Daliana Coban

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January 7, 2015

via RESS e-filing - signed original to follow by courier

Ms. Kirsten Walli Board Secretary Ontario Energy Board PO Box 2319 2300 Yonge Street, 27th floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Toronto Hydro-Electric System Limited ("Toronto Hydro")

Custom Incentive Rate-setting Application for 2015-2019 Electricity Distribution Rates and Charges (the "Application") – Updated Interrogatory Response to 1B-BOMA-61: List of PSE Studies

OEB File No. EB-2014-0116

Toronto Hydro writes to the Ontario Energy Board ("OEB") in respect of the above-noted matter.

Further to Mr. Rubenstein's request at the Technical Conference on November 18, 2014 (pages 151-152), Toronto Hydro has reconsidered its refusal to provide the information requested by the latter part of interrogatory 1B-BOMA-61:

Please provide copies of any other studies done, similar to the Capital Requirements for Serving Developed Environments (Appendix 8 to Appendix B of Exhibit 1B, Tab 2, Schedule 5 [PSE Study]) by any or all of Erik S. Sonju, Steve Hall, or Amanda Jutrzonka, or other PSE employees in the last ten years.

Enclosed is an updated copy of the interrogatory response, which includes as Appendix B to the response, a list of 467 relevant studies prepared by Power System Engineering ("PSE") in the last two

years. Toronto Hydro submits that going back further than two years in not necessary to assess the expertise of the authors.

Upon request, Toronto Hydro will provide interested parties with copies of one or more of the studies, subject to any confidentiality protections that Toronto Hydro may request on PSE's behalf, to be determined on a case by case basis.

Please do not hesitate to contact me if you have any questions.

Yours truly,

[original signed by]

Daliana Coban

Lead Regulatory Counsel
Toronto Hydro-Electric System Limited
regulatoryaffairs@torontohydro.com

:DC

cc: C. Keizer and C. Smith, Torys LLP

M. Helt, OEB

T. Antonopoulos, OEB

M. Davies, OEB

Intervenors of Record for EB-2014-0116

Toronto Hydro-Electric System Limited EB-2014-0116 Interrogatory Responses

Interrogatory Responses 1B-BOMA-61

Filed: 2014 Nov 5 Corrected: 2015 Jan 7 Page 1 of 1

RESPONSES TO BUILDING OWNERS AND MANAGERS ASSOCIATION, GREATER TORONTO INTERROGATORIES

1	INTERROGATORY 61:
2	Reference(s): Exhibit 1B, Tab 2, Schedule 5, Appendix (8) to Appendix B
3	
4	
5	Please provide the full curriculum vitae of each of the five authors of the two PSE
6	studies, including a list of all of the studies each has prepared as sole author, and as joint
7	author, in the last ten years. Please provide copies of any other studies done, similar to
8	the Capital Requirements for Serving Developed Environments (Appendix 8 to Appendix
9	B of Exhibit 1B, Tab 2, Schedule 5 [PSE Study]) by any or all of Erik S. Sonju, Steve
10	Hall, or Amanda Jutrzonka, or other PSE employees in the last ten years.
11	
12	
13	RESPONSE:
14	The requested resumes are provided in Appendix A to this response. None of the studies
15	prepared by Erik S. Sonju, Steve Hall, or Amanda Jutrzonka in the last ten years are
16	similar to the Capital Requirements for Serving Developed Environments Study.
17	
18	A list of more than 200 studies prepared by the PSE authors in the last two years is
19	provided as Appendix B to this response. Upon request, Toronto Hydro will provide
20	interested parties copies of one or more of the studies, subject to any confidentiality
21	protections that Toronto Hydro may request, to be determine on a case by case basis.

Panel: Productivity and Performance

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Project Start	Project #	Project Name	Dept Name	Project Type
22/01/2014	CO0521406	MPEI 2014 LRP & Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
15/12/2014	CO0521411	MPEI Arc Flash Assessment	Resource & Pwr Delivery Planning & Design	Power System Studies
02/12/2014	CO0581408	Delta-Montrose Drop 2 System Impact Study	Resource & Pwr Delivery Planning & Design	Power System Studies
11/12/2012	DC0021228	NRECA Tech Surveillance: Solid State Dist. Equipment	Resource & Pwr Delivery Planning & Design	Power System Studies
20/11/2013	DC0021317	NRECA CRN - Oil Load Article - Project: CRN R1102-001	Resource & Pwr Delivery Planning & Design	Power System Studies
15/09/2014	DC0021417	NRECA 2014 IDE Unit B	Resource & Pwr Delivery Planning & Design	Power System Studies
01/10/2013	IA0531319	Linn Co. North Liberty Ultimate Buildout Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
01/12/2014	IA0561406	T.I.P. Sectionalizing & Arc Flash Study	Resource & Pwr Delivery Planning & Design	Power System Studies
07/02/2014	IA0951433	ECI Arc Flash Study	Resource & Pwr Delivery Planning & Design	Power System Studies
18/12/2012	IL0441228	UFLS Plan and SVT drawing update	Resource & Pwr Delivery Planning & Design	Power System Studies
13/02/2014	<u>IL0441407</u>	Jo-Carroll 2014 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
13/02/2014	<u>IL0441408</u>	Jo-Carroll Geneseo Area Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
27/09/2013	IN1101307	NineStar IVVC & CVR Related Engineering Services	Resource & Pwr Delivery Planning & Design	Power System Studies
02/12/2014	IN1101406	Ninestar Community Solar	Resource & Pwr Delivery Planning & Design	Power System Studies
04/08/2014	ME0021402	MRRA Miscellaneous Engineering and Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
07/01/2014	ME0021406	MRRA Electrical Transmission and Distribution Analysis	Resource & Pwr Delivery Planning & Design	Power System Studies
31/03/2014	MI0371406	Thumb 2014-2017 CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
31/03/2014	MI0371407	Thumb 2014-2017 CWP Environmental Report	Resource & Pwr Delivery Planning & Design	Power System Studies
22/01/2013	MI0441306	Cherryland 2014-2018 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
21/08/2012	MN0391209	MVCLP 2014-2017 Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
21/01/2013	MN0561306	Crow Wing 2013 LRP & CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
23/08/2013	MN0561308	Crow Wing 2014-2016 CWP ER	Resource & Pwr Delivery Planning & Design	Power System Studies
08/01/2014	MN0561406	Crow Wing Koch Pumping Station	Resource & Pwr Delivery Planning & Design	Power System Studies
09/09/2013	MN0611306	Freeborn 2013 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
17/09/2014	MN0611407	Freeborn 2014 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
21/01/2014	MN0621406	Wright-Hennepin 2013 Sectionalizing Study Review	Resource & Pwr Delivery Planning & Design	Power System Studies
25/08/2014	MN0951407	North Star 2015-2018 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
17/11/2014	MN0951408	North Star 2015-2018 WP Environmental Report	Resource & Pwr Delivery Planning & Design	Power System Studies
19/11/2014	MN0971406	Lake States Nashwauk Mapping and Arc Flash	Resource & Pwr Delivery Planning & Design	Power System Studies

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Project Start	Project #	Project Name	Dept Name	Project Type
21/03/2014	MN1611406	COOP Danube New Grain Arc Flash	Resource & Pwr Delivery Planning & Design	Power System Studies
16/04/2014	MN1611407	COOP Renville New Grain Arc Flash	Resource & Pwr Delivery Planning & Design	Power System Studies
28/10/2014	MN1831411	LHB Line 93 Power Studies	Resource & Pwr Delivery Planning & Design	Power System Studies
17/09/2013	MN1861306	RPU LRP & CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
09/12/2014	MN1861406	RPU Arc Flash Study - Fdrs 303 &405	Resource & Pwr Delivery Planning & Design	Power System Studies
24/01/2014	MN1871406	Grove City Emergency Feed	Resource & Pwr Delivery Planning & Design	Power System Studies
29/09/2014	NH0041406	NHEC Sectionalizing Review	Resource & Pwr Delivery Planning & Design	Power System Studies
29/04/2013	NY0041306	Stueben REC SPCC	Resource & Pwr Delivery Planning & Design	Power System Studies
08/03/2013	NY0191306	Otsego SPCC	Resource & Pwr Delivery Planning & Design	Power System Studies
27/08/2013	OH0041306	Carroll SPCC Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
24/06/2014	OH0061406	Buckeye System-Wide Voltage Study	Resource & Pwr Delivery Planning & Design	Power System Studies
20/02/2014	OH0391406	PPEC 2015 Distribution Plant Study (CWP)	Resource & Pwr Delivery Planning & Design	Power System Studies
06/11/2014	OH0421407	Darke Arc Flash Study	Resource & Pwr Delivery Planning & Design	Power System Studies
06/11/2014	OH0421408	Darke SPCC Update	Resource & Pwr Delivery Planning & Design	Power System Studies
06/08/2013	OH0501307	Union (OH) 2013 CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
06/12/2013	OH0501308	Union East Liberty Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies
06/12/2013	OH0501309	Union East Logan Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies
16/12/2014	OH0501410	Union Honda Building Construction Analysis	Resource & Pwr Delivery Planning & Design	Power System Studies
21/10/2014	OH0591409	Consolidated Arc Flash Assessment	Resource & Pwr Delivery Planning & Design	Power System Studies
04/08/2014	OH0651411	South Central Belmont Area Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
05/11/2014	OH0651417	South Central 69kV Loop Long Range Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
21/10/2014	OH0651420	South Central Arc Flash Assessments	Resource & Pwr Delivery Planning & Design	Power System Studies
05/05/2014	OH0711406	Logan 2014 Contingency Study	Resource & Pwr Delivery Planning & Design	Power System Studies
31/03/2014	OH0851406	Mid-Ohio 2015-2018 CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
27/05/2014	OH0931407	WEC 4-Year Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
05/08/2013	OH0971306	Holmes-Wayne 2013 LRP/CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
09/12/2014	PA0291406	Bedford Long Range Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
29/04/2013	SD0091306	City of Colman Electrical System Model Development	Resource & Pwr Delivery Planning & Design	Power System Studies
06/06/2013	SD0091307	City of Colman Existing Electrical System Review	Resource & Pwr Delivery Planning & Design	Power System Studies

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Project Start	Project #	Project Name	Dept Name	Project Type
3/12/2013	SD0091308	City of Colman 10 Year System Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
3/08/2012	SD0381217	Moreau-Grand 2013-2016 CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
5/09/2014	<u>VT0461406</u>	VEC 2014 SPCC Updates	Resource & Pwr Delivery Planning & Design	Power System Studies
3/10/2014	WI0011408	Kaukauna Electrical System Study	Resource & Pwr Delivery Planning & Design	Power System Studies
4/10/2013	WI0141307	Oconto 2015-2018 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
3/03/2014	WI0191406	CVEC 2014 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
1/11/2014	WI0291407	Clark 2014/2015 System Survey	Resource & Pwr Delivery Planning & Design	Power System Studies
7/02/2014	WI0431406	Scenic Rivers 2015-2018 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
1/07/2014	WI0431407	Scenic Rivers 2014 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
5/12/2014	WI0431408	Scenic Rivers Environmental Report for 2015-2018 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
9/09/2013	WI0471306	Jackson 2015-2018 CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
9/12/2014	WI0491407	Dunn 2014/2015 Sectionalizing - Ethanol, Colfax, Elk Mound	Resource & Pwr Delivery Planning & Design	Power System Studies
7/05/2013	WI0551307	ACEC 10 Year LRP / 4 Year CWP	Resource & Pwr Delivery Planning & Design	Power System Studie
8/03/2012	WI0631207	Bayfield 2013-2016 CWP/LRP	Resource & Pwr Delivery Planning & Design	Power System Studie
2/12/2013	WI0661306	Central 2013 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studie
3/02/2014	WI0661406	Central Wisconsin Arc Flash Study	Resource & Pwr Delivery Planning & Design	Power System Studie
5/09/2014	WI1021406	MG&E Arc Flash Study	Resource & Pwr Delivery Planning & Design	Power System Studie
0/07/2013	CO0521306	MPEI Devils Thumb System Impact Study	Resource & Pwr Delivery Planning & Design	Power System Studie
9/03/2012	DC0021209	NRECA 2012 TechSurveillance Articles	Resource & Pwr Delivery Planning & Design	Power System Studies
3/04/2012	DC0021211	NRECA GridLab-D CVR Project	Resource & Pwr Delivery Planning & Design	Power System Studie
1/05/2013	DC0021311	NRECA 2013 IDE Unit B	Resource & Pwr Delivery Planning & Design	Power System Studie
7/04/2012	IA0401202	Pella Misc Planning, Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studie
7/04/2012	IA0401302	Pella Misc Planning, Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studie
7/04/2012	IA0401402	Pella Misc Planning, Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studie
2/04/2012	IA0531209	Linn 2013-15 Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studie
5/03/2012	IA0921206	ILEC GIS and Windmil Support for CWP	Resource & Pwr Delivery Planning & Design	Power System Studie
4/05/2012	IA0951230	ECI Karr Substation 69kV Conversion	Resource & Pwr Delivery Planning & Design	Power System Studie
4/05/2012	IA0951231	ECI Harrison Substation 69kV Conversion	Resource & Pwr Delivery Planning & Design	Power System Studie
4/05/2012	IA0951232	ECI Spring Creek Substation 69kV Conversion	Resource & Pwr Delivery Planning & Design	Power System Studie

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Project Start	Project #	Project Name	Dept Name	Project Type
4/06/2012	IA0951236	ECI 2013-16 Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
1/07/2012	IA0951238	ECI Windmil Model Enhancements	Resource & Pwr Delivery Planning & Design	Power System Studies
4/02/2013	IA0951304	ECIREC Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
4/02/2013	IA0951305	ECIREC 2013 CWP Environmental Report	Resource & Pwr Delivery Planning & Design	Power System Studies
4/02/2013	IA0951404	ECIREC Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
4/02/2013	IA0951405	ECIREC 2013 CWP Environmental Report	Resource & Pwr Delivery Planning & Design	Power System Studies
1/06/2012	IA0971202	Guthrie Misc. Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
1/06/2012	IA0971302	Guthrie Misc. Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
3/04/2012	IA1021206	Southwest LRP, CWP and ER	Resource & Pwr Delivery Planning & Design	Power System Studies
0/05/2012	IL0441214	JCE WO 12-0274 AGF-2 to CHD Sub Tie	Resource & Pwr Delivery Planning & Design	Power System Studies
0/05/2012	IL0441215	JCE WO 12-0297 MTC-3 to SVC-1 Load Swap	Resource & Pwr Delivery Planning & Design	Power System Studies
0/05/2012	IL0441216	JCE WO 12-0298 CLA-1 to MTC-2 Load Swap	Resource & Pwr Delivery Planning & Design	Power System Studies
0/05/2012	IL0441217	JCE WO 12-0299 CHN-1 to PAL-3 Load Swap	Resource & Pwr Delivery Planning & Design	Power System Studie
4/05/2012	IL0441218	JCE WO 11-0741 Bowen Substation Rebuild	Resource & Pwr Delivery Planning & Design	Power System Studie
2/06/2012	IL0441220	JCE WO 12-0304 Galena WWTP Solar Project	Resource & Pwr Delivery Planning & Design	Power System Studies
9/12/2012	IL0441229	JoCarroll Farmers Mutual: Planning & Operations	Resource & Pwr Delivery Planning & Design	Power System Studie
5/01/2013	<u>IL0441306</u>	Jo-Carroll Metform Sub, Preparing MFA-1 for new load	Resource & Pwr Delivery Planning & Design	Power System Studies
0/05/2013	IN1101302	NineStar Misc. Engineering and Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
3/01/2013	ME0011307	Eastern Maine 4-Year Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
2/01/2013	MI0441406	Cherryland 2014-2018 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
2/05/2012	MI0481207	GLE Beaver Island Generating Plant SPCC	Resource & Pwr Delivery Planning & Design	Power System Studies
8/10/2012	MN0291206	Tyler State of the Substation Report	Resource & Pwr Delivery Planning & Design	Power System Studies
8/02/2012	MN0331202	Anoka Misc Eng, Planning & Ops	Resource & Pwr Delivery Planning & Design	Power System Studie
3/02/2012	MN0331206	Anoka Pole Replacements Project	Resource & Pwr Delivery Planning & Design	Power System Studie
0/08/2012	MN0331207	Anoka Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studie
8/02/2012	MN0331302	Anoka Misc Eng, Planning & Ops	Resource & Pwr Delivery Planning & Design	Power System Studie
6/01/2012	MN0391206	MVCLP Trans System Protection Study	Resource & Pwr Delivery Planning & Design	Power System Studie
9/09/2012	MN0611207	Freeborn 2012 Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studie
5/01/2013	MN0721307	Renville 2013 Sectionalizing Update	Resource & Pwr Delivery Planning & Design	Power System Studie

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Project Start	Project #	Project Name	Dept Name	Project Type
24/05/2012	MN1041206	Arrowhead 2012 Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
05/06/2012	MN1041207	Arrowhead Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
11/10/2012	NY0191206	Otsego EC 4-Year CWP	Resource & Pwr Delivery Planning & Design	Power System Studies
03/12/2012	NY0201202	DCEC Misc Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
03/12/2012	NY0201302	DCEC Misc Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
17/07/2012	OH0061302	Buckeye Misc Engineering & Ops	Resource & Pwr Delivery Planning & Design	Power System Studies
30/07/2012	OH0421202	Darke Misc Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
18/07/2012	OH0421206	Darke New Substation Environmental Report	Resource & Pwr Delivery Planning & Design	Power System Studies
30/07/2012	OH0421302	Darke Misc Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
28/06/2013	OH0591306	Consolidated 4-Year Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
19/03/2012	OH0711202	Logan Misc Engineering and Planning	Resource & Pwr Delivery Planning & Design	Power System Studies
19/03/2012	OH0711302	Logan Misc Engineering and Planning	Resource & Pwr Delivery Planning & Design	Power System Studies
17/01/2012	OH0851206	Mid Ohio SPCC	Resource & Pwr Delivery Planning & Design	Power System Studies
17/12/2012	OH0861202	GMEC Miscellaneous Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
17/12/2012	OH0861302	GMEC Miscellaneous Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
05/07/2012	OH0871207	HWEC 2012 SPCC Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
11/12/2012	OH0931202	WEC Misc. Engineering	Resource & Pwr Delivery Planning & Design	Power System Studies
04/11/2013	OH0931303	WEC Misc. Engineering and Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
25/07/2013	OH0931306	WEC 4-Year Construction Work Plan	Resource & Pwr Delivery Planning & Design	Power System Studies
06/08/2012	PA0291202	Bedford Misc. Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
06/08/2012	PA0291302	Bedford Misc. Engineering & Operations	Resource & Pwr Delivery Planning & Design	Power System Studies
06/04/2012	SD0381214	Moreau Sioux Ckts 3 & 5 Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies
19/12/2012	SD0381220	Moreau 2013-2016 CWP-ER	Resource & Pwr Delivery Planning & Design	Power System Studies
21/08/2012	VT0461206	Vermont Distribution System Loss Study	Resource & Pwr Delivery Planning & Design	Power System Studies
16/09/2013	VT0461306	Vermont Derby #45 Sub SPCC	Resource & Pwr Delivery Planning & Design	Power System Studies
17/02/2012	WI0191207	CVEC 2012 Sectionalizing Study	Resource & Pwr Delivery Planning & Design	Power System Studies
25/02/2013	WI0191306	CVEC 2013 Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies
24/05/2012	WI0321209	Pierce Pepin Trenton Area Sand Mine Analysis	Resource & Pwr Delivery Planning & Design	Power System Studies
22/08/2012	WI0431206	Scenic 2012 Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies

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Project Start	Project #	Project Name	Dept Name	Project Type
1/01/2012	WI0491206	Dunn 12 Sect Study-Connorsville,Knapp&Ti	Resource & Pwr Delivery Planning & Design	Power System Studies
20/08/2013	WI0491306	Dunn 2013 Sectionalizing - Downsville, Tainter, Wheeler Substations	Resource & Pwr Delivery Planning & Design	Power System Studies
9/03/2012	WI0511206	St. Croix 2013-2015 CWP and LRP and Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies
28/03/2012	WI0631208	Bayfield Environmental Report	Resource & Pwr Delivery Planning & Design	Power System Studies
22/10/2013	CN0061309	Toronto Hydro Standards Review Study	Resource & Pwr Delivery Planning & Design	Line Design
2/05/2014	CO0521407	MPEI Town of Grand Lake 1/0 Guying Review	Resource & Pwr Delivery Planning & Design	Line Design
9/07/2014	CO0521408	MPEI Grand Lake Shallow Pole Set Analysis	Resource & Pwr Delivery Planning & Design	Line Design
22/10/2014	CO0521410	MPEI Granby Dam Long Span Line Design	Resource & Pwr Delivery Planning & Design	Line Design
30/11/2012	IA0341206	MVEC FEMA 404 #4.8.3 - Cascade 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
30/11/2012	IA0341207	MVEC FEMA 404 # 13.1.3 BACKBONE 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
30/11/2012	IA0341208	MVEC FEMA 404 # 14.4.1 St. Donatus 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
0/11/2012	IA0341209	MVEC FEMA 404 # 17.3.3 Union 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
0/11/2012	IA0341210	MVEC FEMA 404 # 22.8.3 Farley 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
0/11/2012	IA0341211	MVEC FEMA 404 # 29.7.1 Edgewood 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
0/11/2012	IA0341212	MVEC FEMA 404 # 29.7.3 Edgewood 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
0/11/2012	IA0341213	MVEC FEMA 404 # 36.4.1 Mosalem 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
1/12/2012	IA0341214	MVEC 2013 FEMA Contractor Out of Scope	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341307	MVEC FEMA 404 #25.1.1.1 Stone City 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341308	MVEC FEMA 404 #38.1.1 Prairie 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341309	MVEC FEMA 404 #31.5.2 Lovell 2-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341310	MVEC FEMA 404 #2.1.3 Ryan 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341311	MVEC FEMA 404 #28.6.3 Monmouth 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341312	MVEC FEMA 404 #11.4.3 Hopkinton 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341313	MVEC FEMA 404 #25.1.1.2 Stone City 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
5/01/2013	IA0341314	MVEC FEMA 404 #22.6.3 Farley 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341315	MVEC FEMA 404 Project Administration	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341316	MVEC FEMA 404 #14.6.3 St Donatus 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341317	MVEC FEMA 404 #18.8.3 Bernard 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341318	MVEC FEMA 404 #3.5.1 Graf 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
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Project Start	Project #	Project Name	Dept Name	Project Type
9/08/2013	IA0341319	MVEC FEMA 404 #31.7.3 Lovell 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341320	MVEC FEMA 404 #21.1.1 Van Buren 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341321	MVEC FEMA 404 #18.3.3 Bernard 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341322	MVEC FEMA 404 #18.8.1 Bernard 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341323	MVEC FEMA 404 #2.6.1 Ryan 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341324	MVEC FEMA 404 #8.8.1 New Vienna 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341325	MVEC FEMA 404 #8.8.2 New Vienna 2-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341326	MVEC FEMA 404 #15.1.1 Petersburg 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341327	MVEC FEMA 404 #11.7.1 Hopkinton 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/08/2013	IA0341328	MVEC FEMA 404 #1.4.1 Maquoketa 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
1/11/2013	IA0341329	MVEC FEMA 404 Project Administration	Resource & Pwr Delivery Planning & Design	Line Design
1/11/2013	IA0341330	MVEC FEMA 404 #27.6.3 Paradise 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
1/11/2013	IA0341331	MVEC FEMA 404 #1.4.3 Maquoketa 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
01/11/2013	IA0341332	MVEC FEMA 404 #9.5.3 Spragueville 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0531208	Linn 2012 OH Work Plan Construction Contract	Resource & Pwr Delivery Planning & Design	Line Design
4/04/2012	IA0531210	Linn Line Design Hwy 30-Cedar River Crossing	Resource & Pwr Delivery Planning & Design	Line Design
4/06/2012	IA0531212	Linn Cty Home Rd 3-ph to Dbl Ckt Conversion	Resource & Pwr Delivery Planning & Design	Line Design
7/08/2012	IA0531214	Linn Palo-Cedar River Crossing	Resource & Pwr Delivery Planning & Design	Line Design
4/01/2013	IA0531304	Linn Co. Misc. Line Design Projects	Resource & Pwr Delivery Planning & Design	Line Design
8/02/2013	IA0531308	Linn Co. Traver Sub ITC UB	Resource & Pwr Delivery Planning & Design	Line Design
8/02/2013	IA0531309	Linn Co. Ely East CKT ITC UB	Resource & Pwr Delivery Planning & Design	Line Design
4/01/2013	IA0531404	Linn Co. Misc. Line Design Projects	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951220	ECI FEMA 404 WO# m2436	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951221	ECI FEMA 404 WO# m2271	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951222	ECI FEMA 404 WO# m2313	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951223	ECI FEMA 404 WO# m2351	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951224	ECI FEMA 404 WO# m2331	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951225	ECI FEMA 404 WO# m9431	Resource & Pwr Delivery Planning & Design	Line Design
9/03/2012	IA0951226	ECI FEMA 404 WO# m9233	Resource & Pwr Delivery Planning & Design	Line Design

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Project Start	Project #	Project Name	Dept Name	Project Type
19/03/2012	IA0951227	ECI FEMA 404 WO# m9213	Resource & Pwr Delivery Planning & Design	Line Design
19/03/2012	IA0951228	ECI FEMA 404 WO# m9125	Resource & Pwr Delivery Planning & Design	Line Design
19/03/2012	IA0951229	ECI FEMA 404 WO# m9210-22	Resource & Pwr Delivery Planning & Design	Line Design
21/05/2012	IA0951233	ECI WO# 12735-Old Hwy 20 Rebuild 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
21/05/2012	IA0951234	ECI WO# 12736-Old Hwy 20-Move 3-ph	Resource & Pwr Delivery Planning & Design	Line Design
21/05/2012	IA0951235	ECI WO# 12737-Old Hwy 20-Rebuild 1-ph	Resource & Pwr Delivery Planning & Design	Line Design
12/06/2012	IA0951237	ECI 1-ph Rebuild-Cono Sch - WO# 12780	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951239	ECI FEMA 404 WO# m1415	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951240	ECI FEMA 404 WO# m1370	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951241	ECI FEMA 404 WO# m12136	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951242	ECI FEMA 404 WO# m12128	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951243	ECI FEMA 404 WO# m12117	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951244	ECI FEMA 404 WO# m12116	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951245	ECI FEMA 404 WO# m12424	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951246	ECI FEMA 404 WO# m12130-28	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951247	ECI FEMA 404 WO# m8228	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951248	ECI FEMA 404 WO# m8242	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951249	ECI FEMA 404 WO# m8232	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951250	ECI FEMA 404 WO# m8170	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951251	ECI FEMA 404 WO# m15120-23	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951252	ECI FEMA 404 WO# m15324	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951253	ECI FEMA 404 WO# m15423	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951254	ECI FEMA 404 WO# m5413	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951255	ECI FEMA 404 WO# m5231	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951256	ECI FEMA 404 WO# m5425	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951257	ECI FEMA 404 WO# m3410-35	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951258	ECI FEMA 404 WO# m3119	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951259	ECI FEMA 404 WO# m3136	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951260	ECI FEMA 404 WO# m3416	Resource & Pwr Delivery Planning & Design	Line Design

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10/08/2012	IA0951261	ECI FEMA 404 WO# m3125	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951262	ECI FEMA 404 WO# m3128	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951263	ECI FEMA 404 WO# m14141	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951264	ECI FEMA 404 WO# m14425	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951265	ECI FEMA 404 WO# m11131	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951266	ECI FEMA 404 WO# m11124	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951267	ECI FEMA 404 WO# m11126	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951268	ECI FEMA 404 WO# m11136	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951269	ECI FEMA 404 WO# m59433	Resource & Pwr Delivery Planning & Design	Line Design
10/08/2012	IA0951270	ECI FEMA 404 WO# m59437	Resource & Pwr Delivery Planning & Design	Line Design
18/06/2013	IA0951307	ECI REC JF-202 New 3-Phase 4/0 URD	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951308	ECI FEMA 404 WO# m7312	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951309	ECI FEMA 404 WO# m7335	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951310	ECI FEMA 404 WO# m7336	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951311	ECI FEMA 404 WO# m55114	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951312	ECI FEMA 404 WO# m55133	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951313	ECI FEMA 404 WO# m55152	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951314	ECI FEMA 404 WO# m55170	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951315	ECI FEMA 404 WO# m55327	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951316	ECI FEMA 404 WO# m55370-22	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951317	ECI FEMA 404 WO# m55423	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951318	ECI FEMA 404 WO# m55470	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951319	ECI FEMA 404 WO# m58213	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951320	ECI FEMA 404 WO# m58214	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951321	ECI FEMA 404 WO# m58215	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951322	ECI FEMA 404 WO# m58224	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951323	ECI FEMA 404 WO# m58473	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951324	ECI FEMA 404 WO# m61132	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951325	ECI FEMA 404 WO# m61216	Resource & Pwr Delivery Planning & Design	Line Design

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Project Start	Project #	Project Name	Dept Name	Project Type
20/06/2013	IA0951326	ECI FEMA 404 WO# m61217	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951327	ECI FEMA 404 WO# m61225	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951328	ECI FEMA 404 WO# m61236	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951329	ECI FEMA 404 WO# m62222	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951330	ECI FEMA 404 WO# m63413	Resource & Pwr Delivery Planning & Design	Line Design
20/06/2013	IA0951331	ECI FEMA 404 WO# m63475	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951406	ECI FEMA 404 WO# m51135	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951407	ECI FEMA 404 WO# m51123	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951408	ECI FEMA 404 WO# m51126	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951409	ECI FEMA 404 WO# m51216	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951410	ECI FEMA 404 WO# m51218	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951411	ECI FEMA 404 WO# m51325	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951412	ECI FEMA 404 WO# m51333	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951413	ECI FEMA 404 WO# m51121	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951414	ECI FEMA 404 WO# m54313	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951415	ECI FEMA 404 WO# m1752	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951416	ECI FEMA 404 WO# m53123	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951417	ECI FEMA 404 WO# m53124	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951418	ECI FEMA 404 WO# m53425	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951419	ECI FEMA 404 WO# m53436	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951420	ECI FEMA 404 WO# m53438	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951421	ECI FEMA 404 WO# m53270	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951422	ECI FEMA 404 WO# m57322	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951423	ECI FEMA 404 WO# m57412	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951424	ECI FEMA 404 WO# m57436	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951425	ECI FEMA 404 WO# m57374	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951426	ECI FEMA 404 WO# m56342	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951427	ECI FEMA 404 WO# m56332	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951428	ECI FEMA 404 WO# m56315	Resource & Pwr Delivery Planning & Design	Line Design

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Project Start	Project #	Project Name	Dept Name	Project Type
02/01/2014	IA0951429	ECI FEMA 404 WO# m56134	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951430	ECI FEMA 404 WO# m60418	Resource & Pwr Delivery Planning & Design	Line Design
02/01/2014	IA0951431	ECI FEMA 404 WO# m60437	Resource & Pwr Delivery Planning & Design	Line Design
29/10/2012	IA0971206	Guthrie FEMA 406 10038 PW06 355 GFG26	Resource & Pwr Delivery Planning & Design	Line Design
22/09/2014	<u>IL0041406</u>	Batavia Fabyan/Western Transmission Line WO#14-120	Resource & Pwr Delivery Planning & Design	Line Design
22/09/2014	IL0041407	Batavia Colonial Village Distribution Rebuild WO#14-121	Resource & Pwr Delivery Planning & Design	Line Design
22/09/2014	IL0041408	Batavia Carlisle Distribution Rebuild WO#14-120	Resource & Pwr Delivery Planning & Design	Line Design
20/01/2012	IL0441207	Jo-Carroll Const Spec Development	Resource & Pwr Delivery Planning & Design	Line Design
20/03/2012	IL0441211	JCE WO 12-038 Danisco to Metform 34.5kV Rebuild	Resource & Pwr Delivery Planning & Design	Line Design
20/03/2012	IL0441212	JCE WO 12-044 SVA-2 34.5kV Rebuild w/SVC-2 Underbuild	Resource & Pwr Delivery Planning & Design	Line Design
20/03/2012	IL0441213	JCE CE WO 12-039 DPT-4 to Whitton 3ph. New Construction	Resource & Pwr Delivery Planning & Design	Line Design
21/08/2012	IL0441221	Jo-Carroll Derinda Rd North 3-Ph Line Design	Resource & Pwr Delivery Planning & Design	Line Design
21/08/2012	IL0441222	Jo-Carroll Derinda Rd South 3-Ph Line Design	Resource & Pwr Delivery Planning & Design	Line Design
21/08/2012	IL0441223	Jo-Carroll Derinda Rd 3-Ph Line Retirement	Resource & Pwr Delivery Planning & Design	Line Design
14/02/2013	IL0441307	Jo-Carroll OH Fiber Standards	Resource & Pwr Delivery Planning & Design	Line Design
18/03/2013	IL0441308	Jo-Carroll WO 13-0063 Fulrath MIII Road 3-Ph Line Design	Resource & Pwr Delivery Planning & Design	Line Design
18/03/2013	IL0441309	Jo-Carroll WO 13-0222 Badger Road 3-Ph Line Design	Resource & Pwr Delivery Planning & Design	Line Design
29/07/2013	IL0441313	Jo-Carroll York to Argo Fay Line Design Support	Resource & Pwr Delivery Planning & Design	Line Design
30/07/2013	IL0441314	Jo-Carroll Fiber Design and Contract	Resource & Pwr Delivery Planning & Design	Line Design
16/08/2013	IL0441315	Jo-Carroll York to Eaton Fiber Design	Resource & Pwr Delivery Planning & Design	Line Design
16/08/2013	IL0441316	Jo-Carroll Savanna to Bowen Fiber Design	Resource & Pwr Delivery Planning & Design	Line Design
18/08/2014	<u>IL0441414</u>	Jo-Carroll Depot Line Relocation Design Support	Resource & Pwr Delivery Planning & Design	Line Design
07/02/2014	ME0021407	MRRA Oxford Networks Service Upgrade	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481409	Great Lakes Energy WO # 212 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481410	Great Lakes Energy WO # 368-01 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481411	Great Lakes Energy WO # 368-02 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481412	Great Lakes Energy WO # 369 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481413	Great Lakes Energy WO # 215 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481414	Great Lakes Energy WO # 216 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design

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Project Start	Project #	Project Name	Dept Name	Project Type
25/09/2014	MI0481415	Great Lakes Energy WO # 375-01 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481416	Great Lakes Energy WO # 375-02 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481417	Great Lakes Energy WO # 375-03 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481418	Great Lakes Energy WO # 376 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481419	Great Lakes Energy WO # 370 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481420	Great Lakes Energy WO # 222 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481421	Great Lakes Energy WO # 380-10 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481422	Great Lakes Energy WO # 380-02 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
25/09/2014	MI0481423	Great Lakes Energy WO # 382 2015 CWP Staking	Resource & Pwr Delivery Planning & Design	Line Design
21/05/2013	MI0541309	MJ GNC Primary Meter Pole Review	Resource & Pwr Delivery Planning & Design	Line Design
23/08/2012	MN0031206	Meeker FEMA Line Assessment Report	Resource & Pwr Delivery Planning & Design	Line Design
03/04/2014	MN0031406	Meeker Line Design for FEMA Replacement Projects	Resource & Pwr Delivery Planning & Design	Line Design
24/06/2013	MN0041306	Lake Connections and Northeast Service Cooperative Attachment (Hwy 61 Between Castle Danger and Split Rock)	Resource & Pwr Delivery Planning & Design	Line Design
25/07/2013	MN0041307	CL&P Post Inspection of Existing Lake Connections Attachments	Resource & Pwr Delivery Planning & Design	Line Design
04/11/2013	MN0041308	CL&P Lake County Phase 2B Pre-Attachment Assessment	Resource & Pwr Delivery Planning & Design	Line Design
04/11/2013	MN0041309	CL&P Lake County Phase 2B Post-Attachment Assessment	Resource & Pwr Delivery Planning & Design	Line Design
07/02/2013	MN0071307	Minnesota Power Pole Attachment Survey	Resource & Pwr Delivery Planning & Design	Line Design
14/02/2013	MN0071309	Minnesota Power 2013 Line Design & Staking Training	Resource & Pwr Delivery Planning & Design	Line Design
13/05/2013	MN0071310	Minnesota Power Tek Star Browerville Application	Resource & Pwr Delivery Planning & Design	Line Design
28/05/2013	MN0071311	Minnesota Power Lake Connections Phase 2A Application	Resource & Pwr Delivery Planning & Design	Line Design
18/06/2013	MN0071313	Minnesota Power CenturyLink Duluth Area Application	Resource & Pwr Delivery Planning & Design	Line Design
25/07/2013	MN0071314	Minnesota Power Lake Connections Phase 2C Application	Resource & Pwr Delivery Planning & Design	Line Design
15/10/2013	MN0071315	Minnesota Power Conductor Sag and Tension Table Development	Resource & Pwr Delivery Planning & Design	Line Design
13/11/2013	MN0071316	Minnesota Power Charter Superior 27 Application	Resource & Pwr Delivery Planning & Design	Line Design
17/03/2014	MN0071406	Minnesota Power Tekstar Browerville 18 Application	Resource & Pwr Delivery Planning & Design	Line Design
22/04/2014	MN0071407	Minnesota Power Lake Connections Hoyt Lakes 190	Resource & Pwr Delivery Planning & Design	Line Design
05/05/2014	MN0071408	Minnesota Power Lake Connections Aurora 230	Resource & Pwr Delivery Planning & Design	Line Design
05/05/2014	MN0071409	Minnesota Power Lake Connections Babbitt 287	Resource & Pwr Delivery Planning & Design	Line Design
20/05/2014	MN0071410	Minnesota Power Charter Superior 29	Resource & Pwr Delivery Planning & Design	Line Design

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10/06/2014	MN0071411	Minnesota Power MediaCom Hermantown - Arrowhead Rd	Resource & Pwr Delivery Planning & Design	Line Design
16/06/2014	MN0071412	Minnesota Power Lake Connections Silver Bay	Resource & Pwr Delivery Planning & Design	Line Design
16/07/2014	MN0071413	Minnesota Power Lake Connections Winton 27	Resource & Pwr Delivery Planning & Design	Line Design
19/08/2014	MN0071414	Minnesota Power NESC Biwabik 42	Resource & Pwr Delivery Planning & Design	Line Design
03/09/2014	MN0071415	Minnesota Power CI Little Falls	Resource & Pwr Delivery Planning & Design	Line Design
26/09/2014	MN0071416	Minnesota Power NESC Jay Cooke 11	Resource & Pwr Delivery Planning & Design	Line Design
31/10/2014	MN0071417	Minnesota Power Lake Connections French River A	Resource & Pwr Delivery Planning & Design	Line Design
31/10/2014	MN0071418	Minnesota Power Lake Connections French River B	Resource & Pwr Delivery Planning & Design	Line Design
31/10/2014	MN0071419	Minnesota Power NESC French River Hatchery	Resource & Pwr Delivery Planning & Design	Line Design
24/11/2014	MN0071420	Minnesota Power CI Hibbard	Resource & Pwr Delivery Planning & Design	Line Design
19/02/2013	MN0171306	MREA Line Design & Staking - Module I-3	Resource & Pwr Delivery Planning & Design	Line Design
29/01/2014	MN0171406	MREA 2014 Line Design & Staking Training	Resource & Pwr Delivery Planning & Design	Line Design
22/03/2013	MN0331306	Anoka Dist. UB Design - GRE 115kV line	Resource & Pwr Delivery Planning & Design	Line Design
16/09/2013	MN0331307	Anoka Underground Bid Documents	Resource & Pwr Delivery Planning & Design	Line Design
31/12/2012	MN0591210	2013 Peoples Annexation Line Valuation	Resource & Pwr Delivery Planning & Design	Line Design
13/11/2013	MN0591306	People's 2013 RPU Annexation	Resource & Pwr Delivery Planning & Design	Line Design
03/07/2012	MN0721206	Renville WP Projects CAS-338,339	Resource & Pwr Delivery Planning & Design	Line Design
14/01/2013	MN0721306	Renville Line Design - FEMA Projects	Resource & Pwr Delivery Planning & Design	Line Design
14/01/2013	MN0721406	Renville Line Design - FEMA Projects	Resource & Pwr Delivery Planning & Design	Line Design
04/03/2013	MN0951306	North Star 2013 Construction Contract	Resource & Pwr Delivery Planning & Design	Line Design
10/03/2014	MN0951406	North Star 2014 Construction Contract	Resource & Pwr Delivery Planning & Design	Line Design
11/12/2014	MN0951410	North Star Line Design Workshop	Resource & Pwr Delivery Planning & Design	Line Design
06/12/2012	MN1231208	Geronimo Wind Energy Line Design Support for Paynesville Transmission	Resource & Pwr Delivery Planning & Design	Line Design
17/03/2014	MN1831406	LHB Enbridge Superior Terminal Electrical Line Upgrade	Resource & Pwr Delivery Planning & Design	Line Design
08/12/2014	MN1831412	LHB Enbridge Clearbrook Station OH Line	Resource & Pwr Delivery Planning & Design	Line Design
20/03/2012	NH0041206	NHEC Engineering Services for Conway Line Reroute	Resource & Pwr Delivery Planning & Design	Line Design
10/12/2013	OH0011306	Pioneer Prologis Warehouse Line Extension and Upgrade	Resource & Pwr Delivery Planning & Design	Line Design
04/11/2013	OH0651307	SCP Idaho to Ware Rd Sub 69kv line design	Resource & Pwr Delivery Planning & Design	Line Design
02/05/2014	OH0651409	South Central Roundbottom 12kV Line Design	Resource & Pwr Delivery Planning & Design	Line Design

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07/07/2014	OH0651410	South Central Logan Elm to Kinderhook Transmission Design	Resource & Pwr Delivery Planning & Design	Line Design
29/09/2014	OH0651412	South Central Biers Run to Andersonville Substation CWP Transmission Design	Resource & Pwr Delivery Planning & Design	Line Design
29/09/2014	OH0651413	South Central Lockbourne to Ashville Substation CWP Transmission Design	Resource & Pwr Delivery Planning & Design	Line Design
29/09/2014	OH0651414	South Central Ashville to Bell Siding Substation CWP Transmission Design	Resource & Pwr Delivery Planning & Design	Line Design
29/09/2014	OH0651415	South Central SR 104 to Andersonville Substation CWP Transmission Design	Resource & Pwr Delivery Planning & Design	Line Design
29/09/2014	OH0651416	South Central Laurelville Substation to Logan Elm Tap CWP Transmission Design	Resource & Pwr Delivery Planning & Design	Line Design
10/07/2012	OH0961206	Piqua Redesign of damaged 69kV Line	Resource & Pwr Delivery Planning & Design	Line Design
08/08/2012	OH0961207	Piqua Assessment and Redesign of sub #4 to Sub #5 Line	Resource & Pwr Delivery Planning & Design	Line Design
19/02/2013	OH0961306	City of Piqua Construction Documents and Staking	Resource & Pwr Delivery Planning & Design	Line Design
28/03/2013	OH0961307	City of Piqua Sub #4 to Sub #3 Engineering Analysis	Resource & Pwr Delivery Planning & Design	Line Design
21/04/2014	OH0961406	City of Piqua Water Plant Line - Underbuild Analysis	Resource & Pwr Delivery Planning & Design	Line Design
07/05/2014	OH0961407	City of Piqua Pole Replacement Support	Resource & Pwr Delivery Planning & Design	Line Design
03/04/2012	OR0221206	Stantec Geronimo Paynesville Line - 30% Design	Resource & Pwr Delivery Planning & Design	Line Design
03/04/2012	OR0221207	Stantec Geronimo Black Oak Line - 30% Design	Resource & Pwr Delivery Planning & Design	Line Design
15/12/2014	PSE011416	2015 Distribution Line Design Course	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381206	Moreau Contract Work 2012 FEMA OH Projs	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381207	Moreau Contract Work 2012 FEMA UG Projs	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381208	Moreau LD & Staking for FEMA PW 142 - Parade Line	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381209	Moreau LD & Staking for FEMA PW161- US Hwy 63	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381210	Moreau LD & Staking for FEMA PW 189 - Airport Road	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381211	Moreau LD & Staking for FEMA PW 193 - N. Sioux/McGill	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381212	Moreau LD & Staking for FEMA PW 202 - Curtis/Cemetery	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381213	Moreau LD & Staking for FEMA PW 203 - Ridgeview	Resource & Pwr Delivery Planning & Design	Line Design
06/02/2012	SD0381215	Moreau Contract Work 2012 FEMA UG Projs	Resource & Pwr Delivery Planning & Design	Line Design
09/11/2012	SD0381218	MGEC WO 12-277 FEMA 404 & 406 Out of Scope LD & Staking	Resource & Pwr Delivery Planning & Design	Line Design
09/11/2012	SD0381219	MGEC WO 12-276 FEMA 404 Projects 11, 13, 14 and 17 LD & Staking	Resource & Pwr Delivery Planning & Design	Line Design

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04/12/2013	SD0381307	Moreau Oct. 2013 Storm FEMA Project Estimates	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381406	MGEC WO#14-117 Dietterle Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381407	MGEC WO#14-118 Shambo Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381408	MGEC WO#14-119 Gebhart Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381409	MGEC WO#14-120 Walters Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381410	MGEC WO#14-122 Grand River Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381411	MGEC WO#14-123 Petik Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381412	MGEC WO#14-124 Charlie Clark Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381413	MGEC WO#14-125 Keldron S. Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381414	MGEC WO#14-127 Roger Dix Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381415	MGEC WO#14-129 Kvale Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381416	MGEC WO#14-130 Mike Beer Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381417	MGEC WO#14-131 Tomac Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381418	MGEC WO#14-132 Jeff Meier Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381419	MGEC WO#14-133 Glad Valley Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381420	MGEC WO#14-134 Cook Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381421	MGEC WO#14-135 '14 FEMA 406 OOS LD	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381422	MGEC WO#14-136 FEMA 404 13-A LD	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381423	MGEC WO#14-137 FEMA 404 13-B1 LD	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381424	MGEC WO#14-138 FEMA 404 13-B2 LD	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381425	MGEC WO#14-139 FEMA 404 14 LD	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381426	MGEC WO#14-140 '14 FEMA 404 OOS LD	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381427	MGEC WO#14-141 Bullhead Line Design	Resource & Pwr Delivery Planning & Design	Line Design
24/03/2014	SD0381428	MGEC WO#14-142 Isabel Line Design	Resource & Pwr Delivery Planning & Design	Line Design
03/12/2014	SD0381429	Moreau Grand FEMA Work	Resource & Pwr Delivery Planning & Design	Line Design
07/06/2012	SD0431206	E. River Beresford to Tea Line	Resource & Pwr Delivery Planning & Design	Line Design
25/02/2013	SD0431306	E. River Mount Vernon to Plankinton Line	Resource & Pwr Delivery Planning & Design	Line Design
09/09/2013	SD0431308	E. River Mitchell Reroute	Resource & Pwr Delivery Planning & Design	Line Design
06/11/2012	VA0281207	Northern Neck Mattox Creek Crossing	Resource & Pwr Delivery Planning & Design	Line Design

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Project Start	Project #	Project Name	Dept Name	Project Type
06/11/2012	VA0281208	Northern Neck Horners Mill Pond Crossing	Resource & Pwr Delivery Planning & Design	Line Design
19/11/2013	VA0281306	Northern Neck Garner Line - Wood vs Steel Pole Analysis	Resource & Pwr Delivery Planning & Design	Line Design
11/12/2014	VA0281407	Northern Neck Avalon Transmission Line	Resource & Pwr Delivery Planning & Design	Line Design
10/04/2014	WI0011406	Kaukauna Material and Construction Standards Assessment	Resource & Pwr Delivery Planning & Design	Line Design
9/02/2012	WI0141206	Oconto FF Line 477 LD	Resource & Pwr Delivery Planning & Design	Line Design
0/04/2013	WI0141306	Oconto Q Line to Little Suamico Sub	Resource & Pwr Delivery Planning & Design	Line Design
25/11/2014	WI0141406	Oconto TLB Rebuild	Resource & Pwr Delivery Planning & Design	Line Design
0/03/2014	WI0181406	Menasha Fox River Crossing	Resource & Pwr Delivery Planning & Design	Line Design
7/01/2012	WI0321207	Pierce 2012 CTH "D" Line Rebuild	Resource & Pwr Delivery Planning & Design	Line Design
7/01/2012	WI0321208	Pierce 2012 CTH "V" Line Rebuild	Resource & Pwr Delivery Planning & Design	Line Design
0/12/2012	WI0321212	Pierce ESA-07 WO# 13009C Line Design	Resource & Pwr Delivery Planning & Design	Line Design
0/12/2012	WI0321213	Pierce ESA-05 WO# 13011C Line Design	Resource & Pwr Delivery Planning & Design	Line Design
1/04/2014	WI0321406	Pierce-Pepin GLS-01 Line Design and Staking Assistance	Resource & Pwr Delivery Planning & Design	Line Design
7/02/2014	WI0381406	Rock Energy HWY 75 3ph Design	Resource & Pwr Delivery Planning & Design	Line Design
6/05/2014	WI0381407	Rock Energy South Bluff Street Line Rebuild	Resource & Pwr Delivery Planning & Design	Line Design
1/01/2014	WI0431403	Scenic Work Order Inspections	Resource & Pwr Delivery Planning & Design	Line Design
2/10/2012	WI0471206	Jackson HUC3 608.08 Line Design	Resource & Pwr Delivery Planning & Design	Line Design
9/09/2013	WI0471307	Jackson HUC3 608.07 Line Design	Resource & Pwr Delivery Planning & Design	Line Design
1/08/2014	WI0511403	St. Croix Work Order Inspections	Resource & Pwr Delivery Planning & Design	Line Design
5/07/2014	WI0631403	Bayfield '14 Work Order Inspection	Resource & Pwr Delivery Planning & Design	Line Design
2/01/2014	WI0641406	Dairyland Staking Seminar	Resource & Pwr Delivery Planning & Design	Line Design
3/04/2012	WI1471206	Georgia Brander Project - Dist Line & Substation	Resource & Pwr Delivery Planning & Design	Line Design
2/11/2013	WI1521306	Sauk City Industrial Park Distribution System Design	Resource & Pwr Delivery Planning & Design	Line Design
1/10/2014	WI1521406	Sauk City Hwy 12/60 Distribution Line Relocation	Resource & Pwr Delivery Planning & Design	Line Design
2/01/2014	WV0101406	Harrison Project 308 Line Design	Resource & Pwr Delivery Planning & Design	Line Design
7/07/2012	OH0061202	Buckeye Misc Engineering & Ops	Resource & Pwr Delivery Planning & Design	Power System Studies
1/05/2014	AR0021406	Carroll Transmission Ownership Study	Resource & Pwr Delivery Planning & Design	Power System Studies
1/05/2014	AR0031406	Ozarks Transmission Ownership Study	Resource & Pwr Delivery Planning & Design	Power System Studie
4/08/2014	IN1131406	Utilities District of Western Indiana Owensburg/Guthrie CVR/Sectionalizing	Resource & Pwr Delivery Planning & Design	Power System Studies

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04/08/2014	<u>IN1131407</u>	Utilties District of Western Indiana PV System Impact Study 2014	Resource & Pwr Delivery Planning & Design	Power System Studies
15/09/2014	MN1601406	Allete Buena Vista Thermal Analysis & LMP History	Resource & Pwr Delivery Planning & Design	Power System Studies
31/03/2014	OH0651408	South Central 69kV Loop Protection and ATS Study	Resource & Pwr Delivery Planning & Design	Power System Studies
17/02/2014	OH0751406	NWEC Environmental Report - 69 kV line	Resource & Pwr Delivery Planning & Design	Power System Studies
17/07/2012	SD0431208	E. River Sioux Falls Area System Analysis	Resource & Pwr Delivery Planning & Design	Power System Studies