

APR 13 2001

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

STATE OF ILLINOIS
Pollution Control Board

IN THE MATTER OF:)
)
PROVISIONAL VARIANCES FROM) R 01-3/
WATER TEMPERATURE STANDARDS:) (Rulemaking-Water)
PROPOSED NEW 35 Ill. Adm. Code 301.109)
)

STATEMENT OF REASONS

The Illinois Environmental Protection Agency ("Illinois EPA") hereby submits its Statement of Reasons for the above-captioned proceeding to the Illinois Pollution Control Board ("Board") pursuant to Section 27 of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/27 (1998), and 35 Ill. Adm. Code 102.200 and 102.202.

I. Statutory Basis

In 1980 the Illinois General Assembly amended Title IX of the Act to allow for the use of provisional variances as an additional form of short term regulatory relief by the regulated community. Public Act 81-1442. The Act provides that (to the extent consistent with applicable provisions of the Clean Water Act):

The Board shall grant provisional variances, only upon notification from the Agency that compliance on a short term basis with any rule or regulation, requirement or order of the Board, or with any permit requirement would impose an arbitrary or unreasonable hardship. Such provisional variances shall be issued within 2 working days of notification from the Agency.

415 ILCS 5/35(b)(1998). Section 36(c) of the Act further provides that:

Any provisional variance granted by the Board pursuant to subsection (b) of Section 35 shall be for a period of time not to exceed 45 days. Upon receipt of a recommendation from the Agency to extend this time period, the Board shall grant up to an additional 45 days. The provisional variances granted to any one person shall not exceed a total of 90 days during any calendar year.

415 ILCS 5/36(c)(1998). In addition, Section 26 of the Act confers procedural rulemaking authority upon the Board and Section 27 of the Act confers substantive rulemaking authority upon the Board. 415 ILCS 5/26, 27(1998). The contents of this regulatory proposal are within these general rulemaking powers of the Board.

II. Regulatory Proposal

A. Purpose and Effect of Regulatory Proposal

This proposal is designed to implement Title IX of the Act. The language of proposed Section 301.109 must also be read in conjunction with the Illinois EPA's procedural rules for processing provisional variance applications found in 35 Ill. Adm. Code Part 180. See Exhibit B. The proposal sets forth how the Illinois EPA will exercise its provisional variance authority consistent with the Act and the Illinois EPA's regulations when evaluating requests for provisional variances from water temperature standards. The Illinois EPA is also providing guidance for the regulated community regarding the minimum appropriate conditions to be included in thermal provisional variances to ensure that no environmental harm will result from the provisional variance from the thermal limits. Finally, the proposal places the substantive requirement upon provisional variance recipients to address any environmental damage that results or may result from the provisional variance.

This proposed new Section places several requirements upon the contents of any Illinois EPA recommendation to the Board under Section 35(b) of the Act from water temperature requirements. The recommendation must specifically address each of the informational contents required of a provisional variance application under 35 Ill. Adm.

Code 180.202(b). The relevant informational requirements for provisional variance applications are:

- A statement identifying the requirement from which the variance is requested;
- A description of the business or activity for which the variance is requested;
- The quantity and types of materials used in the process or activity for which the variance is requested;
- The quantity, types and nature of materials to be discharged and the identification of the receiving waterway;
- An assessment of any adverse environmental impacts which the variance may produce;
- A statement explaining why compliance with the requirement imposes arbitrary and unreasonable hardship;
- A description of the proposed methods and a timetable for achieving compliance;
- A discussion of alternate methods of compliance and the factors influencing the choice to apply for a provisional variance;
- A statement of the period, not to exceed 45 days, for which the variance is requested;
- A statement of whether the applicant has been granted any provisional variances within the calendar year, and the terms and duration of such variances;
- A statement regarding the applicant's current permit status; and
- Any Board orders in effect regarding the applicant's activities and any matters currently before the Board in which the applicant is a party.

In addition to addressing all of the above requirements, this proposal requires the Illinois EPA to specifically address the foreseeability of weather and operational conditions that led to the provisional variance request; and the Illinois EPA must identify any provisional variances the Board has issued to the applicant for the past five years from any water temperature standard. The Illinois EPA Recommendation must also address the Illinois EPA's rationale for recommending any specific conditions that have been imposed upon the water temperature provisional variance.

Subsection (b)(2) of proposed Section 301.109, lists five specific conditions that the Illinois EPA will impose upon most provisional variances granted from a water

temperature requirement. The conditions contained in 301.109(b)(2), as they would appear in a provisional variance recommendation from the Illinois EPA:

1. The petitioner shall continuously monitor intake, discharge, and receiving water temperature and visually inspect intake and discharge areas three times daily to assess any mortalities to fish and other aquatic life;
2. The petitioner shall document environmental conditions during the term of the provisional variance, including the activities described in 1 above, and submit the documentation to the Agency and the Department of Natural Resources within 30 days after the provisional variance expires;
3. The petitioner shall immediately implement biological activities to characterize how fish and other aquatic life respond to the thermal conditions resulting from the provisional variance; document these activities; and submit the documentation to the Agency and the Department of Natural Resources within 30 days after the provisional variance expires;
4. The petitioner shall immediately notify the Agency and the Department of Natural Resources of any unusual conditions, including mortalities to fish or other aquatic life; immediately take action to remedy the problem; investigate and document the cause and seriousness of the unusual conditions while providing updates to the Agency and the Department of Natural Resources as changes occur until normal conditions return; notify the Agency and the Department of Natural Resources when normal conditions return; and submit the documentation to the Agency the Department of Natural Resources within 30 days after normal conditions return; and
5. The petitioner shall develop and implement a response and recovery plan to address any adverse environmental impact due to thermal conditions resulting from the provisional variance, including loss and damage to aquatic life.

In most cases, these proposed conditions would impose additional monitoring and reporting requirements on provisional variance recipients beyond the monitoring and reporting required elsewhere in the Board's rules or National Pollutant Discharge Elimination System ("NPDES") permitting requirements. The additional monitoring requirements include continuous monitoring of intake, discharge, and receiving water temperatures and monitoring of biological and environmental conditions. The reporting

requirements include the requirement to document and report to the Illinois EPA and/or the Department of Natural Resources the results of these additional monitoring activities. In addition, Condition 5 requires petitioners to develop and implement a plan to address any adverse environmental impacts that may result from the thermal provisional variance.

B. Facts in Support

The Environmental Protection Act was amended in 1979 to allow for provisional variances upon notification from the Illinois EPA that compliance on a short-term basis with any rule or regulation, requirement or order of the Board, or with any permit requirement would impose an arbitrary or unreasonable hardship. On June 12, 1981, procedures and criteria were adopted for reviewing applications for provisional variances. See Exhibit B. These rules have provided the applicants with documentation and clarification of the application requirements as well as Illinois EPA application review criteria. In general, these rules have worked well. However, given the knowledge and experience that comes with 20 years of considering requests for provisional variances, the Illinois EPA is proposing additional criteria in regard to provisional variances from water temperature standards.

The combination of a severe drought and extremely hot weather, low river flows, elevated ambient river temperatures and decreased heat dissipation have created several emergency situations where power companies have been unable to meet their NPDES permit conditions for the thermal component of their discharges and also meet their obligations to supply reliable power to their customers. Since 1988, the Illinois EPA has received 23 formal requests for provisional variances from water temperature standards. As indicated in the attached Exhibit A, the Illinois EPA recommended the granting of

provisional variances (subject to certain conditions) for 20 of these requests. As noted in Exhibit A, five of the approved requests were for extensions of previously granted variances. One thermal provisional variance request was denied by the Agency and the petitioners withdrew two others. In addition, numerous other informal inquiries have been made to the Illinois EPA regarding the merits of a thermal provisional variance under consideration prior to formal submission.

The most recent emergency conditions which resulted in provisional variance requests from thermal standards occurred in the summer of 1999, when four provisional variances and one extension were granted for relief from thermal requirements. See Exhibit A. Only two of these provisional variances and the extension were actually utilized by the petitioners. Commonwealth Edison Company, Dresden Station, used one 45-day provisional variance plus an extension for an additional 45 days and the other was used by CIPS, Newton Station. The Dresden Station permit provides for a maximum allowable discharge temperature and a specified number of hours when the discharge could exceed a long-term average discharge temperature. The provisional variance increased the number of hours when the long-term average temperature could be exceeded. No relief from the maximum temperature was provided. It is also important to note that the Dresden Station had thermal provisional variance needs in 1988, 1992, 1994, 1996, 1997 and 1998. This history was evidence of an apparent need for additional cooling capacity at Dresden Station. The Newton Station provisional variance was similar to Dresden Station in that relief was provided for increased excursions above long-term thermal limits but no relief from maximum allowable thermal discharge limits. In addition to taking advantage of the provisional variance, the Newton Station suffered

major operational problems because of the prolonged hot period and apparently exceeded maximum discharge levels causing an extensive fish kill in the cooling lake. This incident further supported the apparent need for additional cooling capacity at Newton Station.

After the emergency conditions of the summer of 1999 had subsided, the Illinois EPA notified the power companies (Commonwealth Edison and Ameren-CIPS) of the need to develop more proactive plans to avoid the reoccurrence of violations and the need for variances. Both of these companies have subsequently installed additional cooling systems to reduce the possibility of permit violations. Ameren-CIPS installed supplemental cooling ponds at the Coffeen Station and Newton Station and Commonwealth Edison installed cooling towers in the discharge channel at Dresden Station. It is expected that these cooling systems will sustain full compliance under extreme weather conditions; however, it is possible that unusual combinations of heat and drought may still create a situation where relief from current permit conditions may be needed in order to prevent a serious failure of the power grid. Therefore, the conditions described above have been proposed in Section 301.109(b)(2) in an effort to further clarify and provide up-front documentation to any future petitioner on the requirements for a provisional variance from any water temperature standard.

C. Technical Feasibility and Economic Justification

This proposal places no new regulatory requirements under the State's water pollution control regulations; it merely clarifies the types of information the Illinois EPA should consider when recommending that the Board grant provisional variances from a water temperature regulation or permit limitation. The proposal clarifies the information provisional variance applicants should expect to submit to the Illinois EPA in a

provisional variance application and the minimum conditions that would be imposed upon grant of such a provisional variance. In many cases, these conditions are currently being imposed upon provisional variance applicants. However, in some cases, additional temperature, environmental, and biological monitoring, record-keeping, and reporting will be required for the term of the provisional variance.

It is anticipated that this proposal will ease some of the administrative burden on the resources required by the Illinois EPA for its provisional variance request review process based on receiving more complete applications and issuing fewer requests for additional information. There may be some incremental resources required for the preparation and submittal of more detailed recommendations to the Board and the review of a small number of additional monitoring reports pursuant to provisional variance conditions. This proposal, in most aspects, clarifies existing policy which, in turn, is expected to lessen the economic burden on the regulated community by creating certainty about what is required to be included in provisional variance applications.

The technical feasibility of continuous monitoring of intake, discharge, and receiving water temperatures has been well documented in the past. The additional requirements for visual inspections, environmental monitoring and biological monitoring are also clearly technically feasible. The requirement to develop and implement a plan to address any adverse environmental impact of the provisional variance is also technically feasible and economically reasonable for facilities seeking regulatory relief from a thermal limit.

D. Affected Facilities.

This proposal could potentially impact any facility subject to a water temperature standard or permit condition for whom compliance with that standard on a short term basis would impose an arbitrary and unreasonable hardship. It is likely this proposal will only impact electric utilities that face the confluence of increased demand for power production, low flow rates, and extreme warm weather conditions in the summer months.

II. **Synopsis of Testimony**

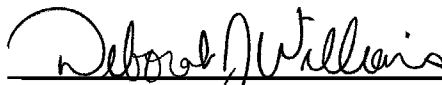
During the Board's proceedings in this matter the Illinois EPA will present testimony in support of the proposed rulemaking. Staff from the Bureau of Water's Compliance Assurance Section will testify to the provisional variance application process, the provisional variance recommendation process, and other technical matters related to this proposal.

IV. **Supporting Documents**

- Exhibit A: Provisional Variance Requests by Utilities from Water Temperature Requirements
- Exhibit B: 35 Ill. Adm. Code Part 180

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

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Division of Legal Counsel

Thermal Provisional Variances

<u>Facility</u>	<u>Date Rec'd By Agency</u>	<u>PCB No.</u>	<u>Date of PCB Order</u>	<u>Decision</u>
Illinois Power – Clinton	07/02/88	--	--	Deny
Illinois Power – Clinton	07/25/88	88-118	08/04/88	Grant
Commonwealth Edison – Dresden	08/09/88	88-128	08/18/88	Grant
Commonwealth Edison – Quad City	08/17/88	88-129	08/18/88	Grant
Commonwealth Edison – Quad City	07/10/89	89-115	07/13/89	Grant
Commonwealth Edison – Dresden	11/16/92	92-181	11/19/92	Grant
Commonwealth Edison – Dresden	03/04/94	94-104	03/31/94	Grant
Com Ed – Fisk, Will Co, Joliet, Crawford	06/21/95	95-183	06/29/95	Grant
Com Ed – Fisk, Will Co., Joliet, Crawford	07/31/95	96-26	08/03/95	Grant/Extension
CIPS Coffeen	08/25/95	--	--	Withdrawn
CIPS Newton	08/25/95	--	--	Withdrawn
Com Ed – Fisk, Will Co., Joliet, Crawford	08/28/95	96-51	09/07/95	Grant/Extension
Commonwealth Edison – Dresden	02/26/96	96-188	03/07/96	Grant
Com Ed – Fisk, Will Co., Joliet, Crawford	10/09/96	97-72	10/17/96	Grant
Commonwealth Edison – Dresden	07/18/97	98-20	07/24/97	Grant
Commonwealth Edison – Dresden	10/27/97	98-64	11/06/97	Grant/Extension
Commonwealth Edison – Dresden	07/17/98	99-17	07/23/98	Grant
Commonwealth Edison – Dresden	08/27/98	99-39	09/03/98	Grant/Extension
Commonwealth Edison – Dresden	07/26/99	00-18	08/05/99	Grant
CIPS Newton	07/28/99	00-21	08/05/99	Grant
Kincaid LLC	07/30/99	00-20	08/05/99	Grant
Commonwealth Edison – LaSalle	07/30/99	00-19	08/05/99	Grant
Commonwealth Edison – Dresden	09/13/99	00-48	02/23/99	Grant/Extension

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A. GENERAL PROVISIONS
Ch. II. ENVIRONMENTAL PROTECTION AGENCY
PART 180
PROCEDURES AND CRITERIA FOR REVIEWING
APPLICATIONS FOR PROVISIONAL VARIANCES

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Authority Note: Authorized by and implementing Section 35(b) of the Environmental Protection Act (Ill. Rev. Stat. 1979, Ch. 111 1/2, par. 1035(b)).

Source Note: 5 Ill. Reg. 24, June 12, 1981.
effective June 2, 1981.

**PROCEDURES AND CRITERIA FOR REVIEWING
APPLICATIONS FOR PROVISIONAL VARIANCES**

SUBPART A: INTRODUCTION

Section 180.101 Purpose

These rules establish the procedures and the criteria which the Agency will use to review applications and to make recommendations to the Pollution Control Board (Board) for granting provisional variances. Section 35(b) of the Act states that such provisional variances shall be granted by the Board "upon notification from the Agency that compliance on a short term basis with any rule or regulation, requirement or order of the Board, or with any permit requirement would impose an arbitrary or unreasonable hardship."

Section 180.102 Definitions

Terms used in these rules are defined as in the Act and in the regulations of the Board.

SUBPART B: APPLICATIONS FOR PROVISIONAL VARIANCE

Section 180.201 Applicants

- a) Any person subject to the Environmental Protection Act and to the rules or regulations, orders, or permit requirements of the Board, and who has not been granted provisional variances in excess of 90 days during the calendar year, may apply for a provisional variance.
- b) Applications may be submitted pursuant to either Section 180.202 or Section 180.204 of these rules.

Section 180.202 Requirements of the Written Application

- a) Two copies of the application shall be sent to:

Illinois Environmental Protection Agency
Division of (Air Pollution Control, Water Pollution Control,
Land/Noise Pollution Control, Public Water Supplies, as
(appropriate)
2200 Churchill Road
Springfield, Illinois 62706

- b) The application shall include:

- 1) A statement identifying the regulations, Board Order, or permit requirements from which the variance is requested;
- 2) A description of the business or activity for which the variance is requested, including pertinent data on location, size, and the population and geographic area affected by the applicant's operations;

- 3) The quantity and types of materials used in the process or activity for which the variance is requested, as appropriate;
- 4) The quantity, types and nature of materials or emissions to be discharged, deposited or emitted under the variance, and the identification of the receiving waterway or land, or the closest receiving Class A and Class B land use, as appropriate;
- 5) The quantity and types of materials in drinking water exceeding the allowable content, or other pertinent facts concerning variances from the Board's public water supply regulations.
- 6) An assessment of any adverse environmental impacts which the variance may produce;
- 7) A statement explaining why compliance with the Act, regulations or Board Order imposes arbitrary and unreasonable hardship;
- 8) A description of the proposed methods to achieve compliance with the Act, regulations or Board Order, and a timetable for achieving such compliance;
- 9) A discussion of alternate methods of compliance and of the factors influencing the choice of applying for a provisional variance;
- 10) A statement of the period, not to exceed 45 days, for which the variance is requested;
- 11) A statement of whether the applicant has been granted any provisional variances within the calendar year, and the terms and duration of such variances;
- 12) A statement regarding the applicant's current permit status as related to the subject matter of the variance request;
- 13) Any Board orders in effect regarding the applicant's activities and any matters currently before the Board in which the applicant is a party.

Section 180.203 Preliminary Review of the Application

- a) Within five working days of receipt of the application, the Agency shall make a determination to accept the application for review; to reject the application as incomplete, based on the requirements of Section 180.202; or to reject the application as outside the scope of relief provided by provisional variances, applying the criteria in Section 180.301.
- b) If the application is rejected, notice of such rejection shall be given to the applicant by certified mail, return receipt requested. This notice of rejection shall include an explanation of the Agency's decision.
 - 1) Upon receipt of a notice of rejection for incompleteness, the applicant may submit a complete application, which will initiate the review process again.

- 2) Upon receipt of a notice of rejection as not within the scope of relief of provisional variances, the applicant may apply to the Board for a variance pursuant to Section 35(a) of the Act.
- c) If the application is accepted as complete and within the scope of relief provided by provisional variances, review shall proceed pursuant to Subpart C. The Agency shall give notice to the Board of written applications which are accepted.

Section 180.204 Emergency Applications

Under emergency circumstances due to causes such as equipment malfunctions, extreme weather conditions or other unforeseeable events, the Agency will consider requests for provisional variances according to the following procedures.

- a) The applicant may notify the Agency of circumstances which it believes justify granting a provisional variance on an emergency basis.
- b) The Agency shall investigate the circumstances of the request.
- c) Based on the information obtained from the applicant and the investigation, the Agency may recommend that the Board grant a provisional variance.
- d) The Agency may notify the applicant that certain information described in subsection 180.202(b) must be submitted in writing in support of the request for a provisional variance.
- e) The applicant shall provide the information required under (d) within ten working days of notification from the Agency.

SUBPART C: AGENCY DECISION MAKING

Section 180.301 Criteria for Reviewing Applications

- a) Applications for provisional variances will be accepted for review when all of the following circumstances exist:
 - 1) The requested relief is short-term, i.e., not exceeding 45 days;
 - 2) The applicant would experience arbitrary and unreasonable hardship if required to wait for a variance pursuant to Section 35(a) of the Act; and
 - 3) The applicant has not been granted provisional variances exceeding 90 days within the calendar year. For purposes of calculating the 90 days during any calendar year, the number of days of provisional variances granted by the Board shall be totaled, regardless of when compliance was actually achieved by the applicant.

b) In determining whether to recommend that the variance be granted, the Agency will evaluate the information provided in the application to meet the requirements of Section 180.202(b) or 180.204. Particular consideration will be given to the following information:

- 1) Inclusion of a definite compliance program;
- 2) Evaluation of all reasonable alternatives for compliance; and
- 3) Demonstration that any adverse impacts will be minimal.

Section 180.302 Final Agency Action

Within 30 days of receipt of an application for a provisional variance or for an extension of a provisional variance, the Agency shall either recommend that the Board grant the variance or notify the applicant and the Board that the variance is denied using the procedures of Section 180.203(b).

Section 180.303 Recommendation to the Board

- a) The Agency shall submit a recommended order to the Board by personal service or by certified mail, return receipt requested. If a written application was submitted, the Agency shall provide a copy to the Board. The Agency may submit a statement explaining or justifying its recommendation.
- b) The recommended order shall state the number of days for which the variance should be granted, any conditions to be imposed, and a draft certification of acceptance.

SUBPART D: EXTENSIONS OF PROVISIONAL VARIANCES

Section 180.401 Applications for Extensions of Provisional Variances

An application for extension of an order granting a provisional variance shall include:

- a) Information as stated in Section 180.202(b)(7) through (10);
- b) Any new information which modifies prior information given to satisfy Section 180.202(b).

Section 180.402 Criteria for Reviewing Applications for Extensions of Provisional Variances

The Agency shall review requests for extensions of provisional variances and make recommendations to the Board in conformity with Subpart C of these rules.

(filed JUN 2, 1981 , effective JUN 2, 1981)