

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

In the Matter of:	)	
	)	
SIERRA CLUB, ENVIRONMENTAL	)	
LAW AND POLICY CENTER,	)	
PRAIRIE RIVERS NETWORK, and	)	
CITIZENS AGAINST RUINING THE	)	
ENVIRONMENT	)	
	)	PCB No-2013-015
Complainants,	)	(Enforcement – Water)
	)	
v.	)	
	)	
MIDWEST GENERATION, LLC,	)	
	)	
Respondents	)	

**NOTICE OF FILING**

PLEASE TAKE NOTICE that I have filed today with the Illinois Pollution Control Board the attached **COMPLAINANTS' PRE-HEARING MEMORANDUM**, copies of which are served on you along with this notice.

Respectfully Submitted,



Lindsay Dubin  
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(312) 795-3726

Dated: October 2, 2017

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MIDWEST GENERATION, LLC,	)	
	)	
Respondents	)	

**COMPLAINANTS’ PREHEARING MEMORANDUM**

**I. STATEMENT OF THE CASE**

1. Midwest Generation, LLC (“MWG”) owns the Waukegan and Will County power plants and operates the Joliet 29 and Powerton power plants.

2. The groundwater at Waukegan was classified as Class I, Potable Resource groundwater, throughout the entire period of violations asserted in the Second Amended Complaint, and continues to be classified as Class I groundwater.

3. The groundwater at Will County, Joliet 29, and Powerton was classified as Class I, Potable Resource Groundwater, prior to IEPA’s approval of Groundwater Management Zones (“GMZs”) at those plants in 2013.

4. Coal ash is located in various places at Waukegan, Will County, Joliet 29 and Powerton, including in and outside of the basins and ponds at those plants, in and on the ground, and in unlined repositories.

5. Quarterly tests of groundwater monitoring wells show groundwater contaminated with coal ash constituents, including boron, sulfate and manganese, in excess of Class I: Potable Resource Groundwater quality standards at all four plants, and in excess of Maximum Contaminant Levels contained in federal open dumping regulations at Waukegan, Will County and Powerton.

6. The Joliet #29 Generating Station (“Joliet 29”) is located in Joliet, Illinois in Will and Kendall Counties, on the north side of the Des Plaines River. MWG has historically stored and disposed of coal ash and other coal combustion waste in repositories that include, but are not limited to, two or more landfills and three ash ponds on the same side of the river, and continues to store or dispose of coal ash and other coal combustion waste in these ponds or repositories.

7. MWG installed eleven groundwater monitoring wells (MW-1 through MW-11) around the Joliet 29 ash ponds in 2010. Since monitoring began in late 2010, groundwater monitoring results have shown levels of antimony, boron, chloride, iron, manganese, sulfate, and Total Dissolved Solids (“TDS”) which exceed Illinois Groundwater Quality Standards (“GQSs”).

8. The Powerton Generating Station (“Powerton”) is located in Pekin, Illinois in Tazewell County. MWG has historically stored and disposed of coal ash and other coal combustion waste in repositories that include, but are not limited to three active ash ponds on the site, two of them lined; one less active ash pond on the site; up to two additional ponds or basins containing coal ash and other coal combustion waste; and a former slag dumping area. MWG continues to store or dispose of coal ash and other coal combustion waste in these ponds or repositories.

9. MWG monitors groundwater at Powerton with a network of 15 wells. Since monitoring began in late 2010, groundwater monitoring results have shown levels of antimony, arsenic, boron, chloride, iron, lead, manganese, nitrate, selenium, sulfate, thallium, and TDS which exceed Illinois GQS and/or open dumping standards.

10. The Waukegan Generating Station (“Waukegan”) is located in Waukegan, Illinois in Lake County. There are two active HDPE-lined ponds at this site. MWG has stored and disposed of coal ash and other coal combustion waste in repositories that include, but are not limited to, these two ponds and one former ash landfill or disposal area, and continues to do so.

11. MWG installed 5 wells (MW-1 through MW-5) around the Waukegan ash ponds in 2010. Groundwater monitoring results from Waukegan show levels of antimony, arsenic, boron, chloride, iron, manganese, nitrate, selenium, pH, sulfate, and TDS which exceed Illinois GQS and/or open dumping standards.

12. The Will County Generating Station (“Will County”) is located in Romeoville, Illinois in Will County. MWG has stored and disposed of coal ash and other coal combustion waste at the site in repositories that include four ponds. MWG continues to store and dispose of coal ash and other coal combustion waste in one or more of these ponds.

13. MWG installed 10 wells around the Will County plant’s ponds in 2010. Groundwater monitoring results from Will County show levels of antimony, arsenic, boron, chloride, manganese, pH, selenium, sulfate, and TDS which exceed Illinois GQS and/or open dumping standards.

14. MWG, through coal ash disposal ponds, landfills, unconsolidated coal ash fill, and/or other coal ash and coal combustion waste repositories at Powerton, Will County and

Waukegan has caused or contributed to contamination of the groundwater beneath Powerton, Will County and Waukegan in violation of 415 ILCS 5/21(a).

15. MWG, through coal ash disposal ponds, landfills, unconsolidated coal ash fill, and/or other coal ash and coal combustion waste repositories at Joliet 29, Powerton, Will County and Waukegan has discharged contaminants into the environment at Joliet 29, Powerton, Will County and Waukegan and thereby caused water pollution in violation of 415 ILCS 5/12(a) and (d), and 35 Ill. Admin. Code §§ 620.115, 620.301(a), and 620.405.

II. FINAL ORDER OF WITNESSES

1. Maria Race
2. Christopher D. Lux
3. Rebecca Maddox
4. Richard R. Gnat
5. Dr. James R. Kunkel

III. LIST OF DEMONSTRATIVE EXHIBITS

**Excerpts from Documents in the Record**

<b>Bate Range</b>	<b>Description</b>	<b>Source Document Bates Range</b>	<b>Name</b>
Bates MWG13-15 58295	Joliet 29 well map	Bates MWG13-15 58292-58388	Joliet 29 groundwater report, 4th quarter 2016
Bates MWG13-15 62221	Powerton well map	Bates MWG13-15 62216-62321	Powerton groundwater report, 1st quarter 2017
Bates MWG13-15 58392	Will County well map	Bates MWG13-15 58389-58489	Will County groundwater report, 4th quarter 2016
Bates MWG13-15 60061	Will County well map	Bates MWG13-15 Stand-alone map	Produced after TestAmerica lab reports for Will County, February 2016, 60040-60060
Bates MWG13-15 43754	Waukegan well map	Bates MWG13-15 43695-43848	Waukegan groundwater report, 3rd quarter 2014
Bates MWG13-15 61564	Waukegan tannery ELUC well map	Bates MWG13-15 61553-61574	Waukegan tannery ELUC report, July 2016
Bates MWG13-15 60222	Waukegan well map	Bates MWG13-15 Stand-alone map	Produced after TestAmerica lab reports for Waukegan, May 2014, 60197-60221
Bates MWG13-15 23339	Joliet 29 site map	Bates MWG13-15 23301-23597	Joliet Phase II ESA
Bates MWG13-15 45814	Waukegan site map	Bates MWG13-15 45779-46054	Waukegan Phase II ESA

The following composite documents are in the form of a spreadsheet, which we currently plan to project on-screen, but the spreadsheet is also formatted to print to the following numbers of pages:

**Composite Documents**

<b>Composite Documents</b>	<b>Number of Pages</b>
Joliet 29 groundwater data	6
Joliet 29 groundwater data summary table	1
Joliet 29 time series for boron and sulfate	4
Powerton groundwater data	10
Powerton groundwater data summary table	1
Powerton time series charts	7
Waukegan groundwater data	8
Waukegan groundwater data summary table	1
Waukegan time series charts	5
Will County groundwater data	6
Will County groundwater data summary table	1
Will County time series charts	4
Waukegan well map (from maps identified above)	1
Chart of Groundwater Standard Exceedances	15

IV. FINAL EXHIBIT LIST

**Exhibits Produced by Complainants, Excluding Groundwater Monitoring Reports**

<b>First Page</b>	<b>Last Page</b>	<b>Brief Description</b>
5526	5545	United States Environmental Protection Agency, Edition of the Drinking Water Standards and Health Advisories, (2012)
16136	16544	United States Environmental Protection Agency, Human and Ecological Risk Assessment of Coal Combustion Wastes, (Apr. 2010)
17321	17472	Electric Power Research Institute (EPRI), Comparison of Risks for Leachate from Coal Combustion Product Landfills and Impoundments with Risks for Leachate from Municipal Solid Waste Landfill Facilities, (2010)
17473	17473	Electric Power Research Institute, Groundwater Quality Signatures for Assessing Potential Impacts from Coal Combustion Product Leachate, (Nov. 15, 2012)
17477	17685	Ohio Environmental Protection Agency, Geotechnical and Stability Analyses for Ohio waste Containment Facilities, (Sept. 14, 2004)
18103	18847	United States Environmental Protection Agency, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; EO12866_CCR 2050-AE81 Final Preamble and Rule_20141218 (Prepublication Version)
18848	19061	United States Geological Survey River Data
19062	19066	Illinois Environmental Protection Agency, Ash Impoundment Strategy Progress Report, (Oct. 2010)
19067	19298	Illinois Environmental Protection Agency, Technical Support Document: Coal Combustion Waste Impoundments at Electrical Coal Fired Power Plants
21738	21748	Nelson Leonard Nemerow, Theories and Practices of Industrial Waste Treatment (1963)
46976		Email from James Kunkel to Jennifer Duggan (Sept. 17, 2014)
52686		Jim Kunkel, Notes from Telecom with Abel Russ (Sept. 12, 2014)
53740	53740	Geosyntech, Notification of Intent to Initiate Closure of the Former Ash Basin, Powerton (Dec. 17, 2015)
23618	23629	NRT, Technical Memorandum No. 3 (Oct. 13, 2006).
23630	23647	NRT, Technical Memorandum No. 3 (Nov. 22, 2006).
23648	23654	Letter from Bruce R. Henset, NRT, to Maria Race re: Conceptual Design for Surface Impoundment Liners (Dec. 21, 2005).



37981	37983	Patrick Engineering, IEPA meeting minutes, Maria Race in attendance, 5/5/2010.
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**Exhibits Produced by Respondents, Excluding Groundwater Monitoring Reports**

<b>First Page</b>	<b>Last Page</b>	<b>Brief Description</b>
1	176	NRT, Non-disclosable Impoundment Evaluations, (2005)
143	176	ENSR, Powerton Phase I Environmental Site Assessment, (1998)
328	332	Illinois Environmental Protection Agency, Violation Notice: Midwest Generation, LLC, Waukegan Generating Station, (June 11, 2012)
333	341	Illinois Environmental Protection Agency, Violation Notice: Midwest Generation, LLC, Will County Generating Station, (June 11, 2012)
342	347	Illinois Environmental Protection Agency, Violation Notice: Midwest Generation, LLC, Joliet #29 Generating Station, (June 11, 2012)
342	347	Joliet Notice of Violation (June 11, 2012)
348	358	Illinois Environmental Protection Agency, Violation Notice: Midwest Generation, LLC, Powerton Generating Station, (June 11, 2012)
364	383	Letter from Susan M. Franzetti, Counsel for Midwest Generation, LLC, to Andrea Rhodes, Illinois Environmental Protection Agency, Re: Violation Notice --MWG response to the Joliet NOV, Jul. 27, 2012
384	406	Letter from Susan M. Franzetti, Counsel for Midwest Generation, LLC, to Andrea Rhodes, Illinois Environmental Protection Agency, Re: Violation Notice 6282--MWG response to Powerton NOV, Jul. 27, 2012
421	437	Letter from Susan M. Franzetti, Counsel for Midwest Generation, LLC, to Andrea Rhodes, Illinois Environmental Protection Agency, Re: Violation Notice --MWG response to the Will County NOV, Jul. 27, 2012
452	491	Letter from Susan M. Franzetti, Counsel for Midwest Generation, LLC, to Andrea Rhodes, Illinois Environmental Protection Agency, Re: Violation Notice 6281--MWG response to Waukegan NOV, Sept. 4, 2012

506	521	Letter from Susan M. Franzetti, Counsel for Midwest Generation, LLC, to Andrea Rhodes, Illinois Environmental Protection Agency, Re: Violation Notice 6283--MWG response to Will NOV, Sept. 4, 2012
523	529	Proposed Joliet CCA.
538	544	Waukegan CCA (including cover page and unexecuted compliance statement)
552	558	Illinois Environmental Protection Agency & Midwest Generation, Powerton Compliance Commitment Agreement, (Oct. 24, 2012)
559	564	Illinois Environmental Protection Agency & Midwest Generation, Will County Compliance Commitment Agreement, (October 24, 2012)
565	570	Illinois Environmental Protection Agency & Midwest Generation, Waukegan Compliance Commitment Agreement, (October 24, 2012)
571	576	Illinois Environmental Protection Agency & Midwest Generation, Joliet #29 Compliance Commitment Agreement, (October 24, 2012)
594	598	Midwest Generation, Compliance Commitment Agreement-Well Installation Documentation, Waukegan Station, (Jan 15, 2013)
599	610	Midwest Generation, Waukegan ELUC Application, Compliance Commitment Agreement—ELUC, Midwest Generation, LLC, Waukegan Station, (Jan. 18, 2013)
611	621	Midwest Generation, Will County ELUC Application, Compliance Commitment Agreement—ELUC, Midwest Generation, LLC, Will County Station,(Jan. 18, 2013)
622	666	Midwest Generation, Compliance Commitment Agreement—Groundwater Management Zone Application—Will County Generating Station, (Jan. 18, 2013)
667	711	Midwest Generation, Compliance Commitment Agreement--Groundwater Management Zone Application--Joliet Generating Station, (Jan. 18, 2013)
712	723	Midwest Generation, Powerton ELUC Application, Compliance Commitment Agreement—ELUC, Midwest Generation, LLC, Powerton Station, (Jan. 18, 2013)

724	775	Midwest Generation, Compliance Commitment Agreement— Groundwater Management Zone Application—Powerton Generating Station, (Jan. 18, 2013)
795	796	Will County Compliance Statement (Oct. 17, 2013)
797	798	Powerton Compliance Statement (Oct. 17, 2013)
801	802	Joliet Compliance Statement (Oct. 9, 2013)
805	806	Waukegan Compliance Statement (Oct. 22, 2013)
818	819	Unsigned Letter from Maria Race to Lynn Dunaway
821	2458	United States Environmental Protection Agency, Questionnaire for the Steam Electric Power Generation Effluent Guidelines, (2010)
3253	3644	ENSR Consulting, Phase II Environmental Site Assessment of the ComEd Powerton Generating Station, Route 29 & Mantino Road, Pekin, Illinois, (1998)
5699	6039	ENSR Consulting, Phase II Environmental Site Assessment of the ComEd Will County Generating Station, (1998)
6964	7080	Patrick Engineering, Joliet Hydrogeologic Assessment Report, (Feb. 2011)
6964	7080	Patrick Engineering, Joliet Patrick Hydrogeological Assessment Report, (2011)
7081	7147	Patrick Engineering, Powerton Hydrogeologic Assessment Report, (Feb. 2011)
7148	7229	Patrick Engineering, Waukegan Hydrogeologic Assessment Report, (Feb. 2011)
7148	7229	Patrick Engineering, Hydrogeological Assessment Report -- Waukegan, 2011
7230	7332	Patrick Engineering, Will County Hydrogeologic Assessment Report, (Feb. 2011)
7230	7340	Patrick Engineering, Hydrogeological Assessment Report -- Will County, (2011)
7362	7362	KPRG, Figure 1: Agreed Upon Monitoring Well Location, Powerton, (Dec. 12, 2012)
7392	7392	Patrick Engineering, Lake Michigan Water Balance Diagram, (Sept. 2010)
7400	7409	Midwest Generation, Powerton Outfall Diagrams, (Mar. 2010)
8502	8536	ENSR, Phase I Environmental Site Assessment of the ComEd Powerton Generating Station, (1998)
9583	9643	Midwest Generation, Powerton Ash Surge Basin Construction Permit Request, (Jan. 17, 2013)

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9644	9645	Letter from Richard Gnat, Principal, KPRG, to Lynn Dunaway, Illinois Environmental Protection Agency, Bureau of Water, re Powerton Compliance Commitment Agreement-ELUC/GMZ (Sept. 11, 2013)
10640	10658	Patrick Engineering, Monitoring Well Completion Reports for Powerton Ash Pond Assessments, (October 20, 2010)
10759	10771	Patrick Engineering, Proposal for Ash Pond Investigation, (Aug. 18, 2010)
10772	10773	Annual NPDES Compliance Evaluation (Aug. 22, 2012)
10774	10777	NPDES Compliance Evaluation (Aug. 18, 2010)
10812	10815	Alan Keller, Illinois Environmental Protection Agency, Powerton Liner Replacement Construction Permit, (Feb. 25, 2013)
10825	10925	KPRG, Ash Pond Sediment Characterization and Cross-Sectional Survey-Powerton, (Jan. 23. 2003)
10926	10947	Powerton Wastewater Treatment Facilities Operating Manuals
10976	10978	Amendola Engineering, Inc. Powerton NPDES Outfalls, (May 11, 2004)
11302	11492	Andrews Environmental Engineering Inc., Draft Sampling Plan Report for the Limestone Runoff Basin, (June 8, 2004)
11302	11492	AEEI, Draft Sampling Plan Report, Midwest Generation, LLC, Powerton Generating Station, (June 2004)
11573	11580	Waukegan Liner Repair Documents, (2007)
11581	11583	Purchase Order, Waukegan Liner Repairs (Jul. 13, 2010)
11955	11955	Email Exchange Re: "Bottom Ash Pond Liner Repairs" (May 12, 2000)
11961	11965	Letter from Michael Smith, Structural Project Engineer, Doyen and Associates, Incorporated to Tom Dilla, ComEd, Waukegan Station (Aug. 7, 1997)
11966	12040	ENSR, Phase I Environmental Site Assessment of the ComEd Waukegan Generating Station, (Oct. 1998)
11966	12040	Commonwealth Edison, Phase I Environmental Site Assessment -- Waukegan Generating Station, 1998
12713	12751	Waukegan Environmental Land Use Control (June 9, 2003)
12827	12845	Letter from Richard Gnat, Principal, KPRG and Associates, Inc. to Maria Race, re Liner Inspection-West and East Ash Pond at Waukegan Generation Station (Aug. 31, 2005)

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12846	12849	North Antelope Mine Coal Specifications
13087	13239	KPRG, Phase II Environmental Site Investigation of Will County Station, (Sept. 30, 2009)
13241	13421	KPRG, Phase I Environmental Site Assessment of Will County Station, (Oct. 22, 2008)
13734	13736	Email from Eric J. Tlachac to Maria Race (Oct. 24, 2007)
13737	13742	Email Exchange Re "Will County South Ash Pond Liner Design Status"
13774	13774	Email Exchange Re "Ash Pond #3"
13870	13886	Patrick Engineering Inc., Hydrogeological Assessment Plan, Joliet Generating Station No. 29, (July 2010)
14096	14101	Email Exchange Re "Data tables for Ash Pond Investigations"
14157	14173	Email Exchange Re "Ash Pond Data Summaries"
14157	14173	Email from Richard Frenedt to Maria Race (Feb. 10, 2012)
14177	14181	Email Exchange Re "3S Ash Pond Liner Damage-Will County"
14225	14269	Email from Richard Frenedt to Maria Race Aug. 9, 2012)
14271	14271	Email Exchange Re "ash ponds" (Aug. 30, 2012)
14522	14544	Waukegan Station New Wells and ELUC Information
14744	14747	Midland Standard Engineering & Testing, Inc., Laboratory Testing Services-Will County station (Aug. 22, 2012)
14783	14785	Email from Xinying Wang to Richard Gnat (July 25, 2012)
15199	15238	Letter from Susan Franzetti, Counsel for Midwest Generation, Nijman Franzetti LLP to Illinois EPA, Division of Public Water Supplies re Violation Notice-Waukegan (Sept. 4, 2012)
16277	16278	Email from Bill Buscher at IEPA to Maria Race (Oct. 26, 2011)
16564	16564	Letter from William E. Buscher, Manager, Hydrogeology and Compliance Unit, Groundwater Section, Bureau of Water, IEPA to John Kennedy, Senior Vice President, Generation (Jul. 2, 2013)
16907	16963	Waukegan ELUC
17183	17183	Letter from William E. Buscher, Manager, Hydrogeology and Compliance Unit, Groundwater Section, Bureau of Water, IEPA to Amy Hanrahan, Senior Environmental Manager, MWG (Aug. 8, 2013)
17185	17229	Midwest Generation, Compliance Commitment Agreement—Groundwater Management Zone Application—Joliet #29 Generating Station, (Jan. 18, 2013)

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18053	18053	Illinois Environmental Protection Agency, Construction Permit for Liner Replacement for Ash Ponds 1 and 2 at Joliet, (July 20, 2007)
18115	18131	Commonwealth Edison Co 1978 Remediation Objectives report
18133	18189	Midwest Generation, Application for Permit or Construction Approval- Joliet Station, Ash Impoundment 1 and 2, (June 21, 2007)
18192	18192	Ruettiger, Tonelli & Associates, Inc., Ash Removal Exhibit, (2007)
18445	18446	Leak Location Services, Inc., Report for "Electronic Leak Location Survey for Ash Impoundment 2 at the Midwest Generation Joliet Station," (June 2, 2008)
18824	19071	KPRG, Coal Ash and Slag Removal Documentation
19067	19428	KPRG, Joliet #29 Ash Berm Removal Summary (Sept. 20, 2007)
19430	19441	KPRG, Joliet #29 Former Ash Burial Area Runoff Erosion Repair Documentation, (Sept. 26, 2009)
19442	19452	KPRG, Joliet #29 Former Ash Burial Area Runoff Inspection 2009, (Aug. 27, 2009)
19455	19468	KPRG, Joliet #29 Former Ash Burial Area Runoff Inspection and Erosion Repair Documentation, (2010)
19470	19473	KPRG, Joliet #29 Former Ash Burial Area Runoff Inspection 2012, (Sept. 19, 2012)
19474	19481	KPRG, Joliet #29 Former Ash Burial Area Runoff Erosion Repair, (Sept. 26, 2012)
19483	19483	KPRG, Joliet #29 Former Ash Burial Area Runoff Inspection 2013, (Aug. 21, 2013)
19485	19668	KPRG, Joliet CCB Determination Support, (July 25, 2005)
19485	19668	KPRG, Joliet CCB Determination Support, (2005)
19486	19668	KPRG, Joliet #29 Summary Report (July 25, 2005)
21359	21360	Email Exchange Re "IEPA visit letter and phone conversations for Powerton" (Sept. 5, 2012)
21361	21367	Email from Maria Race to William Gaynor (Oct. 19, 2012)
21463	21465	Email from Maria Race to James DiCola (June 7, 2010)
21746	21750	Letter from Amy Hanrahan to Andrea Rhodes, Illinois EPA, Well Installation Documentation, Powerton (Dec. 14, 2012)
22014	22018	Email Exchange Re "Powerton Secondary Ash Basin Relining" (Mar. 27, 2013)
22020	22020	Email Exchange Re Ground Water Issues (Mar. 27, 2013)

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22023	22023	Email from William Gaynor to Amy Hanrahan and others, 4/9/2013.
22765	22766	Email from William Gaynor to Charles J Hart and others, 9/24/2013.
22846	22849	Email from William Gaynor to Christopher Lux, 3/8/2013.
22863	22865	Letter from Michael J. Smith, Valdes Engineering, to Christopher Luc, re: Waukegan Ash Ponds Berm Inspection (6/29/2009).
22934	22943	Email from Chris Lux to James Sault and other, 5/23/2013.
23301	23597	ENSR, Phase II Environmental Site Assessment for Joliet 29 (Dec. 1998).
23608	23617	NRT, Technical Memorandum No. 1, Impoundment Ranking and Replacement Liner Recommendations (Dec. 1, 2005).
23721	23729	Letter from Bruce R. Henset, NRT, to Maria Race re: Conceptual Design for Surface Impoundment Liners (Dec. 21, 2005).
23977	23977	Letter from William E. Buscher, IEPA, to John Kennedy, re: Approval of Powerton GMW (10/3/2013).
24221	24231	Letter from Michael J. Smith, Valdes Engineering, to Chris Lux, re: Waukegan Ash Pond Berm Visual Inspection (6/12/14).
24264	24386	Letter from Richard Gnat, KPRG, to Maria Race re: Geotechnical Analysis of Soil Surrounding Settling Basins/Ponds (10/13/2005).
24387	24392	Letter from Richard Gnat, KPRG, to Maria Race re: Re-Issuance of Figure 4-1 for Geotechnical Summary Report (Oct. 25,2005).
25139	25167	ENSR, Phase I Environmental Site Assessment for Joliet 29 (Oct. 1998).
25369	25372	Letter from Elsie Briette to Dave Cohn re: Abandoned Ash Landfill Area at Joliet 29 (4/20/1995).
27001	27001	Email from Jeffrey Beaudry to Aron Yakima and others, 7/17/2013.
27130	27136	Email Exchange Re: Leak Location Survey for 2S Pond at MWGen - Will County
27555	27556	Email from David Kamano to Jeff Beaudry and others, 2/12/2013.
28031	28034	Email from Terry Kosmatka to Christopher lux and other, 9/13/2013.

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28326	28354	Will County Email Exchanges
28849	28851	Fax from Tedd Mills, Brieser Construction, to Beckie Maddox, 10/19/2009.
28862	28863	Stormwater Construction Site Inspection Report signed by Beckie Maddox, 10/1/2009.
29023	29081	Letter from Maria Race to Jaime Rabins, IEPA re: liner replacement permit application for Will County, 7/22/2008.
29102	29104	NRT construction drawings, Will County
29165	29259	Will County liner replacement request for proposals, 9/8/2008.
29339	29339	Will County ash pond modification plan, 1/18/2013.
29502	29532	ENSR, Phase I Environmental Site Assessment for Will County (Oct. 1998).
29589	29590	Letter from Donald Claybaugh to IEPA re: "IEMA incident" at Will County (12/11/2008).
29807	29809	Letter from Matthew Kemnitz, Leak Location Services Inc., to Mike Schmidt, Brieser Construction, re: leak location survey at Joliet 29 (10/7/2013).
29832	29836	Letter from John Ortiz, Leak Location Services, Inc., to Craig Holthaus, Otto Baum Company, Inc., re: leak location survey at Powerton (3/21/2011).
30421	30424	IEPA permit to construct - Powerton bypass basin expansion and liner upgrade, 9/15/2010.
31492	31493	Photographs of liner installation
32583	32583	Construction drawing of Will County ponds
33867	33997	Letter from NRT to Terry Kosmatka re: Joliet 29 south pond #3 liner replacement construction drawings (7/16/2014).
33867	33997	Permit Application for South Ash Ponds 2 and 3 Liner Replacement
33998	34157	Letter from NRT to Mark Kelly re: Powerton ash surge basin liner replacement construction drawings (7/18/2014).
34158	34550	Letter from NRT to Mark Kelly re: Powerton secondary ash settling basin liner replacement construction drawings (7/21/2014).
37979	37980	IEPA Meeting minutes, Maria Race in attendance, 5/5/2010.
39647	39675	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2011, Powerton Generating Station – Ash Impoundment (Aug. 1, 2011)



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39760	39826	Patrick Engineering, Hydrogeological Assessment Report -- Powerton Station, 2011
41172	41183	Letter from Richard Frenedt, Patrick Engineering, to Maria Race (10/10/2012).
41297	41378	Patrick Engineering, Hydrogeologic Assessment Report for Waukegan Generating Station (Feb. 2011).
41735	41744	Patrick Engineering, Ash Pond Data Evaluation & Summary. Waukegan Station, May 2012 (including two draft versions and one final version).
43868	43869	Richard Gnat curriculum vitae
44125	44146	Waukegan ELUC, Annual Groundwater Monitoring Report--July 2014
44147	44147	Letter from Richard Gnat to Peter O'Day, Ash Burial Runoff Inspection (Aug. 28, 2014)
44148	44152	Letter from Richard Gnat to James DiCola, Erosion Repair Documentation (Sept. 22, 2011)
44153	44155	Letter from Richard Gnat to James DiCola, Inspection Summary Letter Aug. 22, 2011)
44269	44269	Email from James DiCola to Peter O'Day, Ash Burial Runoff Inspection (July 28, 2013)
44275	44278	Permit, Liner Replacement, Joliet 29 (Feb. 25, 2013)
44279	44279	Email from James DiCola to Maria Race re Pond 3 (Aug 23, 2012)
44557	44557	Email from James DiCola to Richard Gnat re Ash Burial Area (Sept. 15, 2010)
44558	44583	Email Exchange Re: "Ash Impoundment Project (Groundwater Monitoring Well Installations)
44588	44589	Email about Ash Dumping on Station Property, (Sept. 12, 2014)
44601	44612	Letter from Michael Smith to Christopher Lux (June 12, 2014)
44615	44617	Email from Maria Race to Lynn Dunaway (Aug. 28, 2014)
44621	44622	Email, from C. Lux to Wayne Ollila (Oct. 30, 2014)
44623	44623	Email from Chris Lux to Mike Smith (May 27, 2014)
44969	44973	Email from Brad Castle to Rebecca Maddox , Fred Veenbaas (May 23, 2012)
44979	44979	Email from Rebecca Maddox to Margaret Ruane (May 29, 2012)
45512	45512	KPRG, Aerial Distribution of Groundwater Sampling Results (Oct. 6, 2014)
45648	45649	KPRG Boring Logs for MWs 8 and 9, Waukegan, (April 29, 2014)

45779	46054	ENSR Phase II Environmental Site Assessment Waukegan Generating Station
46113	46122	Andrews Environmental Engineering, Inc., Former Griess Pflieger Tannery Site, (Nov. 8, 2005)
47076	47291	Phase I Remedial Investigation, for Commonwealth Edison (March 1994)
48439	48439	Table 1. Groundwater Elevations - Midwest Generation, LLC, Waukegan Station, Waukegan, IL Bates MWG13-15_48439
48440	48492	ENSR, Phase II Environmental Site Assessment for Joliet 29 Station (Dec. 7, 1998)
48563	48563	Email from James DiCola to Ricardo Ng (Feb. 27 2015)
48566	48566	Email from Rebecca Maddox to Yvonne Dedrickson (Sept. 1, 2010)
48568	48569	Email from Raymond Wolan to Rebecca Maddox and Daryl Miller (July 28, 2010)
48586	48586	Email from Rebecca Maddox to John Shields and Black Connolly (July 28, 2010)
48604	48605	Permit, Liner Replacement, Will County (Sept. 25, 2008)
48612	48612	Email from Rebecca Maddox to Christopher Lux (Sept. 3, 2008)
48636	48639	Email chain beginning with Rebecca Maddox to Sarah Kamm and attachments (Sept. 27, 2012)
48644	48644	KPRG 1974 Aerial Photo of Waukegan Station
48647	48710	NRG Energy, Quarterly Groundwater Monitoring Results – First Quarter 2015, Joliet 29 Generating Station – Ash Impoundments (Apr. 24 2015)
48711	48843	NRG Energy, Quarterly Groundwater Monitoring Results – First Quarter 2015, Powerton Generating Station – Ash Impoundments (Apr. 24 2015)
48844	48901	NRG Energy, Quarterly Groundwater Monitoring Results – First Quarter 2015, Will County Generating Station – Ash Impoundments (Apr. 24 2015)
48902	48958	NRG Energy, Quarterly Groundwater Monitoring Results – First Quarter 2015, Waukegan Generating Station – Ash Impoundments (Apr. 24 2015)
49099	49256	Construction Documentation Transmittal, Metal Cleaning Basin and Bypass Basin Liner Replacement (June 27, 2011)

49272	49285	Letter from Michael Smith to Christopher Lux (May 29, 2015)
49286	49292	Email Exchange Re: NRG Waukegan Station West & East Ash Pond Liner Repairs (Mar. 21, 2015)
49296	49298	NRT Notes on Geomembrane Stress (Sept. 10, 2010)
49299	42340	
49362	49507	
49479	49507	NRT, Modifications to Geomembrane Anchor Trench, Ash Impoundment # 1 Liner Replacement, Joliet 29 Station (Sept. 10, 2008)
49565	49652	KPRG, CCB Determination Support, Midwest Generation Will County Station (Sept. 8, 2015)
49653	49671	Ash Disposal Agreement
49677	49678	Ash Disposal Agreement Amendment
49756	49760	Weekly Inspection Checklists (2015)
50095	50148	Will County Inspection Checklists
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54258	54259	Letter from Maria Race to IEPA re Waukegan CCA (Oct. 22, 2013)
55021	55021	Photograph (Sept. 11, 2003)
55027	55027	Photograph (Sept. 8, 2003)
55031	55031	Photograph (Sept 8, 2003)
57375	57393	May 13, 2016 Seymour presentation
58593	59238	TestAmerica Analytical Report, Joliet #29 (May 31, 2016)
59603	59693	Geosyntech, Waukegan History of Construction, East and West Ash Basins (October 2016)
9668	9731	Midwest Generation, Application for Permit or Construction Approval, Secondary Ash Settling Basin Liner Replacement -- Powerton Station, (Dec. 22, 2009)
11233	11237	Letter from Richard Gnat to Lynn Dunaway, IEPA, Powerton Generating Station (Sept. 11, 2013)
3957	4596	Kosson: Characterization of Coal Combustion Residues from Electric Utilities--Leaching and Characterization Data. U.S. Environmental Protection Agency

**Groundwater Monitoring Reports Produced by Complainants**

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1410	1460	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarterly Report 2012, Powerton Generating Station – Ash Impoundment Bates Comp. 001410-001460 (Aug. 16, 2012)
2475	2562	KPRG Associates, Quarterly Groundwater Monitoring Results – Second Quarter 2013 Joliet #29 Generating Station – Ash Impoundments. See also: Bates Comp. 002475-002562 (July 22, 2013)

**Groundwater Monitoring Reports Produced by Respondents**

Complainants intend to offer these as large group exhibits in order to expedite the introduction of evidence at the hearing.

<b>First Page</b>	<b>Last Page</b>	<b>Brief Description</b>
178	248	July 2013 ELUC groundwater report
3872	3910	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2011, Powerton Generating Station – Bypass Cleaning Basin (Aug. 1, 2011) (See also Bates Comp. 000260-000305)
4748	4783	Powerton Bi-Monthly Groundwater Monitoring Report, Metal Cleaning Basin, April 2011 (See also Bates Comp. 000184-000219)
38471	38523	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2011 Joliet #29 Generating Station- Ash Impoundment Bates Comp. 000131-000183 (Aug. 1, 2011)
40549	40588	Powerton Bi-Monthly Groundwater Monitoring Report, Metal Cleaning Basin, June 2011 (Aug. 1, 2011) (See also Bates Comp. 000220-000259 )
41210	41251	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2011 Waukegan Generating Station- Ash Impoundment (Aug. 1, 2011) (See also Bates Comp. 000306-000347)
17348	17442	KPRG and Associates, Quarterly Groundwater Monitoring Results – Fourth Quarter 2013 and Annual Joliet #29 Generating Station – Ash Impoundments Bates MWG13 (Jan. 21, 2014)
178	248	Groundwater Monitoring Information-Waukegan Environmental Land Use Control
407	420	Letter from Susan M. Franzetti, Counsel for Midwest Generation, LLC, to Andrea Rhodes, Illinois Environmental Protection Agency, Re: Violation Notice --MWG response to the Waukegan NOV, Jul. 27, 2012
2731	2785	Patrick Engineering, Quarterly Groundwater Monitoring Results-First Quarter 2012-Joliet 29 Generating Station (May 11, 2012)
2786	2857	Patrick Engineering, Quarterly Groundwater Monitoring Results-First Quarter 2012-Joliet 29 Generating Station- Amended (May 11, 2012)

3872	3910	2011 Q2 Groundwater Monitoring Report- bypass cleaning basin. Also 39999-40004. Also Patrick Engineering, Quarterly Groundwater Monitoring Results - Second Quarter 2011 Powerton Generating Station - Bypass Cleaning Basin Bates MWG13-15_3872-3910 (Aug. 1, 2011). See also: Comp. 260-305
3995	4043	Patrick Engineering, Quarterly Groundwater Monitoring Results-First Quarterly Report 2012-Powerton Generating Station (May 11, 2012)
4170	4323	KPRG, Quarterly Groundwater Monitoring Results – Second Quarter 2013, Powerton Generating Station – Ash Impoundments. See also: Bates Comp. 002563-002716 (July 22, 2013)
4600	4689	Patrick Engineering, Quarterly Groundwater Monitoring Results-First Quarter 2012-Revisions to Original Report Submitted May 11, 2012 (July 30, 2012)
4784	4820	Bi-Monthly Groundwater Monitoring Results- February, Powerton Generating Station - Metal Cleaning Basin, Feb. 2011 (See also Bates Comp. 55-92)
5328	5383	Patrick Engineering, Quarterly Groundwater Monitoring Results-First Quarter 2012-Revisions to Original Report Submitted May 11, 2012 (July 30, 2012)
5384	5428	Patrick Engineering, Quarterly Groundwater Monitoring Results-First Quarter 2012 (May 11, 2012)
6301	6355	Quarterly Groundwater Monitoring Results-First Quarter 2012-Will County Generating Station-Ash Impoundments (May 11, 2012)
6435	6504	Quarterly Groundwater Monitoring Results-First Quarter 2012-Revisions to Original Report Submitted May 11, 2012, Will County Generating Station-Ash Impoundments (July 30, 2012)
6670	6734	KPRG, Quarterly Groundwater Monitoring Results – Second Quarter 2013, Will County Generating Station – Ash Impoundments. Also: Bates Comp. 002773-002838 (July 22, 2013)
11798	11819	URS Corp, Annual Groundwater Monitoring Report – July 2014, Environmental Land Use Control Implementation, Midwest Generation Waukegan Generating Station (July 14, 2014)
11820	11841	URS Corp, Annual Groundwater Monitoring Report – June 2011, Environmental Land Use Control Implementation, Midwest Generation Waukegan Generating Station (July 25, 2011)

11842	11864	URS Corp, Annual Groundwater Monitoring Report – July 2010, Environmental Land Use Control Implementation, Midwest Generation Waukegan Generating Station (Aug. 4, 2010)
11865	11884	URS Corp, Annual Groundwater Monitoring Report – June 2009, Environmental Land Use Control Implementation, Midwest Generation Waukegan Generating Station (July 2, 2009)
11885	11904	URS Corp, Annual Groundwater Monitoring Report – June 2008, Environmental Land Use Control Implementation, Midwest Generation Waukegan Generating Station (July 7, 2008)
11905		RETEC, Semiannual Groundwater Monitoring Report-June 2005, Environmental Land Use Control Implementation, Waukegan Generating Station (June 30, 2005)
11924	11954	RETEC, Semiannual Groundwater Monitoring Report-December 2003, Environmental Land Use Control Implementation, Waukegan Generating Station (Jan. 16, 2004)
15552	15609	Quarterly Monitoring Results First Quarter, 2014, Waukegan Generating Station
15670	15745	NRG Energy, Quarterly Groundwater Monitoring Results – First Quarter 2014 Will County Generating Station – Ash Impoundments (Apr. 23, 2014)
15756	15836	Patrick Engineering, Quarterly Groundwater Monitoring Results – Fourth Quarter 2012, Will County Generating Station – Ash Impoundments (Jan. 15, 2013)
16427	16489	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2013 Waukegan Generating Station- Ash Impoundments. See also: Bates Comp. 002226-002289 (Apr. 25, 2013)
16491	16560	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2013 Joliet #29 Generating Station-Ash Impoundments. See also: Bates Comp. 002157-002225 (Apr. 25, 2013)
16568	16684	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter Report 2013, Powerton Generating Station – Ash Impoundment. See also: Bates Comp. 002290-002405 (Apr. 26, 2013)
17975	18039	KPRG and Associates, Quarterly Groundwater Monitoring Results – Third Quarter 2013 Joliet #29 Generating Station – Ash Impoundments. Also: Bates Comp. 002839-002901 (Oct. 17, 2013)

19681	19807	KPRG, Quarterly Groundwater Monitoring Results – Third Quarter 2013, Powerton Generating Station – Ash Impoundments (Oct. 17, 2013). Also Bates Comp. 002902-003027
19808	19969	KPRG, Quarterly Groundwater Monitoring Results – Fourth Quarter 2013 and Annual, Powerton Generating Station – Ash Impoundments.(Jan. 21, 2014). Also: Bates Comp. 003152-003301
20001	20126	NRG Energy, Quarterly Groundwater Monitoring Results-First Quarter 2014, Powerton Generating Station-Ash Impoundments (Apr. 23, 2014)
20287	20345	NRG Energy, Quarterly Groundwater Monitoring Results-First Quarter 2014, Joliet Generating Station-Ash Impoundments (Apr. 23, 2014)
20458	20545	KPRG and Associates, Quarterly Groundwater Monitoring Results – Fourth Quarter 2013 and Annual Waukegan Generating Station – Ash Impoundments. Also: Bates Comp. 003302-003389 (Jan. 21, 2014)
20546	20602	KPRG and Associates, Quarterly Groundwater Monitoring Results – Third Quarter 2013 Waukegan Generating Station – Ash Impoundments. Also: Bates Comp. 003028-003087 (Oct. 17, 2013)
20603	20668	NRG Energy, Quarterly Groundwater Monitoring Results – First Quarter 2014 Waukegan Generating Station – Ash Impoundments Bates (Apr. 23, 2014)
20764	20828	KPRG, Quarterly Groundwater Monitoring Results – Third Quarter 2013, Will County Generating Station – Ash Impoundments. Also: Bates Comp. 003088-003151 (Oct. 17, 2013)
21909	21938	DRAFT Quarterly Groundwater Monitoring Results, Second Quarter 2011, Powerton
24577	24617	Groundwater Monitoring Report, Waukegan, First Quarter 2011.
25474	25528	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012 Joliet #29 Generating Station- Ash Impoundment (May 11, 2012) AMENDED JULY 2012 (See also Bates Comp. 000860-000914)
25694	25753	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2012, Will County Generating Station – Ash Impoundments Bates MWG-13-15_25694-25753 (Aug. 16, 2012)
26405	26499	KPRG, Quarterly Groundwater Monitoring Results – Fourth Quarter 2013 and Annual, Will County Generating Station – Ash Impoundments. Also: Bates Comp. 003390-003485 (Jan.



		21, 2014)
37324	37378	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2011 Joliet #29 Generating Station- Ash Impoundment Bates See also: Comp. 000001-000054.
37418	37443	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2012, Powerton Generating Station – Bypass Cleaning Basin (Sept. 12, 2012) (See also Bates Comp. 001509-001534)
37444	37600	Patrick Engineering, Quarterly Groundwater Monitoring Results – Fourth Quarter Report 2012, Powerton Generating Station – Ash Impoundment (Jan. 11, 2013) (See also Bates Comp. 001767-001928)
37601	37670	Patrick Engineering, Quarterly Groundwater Monitoring Results – Fourth Quarter 2012 Joliet #29 Generating Station- Ash Impoundments (Jan. 21, 2013) (See also Bates Comp. 002001-002070)
38281	38332	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2011 Joliet #29 Generating Station- Ash Impoundment (Oct. 21, 2011) (See also Bates Comp. 000398-000449)
38524	38600	Patrick Engineering, Quarterly Groundwater Monitoring Results – Annual Report 2011 Joliet #29 Generating Station- Ash Impoundment (Mar. 5, 2012) (See also Bates Comp. 000667-000741)
38735	38806	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012 – AMENDED Revisions to Original Report Submitted May 11, 2012 Joliet 29 Generating Station - Ash Impoundments (July 30, 2012) (See also Bates Comp. 001060-001131 )
38735	38806	Groundwater Monitoring Report, Joliet 29, First Quarter 2012 amended (2012)
38807	38863	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2012 Joliet #29 Generating Station- Ash Impoundments (Aug. 16, 2012) (See also Bates Comp. 001348-001409)
38864	38925	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2012 Joliet #29 Generating Station- Ash Impoundments (Nov. 9, 2012)

39530	39619	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012 – AMENDED Revisions to Original Report Submitted May 11, 2012, Powerton Generating Station – Ash Impoundment (July. 30, 2012) (See also Bates Comp. 001132-001221 )
39530	39619	Groundwater Monitoring Report, Powerton, First Quarter 2012, Revisions to Original (2012)
39620	39646	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2011, Powerton Generating Station – Ash Impoundment (Apr. 18, 2011)
39647	39675	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2011, Powerton Generating Station – Ash Impoundment (Aug. 1, 2011)
39676	39707	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2011, Powerton Generating Station – Ash Impoundment (Oct. 21, 2011) (See also Bates Comp. Bates 000450-000482)
39708	39759	Patrick Engineering, Quarterly Groundwater Monitoring Results – Annual Report 2011, Powerton Generating Station – Ash Impoundment (Mar. 5, 2012) (See also Bates Comp. 000742-000793)
39844	39892	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012 Powerton Generating Station- Ash Impoundment (May 11, 2012) (See also Bates Comp. 000915-000963)
39893	39951	Groundwater Monitoring Report, Powerton, First Quarter 2012 amended (2012)
39952	39990	Patrick Engineering Inc., Quarterly Groundwater Monitoring Results, First Quarter 2012, Powerton Generating Station – Bypass Cleaning Basin (See also Bates Comp. 4044-4082)
39991	39998	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2011, Powerton Generating Station – Bypass Cleaning Basin See also: Comp. 000093-000130 (May 13, 2011)
40005	40044	Patrick Engineering Inc., Quarterly Groundwater Monitoring Results, Third Quarter 2011, Powerton Generating Station – Bypass Cleaning Basin (See also Bates Comp. 4088-4127)
40005	40044	Groundwater Monitoring Report, Powerton Bypass Cleaning Basin, Third Quarter 2011 (2011)

40045	40104	Patrick Engineering, Quarterly Groundwater Monitoring Results – Fourth Quarter 2011, Powerton Generating Station – Bypass Cleaning Basin (Jan. 18, 2012) (See also Bates Comp. 000626-000666)
40045	40104	Groundwater Monitoring Report, Powerton Bypass Cleaning Basin, Fourth Quarter 2011
40346	40396	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarterly Report 2012, Powerton Generating Station – Ash Impoundment (Aug. 16, 2012) (See also Bates Comp. 001410-001460)
40397	40454	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter Report 2012, Powerton Generating Station – Ash Impoundment (Nov. 9, 2012) (See also Bates Comp. 001535-001594)
40505	40548	Patrick Engineering, Bi-Monthly Groundwater Monitoring Results--February 2011 Powerton Generating Station-Metal Cleaning Basin. (May 13, 2011) See also: Bates Comp. 000055-000092
40589	40629	Patrick Engineering, Groundwater Monitoring Results – April 2012, Powerton Generating Station – Metal Cleaning Basin (May 17, 2012) (See also Bates Comp. 001019-001059)
40630	40670	Patrick Engineering, Bi-Monthly Groundwater Monitoring Results – December 2011, Powerton Generating Station – Metal Cleaning Basin Bates. (Jan. 17, 2012). See also: Comp. 000585-000625
40671	40710	Patrick Engineering, Bi-Monthly Groundwater Monitoring Results – October 2011, Powerton Generating Station – Metal Cleaning Basin. (Dec. 14, 2012) See also: Bates Comp. 001727-001766
41192	41193	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2011, Powerton Generating Station – Ash Impoundment (Oct. 21, 2011) MISSING PAGE (See 41192-41193; see also Bates Comp. Bates 000450-000482)
41252	41296	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2011 Waukegan Generating Station- Ash Impoundment (Oct. 21, 2011) (See also Bates Comp. 000539-000584)
41395	41439	Groundwater Monitoring Report, Waukegan, First Quarter 20112 amended (2012)

41609	41671	Patrick Engineering, Quarterly Groundwater Monitoring Results – Fourth Quarter 2012 Waukegan Generating Station- Ash Impoundments (Jan. 16, 2013) (See also Bates Comp. 001929-002000)
41672	41742	Patrick Engineering, Quarterly Groundwater Monitoring Results – Annual Report 2011 Waukegan Generating Station- Ash Impoundment (Mar. 5, 2012) (See also Bates Comp. 000794-000859)
41743	41798	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012 – AMENDED Revisions to Original Report Submitted May 11, 2012 Waukegan Generating Station - Ash Impoundments (July 30, 2012) (See also Bates Comp. 001222-001277)
41743	41798	Groundwater Monitoring Report, Waukegan, First Quarter 2012 amended (2012)
41799	41846	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2012 Waukegan Generating Station- Ash Impoundment (Aug. 16, 2012) (See also Bates Comp. 001461-001508)
41799	41846	Groundwater Monitoring Report, Waukegan, Second Quarter 2012 (2012)
41847	41898	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2012 Waukegan Generating Station- Ash Impoundment (Nov. 9, 2012) (See also Bates Comp. 001595-001646)
42296	42344	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2011, Will County Generating Station – Ash Impoundment (Apr. 18, 2011)
42345	42394	Patrick Engineering, Quarterly Groundwater Monitoring Results – Second Quarter 2011, Will County Generating Station – Ash Impoundment (Aug. 1, 2011) (See also Bates Comp. 000348-000397 )
42395	42450	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2011, Will County Generating Station – Ash Impoundment (Oct. 21, 2011) (See also Bates Comp. 000483-000538)
42570	42624	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012, Will County Generating Station – Ash Impoundment (May 11, 2012) (See also Bates Comp. 000964-001018)
42706	42781	Groundwater Monitoring Report, Will County, 2011 annual (2011)

42782	42865	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2013, Will County Generating Station – Ash Impoundments (Apr. 29, 2013) (See also Bates Comp. 002071-002156)
42866	42935	Patrick Engineering, Quarterly Groundwater Monitoring Results – First Quarter 2012 – AMENDED Revisions to Original Report Submitted May 11, 2012 Will County (July 30, 2012) (See also Bates Comp. 001278-001347)
42866	42935	Groundwater Monitoring Report, Wil County, 2012 Q2 amended (2012)
42996	43084	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2012, Will County Generating Station – Ash Impoundments. (Nov. 9, 2012). See also: Bates Comp. 001647-001726
43695	43848	Groundwater Monitoring Report, Waukegan, Third Quarter 2014 (2014)
43849	43862	Groundwater data tables for Waukegan Wells MW-1 through MW-15 (various date ranges)
43871	43935	Groundwater Monitoring Report, Joliet 29, Third Quarter 2014
43936	44060	Groundwater Monitoring Report, Powerton, Third Quarter 2014
44061	44121	NRG Energy, Quarterly Groundwater Monitoring Results – Third Quarter 2014, Will County Generating Station – Ash Impoundments Bates (Oct. 20, 2014)
44125	44146	Waukegan ELUC, Annual Groundwater Monitoring Report-- July 2014
44983	45167	NRG Energy, Annual and Quarterly Groundwater Monitoring Results – Fourth Quarter 2014 Joliet #29 Generating Station – Ash Impoundment (Jan. 6, 2015)
45168	45327	NRG Energy, Quarterly Groundwater Monitoring Results – Fourth Quarter 2014/Annual Report, Powerton Generating Station – Ash Impoundments (Jan. 22, 2015)
45328	45416	NRG Energy, Annual and Quarterly Groundwater Monitoring Results – Fourth Quarter 2014 Waukegan Generating Station – Ash Impoundments (Jan. 22, 2015)
45417	45510	NRG Energy, Quarterly Groundwater Monitoring Results – Fourth Quarter 2014, Will County Generating Station – Ash Impoundments (Jan. 23, 2015)
45513	45647	TestAmerica Analytical Report (June 3, 2014)
45656	45710	KPRG and Associates, Quarterly Groundwater Monitoring Results – Second Quarter 2013 Waukegan Generating Station – Ash Impoundments. Also: Bates Comp. 002717-Comp. 002772 (July 22, 2013)

46140	46193	June 2004 ELUC groundwater report
49742	49753	TestAmerica Groundwater Data (July 20, 2015)
49775	49838	NRG Energy, Quarterly Groundwater Monitoring Results – Second Quarter 2015 Joliet #29 Generating Station – Ash Impoundments (July 22, 2015)
49839	49966	NRG Energy, Quarterly Groundwater Monitoring Results – Second Quarter 2015, Powerton Generating Station – Ash Impoundments(July 22, 2015)
49967	50028	NRG Energy, Quarterly Groundwater Monitoring Results – Second Quarter 2015, Will County Generating Station – Ash Impoundments (July 22, 2015)
50029	50092	Mark Nagel, NRG Energy, Quarterly Groundwater Monitoring Results – Second Quarter 2015 Waukegan Generating Station – Ash Impoundments Bates (July 22, 2015)
51503	51525	URS, Annual Groundwater Monitoring Report-July 2013, Environmental Land Use Control Implementation, Waukegan (July 19, 2013)
56145	56196	3Q 2015 Groundwater Monitoring Results, Waukegan
56210	56225	2015 Groundwater Monitoring Report, Powerton
56349	56359	2015 Groundwater Monitoring Report, Joliet 29
56444	56450	2015 Groundwater Monitoring Report, Waukegan
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56632	56638	Draft Groundwater Analytical Results, Waukegan
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57139	57250	1Q 2016 Groundwater Monitoring Results, Powerton
57251	57310	1Q 2016 Groundwater Monitoring Results, Waukegan
57311	57374	1Q 2016 Groundwater Monitoring Results, Will County
57538	57610	2Q 2016 Groundwater Monitoring Results, Joliet 29
57611	57720	2Q 2016 Groundwater Monitoring Results, Powerton
57721	57779	2Q 2016 Groundwater Monitoring Results, Waukegan
57780	57843	NRG, Quarterly Groundwater Monitoring Report - Will County Generating Station , 2nd Quarter 2016 (July 14, 2016)
57844	57905	NRG, Quarterly Groundwater Monitoring Report - Waukegan Generation Station, 3rd Quarter 2016 (Oct. 20, 2016)
57906	57973	NRG, Quarterly Groundwater Monitoring Report - Will County Generating Station, 3rd Quarter 2016 (Oct. 20, 2016)
57974	58046	NRG, Quarterly Groundwater Monitoring Report - Joliet #29 Generating Station, 3rd Quarter 2016 (Oct. 20, 2016)
58047	58154	NRG, Quarterly Groundwater Monitoring Report - Powerton Generating Station, 3rd Quarter 2016 (Oct. 20, 2016)
58155	58291	NRG, Annual and Quarterly Groundwater Monitoring Report - Powerton Generating Station, 4th Quarter 2016 (Jan. 13, 2017)

58292	58388	NRG, Annual and Quarterly Groundwater Monitoring Report - Joliet #29 Generating Station, 4th Quarter 2016 (Jan. 13, 2017)
58389	58489	NRG, Annual and Quarterly Groundwater Monitoring Report - Will County Generating Station, 4th Quarter 2016 (Jan. 13, 2017)
58490	58582	NRG, Annual and Quarterly Groundwater Monitoring Report - Waukegan Generating Station, 4th Quarter 2016 (Jan. 19, 2017)
58583	58587	Powerton Generating Station - Bypass Basin Quarterly Groundwater Sampling Summary - 4th Quarter 2016 (Jan. 24, 2017)
58588	58592	Powerton Generating Station - Metals Cleaning Basin Quarterly Groundwater Sampling Summary - 4th Quarter 2016 (Jan. 24, 2017)
61553	61574	NRG, Annual Groundwater Monitoring Report - July 2016 - Waukegan Generating Station
59778	60324	TestAmerica Analytical Report, Joliet# 29 (Feb. 25, 2016)
61411	61442	TestAmerica Analytical Report, Waukegan (Dec. 21, 2016)
61575	62839	TestAmerica Analytical Reports 2017
5093	5136	Waukegan ELUC, Annual Groundwater Monitoring Report-- July 2012
41192	41193	Patrick Engineering, Quarterly Groundwater Monitoring Results – Third Quarter 2011, Powerton Generating Station – Ash Impoundment (Oct. 21, 2011) MISSING PAGE (See 41192-41193; see also Bates Comp. Bates 000450-000482)
44818	44875	NRG Energy, Quarterly Groundwater Monitoring Results – Second Quarter 2014 Waukegan Generating Station – Ash Impoundments (July 21, 2014)
46123	46139	RETEC, Semiannual Groundwater Monitoring Report-June 2005, Waukegan Environmental Land Use Control Implementation (June 30, 2005)
46164	46193	Waukegan ELUC, Annual Groundwater Monitoring Report-- December 2003
46077	46093	RETEC, Semiannual Groundwater Monitoring Report-June 2006, Waukegan Environmental Land Use Control Implementation (June 26, 2006)
46094	46112	RETEC, Semiannual Groundwater Monitoring Report-- December 2005, Waukegan Environmental Land Use Control Implementation (June 26, 2006)
45513	45647	TestAmerica Analytical Report (June 3, 2014)

**Exhibits Not Assigned Bates Ranges**

ASTM D3987-1987
ASTM D3987-85 (1985) for leaching
ASTM E2277-14 (2014) re structural fills
DiCola Dep. Tr.
ELUC Wells (listed as this on Abel's spreadsheet)
Expert Report of John Seymour, P.E. (Nov. 2, 2015)
Frendt Deposition Transcript
General Boiler Wells (listed as this on Abel's spreadsheet)
Gilbert, R.O. 1987. Statistical Methods for Environmental Pollution Monitoring. New York: van Nostrand Reinhold. ISBN 0-442-23050-8. 320 p.
Gnat Dep. Tr.
Kelly Dep. Tr.
Kunkel Dep. Tr.
Lux Dep. Tr.
Maddox Dep. Tr.
Midwest Generation, LLC's Response to Complainants' Fourth Set of Document Requests, Second Set of Interrogatories, and Second Set of Requests for Admission to Respondents (Mar. 31, 2015)
Midwest Generation, LLC's Supplemental Response to Complainants' First set of Interrogatories (Jun 10, 2015)
Midwest Generation, LLC's Supplemental Response to Complainants' Second Set of Interrogatories (June 10, 2015)
Midwest Generation, LLC's Supplemental Response to Third Requests for Admission to Respondents (June 10, 2015)
MWG's Answer and Defenses to Second Complaint
Race Dep. Tr.
Respondents' Answer and Defenses to Second Amended Complaint (Apr. 20, 2015)
Schroeder Text
Seymour Dep. Tr.
Seymour Dep. Ex. 8
Tannery Wells
Terzaghi, K., Peck, R. B. and Mesri, G., 1996. Soil Mechanics in Engineering Practice, 3rd ed., John Wiley & Sons, Inc., New York, New York, available for purchase at <a href="http://www.amazon.com/K-Terzaghis-Mechanics-Engineering-Practice-Hardcover/dp/B003WXBPR4">http://www.amazon.com/K-Terzaghis-Mechanics-Engineering-Practice-Hardcover/dp/B003WXBPR4</a> .
U.S. EPA, 40 CFR Parts 257 and 261, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule (Apr. 17, 2015), 80 Fed. Reg. 21,302 – 21,501.
Veenbaas Dep. Tr.



Dated: October 2, 2017

Respectfully Submitted,



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**CERTIFICATE OF SERVICE**

The undersigned certifies that a true copy of the foregoing Notice of Electronic filing and **COMPLAINANTS' PRE-HEARING MEMORANDUM** was filed electronically on October 2, 2017 and served via electronic mail on October 2, 2017 on the parties listed on the following Service List.

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