

APPENDIX A

Summary of Informational Order

ILLINOIS POLLUTION CONTROL BOARD



December 21, 2000

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ILLINOIS POLLUTION CONTROL BOARD ADOPTS INFORMATIONAL ORDER ON PEAKER PLANTS DOCKET No. R01-10

In response to a request from Governor George H. Ryan, the Illinois Pollution Control Board (Board) today adopted an Informational Order on natural gas-fired, peak-load electrical power generating facilities (peaker plants). Peaker plants generate electricity during periods of peak electricity demand. The recent proliferation of peaker plants has been a source of much public controversy in the Chicago metropolitan area.

The Informational Order follows seven days of public inquiry hearings across the State (August 23 and 24 in Chicago; September 7 in Naperville; September 14 in Joliet; September 21 in Grayslake; and October 5 and 6 in Springfield). Over 80 persons testified at these public hearings, including individual citizens, representatives of citizen groups, representatives of State and local government, and representatives of industry. The hearing transcripts comprise nearly 1,300 pages of testimony. The Board also received 195 written public comments. The transcripts and public comments are available on the Board's Web site at www.ipcb.state.il.us.

The Board was created by the Illinois Environmental Protection Act (Act) to "determine, define and implement the environmental control standards applicable in the State of Illinois." In addition to the Board's duty to promulgate environmental regulations and to decide contested environmental cases, the Board is authorized to conduct such other noncontested or informational hearings as may be necessary to accomplish the purposes of the Act. Specifically, the Board can conduct inquiry hearings to gather information on any subject the Board is authorized to regulate.

Citing public concern over the recent proliferation of peaker plants in Illinois, Governor Ryan, in a July 6, 2000 letter, asked Board Chairman Claire A. Manning to undertake Board inquiry proceedings. The Governor's letter specifically asked that the Board hold public hearings to address the following issues and to make recommendations on whether further regulation or legislation is necessary to safeguard Illinois' environment:

1. Do peaker plants need to be regulated more strictly than Illinois' current air quality statutes and regulations provide?
2. Do peaker plants pose a unique threat, or a greater threat than other types of State-regulated facilities, with respect to air pollution, noise pollution, or groundwater or surface water pollution?
3. Should new or expanding peaker plants be subject to siting requirements beyond applicable local zoning requirements?
4. If the Board determines that peaker plants should be more strictly regulated or restricted, should additional regulations or restrictions apply to currently permitted facilities or only to new facilities and expansions?
5. How do other states regulate or restrict peaker plants?

In its Informational Order, the Board provides specific answers to each of the Governor's questions and makes recommendations. Copies of the Informational Order will be available to the public on Friday, December 22. The Board is also preparing a companion report that it expects to release sometime in January. This report will summarize all of the information received by the Board in these proceedings. The Informational Order and companion report, when released, will be posted on the Board's Web site at www.ipcb.state.il.us. Copies may be obtained by calling the Board's Chicago office at (312) 814-3620 or its Springfield office at (217) 524-8500.

In its Informational Order, the Board recommends that the State tighten current environmental regulations concerning peaker plants to ensure the protection of the environment.

In the area of air emissions, the Informational Order notes that peaker plants burn natural gas, which is a relatively clean fuel from an environmental perspective. While peaker plants emit various pollutants into the air, nitrogen oxides (NO_x) are of particular concern because they are ozone precursors. In Illinois, a facility that emits less than 250 tons per year (TPY) is considered a "minor" source under current State and federal environmental regulations. Many of the proposed peaker plants are being permitted to allow for emissions just under this threshold and are intended to emit much less than that. Due to their "peaking" nature, however, the Board finds that these plants are unique. They can emit most if not all of their permitted annual amount of air emissions during a concentrated period of time. This time period is generally the summer months when the ozone risk is highest.

In its Informational Order, the Board recommends that the Illinois Environmental Protection Agency (IEPA) and the Board engage in rulemaking under the Act to consider requiring these plants to use the “Best Available Control Technology” (BACT) in controlling their air emissions. BACT is a federally-derived regulatory methodology intended to determine the maximum degree to which air emissions can be reduced in light of energy, environmental, and economic impacts. Generally in Illinois, BACT only applies to “major” sources, which are those that emit 250 TPY or more.

Also regarding air regulations, the Board recommends codifying two practices that IEPA Director Tom Skinner administratively implemented to respond to public concern over the proliferation of peaker plants: dispersion modeling and public hearings for all proposed peaker plant construction permits.

Dispersion modeling is intended to ensure that peaker plant air emissions do not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). While not required for minor sources, IEPA has recently been requesting this modeling information from peaker plant developers during the permit process. The modeling should use conservative parameters to determine the worst-case impact, including any cumulative impact due to the clustering of peaker plants.

On the question of noise, the Board finds that Illinois’ current noise regulations are adequate to address most concerns and that citizen’s enforcement actions before the Board are available to enforce noise standards. Nonetheless, the Board recognizes that a “gap” exists in current Illinois noise regulation. While the State noise standards are strict, IEPA does not currently have a program in place to ensure at the time of air permitting that facilities will meet those noise standards. The Board recommends remedying that problem.

Finally, on the question of whether peaker plants should be subject to siting requirements beyond local zoning, the Board stops short of making any specific recommendation on siting. Instead, the Board provides the Governor with an informed discussion of the concerns raised and potential solutions.

In announcing the Board’s Informational Order, Board Chairman Claire A. Manning stated: “The Board very much appreciates the valuable and insightful public participation in these proceedings from all interested persons, businesses, and associations. The huge record that was created has allowed the Board to address the threshold issues presented to us by the Governor and by the participants. We have been able to make several valuable recommendations to enhance the regulations that apply to these plants—and to further safeguard Illinois’ environment. We commend Governor Ryan for the leadership he has shown on these issues and thank him for the opportunity to have served him and the citizens of the State of Illinois on these important questions.”

The Board is an independent State board comprised of seven technically qualified individuals, all of whom are appointed by the Governor with the advice and consent of the Senate. For more information about the Board and its members, please visit the Board's Web site at www.ipcb.state.il.us.

APPENDIX B

PERSONS TESTIFYING

Chicago Hearings

August 23, 2000

1. Charles Fisher, Executive Director, ICC
2. Thomas Skinner, Director, IEPA
3. Christopher Romaine, Manager, Utility Unit, Permit Section, Division of Air Pollution Control, Bureau of Air, IEPA
4. Robert Kaleel, Manager of Air Quality Modeling Unit, Division of Air Pollution Control, Bureau of Air, IEPA
5. Greg Zak, Noise Advisor, IEPA
6. Steve Nightingale, Manager, Industrial Unit, Bureau of Water Permits Section, IEPA
7. Rick Cobb, Manager, Groundwater Section, Bureau of Water, IEPA
8. Todd Marvel, Assistant Manager of Field Operations Section and RCRA Coordinator/USEPA Liaison/IEPA
9. Dr. Brian Anderson, Director, OSRA, DNR
10. Dr. Derek Winstanley, Chief, ISWS, DNR

August 24, 2000

1. Gerald Erjavec, Manager, Business Development, Indeck
2. Greg Wassilkowsky, Manager, Business Development, Indeck
3. Arlene Juracek, Vice President, Regulatory and Legislative Services, ComEd
4. Steven Nauman, Vice President, Transmission Services, ComEd
5. Deirdre Hirner, Executive Director, IERG
6. Richard Bulley, Executive Director, MAIN

7. Freddi Greenberg, Executive Director and General Counsel, MWIPS
8. Michael Kearney, Manager, Economic Development, Ameren
9. Richard Trzupsek, Manager, Air Quality, Huff & Huff

Suburban Hearings

Naperville

September 7, 2000

1. Mayor George Pradel, Naperville
2. State Senator Chris Lauzen
3. State Representative Mary Lou Cowlshaw
4. Mayor Vivian Lund, Warrenville
5. Paul Hoss, Zoning Manager, DuPage County Department of Development and Environmental Concerns
6. Richard Ryan, President and Chairman, Standard Power and Light, Oak Brook
7. Dianne Turnball, consultant to several citizen groups, a private foundation, and businesses opposing certain peaker plants
8. Carol Dorge, Director, LCCA
9. Connie Schmidt, representative of the River Prairie Group of the Illinois Sierra Club
10. Mark Goff, resident, Warrenville
11. Cathy Capezio, resident, Aurora
12. Terry Voitik, resident, DuPage County, and founder of CAPPRA
13. Maurice Gravenhorst, member, CAPPRA
14. Lucy Debarbaro, member, CAPPRA
15. Terry Voitik on behalf of Steve Arrigo, CAPPRA

16. Susan Zingle, Executive Director, LCCA
17. Beverly DeJovine, representative, Bartlett CARE
18. Cathy Johnson, Vice Chair, Rural and City Preservation Association
19. Chris Gobel, member, CAPPRA
20. Elliot "Bud" Nesvig
21. Sandy Cole, Commissioner, Lake County Board

Joliet

September 14, 2000

1. Dr. Thomas Overbye, Associate Professor, Department of Electrical and Computer Engineering, University of Illinois, Champaign-Urbana
2. Alan Jirik, Director, Environmental Affairs, CPI
3. Carol Stark, Director, CARE, Lockport
4. Susan Zingle, Executive Director, LCCA
5. Keith Harley, Chicago Legal Clinic
6. Elliot "Bud" Nesvig
7. Michael Shay, Senior Planner, Will County

Grayslake

September 21, 2000

1. State Senator Terry Link
2. State Representative Susan Garrett
3. Tom Lynch, Trustee, Libertyville Township
4. Betty Rae Kaiser, Trustee, Village of Wadsworth

5. Daniel J. Kucera, Chapman & Cutler, appearing on behalf of the Lake County Public Water District
6. Jim LaBelle, Chairman, Lake County Board
7. Sandy Cole, Commissioner, Lake County Board
8. Bonnie Thomson Carter, Commissioner, Lake County Board
9. Greg Elam, CEO, American Energy
10. Larry Eaton, attorney, on behalf of the Liberty Prairie Conservancy, Prairie Holdings Corporation, and Prairie Crossing Homeowners Association
11. Toni Larsen, resident, Zion
12. Chris Geiselhart, Chairperson, CCLC
13. Dianne Turnball, representing Liberty Prairie Conservancy, CCLC, CARE from McHenry County, Bartlett CARE, and Southwest Michigan Preservation Association
14. Lisa Snider, Resident, Wadsworth
15. Verena Owen, Co-Chair, Zion Against Peaker Plants
16. Elliot "Bud" Nesvig
17. Carolyn Muse, resident, Zion
18. John Matijevich
19. Dennis Wilson, resident, Island Lake
20. Terry Jacobs, resident, Libertyville
21. Jim Booth, resident, Newport Township, Lake County
22. William McCarthy, resident, Libertyville
23. Susan Zingle, Executive Director, LCCA
24. Barbara Amendola, resident, Zion

25. Mark Sargis, attorney, working with citizens concerned about peaker plants
26. Cindy Skrukrud, resident, Olin Mills, McHenry County
27. Paul Geiselhart, resident, Libertyville
28. Dr. William Holleman, President, Illinois Citizen Action
29. Evan Craig, Volunteer Chair, Woods & Wetlands Group of the Sierra Club
30. Phillip Lane Tanton
31. Sally Ball, on behalf of State Representative Lauren Beth Gash

Springfield Hearings

October 5, 2000

1. Roger Finnell, Engineer, Division of Aeronautics, Bureau of Airport Engineering, IDOT
2. John Smith, representative of ISAWWA
3. Brent Gregory, representative of National Association of Water Companies, Illinois Chapter
4. James R. Monk, President, IEA
5. Patricio Silva, Midwest Activities Coordinator, NRDC
6. Brian Urbaszewski, Director, Environmental Health Programs, ALAMC, and board member of IEC
7. Elliot "Bud" Nesvig
8. Carol Dorge, Director, LCCA

October 6, 2000

1. Susan Zingle, Executive Director, LCCA
2. Scott Phillips, Deputy Counsel, IEPA

3. Kathleen Bassi, Assistant for Program and Policy Coordination for Bureau of Air, IEPA
4. Chris Romaine, Manager, Utility Unit, Permit Section, Division of Air Pollution Control, Bureau of Air, IEPA
5. Greg Zak, Noise Advisor, IEPA
6. Todd Marvel, Assistant Manager of Field Operations Section and RCRA Coordinator/USEPA Liaison, IEPA
7. Steve Nightingale, Manager, Industrial Unit, Bureau of Water Permits Section, IEPA

APPENDIX C

EXHIBIT LIST

<u>Exhibit Number</u>	<u>Description</u>
ICC Exh. 1 (8/23/00)	Prefiled testimony of Charles Fisher
IEPA Grp. Exh. 1 (8/23/00)	Prefiled testimony of IEPA witnesses (Thomas Skinner, Christopher Romaine, Robert Kaleel, Greg Zak, Steve Nightingale, Richard Cobb, and Todd Marvel)
IEPA Grp. Exh. 2 (8/23/00)	Set of 20 documents, beginning with "Simple Cycle Gas Turbine Application Diagram," and including two oversized maps
DNR Exh. 1 (8/23/00)	Prefiled testimony of Dr. Brian Anderson
DNR Exh. 2 (8/23/00)	Prefiled testimony of Dr. Derek Winstanley
Indeck Exh. 1 (8/24/00)	Prefiled testimony of Gerald Erjavec
Indeck Exh. 2 (8/24/00)	Copy of PowerPoint presentation and Supporting Documentation
ComEd Exh. 1 (8/24/00)	Prefiled testimony of Arlene Juracek and Steven Naumann
IERG Exh. 1 (8/24/00)	Prefiled testimony of Deirdre Hirner
MAIN Exh. 1 (8/24/00)	Prefiled testimony of Richard Bulley

MWIPS Exh. 1 (8/24/00)	Prefiled testimony of Freddi Greenberg
Ameren Exh. 1 (8/24/00)	Prefiled testimony of Michael Kearney
Huff & Huff Exh. 1 (8/24/00)	Prefiled testimony of Richard Trzupsek, with attachments
CAPPRA Exh. 1 (9/7/00)	CAPPRA Mission Statement and photographs
CAPPRA Exh. 2 (9/7/00)	<u>Steven Berning, et al. v. The City of Aurora, et al., 00-CH-0361, Second Amended Complaint for Declaratory Judgment pending in DuPage County Circuit Court</u>
CAPPRA Exh. 3 (9/7/00)	Testimony of Michael Warfel
CAPPRA Exh. 4 (9/7/00)	Testimony of Steve Arrigo
DuPage County Board Exh. 1 (9/7/00)	Versar Report
DuPage County Board Exh. 2 (9/7/00)	Map—DuPage County Municipalities and Unincorporated Areas
DuPage County Board Exh. 3 (9/7/00)	Testimony of Paul J. Hoss, Zoning Manager for DuPage County Department of Development and Environmental Concerns
Standard Power and Light Exh. 1 (9/7/00)	Addendum No. 2 to Application for PSD Deterioration Construction

Permit for Standard Energy
Ventures, LLC Electrical
Generation Facility

Bartlett CARE Exh. 1 (9/7/00)	Testimony of Beverly DeJovine
Zingle Exh. 1 (9/7/00)	“Peaker” Electrical Generating Plants Press Coverage—2000
Zingle Exh. 2 (9/7/00)	Testimony of LCCA
Zingle Exh. 3 (9/14/00)	Testimony of LCCA, with attachments
Zingle Exh. 4 (9/21/00)	Video Tape
Zingle Exh. 5 (10/6/00)	“Typical Daily Load Curve” of Reliant
Zingle Exh. 6 (10/6/00)	“The Status of U.S. Electricity Deregulation”
Zingle Exh. 7 (10/6/00)	Arthur Andersen’s “Impact Analysis Mallory Parcel—Libertyville, Illinois”
Zingle Exh. 8 (10/6/00)	“Effects of the Proposed Indeck Facility on Property Values, Land Use and Tax Revenue”
Zingle Exh. 9 (10/6/00)	August 15, 2000 letter from Lake County State’s Attorney, Michael J. Waller, to Kenneth L. Larson
Zingle Exh. 10 (10/6/00)	News Articles, beginning with “Ordinance Would Place Provisos on Peaker Plants”
Zingle Exh. 11 (10/6/00)	“Business Overview—Electrical

Generating Companies”

Sierra Club Exh. 1 (9/7/00)	Testimony of Connie Schmidt
Overbye Exh. 1 (9/14/00)	“Need for New Peaker Generation in Illinois” PowerPoint presentation
CPI Exh. 1 (9/14/00)	Testimony of Alan L. Jirik
Stark Exh. 1 (9/14/00)	Testimony of Carol Stark
Stark Exh. 2 (9/14/00)	Newspaper article
Chicago Legal Clinic Exh. 1 (9/14/00)	Petition to USEPA requesting revocation of the NO _x waiver
Chicago Legal Clinic Exh. 2 (9/14/00)	Testimony of Keith Harley
Link Exh. 1 (9/21/00)	Statement of State Senator Terry Link
Lynch Exh. 1 (9/21/00)	Comments of Tom Lynch, Libertyville Township Trustee
Kaiser Exh. 1 (9/21/00)	Village of Wadsworth Resolution R130 and letter of December 21, 1999
Kucera Exh. 1 (9/21/00)	Comments on behalf of the Lake County Public Water District

Lake County Exh. 1 (9/21/00)	Testimony of Jim LaBelle, Chairman Lake County Board
Lake County Exh. 2 (9/21/00)	Testimony of Sandy Cole, Lake County Board Member
Lake County Exh. 3 (9/21/00)	Testimony of Bonnie Thomson Carter, Lake County Board Member
Lake County Exh. 4 (9/21/00)	Testimony of Greg Elam, CEO of American Energy, including PowerPoint presentation and FERC article
Lake County Exh. 5 (9/21/00)	Lake County 2000—Legislative Program
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Eaton Exh. 1 (9/21/00)	Testimony of Larry Eaton on behalf of Liberty Prairie Conservancy, Prairie Holdings Corporation, and Prairie Crossing Homeowners Association
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CCLC Exh. 1 (9/21/00)	Testimony of Chris Geiselhart, Chairperson
CCLC Exh. 2 (9/21/00)	Comments of Richard Domanik during an April 25, 2000 hearing in Libertyville, with attached articles
<hr/>	
Nesvig Exh. 1 (9/21/00)	Testimony of E.M. Nesvig
Nesvig Exh. 2 (9/21/00)	“Electric Power Monthly” (July 2000 edition)
Nesvig Exh. 3 (10/5/00)	Written testimony of E.M. Nesvig
Nesvig Exh. 4 (10/5/00)	Hard copy of Air Permit Public Hearing Presentation (September

Nesvig Exh. 5 (10/5/00)	28, 2000) by Elwood Energy II and Elwood Energy III “U.S. Electricity Imports and Exports 1995–1999”
McCarthy Exh. 1 (9/21/00)	Correspondence of William McCarthy, PhD, regarding proposed Libertyville plant
McCarthy Exh. 2 (9/21/00)	Guidance for Power Plant Siting and Best Available Control Technology
McCarthy Exh. 3 (9/21/00)	“Catalytica” publication regarding “XONON™ Technology”
Sargis Exh. 1 (9/21/00)	Written comments of Mark R. Sargis (dated September 7, 2000)
IDOT Exh. 1 (10/5/00)	October 5, 2000 letter from James V. Bildilli to Chairman Claire A. Manning
Gregory Exh. 1 (10/5/00)	Written testimony of Brent Gregory
Monk Exh. 1 (10/5/00)	Written testimony of James Monk
Monk Exh. 2 (10/5/00)	“System Peak Load and Capacity—Historical 1990-2000 & Projected 2001-2003
ALAMC Exh. 1 (10/5/00)	Joint Comments of the ALAMC and IEC
Dorge Exh. 1 (10/5/00)	Written comments of LCCA

Dorge Exh. 2 (10/5/00)

“Peaker” Natural Gas Fired
Turbines—Permits Issued

Dorge Exh. 3 (10/5/00)

“Peaker” Natural Gas Fired
Turbines Permits Issued—PSD

Dorge Exh. 4 (10/5/00)

Group of four exhibits, beginning
with “Lake County Conservation
Alliance written comments in
Carlton air permitting proceeding”

APPENDIX D

PUBLIC COMMENTS

1	Reliant, submitted by Cindy Conte, Manager, State Affairs
2	Debbie Halvorson, Sentator, 40th District
3	Ron Molinaro
4	Peter J. Cioni, Director of Community Development, City of Zion
5	Lake County Zoning Board of Appeals submitted by Bob Mosteller, Deputy Director
6	Larry Eaton
7	Susan Zingle
8	Response to Questions—Charles Fisher of the ICC
9	IEPA Response to Questions
10	John Smith, ISAWWA
11	“The Status of U.S. Electricity Deregulation” submitted by Susan Zingle, LCCA Executive Director
12	Gary Hougen
13	Robert Brooks
14	Amy Snyder
15	Gary A. Bellak
16	Sally J. Carr
17	Rollin and Sara Shaw
18	Paul and Cyndy Niles
19	Mike Miller
20	Bill O’Donnell
21	Wesley Landmeier
22	Lucille Landmeier
23	Julie and Curt Moon
24	Lester Landmeier
25	Joyce Landmeier
26	Jim Schindel
27	Diane Schindel
28	Joyce Sanders
29	Lawrence H. Robertson
30	Harold and Barbara Snyder
31	Curt W. Peters
32	Walter Quanstrom
33	Byron and Kristin Henn
34	Kris O’Donnell
35	John Geltz,
36	Brian J. Gelf

37	Veda E. Miller
38	Sheri and Keith Fitzgerald
39	Tim Geltz
40	Gail Geltz
41	Sue Andersen
42	Kenneth Andersen
43	Mrs. Arnold Nier
44	Gary Brigel
45	Jeanette Bower
46	James and Kelly Reuland
47	Linda J. Ott
48	Darrin J. Ott
49	Duane Rhoades
50	Steven R. Weissinger
51	William A. Thompson and Karen R. Thompson
52	Mary Backes
53	Ruth A. Brigel
54	Lisa Weissinger
55	Richard Pave
56	Marcia Lee
57	Leon Backes
58	Scott Ritter
59	Mr. and Mrs. Robert J. Krajecki
60	Dorothy Gum
61	Norman L. Curry, Fox
62	Mr. and Mrs. Jeffrey Berg
63	Doug Tuell
64	Jon and Lori Simon
65	David Young
66	Lynne B. Pave
67	Elaine Tuell,
68	Phyllis Pierson, Sugar
69	Margaret Kathleen McCrimmon
70	A. Gum, Big Rock
71	Robert E. Pierson
72	Nancy Fayfar
73	Ronnie Simpkins
74	Kelly Salazar
75	Sheila M. Simpkins
76	Patricia L. McKenzie
77	Wray V. McKenzie, Jr.

78	Marilyn Lasecki and Edmund Lasecki, Jr.
79	Patricia McBroom and Roger McBroom
80	Cheryl Romano and Thomas Romano
81	Dorothy Holland
82	Annie Buckmiller
83	Alice Hulka
84	Mary Copp
85	Patrick and Linda Barnes
86	Carla S. Miller
87	John and Carrie Loehmann
88	Helen LeBeau
89	James E. McCrimmon
90	Lynette and Dave Weidin
91	Jane Erdman
92	Frederick C. Runge
93	Julie A. Anderson, Elburn
94	(unable to read name) Elburn
95	Ben Halls
96	Kathryn M. Hellwig,
97	Anita Sennett,
98	Gregory G. Goss and Jo A. Goss
99	William and Cheryl Oeser
100	Debra E. Raymond, Big Rock
101	Lawrence Von Ohlen
102	Ricky Gum
103	John Hellwig
104	Diane M. Howard
105	Orville Howard
106	Rose Marie Diedesch and Bill C. Diedesch
107	Udo A. Heinze on behalf of Ameren
108	Jeannine Kannegiesser, Center for Neighborhood Technology
109	Patricia Silva, Midwest Activities Coordinator, NRDC, Washington, D.C.
110	IMEA, submitted by Ronald D. Earl, General Manager & CEO
111	AIEC, submitted by Earl W. Struck, President/CEO
112	Verena Owen
113	Simon Klambauer
114	Peter and Dawn Roberts
115	Cathy Jo Magee
116	C. Beau and Sue Carlson
117	Richard A. and Mary C. LaFleur

118	Jennifer E. Johnson
119	William P. Fischer
120	Karen Yoeler
121	Bill Yoeler
122	Judy M. Hoffman
123	David R. Mag
124	Daniel Salazar
125	JoAnn I. Kline
126	Laurie Kazmiercek
127	Pam S. Wedeen
128	Ramona A. Kline
129	William F. Kline, Sr.
130	Jeff Hoffman
131	Ronald L. Burgess
132	Ed Whatley
133	Elaine and Harold Morris
134	James Scott
135	Lois Long
136	Dale N. Johnson
137	Elaine Fischer
138	Larry Hawhes
139	Cynthia S. Polfer
140	Mr. and Mrs. Mau
141	Ruth Pessina
142	Fritz Landmeier
143	Patricia and Joseph Heimonen
144	Elizabeth Simmons
145	Tom Pattermann
146	Sheela A. Faulkner
147	A. Denise Farrugia
148	Barry and Leah A. Morsch
149	Mary Hankes
150	Andy and Barb Kearns
151	Jackie Beane
152	Michelle Drauz
153	Marilyn Hannemann
154	Sandy Madden
155	James R. Kidd
156	W.R. Hannemann III
157	Mark and Lisa Spangler
158	Allen and Jeanette Krodel

159	Robert and Sharon Phillips
160	James Gasdiel
161	Mary Thurow
162	Margaret Bock
163	Midwest Generation, submitted by Cynthia A. Faur
164	ComEd, submitted by Christopher W. Zibart
165	Joint testimony of ALAMC and IEC, submitted by Brian Urbaszewski, the Director of Environmental Health Programs for ALAMC and a board member of IEC
166	Final Comments of Carol Dorge, Director, LCCA
167	IEA, submitted by James R. Monk, President
168	IEPA additional comments, submitted by Scott Phillips, Deputy Counsel
169	Sierra Club Woods & Wetlands Group, submitted by Evan L. Craig
170	PG&E, submitted by Stephen Brick, Director, External Relations and Environmental Affairs
171	MWIPS, submitted by Freddi L. Greenberg, Executive Director and General Counsel
172	Sierra Club, Illinois Chapter
173	Indeck, submitted by Gerald M. Erjavec, Manager, Business Development
174	Marvin and Eunice Gapinske
175	Ronald and Mary Jane Davis
176	Clifford and Gloria Sisko
177	Donald and Linda Czachor
178	Clara Arm Babel
179	Julie and Karl Kettelkamp
180	Audrey and David Boston
181	Suzanne Pyle
182	Terry and Sherilyn Sorensen
183	Donna Morris
184	Debra K. Galvan
185	Mr. and Mrs. Bradley Scott
186	Ersel C. Schuster, McHenry County Board, District 6
187	IERG, submitted by Katherine D. Hodge
188	Dr. Donna M. Lawlor and Lynn Hoeth
189	CCLC & Liberty Prairie Conservancy submitted by Dianne Turnball
190	Jim LaBelle, Chairman, Sandy Cole, and Bonnie Thomson Carter, Members of the Lake County County Board, submitted by Jim

	LaBelle
191	Marsha B. Winter
192	Ken Bentsen
193	Lois Scott and Burton Scott
194	Ralph N. Schleifer
195	Marci Rose

APPENDIX E

ABBREVIATION LIST

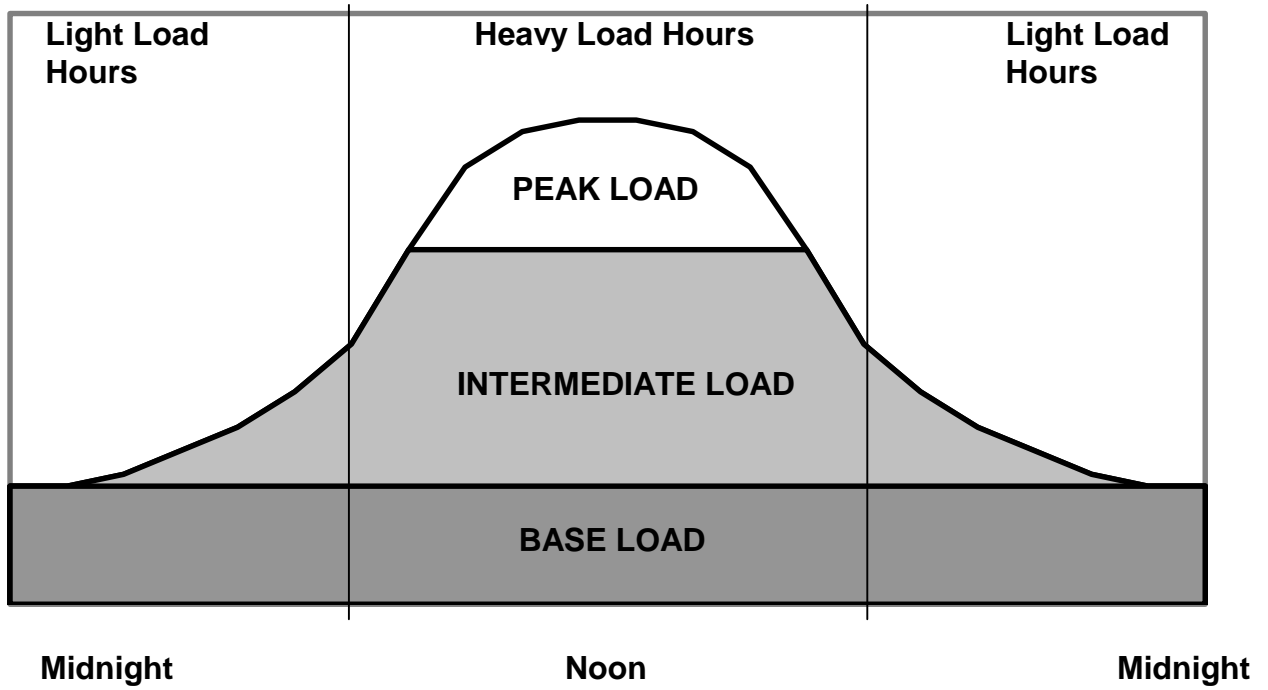
Acentech	ACENTECH, INC.
Act	ENVIRONMENTAL PROTECTION ACT
AIEC	ASSOCIATION OF ILLINOIS ELECTRIC COOPERATIVES
ALAMC	AMERICAN LUNG ASSOCIATION OF METROPOLITAN CHICAGO
Ameren	AMEREN CORPORATION
American Energy	AMERICAN ENERGY SOLUTIONS, INC.
BACT	BEST AVAILABLE CONTROL TECHNOLOGY
Bartlett CARE	BARTLETT CITIZENS ADVOCATING RESPONSIBLE ENVIRONMENTS
Board	ILLINOIS POLLUTION CONTROL BOARD
CAA	CLEAN AIR ACT
CAAPP	CLEAN AIR ACT PERMIT PROGRAM
CAPPRA	CITIZENS AGAINST POWER PLANTS IN RESIDENTIAL AREAS
CARE	CITIZENS AGAINST RUINING THE ENVIRONMENT
CCLC	CONCERNED CITIZENS OF LAKE COUNTY
CEC	CALIFORNIA ENERGY COMMISSION
CESQG	CONDITIONALLY-EXEMPT SMALL-QUANTITY GENERATOR
CNT	CENTER FOR NEIGHBORHOOD TECHNOLOGY
CO	CARBON MONOXIDE
CO ₂	CARBON DIOXIDE
ComEd	COMMONWEALTH EDISON COMPANY
CPI	CORN PRODUCTS INTERNATIONAL, INC.
dB	DECIBEL
dB(A)	A-WEIGHTED DECIBEL
DNR	ILLINOIS DEPARTMENT OF NATURAL RESOURCES
EGU	ELECTRICAL GENERATING UNIT
EIS	ENVIRONMENTAL IMPACT STATEMENT
Illinois Electricity Choice Law	ELECTRIC SERVICE CUSTOMER CHOICE AND RATE RELIEF LAW OF 1997
ERMS	EMISSIONS REDUCTION MARKET SYSTEM
FAA	FEDERAL AVIATION ADMINISTRATION
FERC	FEDERAL ENERGY REGULATORY COMMISSION
HAP	HAZARDOUS AIR POLLUTANT
Huff & Huff	HUFF & HUFF, INC.
ICC	ILLINOIS COMMERCE COMMISSION
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION

IEA	ILLINOIS ENERGY ASSOCIATION
IEC	ILLINOIS ENVIRONMENTAL COUNCIL
IEPA	ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
IERG	ILLINOIS ENVIRONMENTAL REGULATORY GROUP
IMEA	ILLINOIS MUNICIPAL ELECTRIC AGENCY
Indeck	INDECK ENERGY SERVICES, INC.
IPP	INDEPENDENT POWER PRODUCER
ISAWWA	ILLINOIS SECTION OF THE AMERICAN WATER WORKS ASSOCIATION
ISWS	ILLINOIS STATE WATER SURVEY
kW	KILOWATT
kWh	KILOWATT HOUR
LAER	LOWEST ACHIEVABLE EMISSION RATE
LCCA	LAKE COUNTY CONSERVATION ALLIANCE
MACT	MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY
MAIN	MID-AMERICA INTERCONNECTED NETWORK, INC.
MEAC	MIDWEST ENVIRONMENTAL ASSISTANCE CENTER
Midwest Generation	MIDWEST GENERATION EME, LLC
mmBtu	MILLION BRITISH THERMAL UNIT
MSSCAM	MAJOR STATIONARY SOURCES CONSTRUCTION AND MODIFICATION
MW	MEGAWATT
MWh	MEGAWATT HOUR
MWIPS	MIDWEST INDEPENDENT POWER SUPPLIERS
NAA	NONATTAINMENT AREA
NAAQS	NATIONAL AMBIENT AIR QUALITY STANDARDS
NESHAP	NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANT
NIPC	NORTHEASTERN ILLINOIS PLANNING COMMISSION
NO	NITRIC OXIDE
NO ₂	NITROGEN DIOXIDE
NO _x	NITROGEN OXIDES
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NRC	ILLINOIS NUCLEAR REGULATORY COMMISSION
NRDC	NATURAL RESOURCES DEFENSE COUNCIL
NSPS	NEW SOURCE PERFORMANCE STANDARD
NSR	NEW SOURCE REVIEW
NYS Siting Board	NEW YORK STATE BOARD ON ELECTRIC GENERATION SITING AND THE ENVIRONMENT
OSRA	OFFICE OF SCIENTIFIC RESEARCH AND ANALYSIS

OTAG	OZONE TRANSPORT ASSESSMENT GROUP
PG&E	PG&E NATIONAL ENERGY GROUP
PM	PARTICULATE MATTER
PM 10	PARTICULATE MATTER NOMINALLY 10 MICRONS AND LESS
PM 2.5	PARTICULATE MATTER NOMINALLY 2.5 MICRONS AND LESS
POTW	PUBLICLY OWNED TREATMENT WORKS
ppb	PARTS PER BILLION
ppm	PART PER MILLION
ppmv	PARTS PER MILLION BY VOLUME
PSD	PREVENTION OF SIGNIFICANT DETERIORATION
RACT	REASONABLY AVAILABLE CONTROL TECHNOLOGY
Reliant	RELIANT ENERGY POWER GENERATION, INC.
RTO	REGIONAL TRANSMISSION ORGANIZATION
SB 172	SENATE BILL 172 (REFERENCE FOR POLLUTION CONTROL FACILITY SITING PROVISIONS UNDER THE ACT)
SCR	SELECTIVE CATALYTIC REDUCTION
SCW&WG	SIERRA CLUB WOODS & WETLAND GROUP
SIP	STATE IMPLEMENTATION PLAN
SO ₂	SULFUR DIOXIDE
TPY	TONS PER YEAR
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
UAM-V	URBAN AIRSHED MODEL—VERSION V
Versar	VERSAR, INC.
VOC	VOLATILE ORGANIC COMPOUND
VOM	VOLATILE ORGANIC MATERIAL
Water Use Act	ILLINOIS WATER USE ACT OF 1983
WRAC	WATER RESOURCES ADVISORY COMMITTEE

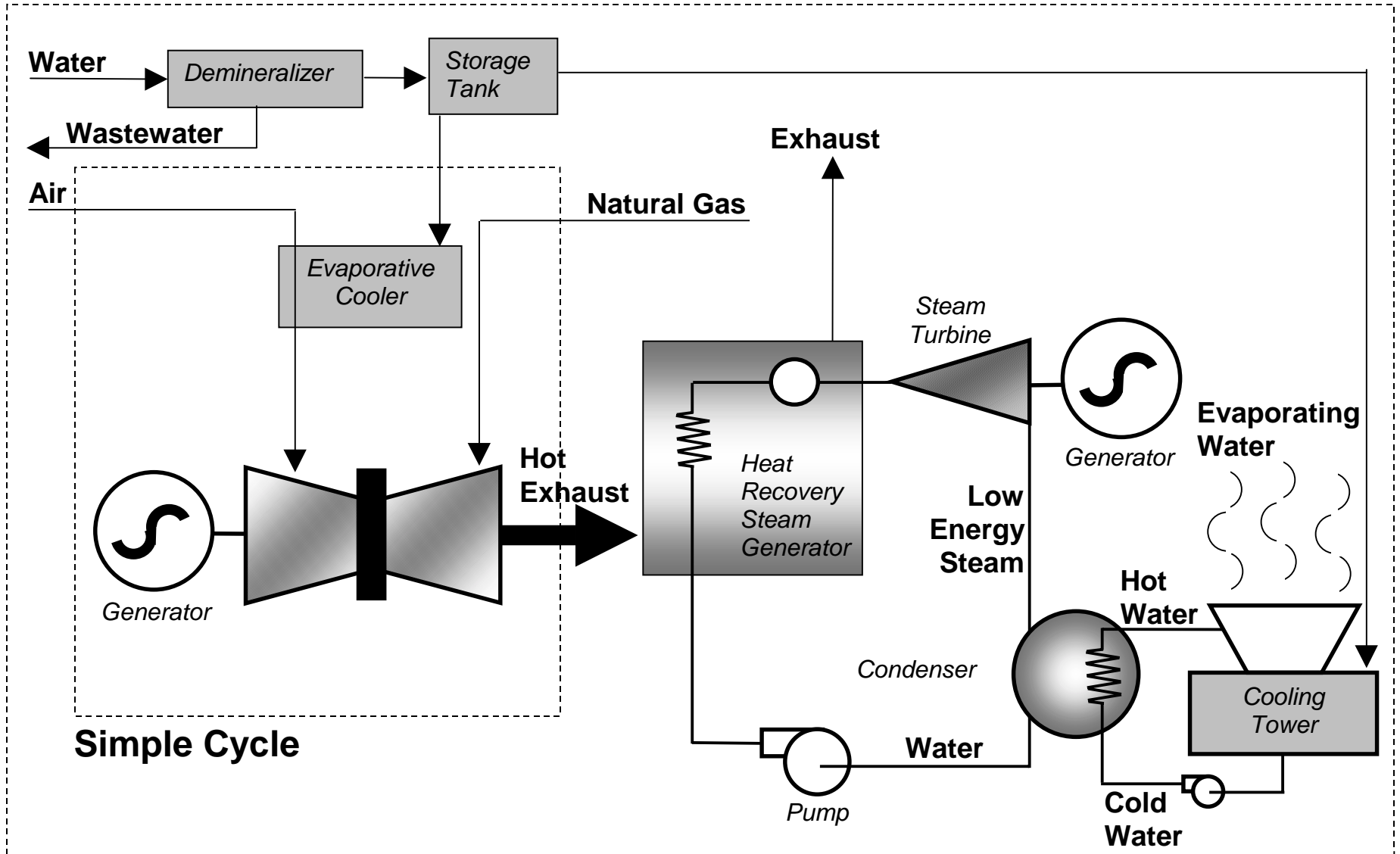
APPENDIX F

Figure 1: Typical Daily Load Curve



Based on drawing presented in Reliant's public comment (PC 1).

Figure 2: Simple Cycle and Combined Cycle Combustion Turbine Power Plant



Combined Cycle

Based on drawing entitled Peaking vs. Combined Cycle Facility. Indeck Ex. 2.

Table 1: Existing & New Natural Gas-Fired, Simple Cycle and Combined Cycle Units
based on IEPA Grp. Exh. 2, No. 7 and PC 168, Att. 2

Combined Cycle Units are shaded.

Map #	ID #	Company Name	City	County	EGU Site: Existing or New	Permit			Total Capacity (MW)	Fuel Used	Load Type	NOx (tons/yr)	Rule
						Number	Type	Status					
1	021814AAG	Dom. Energy-Lincoln Generation	Kincaid	Christian	Existing	00020011	C	Add. Info Ltr 3/6/00	688	NG	Peak		Major-PSD
2	025803AAD	Aquila Energy/MEP Flora Power	Harter/Flora	Clay	New	00050050	C	Review Pending	567	NG	Peak	245	NSPS
3	025804AAC	Entergy Power-Flora Peaking Stn	Flora	Clay	New	00030053	C	Public Notice	292	NG	Peak	212	NSPS
	025804AAC	Entergy Power-Flora Peaking Stn	Flora	Clay	New	00030053	C	Public Notice	296	NG	Peak	212	NSPS
4	031600AMI	Midwest Generation	Chicago	Cook	Existing	95090081	Title V	Review Pending	264	JP-4, NG	Peak		None
5	031600GGV	People's Energy/Calumet Power	Chicago	Cook	New	99100023	C	Permitted	266	NG	Peak	233	NSPS
6	031600GHA	Calumet Energy Team LLC	Chicago	Cook	New	99110107	C	Permitted	305	NG/Oil	Peak	240	NSPS
7	031801AAI	Duke Energy Chicago Hts	Chicago Hts	Cook	New	00040068	C	Review Pending	620	NG	Base		Major
8	041806AAC	Ener Star- Montana Stn	Newman	Douglas	New	00060075	C	Review Pending	322	NG	Peak		NSPS
	041806AAC	Ener Star- Montana Stn	Newman	Douglas	New	00060075	C	Review Pending	40	NG	Peak		NSPS
9	043090ADB	Standard Energy Venture, LLC	West Chicago	DuPage	New	99120001	C	Draft Permit	800	NG/Oil	Base/Peak	732	PSD/BACT
10	043407AAF	Reliant Energy/Reliant DuPage Cty LP	Aurora	DuPage	New	99110018	C	Permitted	680	NG	Peak	247	NSPS
	043407AAF	Reliant Energy/Reliant DuPage Cty LP	Aurora	DuPage	New	99110018	C	Permitted	270	NG	Peak	247	NSPS
11	043412AAH	Grand Prairie Energy, LLC/ABB	Bartlett	DuPage	New	99090051	C	Permitted	500	NG/Oil	Base	213	PSD/BACT

Map #	ID #	Company Name	City	County	EGU Site: Existing or New	Permit			Total Capacity (MW)	Fuel Used	Load Type	NOx (tons/ yr)	Rule
						Number	Type	Status					

12	051030AAD	Spectrum Energy/C.I. C.S.Power	St. Peter	Fayette	New	99100013	C	Permitted	45	NG	Peak	85.9	NSPS
13	051808AAK	Cent.Ill. S C Pow./Spectrum	St. Elmo	Fayette	New	99060052	C	Permitted	45	NG	Peak	85.9	NSPS
14	053803AAL	Ameren CIPS	Gibson City	Ford	New	99020071	C	Permitted	270	NG/Oil	Peak	245	NSPS
15	055803AAB	Entergy -Franklin County Pwr	Thompsonville	Franklin	New	00080055	C	Review Pending	295.6	NG	Peak	250	NSPS
	055803AAB	Entergy -Franklin County Pwr	Thompsonville	Franklin	New	00080055	C	Review Pending	291.6	NG	Peak	250	NSPS
16	055807AAD	Gen Power	W. Frankfort	Franklin	New	00090005	C	Review Pending	0		Peak		PSD Minor
17	063800AAP	Kinder Morgan-Aux Sable Power Plt	Morris	Grundy	New	00030031	C	Draft Permit	176	NG	Peak	247.5	NSPS
18	077806AAA	Ameren CIPs	Grand Tower	Jackson	Existing	99080101	C	Permitted	600	NG	Base	1911.5	NSPS
19	089425AAC	DMG (Dynergy/Rocky Road)	East Dundee	Kane	New	98120016	C	Permitted	35	NG	Peak	245	NSPS
	089425AAC	DMG (Dynergy/Rocky Road)	East Dundee	Kane	New	98120016	C	Permitted	242	NG	Peak	245	NSPS
	089425AAC	DMG (Dynergy/Rocky Road)	East Dundee	Kane	New	99050098	C	Permitted	121	NG	Peak	245	NSPS
20	089802AAF	Fox River Pkng Stn/Coastal Power Co.	Big Rock	Kane	New	99110073	C	Final Review	345	NG	Peak		NSPS
21	091015AAD	Indeck-Bourbonnais Energy Center	Bourbonnais	Kankakee	New	00060010	C	No Action	683.2	NG	Peak		NSPS
22	091806AAM	Duke Energy	Manteno	Kankakee	New	00040067	C	Public Notice	620	NG	Base		Major
23	093801AAN	Kendall New Cent. Dev./Enron	Plano	Kendall	New	99020032	C	Permitted	664	NG	Peak	426.4	PSD/BA CT
24	093808AAD	L S Power/Kendall Energy	Minooka	Kendall	New	98110017	C	Permitted	1000	NG	Base/ Peak	99 (SCT), 630.7 (CCT)	PSD/BA CT

Map #	ID #	Company Name	City	County	EGU Site: Existing or New	Permit			Total Capacity (MW)	Fuel Used	Load Type	NOx (tons/ yr)	Rule
						Number	Type	Status					
25	097190AAC	Midwest Generation	Waukegan	Lake	Existing	95090043	Title V	Consolidation	132	JP-4, NG	Peak	No Limit	None
	097190AAC	Midwest Generation	Waukegan	Lake	Existing	00050071	C	Review Pending	291.6	NG	Peak		NSPS
26	097200ABB	Skygen/Zion Energy Center LLC	Zion	Lake	New	99110042	C	Final Review	800	NG/Oil (back-up)	Peak	697.5	PSD/BACT/NSPS
27	097810AAC	Carlton Inc./North Shore Power	Zion	Lake	New	99120057	C	Final Review	561	NG	Peak	245	NSPS
28	103814AAC	Lee Cty Gen. Facility/L S Power	Nelson	Lee	New	98080039	C	Permitted	1000	NG/Oil	Base/Peak	630.8	PSD/NSPS
29	103817AAH	Lee Generating Stn./Duke Energy	South Dixon	Lee	New	99090029	C	Permitted	664	NG/Oil	Peak		PSD/BACT
30	107815AAC	Spectrum Energy-Logan County	New Holland	Logan	New	00050025	C	Permitted	270	NG	Peak		NSPS
31	111805AAP	Reliant Energy	Woodstock	McHenry	New	99050089	C	Permitted	510	NG	Peak	248	PSD/BACT
32	119090AAH	Reliant Energy (Cardinal Energy)	Roxana	Madison	New	98090064	C	Permitted	633	NG, Refinery Gas	Base	330.5	PSD/BACT
33	119105AAA	Ameren CIPS	Venice	Madison	Existing	95090017	Title V	Permitted	37	Oil	Peak	No Limit	None
34	121803AAA	AmerenEnergy Gen. Company-Kinmundy	Patoka	Marion	New	99020027	C	Permitted	270	NG/Dis. Oil	Peak	245	NSPS
35	127899AAA	Electric Energy/Midwest Elec. Power	Joppa	Massac	Existing	99100060	C	Permitted	216	NG	Peak	349.3	Netted
	127899AAA	Electric Energy/Midwest Elec. Power	Joppa	Massac	Existing	99100060	C	Permitted	102	NG	Peak		Netted
36	145842AAA	AmerenEnergy Gen. Company	Pinckneyville	Perry	New	99090035	C	Permitted	388	NG	Peak		NSPS
	145842AAA	AmerenEnergy Gen. Company	Pinckneyville	Perry	New	00090076	C	Review Pending	192	NG	Peak		NSPS
37	147803AAA	MEP Investments-DeLand	Goose Creek	Piatt	New	00090082	C	Review Pending	567	NG	Peak		NSPS
38	161807AAN	Cordova Energy	Cordova	Rock Island	New	99020097	C	Permitted	500	NG	Base	306.6	PSD/BACT

Map #	ID #	Company Name	City	County	EGU Site: Existing or New	Permit			Total Capacity (MW)	Fuel Used	Load Type	NOx (tons/ yr)	Rule
						Number	Type	Status					

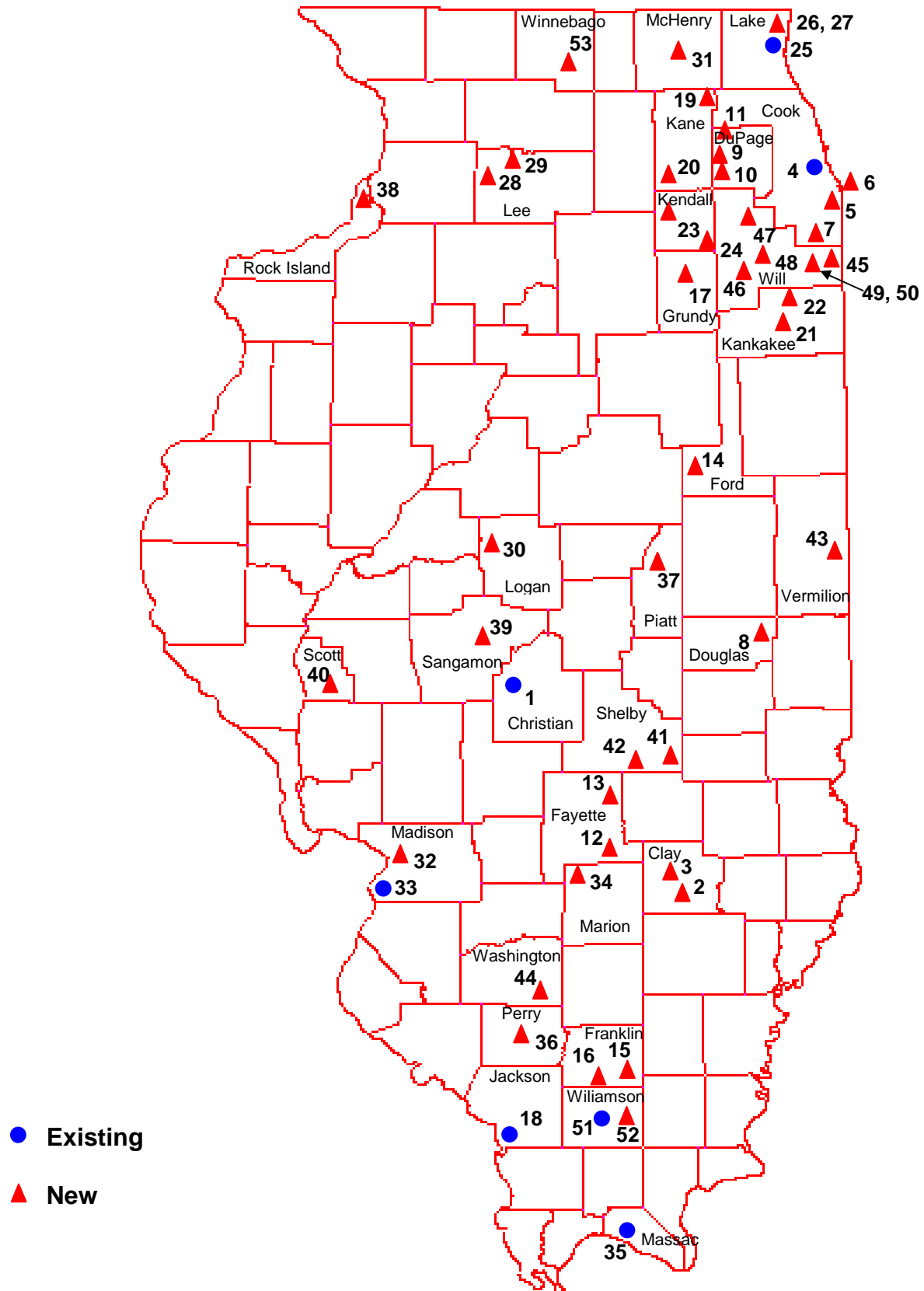
													CT
39	167822ABG	CWLP	Springfield	Sangamon	New	94120058	O	Permitted	100	NG/ #2 Oil	Peak	249	NSPS
40	171851AAA	Soyland Power	Alsey	Scott	New	98120050	C	Permitted	60	NG/ Oil	Peak		old unit
	171851AAA	Soyland Power	Alsey	Scott	New	98120050	C	Permitted	25	NG/ Oil	Peak		old unit
41	173801AAA	Shelby Enrgy Cntr/ Reliant Energy	Sigel	Shelby	New	99090085	C	Permitted	328	NG	Peak	198	NSPS
42	173807AAG	Holland Energy, LLC	Holland	Shelby	New	99100022	C	Permitted	336	NG/Oil (CT), NG (D.B.)	Base	342	PSD/BA CT
43	183090AAE	DMG/Tilton Energy Center	Tilton	Vermilion	New	98110018	O	Permitted	176	NG	Peak	197	NSPS
44	189802AAA	MEP Investments-Posen	Bolo	Washington	New	00090081	C	Review Pending	567	NG	Peak		NSPS
45	197030AAO	Power Energy Partners/ Crete Energy Park	Crete	Will	New	99120056	C	Draft Permit	393	NG	Peak	245	NSPS
46	197035AAG	Elwood Energy/Peoples Gas	Elwood	Will	New	00010076	C	Permitted	344	NG	Peak	217.56	Major- PSD
	197035AAH	Elwood Energy/Peoples Gas	Elwood	Will	New	00010077	C	Permitted	516	NG	Peak	326.34	Major- PSD
	197808AAG	Elwood Energy Center,LLC	Elwood	Will	New	98060091	C	Permitted	680	NG/ Ethane	Peak	1565.7	PSD/BA CT
	197808AAG	Elwood Energy Center,LLC	Elwood	Will	New	98060091	C	Permitted	2500	NG/ Ethane	Base	1565.7	PSD/BA CT
47	197810ABS	Rolls-Royce/Lockport Pwr Gen.	Lockport	Will	New	00050010	C	Permitted	372	NG	Peak	245	NSPS
48	197811AAH	Desplaines Greenland/Enron	Manhattan	Will	New	99020021	C	Permitted	664	NG	Peak	419.4	PSD/ BACT
	197811AAH	Desplaines Greenland/Enron	Manhattan	Will	New	99020021	C	Final Revision	167	NG	Peak		PSD/ BACT
49	197899AAB	Univ. Park Energy/ Constellation Po.	Univ. Park	Will	New	99120020	C	Permitted	300	NG	Peak	245	NSPS

Map #	ID #	Company Name	City	County	EGU Site: Existing or New	Permit			Total Capacity (MW)	Fuel Used	Load Type	NOx (tons/yr)	Rule
						Number	Type	Status					
50	197899AAC	Univ. Park Power (PPL Global)	Univ. Park	Will	New	00080078	C	Review Pending	530.4	NG	Peak		NSPS
51	199856AAC	Southern Ill. Power Coop.	Marion	Williamson	Existing	00070029	C	Draft Permit	166	NG/Oil	Peak		Netting
52	199856AAK	Reliant Energy/Williamson Enrgy Cntr	Crab Orchard	Williamson	New	99090084	C	Permitted	328	NG	Peak	198	NSPS
53	201030BCG	Indeck-Rockford	Rockford	Winnebago	New	99110088	C	Permitted	300	NG	Peak	199	NSPS
TOTALS						67 Permits			27,329 MW Capacity	8 Base 56 Peak 3 B/P	16,183+ tons NO _x /yr		
					Ozone 36 Attainment 31 Nonattainment		58 New 9 Existing						

Abbreviations: EGU Electrical Generating Unit
C Construction
O Operating
MW Megawatt
NG Natural Gas
FO Fuel Oil
DFO Distillate Fuel Oil
JP-4 Jet Fuel

Figure 3: Map of Existing & New Natural Gas-Fired, Simple Cycle and Combined Cycle Units

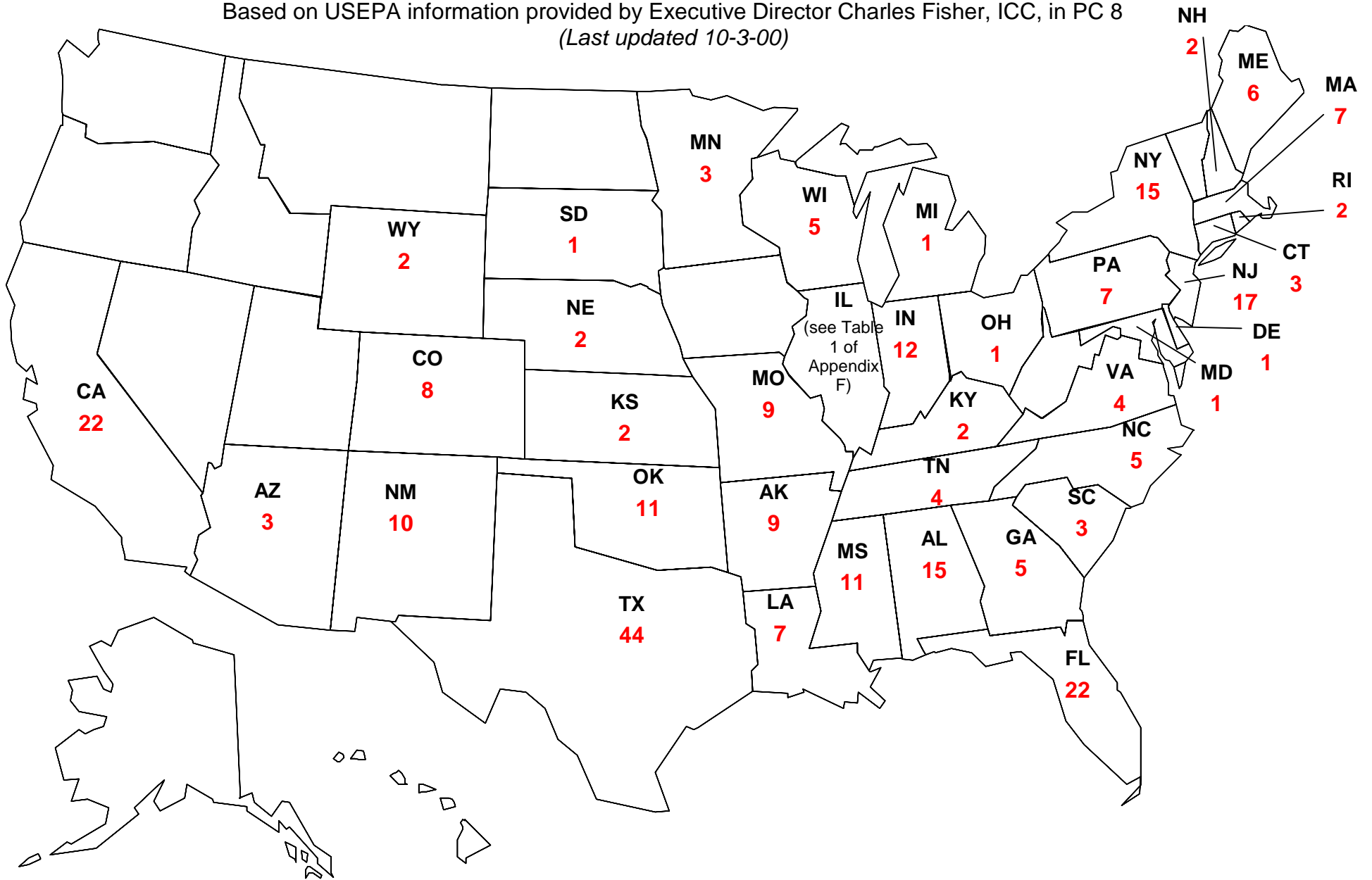
based on IEPA Grp. Exh. 2, No. 7 and PC 168, Att. 2



Note: Some locations have multiple air permits and gas-fired turbines.

Figure 4: National Combustion Turbine Projects

Based on USEPA information provided by Executive Director Charles Fisher, ICC, in PC 8
(Last updated 10-3-00)



Numbers represent numbers of facilities with draft permits or recently-issued final permits.
Some facilities have multiple turbines.