kcmil ACSR Bus Conductor in Brokaw-Normal East 138 kV Line 1578 position with conductor capable of carrying 1200 A continuously.	IL						\$100,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	2998	LaSalle-Oglesby Main Line 1496 Reconductoring	LaSalle-Oglesby Main 138 kV Line 1496 - Reconductor 2.16 miles of 477 kcmil ACSR and 336 kcmil ACSR with conductor capable of carrying 1200 A under summer emergency conditions.	IL						\$650,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3001	Mascoutah Area 345/138 kV Substation	Mascoutah Area 345/138 kV Substation - Install a new 345/138 kV Substation. Supply from the Baldwin-Prairie State 345 kV line. 1-560 MVA 345/138 kV transformer, 3-345 kV PCB's, 1-138 kV PCB.	IL						\$9,000,000	6/1/2015	6/1/2015	Proposed	345	138	C	Y
C	Central	AmerenIL	3002	N. Decatur-Clinton Rt. 54 Line 1313 Reconductoring	N. Decatur-Clinton Rt. 54 138 kV Line 1313 - Reconductor 5.41 miles of 336 kcmil ACSR conductor in the N. Decatur-County Hwy. 20 line section with conductor capable of carrying 1200 A under summer emergency conditions.	IL						\$1,650,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3004	Gilman Capacitor Bank	Gilman 138-69 kV Substation - Install 138 kV capacitor bank and PCB	IL						\$1,500,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3005	S. Belleville-Tilden Terminal Equipment	S. Belleville-Tilden 138 kV Line 1526 - Replace 1200 A terminal equipment (PCB, CT's, and bus conductor) at S. Belleville Substation with equipment capable of carrying 2000 A continuously.	IL						\$1,100,000	12/1/2015	12/1/2015	Proposed	138		C	Y
C	Central	AmerenIL	3008	Vermilion-Champaign Reconductoring	Vermilion-Champaign 138 kV Line 1396 - Reconductor 26.8 miles of 477 kcmil ACSR with minimum 1200 A SE capability.	IL						\$8,100,000	6/1/2016	6/1/2016	Conceptual	138		C	Y
C	Central	AmerenIL	3011	Joppa-Mound City 161 kV Line Reconductoring	Joppa-Mound City 161 kV Line - Reconductor 23.4 mi. 556 ACSR with conductor capable of carrying 1200 A under summer emergency conditions.	IL						\$7,100,000	6/1/2017	6/1/2017	Conceptual	161		C	Y
C	Central	AmerenIL	3012	Normal East Substation Terminal Upgrade	Normal East 138/34 kV Substation - Upgrade 600 A terminal equipment to minimum 1200 A SE capability in the Brokaw-Normal East 138 kV line terminal.	IL						\$100,000	6/1/2017	6/1/2017	Proposed	138		C	Y
C	Central	AmerenIL	3013	Turkey Hill-Cahokia Reinsulation to 345 kV	Turkey Hill-Cahokia 345 kV - Reinsulate the existing Turkey Hill-Cahokia 138 kV Line 1492 (approx. 19 miles) to 345 kV service.	IL						\$1,000,000	6/1/2017	6/1/2017	Proposed	345		C	Y
C	Central	AmerenIL	3014	Cape-Joppa 161 kV Line Reconductoring	Cape-Joppa 161 kV Line - Reconductor line (40.27 miles) to 1600 A Summer Emergency Capability.	IL						\$12,100,000	6/1/2018	6/1/2018	Proposed	161		C	Y
C	Central	AmerenIL	3015	Grand Tower-E.W. Frankfort 345 kV Line	Grand Tower-E.W. Frankfort 345 kV - New 41 mile, 345 kV, 3000 A line. 345 kV PCBs: 2-Grand Tower; 2-E.W. Frankfort	IL						\$82,000,000	6/1/2018	6/1/2018	Conceptual	345		C	Y
C	Central	AmerenIL	3016	Galesburg Substation Transformer Addition	Galesburg 345/138 kV Substation - 1-560 MVA 345/138 kV transformer, 3-345 kV PCBs, 1-138 kV PCB	IL						\$18,480,000	11/15/2019	11/15/2019	Conceptual	345	138	C	Y
C	Central	AmerenIL	3018	Tazewell-Tremont 138 kV Line	Tazewell-Tremont 138 kV Line - Physically inspect 3 miles of existing deenergized 477 kcmil ACSR line near Tremont Tap (Havana-Darvers 138 kV Line 1352). Construct 3 miles of new 138 kV line with 1200 A summer emergency capability to extend line to Tazewell	IL						\$2,922,000	6/1/2018	6/1/2018	Conceptual	138		C	Y
C	Central	AmerenIL	3019	Oglesby 345/138 kV Transformer Addition	Oglesby 345/138 kV Substation - 1-560 MVA 345/138 kV transformer, 1-138 kV PCB	IL						\$6,000,000	6/1/2018	6/1/2018	Conceptual	345	138	C	Y
C	Central	AmerenIL	3021	Mound City-Charleston 161 kV Line	Mound City-Charleston 161 kV Line - New 20 mile, 1200 A summer emergency capability line. 3-161 kV PCBs: 2-Mound City, 1-Charleston.	IL						\$23,000,000	6/1/2018	6/1/2018	Conceptual	161		C	Y
C	Central	AmerenIL	3023	E. Collinsville-Porter Road 138 kV Reconductoring	E. Collinsville-Porter Road 138 kV Line 1432 - Reconductor 5.15 miles of 477 kcmil ACSR with conductor capable of carrying 2000 A under summer emergency conditions.	IL						\$1,600,000	6/1/2018	6/1/2018	Proposed	138		C	Y
C	Central	AmerenIL	3026	Havana Plant-138 kV Connection for R.A.T.	Havana Plant 138 kV Switchyard - Add 138 kV Connection for new Reserve Auxiliary Transformer needed to supply new pollution control load.	IL						\$100,000	6/1/2019	6/1/2019	Conceptual	138		C	Y
C	Central	AmerenIL	3029	Gibson City Plant - Increase Outlet Line Capacity	Gibson City Plant 138 kV Outlet - Increase capability of Gibson City-Brokaw and Gibson City-Paxton 138 kV lines.	IL						\$6,750,000	6/1/2019	6/1/2019	Conceptual	138		C	Y
C	Central	AmerenIL	3033	Dupo Area 345/138 kV Substation	Dupo Area 345/138 kV Substation - 1-560 MVA Transformer, 8-138 kV PCBs. New 8 mi. 3000 A 345 kV line from Cahokia Substation, 2-345 kV PCBs @ Cahokia, and 138 kV Outlet to Cahokia-Meramec circuits near Lemay Taps. New Dupo-Dupo Ferry 138 kV 2000 A line.	IL						\$22,192,000	6/1/2019	6/1/2019	Conceptual	345	138	C	Y
C	Central	AmerenIL	3035	Kinmundy-Salem, West 138 kV - Increase Ground Clearance	Kinmundy-Salem, West 138 kV line - Increase clearances to ground.	IL						\$1,100,000	6/1/2019	6/1/2019	Conceptual	138		C	Y
C	Central	AmerenIL	3036	Latham Substation 2nd. 345/138 kV Transformer	Latham 345/138 kV Substation - Install 2nd. 345/138 kV, 448 MVA Transformer. 1-345 kV PCB, 1-138 kV PCB.	IL						\$5,000,000	6/1/2019	6/1/2019	Conceptual	345	138	C	Y

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C	Central	AmerenIL	3037	Rush Island-Dupo 345 kV Line	Rush Island-Dupo 345 kV Line - New 27 mile, 3000 A summer emergency capability line. Design for double-circuit. 2-345 kV PCBs: 1-Rush Island, 1-Dupo.	IL							\$49,000,000	6/1/2019	6/1/2019	Conceptual	345		C	Y
C	Central	AmerenIL	3039	Grand Tower-Joppa 345 kV Line	Grand Tower-Joppa 345 kV Line - New 50 mile 345 kV, 3000 A line. 345 kV PCBs: 2-Grand Tower, 1-Joppa.	IL							\$100,000,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	Central	AmerenIL	3040	Tazewell-S. Bloomington 345 kV Line	Tazewell-South Bloomington 345 kV Line - New 35 mile, 345 kV, 3000 A line. 345 kV PCBs: 2 at Tazewell, 3 at South Bloomington switching station.	IL							\$87,500,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	Central	AmerenIL	3043	LaSalle-Oglesby 345 kV Line	LaSalle-Oglesby 345 kV Line - New 22 mi. 3000 A summer emergency capability line; 1-345 kV PCB at LaSalle, 1-138 kV PCB at Oglesby.	IL							\$44,000,000	8/1/2020	6/1/2020	Conceptual	345		C	Y
C	Central	AmerenIL	3044	Roxford-Pawnee 345 kV Line	Roxford-Pawnee 345 kV Line - New 60 mile, 3000 A summer emergency capability line. 3-345 kV PCBs (1-Roxford, 2-Pawnee) Install WAMS - PMU at Pawnee on new line terminal.	IL							\$120,000,000	6/1/2021	6/1/2021	Conceptual	345		C	Y
C	Central	AmerenIL	3175	Palmvra Tap-Pawnee 765 kV Line	New 117 mile 765 kV, approx. 4000 A line	IL							\$347,557,224	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenIL	3176	Pawnee-Breed 765 kV Line	New 140 mile 765 kV, approx. 4000 A line	IL							\$404,702,844	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenIL	3177	Pawnee 765/345 kV Substation	New 2250 MVA, 765/345 kV Substation	IL							\$28,200,000	6/1/2020	6/1/2020	Conceptual	765	345	C	Y
C	Central	AmerenIL	3178	Pawnee-Powerton 765 kV Line	New 79 mile 765 kV, approx. 4000 A line	IL							\$224,509,670	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenIL	3183	Grand Tower 765/345 kV Substation	New 2250 MVA, 765/345 kV Substation	IL							\$28,200,000	6/1/2020	6/1/2020	Conceptual	765	345	C	Y
C	Central	AmerenIL	3184	Grand Tower-Rockport 765 kV Line	New 172 mile 765 kV, approx. 4000 A line	IL							\$494,508,712	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenIL	3349	East Galesburg Breaker Replacement	Replace breaker at East Galesburg with 1200 A breaker. Replace terminal equipment to 1200 A capability.	IL							\$1,000,000	6/1/2020	6/1/2020	Conceptual	138		C	Y
C	Central	AmerenIL	3350	East Kewanee-Princeton Tap of Hennepin-East Kewanee Reconnector	Reconnector 477 kcmil ACSR conductor to 1200 A summer emergency capability. Replace terminal equipment at East Kewanee to 1200 A capability.	IL							\$2,656,000	12/1/2012	12/1/2012	Planned	138		C	Y
C	Central	AmerenIL, Non-MISO	2197	MTEP08 Reference Future EHV Overlay - St. Francois to Rockport	Builds 765 kV circuit from St. Francois Station in Missouri to Rockport Station in Indiana (Located in 3 States: 15% in MO, 56% in IL, 29% in IN)	IL	IN, MO						\$599,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	Central	AmerenIL, Non-MISO	2215	MTEP08 Reference Future EHV Overlay - Coffeen to Sullivan	Build 765 kV circuit from Coffeen Station in Illinois to Sullivan Station in Indiana	IL	IN						\$322,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	Central	AmerenMO	2122	Belleau - GM - 3 to AECl Enon Substation 161 kV line	Belleau - GM - 3 to AECl Enon Substation 161 kV line	MO							\$1,896,500	11/17/2011	11/17/2011	Planned	161		C	Y
C	Central	AmerenMO	2292	Kelso 345/161 kV Substation	Replace 336 MVA, 345/161 kV Transformer with 450 MVA Transformer	MO		BaseRel					\$6,134,000	6/1/2016	6/1/2016	Proposed	345	161	C	Y
C	Central	AmerenMO	2967	Taum Sauk Capacitor Banks	Taum Sauk 138 kV Capacitor Banks - 2-30 Mvar banks; 2-138 kV synchronous PCBs.	MO							\$1,500,000	6/1/2014	6/1/2014	Conceptual	138		C	Y
C	Central	AmerenMO	2990	Conway-Tyson-3 and -4 Increase Ground Clearance	Conway-Tyson-3 and -4 138 kV - Increase ground clearance on Tyson-Orchard Gardens sections (7 miles)	MO							\$700,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenMO	2991	Mason Transformer Replacement	Mason 345/138 kV Substation - Replace 345/138 kV, 560 MVA Transformer #2 with a 700 MVA unit	MO							\$5,000,000	6/1/2014	6/1/2014	Proposed	345	138	C	Y
C	Central	AmerenMO	2993	Dupo Ferry-Buck Knob Reconductoring	Dupo Ferry-Buck Knob 138 kV Line - Replace 22 mi. of 2-300 ACSR with maximum size conductor existing towers will support.	MO							\$6,600,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	AmerenMO	2996	Montgomery-Spencer Creek - Increase Ground Clearance	Montgomery-Spencer Creek 345 kV - Increase ground clearance on 28 miles of 795 kcmil ACSR conductor and upgrade terminal equipment at Montgomery Substation.	MO							\$9,500,000	6/1/2015	6/1/2015	Proposed	345		C	Y
C	Central	AmerenMO	2998	Overton 2nd Transformer	Overton 345/161 kV Substation - 2nd Transformer - 450 MVA, 1-161 kV PCB, 2-345 kV PCBs, 345 kV Ring Bus	MO							\$5,000,000	6/1/2015	6/1/2015	Conceptual	345	161	C	Y
C	Central	AmerenMO	3000	Miller Substation Transformer Addition	Miller 138/161 kV Substation - Install a new 300 MVA 138/161 kV transformer to convert Miller-Zion line to 161 kV operation and increase voltage support to Jefferson City, Missouri area.	MO							\$5,000,000	6/1/2015	6/1/2015	Proposed	345	161	C	Y
C	Central	AmerenMO	3007	Camden-Ullman 138 kV Line	Camden-Ullman 138 kV Line - Construct approximately 16 miles of 138 kV line between Camden Substation and Ullman (switching station connecting to Maries-Osage-1 138 kV line), with 1600 A summer emergency capability. Install 300 MVA, 161/138 kV transformer	MO							\$29,000,000	6/1/2016	6/1/2016	Proposed	161	138	C	Y
C	Central	AmerenMO	3008	Overton Capacitor Bank	Overton 161 kV Capacitor Bank - 1-90 Mvar capacitor bank, 1-161 kV synchronous PCB, 1-161 kV reactor.	MO							\$1,500,000	6/1/2016	6/1/2016	Conceptual	161		C	Y
C	Central	AmerenMO	3020	Overton-Columbia Terminal Upgrade	Overton-Huntsdale-Columbia 161 kV - Replace 800 A CT at Overton Terminal with 1200 A unit.	MO							\$50,000	6/1/2018	6/1/2018	Proposed	161		C	Y
C	Central	AmerenMO	3025	Rivermines-N. Farmington - Second 138 kV Line	Rivermines-N. Farmington 138 kV Line - Construct a second 5.5 mile 138 kV line.	MO							\$7,500,000	6/1/2019	6/1/2019	Proposed	138		C	Y
C	Central	AmerenMO	3027	Campbell Substation 2nd. 345/138 kV Transformer	Campbell 345/138 kV Substation - 2nd 560 MVA transformer; New 12.8 mi. Roxford-Campbell 345 kV 3000 A summer emergency capability line; 2-345 kV PCBs (1-Campbell, 1-Roxford); 1-138 kV PCB @ Campbell.	MO			Shared				\$6,000,000	6/1/2019	6/1/2019	Conceptual	345	138	C	Y
C	Central	AmerenMO	3028	Campbell-Euclid-Page 138 kV Line Rebuild	Campbell-Euclid-Page 138 kV Line - Rebuild 5.25 mi. double-circuit 138 kV 2000 A SE capability, 3-138 kV PCBs (2-Campbell, 1-Page). Operate Euclid 138 kV Bus-Tie normally closed.	MO							\$21,300,000	6/1/2019	6/1/2019	Conceptual	345		C	Y

Target Appendix	Geographic			Project Summary Information from Facility table															
	Planning Region	Location by TO Member System	ProjID	Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share	Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
C	Central	AmerenMO	3030	Labadie-Mason 345 kV Line #3	Labadie-Mason 345 kV Line #3 - New 25 mi. 3000 A summer emergency capability line designed for double-circuit. 345 kV PCBs: 1-Labadie, 1-Mason. Install WAMS - PMU at Labadie on new line terminal	IL	MO					\$44,250,000	6/1/2019	6/1/2019	Conceptual	345		C	Y
C	Central	AmerenMO	3031	Page Area 345/138 kV Substation	Page Area 345/138 kV Substation - 2,560 MVA transformers. 9-138 kV PCBs: 2-transformer, 1-bus-tie, 6-line (2-Warson, 2-Page, 2-Hunter)		MO					\$11,000,000	6/1/2019	6/1/2019	Conceptual	345	138	C	Y
C	Central	AmerenMO	3032	Campbell-Page-Mason 345 kV Line	Campbell-Page-Mason 345 kV Line - New 16.5 mi. 3000 A summer emergency capability line, plus reutilization of 14.5 miles of existing Page-Sloux-4 at 345 kV.		MO					\$35,750,000	6/1/2019	6/1/2019	Proposed	345		C	Y
C	Central	AmerenMO	3034	Loose Creek-Kingdom City 345 kV Line	Loose Creek-Kingdom City 345 kV Line - New 25 mile 345 kV, 3000 A line. 2-345 kV PCBs at Loose Creek, 2-345 kV PCBs at Kingdom City		MO					\$52,000,000	6/1/2019	6/1/2019	Conceptual	345		C	Y
C	Central	AmerenMO	3038	Loose Creek-Barnett-Windsor-Pleasant Hill 345 kV Line	Loose Creek-Barnett-Windsor-Pleasant Hill 345 kV Line New 138 mile 345 kV, 3000 A line. 560 MVA, 345/161 kV transformer at Barnett Substation. 345 kV PCBs: 2 at Loose Creek, 2 at Barnett, 2 at Windsor, 2 at Pleasant Hill		MO					\$249,000,000	6/1/2019	6/1/2019	Conceptual	345		C	Y
C	Central	AmerenMO	3042	Palmyra-Thomas Hill-Fairport 345 kV Line	Palmyra-Thomas Hill-Fairport - New 122 mile 345 kV, 3000 A line. 345 kV PCBs: 2 at Palmyra, 2 at Thomas Hill, 2 at Fairport		MO					\$220,000,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	Central	AmerenMO	3045	St. Francois-Fletcher 345 kV Line	St. Francois-Fletcher 345 kV Line - New 48 mi. 3000 A SE capability. 345 kV terminals at St. Francois & Fletcher. Install WAMS - PMU at St. Francois on new line terminal.		MO					\$86,000,000	6/1/2021	6/1/2021	Conceptual	345		C	Y
C	Central	AmerenMO	3171	West Adair-Fairport 345 kV Line	New 113 mile 345 kV, 3000 A line		MO					\$171,819,825	6/1/2018	6/1/2018	Conceptual	345		C	Y
C	Central	AmerenMO	3173	Fairport-Palmyra Tap 765 kV Line	New 176 mile 765 kV, approx. 4000 A line		MO					\$500,335,836	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenMO	3174	Palmyra Tap 765/345 kV Substation	New 2250 MVA, 765/345 kV Substation		MO					\$28,200,000	6/1/2020	6/1/2020	Conceptual	765	345	C	Y
C	Central	AmerenMO	3179	Palmyra Tap-Montgomery 765 kV Line	New 68 mile 765 kV, approx. 4000 A line		MO					\$192,436,880	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenMO	3180	Montgomery 765/345 kV Substation	New 2250 MVA, 765/345 kV Substation		MO					\$28,200,000	6/1/2020	6/1/2020	Conceptual	765	345	C	Y
C	Central	AmerenMO	3181	Montgomery-St. Francois 765 kV Line	New 104 mile 765 kV, approx. 4000 A line		MO					\$295,069,852	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenMO	3182	St. Francois-Grand Tower 765 kV Line	New 63 mile 765 kV, approx. 4000 A line		MO					\$193,607,736	6/1/2020	6/1/2020	Conceptual	765		C	Y
C	Central	AmerenMO	3187	St. Francois 765/345 kV Substation	New 2250 MVA, 765/345 kV Substation		MO					\$28,200,000	6/1/2020	6/1/2020	Conceptual	765	345	C	Y
C	Central	AmerenMO, AmerenIL	2195	MTEP08 Reference Future EHV Overlay - Montgomery to Coffeen	Builds 765 kV circuit from Montgomery Station in Missouri to Coffeen Station in Illinois		IL					\$343,000,000	6/1/2018	6/1/2018	Conceptual	765		C	Y
C	Central	BREC	3435	Rome Junction to West Owensboro 69 kV reconductor.	Reconductor 5.8 miles of 3/0 and 267 MCM ACSR with 336 MCM ACSS		KY					\$440,000	12/31/2017	12/31/2017	Proposed	69		C	Y
C	Central	BREC	3436	Wilson to Sacramento 69 kV line addition	New 11 mile line and line terminal at Wilson		KY					\$2,100,000	12/31/2018	12/31/2018	Proposed	69		C	Y
C	Central	BREC	3437	Thruston Junction to East Owensboro reconductor.	Reconductor 4 miles of 3/0 ACSR with 336 MCM ACSR		KY					\$40,000	12/31/2018	12/31/2018	Proposed	69		C	Y
C	Central	BREC	3438	Daviess County to Philpot Tap reconductor.	Reconductor 7.7 miles of 267 MCM ACSR with 336 MCM ACSS		KY					\$580,000	12/31/2018	12/31/2018	Proposed	69		C	Y
C	Central	BREC	3439	Ensor 161/69 kV Substation	Construct new 161/69 kV substation with 56 MVA transformer.		KY					\$6,200,000	12/31/2022	12/31/2022	Proposed	161	69	C	Y
C	Central	BREC	3440	Reid EHV 161/69 kV transformer	Add a 56 MVA transformer to the existing Reid EHV substation.		KY					\$5,000,000	12/31/2024	12/31/2024	Proposed	161	69	C	Y
C	Central	BREC	3441	Olivet Church Road to Olivet Church Road Tap 69 kV reconductor.	Reconductor 1.4 miles of 4/0 ACSR with 336 MCM ACSR		KY					\$150,000	12/31/2020	12/31/2020	Proposed	69		C	Y
C	Central	BREC	3442	White Oak transformer addition	Add a second 56 MVA transformer to the White Oak 161/69 kV substation.		KY					\$1,900,000	12/31/2024	12/31/2024	Proposed	161	69	C	Y
C	Central	BREC	3443	Hardinsburg 161/69 transformer replacements	Replace both 50 MVA 161/69 kV transformers with 100 MVA transformers.		KY					\$4,000,000	12/31/2017	12/31/2017	Proposed	161	69	C	Y
C	Central	BREC	3444	Meade County 161/69 transformer addition	Add a third 56 MVA transformer to the existing Meade County substation.		KY					\$700,000	12/31/2020	12/31/2020	Proposed	161	69	C	Y
C	Central	BREC	3445	Brandenburg 69 kV capacitor addition	Add a 6 MVAR capacitor in the Brandenburg/Battletown area.		KY					\$300,000	12/31/2020	12/31/2020	Proposed	69		C	Y
C	Central	BREC	3446	Hardinsburg No. 1 to Harned 69 kV reconductor.	Reconductor 2 miles of 3/0 ACSR with 336 MCM ACSS		KY					\$170,000	12/31/2022	12/31/2022	Proposed	69		C	Y
C	Central	DEM	840	Rushville 69kV Cap	Add 14.4 MVAR 69kV capacitor at Rushville.		IN	Other	Not Shared			\$510,845	6/1/2016	6/1/2016	Planned	69		C	NT
C	Central	DEM	1245	Frankfort 230 36MVAR 69kV capacitor	Install 36 MVAR 69kV capacitor.		IN	Other	Not Shared			\$632,358	12/31/2016	12/31/2016	Planned	69		C	NT
C	Central	DEM	1264	Speed	Replace existing 345/138 transformer at Speed with a new transformer, rated at 3,000A or higher.		IN	BaseRel	Shared			\$7,541,500	6/1/2022	6/1/2022	Alternative	345	138	C	Y
C	Central	DEM	1518	Curliss 138/69	Install new Curliss 138-69 kV sub in the 5884 ckt, 150 MVA xfmr, install one 69 kV circuit. Convert Glen Este and Batavia dist subs from 34 to 69kV primary voltage.		OH	Other	Not Shared			\$9,818,000	6/1/2016	6/1/2016	Proposed	138	69	C	Y
C	Central	DEM	1571	Rockville (PL) to Avon East new 138kV line	Construct 4.3 miles / 954ACSR of 138kV line from IPL Rockville to Avon East		IN	Other				\$2,980,000	6/1/2015	6/1/2015	Alternative	138		C	Y
C	Central	DEM	1900	Avon Industrial Park 138 (or 69)-12kV new dist sub	Avon Industrial Park (aka Central Logistics) - Construct 69/138-12kV - 22.4 MVA sub and 2.6 mile - 69kV radial line from roughly the Avon South sub - unknown if this will be a 69 or 138 kv sub		IN	Other				\$923,000	6/1/2015	6/1/2015	Proposed	138	12	C	NT
C	Central	DEM	1904	Batesville to Hillenbrand 69kV uprate	Uprate 69kV Batesville to Hillenbrand to 100C - 4/0acsr - 2.1 miles - 69107 ckt		IN	Other	Not Shared			\$115,961	6/1/2015	6/1/2015	Planned	69		C	NT
C	Central	DEM	2124	Brooklyn to HE Brooklyn 69kV Reconductor	Brooklyn Sub to HE Brooklyn Sub reconductor 1.28 miles of 6940 line 4/0 Cu with 954ACSR@100C		IN	Other	Not Shared			\$320,000	6/1/2020	6/1/2020	Planned	69		C	NT
C	Central	DEM	2125	Centerton 138/69kV Bk 1 replacement	Upgrade/replace existing 75MVA 138/69kV bank with 120MVA bank		IN	Other				\$3,091,000	6/1/2020	6/1/2020	Planned	138	69	C	NT

Appendices A, B, C: Project Table 9/7/2011

Project Summary Information from Facility table

Target Appendix	Planning Region	Geographic Location by TO Member System	PrjID	Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
C	Central	DEM	2129	Plainfield S. to HE Mooresville Jct 69kV reconductor	Plainfield South to HE Mooresville Jct 69kV reconductor 4/0Cu with 954ACSR - 2.03 miles	IN		Other	Not Shared		\$980,000	6/1/2020	6/1/2020	Planned	69		C	NT
C	Central	DEM	2135	Franklin 230 Sub 69kV Cap	Franklin 230 Sub 69kV Cap - Install 36MVAR 69kV bus capacitor bank	IN		Other	Not Shared		\$400,000	6/15/2014	6/15/2014	Planned	69		C	NT
C	Central	DEM	2139	Greenwood West Sub 69kV #2 switch upgrade	Greenwood West Sub - upgrade (or replace, if required) 69kV Loadbreak switch #2 for 1200amp capacity in the 6999 ckt.	IN		Other	Not Shared		\$50,000	6/30/2016	6/30/2016	Planned	69		C	NT
C	Central	DEM	2140	Greenwood West to Lenore Jct 69kV reconductor	Greenwood West to Lenore Jct reconductor 69kV - 6949 ckt. with 477ACSR @ 100C conductor	IN		Other			\$1,377,500	6/30/2015	6/30/2015	Planned	69		C	NT
C	Central	DEM	2144	Franklin 230 to Earlywood 69kV Reconductor	Franklin 230kV sub to Earlywood sub reconductor 1.06 mile - 69kV - 69165 line with 954ACSR@100C	IN		Other	Not Shared		\$424,000	6/30/2015	6/30/2015	Planned	69		C	NT
C	Central	DEM	2145	Franklin 230/69 Bks 1&2 Replacement	Franklin 230 sub - Replace 230/69kV barks 1&2 each with a 200MVA LTC transformer	IN		Other			\$4,800,000	6/1/2020	6/1/2020	Planned	230	69	C	Y
C	Central	DEM	2146	HE Honey Creek Jct to Frances Creek Jct 69kV reconductor	HE Honey Creek Jct to Frances Creek Jct. reconductor 69kV - 1.12 mile line section of the 69102 ckt. with 954ACSR 100C conductor.	IN		Other	Not Shared		\$420,000	6/30/2015	6/30/2015	Planned	69		C	NT
C	Central	DEM	2147	Whiteland to Madison J 69kV reconductor	Whiteland Sub to Greenwood North Tap to Madison Ave Jct reconductor 3.44 mile 69kV - 6997 line with 954ACSR 100C conductor.	IN		Other			\$1,376,000	6/30/2015	6/30/2015	Planned	69		C	NT
C	Central	DEM	2247	MTEP08 Reference Future EHV Overlay - Gwynn 765/345 Autotransformation	Add Gwynn 765/345 kV autotransformer in Indiana	IN					\$20,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	Central	DEM	2328	Speed to HE Bethany 69kV - 6955 Reconductor Ph2	Speed to HE Bethany 69kV - 6955 Reconductor Ph2 - Replace 1.6 miles of 4/0 ACSR with 477 ACSR (new limiter 600A switches)	IN		Other	Not Shared		\$480,000	6/1/2015	6/1/2015	Planned	69		C	NT
C	Central	DEM	2329	Clarksville to Indiana Arsenal 69kV - 6955 ckt. reconductor	Clarksville to Indiana Arsenal 69kV - 6955 ckt. reconductor 1.1 miles of 4/0acsr with 477ACSR at 100C (this is Phase 2 remainder of 4/0ACSR in this line section)	IN		Other	Not Shared		\$330,000	6/1/2014	6/1/2014	Planned	69		C	NT
C	Central	DEM	2330	New Albany to HE Georgetown 69kV - 6970 ckt. Reconductor	New Albany to HE Georgetown 69kV - 6970 ckt. Reconductor 1.24 miles of 4/0acsr with 477acsr@100C	IN		Other	Not Shared		\$666,000	6/1/2014	6/1/2014	Planned	69		C	NT
C	Central	DEM	2864	Centeron to Martinsville 69kV - 69163 ckt. Reconductor	Reconductor the 69kV-69163 ckt - 3.47 miles of 365ACSR 80C and 0.23 miles of 477ACSR 80C to 954ACSR 100C	IN					\$1,110,000	6/1/2020	6/1/2020	Planned	69		C	NT
C	Central	DEM	2868	Fairfax to Senco 69kV - F868 Reconductor	F868 - Reconductor Fairfax to Senco - Replace 4/0 ACSR with 954 ACSR - Approx 4.6 miles	OH					\$1,711,992	6/1/2014	6/1/2014	Proposed	69		C	NT
C	Central	DEM	2873	Danville E. 69kV looped feed	Construct new Danville East substation near HRH hospital - single 22.4MVA transformer - 6945 ckt to be looped through	IN					\$500,000	6/1/2016	6/1/2016	Proposed	69	12	C	NT
C	Central	DEM	3382	Vincennes Vigo St. 138kV Dist Sub	Build new radial 138kV line and add breaker at Vincennes 138kV sub to convert Vigo St. sub from 34kV to 138kV	IN					\$1,800,000	12/31/2017	12/31/2017	Planned	138	12	C	Y
C	Central	DEM, IPL	2783	Wheatland - Bloomington 345 kV line	Build new 345 kV circuits from Wheatland Power Facility to Bloomington substation	IN					\$105,000,000	5/1/2012	5/1/2012	Proposed	345		C	Y
C	Central	DEM, Non-MISO	2203	MTEP08 Reference Future EHV Overlay - Greentown to Blue Creek	Build 785 kV circuit from Greentown Station to Blue Creek Station in Indiana	IN					\$191,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	Central	DEM, Non-MISO	2213	MTEP08 Reference Future EHV Overlay - Ghent to Buffinton	Build 345 kV circuit from Ghent Station to Buffinton Station in Kentucky	KY					\$47,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	Central	IPL	2246	MTEP08 Reference Future EHV Overlay - Pete 765/345 Autotransformation	Add Pete 765/345 kV autotransformer in Indiana	IN					\$20,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	Central	IPL	2897	Petersburg - Frances Creek - Hanna 345 kV line rating upgrade	Increase line rating from 956 to 1195 MVA	IN		BaseRel	Not Shared		\$2,500,000	6/1/2013	6/1/2013	Proposed	345		C	Y
C	Central	IPL	2898	Hanna - Southeast 138 kV line rating upgrade	Increase line rating from 287 to 574 MVA. Remove operating guide # 2007-S-012-C Hanna-Southeast-138-IPL	IN		BaseRel	Not Shared		\$4,000,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	Central	IPL	2899	Guion - Whitestown 345 kV line rating upgrade	Increase line rating from 956 to 1195 MVA	IN		BaseRel	Not Shared		\$1,000,000	6/1/2015	6/1/2015	Proposed	345		C	Y
C	Central	ITCM, Non MISO	2198	MTEP08 Reference Future EHV Overlay - Rockcreek to Pontiac	Builds 765 kV circuit from Rock Creek Station in Iowa to Pontiac Station in Illinois	IA	IL				\$378,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	Central	MEC, AmerenMo	2194	MTEP08 Reference Future EHV Overlay - Toledo to Montgomery	Builds 765 kV circuit from Toledo Station in Iowa to Montgomery Station in Missouri	IA	MO				\$871,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	Central	Non-MISO	2199	MTEP08 Reference Future EHV Overlay - Pontiac to Dequine	Builds 765 kV circuit from Pontiac Station in Illinois to Dequine Station in Indiana	IL	IN				\$265,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	Central	Non-MISO	2200	MTEP08 Reference Future EHV Overlay - Dequine to Chicago	Build 765 kV circuit from Dequine Station to New South Chicago Station in Indiana	IN					\$161,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	East	ATC LLC, ITC	2208	MTEP08 Reference Future EHV Overlay - Dead River to Livingston	Build 345 kV circuit from Dead River Station to Livingston Station in Michigan	MI					\$329,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	East	ITC	694	Saratoga Station	Saratoga 345/120 kV switching station	MI						12/31/2018	12/31/2018	Proposed	345	120	C	Y
C	East	ITC	908	Lulu Station	Tap the Majestic to Lemoyne and Milan to Allen Junction to Monroe 3-4 345 kV circuits into a new 345 kV Switching Station at the Lulu site. Project also adds three miles 345 kV double circuit tower from Monroe to out the Lulu-Lemoyne circuit into Monroe, moving the Lemoyne 345 kV interconnection with First Energy to the Monroe 3-4 345 kV bus	MI						6/1/2018	6/1/2018	Proposed	345		C	Y
C	East	ITC	1012	Wayne - Newburgh Split	Establish new Wayne-Newburgh 120 kV circuit 3 using currently paralleled wire from existing Wayne-Newburgh circuit 2	MI						6/1/2014	6/1/2014	Proposed	120		C	Y

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C	East	ITC	1295	Quaker to Southfield #2 120 kV	Rebuild the existing Quaker - Drexel - Southfield line to double circuit and construct a new Quaker - Southfield #2 120 kV line (7.5 miles total).	MI							6/30/2016	6/30/2016	Proposed	120		C	Y
C	East	ITC	1382	Michigan 765 kV Backbone	Project constructs a 765 kV circuit from AEP's Cook station to Michigan.	MI	IN OH					\$2,500,000,000	12/31/2016	12/31/2016	Proposed	765	138	C	Y
C	East	ITC	1550	Hager - Sunset 120 kV	Transposes the existing cabled line entrance of the Hager-Sunset 120 kV Line with the overhead line entrance of the Sunset-Southfield 120 kV line to increase the thermal rating of Hager-Sunset.	MI							5/31/2015	5/31/2015	Proposed	120		C	Y
C	East	ITC	1854	Trenton Channel - Riverview 120kV	Install a new 120 kV circuit from Trenton Channel to Riverview utilizing the existing de-energized Trenton Channel to Jefferson circuit to get from Trenton Channel to Jefferson, or rebuild it if required, and then from Jefferson to Riverview either install a new 120 kV single circuit lower line or replace the existing double circuit towers with triple circuit towers. Also reductor/rebuild Trenton Channel to Jefferson 120 kV #4 circuit (3.63 miles).	MI							6/1/2018	6/1/2018	Proposed	120		C	Y
C	East	ITC	1858	Wayne 345 kV Overloaded S.E. Replacement	Replace various pieces of station equipment that are overloaded at Wayne station under normal conditions and for various contingencies.	MI							4/14/26	4/14/26	Proposed	345		C	Y
C	East	ITC	2205	MTEP08 Reference Future EHV Overlay - Evans to Spreague	Build 765 kV circuit from Evans Station to Spreague Station in Michigan.	MI						\$304,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	East	ITC	2206	MTEP08 Reference Future EHV Overlay - Spreague to Bridgewater	Build 765 kV circuit from Spreague Station to Bridgewater Station in Michigan.	MI						\$135,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	East	ITC	2933	Superior - Wayne 120 kV Rebuild	Rebuild the 10.5 miles of the Superior to Wayne 120 kV circuit from 477 ACSR to 954 ACSR on new structures.	MI		BaseRel		Shared		\$8,800,000	6/1/2013	6/1/2013	Proposed	120		C	Y
C	East	ITC	3129	Belle River - Bunce Creek 230 kV	Construct a new 230 kV line between Belle River and Bunce Creek substations. This project includes a 345/230 kV transformer at Belle River and 230/120 kV transformer at Bunce Creek (13.5 miles total).	MI							6/1/2017	6/1/2017	Proposed	345	230	C	Y
C	East	ITC	3130	Thumb Area 120 kV Capacitors	Install a 50 MVAR capacitor at the Stratford and Wabash 120 kV stations.	MI							6/1/2013	6/1/2013	Proposed	120		C	Y
C	East	ITC	3140	Belle River - St. Clair #2 345 kV	Build a second 345 kV circuit from Belle River to St. Clair (1.12 miles total).	MI							6/1/2017	6/1/2017	Proposed	345		C	Y
C	East	ITC	3141	Redrun - Chestnut #2 120 kV & L-N-NW - Lincoln 120 kV	Build a new 120 kV line between Redrun and Chestnut (5 miles total).	MI							6/1/2014	6/1/2014	Proposed	120		C	Y
C	East	ITC	3142	L-N-NW - Lincoln 120 kV	Rebuild 2.95 miles of 477 ACSR to 954 ACSR on the L-N-NW - Lincoln 120 kV line.	MI							6/1/2016	6/1/2016	Proposed	120		C	Y
C	East	ITC	3143	Northwest - Southfield 120 kV	Rebuild 0.13 mile of 477 ACSR to 1431 ACSR and replace the line entrance at Northwest substation.	MI							6/1/2019	6/1/2019	Proposed	120		C	Y
C	East	ITC	3147	Phoenix 120 kV Capacitor	Install a 75 MVAR 120 kV capacitor at Phoenix.	MI							6/1/2013	6/1/2013	Proposed	120		C	Y
C	East	ITC	3148	Riverview - I-N-RV 120 kV	Replace wavetrap at Riverview.	MI							6/1/2013	6/1/2013	Proposed	120		C	Y
C	East	ITC	3496	NERC Alert Facility Ratings for 2012	Verify and remediate facilities as required due to the industry-wide NERC alert	MI							12/31/2012	12/31/2012	Planned			C	Y
C	East	ITC	3497	NERC Alert Facility Ratings for 2013	Verify and remediate facilities as required due to the industry-wide NERC alert	MI							12/31/2013	12/31/2013	Planned			C	Y
C	East	ITC	3498	NERC Alert Facility Ratings for 2014	Verify and remediate facilities as required due to the industry-wide NERC alert	MI							12/31/2014	12/31/2014	Planned			C	Y
C	East	ITC, Non-MISO	2204	MTEP08 Reference Future EHV Overlay - Cook to Evans	Build 765 kV circuit from Cook Station to Evans Station in Michigan.	MI						\$319,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	East	ITC, Non-MISO	2207	MTEP08 Reference Future EHV Overlay - Bridgewater to Blue Creek	Build 765 kV circuit from Bridgewater Station in Michigan to Blue Creek Station in Indiana (1% in Indiana, 26% in OH, 73% in MI).	MI						\$447,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	East	ITC, Non-MISO	2209	MTEP08 Reference Future EHV Overlay - Bridgewater to South Canton	Build 765 kV circuit from Bridgewater Station in Michigan to South Canton Station in Ohio.	MI	OH					\$538,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	East	METC	642	Argenta - Hazelwood(Sag) 138 ckt # 1	Argenta - Hazelwood(Sag) 138 ckt # 1	MI				Excluded		\$50,000	6/1/2017	6/1/2017	Proposed	138		C	Y
C	East	METC	987	Emmet - Stover 138 kV Line	Build 30 miles new 138 kV line, 795 ACSR	MI						\$10,250,000	6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	1432	Withey Lake-Twinning 138kV line	Rebuild 0.2 miles of Withey Lake-Twinning 138kV line	MI						\$109,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	1673	Donaldson Creek 138kV Capacitor	Install minimum 23.3 MVAR 138kV capacitor	MI							6/1/2011	6/1/2011	Proposed	138		C	Y
C	East	METC	1657	Terminal Equipment Upgrade	throughout system.	MI									Proposed			C	Y
C	East	METC	1795	David Jct. - Bingham 138kV	Rebuild 19 miles of 138kV 336.4 ACSR to 954 ACSR.	MI		BaseRel		TBD		\$11,700,000	6/1/2012	6/1/2012	Proposed	138		C	Y
C	East	METC	1800	Argenta-Riverview 138kV	Fix Sag limit, Retap or upgrade 1200A CTs at both ends, Upgrade 1200A Breaker 377 and 1200A Switch 377 at Riverview	MI							6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	1804	Marquette - Easton Jct. 138kV	Upgrade relaying at Marquette	MI							6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	1805	Livingston-Emmet-Oden 138kV	Rebuild the Livingston-Emmet and Emmet-Oden 138kV circuits with 954 ACSR DCT, creating two circuits from both Livingston-Emmet and Emmet-Oden. Total line rebuild is 33 miles	MI							6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	1807	Murphy - Bullock 230kV	Swap the existing Bullock-Gleaner and Tittabawassee-Begole 138 kV lines, and open the Begole-Tittabawassee 138 kV line, and build 3.2 miles of new DCT into Richland, creating Bullock-Richland, Richland-Begole, and Tittabawassee-Gleaner 138 kV lines. Convert 8.3 miles of the new Bullock to Richland 138 kV line to 230 kV 954 ACSR. Install a new 345/230 kV transformer at Richland and a new 230/138 kV transformer at Bullock.	MI							6/1/2016	6/1/2016	Proposed	345	138	C	Y
C	East	METC	1808	Four Mile - Cowan Lake Jct.	Rebuild 15.5 miles of 336/477 to 954 ACSR.	MI							6/1/2017	6/1/2017	Proposed	138		C	Y

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		Member System	PriID																
C	East	METC	1811	Keystone - Gray Rd. 138kV	Construct a new 9 mile 138kV 954 ACSR circuit from Keystone to Gray Road.	MI							6/1/2016	6/1/2016	Proposed	138		C	Y
C	East	METC	1816	Mecosta - Croton 138kV	Rebuild 22 miles of 138kV 110 CU to 954 ACSR. Prebuild to 230kV construction.	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	1831	Northern Michigan 230 kV Loop	Cut in the existing Hampton -Tittabawassee 345 kV and Tretford -- Tittabawassee 2 345 kV circuits to a new 345 kV station, Crane Rd. Construct a 230 kV loop from Crane Rd to Twining to Mio to Livingston to Plum to Keystone to Tippy to a new station, Sunoco, which is formed by reconfiguring the Ludington -- Kenowa 1 345 kV circuit into it. Install 345/230 kV transformers at Crane Rd, Mio, Livingston, Keystone, and Sunoco, and 230/138 kV transformers at Twining, Mio, Livingston, Plum, Keystone, and Tippy. The total 230 kV circuit mileage would be approximately 330 miles and roughly 320 miles would be along the existing ROW.	MI							6/1/2019	6/1/2019	Proposed	345	138	C	Y
C	East	METC	2490	North Belting - Vergennes 138kV	Upgrade terminal equipment.	MI		BaseRel		Not Shared		\$550,000	6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	2810	Delhi - Canal Jct 138kV	Rebuild 7.5 miles of 138kV line to 954 ACSR	MI						\$5,500,000	6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	2811	East Tawas - Kam 138kV	Rebuild 56 miles of 138kV to 954 ACSR. Does not include the 12.3 miles of rebuild from 2011 MTEP project Cottage Grove - East Tawas 138kV rebuild.	MI						\$51,000,000	6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	3103	Gallagher 345 kV additional breakers	Add two 345kV breakers and convert the Gallagher 345 kV side to a three breaker ring	MI		BaseRel		Not Shared		\$5,000,000	12/31/2014	12/31/2014	Proposed	345		C	Y
C	East	METC	3128	Emmet - Riggsville and Livingston - Riggsville #2 138 kV Lines	Construct a new 138 kV circuit from Emmet to Riggsville (25 miles total), 954 ACSR and install Livingston to Riggsville 138 kV circuit #2 (40 miles total)	MI							6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	3131	Bill-Mar Jct - Port Sheldon Jct. 138 kV Sag Remediation	Improve sag clearance	MI							6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	3132	Tallmadge - Tyler 138 kV Sag Remediation	Improve sag clearance	MI							6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	3133	Claremont - Cornell 138 kV #2	Rebuild/Reconductor the Bell Rd to N. Corunna and the Cornell to N. Corunna sections of 115 CU (4.34 miles).	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	3134	Weadock Station 138 kV	Terminal Equipment upgrade at Weadock	MI							6/1/2012	6/1/2012	Proposed	138		C	Y
C	East	METC	3135	Airport - Alpena #2 138 kV	Rebuild the existing Airport - Alpena circuit on DCT's while creating a second circuit from Airport to Alpena.	MI							6/1/2016	6/1/2016	Proposed	138		C	Y
C	East	METC	3136	Alpena - Iosco 138 kV	Rebuild 20 miles from Alpena to Spruce Rd and replace limiting station equipment.	MI							6/1/2017	6/1/2017	Proposed	138		C	Y
C	East	METC	3137	Bard Road - Warren 138 kV	Rebuild 20 miles from Bard Rd to Warren and replace limiting station equipment.	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	3138	Mio-Gaylord 138 kV	Terminal Equipment upgrade at Mio	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	3144	Argenta - Morrow 138 kV	Terminal Equipment upgrade at Morrow	MI							6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	3145	Blackstone - Leoni 138 kV #1, #2 and #3	Replace the 636 ACSR trainers at Blackstone substation. Upgrade the relaying at Leoni and Blackstone.	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	3146	Battle Creek - Verona # 2 138 kV	Replace the 795 ACSR trainer at Verona substation.	MI							6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	3149	Four Mile Station 138 kV	Replace the 2-40 Cu trainer at Four Mile.	MI							6/1/2013	6/1/2013	Proposed	138		C	Y
C	East	METC	3150	North Belting - Bricker Jct 138 kV	Replace the 336.4 ACSR trainer at North Belting.	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	3151	Spaulding - Pettis Jct. 138 kV	Replace the 795 ACSR trainer at Spaulding.	MI							6/1/2014	6/1/2014	Proposed	138		C	Y
C	East	METC	3152	Riggsville to McGulpin 138 kV	Replace 266.8 ACSR trainer at McGulpin and 336.4 ACSR trainer at Riggsville.	MI							6/1/2016	6/1/2016	Proposed	138		C	Y
C	East	METC	3153	Oden to McGulpin 138 kV	Replace 336.4 ACSR trainer at McGulpin.	MI							6/1/2016	6/1/2016	Proposed	138		C	Y
C	East	METC	3300	Stover - Livingston Rebuild	Rebuild 22.2 miles 138 kV line	MI							6/1/2015	6/1/2015	Proposed	138		C	Y
C	East	METC	3492	NERC Alert Facility Ratings for 2012	Verify and remediate facilities as required due to the industry-wide NERC alert	MI							12/31/2012	12/31/2012	Planned			C	Y
C	East	METC	3493	NERC Alert Facility Ratings for 2013	Verify and remediate facilities as required due to the industry-wide NERC alert	MI							12/31/2013	12/31/2013	Planned			C	Y
C	East	METC	3494	NERC Alert Facility Ratings for 2014	Verify and remediate facilities as required due to the industry-wide NERC alert	MI							12/31/2014	12/31/2014	Planned			C	Y
C	East	MPPA	2079	SA Switches	Replacing 600 Amp switches with 1200 Amp switches at the South Airport Sub.	MI						\$200,000	7/1/2015	7/1/2015	Planned	69		C	NT
C	East	MPPA	2080	BWX Switches	Replacing 600 Amp switches with 1200 Amp switches at the Barlow Junction.	MI						\$200,000	7/1/2019	7/1/2019	Planned	69		C	NT
C	East	MPPA	2081	CDX Switches	Replacing 600 Amp switches with 1200 Amp switches at the Cass Road Junction.	MI						\$200,000	7/1/2019	7/1/2019	Planned	69		C	NT
C	East	NIPS	1973	Leesburg to Northeast -- Upgrade Capacity	Increase circuit capacity between Leesburg and Northeast (8.5 mi.). Upgrade to 954 KCM ACSR.	IN		BaseRel		Not Shared		\$5,279,000	12/1/2017	12/1/2017	Conceptual	138		C	Y
C	East	NIPS	1979	Maple Sub - 69 kV Switched Capacitors	Add two steps of 8.1 MVAR capacitors on the Maple Substation 69 kV bus.	IN		Other		Not Shared		\$1,080,000	12/1/2014	12/1/2014	Conceptual	69		C	Y
C	East	NIPS	1980	Babcock Sub - 69 kV Switched Capacitors	Add two to three steps of 9.0 MVAR capacitors on the Babcock Substation 69 kV bus.	IN		Other		Not Shared		\$1,052,000	12/1/2013	12/1/2013	Conceptual	69		C	Y
C	East	NIPS	1981	Kreitzburg Sub - 69 kV Switched Capacitors	Add two steps of 9.0 MVAR capacitors on the Kreitzburg Substation 69 kV bus.	IN		Other		Not Shared		\$1,052,000	12/1/2013	12/1/2013	Proposed	69		C	Y
C	East	NIPS	1983	Dekalb Sub - Upgrade 138/69 Transformer	Replace the existing No.1 138/69 kV 56 MVA transformer with a 138/69 kV, 1-168 MVA Transformer.	IN		BaseRel		Not Shared		\$1,700,000	12/1/2016	12/1/2016	Conceptual	138	69	C	Y
C	East	NIPS	1984	South Knox - New 138/69 kV Substation	South Knox- New 138-69 kV, 1-168 MVA Transformer Substation	IN		BaseRel		Not Shared		\$12,568,000	12/1/2017	12/1/2017	Conceptual	138	69	C	Y
C	East	NIPS	1985	Circuit 6959 Wolcottville to S. Milford Reconductor	Reconductor 5.4 miles of Circuit 6959's existing 20 Cu to 336.4 kCM ACSR.	IN		Other		Not Shared		\$1,671,000	12/1/2017	12/1/2017	Conceptual	69		C	Y

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C	East	NIPS	1989	Upgrade Circuit 6959 - S Milford to Helmer Tap	Reconductor 4.73 miles of Circuit 6959's existing 2/0 Cu to 336.4 kCM ACSR.	IN		Other	Not Shared		\$1,037,000	12/1/2017	12/1/2017	Conceptual	69		C	Y
C	East	NIPS	1990	Upgrade Circuit 6986 - Dekalb to Angola Substation	Rebuild 16.5 miles of Circuit 6986's existing 2/0 Cu line to 336.4 kCM ACSR.	IN		Other	Not Shared		\$9,253,000	12/1/2016	12/1/2016	Conceptual	69		C	Y
C	East	NIPS	1993	South Valparaiso - New 138/69 kV Substation	South Valparaiso - New 138/69 Substation, (3) 69 kV line extensions	IN		BaseRel	Not Shared		\$4,917,000	12/1/2017	12/1/2017	Conceptual	138	69	C	Y
C	East	NIPS	1994	Circuit 6977 - Midway to Bristol Subs - Recond 4.1 miles	Upgrade (reconductor) 4.1 miles of 69 kV line to 336.4 KCM ACSR between Midway and Bristol Substations.	IN		Other	Not Shared		\$656,000	12/1/2011	12/1/2011	Planned	69		C	Y
C	East	NIPS	1996	Circuits 6962 & 6937 - Lawton to E. Winamac - Rebuild 4.5 Miles	Rebuild existing double circuit 69 kV line between East Winamac and Lawton. Rebuild with new poles and conductors for 4.5 miles.	IN		Other	Not Shared		\$1,339,000	12/1/2013	12/1/2013	Proposed	69		C	Y
C	East	NIPS	2000	Circuit 6977 - Goshen Jct to Model Sub Tap	Upgrade (reconductor) .5 miles of 69 kV line to 336.4 KCM ACSR.	IN		Other	Not Shared		\$52,000	12/1/2014	12/1/2014	Planned	69		C	Y
C	East	NIPS	2003	Circuit 6937 Sw 854 to Bruce Lake Sub - Rebuild	Rebuild existing 69 kV line between Bruce Lake Substation and Switch 854.	IN		Other	Not Shared		\$957,800	12/1/2014	12/1/2014	Proposed	69		C	Y
C	East	NIPS	2244	MTEP08 Reference Future EHV Overlay - should be Stillwell to Burr Oak	Build 345 kV circuit from Stillwell to Burr Oak station in Indiana	IN					\$28,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	East	NIPS	2319	South Chalmers MO 62 load breaks and switch replacement.	Upgrade Switch and install Load breaks	IN		Other	Not Shared		\$25,000	5/1/2013	5/1/2013	Proposed	69		C	Y
C	East	NIPS	2320	Circuits 13874-Pole Replacement	Circuit 13874 - Replace 58 wood poles up to 70 poles if needed upon inspection, inspect and replace static wire as needed. First half of a two part project which will complete work begun in 2009.	IN		Other	Not Shared		\$600,000	12/1/2010	12/1/2010	Planned	138		C	Y
C	East	NIPS	2321	Miller Sub - Add 138KV Capacitors - 100.0 MVAR	Add one step of 100 MVAR capacitors on the Miller Substation 138 kV bus. Engineering only in 2010.	IN		BaseRel	Not Shared		\$974,838	9/1/2017	9/1/2017	Conceptual	138		C	Y
C	East	NIPS	2323	Hiple Sub to Northport Sub - New 138 kV Line	Add new 138 kV terminals at Hiple and Northport Substations, and construct a new 10 mile 954 KCM ACSR 138 kV line between these two substations. Engineering only on 2008.	IN		Other	Not Shared		\$5,770,000	12/1/2016	12/1/2016	Conceptual	138		C	Y
C	East	NIPS	2324	East Plymouth - New 345-138 Substation	Add East Plymouth 345/138 kV, 1-580 MVA Transformer Sub. - New	IN		BaseRel	Shared		\$18,884,017	5/1/2016	5/1/2016	Conceptual	345	138	C	Y
C	East	NIPS	2792	Northwest circuit reconfiguration	Phase I: Reconfigure 138 kV circuits at Mitchell switchyard to address SF-6 breaker maintenance. Reconfigure Chicago Avenue 138 kV line terminals. Phase II: Split existing Dune Acres Substation 138 kV bus into two sections to form a double bus. Add (2) new POTs and additional system protection (differential relaying) to provide adequate protection for a normally split 138 kV bus.	IN		Other	Not Shared		\$2,771,000	12/1/2012	12/1/2012	Conceptual	138		C	Y
C	East	NIPS	3399	Circuit 6964 rebuild	Rebuild/ Reconductor 6964 from Kentland Sub to Goodland Sub to Pine Creek Sub.	IN					\$5,567,000	12/1/2010	12/1/2010	Proposed	69		C	Y
C	East	NIPS	3400	Extend 6951 to Palmira Substation	Extend 6951 to Palmira Substation	IN					\$123,000	12/1/2012	12/1/2012	Conceptual	69		C	Y
C	East	NIPS	3401	Circuit 6913 Rebuild Reconductor	Circuit 6913 Rebuild Reconductor	IN					\$2,131,000	12/1/2013	12/1/2013	Conceptual	69		C	Y
C	East	NIPS	3402	Circuit 6981 Rebuild Reconductor	Circuit 6981 Rebuild Reconductor	IN					\$5,563,000	12/1/2013	12/1/2013	Conceptual	69		C	Y
C	East	NIPS	3403	Circuit 6987 Rebuild Reconductor	Circuit 6987 Rebuild Reconductor	IN					\$1,383,000	12/1/2012	12/1/2012	Conceptual	69		C	Y
C	East	NIPS	3404	Circuit 6998, Switch 151 to Warsaw Sub Reconductor Rebuild	Circuit 6998, Switch 151 to Warsaw Sub Reconductor Rebuild	IN					\$461,000	12/1/2015	12/1/2015	Conceptual	69		C	Y
C	East	NIPS	3405	Circuit 69-107 Reconductor	Circuit 69-107 Reconductor	IN					\$360,000	12/1/2015	12/1/2015	Conceptual	69		C	Y
C	West	AmerenIL, ATC LLC, GRE, ITCM, TP, XEL	2773	Green Power Express 765kV	Construct a 765kV network including 11 new 765/345kV substations (13 new 765/345kV TRFs) and approximately 3000 miles of new 765kV line. Proposed substation locations include 2 in North Dakota, 1 in South Dakota, 4 in Minnesota, and 3 in Iowa. This 765kV network will tie to the existing 765kV substations in Plano, IL and Sullivan, IN.	IA	WI				\$11,510,000,000	12/31/2020	12/31/2020	Conceptual	765	345	C	Y
C	West	ATC LLC	89	Mill Road 345/138 kV substation and transformer	Mill Road transformer - 345/138 ckt, Sum rate 500	WI					\$29,200,000	6/1/2050	6/1/2050	Conceptual	345	138	C	Y
C	West	ATC LLC	341	Rockdale-Mill Road 345 kV line projects	Construct Rockdale-Concord 345 kV line in parallel with existing 138 kV on existing double-width right-of-way. Construct a 345 kV bus and install a 345/138 kV, 500 MVA transformer at Concord. Convert Bark River-Mill Road 138 kV line to 345 kV. Construct.	WI					\$94,600,000	6/1/2050	6/1/2050	Conceptual	345	138	C	Y
C	West	ATC LLC	1621	New Birchwood-Lake Delton 138-kV line	Construct new Birchwood-Lake Delton 138-kV line	WI		TBD	TBD		\$5,806,000	6/1/2020	6/1/2020	Conceptual	138		C	Y
C	West	ATC LLC	1625	North Randolph Transformer	Install a 500 MVA 345/138 kV transformer at the North Randolph 138 kv SS by looping in the Columbia-South Fond du Lac 345-kV line	WI		BaseRel	Shared		\$16,652,836	12/31/2025	12/31/2025	Conceptual	345	138	C	Y
C	West	ATC LLC	1697	Brick Church-Walworth 69 kV line	Upgrade Brick Church-Walworth 69 kV line to 115 MVA	WI			Not Shared		\$716,000	6/1/2020	6/1/2020	Conceptual	69		C	Y
C	West	ATC LLC	1703	Boscobel Capacitor Banks	Install one 8.16 MVAR capacitor bank at Boscobel 69 kV substation and upgrade existing 5.4 MVAR bank with an 8.16 MVAR bank	WI			Not Shared		\$1,335,173	6/1/2019	6/1/2019	Conceptual	69		C	Y
C	West	ATC LLC	1707	Holmes-Chandler 69 kV line	Rebuild/convert Holmes-Chandler 69 kV line to 138 kV operation	MI	WI				\$56,300,000	6/1/2050	6/1/2050	Conceptual	138		C	Y
C	West	ATC LLC	1708	Metomen and Mackford Prairie area upgrades	Construct Fairwater-Mackford Prairie 69 kV line, Reconfigure the North Randolph-Ripon 69-kV line to form a second Ripon-Metomen 69-kV line and retire the circuit between Metomen and the Mackford Prairie tap	WI		Other	Not Shared		\$8,879,773	6/1/2018	6/1/2018	Conceptual	69		C	Y
C	West	ATC LLC	1709	Eden Capacitor Banks	Install two 16.33 MVAR 69 kV capacitor banks at Eden Substation	WI			Not Shared		\$1,568,118	6/1/2019	6/1/2019	Conceptual	69		C	Y

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		Member System	ProjID																
C	West	ATC LLC	1710	Mazomanie capacitor banks	Install two 12.25 MVAR 69 kV capacitor banks at Mazomanie substation	WI			Not Shared		\$1,681,113	6/1/2020	6/1/2020	Conceptual	69		C	Y	
C	West	ATC LLC	1712	Horicon-East Beaver Dam 138 kV line	Construct a Horicon-East Beaver Dam 138 kV line	WI		TBD	TBD		\$18,186,000	6/1/2022	6/1/2022	Conceptual	138		C	Y	
C	West	ATC LLC	1717	Glennview 138/69 kV transformers	Replace two existing 138/69 kV transformers at Glennview Substation with 100 MVA transformers	WI			Not Shared		\$3,440,000	6/1/2020	6/1/2020	Conceptual	138	69	C	Y	
C	West	ATC LLC	1718	Custer 138/69 kV transformer	Install a 138/69 kV transformer at Custer substation	WI			Not Shared		\$4,904,268	6/1/2022	6/1/2022	Conceptual	138	69	C	Y	
C	West	ATC LLC	1719	Shoto-Custer 138 kV line	Construct a Shoto-Custer 138 kV line	WI		TBD	TBD		\$22,938,000	6/1/2022	6/1/2022	Conceptual	138		C	Y	
C	West	ATC LLC	1720	Wautoma 138/69 kV transformer	Install a second 138/69 kV transformer at Wautoma Substation	WI			Not Shared		\$1,440,000	6/1/2017	6/1/2017	Conceptual	138	69	C	Y	
C	West	ATC LLC	1721	Pulliam area 69 kV reconductor projects	Reconductor Pulliam-Danz 69kV line, reconductor Danz-Henry Street 69 kV line, reconductor Pulliam-Van Buren 69 kV line	WI			Not Shared			6/1/2050	6/1/2050	Conceptual	69		C	Y	
C	West	ATC LLC	1723	Sunset Point transformer replacement	Replace two existing 138/69 kV transformers at Sunset Point Substation with 100 MVA transformers	WI			Not Shared		\$3,540,000	6/1/2024	6/1/2024	Conceptual	138	69	C	Y	
C	West	ATC LLC	1726	Uprate Royster-Sycamore 69 kV line	Uprate Royster-Sycamore 69 kV line to 115 MVA	WI			Not Shared		\$790,000	6/1/2019	6/1/2019	Conceptual	69		C	Y	
C	West	ATC LLC	1727	Dunn Road-Egg Harbor 69 kV line	Construct a second Dunn Road-Egg Harbor 69 kV line	WI		Other	Not Shared		\$37,194,000	6/1/2018	6/1/2018	Conceptual	69		C	Y	
C	West	ATC LLC	1730	Cardinal-Blount 138 kV line	Construct a Cardinal-Blount 138 kV line	WI			Not Shared		\$60,810,250	6/1/2020	6/1/2020	Conceptual	138		C	Y	
C	West	ATC LLC	2029	Brick Church 138 & 69kV Caps	Install 1-24.5 Mvar 138-kV capacitor bank and 1-18 Mvar 69-kV capacitor bank at Brick Church	WI			Not Shared			6/1/2017	6/1/2017	Conceptual	138		C	Y	
C	West	ATC LLC	2030	Concord 4x24.5 138 kV Caps	Install 4-24.5 Mvar 138-kV capacitor bank at Concord	WI			Not Shared		\$3,358,282	6/1/2020	6/1/2020	Conceptual	138		C	Y	
C	West	ATC LLC	2031	Y-32 Rebuild (Colley Rd-Brick Church 69 kV)	Y-32 Rebuild (Colley Rd-Brick Church 69 kV)	WI			Not Shared		\$11,225,500	6/1/2018	6/1/2018	Conceptual	69		C	Y	
C	West	ATC LLC	2038	Spring Valley-S Lake Geneva 138 kV	Construct Spring Valley-Twin Lakes-S Lake Geneva 138 kV	WI			Not Shared		\$33,284,915	6/2/2016	6/2/2016	Conceptual	138		C	Y	
C	West	ATC LLC	2040	Sun Prairie 69kV Caps	Install 2x16.33 Mvar 69 kV capacitor banks at Sun Prairie	WI			Not Shared		\$2,566,334	6/1/2020	6/1/2020	Conceptual	69		C	Y	
C	West	ATC LLC	2042	Dam Heights 69kV Caps	Install 2x16.33 Mvar 69 kV caps at Dam Heights	WI			Not Shared		\$2,896,361	6/1/2019	6/1/2019	Conceptual	69		C	Y	
C	West	ATC LLC	2043	Convert Necedah from 69 to 138 kV	Convert Necedah from 69 to 138 kV and tap into the Petenwell-Council Creek 138 kV line	WI			Not Shared		\$761,500	6/1/2018	6/1/2018	Conceptual	138		C	Y	
C	West	ATC LLC	2046	North Monroe 69 kV Caps	Install 2x16.33 Mvar 69 kV capacitor banks at North Monroe	WI			Not Shared		\$2,336,040	6/1/2018	6/1/2018	Conceptual	69		C	Y	
C	West	ATC LLC	2056	Uprate Oak Creek-Pennsylvania 138 kV	Uprate Oak Creek-Pennsylvania 138 kV	WI			Not Shared		\$2,409,559	6/1/2020	6/1/2020	Conceptual	138		C	Y	
C	West	ATC LLC	2162	2nd McCue-LaMar 69 kV line	Construct a 2nd McCue-LaMar 69 kV line	WI			Not Shared		\$5,009,085	6/1/2017	6/1/2017	Conceptual	69		C	Y	
C	West	ATC LLC	3117	Reconductor X-12 from Townline Rd to Bass Creek	Reconductor X-12 from Townline Rd to Bass Creek	WI			Not Shared		\$1,900,000	6/1/2021	6/1/2021	Conceptual	138		C	Y	
C	West	ATC LLC	3124	construct a 2nd Forsyth-Gwinn 69kV line	construct a 2nd Forsyth-Gwinn 69kV line	MI					\$1,000,000	6/1/2018	6/1/2018	Conceptual	69		C	Y	
C	West	ATC LLC	3164	Point Beach-Ludington HVDC line	Construct a HVDC line under Lake Michigan between Point Beach and Ludington and construct HVDC converter stations	MI	WI/MI				\$828,000,000	6/1/2020	6/1/2020	Conceptual	350		C	Y	
C	West	ATC LLC	3165	Elm Rd- DC Cook HVDC line	Construct a HVDC line under Lake Michigan between Elm Road and DC Cook and construct HVDC converter stations	MI	WI/MI				\$1,071,000,000	6/1/2020	6/1/2020	Conceptual	765	345	C	Y	
C	West	ATC LLC	3166	2nd Hillman 138/69kV transformer	Install a 2nd Hillman 138/69kV transformer	WI					\$4,843,288	6/1/2018	6/1/2018	Conceptual	138	69	C	Y	
C	West	ATC LLC	3167	Y-87 North Monroe-South Monroe 69 kV Line Uprate	Y-87 North Monroe-South Monroe 69 kV Line Uprate	WI					\$7,080,193	6/1/2018	6/1/2018	Conceptual	69		C	Y	
C	West	ATC LLC	3189	Uprate line Y-93 from Ripon to Northwest Ripon	Uprate line Y-93 from Ripon to Northwest Ripon from 167 deg F to SN/SE	WI					\$2,205,426	6/1/2019	6/1/2019	Conceptual	69		C	Y	
C	West	ATC LLC	3190	Rebuild line Y-103 from Sunset Point to Winneconne	Rebuild line Y-103 from Sunset Point to Winneconne to SN/SE = 200/300 deg F	WI					\$12,366,239	6/1/2019	6/1/2019	Conceptual	69		C	Y	
C	West	ATC LLC	3207	Replace Harrison 138/69kV Tr	Replace the Harrison 56 MVA 138/69kV Tr with a 100 MVA unit	WI					\$3,228,974	6/1/2016	6/1/2016	Conceptual	138	69	C	Y	
C	West	ATC LLC	3208	Replace Caroline 115/69kV Tr	Replace the Caroline 33 MVA 115/69kV Tr with a dual high side 138-115/69-kV 100 MVA unit	WI					\$4,010,542	6/1/2018	6/1/2018	Conceptual	115	69	C	Y	
C	West	ATC LLC	3429	Sun Valley-Tap-Oregon 69kV line rebuild	Rebuild the Sun Valley-Tap-Oregon 69kV line	WI					\$5,561,798	6/1/2020	6/1/2020	Conceptual	69		C	Y	
C	West	ATC LLC	3430	Dyckesville-Sawyer 69kV rebuild	Rebuild the Dyckesville-Brustbay-Sawyer 69 kV line	WI					\$11,814,129	6/1/2016	6/1/2016	Conceptual	69		C	Y	
C	West	ATC LLC	3486	Oak Creek-Stuemund Uprate	Uprate 138 kV line to 275 F	WI					\$1,400,000	6/1/2021	6/1/2021	Conceptual	138		C	Y	
C	West	ATC LLC	3487	West Middleton-Pheasant Branch 69 kV new circuit	Replace existing single circuit from WMD-Pheasant Branch 69 kV with double circuit 69 kV lines	WI					\$22,711,186	6/1/2022	6/1/2022	Conceptual	69		C	Y	
C	West	ATC LLC	3512	Pleasant Prairie-Cook HVDC line	Construct a HVDC line under Lake Michigan between Pleasant Prairie and Cook and construct HVDC converter stations	MI	WI/MI				\$828,000,000	6/1/2020	6/1/2020	Conceptual	350		C	Y	
C	West	ATC LLC, ALTW	2230	MTEP08 Reference Future EHV Overlay - Salem to West Middleton	Build 345 kV circuit from West Middleton in Wisconsin to Salem Station in Iowa	WI					\$102,000,000	6/1/2018	6/1/2018	Conceptual	345	138	C	Y	
C	West	ATC LLC, XEL	2211	MTEP08 Reference Future EHV Overlay - Longwood to Greenwood	Build 345 kV circuit from Longwood Station to Greenwood Station in Wisconsin	WI					\$200,000,000	6/1/2018	6/1/2018	Conceptual	345		C	Y	
C	West	DPC, ATC LLC	2231	MTEP08 Reference Future EHV Overlay - LaCrosse-Columbia	Build 345 kV circuit from LaCrosse to Columbia Station in Wisconsin	WI					\$186,000,000		43313	43313	Conceptual	345	138	C	Y
C	West	GRE	2691	Oroock 345/115 kV source and Oroock-Waco-Liberty 115 kV line.	Oroock 345/115 kV source and Oroock-Waco-Liberty 115 kV line.	MN					\$19,661,825	6/1/2017	6/1/2017	Conceptual	345	69	C	Y	
C	West	ITCM	1738	Bertram-Hills 161kV Reconductor	Reconductor 33 miles of 161kV from Bertram to new Rose Hollow to Hills	IA		BaseRel	Shared		\$22,540,000	12/31/2017	12/31/2017	Proposed	161		C	Y	
C	West	ITCM	1742	Split Rock-Heron Lake 161kV Rebuild	Rebuild from Split Rock-Magnolia-Ek-Heron Lake 161kV line	MN		BaseRel	Shared		\$33,404,000	12/31/2014	12/31/2016	Proposed	161		C	Y	
C	West	ITCM	2830	Lakefield Jct. - Rutland 345kV	Build a new 345kV station at Rutland and add a new 345/161kV transformer. Build a new 345kV circuit from Lakefield Jct station to Rutland 345kV station.	MN					\$98,500,000	1/1/2014	1/1/2014	Proposed	345	161	C	Y	
C	West	ITCM	3086	8th Street-Kerper-Lore 161kV Rebuild	Rebuild the dubuque area 8th Street-Kerper-Lore 161kV line.	IA		BaseRel	Shared		\$7,056,500	12/31/2013	12/31/2014	Proposed	161		C	Y	

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C	West	ITCM	3087	Lansing-Harmony 161kV Rebuild	Rebuild portion of the line in IA due to structure condition.	IA		Other	Not Shared		\$30,000,000	12/31/2016	12/31/2016	Proposed	161		C	Y
C	West	ITCM	3500	NERC Alert Facility Ratings for 2012	Verify and remediate facilities as required due to the industry-wide NERC alert	IA						12/31/2012	12/31/2012	Planned			C	Y
C	West	ITCM	3501	NERC Alert Facility Ratings for 2013	Verify and remediate facilities as required due to the industry-wide NERC alert	IA						12/31/2013	12/31/2013	Planned			C	Y
C	West	ITCM	3502	NERC Alert Facility Ratings for 2014	Verify and remediate facilities as required due to the industry-wide NERC alert	IA						12/31/2014	12/31/2014	Planned			C	Y
C	West	ITCM, XEL	2223	MTEP08 Reference Future EHV Overlay - Lakefield to Adams	Build 345 kV double circuit line from Lakefield to Adams Station in Minnesota	MN					\$334,000,000	8/1/2018	8/1/2018	Conceptual	345	161	C	Y
C	West	MDU	3082	NW Bismarck Ring Bus	Install 115kV ring bus at the NW Bismarck substation	ND		TBD			\$3,050,000	6/1/2014	6/1/2014	Planned	115		C	Y
C	West	MDU	3084	East Bismarck Bus Split	Install 115 kV Bus Tie breaker and 2nd 115 kV WAPA Tie	ND		TBD			\$2,500,000	12/1/2015	12/1/2015	Proposed	115		C	Y
C	West	MDU	3456	Glenham transformer replacement	Replace the smaller Glenham transformer and rebuild Glenham 230 kV bus into a ring configuration	SD					\$7,000,000	6/1/2016	6/1/2016	Planned	230	115	C	Y
C	West	MDU, NON-MISO	2214	MTEP08 Reference Future EHV Overlay - Glenham to Ellendale	Build 345 kV circuit from Glenham in South Dakota to Ellendale in North Dakota	SD	SD/ND				\$47,000,000	8/1/2018	8/1/2018	Conceptual	345	230	C	Y
C	West	MEC	2941	Sub T - Boone Jct 161 kV Line Upgrade	Upgrade MEC's portion of the Sub T - Boone Jct 161 kV line	IA		BaseRel	TBD		\$1,600,000	12/31/2014	12/31/2014	Proposed	161		C	Y
C	West	MEC	2943	Hills 2nd 345-161 kV XFMR	Install 2nd 560 MVA 345-161 kV transformer at Hills Substation. Expand 345 and 161 kV ring buses to accommodate new transformer.	IA		BaseRel	TBD		\$12,000,000	6/1/2020	6/1/2020	Conceptual	345	161	C	Y
C	West	MEC	2944	Hills - Sub E 161 kV Line Reconnector	Reconnector the Hills - Sub E Iowa City 161 kV line.	IA		BaseRel	TBD		\$1,800,000	6/1/2019	6/1/2019	Conceptual	161		C	Y
C	West	MEC	2945	Grimes Sub Add 2nd 345-161 kV Transformer	Add a second transformer at the Grimes Substation and expand the 345 and 161 kV ring buses by one breaker.	IA		BaseRel	Shared?		\$11,900,000	6/1/2019	6/1/2019	Conceptual	345	161	C	Y
C	West	MEC	2948	Reconnector Greenfield Plaza-Army Post-Ashawa 161 kV line.	Reconnector the Greenfield Plaza-Army Post-Ashawa 161 kV line.	IA		BaseRel	TBD		\$1,200,000	6/1/2018	6/1/2018	Proposed	161		C	Y
C	West	MEC	2947	North Grimes 161-13 kV Substation	Construct the North Grimes Substation by tapping the Bittersweet Road-Granger Tap 161 kV line with in and out breakered line terminals. The Granger Tap is located on the Grimes-100th & 54th 161 kV line.	IA		Other	Not Shared	Distribution	\$3,900,000	6/1/2012	6/1/2018	Planned	161	13.2	C	Y
C	West	MEC	2948	West Waukee 161-13 kV Substation	Construct the West Waukee Substation. The Substation will tap (non-breakered in and out) a new 161 kV line from the Booneville Substation to the	IA					\$10,650,000	6/1/2018	6/1/2018	Proposed	161	13.2	C	Y
C	West	MEC	2949	West Waukee 161-69 kV Transformer	Add a 161-69 kV transformer and 161 kV circuit breakers at the West Waukee Substation.	IA		Other	Not Shared	Reliability	\$3,100,000	6/1/2020	6/1/2020	Conceptual	161	69	C	Y
C	West	MEC	2951	Boston 161-13 kV Substation	Construct the Boston Substation by tapping (non-breakered in and out) the Sycamore-Forest & Vermont 161 kV line.	IA		Other	Not Shared		\$2,000,000	6/1/2018	6/1/2018	Conceptual	161	13	C	Y
C	West	MEC	2952	East Altoona 161-13 kV Substation	Construct the East Altoona Substation and the Metro East - E Altoona and E Altoona-Bondurant 161 kV lines. Includes the addition of a breakered line terminal at Bondurant and the addition of breakers on the two existing line terminals at Metro East.	IA		Other	Not Shared		\$11,340,000	6/1/2016	6/1/2016	Conceptual	161	13	C	Y
C	West	MEC	2953	Page County 345-161 kV Substation	Construct a 345-161 kV Substation that taps the Atchison County-Booneville 345 kV line and the Clarinda-Hastings 161 kV line. The substation will consist of a three (3) breaker 345 kV ring bus, a three (3) breaker 161 kV ring bus, and a 345-161 kV autotransformer. Reconnector the Page County-Clarinda 161 kV line.	IA					\$18,600,000	6/1/2020	6/1/2020	Conceptual	345	161	C	Y
C	West	MEC	2954	Clarinda 161 kV Capacitor	Install a 50 MVAR, 161 kV capacitor at the Clarinda Substation	IA		BaseRel	TBD		\$1,000,000	6/1/2018	6/1/2018	Proposed	161		C	Y
C	West	MEC	3217	Kewanee - Scott County 765 kV Line	Construct 765 kV line from new Kewanee 765 kV bus to Scott County Substation and associated substation equipment additions.	IA	IA/IL				\$193,000,000	12/31/2019	12/31/2019	Proposed	765		C	Y
C	West	MEC	3218	Kewanee - Louisa 765 kV Line	Construct 765 kV line from Kewanee to Louisa and associated substation equipment additions.	IA	IA/IL				\$283,000,000	12/31/2019	12/31/2019	Proposed	765	345	C	Y
C	West	MEC	3224	Woodbury County (Raun) - Hoskins 345 kV Lines	Construct double circuit 345 kV line from either Raun or new substation in Woodbury County to Hoskins Substation and associated substation equipment additions.	IA	NE				\$167,000,000	12/31/2019	12/31/2019	Proposed	345		C	Y
C	West	MEC	3225	Woodbury County (Raun) - Broadland 345 kV Lines	Construct double circuit 345 kV line from either Raun or new substation in Woodbury County to Broadland Substation and associated substation equipment additions.	IA	SD				\$591,000,000	12/31/2019	12/31/2019	Proposed	345		C	Y
C	West	MEC	3226	Pocahontas Co. - Woodbury County (Raun) 765 kV Line	Construct 765 kV line from new Pocahontas County Substation to either Raun Substation or new substation in Woodbury County and associated substation equipment additions.	IA					\$296,000,000	12/31/2024	12/31/2024	Proposed	765	345	C	Y
C	West	MEC	3227	Pocahontas Co. - Hoskins 765 kV Line	Construct 765 kV line from new Pocahontas County Substation to Hoskins Substation and associated substation equipment additions.	IA	NE				\$461,000,000	12/31/2024	12/31/2024	Proposed	765		C	Y
C	West	MEC	3229	Pocahontas Co. - Osceola Co. 765 kV Line	Construct 765 kV line from new Pocahontas County Substation to new Osceola County 765 kV substation and associated substation equipment additions.	IA					\$220,000,000	12/31/2024	12/31/2029	Proposed	765	345	C	Y

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C	West	MEC	3230	Osoeola Co. - Chanarambie 765 kV Line	Construct 765 kV line from new Osoeola County substation to new Chanarambie substation and associated substation equipment additions.	IA	MN				\$366,000,000	12/31/2029	12/31/2029	Proposed	765		C	Y
C	West	MEC	3231	Pocahontas Co. - Adair Co. 765 kV Line	Construct 765 kV line from new Pocahontas County Substation to new Adair County Substation and associated substation equipment additions.	IA					\$499,000,000	12/31/2029	12/31/2029	Proposed	765	345	C	Y
C	West	MEC	3232	Adair Co. - St. Joseph 765 kV Line	Construct 765 kV line from new Adair County Substation to St. Joseph Substation and associated substation equipment additions.	IA	MO				\$407,000,000	12/31/2029	12/31/2029	Proposed	765		C	Y
C	West	MEC	3233	Adair Co. - Hills 765 kV Line	Construct 765 kV line from new Adair County Substation to Hills Substation and associated substation equipment additions.	IA					\$691,000,000	12/31/2029	12/31/2029	Proposed	765		C	Y
C	West	MEC	3234	Hills - Kincaid 765 kV Line	Construct 765 kV line from Hills to Kincaid Substation and associated substation equipment additions.	IA	IL				\$745,000,000	12/31/2029	12/31/2029	Proposed	765		C	Y
C	West	MEC	3237	Avoca-Page County-Maryville 345 kV Line	Construct a new 345 kV line from Avoca-Page County-Maryville with 161 kV underbuild and associated substation equipment additions.	IA	IA/MO				\$203,000,000	6/1/2020	6/1/2020	Conceptual	345	161	C	Y
C	West	MEC	3238	CBEC-S3456 345 kV Line	Construct second 345 kV line from CBEC-OPPD's 3456 Sub and associated substation equipment additions.	IA	NE				\$29,100,000	6/1/2019	6/1/2019	Conceptual	345		C	Y
C	West	MEC	3239	Bunge-Hastings-Page County 161 kV Rebuild	Rebuild 161 kV Line from Bunge-Hastings and associated substation equipment additions.	IA					\$29,100,000	6/1/2018	12/1/2018	Conceptual	161		C	Y
C	West	MEC	3240	Denison-Avoca 161 kV Line	New 161 kV line from Denison-Avoca and associated substation equipment additions.	IA					\$20,900,000	6/1/2020	6/1/2020	Conceptual	161		C	Y
C	West	MEC	3241	CBEC-Sub 701 161 kV Line	Construct a 161 kV line from CBEC-Sub 701 and associated substation equipment additions.	IA		BaseRel	TBD		\$4,600,000	6/1/2018	6/1/2018	Conceptual	161		C	Y
C	West	MEC	3242	Quick-Sub 701 161 kV Line	Construct a 161 kV line from Quick to Sub 701 and associated substation equipment additions.	IA					\$7,700,000	6/1/2018	6/1/2018	Conceptual	161		C	Y
C	West	MEC	3243	Quick-Avoca 161 kV line	Construct a 161 kV line from Quick to Avoca and associated substation equipment additions.	IA					\$11,700,000	6/1/2016	6/1/2016	Conceptual	161		C	Y
C	West	MEC	3246	Webster South-Lehigh 161 kV line	Construct new 161 kV line between future 161 kV terminals at the Lehigh Substation and Webster South switching station and associated substation equipment additions.	IA					\$3,500,000	6/1/2016	6/1/2016	Conceptual	161		C	Y
C	West	MEC	3247	Lehigh 345-161 kV Transformer	Install a 345-161 kV transformer at the Lehigh Substation	IA					\$7,500,000	6/1/2016	6/1/2016	Conceptual	345	161	C	Y
C	West	MEC	3250	West Grand-88th St 161 kV Line	West Grand-88th St 161 kV Line and associated substation equipment additions.	IA					\$1,800,000	6/1/2018	6/1/2018	Conceptual	161		C	Y
C	West	MEC	3251	Army Post-West Grand 161 kV Line	Army Post-West Grand 161 kV Line and associated substation equipment additions.	IA					\$4,400,000	6/1/2018	6/1/2018	Conceptual	161		C	Y
C	West	MEC	3252	Norwalk-Scotch Ridge 161 kV Line	Norwalk-Scotch Ridge 161 kV Line and associated substation equipment additions.	IA					\$7,100,000	6/1/2020	6/1/2020	Conceptual	161	13.2	C	Y
C	West	MEC	3253	Scotch Ridge-Avon Lake 161 kV Line	Scotch Ridge-Avon Lake 161 kV Line and associated substation equipment additions.	IA					\$5,700,000	6/1/2020	6/1/2020	Conceptual	161	13.2	C	Y
C	West	MEC	3254	Avon Lake-DPS 161 kV Line or SE Polk	Avon Lake-DPS 161 kV Line or SE Polk and associated substation equipment additions.	IA					\$1,400,000	6/1/2020	6/1/2020	Conceptual	161		C	Y
C	West	MEC	3255	Sub 91 - Cordova 345 kV Line	345 kV line from Cordova - Sub 91, convert Sub 91 345 to ring bus and associated substation equipment additions.	IA	IL				\$23,400,000	6/1/2015	6/1/2015	Conceptual	345		C	Y
C	West	MEC	3256	Sub 39 - Cordova 345 kV ckt 2	2nd 345 kV line from Sub 39 to Cordova and associated substation equipment additions.	IL					\$20,800,000	6/1/2015	6/1/2015	Conceptual	345		C	Y
C	West	MEC	3257	Eagle - LeMars - Spencer - Sioux County 161 kV Line	Eagle - LeMars - Spencer - Sioux County 161 kV Line and associated substation equipment additions.	IA					\$54,100,000	6/1/2016	6/1/2016	Conceptual	161		C	Y
C	West	MEC	3258	Little Sioux-Monona 161 kV line	Little Sioux-Monona 161 kV line and associated substation equipment additions.	IA					\$18,700,000	6/1/2020	6/1/2020	Conceptual	161		C	Y
C	West	MEC	3259	Carroll-Denison 161 kV line	New Carroll County-Denison 161 kV line and associated substation equipment additions.	IA					\$16,500,000	6/1/2020	6/1/2020	Conceptual	161		C	Y
C	West	MEC	3260	Odebolt-Carroll 345 kV line	New Odebolt-Carroll County 345 kV line with 161 kV underbuild and associated substation equipment additions.	IA					\$57,000,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	West	MEC	3261	Wisdom-Odebolt 345 kV line	Wisdom-Buena Vista-Sac-Odebolt 345 kV line with 161 kV underbuild and associated substation equipment additions.	IA					\$79,300,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	West	MEC	3267	NW Sioux City 230-69 kV Substation	Add 230-69 kV sub and associated 230 kV and 69 kV ties and associated substation equipment additions.	IA		Other	Shared	Reliability	\$10,500,000	6/1/2016	6/1/2016	Conceptual	230	69	C	Y
C	West	MEC	3269	Blackhawk-Hazleton 161 kV Rebuild	Increase 161 kV line ratings.	IA		BaseRel	Not Shared		\$3,400,000	6/1/2012	6/1/2012	Planned	161		C	Y
C	West	MEC	3371	Hills-Parnell 161 kV Line Upgrade	Upgrade the Hills-Parnell 161 kV line.	IA		BaseRel	Not Shared		\$90,000	12/31/2014	12/31/2014	Proposed	161		C	Y
C	West	MEC	3372	Parnell-Poweshiek 161 kV Line Upgrade	Upgrade the Parnell-Poweshiek 161 kV line.	IA		BaseRel	Not Shared		\$540,000	12/31/2014	12/31/2014	Proposed	161		C	Y
C	West	MEC	3477	Oak Grove-Galesburg 161 kV Upgrade	Rebuild the Oak Grove-Galesburg 161 kV line to increase capacity.	IL						12/1/2014	12/1/2014	Proposed	161	138	C	Y
C	West	MEC	3478	Webster-Black Hawk-Hazleton 161 kV Rebuild	Rebuild approx. 115 miles of existing 161 kV line from Webster to Black Hawk to Hazleton to increase capacity.	IA					\$23,680,000	12/31/2016	12/31/2016	Planned	161		C	Y
C	West	MEC, ALTW	2193	MTEP08 Reference Future EHV Overlay - Lehigh to Toledo	Builds 765 kV circuit from Lehigh Station to Toledo Station in Iowa.	IA					\$313,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	West	MEC, ITCM	2950	Polk City 161-13 kV Substation	Construct the Polk City Substation. The Substation will tap the ITC Midwest 161 kV line from Bittersweet Road to NE Ankeny with in and out breakered line terminals.	IA					\$1,500,000	6/1/2018	6/1/2018	Conceptual	161	13.2	C	Y
C	West	MEC, ITCM	3218	Scott County - Hazleton 765 kV Line	Construct 765 kV line from Scott County to Hazleton Substation and associated substation equipment additions.	IA					\$459,000,000	12/31/2019	12/31/2019	Proposed	765	345	C	Y

Appendices A, B, C: Project Table 9/7/2011

Project Summary Information from Facility table

Target Appendix	Planning Region	Geographic Location by TO Member System	ProjID	Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
C	West	MEC, ITCM	3220	Louisa-Hazleton 765 kV	Construct 765 kV line from Louisa to Hazleton and associated substation equipment additions.	IA					\$257,000,000	12/31/2019	12/31/2019	Proposed	765		C	Y
C	West	MEC, ITCM	3221	Hazleton - Pocahontas Co. 765 kV Line	Construct 765 kV line from Hazleton to new Pocahontas County Substation and associated substation equipment additions.	IA					\$837,000,000	12/31/2019	12/31/2019	Proposed	765	345	C	Y
C	West	MEC, ITCM	3222	Hills - Hazleton 345 kV Line	Construct 345 kV line from Hills to Hazleton Substation and associated substation equipment additions.	IA					\$83,000,000	12/31/2019	12/31/2019	Proposed	345		C	Y
C	West	MEC, ITCM	3223	Hazleton - Adams 345 kV Lines	Construct double circuit 345 kV line from Hazleton to Adams Substation and associated substation equipment additions.	IA	MN				\$227,000,000	12/31/2019	12/31/2019	Proposed	345		C	Y
C	West	MEC, ITCM	3228	Hills - Hazleton 765 kV Line	Construct 765 kV line from Hills to Hazleton Substation and associated substation equipment additions.	IA					\$215,000,000	12/31/2024	12/31/2024	Proposed	765	345	C	Y
C	West	MEC, ITCM	3235	Osceola Co. - Lakefield Jct. 765 kV Line	Construct 765 kV line from new Osceola County Substation to Lakefield Jct. Substation and associated substation equipment additions.	IA	MN				\$230,000,000	12/31/2029	12/31/2029	Proposed	765		C	Y
C	West	MEC, ITCM	3236	Hazleton - Adams 765 kV Line	Construct 765 kV line from Hazleton to Adams Substation and associated substation equipment additions.	IA	MN				\$312,000,000	12/31/2029	12/31/2029	Proposed	765		C	Y
C	West	MEC, ITCM	3244	OGS-Pleasant Corner-Beacon-Pella-Reasnor 161 kV Line	Construct a new 161 kV line from OGS-Pleasant Corner-Beacon-Pella-Reasnor with 69 kV underbuild and associated substation equipment additions.	IA					\$38,650,000	6/1/2017	6/1/2017	Conceptual	161		C	Y
C	West	MEC, ITCM	3245	Lucas County-Knoxville-Pella-Reasnor 161 kV Line	Construct a 161 kV line from Lucas County-Knoxville-Pella-Reasnor and associated substation equipment additions.	IA					\$34,100,000	6/1/2017	6/1/2017	Conceptual	161		C	Y
C	West	MEC, ITCM	3248	DPS/Reasnor Sub - East Altoona 161 kV Line	New 161 kV line from switching station on DPS-Reasnor line to East Altoona and associated substation equipment additions.	IA					\$6,500,000	6/1/2016	6/1/2016	Conceptual	161		C	Y
C	West	MEC, ITCM	3249	East Altoona-NE Ankeny/Jasper County Sub 161 kV line	New 161 kV line from East Altoona to a new sub off NE Ankeny/Jasper County line and associated substation equipment additions.	IA					\$7,800,000	6/1/2016	6/1/2016	Conceptual	161		C	Y
C	West	MEC, ITCM	3262	Odebolt-Adair 345 kV line	Odebolt-Grand Junction-Adair 345 kV line and associated substation equipment additions.	IA					\$204,100,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	West	MEC, ITCM	3263	Adair-Sub T 345 kV line	Adair-Ottumwa-Sub T 345 kV line and associated substation equipment additions.	IA					\$244,000,000	6/1/2020	6/1/2020	Conceptual	345		C	Y
C	West	MEC, ITCM	3264	S.E. Polk - Ottumwa 161 kV Line	New S.E. Polk-Ottumwa 161 kV line and associated substation equipment additions.	IA					\$40,000,000	6/1/2020	6/1/2020	Conceptual	161		C	Y
C	West	MEC, ITCM	3265	Carroll-Adair 161 kV line	New Carroll County-Grand Junction-Adair 161 kV line and associated substation equipment additions.	IA					\$60,500,000	6/1/2020	6/1/2020	Conceptual	161		C	Y
C	West	MH, OTP	2180	MTEP08 Reference Future EHV Overlay - Riel to Maple River	Builds 500 kV circuit from Riel Station in Manitoba to Maple River Station in North Dakota	Manitoba	ND				\$374,000,000	8/1/2016	8/1/2018	Conceptual	500	115	C	Y
C	West	MP	2548	Hilltop	Add second 230/115 kV Transformer capacity and 230 kV line	MN		TBD				6/1/2019	6/1/2019	Proposed	230	115	C	Y
C	West	MP	2551	28L Tap	Remove Tap and put line on its own breaker & upgrade capacity	MN		BaseRel	Not Shared		\$1,250,000	6/30/2014	6/30/2014	Proposed	115		C	Y
C	West	OTP	2746	Turtle Lake-Mercer 41.6 kV Line Upgrade	Rebuild Existing 18-Mile 41.6 kV Line	ND		Other	Not Shared		\$500,000	11/1/2015	11/1/2015	Proposed	41.6		C	NT
C	West	OTP	2857	Green Valley 41.6 kV Line Upgrade	Rebuild Existing 4-Mile 41.6 kV Line	MN		Other	Not Shared		\$550,000	12/31/2014	12/31/2014	Proposed	41.6		C	Y
C	West	OTP	3484	Big Stone AQCS Addition	Install a new 230/13.8 kV transformer to accommodate a new load increase at Big Stone related to new pollution control equipment	SD					\$3,000,000	7/1/2015	7/1/2015	Proposed	230	13.8	C	Y
C	West	OTP, GRE	2225	MTEP08 Reference Future EHV Overlay - Big Stone-Crow River	Build 345 kV double circuit line from Big Stone in South Dakota to Crow River in Minnesota	MN	MN/SD				\$328,000,000	8/1/2018	8/1/2018	Conceptual	345	115	C	Y
C	West	OTP, MDU	2219	MTEP08 Reference Future EHV Overlay - Maple River to Ellendale	Build 345 kV double circuit line from Maple River to Ellendale in North Dakota	ND					\$239,000,000	8/1/2018	8/1/2018	Conceptual	345	230	C	Y
C	West	OTP, NON-MISO	2182	MTEP08 Reference Future EHV Overlay - Maple River to Watertown	Builds 345 kV circuit from Maple River Station in North Dakota to Watertown Station in South Dakota	ND	SD				\$202,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	OTP, XEL	2181	MTEP08 Reference Future EHV Overlay - Maple River to Blue Lake	Builds 500 kV circuit from Maple River Station in North Dakota to Blue Lake Station in Minnesota	MN	SD/MN				\$401,000,000	8/1/2018	8/1/2018	Conceptual	500	345	C	Y
C	West	OTP, XEL	2224	MTEP08 Reference Future EHV Overlay - Bigstone to Morris to Alexandria	Build 345 kV double circuit line from Big Stone in South Dakota to Morris and then to Alexandria Station in Minnesota	MN	SD/MN				\$215,000,000	8/1/2018	8/1/2018	Conceptual	345	230	C	Y
C	West	West	3513	Bison Substation	Bison 345/230 kV substation, associated breakers, 2-345/230 kV transformers	ND					\$17,635,000	3/31/2015	3/31/2015	Planned	345	230	C	Y
C	West	XEL	2177	RES (230 kV Corridor study)	Convert Minn Valley - Panther - McLeod - Blue Lake 230 kV line to Double circuit 345 kV from Hazel to McLeod to West Waconia to Blue Lake.	MN		Other	Not Shared			6/1/2016	6/1/2016	Proposed	345	115	C	Y
C	West	XEL	2184	MTEP08 Reference Future EHV Overlay - Splitrock to "New Blue Earth Sub"	Builds 345 kV circuit from Splitrock Station in South Dakota to a New Blue Earth Station in Minnesota	MN	SD/MN				\$205,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	West	XEL	2185	MTEP08 Reference Future EHV Overlay - Adams to Hampton Corners	Builds 765 kV circuit from Adams Station in Minnesota to Hampton Corners Station in Minnesota	MN					\$15,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	West	XEL	2186	MTEP08 Reference Future EHV Overlay - Sherburne County to Chisago City	Builds 345 kV circuit from Sherburne County Station to Chisago County Station in Minnesota	MN					\$69,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	XEL	2187	MTEP08 Reference Future EHV Overlay - Sherburne County to "New SW MPLS Sub"	Builds 345 kV circuit from Sherburne County Station to New SW Minneapolis Station in Minnesota	MN					\$68,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	XEL	2188	MTEP08 Reference Future EHV Overlay - "New SW MPLS Sub" to Hampton Corners	Builds 765 kV circuit from Hampton Corner Station to New SW Minneapolis Station in Minnesota	MN					\$260,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	West	XEL	2189	MTEP08 Reference Future EHV Overlay - Hampton Corners to Chisago City (east mpls loop)	Builds 345 kV circuit from Hampton Corner Station to Chisago County Station in Minnesota	MN					\$103,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y

Appendices A, B, C: Project Table 9/7/2011			Project Summary Information from Facility table															
Target Appendix	Planning Region	Geographic Location by TO Member System	PriID	Project Name	Project Description	State 1	State 2	Allocation Type per FF	Share Status	Other Type	Estimated Cost	Expected ISD (Min)	Expected ISD (Max)	Min of Plan Status	Max kV	Min kV	App ABC	MISO Facility
C	West	XEL	2191	MTEP08 Reference Future EHV Overlay - "New SW MPLS Sub" to "New Blue Earth Sub"	Builds 765 kV circuit from New SW Minneapolis Station to New Blue Earth Station in Minnesota	MN					\$215,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	West	XEL	2217	MTEP08 Reference Future EHV Overlay - Granite Falls-Twin Cities	Build 345 kV circuit from Granite Falls (Hazel sub) to Blue Lake (Twin Cities) in Minnesota	MN					\$162,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	XEL	2222	MTEP08 Reference Future EHV Overlay - Minn Valley-Blue Lk 230	Build 230 kV double circuit line from Minnesota Valley to West Waconia Station in Minnesota	MN					\$274,000,000	8/1/2018	8/1/2018	Conceptual	345	230	C	Y
C	West	XEL	2228	MTEP08 Reference Future EHV Overlay - Adams-N Rochester	Build 345 kV double circuit line from Adams Station to North Rochester in Minnesota	MN					\$101,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	XEL	2227	MTEP08 Reference Future EHV Overlay - Monticello-W Waconia-Helena	Build 345 kV double circuit line from Monticello to West Waconia to Helena in Minnesota	MN					\$102,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	XEL, ATC LLC	2210	MTEP08 Reference Future EHV Overlay - Chisago Cty to Longwood	Build 345 kV circuit from Chisago County Station in Minnesota to Longwood Station in Wisconsin	MN	WI				\$165,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West	XEL, ITCM	2212	MTEP08 Reference Future EHV Overlay - Adams to Rockcreek	Build 765 kV circuit from Adams Station in Minnesota to Rock Creek Station in Iowa	MN	IA				\$827,000,000	8/1/2018	8/1/2018	Conceptual	765		C	Y
C	West	XEL, MEC	2192	MTEP08 Reference Future EHV Overlay - "New Blue Earth Sub" to Lehigh	Builds 765 kV Circuit from New Blue Earth Station in Minnesota to Lehigh Station in Iowa	IA	MN/IA				\$273,000,000	8/1/2018	8/1/2018	Conceptual	765	345	C	Y
C	West	XEL, MH, GRE, OTP, MP, MRE	3398	Dorsey-Split Rock 500 kV line	Option W6: Dorsey(Manitoba)-Bison(ND)-Brookings(SD)-Split Rock (SD) 500 kV with 345/500 kV transformers. Also included is a 2nd 345 kV circuit on the Fargo-Alexandria-Quarry-Monticello 345 kV project (Project 286) and works in concert with the Brookings, SD - SE Twin Cities 345 kV project (Project ID 1203) and the Corridor project (Project ID 2177)	MB	SD				\$1,627,000,000	12/31/2017	12/31/2017	Proposed	500	345	C	Y
C	West	XEL, Non-MISO	2183	MTEP08 Reference Future EHV Overlay - Watertown to Split Rock	Builds 345 kV circuit from Watertown Station in South Dakota to Splitrock station in South Dakota	SD					\$131,000,000	8/1/2018	8/1/2018	Conceptual	345		C	Y
C	West, Central, East	ITCM, AmerenIL	2785	Northwest Iowa (New Substation)-Sorenson HVDC	Build new +/- 800 kV bi-pole HVDC line from a new Northwest Iowa substation to the existing Sorenson substation. The project will be capable of transferring approximately 1,500 MW independently or up to 7,900 MW coupled with the complimentary project (Pj)ID 2794). The project(s) also envision a regional collector system that will be vetted through the RGOS stakeholder process.	IA	IN				\$1,900,500,000	5/1/2014	5/1/2014	Proposed	800		C	Y

Facility Table Field Legend

Project table has blue highlighted header. A project may have multiple facilities.
 Facility table has beige highlighted header. A project's facilities may have different in service dates.

Facility Table Field Legend

Field	Description
Target Appendix	Target appendix for the MTEP11 planning cycle. "A in MTEP11" projects were reviewed and approved in MTEP11. This column also indicates what projects were approved in prior MTEPs that are not yet in service.
Region	MISO Planning Region: Central, East or West
Geographic Location by TO Member System	Project geographic location by Transmission Owner member systems
ProjID	Indicates the Facility's Project. Projects may have multiple facilities.
Facility ID	Facility ID: MISO facility identifier
Expected/SD	Expected In Service Date for this facility
From Sub	From substation for transmission line or location of transformer or other equipment
To Sub	To substation for transmission line or transformer designation
Ckt	Circuit identifier
MaxKV	Maximum voltage of this facility
Min KV	Minimum voltage of this facility (transformer low-side voltage)
Facility Rating	Rating of the facility in applicable units. Typically Summer rate
Facility Description	Brief description of transmission facility
State	State the facility is located in
Miles Upg.	Transmission line miles on existing rights of way (ROW)
Miles New	Transmission line miles on new rights of way (ROW)
Plan Status	Indicates status of project in planning or implementation. Alternative, Conceptual, Proposed, Planned, Under Construction, In Service.
Estimated Cost	Total estimated facility cost
Cost Shared	Y if facility is cost shared per Attachment FF
Postage Stamp	Y if facility has postage stamp cost allocation per Attachment FF
MISO Facility	Y for facilities under MISO functional control. NT for non-transferred facilities under Agency Agreements
App ABC	Appendix the project is in. B>A or C>B for projects moving during this planning cycle.

Appendices A, B, C: Project Facility Table 9/7/2011

Target Appendix	Region	Geographic Location by TO Member System	PrID	Facility ID	Expected ISD	From Sub	To Sub	GR	Max KV	Min KV	Facility Rating	Facility Description	State	Miles Upg	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	Central	AmerenIL	2065	3961	6/1/2012	Stallings	Stallings Tap (Wood River - Venice 138 line)	1	138		280	Replace terminal equipment at Stallings on Wood River - Venice 138 kV line (Line # 1452)	IL			Planned	\$185,000	Y		Y	B>A
A in MTEP11	Central	AmerenIL	2065	3960	6/1/2012	Stallings	Stallings substation	1	345	138	700	Stallings 345/138 kV Substation-Replace 560 MVA, 345/138 kV Transformer with 700 MVA unit	IL			Planned	\$9,890,000	Y		Y	B>A
A in MTEP11	Central	AmerenIL	2237	4104	11/15/2018	Pana	Mt. Zion	1	345		1793	new line - 28 miles of 345 kV	IL		28	Planned	\$66,610,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2237	5210	11/15/2018	Kansas Sub	2nd. 345/138 kV Xfmr	2	345	138	560	Kansas 345/138 kV Substation - Add 2nd 345/138 kV, 560 MVA Transformer, 345 kV Breaker-and-a-half arrangement.	IL			Planned	\$25,610,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2237	4151	11/15/2018	Mt. Zion	Transformer	1	345	138	560	new transformer - 560 MVA, 345/138 kV, plus 345 kV ring bus	IL			Planned	\$17,770,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2237	4152	11/15/2018	Mt. Zion	Kansas	1	345		1793	new line - 52 miles 345 kV	IL		52	Planned	\$123,710,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2237	4154	11/15/2019	Kansas	Sugar Creek	1	345		1793	New 35 mi. single-circuit line, 3000 A SE capability	IL		35	Planned	\$84,710,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2239	6595	6/1/2016	Sidney		1	345		1793	Substation work for new Sidney-Risng 345 kV line	IL			Planned		Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2239	6594	6/1/2016	Rising		1	345		1793	Substation work for new Sidney-Risng 345 kV line	IL			Planned		Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2239	4153	11/15/2016	Rising	Sidney	1	345		1793	New 28 mile, 345 kV line from Sidney to Rising Substations with 3000 A summer emergency capability. Establish ring bus at Rising and breaker-and-a-half arrangement at Sidney.	IL		28	Planned	\$83,230,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	2980	5183	6/1/2013	Tazewell	San Jose Rail	1	138		269	Tazewell-San Jose Rail Substation section of East Springfield-Tazewell-1384 138 kV Line - Reconductor 3.67 miles of 927 kcmil ACAR conductor at the Tazewell end of the line with conductor capable of carrying at least 1278 A under summer emergency conditio	IL	3.67		Planned	\$3,251,000			Y	B>A
A in MTEP11	Central	AmerenIL	2981	5184	9/1/2013	McLean	El Paso Tap	1	138		160	Replace 9.72 miles of 138 kV line on L1382, from McLean County Substation to El Paso Tap to a minimum 1200A SE capability	IL	9.72		Planned	\$5,100,000			Y	B>A
A in MTEP11	Central	AmerenIL	2989	5193	6/1/2013	Sidney Sustation	Transformer Addition		345	138	560	Sidney 345/138 kV Substation - Install 2nd. 345/138 kV, 560 MVA Transformer.and 345 kV Ring Bus	IL			Planned	\$14,200,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3017	6596	6/1/2016	Palmyra Tap		1	345		1793	Build new 345 kV switching station at the Palmyra Tap location	IL			Planned		Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	6598	6/1/2016	Meredosia		1	345		1793	Substation work for new Meredosia-Ipava 345 kV line	IL			Planned		Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	5616	11/15/2016	Meredosia	Install 345/138 kV Xfmr	1	345	138	560	Meredosia 345/138 kV Substation - Install 345/138 kV Xfmr, 345 kV ring bus.	IL			Planned	\$18,260,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	5202	11/15/2016	Palmyra	Quincy	1	345		1793	New 14-mi. 345 kV 3000 A summer emergency capability line from Palmyra to Quincy.	IL		14	Planned	\$25,740,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	5227	11/15/2016	Quincy Area	Meredosia	1	345		1793	New 47 m. single circuit line	IL		47	Planned	\$108,020,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	5203	11/15/2016	Quincy Area	Xfmr Addition	1	345	138	560	Quincy Area 345/138 kV Substation - 1-560 MVA transformer, 345 kV ring bus.	IL			Planned	\$19,950,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	6597	6/1/2017	Ipava		1	345		1793	Substation work for new Meredosia-Ipava 345 kV line	IL			Planned		Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	4149	11/15/2017	Meredosia	Ipava	1	345		1793	new line - 41 miles 345 kV. Establish 345 kV ring bus at Ipava Sub.	IL		41	Planned	\$107,900,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	4150	11/15/2017	Meredosia	Pawnee	1	345		1793	New 55 mi. single-circuit line, 345 kV line	IL		55	Planned	\$128,610,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3017	6430	11/15/2017	Pawnee	Transformer	2	345	138	560	2nd. 345/138, 560 MVA Xfmr, establish 345 kV breaker-and-a-half arrangement at Pawnee	IL			Planned	\$23,680,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3022	6599	6/1/2019	Fargo		1	345			Fargo substation work - add a new 345 kV position	IL			Planned		Y	Y	Y	B>A

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Target Appendix	Region	Geographic Location by TO Member System	ProjID	Facility ID	Expected ISD	From Sub	To Sub	Ckt	Max kV	Min kV	Facility Rating	Facility Description	State	Miles Upg	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	Central	AmerenIL	3169	5600	11/15/2018	Pana	Pawnee	1	345		1793	New 31 mi. single-circuit line, 3000 A SE capability.	IL		31	Planned	\$73,750,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3169	6431	11/15/2018	Pana	Transformer	2	345	138	560	Install 2nd. 345/138 kV Fmr at Pana Sub., 345 kV breaker-and-a-half arrangement at Pana.	IL			Planned	\$25,610,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenIL	3337	6202	12/1/2013	Paxton, East	Gilman	1	138		240	Reconductor to 1200 A summer emergency capability	IL	22.1		Planned	\$7,390,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3357	6223	12/31/2012	E. Kewanee	Princeton Tap L1552	1	138		160	Increase ground clearance on 477 kcmil ACSR conductor to permit operation at 120 degrees C. Upgrade E. Kewanee breaker and terminal equipment to 1200 A capability	IL	15.33		Planned	\$3,180,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3358	6224	10/15/2012	E. Kewanee	Generator connection and bus rearrangement		138		287	Rearrange 138 kV bus at E. Kewanee and install terminal equipment (including 1200 A breaker) to connect wind farm (G545)	IL			Planned	\$1,501,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3359	6225	10/1/2012	E. Galesburg	Generator connection and bus upgrade		138		287	Upgrade 138 kV bus at E. Galesburg and install terminal equipment, including 1200 A breaker, to facilitate connection of wind farm (G569).	IL			Planned	\$834,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3360	6227	5/6/2011	Sheldon South Sw. Station	Watseka	1	138		240	Replace or reset relaying as required to obtain 1200 A capability at the Watseka terminal	IL	10		In Service	\$100,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3360	6226	5/6/2011	Sheldon South Sw. Station	Install ring bus with 3 - 1200 A breakers		138		287	Construct a new 138 kV switching station to connect a new wind farm (G931) to the Watseka-Morrison Ditch-1 138 kV line.	IL			In Service	\$4,325,000			Y	C>B>A
A in MTEP11	Central	AmerenIL	3361	6228	7/26/2011	Paxton, East	Generator connection		138		478	Install terminal equipment, including 2000 A breaker, to facilitate connection of wind farm (G996). Install 2000 A bus-tie breaker	IL			Planned	\$1,512,200			Y	C>B>A
A in MTEP11	Central	AmerenIL	3370	6241	6/1/2012	Oreana Sub.	Install 1-2000 A breaker and 2-2000 A disconnect switches.		138		112	Installation of a new 138-69 kV transformer at Oreana, install 1-2000 A breaker and 2-2000 A disconnect switches to expand ring bus. Install 138 kV, 600 A MOD switch at high-side of new 138-69 kV transformer.	IL			Planned	\$750,000			Y	C>B>A
A in MTEP11	Central	AmerenIL, MEC	3022	5232	11/15/2019	Fargo	Oak Grove	1	345		1793	Fargo-Galesburg-Oak Grove (MEC) 345 kV Line - New 70 mile, 3000 A summer emergency capability line. 345 kV ring bus at Fargo.	IL		70	Planned	\$200,530,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenMO	2248	5187	11/15/2020	West Adair Substation	Install Transformer	1	345	161	560	West Adair Substation - New 560 MVA, 345/161 kV Transformer, 345 kV ring bus.	MO			Planned	\$18,920,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenMO	2306	4222	6/1/2016	Lutesville	Northwest Cape	1	345		1793	Install approximately 11 miles of new line to supply substation	MO		11	Planned	\$18,181,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenMO	2306	4221	6/1/2016	Northwest Cape 345/161 kV	New Substation		345	161	560	Install 560 MVA, 345/161 kV Transformer, 3-161 kV outlet lines	MO			Planned	\$12,570,000	Y		Y	B>A
A in MTEP11	Central	AmerenMO	3170	6603	11/15/2016	Palmyra Tap	Establish 345 kV Sub		345		1793	New Palmyra Tap Substation - Establish with breaker-and-a-half arrangement	MO			Planned	\$17,660,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenMO	3170	5601	11/15/2020	West Adair	Palmyra Tap	1	345		1793	Construct new 58 mile, 345 kV Line	MO		58	Planned	\$95,130,000	Y	Y	Y	B>A
A in MTEP11	Central	AmerenMO	3355	6220	12/31/2011	Labadie	Bland	3	345		1200	Replace breaker at Labadie with 3000 A, 50 kA breaker	MO			Planned	\$1,305,000			Y	C>B>A
A in MTEP11	Central	AmerenMO	3355	6221	12/31/2011	Labadie	Montgomery	4	345		1200	Replace breaker at Labadie with 3000 A, 50 kA breaker	MO			Planned	\$1,305,000			Y	C>B>A
A in MTEP11	Central	AmerenMO	3368	6239	6/1/2012	Bailey	Install 2-2000 A breakers and circuit switchers		138		214	Install 2-2000 A bus-tie breakers and 2-138 kV circuit switchers	MO			Planned	\$4,000,000			Y	C>B>A
A in MTEP11	Central	AmerenMO, ITCM	2248	4160	11/15/2020	Ottumwa	West Adair	1	345		1793	New line - 345 kV, 71 mile single circuit	IA/MO		71	Planned	\$154,790,000	Y	Y	Y	B>A
A in MTEP11	Central	DEM	3377	6250	12/31/2015	Scottsburg	Capacitor		69		28.8 MVAR	Replace Scottsburg 69kV - 7.2Mvar capacitor with a 28.8 Mvar capacitor and upgrade 69kV capacitor switching equipment	IN			Planned	\$500,000			Y	C>B>A

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Target Appendix	Region	Geographic Location by TO Member System	Proj ID	Facility ID	Expected USD	From Sub	To Sub	Ckt	Max kV	Min kV	Facility Rating	Facility Description	State	Miles Upg	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISC Facility	App ABC	
A in MTEP11	Central	DEM	3378	6251	6/1/2012	Canal Road	new distribution sub		69	12		Canal Sub - Purchase land and build 22.4MVA, 69/12kV sub near Canal Road and Allison Street in the 5762 ckt.	OH			Planned	\$756,196			Y	C>B>A	
A in MTEP11	Central	DEM	3379	6252	6/1/2014	Shelbyville McKay Rd.	new distribution sub		69	12		Shelbyville McKay Rd. - add new 69/12kV distribution sub in the 6976 ckt. Loop through with 954acsr and a set of 1200A line switches.	IN			Planned	\$303,710			Y	C>B>A	
A in MTEP11	Central	DEM	3380	6253	12/31/2011	Noblesville Gen. Station	breakers		345	138		Noblesville Gen. Sta. - Replace 138KV OB OCB: 138TR, 13869-9, 138230-7, 13886 and Circuit Switchers: 345230-11, 34519.	IN			Planned	\$2,909,606			Y	C>B>A	
A in MTEP11	Central	DEM	3383	6256	2/6/2011	Sherman Rd. Jct (new)	H.E. Rocklane	1	69			Ckt. 6999 new Sherman Rd. Jct. to H.E. Rocklane line section. Replace DEM 69kV poles to accommodate new H.E. tap line. This will be an alternate feed to Rocklane - operated N.O. - built and owned by HE, inside DEM area.	IN			In Service	\$64,568			Y	C>B>A	
A in MTEP11	Central	DEM	3384	6257	12/1/2012	Hortonville	Marathon Jct.	1	69		143	Hortonville to Marathon Jct. section of ckt. 6917 - Replace 336ACSR and 477ACSR with 954ACSS@200C. Upgrade Marathon Jct 600A switches to 1200A.	IN	3.86		Planned	\$1,409,099			Y	C>B>A	
A in MTEP11	Central	DEM	3385	6258	12/31/2012	Carmel Homeplace	Springmill Jct.	1	69		143	Carmel Homeplace to Springmill Jct. section of ckt. 69155 - Reconductor with 954ACSS@200C	IN	3.66		Planned	\$1,691,315			Y	C>B>A	
A in MTEP11	Central	DEM	3386	6259	6/1/2016	Carmel Springmill Rd.	Hortonville	1	69		143	Carmel Springmill Rd. Sub - Add 3-69kV breakers; straight bus config; build .23 mi 69kV 954ACSS@200C from Springmill to old Springmill Jct. Completes circuit to Hortonville. Change operating mode at Homeplace to close loop from 146th to Springmill.	IN		0.23	Planned	\$3,000,000			Y	C>B>A	
A in MTEP11	Central	DEM	3387	6260	6/1/2013	Tri-County Wind Energy 230kV Station - DPP J028	new gen i-connect	1	230			J028 - 230kV - Gen. interconnect sub - install three brkr ring bus for 200MW wind farm between Attica and Lafayette in the 23027 ckt.	IN			Planned	\$3,778,246			Y	C>B>A	
A in MTEP11	Central	DEM	3388	6261	6/1/2015	Walton	Logansport South	1	69		100	Walton to Logansport S. - Reconductor 69kV - 69110 line with 477acsr at 100C	IN	5.9		Planned	\$1,900,000			Y	C>B>A	
A in MTEP11	Central	DEM	3389	6262	12/1/2011	WVPA Center Valley	new WVPA distribution sub			138	12		DEM to install new line switching in the 138kV - 13867 ckt. at intersection with SR39 for tap line to radially feed new WVPA Center Valley dist sub	IN			Planned	\$236,677			Y	C>B>A
A in MTEP11	Central	DEM	3390	6263	12/31/2011	Inland Container	Hillsdale	1	69		100	Rebuild 69kV - 6906 line from Inland Container to WROW Jct. to Hillsdale - 477acsr26x7 at 100C	IN	10.8		Planned	\$3,663,434			Y	C>B>A	
A in MTEP11	Central	DEM	3391	6264	12/31/2011	Elora	Newberry	1	69		100	Rebuild 69kV - 6959 line section from Elora to Newberry - 477acsr26x7 at 100C	IN	5.4		Planned	\$1,716,818			Y	C>B>A	
A in MTEP11	Central	DEM	3392	6265	12/31/2012	Speed	LGEE Paddys West	1	345		1529	New DEM Speed to LGEE Paddys West 345kV tie line	IN		16.66	Planned	\$15,000,000			Y	C>B>A	
A in MTEP11	Central	DEM, NIPS	2202	4074	6/1/2018	Reynolds	Greentown	1	765		3576	new line	IN		66	Planned	\$171,875,000	Y	Y	Y	B>A	
A in MTEP11	Central	IPL	3273	6105	6/1/2011	Southwest	Stout CT	1	138		350	Line Survey and Potential Modifications	IN	2.9		Planned	\$300,000			Y	C>B>A	
A in MTEP11	Central	IPL	3274	6106	6/1/2011	South	Stout S	1	138		287	Line Survey and Potential Modifications	IN	3.34		Planned	\$350,000			Y	C>B>A	
A in MTEP11	Central	NIPS	2202	4073	8/1/2018	Reynolds	Transformer	1	765	345	2767.5	new transformer	IN			Planned	\$15,000,000	Y	Y	Y	B>A	
A in MTEP11	Central	Vectren	2460	4424	6/1/2013	Leonard Rd 69kV Substation		1	69			Add new 69kV switching substation near Leonard Rd	IN			Planned	\$2,150,000			NT	C>B>A	
A in MTEP11	Central	Vectren	2462	4426	6/1/2013	Stringtown	Folz	50-3	69			Reconductor existing 69kV line for more capacity	IN			Planned	\$2,500,000			NT	C>B>A	
A in MTEP11	Central	Vectren	2463	4427	6/1/2013	Givens	North West	31	69			Reconductor existing 69kV line for more capacity	IN			Planned	\$5,700,000			NT	C>B>A	

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Target Appendix	Region	Geographic Location by TO Member System	RFD	Facility ID	Expected JSD	From Sub	To Sub	Ckt	Max KV	Min KV	Facility Rating	Facility Description	State	Miles Upd	Miles New	Plan Status	Estimated Cost	Costs Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	Central	Vectren	2464	4428	6/1/2014	Mt Vernon	New Harmony	33	69			Reconductor existing 69kV line for more capacity	IN			Planned	\$10,600,000			NT	C>B>A
A in MTEP11	East	ATC LLC	3396	6271	11/15/2010	Blue River Tap	Muscoda	1	69	67		Improve line clearance	WI	9		In Service	\$580,000			Y	C>B>A
A in MTEP11	East	ITC	1868	3755	12/1/2012	Cato 120 kV	Substation Equipment		120			Rebuild GIS Bus and Replace 120 kV breaker	MI			Planned	\$5,400,000			Y	C>B>A
A in MTEP11	East	ITC	2931	5103	6/30/2012	Burns1	Jewel	1	120			Rebuild 2.4 miles of DC 3/0 Cu 120 kV lin to 1431 ACSR 230 kV construction.	MI	2.4		Planned	\$1,600,000			Y	C>B>A
A in MTEP11	East	ITC	2931	5102	6/30/2012	Adams	Spokane	1	120			Rebuild 2.4 miles of DC 3/0 Cu 120 kV lin to 1431 ACSR 230 kV construction.	MI	2.4		Planned	\$1,600,000			Y	C>B>A
A in MTEP11	East	ITC	3276	6108	12/31/2013							Replace Damaged or Defective Breakers	MI			Planned	\$9,000,000			Y	C>B>A
A in MTEP11	East	ITC	3277	6109	12/31/2013							Meet NERC PRC-023 Compliance	MI			Planned	\$2,400,000			Y	C>B>A
A in MTEP11	East	ITC	3278	6110	12/31/2013							Replace Damaged or Defective Potential Devices	MI			Planned	\$300,000			Y	C>B>A
A in MTEP11	East	ITC	3279	6111	12/31/2013							Replace Damaged or Defective Relays	MI			Planned	\$1,800,000			Y	C>B>A
A in MTEP11	East	ITC	3280	6112	12/31/2013							Replace Damaged or Defective Wood Poles	MI			Planned	\$3,000,000			Y	C>B>A
A in MTEP11	East	ITC	3281	6113	12/31/2012	Majestic	Lima	1	120	305		Construct new 120 kV line between Majestic and Lima, along with associated breakers and terminal equipment at each termination.	MI		5	Planned	\$8,400,000			Y	C>B>A
A in MTEP11	East	ITC	3283	6115	11/1/2012	Dexter Twp	Madrid	1	120	300		Loop Madrid to Majestic 120 kV line and new breaker station	MI		0.1	Planned	\$1,338,000			Y	C>B>A
A in MTEP11	East	ITC	3283	6116	11/1/2012	Dexter Twp	Majestic	1	120	300		Loop Madrid to Majestic 120 kV line and new breaker station	MI		0.1	Planned	\$1,338,000			Y	C>B>A
A in MTEP11	East	ITC	3284	6117	12/31/2015							Distribution Interconnection Request	MI			Planned	\$2,000,000			Y	C>B>A
A in MTEP11	East	ITC	3285	6516	6/1/2013	Shoal	33.3 Mvar capacitor		120			33.3 Mvar Capacitor at Shoal 120kV	MI			Planned	\$2,200,000			Y	C>B>A
A in MTEP11	East	ITC	3285	6118	6/1/2014	Fermi	33.3 Mvar capacitor		120			33.3 Mvar Capacitor at Fermi 120kV	MI			Planned	\$1,600,000			Y	C>B>A
A in MTEP11	East	ITC	3286	6519	4/30/2012	Fermi			345			Add 3rd Fermi 345kV row	MI			Planned	\$4,100,000			Y	C>B>A
A in MTEP11	East	ITC	3286	6119	12/31/2013	Fermi			345			Replace 345kV Disconnects	MI			Planned	\$950,000			Y	C>B>A
A in MTEP11	East	ITC	3495	6455	12/31/2011	NERC Alert Facility Ratings for 2011	Throughout system					Verify facilities as required due to the industry-wide NERC alert	MI			Planned	\$1,700,000			Y	C>B>A
A in MTEP11	East	ITC	3503	6463	12/31/2012	Air Flow Spoilers Installation			345			Install Air Flow Spoilers on Belle River-Greenwood-Pontiac and Belle River-Blackfoot 345 kV lines	MI			Planned	\$1,620,000			Y	C>B>A
A in MTEP11	East	ITC	3516	6500	9/1/2011	St. Clair P.P.	substation		120			Install a RFL 9745 Transmitter at St. Clair P.P. end of ITC line.	MI			Planned	\$5,000	Y		Y	C>B>A
A in MTEP11	East	ITC	3516	6497	9/1/2011	Carbon	Carbon Tap		120			Tap the existing LES/Sumpter Energy Associates Carbon to Carbon Tap 120 kV radial line connecting to ITC's Jewell - St. Clair 120kV line with a new J025 Tap for the new customer. Install a one way disconnect switch and tap structure at the POI on the Car	MI			Planned	\$237,500	Y		Y	C>B>A
A in MTEP11	East	ITC	3516	6498	9/1/2011	J025 Tap	J025 Customer Sub		120			Install a one way disconnect switch and tap structure at the Point of Change of Ownership at the new J025 Tap on the radial line from the J025 Customer Substation.	MI			Planned	\$237,500	Y		Y	C>B>A
A in MTEP11	East	ITC	3516	6499	9/1/2011	Jewell	substation		120			Install a RFL 9745 Transmitter at Jewell end of ITC line.	MI			Planned	\$5,000	Y		Y	C>B>A
A in MTEP11	East	METC	1809	3632	12/31/2013	Keystone	Hodenpyl	1	138	351		Rebuild 26.4 miles 138 kV line	MI	26.4		Planned	\$32,600,000	Y		Y	C>B>A
A in MTEP11	East	METC	2812	4507	5/31/2012	Twining	Whittemore	1	138	215		Rebuild the 12.7 mile Twining-Whittemore 138kV section to 954 ACSR future-double-circuit (pre-built to 230kV)	MI	12.7		Planned	\$14,200,000	Y		Y	C>B>A
A in MTEP11	East	METC	2812	4508	5/31/2012	Whittemore	Loud Dam	1	138	86		Rebuild the 15.6 mile Twining-Mio 138kV section to 954 ACSR future-double-circuit (pre-built to 230kV)	MI	15.6		Planned	\$17,500,000	Y		Y	C>B>A
A in MTEP11	East	METC	2812	4509	5/31/2012	Loud Dam	Alcona	1	138	86		Rebuild the 9.9 mile Twining-Mio 138kV section to 954 ACSR future-double-circuit (pre-built to 230kV)	MI	9.9		Planned	\$11,600,000	Y		Y	C>B>A

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Target Appendix	Region	Geographic Location by TO Member System	PrjID	Facility ID	Expected ISD	From Sub	To Sub	OKT	Max KV	Min KV	Facility Rating	Facility Description	State	Miles Upg.	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	East	METC	3139	5517	6/1/2012	Tippy	Wexford	1	138			Replace terminal equipment at Tippy	MI			Planned	\$20,000			Y	C>B>A
A in MTEP11	East	METC	3287	6120	9/30/2011	Riggsville			138			Replace 138 kV Terminal Equipment	MI			Planned	\$4,600,000			Y	C>B>A
A in MTEP11	East	METC	3288	6121	12/31/2013							Replace Damaged or Defective Breakers	MI			Planned	\$6,000,000			Y	C>B>A
A in MTEP11	East	METC	3289	6122	12/31/2013							Meet NERC PRC-023 Compliance	MI			Planned	\$2,400,000			Y	C>B>A
A in MTEP11	East	METC	3290	6123	12/31/2013							Replace Damaged or Defective Potential Devices	MI			Planned	\$300,000			Y	C>B>A
A in MTEP11	East	METC	3291	6124	12/31/2013							Replace Damaged or Defective Relays	MI			Planned	\$1,200,000			Y	C>B>A
A in MTEP11	East	METC	3292	6125	12/31/2013							Replace Damaged or Defective Wood Poles	MI			Planned	\$4,800,000			Y	C>B>A
A in MTEP11	East	METC	3293	6126	12/31/2013							Replace Damaged or Defective Batteries	MI			Planned	\$100,000			Y	C>B>A
A in MTEP11	East	METC	3294	6127	12/31/2013							Relocate Power Plant Controls for better access	MI			Planned	\$3,120,000			Y	C>B>A
A in MTEP11	East	METC	3295	6128	12/31/2013							Address NECS Code Clearance Issues	MI			Planned	\$3,600,000			Y	C>B>A
A in MTEP11	East	METC	3296	6129	12/31/2011							Install or upgrade secondary oil containment	MI			Planned	\$3,100,000			Y	C>B>A
A in MTEP11	East	METC	3297	6130	12/31/2012							Install or upgrade secondary oil containment	MI			Planned	\$3,100,000			Y	C>B>A
A in MTEP11	East	METC	3298	6131	12/31/2013							Install or upgrade secondary oil containment	MI			Planned	\$3,100,000			Y	C>B>A
A in MTEP11	East	METC	3299	6132	12/31/2015							Distribution Interconnection Request	MI			Planned	\$2,500,000			Y	C>B>A
A in MTEP11	East	METC	3303	6136	6/1/2015	Cottage Grove	East Tawas	1	138	287		Rebuild 12.3 miles of 138kV to 954 ACSR.	MI	12.3		Planned	\$11,400,000	Y		Y	C>B>A
A in MTEP11	East	METC	3304	6137	12/31/2013	Croton	Nineteen Mile Rd	1	138	196		Rebuild 21.5 miles 138 kV line	MI	21.5		Planned	\$26,600,000	Y		Y	C>B>A
A in MTEP11	East	METC	3306	6139	6/1/2012	Karn			138			Replace relays	MI			Planned	\$200,000			Y	C>B>A
A in MTEP11	East	METC	3308	6143	12/31/2012	Gaylord	Livingston	1	138			Install new dual pilot relay scheme on 138kV circuit	MI			Planned	\$315,000			Y	C>B>A
A in MTEP11	East	METC	3491	6451	12/31/2011	NERC Alert Facility Ratings for 2011	Throughout system					Verify facilities as required due to the industry-wide NERC alert	MI			Planned	\$2,100,000			Y	C>B>A
A in MTEP11	East	METC	3505	6472	1/1/2013	Clinton Jct.		1	138			New Switching Station at existing Clinton Jct. Tap point on Delhi - Island Rd. circuit. Will connect existing 3 circuits plus new circuit to Eaton Rapids area.	MI			Planned	\$4,500,000			Y	A
A in MTEP11	East	METC	3505	6466	1/1/2013	URV Junction			138			New Switching Station looping in Tompkins-Kipp Rd 138kV circuit	MI			Planned	\$4,100,000			Y	A
A in MTEP11	East	METC	3505	6467	1/1/2013	Tompkins	Kipp Rd	1	138			Loop Tompkins-Kipp Rd into new URV Jct. Station	MI			Planned	\$500,000			Y	A
A in MTEP11	East	METC	3505	6468	1/1/2013	Eaton Rapids North	URV	1	138			New Line. On same structures as URV to Eaton Rapids Wolv.	MI		2	Planned	\$1,800,000			Y	A
A in MTEP11	East	METC	3505	6469	1/1/2013	URV		1	138			New Substation to serve Eaton Rapids load (URV-USA)	MI			Planned	\$2,600,000			Y	A
A in MTEP11	East	METC	3505	6470	1/1/2013	URV	Eaton Rapids Wolv	1	138			New Line from URV to potential Wolverine Tap point. On same structures as Eaton Rapids North to URV.	MI		2	Planned	\$1,800,000			Y	A
A in MTEP11	East	METC	3505	6471	1/1/2013	Eaton Rapids Wolv	Clinton Jct	1	138			New Line from Clinton Jct. to potential Wolverine Tap point.	MI		10.4	Planned	\$13,200,000			Y	A
A in MTEP11	East	METC	3517	6502	10/31/2011	Redstone	Tittabawassee	1	138	159 MVA		Line created when the existing Tittabawassee-Begole line is cut into Redstone	MI			Planned	\$226,000			Y	C>B>A
A in MTEP11	East	METC	3517	6503	10/31/2011	Redstone			138			New Redstone substation will be laid out in a 3-breaker ring bus configuration.	MI			Planned	\$4,100,000			Y	C>B>A
A in MTEP11	East	METC	3517	6510	10/31/2011	Redstone	Gratiot Wind	1	138			Install a METC owned 138 kV disconnect switch at the Redstone end of the interconnection customers radial line	MI			Planned	\$390,500			Y	C>B>A
A in MTEP11	East	METC	3517	6509	12/31/2012	Summerton	Begole	1	138	159 MVA		New line created by looping the existing Alma-Summerton 138 kV line into Begole	MI		2.4	Planned	\$1,775,000	Y		Y	C>B>A
A in MTEP11	East	METC	3517	6508	12/31/2012	Alma	Begole	2	138	159 MVA		New line created by looping the existing Alma-Summerton 138 kV line into Begole	MI		2.4	Planned	\$1,775,000	Y		Y	C>B>A
A in MTEP11	East	METC	3517	6501	12/31/2012	Redstone	Begole	1	138	386 MVA		Rebuild the existing line between Redstone and Begole to 1431 ACSR	MI	10.7		Planned	\$8,109,000	Y		Y	C>B>A
A in MTEP11	East	METC	3517	6507	12/31/2012	Alma	Vestaburg	1	138	159 MVA		Replace terminal equipment at the Alma end of the Alma-Vestaburg 138 kV line	MI			Planned	\$170,000			Y	C>B>A
A in MTEP11	East	METC	3517	6506	12/31/2012	Alma	Begole	1	138	159 MVA		Replace terminal equipment at the Alma end of the Alma-Begole 138 kV line	MI			Planned	\$170,000			Y	C>B>A

Appendices A, B, C: Project Facility Table 9/7/2011

Target Appendix	Region	Geographic Location by TO Member System	Facility ID	Facility ID	Expected ISO	From Sub	To Sub	OKts	Max kv	Min kv	Facility Rating	Facility Description	State	Miles Upg	Miles New	Plan Status	Estimated Cost	Costs Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	East	METC	3517	6505	12/31/2012	Cornell	Bennington	1	138		159 MVA	Replace terminal equipment at the Cornell end of the Cornell-Bennington 138 kV line	MI			Planned	\$15,000			Y	C>B>A
A in MTEP11	East	METC	3517	6504	12/31/2012	Begole			138			Reconfigure and expand the existing Begole substation into a 5-breaker ring bus layout	MI			Planned	\$4,900,000			Y	C>B>A
A in MTEP11	East	METC	3518	6511	6/1/2012	MCV	Tittabawassee	1	345		1239 MVA	Remove 345 kV Disconnect switch from the Tittabawassee end of the MCV-Tittabawassee #1 345 kV line and extend the line entrance into the bus	MI			Planned	\$32,000	Y		Y	C>B>A
A in MTEP11	East	METC	3518	6512	6/1/2012	MCV	Tittabawassee	2	345		1239 MVA	Remove 345 kV Disconnect switch from the Tittabawassee end of the MCV-Tittabawassee #2 345 kV line and extend the line entrance into the bus	MI			Planned	\$32,000	Y		Y	C>B>A
A in MTEP11	East	METC	3520	6517	6/1/2012	Eureka 138kV	Vestaburg 138kV	1	138			Remediate sag limits to conductor rating of circuit	MI			Planned	\$1,100,000			Y	C>B>A
A in MTEP11	East	METC	3521	6518	6/1/2012	Bullock 138kV	Summertown 138kV	1	138			Remediate sag limits to conductor rating of circuit	MI			Planned	\$3,600,000			Y	C>B>A
A in MTEP11	East	NIPS	3203	5949	12/31/2019	Reynolds	Hiple	2	345			new line tap at Burr Oak	IN			Planned	\$271,000,000	Y	Y	Y	B>A
A in MTEP11	East	WPSC	3328	6191	12/31/2011	Hersey	Barryton	1	69			Barryton Taps the Hersey to Weidman 69kV circuit	MI			Planned	\$100,000			Y	C>B>A
A in MTEP11	East	WPSC	3329	6192	12/31/2011	Barryton	Weidman	1	69			Barryton Taps the Hersey to Weidman 69kV circuit	MI			Planned	\$100,000			Y	C>B>A
A in MTEP11	East	WPSC	3329	6194	12/31/2013	Goodwin	Wayland	1	69		143.4MVA	Rebuild Overloaded Line to 795ACSS	MI	4.58		Planned	\$1,900,000			Y	C>B>A
A in MTEP11	East	WPSC	3329	6193	12/31/2013	Burnips	Goodwin	1	69		143.4MVA	Rebuild Overloaded Line to 795ACSS	MI	13.09		Planned	\$5,250,000			Y	C>B>A
A in MTEP11	East	WPSC	3330	6195	12/31/2011	Casnovia	Capacitor Bank		69			Install a Capacitor Bank	MI			Planned	\$260,000			Y	C>B>A
A in MTEP11	East	WPSC	3331	6196	12/31/2015	Redwood	Hart	1	69		143.4MVA	Rebuild Overloaded Line to 795ACSS	MI	1.77		Planned	\$750,000			Y	C>B>A
A in MTEP11	East	WPSC	3332	6197	2/28/2011	Bass Lake	Substation Upgrade		69			Install Relaying at the current single breaker station	MI			In Service	\$250,000			Y	C>B>A
A in MTEP11	East	WPSC	3333	6198	12/31/2011	Lemon Junction	Substation Upgrade		69			Install a Single Breaker Station	MI			Planned	\$350,000			Y	C>B>A
A in MTEP11	East	WPSC	3334	6199	6/30/2011	Casnovia	Sternberg	1	69		143.4MVA	Rebuild a portion of the line to accommodate work on the distribution underbuild	MI	1.5		In Service	\$400,000			Y	C>B>A
A in MTEP11	East	WPSC	3335	6200	12/31/2013	Burnips	Substation Upgrade		69			Replace bus work, breakers, relays, and any other necessary components	MI			Planned	\$900,000			Y	C>B>A
A in MTEP11	West	AmerenMO, ITCM	2248	6584	6/1/2017	Ottumwa	Adair	1	345		1739	New Ottumwa-Adair 345 kV line. ITCM & MEC to own Iowa portion, Ameren to own Missouri portion.	IA		64	Planned	\$32,164,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	174	3477	3/1/2012	Dunn Road	Transformer	1	138	69	56	Install 56 MVA 138/69 kV transformer at Dunn Road	WI			Planned				Y	B>A
A in MTEP11	West	ATC LLC	174	442	3/1/2012	Canal	Dunn Road	1	138		290	New 138kV line from Canal to Dunn Rd	WI		7.64	Planned	\$24,763,300			Y	B>A
A in MTEP11	West	ATC LLC	333	596	6/1/2013	Hiawatha	Indian Lake (string second 138 kV circuit)	2	138		277	terminate and energize unused 2nd 138 kV circuit	MI		40	Planned	\$4,900,000			Y	B>A
A in MTEP11	West	ATC LLC	333	474	6/1/2013	Hiawatha	Indian Lake (convert double circuit 138 kV from 69 kV operation to 138 kV o	2	138		277	Convert from 69kV operation to 138kV operation	MI		40	Planned				Y	B>A
A in MTEP11	West	ATC LLC	1143	1793	12/31/2012	Lafayette (aka Darlington Wind)	generator		0.6		99 MW	new generator	WI			Planned	\$4,200,000			Y	B>A
A in MTEP11	West	ATC LLC	1699	5979	7/31/2011	Chaffee Ck	Capacitor Bank		69		14.4 MVAR	Upgrade Chaffee Ck 10.8 MVAR capacitor bank to 14.4 MVAR	WI			Planned	\$282,779			Y	C>B>A
A in MTEP11	West	ATC LLC	1699	3478	7/31/2011	Mckenna	Capacitor bank		69		15.3 MVAR	Upgrade Mckenna 6.3 MVAR capacitor bank to 15.3 MVAR	WI			Planned	\$403,971			Y	C>B>A
A in MTEP11	West	ATC LLC	1705	3487	4/1/2011	Townline Road	Bass Creek	1	138		146 MVA	Upgrade Townline Road-Bass Creek 138 kV line	WI		11.7	In Service	\$935,946			Y	B>A
A in MTEP11	West	ATC LLC	1705	3486	4/1/2011	Bass Creek	Transformer	1	138	69	100 MVA	Install a 138/69 kV transformer at Bass Creek substation	WI			In Service	\$6,040,000			Y	B>A
A in MTEP11	West	ATC LLC	1729	3518	4/20/2011	Straits	McGulpin	1	138		127 MVA	Upgrade the Straits-McGulpin 138 kV line 9901 for Frontier T-D	MI		2.5	In Service	\$150,000			Y	C>B>A
A in MTEP11	West	ATC LLC	1729	3519	4/20/2011	Straits	McGulpin	3	138		127 MVA	Upgrade the Straits-McGulpin 138 kV line 9903 for Frontier T-D	MI		2.5	In Service	\$150,000			Y	C>B>A

Appendices A, B, C: Project Facility Table 9/7/2011

Target Appendix	Region	Geographic Location by IO Member System	PrjID	Facility ID	Expected ISD	From Sub	To Sub	Ckt	Max kV	Min kV	Facility Rating	Facility Description	State	Miles Upd	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISC Facility	App ABC
A in MTEP11	West	ATC LLC	1950	3831	3/17/2011	Kewaunee	transformer	2	345	138	500 MVA	Add a 2nd Kewaunee 345-138 kV transformer	WI			In Service	\$17,697,000	Y		Y	B>A
A in MTEP11	West	ATC LLC	2036	3916	12/15/2011	Wauzeka	Boscobel	1	69		64 MVA	Increase line clearance to 200/300 deg F SN/SE	WI	12		Planned	\$3,289,758			Y	B>A
A in MTEP11	West	ATC LLC	2036	3915	12/15/2011	Gran Grae	Wauzeka	1	69		73 MVA	Increase line clearance to 200/300 deg F SN/SE	WI	7.3		Planned	\$2,001,270			Y	B>A
A in MTEP11	West	ATC LLC	2037	3917	6/19/2012	Dane	Lodi Tap	1	69		95 MVA	Rebuild Dane-Lodi Tap 69 kV	WI		4.39	Planned	\$6,798,033			Y	C>B>A
A in MTEP11	West	ATC LLC	2055	3942	6/1/2012	Woodmin	Substation			115	175 MVA	Construct a new Woodmin distribution substation	WI			Planned				Y	B>A
A in MTEP11	West	ATC LLC	2055	3941	6/1/2012	Clear Lake	Woodmin	1	115		175 MVA	Construct a 7.5 mile 115 kv line from Clear Lake to a new Woodmin distribution substation	WI		7.5	Planned	\$21,331,000			Y	B>A
A in MTEP11	West	ATC LLC	2800	4930	9/10/2010	Arpin	Hume	1	115		236 MVA	Marshfield Electric & Water Department project to increase ground clearance to operate the line at 200 Deg F	WI	13.5		In Service	\$191,000			Y	B>A
A in MTEP11	West	ATC LLC	2820	4958	5/31/2012	Bluemound	transformer	1	230	138	400 MVA	Replace Bluemound 230/138kV transformer T1 with a 400 MVA unit	WI			Planned	\$8,200,000			Y	B>A
A in MTEP11	West	ATC LLC	2842	5050	4/8/2011	Stage Coach	Black Earth	1	69		83 MVA	Uprate Stage Coach-Black Earth 69 kV	WI	6.7		In Service	\$3,554,873			Y	B>A
A in MTEP11	West	ATC LLC	2842	5049	4/8/2011	Spring Green	Arena	1	69		84 MVA	Uprate Spring Green-Arena 69kV line	WI	7		In Service	\$3,402,521			Y	B>A
A in MTEP11	West	ATC LLC	2844	4998	3/16/2014	Pleasant Prairie	Zion Energy Center	1	345		1462	Construct a new Pleasant-Zion Energy Center 345-kV line	WI/IL		5.3	Planned	\$28,856,000	Y	Y	Y	C>B>A
A in MTEP11	West	ATC LLC	2846	5068	5/1/2014	Straits power flow control		1	138	138		Install AC-DC-AC Back to Back Voltage Source Converter (VSC) power flow controller at the Straits 138-kV substation	MI			Planned	\$90,000,000	Y		Y	A
A in MTEP11	West	ATC LLC	3095	5420	4/1/2012	Hulbert	Roberts	1	69		37 MVA	Increase ground clearance for the 9Mile-Roberts 69 kV line 6952 to 176 deg f clearance for all seasons & Install Arresters, Replace Select Components	MI	17.3		Planned	\$6,034,531			Y	B>A
A in MTEP11	West	ATC LLC	3095	5418	4/1/2012	Raco	Eckerman	1	69		37 MVA	Increase ground clearance for the 9Mile-Roberts 69 kV line 6952 to 176 deg f clearance for all seasons & Install Arresters, Replace Select Components	MI	12.1		Planned	\$4,220,684			Y	B>A
A in MTEP11	West	ATC LLC	3095	5419	4/1/2012	Eckerman	Hulbert	1	69		37 MVA	Increase ground clearance for the 9Mile-Roberts 69 kV line 6952 to 176 deg f clearance for all seasons & Install Arresters, Replace Select Components	MI	6.4		Planned	\$2,232,428			Y	B>A
A in MTEP11	West	ATC LLC	3095	5416	4/1/2012	9Mile	Brimley	1	69		37 MVA	Increase ground clearance for the 9Mile-Roberts 69 kV line 6952 to 176 deg f clearance for all seasons & Install Arresters, Replace Select Components	MI	10.7		Planned	\$3,732,340			Y	B>A
A in MTEP11	West	ATC LLC	3095	5417	4/1/2012	Brimley	Raco	1	69		37 MVA	Increase ground clearance for the 9Mile-Roberts 69 kV line 6952 to 176 deg f clearance for all seasons & Install Arresters, Replace Select Components	MI	10.1		Planned	\$3,523,050			Y	B>A
A in MTEP11	West	ATC LLC	3108	5450	6/1/2014	Evergreen	Pine River	1	69		174 MVA	Rebuild Straits-Pine River dbl ckt line with T2-477 ACSR	MI	23.46		Planned	\$19,145,477			Y	B>A
A in MTEP11	West	ATC LLC	3108	5448	6/1/2014	Straits	Pine River	1	69		174 MVA	Rebuild Straits-Pine River dbl ckt line with T2-477 ACSR	MI	25		Planned	\$20,402,257			Y	B>A
A in MTEP11	West	ATC LLC	3108	5449	6/1/2014	Straits	Evergreen	1	69		174 MVA	Rebuild Straits-Pine River dbl ckt line with T2-477 ACSR	MI	1.54		Planned	\$1,256,779			Y	B>A
A in MTEP11	West	ATC LLC	3126	5477	12/9/2012	Chandler	transformer	2	138	69	60 MVA	Install a 2nd Chandler Transformer & reconfigure bus to 138 kV Ring bus	MI			Planned	\$9,700,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3127	5628	12/31/2018	North Madison	Cardinal	1	345		2110	Construct a North Madison - Cardinal 345-kV line	WI		20.55	Planned	\$45,300,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5627	12/31/2018	North Madison	Cardinal	1	138		348	Reconductor with T2-477 HAWK ACSR	WI	20.546		Planned	\$6,400,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5060	12/31/2020	Arena	Mazomanie West	1	138		348 MVA	Convert Arena-Mazomanie West from 69-kV to 138 kV	WI	5		Planned	\$4,400,000	Y	Y	Y	B>A

Appendices A, B, C: Project Facility Table 9/7/2011

Target Appendix	Region	Geographic Location by TO Member System	Proj ID	Facility ID	Expected (SD)	From Sub	To Sub	Ckt	Max kV	Min kV	Facility Rating	Facility Description	State	Miles Uprgt	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	West	ATC LLC	3127	5065	12/31/2020	Stage Coach	Cardinal	1	138		348 MVA	Convert Stage Coach-West Middleton from 69-kV to 138 kV	WI	4		Planned	\$9,200,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5064	12/31/2020	Black Earth	Stage Coach	1	138		348 MVA	Convert Black Earth-Stage Coach from 69-kV to 138 kV	WI	7		Planned	\$10,800,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5063	12/31/2020	Mazomanie	Black Earth	1	138		348 MVA	Convert Mazomanie-Black Earth from 69-kV to 138 kV	WI	4		Planned	\$2,700,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5062	12/31/2020	Mazomanie Industrial	Mazomanie	1	138		348 MVA	Convert Mazomanie Industrial-Mazomanie from 69-kV to 138 kV	WI	2		Planned	\$800,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5061	12/31/2020	Mazomanie West	Mazomanie Industrial	1	138		348 MVA	Convert Mazomanie West-Mazomanie Industrial from 69-kV to 138 kV	WI	1		Planned	\$800,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	4978	12/31/2020	Spring Green	Transformer	1	345	138	500	new transformer	WI			Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5059	12/31/2020	Spring Green	Arena	1	138		348 MVA	Convert Spring Green-Arena from 69-kV to 138 kV	WI	7		Planned	\$5,300,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5480	12/31/2020	Nelson Dewey	Cassville	1	161		342 MVA	Reconductor Nelson Dewey-Cassville	WI	2.34		Planned	\$5,200,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5481	12/31/2020	Cassville	Turkey River	1	161		445 MVA	Reconductor Cassville-Turkey River	WI/IA	4		Planned	\$3,700,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5483	12/31/2020	Spring Green	Substation		345	138		Spring Green substation modifications	WI			Planned	\$23,100,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	5484	12/31/2020	Cardinal	Substation		345	138		Cardinal substation modifications	WI			Planned	\$9,700,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3127	4977	12/31/2020	Spring Green	Cardinal	1	345		2110	new line	WI		28	Planned	\$59,900,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3157	5543	6/17/2011	Red Granite Tap	ACEC Spring Lake Tap	1	69	69		Uprate Red Granite Tap to ACEC Spring Lake Tap 69 kV Line	WI	2.5		In Service	\$39,146			Y	C>B>A
A in MTEP11	West	ATC LLC	3157	5542	6/17/2011	Fountain Valley Tap	Red Granite Tap	1	69	69		Uprate Fountain Valley Tap to Red Granite Tap 69 kV Line	WI	3.6		In Service	\$56,182			Y	C>B>A
A in MTEP11	West	ATC LLC	3157	5541	6/17/2011	Fountain Valley	Fountain Valley Tap	1	69	69		Uprate Fountain Valley to Fountain Valley Tap 69 kV Line	WI	9.2		In Service	\$143,900			Y	C>B>A
A in MTEP11	West	ATC LLC	3157	5545	6/17/2011	Silver Lake Tap	Wautoma	1	69	69		Uprate Silver Lake Tap to Wautoma 69 kV Line	WI	3.6		In Service	\$56,183			Y	C>B>A
A in MTEP11	West	ATC LLC	3157	5544	6/17/2011	ACEC Spring Lake Tap	Silver Lake Tap	1	69	69		Uprate ACEC Spring Lake Tap to Silver Lake Tap 69 kV Line	WI	4.3		In Service	\$67,057			Y	C>B>A
A in MTEP11	West	ATC LLC	3160	5550	12/31/2011	Staff	Hamilton	1	138	258		Uprate Staff to Hamilton 138 kV Line for G706/H012	WI	12.7		Planned	\$471,114			Y	C>B>A
A in MTEP11	West	ATC LLC	3160	5551	12/31/2011	Staff	Friesland	1	138	348		Uprate Staff to Friesland 138 kV Line	WI	6		Planned	\$222,733			Y	C>B>A
A in MTEP11	West	ATC LLC	3160	5552	12/31/2011	Friesland	North Randolph	1	138	293		Uprate Friesland to North Randolph 138 kV Line for G706/H012	WI	1.4		Planned	\$347,573			Y	C>B>A
A in MTEP11	West	ATC LLC	3160	5553	12/31/2011	Hamilton	Portage	1	138	293		Uprate Hamilton to Portage 138 kV Line for G706/H012	WI	1.1		Planned	\$406,259			Y	C>B>A
A in MTEP11	West	ATC LLC	3161	5556	11/30/2012	EcoMont	Rewey Tap	1	69	78		New EcoMont substation is tapped into Belmont Tap-Rewey Tap 69 kV Line & remote end terminal work for G749	WI	6.7		Planned	\$572,112			Y	C>B>A
A in MTEP11	West	ATC LLC	3161	5555	11/30/2012	Belmont Tap	EcoMont	1	69	78		New EcoMont substation is tapped into Belmont Tap-Rewey Tap 69 kV Line & remote end terminal work for G749	WI	3.6		Planned	\$307,404			Y	C>B>A
A in MTEP11	West	ATC LLC	3161	5554	11/30/2012	EcoMont	Substation		69			New EcoMont substation G749	WI			Planned	\$3,689,667			Y	C>B>A
A in MTEP11	West	ATC LLC	3188	5629	3/25/2011	Pleasant Prairie	Zion	1	345	1334		Replace 345kV Wave trap and jumpers at the ComEd Zion SS	WI/IL			In Service	\$1,544,571	Y		Y	B>A
A in MTEP11	West	ATC LLC	3206	5970	6/1/2018	Branch River	Point Beach	1	345	883		Loop the Point Beach-Forest Junction into the Branch River SS	WI			Planned	\$5,314,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5971	6/1/2018	Branch River	Forest Jct	1	345	883		Loop the Point Beach-Forest Junction into the Branch River SS	WI			Planned	\$2,566,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5969	6/1/2018	Barnhart	Holland	1	138	283		Terminate the not-converted Holland 138 kV line at Barnhart 138 kV	WI			Planned	\$142,000			Y	B>A
A in MTEP11	West	ATC LLC	3206	5968	6/1/2018	Branch River	Forest Jct	2	345	883		Convert the existing Forest Junction-Howards Grove-Plymouth #4 138 kV line and the Branch River portion of the existing Plymouth #4-Holland 138 kV line to 345 kV and loop into the Barnhart and Branch River substations	WI		12.88	Planned	\$9,397,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5966	6/1/2018	Howards Grove	Erdman	1	138	348		Construct a new 138 kV line from Howards Grove to Erdman	WI		6.6	Planned	\$11,824,000			Y	B>A

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A in MTEP11	West	ATC LLC	3206	5959	6/1/2018	Barnhart	Cedarsauk	1	345		960	Loop Edgewater-Cedarsauk into the new Barnhart SS and uprate the Barnhart to Cedarsauk section to 960 MVA	WI			Planned	\$5,322,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5967	6/1/2018	Barnhart	Branch River	1	345		1096	Convert the existing Forest Junction-Howards Grove-Plymouth #4 138 kV line and the Branch River portion of the existing Plymouth #4-Holland 138 kV line to 345 kV and loop into the Barnhart and Branch River substations	WI		35.5	Planned	\$20,057,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5958	6/1/2018	Barnhart	Edgewater	1	345		653	Loop Edgewater-Cedarsauk into the new Barnhart SS	WI			Planned	\$1,299,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5957	6/1/2018	Barnhart	South Fond du Lac	1	345		1198	Loop Edgewater-South Fond du Lac into the new Barnhart SS	WI			Planned	\$9,928,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5964	6/1/2018	Barnhart	Plymouth #4	1	138		348	Construct a new 138 kV line from Barnhart to Plymouth #4	WI		5.87	Planned	\$8,529,000			Y	B>A
A in MTEP11	West	ATC LLC	3206	5963	6/1/2018	Barnhart	Mullet River 138 kV	1	138		488	Loop the South Sheboygan Falls-Mullet River 138 kV line into Barnhart SS	WI			Planned	\$6,843,000			Y	B>A
A in MTEP11	West	ATC LLC	3206	5978	6/1/2018	Barnhart	Substation	1	345		500	New 345 kV Substation, including bus work and new 345/138 kV transformer	WI			Planned	\$42,475,500	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5955	6/1/2018	Branch River	substation		345			Construct a new Branch River substation	WI			Planned	\$25,921,500	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5962	6/1/2018	Barnhart	South Sheboygan Falls	1	138		293	Loop the South Sheboygan Falls-Mullet River 138 kV line into Barnhart SS	WI			Planned	\$3,839,000			Y	B>A
A in MTEP11	West	ATC LLC	3206	5960	6/1/2018	Barnhart	Sheboygan Energy Center	1	345		1096	Loop Sheboygan Energy Center-Granville into the new Barnhart SS	WI			Planned	\$3,272,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5965	6/1/2018	Plymouth #4	Howards Grove	1	138		348	Construct a new 138 kV line from Plymouth #4 to Howards Grove	WI		3.13	Planned	\$2,938,000			Y	B>A
A in MTEP11	West	ATC LLC	3206	5973	6/1/2018	Branch River	Sheboygan Energy Center	1	345		1096	Loop the Point Beach-Sheboygan Energy Center 345 kV line into the Branch River SS	WI		1	Planned	\$2,861,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5961	6/1/2018	Barnhart	Granville	1	345		1096	Loop Sheboygan Energy Center-Granville into the new Barnhart SS	WI			Planned	\$2,294,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5956	6/1/2018	Barnhart	Edgewater	2	345		937	Loop Edgewater-South Fond du Lac into the new Barnhart SS	WI			Planned	\$4,499,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3206	5972	6/1/2018	Branch River	Point Beach	1	345		1096	Loop the Point Beach-Sheboygan Energy Center 345 kV line into the Branch River SS	WI		1	Planned	\$3,988,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC	3395	6270	4/1/2015	Milwaukee Co			138	13.2		added distribution substation with 2 line breakers and a bus tie breaker	WI			Planned	\$3,500,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3395	6269	4/1/2015	Parkhill	Milwaukee Co	1	138		321	Tap Bluemound-Parkhill line and install 1.9 miles of new 138kV line to the new Milwaukee Co substation	WI		1.9	Planned	\$15,000,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3395	6268	4/1/2015	Bluemound	Milwaukee Co	1	138		321	Tap Bluemound-Tosa line and install 2.0 miles of new 138kV line to the new Milwaukee Co substation	WI		2	Planned	\$15,000,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3427	6322	3/7/2011	Nordic	Perch Lk	1	138		191	Increase ground clearance for the Nordic-Perch Lk 138 kV line	MI	29.6		In Service	\$1,543,040			Y	C>B>A
A in MTEP11	West	ATC LLC	3428	6323	4/8/2011	Stage Coach	Timberlane	1	69		80	Increase ground clearance for the Stage coach-Timberlane 69 kV line	WI	2.4		In Service	\$35,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3432	6330	4/21/2011	Stoughton	Stoughton South Tap	1	69		69	Uprate the Stoughton-Stoughton South Tap-Oregon 69 kV line Y-127	WI	8		In Service	\$456,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3432	6331	4/21/2011	Stoughton South Tap	Oregon	1	69		69	Uprate the Stoughton-Stoughton South Tap-Oregon 69 kV line Y-127	WI	2		In Service	\$114,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3433	6332	12/31/2011	Stagecoach	Mt Horeb NE	1	69		69	Uprate the Stagecoach-Mt Horeb NE-Mt Horeb 69 kV line Y-128	WI	0.5		Planned				Y	C>B>A
A in MTEP11	West	ATC LLC	3433	6333	12/31/2011	Mt Horeb NE	Mt Horeb	1	69		69	Uprate the Stagecoach-Mt Horeb NE-Mt Horeb 69 kV line Y-128	WI	0.8		Planned	\$36,505			Y	C>B>A
A in MTEP11	West	ATC LLC	3447	6350	12/7/2010	Ontonagon		1	138	69	28	Retap CT related to Ontonagon 138/69 kV Tr to obtain a higher rating	MI			In Service	\$12,410			Y	C>B>A
A in MTEP11	West	ATC LLC	3448	6351	12/1/2011	Ontonagon		1	138	69	47	Replace the Ontonagon 138/69 kv Tr with a larger unit	MI			Planned	\$935,786			Y	C>B>A

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A in MTEP11	West	ATC LLC	3449	6352	12/31/2013	Atlantic	M38	1	69		146	Rebuild the Atlantic-M38 69kV line	MI			Planned	\$18,878,963			Y	C>B>A
A in MTEP11	West	ATC LLC	3451	6356	11/1/2011	Mt Horeb	Verona	1	69		69	Increase ground clearance on the Mt Horeb-Verona 69kV line	WI	13		Planned	\$710,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3452	6359	11/1/2011	RCEC Center	Union Town Line	1	69		69	Increase ground clearance on the Bass Ck-Sheepskin 69kV line	WI	4.4		Planned	\$182,342			Y	C>B>A
A in MTEP11	West	ATC LLC	3452	6360	11/1/2011	Union Town Line	Evansville Tap	1	69		69	Increase ground clearance on the Bass Ck-Sheepskin 69kV line	WI	1.5		Planned	\$62,162			Y	C>B>A
A in MTEP11	West	ATC LLC	3452	6358	11/1/2011	Footville	RCEC Center	1	69		69	Increase ground clearance on the Bass Ck-Sheepskin 69kV line	WI	2.9		Planned	\$120,180			Y	C>B>A
A in MTEP11	West	ATC LLC	3452	6357	11/1/2011	Bass Ck	Footville	1	69		69	Increase ground clearance on the Bass Ck-Sheepskin 69kV line	WI	0.4		Planned	\$16,577			Y	C>B>A
A in MTEP11	West	ATC LLC	3452	6361	11/1/2011	Evansville Tap	Sheepskin	1	69		69	Increase ground clearance on the Bass Ck-Sheepskin 69kV line	WI	13		Planned	\$538,739			Y	C>B>A
A in MTEP11	West	ATC LLC	3453	6362	2/28/2012	Waupun	Koch Tap	1	69		59	Increase ground clearance on the Waupun-S Fond du Lac 69kV line	WI	2.6		Planned	\$314,102			Y	C>B>A
A in MTEP11	West	ATC LLC	3453	6363	2/28/2012	Koch Tap	S Fond du Lac	1	69		59	Increase ground clearance on the Waupun-S Fond du Lac 69kV line	WI	15.5		Planned	\$1,872,528			Y	C>B>A
A in MTEP11	West	ATC LLC	3457	6371	12/30/2011	Highway 2	SUB			138		GIC-J060 Highway 2 SS tapped in the Indian Lk-Perkins #1 line	MI			Planned	\$4,779,758			Y	C>B>A
A in MTEP11	West	ATC LLC	3457	6372	12/30/2011	Highway 2	Garden City Wind	1	138		211	GIC-J060 Highway 2 - Garden City Wind SS 138kV line	MI		17	Planned				Y	C>B>A
A in MTEP11	West	ATC LLC	3457	6373	12/30/2011	Garden City Wind	Transformer	1	138	34.5	30	GIC-J060 Garden City Wind 138/34.5 kV step up transformer	MI			Planned				Y	C>B>A
A in MTEP11	West	ATC LLC	3457	6374	12/30/2011	Garden City Wind	Transformer	1	34.5	0.69	35	GIC-J060 Garden City Wind 34.5/0.69 kV generator step up transformer	MI			Planned				Y	C>B>A
A in MTEP11	West	ATC LLC	3458	6375	6/3/2011	Aurora	Transformer	1	115	69	60	Aurora 115-69kV T3 Replacement	WI			In Service	\$2,958,914			Y	C>B>A
A in MTEP11	West	ATC LLC	3459	6376	4/12/2011	Hume	Wildwood	1	115		207	Increase ground clearance on the Hume-Wildwood 115kV line	WI	2.7		In Service	\$50,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3460	6377	2/28/2011	Berlin	Dartford Tap	1	69		72	Increase ground clearance on the Y-93 Berlin-Ripon 69kV line	WI	5.7		In Service	\$609,350			Y	C>B>A
A in MTEP11	West	ATC LLC	3460	6378	2/28/2011	Dartford Tap	NW Ripon	1	69		72	Increase ground clearance on the Y-93 Berlin-Ripon 69kV line	WI	5.5		In Service	\$587,969			Y	C>B>A
A in MTEP11	West	ATC LLC	3460	6379	2/28/2011	NW Ripon	Ripon	1	69		72	Increase ground clearance on the Y-93 Berlin-Ripon 69kV line	WI	1.8		In Service	\$192,426			Y	C>B>A
A in MTEP11	West	ATC LLC	3461	6380	2/28/2011	McMillan	Wildwood	1	115		138	Increase ground clearance on the McMillan-Wildwood 115kV line	WI	4.4		In Service	\$50,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3488	6446	3/1/2012	Brick Church	Walworth	1	69		84	Fix clearance on Brick Church-Walworth 69 kV line to bring rating up	WI	2.3		Planned	\$532,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3489	6448	3/1/2012	Wiota	Gratiot Tap	1	69		66	Fix clearance on Wiota-Gratiot Tap 69 kV line to bring rating up	WI	3.8		Planned				Y	C>B>A
A in MTEP11	West	ATC LLC	3489	6447	3/1/2012	Jennings Road	Wiota	1	69		60	Fix clearance on Jennings Road-Wiota 69 kV line to bring rating up	WI	1.5		Planned	\$314,000			Y	C>B>A
A in MTEP11	West	ATC LLC	3489	6449	3/1/2012	Gratiot Tap	Darlington	1	69		64	Fix clearance on Gratiot Tap-Darlington 69 kV line to bring rating up	WI	8.9		Planned				Y	C>B>A
A in MTEP11	West	ATC LLC	3504	6464	12/1/2012	Omro	Winneconne	1	69		64	Rerate Line Y-80 conductor from Omro sub to Winneconne sub to a rating of 580 amps	WI	5		Planned	\$205,000			Y	C>B>A
A in MTEP11	West	ATC LLC, ITCM	3127	5482	12/31/2020	Dubuque Co	Substation		345			Construct the Dubuque Co switching station new line	IA			Planned	\$13,400,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC, ITCM	3127	4976	12/31/2020	Spring Green	Dubuque Co	1	345		2110		WI		75.13	Planned	\$159,300,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC, XEL	3127	5626	12/31/2018	North LaCrosse	North Madison	1	345		2110	Construct a North LaCrosse - North Madison 345-kV line	WI		136.3	Planned	\$301,800,000	Y	Y	Y	B>A
A in MTEP11	West	ATC LLC, XEL	3127	6573	12/31/2018	North LaCrosse (Briggs Road)	Substation		345	161	448 MVA	Terminate North Madison - North LaCrosse 345 kV line into Briggs Road, create 345 kV breaker ring bus, add second 345/161 kV transformer, and 50 MVAR of 34.5 kV reactors on the tertiary	WI			Planned	\$17,460,000	Y	Y	Y	B>A
A in MTEP11	West	ATCLLC	3472	6399	3/22/2013	Pleasant Prairie			345			Construct a new 6 ring breaker and a half 345 kV bus at the P4 site adjacent to the existing P4 yard.	WI			Planned	\$39,400,000			Y	C>B>A

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A in MTEP11	West	ATCLLC	3479	6428	3/1/2012	Progress	Aviation	1	138		230 MVA	Increase ground clearance for the Progress-Aviation line to 187 degrees F	WI	1.85		Planned	\$492,563			Y	C>B>A	
A in MTEP11	West	ATCLLC	3480	6429	10/1/2012	Engadine Tap	Engadine	1	138		57 MVA	Construct a new radial 69-kV tap from the existing Indian Lake-Hiawatha 69-kV line 6913 to the Engadine Substation	WI		0.15	Planned	\$810,804			Y	C>B>A	
A in MTEP11	West	DPC	3397	6272	6/1/2014	Genoa	La Crosse Tap	1	161		400	Rebuild line	WI	20.9		Planned	\$18,000,000	Y		Y	C>B>A	
A in MTEP11	West	DPC	3434	6337	9/1/2012	Alma	Elk Mound	1	161			New Substation	WI			Planned	\$2,164,000			Y	C>B>A	
A in MTEP11	West	GRE	1203	2649	6/17/2013	Cedar Mountain	Transformer	1	345	115	448	new transformer	MN			Planned	\$19,300,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1885	8/15/2013	Cedar Mountain	Helena	2	345		2066	new line	MN		62.2	Planned	\$0	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1884	8/15/2013	Cedar Mountain	Helena	1	345		2066	new line	MN		62.2	Planned	\$141,700,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1893	10/9/2013	Lyon County	Transformer	1	345	115	448	new transformer	MN			Planned	\$20,700,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1883	11/5/2013	Lyon County	Cedar Mountain	2	345		2066	new line	MN		51.9	Planned	\$0	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1882	11/5/2013	Lyon County	Cedar Mountain	1	345		2066	new line	MN		51.9	Planned	\$111,500,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	5624	2/10/2014	Cedar Mountain	Franklin	1	115		336	new line	MN		5	Planned	\$22,600,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1894	3/31/2014	Lake Marion	Transformer	1	345	115	448	new transformer	MN			Planned	\$25,900,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1886	4/29/2014	Helena	Lake Marion	1	345		2066	new line	MN		26.6	Planned	\$87,800,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1887	6/16/2014	Lake Marion	Hampton Corner	1	345		2066	new line	MN		18.5	Planned	\$55,600,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1881	1/12/2015	Brookings County	Lyon County 345 kV	1	345		2066	new line	SD/MN		48.1	Planned	\$134,700,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1895	1/22/2015	Hazel	Transformer	1	345	230	336	new transformer	MN			Planned	\$25,700,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1888	2/2/2015	Lyon County	Hazel	1	345		2066	new line	MN		23.5	Planned	\$59,000,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	1203	1889	2/16/2015	Hazel Creek	Minnesota Valley	1	230		1558	new line	MN		6	Planned	\$20,500,000	Y	Y	Y	B>A	
A in MTEP11	West	GRE	2571	4582	11/15/2014	MN Pipeline	Menahga	1	115		42	MN Pipeline-Menahga 115 kV line operated at 34.5 kV. Menahga 2-way switch	MN		8	Planned	\$4,199,990			Y	C>B>A	
A in MTEP11	West	GRE	2599	4610	10/31/2014	Shell Lake	Shell Lake Tap	1	115			New Distribution	MN		5	Planned	\$4,201,000			Y	C>B>A	
A in MTEP11	West	GRE	2634	6292	11/2/2012	Savanna	Cedar Valley	1	115		310	Cedar Valley conversion to 115 kV from 69 kV	MN		8	Planned	\$3,900,225	Y		Y	B>A	
A in MTEP11	West	GRE	2634	4645	11/28/2014	Savanna	Cromwell	1	115		310	New 115 kV Cromwell-Floodwood Line	MN		29	Planned	\$22,000,000	Y		Y	B>A	
A in MTEP11	West	GRE	2643	4659	5/1/2013	Parkers Prairie	Parkers Prairie Tap	1	115		141.6	Parkers Prairie Conversion from 41.6 to 115 kV	MN		2	Planned	\$1,220,998			Y	C>B>A	
A in MTEP11	West	GRE	2679	4696	11/1/2013	Ramsey	Grand Forks	1	230			230 kV rebuild	MN	81.02		Planned	\$40,500,000			Y	C>B>A	
A in MTEP11	West	GRE	3454	6267	5/1/2013	Medina	115 kV breaker station	1	115		0	Convert WHCEA's Median 69 kV distribution substation to 115 kV. Retire the 69 kV portion of the Medina 115/69 kV substation, reconfigure Medina to a straight bus breaker station and re-terminate the existing 115kV lines and the new Median - Pomerleau Lake 115 kV line at the Medina breaker station. Medina is recommended to have additional positions for future 115 kV line terminations.	MN		0	Planned	\$1,386,164	N		Y	C>B>A	
A in MTEP11	West	GRE	3467	6394	7/1/2011	Oak Glen Wind	Riverpoint	1	69			SW-RB rebuild to double circuit line	MN		4	0	Under Construction	\$1,722,464			Y	B>A
A in MTEP11	West	GRE	3468	6395	9/1/2011	Claybank	Substation	1	69			Claybank breaker station	MN		0	0	Under Construction	\$1,312,741			Y	B>A
A in MTEP11	West	GRE	3469	6396	10/1/2011	H061	Tap Switch	1	69			H061 switch on the Vasa Tap line	MN		0	0	Planned	\$192,530			Y	B>A
A in MTEP11	West	GRE, XEL	1203	1898	6/1/2011	Morris	Transformer	2	230	115	150	Upgrade 100 MVA to 150 MVA	MN				Planned	\$4,000,000	Y	Y	Y	B>A
A in MTEP11	West	GRE, XEL	1203	1899	6/1/2011	Willmar	Transformer	2	115	69	112		MN				Planned	\$3,000,000	Y	Y	NT	B>A
A in MTEP11	West	ITCM	3191	5635	4/29/2011	Lakefield Jct	Substation	1	345			Convert the Lakefield 345kV ring bus to breaker and a half.	MN				In Service	\$8,148,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3192	5636	8/15/2010	Ellendale	Breaker Station	1	69		143 MVA	Construct a new Ellendale 69kV four terminal breaker station near the existing River Point Tap.	MN				In Service	\$1,854,906			Y	B>A
A in MTEP11	West	ITCM	3192	5638	12/31/2011	Ellendale	County Line	1	69		77 MVA	Change the N.O. switch to normally closed after breaker station is operational.	MN				Under Construction	\$58,800	Y		Y	B>A
A in MTEP11	West	ITCM	3192	5637	12/31/2011	Ellendale	G604 customer sub	1	69		77 MVA	Construct a new Ellendale-G604 customer 69kV tap.	MN		3.5		Under Construction	\$0	Y		Y	B>A
A in MTEP11	West	ITCM	3193	5639	10/1/2010	Trimont	G741 Tap	1	69			Tap Trimont(IPL)-Sherburn(SCREC) 69kV line for the new tap to G741 customer.	MN				In Service	\$10,000	Y		Y	B>A

Appendices A, B, C: Project Facility Table 9/7/2011

Target Appendix	Region	Geographic Location by I.C. Member System	ProjID	Facility ID	Expected ISD	From Sub	To Sub	Qty	Max kv	Min kv	Facility Rating	Facility Description	State	Miles Upg	Miles New	Plant Status	Estimated Cost	Cost Shared	Postage Stamp	MISO Facility	App/ABC
A in MTEP11	West	ITCM	3193	5640	10/1/2010	Sherburn(SCREC)	G741 Tap	1	69			Tap Trimont(PL)-Sherburn(SCREC) 69kV line for the new tap to G741 customer.	MN			In Service	\$10,000	Y		Y	B>A
A in MTEP11	West	ITCM	3193	5641	10/1/2010	G741 Tap	G741 Customer Sub	1	69			Radial tap from G741 Tap-G741 Customer sub	MN		2.5	In Service	\$197,884	Y		Y	B>A
A in MTEP11	West	ITCM	3193	5642	10/1/2010	Fox Lake	Relay Upgrade	1	69			Adjust relays at Fox Lake 69kV breaker730.	MN		2.5	In Service	\$6,000	Y		Y	B>A
A in MTEP11	West	ITCM	3194	5643	7/31/2010	Story County	Breaker Station	1	161	558 MVA		Expand the 161kV ring bus at Story County.	IA			In Service	\$422,664	Y		Y	B>A
A in MTEP11	West	ITCM	3195	5647	10/1/2010	Freeborn	G870 Wind Sub	1	161			Radial tap from Freeborn-G870	MN		4	In Service	\$0	Y		Y	B>A
A in MTEP11	West	ITCM	3195	5644	10/1/2010	Freeborn	Breaker Station	1	161	558 MVA		Construct a new Freeborn 161kV three terminal breaker station.	MN			In Service	\$3,076,795	Y		Y	B>A
A in MTEP11	West	ITCM	3195	5646	10/1/2010	Freeborn	Winnebago	1	161			Tap Hayward-Winnebago Jct 161kV line for the new Freeborn Breaker Station.	MN			In Service	\$139,368	Y		Y	B>A
A in MTEP11	West	ITCM	3195	5645	10/1/2010	Freeborn	Hayward	1	161			Tap Hayward-Winnebago Jct 161kV line for the new Freeborn Breaker Station.	MN			In Service	\$300,000	Y		Y	B>A
A in MTEP11	West	ITCM	3196	5648	7/1/2011	Bond	Breaker Station	1	69	143 MVA		Construct a new Bond 69kV four terminal breaker station near the existing Greely T.	IA			In Service	\$1,897,882			Y	B>A
A in MTEP11	West	ITCM	3196	5649	7/1/2011	Bond	Backbone Tap	1	69	69 MVA		Construct 2 miles of 69kV double circuit.	IA			In Service	\$831,141	Y		Y	B>A
A in MTEP11	West	ITCM	3196	5650	7/1/2011	Bond	Manchester REC Tap	1	69	69 MVA		Construct 2 miles of 69kV double circuit.	IA			In Service	\$831,140	Y		Y	B>A
A in MTEP11	West	ITCM	3205	6526	12/31/2015	Rutland	Winnebago	1	161	446 MVA		Construct 345-161kV double circuit	MN	15.24		Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6535	12/31/2015	Winnebago	Fairbault Co	1	161	446 MVA		Construct 345-161kV double circuit	IA	15.13		Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6534	12/31/2015	Wincco	Fairbault Co	1	161	446 MVA		Construct 345-161kV double circuit	MN/IA	22		Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6533	12/31/2015	Wincco West	Burt	1	345	1800 MVA		Construct 345kV circuit	IA		19	Planned	\$41,225,660	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6532	12/31/2015	Winnebago	Wincco West	1	161			Retire existing 161kV H frame circuit	MN/IA			Planned	\$1,105,632	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6531	12/31/2015	Winnebago	Wincco West	1	345	1800 MVA		Construct 345-161kV double circuit	MN/IA	22		Planned	\$47,734,975	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6530	12/31/2015	Wincco West	substation	1	345	1800 MVA		Construct a new Wincco West 3-terminal 345kV switch station.	IA			Planned	\$10,980,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6529	12/31/2015	Lakefield	Substation		345	1800 MVA		Add a 345kV terminal at Lakefield including 2 new 345kV bkr	IA			Planned	\$5,000,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6527	12/31/2015	Fox Lake	Rutland	1	161			Retire existing 161kV H frame circuit	MN			Planned	\$804,097	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6525	12/31/2015	Fox Lake	Rutland	1	161	446 MVA		Construct 345-161kV double circuit	MN	16.5		Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6524	12/31/2015	Lakefield	Fox Lake	1	161	446 MVA		Construct 345-161kV double circuit	MN	23		Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6523	12/31/2015	Lakefield	Fox Lake	1	161			Retire existing 161kV H frame circuit	MN			Planned	\$1,155,888	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6521	12/31/2015	Winnebago	transformer		345	161	450 MVA	Add a 345/161kV TRF	IA			Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6520	12/31/2015	Winnebago	Substation		345	161	1800 MVA	Construct a new sub with a 345kV ring bus with 2 line terminals and one 345/161kV TRF	IA			Planned	\$27,360,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6528	12/31/2015	Rutland	Winnebago	1	161			Retire existing 161kV H frame circuit	MN			Planned	\$804,097	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3205	6522	12/31/2015	Lakefield	Winnebago	1	345	1800 MVA		Construct 345-161kV double circuit	MN		55	Planned	\$119,337,438	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6547	12/31/2015	Lime Creek	Emery	1	161			Retire existing 161kV H frame circuit	IA			Planned	\$804,096	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6545	12/31/2015	Lime Creek	Emery	1	345	1800 MVA		Construct 345-161kV double circuit	IA		16	Planned	\$34,716,345	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6544	12/31/2015	Emery	transformer		345	161	450 MVA	Add a 345/161kV TRF	IA			Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6543	12/31/2015	Emery	Substation		345	161	1800 MVA	Construct a new sub with a 345kV ring bus with 2 line terminals and one 345/161kV TRF	IA			Planned	\$19,380,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6541	12/31/2015	Lime Creek	Substation		345	161	1800 MVA	Construct a new sub with a 345kV ring bus with 2 line terminals and one 345/161kV TRF	IA			Planned	\$18,930,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6546	12/31/2015	Lime Creek	Emery	1	161	335 MVA		Construct 345-161kV double circuit	IA		16	Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6542	12/31/2015	Lime Creek	transformer		345	161	450 MVA	Add a 345/161kV TRF	IA			Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6553	12/31/2015	Hazleton	Substation		345	161	1800 MVA	Convert the 345kV ring bus to a breaker and half and add a 345kV line terminal.	IA			Planned	\$14,200,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6552	12/31/2015	Blackhawk	Hazleton	1	161			Retire existing 161kV H frame circuit	IA			Planned	\$603,072	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6537	12/31/2015	Lime Creek	Worth County	1	161	200 MVA		Construct 345-161kV double circuit	IA		7	Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6536	12/31/2015	Wincco West	Lime Creek	1	345	1800 MVA		Construct 345-161kV double circuit	IA		61	Planned	\$132,356,067	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6538	12/31/2015	Wincco West	Wincco	1	161			Retire existing 161kV H frame circuit	IA			Planned	\$804,096	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6539	12/31/2015	Worth County	Lime Creek tap	1	161			Retire existing 161kV H frame circuit	IA			Planned	\$251,280	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3213	6540	12/31/2015	Lime Creek tap	Lime Creek	1	161			Retire existing 161kV H frame circuit	IA			Planned	\$226,152	Y	Y	Y	B>A
A in MTEP11	West	ITCM	3406	6293	4/29/2011	Adams	Rochester	1	161	501 MVA		Upgrades terminal equipment	MN			In Service	\$360,000			Y	C>B>A
A in MTEP11	West	ITCM	3407	6294	12/31/2011	Bluff	Substation	1	69			Expand the Bluff sub	IA			Planned	\$1,920,000			Y	C>B>A

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A in MTEP11	West	ITCM	3408	6295	12/31/2011	Boone Quartz	Substation	1	69			Construct the 69/dist sub	IA			Planned	\$1,700,000			Y	C>B>A
A in MTEP11	West	ITCM	3409	6296	12/31/2013	Bricelyn	Walters	1	69			Rebuild 5 miles to T2-477	IA	5.03		Planned	\$2,625,000			Y	C>B>A
A in MTEP11	West	ITCM	3410	6297	12/31/2011	Bridgeport	Ottumwa	1	161			Upgrades terminal equipment	IA			Planned	\$200,000			Y	C>B>A
A in MTEP11	West	ITCM	3411	6298	12/31/2011	Bridgeport	Substation	1	69			Add new T8 69/dist TRF	IA			Planned	\$360,000			Y	C>B>A
A in MTEP11	West	ITCM	3412	6299	12/31/2012	Fort Madison	Substation	1	69			Add new 69/dist TRF	IA			Planned	\$360,000			Y	C>B>A
A in MTEP11	West	ITCM	3413	6300	12/31/2013	Gladbrook	Gladbrook Tap	1	161	161		Add new 69/dist TRF	IA			Planned	\$300,000			Y	C>B>A
A in MTEP11	West	ITCM	3413	6301	12/31/2013	Marshalltown	Gladbrook Tap	1	161	161		Add new 69/dist TRF	IA			Planned	\$0			Y	C>B>A
A in MTEP11	West	ITCM	3413	6302	12/31/2013	Traer	Gladbrook Tap	1	161	161		Add new 69/dist TRF	IA			Planned	\$0			Y	C>B>A
A in MTEP11	West	ITCM	3414	6303	12/31/2012	Magnolia	capacitor	1	69			Add a 7.1 MVAR cap at Magnolia	IA			Planned	\$480,000			Y	C>B>A
A in MTEP11	West	ITCM	3415	6304	12/31/2011	Marion	Prairie Creek	1	115		195 MVA	Upgrades terminal equipment	IA			In Service	\$10,000			Y	C>B>A
A in MTEP11	West	ITCM	3416	6305	12/31/2012	Marion	0410 circuit	1	34	34		Rebild to double ckt 69kV	IA			Planned	\$10,500,000			Y	C>B>A
A in MTEP11	West	ITCM	3417	6306	12/31/2011	Marshalltown East Nevada	Substation	1	34			Add new 34/dist TRF	IA			In Service	\$280,000			Y	C>B>A
A in MTEP11	West	ITCM	3418	6307	12/31/2013	Mt Vernon 6420	6420 circuit	1	34	34		Rebild ckt 69kV	IA			Planned	\$7,150,000			Y	C>B>A
A in MTEP11	West	ITCM	3419	6308	12/31/2012	Bertram Sewage	Bertram Sewage Tap	1	69			Add new 69/dist sub and tap	IA			Planned	\$270,000			Y	C>B>A
A in MTEP11	West	ITCM	3420	6309	12/31/2011	Ottumwa Generating Station	Substation	1	345			Replace the failed circuit switcher with a new breaker	IA			Planned	\$1,350,000			Y	C>B>A
A in MTEP11	West	ITCM	3421	6310	12/31/2011	South Centerville	capacitor	1	69			Add a 7 MVAR cap at South Centerville	IA			Planned	\$1,350,000			Y	C>B>A
A in MTEP11	West	ITCM	3422	6311	12/31/2012	South Broadway	Substation	1	69		195 MVA	Upgrades terminal equipment	IA			Planned	\$150,000			Y	C>B>A
A in MTEP11	West	ITCM	3423	6313	12/31/2011	Truro tap	White Oak REC	1	69			Tap White Oak-Medora	IA			Planned	\$0			Y	C>B>A
A in MTEP11	West	ITCM	3423	6312	12/31/2011	Truro tap	Truro tap	1	69		77 MVA	Add new 69kV tap	IA	10.03		Planned	\$3,360,000			Y	C>B>A
A in MTEP11	West	ITCM	3423	6314	12/31/2011	Truro tap	Medora	1	69			Tap White Oak-Medora	IA			Planned	\$0			Y	C>B>A
A in MTEP11	West	ITCM	3425	6318	12/31/2011	VMEU	VMEU tap	1	34			Add new switches for tap	IA			In Service	\$110,000			Y	C>B>A
A in MTEP11	West	ITCM	3426	6319	12/31/2013	Osage	Osage	1	69			Move interconnect point	IA			Planned	\$0			Y	C>B>A
A in MTEP11	West	ITCM	3499	6459	12/31/2011	NERC Alert Facility Ratings for 2011	Throughout system					Verify and remediate facilities as required due to the industry-wide NERC alert	IA			Planned	\$0			Y	C>B>A
A in MTEP11	West	ITCM,MEC	2248	6585	6/1/2017	Ottumwa		1	345			New terminal at Ottumwa for Adair - Ottumwa 345 kV line. Add three 345 kV circuit breakers.	IA			Planned	\$3,295,000	Y	Y	Y	B>A
A in MTEP11	West	ITCM/MEC	3213	5991	12/31/2015	Blackhawk	Hazleton	1	345		1800 MVA	Construct 345-161kV double circuit	IA		12	Planned	\$23,866,416	Y	Y	Y	B>A
A in MTEP11	West	ITCM/MEC	3213	6548	12/31/2015	Emery	Blackhawk	1	345			Construct 345-161kV double circuit	IA		29	Planned	\$57,677,172	Y	Y	Y	B>A
A in MTEP11	West	ITCM/MEC	3213	6550	12/31/2015	Emery	Blackhawk	1	161			Retire existing 161kV H frame circuit	IA			Planned	\$1,457,424	Y	Y	Y	B>A
A in MTEP11	West	ITCM/MEC	3213	6549	12/31/2015	Emery	Blackhawk	1	161			Construct 345-161kV double circuit and transfer existing 161kV conductor	IA			Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM/MEC	3213	6551	12/31/2015	Blackhawk	Hazleton	1	161		335 MVA	Construct 345-161kV double circuit	IA		12	Planned	\$0	Y	Y	Y	B>A
A in MTEP11	West	ITCM/MEC	3213	6557	12/31/2015	Blackhawk	Emery	1	345			345/161 kV double circuit line via Franklin	IA		63	Planned	\$124,122,070	Y	Y	Y	B>A
A in MTEP11	West	MDU	3199	5657	3/21/2011	Ellendale	Transformer	1	230	115	150	new transformer, replace existing	ND			Under Construction	\$2,000,000			Y	B>A
A in MTEP11	West	MDU	3199	5656	12/1/2011	Ellendale	G359 POI	1	230		380	new line	ND		24	Planned	\$12,400,000			Y	B>A
A in MTEP11	West	MDU	3199	5658	12/1/2011	Ellendale	Wavetrap on line to Oaks		230			new wave trap	ND			Planned	\$75,000			Y	B>A
A in MTEP11	West	MDU	3199	6407	12/1/2011	Merricourt	New Generator Interconnection Substation		230			New Generator Interconnection Substation	ND			Planned	\$4,655,000			Y	B>A
A in MTEP11	West	MEC	2248	6565	6/1/2017	Ottumwa	Iowa boarder	1	345	161		345/161 double circuit line	IA	16.6		Planned	\$32,163,860	Y	Y	Y	B>A
A in MTEP11	West	MEC	3022	6586	12/1/2014	Oak Grove		1	345			New 345 kV terminal at Oak Grove for Oak Grove - Galesburg-Fargo 345 kV line	IL			Planned	\$2,337,000	Y	Y	Y	B>A
A in MTEP11	West	MEC	3022	6564	12/1/2016	Sub 56	Sub 85		161		410	Reconductor Sub 56-Sub 85 161 kV line with T2- 556.5 ACSR conductor	IA	7.5		Planned	\$2,200,000	Y	Y	Y	B>A
A in MTEP11	West	MEC	3022	6562	6/1/2018	Oak Grove	345 kV terminal		345			add 345 kV terminal for Galesburg line	IA			Planned	\$2,336,952	Y	Y	Y	B>A
A in MTEP11	West	MEC	3022	5989	6/1/2019	Oak Grove	Galesburg	1	345			new 345/161 kV double circuit line	IA		32	Planned	\$64,846,017	Y	Y	Y	B>A
A in MTEP11	West	MEC	3205	5990	12/1/2016	Sheldon			345			New Sheldon three-way 345 kV Switching Station	IA			Planned	\$10,450,000	Y	Y	Y	B>A
A in MTEP11	West	MEC	3205	5951	12/1/2016	Sheldon	Webster		345		1739	Sheldon to Webster 345/161 kV double ckt line - Candidate MVP Portfolio #1. Includes rebuild of non-MISO 161 kV circuit from Wisdom to Webster.	IA		122	Planned	\$231,261,000	Y	Y	Y	B>A

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A in MTEP11	West	MEC	3205	6561	12/1/2016	Burt			345			New three-way 345 kV Switching Station near Burt Substation	IA			Planned	\$10,450,000	Y	Y	Y	B>A
A in MTEP11	West	MEC	3205	6560	12/1/2016	Webster			345			New terminal at Webster for Sheldon - Webster 345 kV line	IA			Planned	\$6,401,000	Y	Y	Y	B>A
A in MTEP11	West	MEC	3213	5992	12/1/2015	Black Hawk	Black Hawk		345	161	560	Black Hawk 345-161 kV substation with line terminals to Emery and Hazleton	IA			Planned	\$15,019,000	Y	Y	Y	
A in MTEP11	West	MEC	3213	6424	12/1/2015	Franklin	Butler	1	161		410	Rebuild Franklin-Butler 161 kV line.	IA	26.24		Planned		Y	Y	Y	B>A
A in MTEP11	West	MEC	3213	6587	12/1/2015	Black Hawk	Emery		345		1739	Blackhawk - Emery 345/161 kV double circuit line via Franklin. Includes rebuild of non-MISO 161 kV circuit from Franklin to Emery.	IA		88	Planned	\$124,122,000	Y	Y	Y	B>A
A in MTEP11	West	MEC	3213	6427	12/1/2015	Black Hawk	Hazleton	1	161		410	Rebuild Black Hawk-Hazleton 161 kV line.	IA	24		Planned		Y	Y	Y	B>A
A in MTEP11	West	MEC	3213	6426	12/1/2015	Union Tap	Black Hawk	1	161		410	Rebuild Union Tap-Black Hawk 161 kV line.	IA	7.9		Planned		Y	Y	Y	B>A
A in MTEP11	West	MEC	3213	6425	12/1/2015	Butler	Union Tap	1	161		410	Rebuild Butler-Union Tap 161 kV line.	IA	15.93		Planned		Y	Y	Y	B>A
A in MTEP11	West	MEC	3213	6556	12/31/2015	Blackhawk			345	161		add 345-161 kV transformer & 2 line terminals	IA			Planned	\$15,019,305	Y	Y	Y	B>A
A in MTEP11	West	MEC	3268	6091	11/1/2012	Lehigh	Reactor		345		50	Lehigh: 345 kV 50 MVA Reactor	IA			Planned	\$2,750,000			Y	C>B>A
A in MTEP11	West	MEC	3270	6093	6/1/2011	Council Bluffs	River Bend		161		410	CBEC-River Bend 161 kV Rebuild	IA		0.5	Planned	\$675,000			Y	C>B>A
A in MTEP11	West	MEC	3271	6094	6/1/2011	River Bend	Bunge		161		410	River Bend-Bunge 161 kV Rebuild	IA	1.88		Planned	\$700,000			Y	C>B>A
A in MTEP11	West	MEC	3272	6090	6/1/2011	Raun			345		1195	Replace 345 kV circuit breaker	IA			Planned	\$500,000			Y	C>B>A
A in MTEP11	West	MEC, ITCM	2248	6566	6/1/2017	Ottumwa	345 kV terminal		345			add 345 kV terminal for Adair line	IA			Planned	\$3,294,904	Y	Y	Y	B>A
A in MTEP11	West	MP	2549	4561	6/1/2014	15th AVE West	Fond du Lac H.E.	1	115		182	MP Line #15 Upgarde	MN	11.33		Planned	\$3,179,000	Y		Y	C>B>A
A in MTEP11	West	MP	2634	6369	12/1/2012	Savanna		1	115			Savanna 115 kV breaker Station	MN			Planned	\$2,600,000	Y		Y	B>A
A in MTEP11	West	MP	2634	6370	12/1/2014	Savanna	Floodwood Tap	1	115			Thermal upgrade of Savanna-9 Line tap	MN			Planned	\$1,500,000	Y		Y	B>A
A in MTEP11	West	MP	3373	6244	12/30/2012	Blackberry	Floodwood Tap	1	115			Thermal Upgrade	MN	16	0	Planned	\$8,000,000	Y		Y	C>B>A
A in MTEP11	West	MP	3374	6245	11/1/2012	Diamond Lake (old Greenway)			115		23 15	re-energize existing substation	MN			Planned	\$700,000			Y	C>B>A
A in MTEP11	West	MP	3374	6246	11/1/2012	Diamond Lake (old Greenway)	Diamond Lake (old Greenway) 28L tap	1	115			re-energize existing 28L to Greenway	MN			Planned				Y	C>B>A
A in MTEP11	West	MP	3374	6247	11/1/2012	Diamond Lake (old Greenway)	Diamond Lake (old Greenway) 45L tap	1	115			re-energize existing 45L to Greenway	MN			Planned				Y	C>B>A
A in MTEP11	West	OTP	2856	5009	6/30/2011	Victor 41.6 kV	New Effington 41.6 kV		41.6		24 MVA	Rebuild Existing 4-Mile 41.6 kV Line	SD			In Service	\$200,000			Y	C>B>A
A in MTEP11	West	OTP	3466	6392	8/1/2012	Doran Tap	Doran 41.6 kV	1	41.6			Add 3 Way Switch on 41.6 kV line between Doran 41.6 kV substation to Doran Jct.	MN			Planned	\$140,000			Y	B>A
A in MTEP11	West	OTP	3481	6432	7/1/2013	Buffalo 115 kV	Casselton Ethanol 115 kV	1	115		337 MVA	Construct new 16-mile 115 kV line from Buffalo - Casselton	ND		16	Planned	\$7,000,000	Y		Y	C>B>A
A in MTEP11	West	OTP	3481	6434	12/31/2014	Buffalo 345 kV	Buffalo 115/41.6 kV	1	345	115	187 MVA	Replace existing 112 MVA 345/115/41.6 kV transformer with a new 187 MVA 345/115/41.6 kV transformer	ND			Planned	\$3,000,000	Y		Y	C>B>A
A in MTEP11	West	OTP, MDU	2220	4092	12/31/2019	Big Stone South	Ellendale		345			Line	SD/ND		145	Planned	\$300,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, MDU	2220	6382	12/31/2019	Ellendale 345/230	Transformer		345	230		Transformer 345/230	ND			Planned	\$26,164,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	4116	12/31/2017	Big Stone South 345/230	Transformer	1	345	230	672 MVA	Transformer #1 345/230/13.8 kV	SD			Planned	\$4,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	4117	12/31/2017	Big Stone South	Brookings 345 kV double circuit	1,2	345			Line #1 and #2	SD		65	Planned	\$165,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	6572	12/31/2017	Brookings County	Substation		345			Termination for Big Stone - Brookings Co 345 kV line and conversion of the existing ring bus to a breaker-and-a-half	SD			Planned	\$9,720,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	6588	12/31/2017	Big Stone South Sub	Equipment		345	230		Substation Equipment	SD			Planned	\$30,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	6387	12/31/2017	Big Stone South 345/230	Transformer	2	345	230	672 MVA	Transformer #2 345/230/13.8 kV	SD			Planned	\$4,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	6589	12/31/2017	Big Stone 230	Big Stone 230		230	230		Substation Equipment	SD			Planned	\$10,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	6383	12/31/2017	Big Stone	Big Stone South	1	230			Line #1	SD		2	Planned	\$2,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP, XEL	2221	6384	12/31/2017	Big Stone	Big Stone South	2	230			Line #2	SD		2	Planned	\$2,000,000	Y	Y	Y	B>A
A in MTEP11	West	OTP/XEL	3481	6433	12/31/2014	Mapleton 115 kV	Sheneye 115 kV	1	115		147 MVA	Rebuild 8 mile portion of the existing Sheneye - Mapleton 115 kV line from 266 ACSR conductor to 795 ACSS conductor	ND	8		Planned	\$4,000,000	Y		Y	C>B>A

Appendices A, B, C: Project Facility Table 9/7/2011

Target Appendix	Region	Geographic Location by TO Member System	ProjID	Facility ID	Expected ISD	From Sub	To Sub	Ckt	Max kV	Min kV	Facility Rating	Facility Description	State	Miles Upp	Miles New	Plan Status	Estimated Cost	Cost Shared	Postage Stamp	MISO Facility	App ABC
A in MTEP11	West	XEL	1203	4224	1/22/2014	Franklin	Transformer	2	115	69	70	Upgrade 47 MVA to 70 MVA (Time line is dependant on SW MN - Twinc Cities 345 kV line)	MN			Planned	\$4,000,000	Y	Y	NT	B>A
A in MTEP11	West	XEL	1203	1897	1/22/2014	Franklin	Transformer	1	115	69	70	Upgrade 47 MVA to 70 MVA (Time line is dependant on SW MN - Twinc Cities 345 kV line)	MN			Planned	\$2,400,000	Y	Y	NT	B>A
A in MTEP11	West	XEL	3309	6145	8/1/2011	Pipestone		1	115			Retap the breaker CTs going to Buffalo Ridge to 2000.5.	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3309	6144	8/1/2011	Buffalo Ridge		1	115			Upgrade the wave traps and line switches at Buffalo Ridge going to Lake Yankton and Pipestone substations from 1200 A to 2000 A.	MN			Planned	\$286,000			Y	C>B>A
A in MTEP11	West	XEL	3310	6150	6/1/2012	Victoria tap	West Creek	1	115		361	New 115 kV line	MN	1	1	Planned	\$19,450,000			Y	C>B>A
A in MTEP11	West	XEL	3310	6154	6/1/2012	Chaska	Scott County	1	115			upgrade 69 kV line to 115 kV	MN	1.9		Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6148	6/1/2012	Augusta	Victoria tap	1	115		361	Upgrade 69 kV line to 115 kV	MN	1.5		Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6149	6/1/2012	Victoria			115			Upgrade substation to 115 kV	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6156	6/1/2012	Chaska			115			Add new line termination	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6155	6/1/2012	West Waconia			115			Add new line termination	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6146	6/1/2012	West Waconia	Augusta	1	115		361	upgrade 69 kV line to 115 kV	MN	1	2.5	Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6152	6/1/2012	West Creek	Chaska	1	115		361	Upgrade 69 kV line to 115 kV	MN	1.9	1	Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6151	6/1/2012	West Creek			115			New 115 kV distribution substation	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6147	6/1/2012	Augusta			115			Upgrade substation to 115 kV	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3310	6153	6/1/2012	Chaska			115			Upgrade 69 kV substation to 115 kV	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3312	6158	6/1/2014	Minnesota Valley	Maynard	1	115		361	upgrade existing 115 kV line to higher capacity	MN	10.89		Planned	\$5,790,000	Y		Y	C>B>A
A in MTEP11	West	XEL	3312	6159	6/1/2014	Maynard	Kerkhoven tap	1	115		361	upgrade existing 115 kV line to higher capacity	MN	14.8		Planned	\$7,870,000	Y		Y	C>B>A
A in MTEP11	West	XEL	3313	6160	6/1/2012	SMPMA New Prague tap			69			Install 1 way switch	MN			Planned	\$180,000			Y	C>B>A
A in MTEP11	West	XEL	3314	6161	6/1/2014	Kohlman Lake	Long Lake	2	115		361	Convert the bifurcated 115 kV line to double circuit	MN		0.08	Planned	\$3,000,000			Y	C>B>A
A in MTEP11	West	XEL	3314	6163	6/1/2014	Long Lake			115			Add new line termination	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3314	6162	6/1/2014	Kohlman Lake			115			Add new line termination	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3315	6165	6/1/2014	Chisago County			345			Install breakers to accommodate the new TR	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3315	6164	6/1/2014	Chisago County		5	345	115	448	Install 2nd 345/115 kV transformer	MN			Planned	\$7,000,000			Y	C>B>A
A in MTEP11	West	XEL	3315	6166	6/1/2014	Chisago County			115			Install breakers to accommodate the new TR	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3316	6167	6/1/2014	Riverside	Apache	1	115		361	Upgrade line to higher capacity	MN	3.5		Planned	\$3,000,000			Y	C>B>A
A in MTEP11	West	XEL	3316	6168	6/1/2014	Apache			115			Upgrade Apache switch	MN			Planned				Y	C>B>A
A in MTEP11	West	XEL	3317	6169	6/1/2014	Goose Lake	Kohlman Lake	2	115		361	Build 2nd Goose Lake - Kohlman Lake circuit by rebuilding the existing line to double circuit.	MN		3.2	Planned	\$6,000,000	Y		Y	C>B>A
A in MTEP11	West	XEL	3317	6171	6/1/2014	Kohlman Lake			115		361	Install breakers to accommodate 2nd line to Goose Lake	MN			Planned		Y		Y	C>B>A
A in MTEP11	West	XEL	3317	6170	6/1/2014	Goose Lake			115		361	Install breakers to accommodate 2nd line to Kohlman Lake	MN			Planned		Y		Y	C>B>A
A in MTEP11	West	XEL	3318	6172	10/1/2011	Parkers Lake			115			Replace the Parkers Lake breakers 5M48, 5M49, 5M50, 5M51, 5M52, 5M53, 5M57, 5M58, and 5M62	MN			Planned	\$1,900,000			Y	C>B>A
A in MTEP11	West	XEL	3319	6173	12/1/2011	Split Rock			115			Replace the Split Rock breakers 5X28, 5X29, 5X32, 5X34, 5X35, 5X36, 5X75, 5X76, 5X77, 5X81, and 5X83	SD			Planned	\$1,344,000			Y	C>B>A
A in MTEP11	West	XEL	3320	6174	12/1/2011	Split Rock			115			Replace the broken 50 MVAR reactor and failed associated breaker at the Split Rock substation	SD			Planned	\$100,000			Y	C>B>A
A in MTEP11	West	XEL	3321	6175	1/14/2011	Chemolite			115			Two breakers will be added to complete Breaker and 1/2 configuration	MN			In Service	\$580,000			Y	C>B>A
A in MTEP11	West	XEL	3322	6178	6/1/2013	Collfax	Wheeler	1	69			Rebuild line ot 477 ACSR	WI	3.7		Planned				Y	C>B>A
A in MTEP11	West	XEL	3322	6177	6/1/2013	Hay River	Collfax	1	69			Rebuild line ot 477 ACSR	WI	0.8		Planned				Y	C>B>A