

Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, IL 61242-9740

www.exeloncorp.com

SVP-05-059

July 28, 2005

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Approval of Provisional Variance from National Pollutant Discharge Elimination System (NPDES) Permit No. IL0005037

Reference: Letter from Timothy J. Tulon (Exelon Generation Company, LLC) to U. S. NRC, "Provisional Variance Request from National Pollutant Discharge Elimination System (NPDES) Permit No. IL0005037," dated July 22, 2005

The referenced letter submitted a provisional variance request from the NPDES Permit for Quad Cities Nuclear Power Station. In accordance with Technical Specifications, Appendix B, Section 2.2, "Reporting Related to the NPDES Permits and State Certifications," enclosed is the Illinois Environmental Protection Agency approval of the requested provisional variance.

Should you have any questions concerning this letter, please contact Mr. W. J. Beck at (309) 227-2800.

Respectfully,



Timothy J. Tulon
Site Vice President
Quad Cities Nuclear Power Station

Attachment: Approval of Provisional Variance from NPDES Permit No. IL0005037

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

.C 001

Attachment

Approval of Provisional Variance

from

NPDES Permit No. IL0005037



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

(217) 782-5544
TDD: (217) 782-9143

July 22, 2005

Dorothy Gunn, Clerk
Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, IL 60601

RE: NOTICE OF PROVISIONAL VARIANCE APPROVAL
PV-06-07

Dear Ms. Gunn:

Pursuant to Subsection 37(b) of the Environmental Protection Act (415 ILCS 5/37(b)), attached is a copy of the Illinois EPA's recent approval of a request for provisional variance. As you know, the Board must maintain for public inspection copies of all provisional variances filed with it by the Illinois EPA. Please feel free to call me at the number referenced above should you have any questions.

Sincerely,

Vera Herst
Assistant Counsel
Division of Legal Counsel

Attachment

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 22, 2005

Exelon Generation Company, L.L.C.)	
Quad Cities Nuclear Power Station)	
)	
)	
Petitioner,)	
)	
v.)	IEPA – 05-07
)	(Provisional Variance-Water)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

Re: **Provisional Variance From Special Condition 6B
of NPDES Permit IL0005037**

The Agency has completed its technical review of the attached provisional variance request submitted by Exelon Generation Company, L.L.C. Quad Cities Nuclear Power Station (Exelon's Quad Cities Station) on July 21, 2005 (Attachment A). Based on the review, the Agency GRANTS a provisional variance subject to specific conditions set forth below for a period of 45 days or until the additional 100 provisional variance excursion hours are utilized, whichever occurs first.

Exelon's Quad Cities Station is seeking a provisional variance from Special Condition 6B of its NPDES Permit IL0005037 (Attachment B), which limits the number of excursion hours and the maximum temperatures.

Exelon's Quad Cities Station is a nuclear-fueled steam electric generating facility located on the Mississippi River at River Mile 506.8 near Cordova, Illinois. It operates its cooling water system in open cycle mode. Cooling water is taken from the Mississippi River, passes through the plant system and is then discharged by diffusers into the Mississippi River. Maximum design flow of this system is 2,253 cfs.

Exelon's Quad Cities Station seeks a variance from Special Condition 6B of NPDES Permit IL0005037. This condition establishes the thermal discharge ranges for Exelon's Quad Cities Station. Additionally, it allows Exelon's Quad Cities Station excursion hours from these limits. Excursion hours are periods of time in which the temperature at

the edge of the mixing zone may be 3°F warmer than the temperature limit in the permit. Exelon's Quad Cities Station may only utilize 1% (87.6) of the hours in a 12-month period ending with any month as excursion hours. The permit also requires that water temperature in the Mississippi River at the edge of the mixing zone shall at no time exceed by 3°F the maximum limits of 86°F in July and August and 85°F in September.

Normally, Exelon's Quad Cities Station can operate within these limits because the ambient temperature in the Mississippi River at the intake points (or above the plant) remain below the non-excursion hour temperature limit. Ordinarily, the Mississippi River has significant river flows. These significant river flows act to enable Exelon's Quad Cities Station to meet its permit conditions even when ambient temperatures approach non-excursion hour temperature limit. However, at this time the Mississippi River is at extremely low flow condition. This low flow condition coupled with high ambient river temperatures is the basis of the need for this provisional variance.

Inlet river temperatures have been ranging around 83°F to 86°F. The long range weather forecasts predict the current drought and temperature conditions the continue for several more weeks. This could cause the ambient river temperature to exceed non-excursion hour temperature limits for significant periods of time. Current predictions indicate Exelon's Quad Cities Station will use all of its permitted excursion hours around July 23, 2005. Petitioner claims the only alternative available for the station, other than relief pursuant to this provisional variance request, is to shut down the station. Derating the facility will not resolve this situation due to the high ambient temperatures. In addition, power demand is extremely high due to the current weather conditions.

The Agency has reviewed the requested provisional variance and has concluded the following:

1. The environmental impact from the requested relief will be closely monitored and the Agency will be immediately notified of any significant impact along with actions taken to remedy the problem;
2. No other reasonable alternatives appear available;
3. No public water supplies will be affected;
4. No federal regulations will preclude the granting of this request; and
5. Exelon's Quad Cities Station will face an arbitrary and unreasonable hardship if the request is not granted.

The Agency hereby GRANTS the Exelon's Quad Cities Station a provisional variance from Special Condition 6B of NPDES Permit IL0005037 as follows:

- (1) Exelon's Quad Cities Station is granted 100 provisional variance excursion hours;
- (2) The provisional variance will begin on the date that Exelon's Quad Cities Station either (1) exhausts the 87.6 permitted excursion hours or (2) on the date that Exelon's Quad Cities Station first exceeds the current permitted excursion hour temperature limits (July 89°, August 89°, and September 88°). The provisional variance will end on the date that the 100 provisional variance excursion hours are used, but in no case later than 45 days following the start of the provisional variance period.
- (3) Exelon's Quad Cities Station, during the 100 provisional variance excursion hours, may exceed the maximum temperature limit stated in Special Condition 6B in NPDES permit IL0005037 by no more than 5°F (July 91°, August 91° and September 90°).

This provisional variance includes the following conditions:

- A. During the variance period, when excursion hours are being used, Exelon's Quad Cities Station must continuously monitor intake, discharge and receiving water temperatures and to visually inspect intake and discharge areas at least three times daily to assess any mortalities to fish and other aquatic life;
- B. Exelon's Quad Cities Station shall document environmental conditions during the term of the provisional variance, including the activities described in A above of this Section, and submit the documentation to the Agency and the Department of Natural Resources within 30 days after the provisional variance expires;
- C. Exelon's Quad Cities Station shall immediately implement biological activities to characterize how fish and other aquatic life respond to the thermal conditions resulting from the provisional variance; to document these activities; and to submit the documentation to the Agency and the Department of Natural Resources within 60 days after completing the monitoring survey, as described below. Specifically, Exelon's Quad Cities Station must prepare a study plan within three days of the beginning date of this provisional variance to address the issue of increased excursion hours (increase in thermal stress) on Unionid Mussels in the Mississippi River in the vicinity of the discharge. The plan must include a survey of the mussel beds identified in a recent report: Draft Report: Unionid Mussel Biothermal Assessment for the Quad Cities Nuclear

Station, Mississippi River Miles 503.0 to 506.9 (Attachment C). The survey must address the apparent health of the mussels within the mussel beds given the current high river temperatures. Dives to ascertain ongoing effects on the mussel beds must begin as soon as possible given current dry and hot weather conditions and no later than Monday, July 25, 2005. Conditions pertinent to the mussel populations to be recorded during the surveys will be much the same as conducted for the baseline study referenced above. These must include but are not limited to mussel species occurrence and density, age, zebra mussel infestation and apparent condition, i.e., any outward signs of heat stress such as morbidity, reflex time, position in the substrate, etc. Plant discharge temperatures, upstream river temperatures, incidence of excursion hours and other pertinent information must be provided to build an understanding of the conditions to which the mussels have recently been exposed. Surveys must continue until excursion hours are no longer being utilized, or in other words, until the weather conditions causing the need for more excursion hours have moderated. The final report for this study must address the changes noted in mussel populations from the previous study. Verbal reports are due to the Agency at regular intervals during the surveys. These reports must include any information on mussel die-off. If mussel die-off downstream from the discharge is found and is attributable to the thermal effects of the effluent, as compared to the condition of upstream populations, a monetary settlement will be required as calculated by the formula the Illinois Department of Natural Resources uses for mussel die-off settlements;

- D. Exelon's Quad Cities Station shall immediately notify the Agency and the Department of Natural Resources of any unusual conditions, including mortalities to fish or other aquatic life; to immediately take action to address the problem; to 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; to notify the Agency and the Department of Natural Resources when normal conditions return; and to submit the documentation to the Agency and the Department of Natural Resources within 30 days after normal conditions return;
- E. Exelon's Quad Cities Station 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;
- F. Exelon's Quad Cities Station must conduct a feasibility study for incorporation of supplemental cooling capabilities (cooling towers at the plant or other potential technologies) to avoid reliance on thermal provisional variances in the future. The study must consider both

technical and economic feasibility. Exelon's Quad Cities Station must consider, but is not limited to studying the following aspects of this issue: the type and placement of cooling towers; the efficiency of the towers, i.e. how many towers would be necessary to cool the effluent a certain amount; the cost of the towers relative to the profitability of the plant during extreme summer weather conditions and the time frame for obtaining and installing towers. A final report on tower feasibility along with Exelon's Quad Cities Station conclusions for implementing a portable cooling tower program, are due to the Agency within six months of the beginning date of this provisional variance;

- G. Exelon's Quad Cities Station shall notify Roger Callaway of the Agency by telephone at 217/782-9720 when the need for the 100 requested excursion hours begin and again if the excursion hours are totally utilized. Written confirmation of each notice shall be sent within five days to the following address:

Illinois Environmental Protection Agency
Bureau of Water - Water Pollution Control
Attention: Roger Callaway
1021 North Grand Avenue East, MC #19
Springfield, Illinois 62794-9276

- H. Exelon's Quad Cities Station shall sign a certificate of acceptance of this provisional variance and forward that certificate to Roger Callaway at the address indicated above within one day of the date of this order. The certification should take the following form:

I(We) _____, hereby accept and agree to be bound by all terms and conditions of the provisional variance granted by the Agency in _____ dated _____.

Petitioner

Authorized Agent

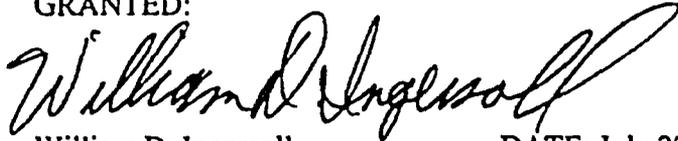
Title

Date

Exelon's Quad Cities Station shall continue to monitor and maintain compliance with all other parameters and conditions specified in its NPDES Permit No. IL0005037.

The Illinois EPA grants this provisional variance in accordance with its authority contained in Sections 35(b), 36 (c), and 37(b) of the Illinois Environmental Protection Act (415 ILCS 5/35(b), 36(c), and 37(b) (2004). The decision to grant this provisional variance is not intended to address compliance with any other applicable laws or regulations.

GRANTED:



William D. Ingersoll
Acting Chief Legal Counsel

DATE: July 22, 2005

ATTACHMENT A



Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
7710 206th Avenue North
Cordova IL 61242-9740

www.exeloncorp.com

PM-05-008

July 21, 2005

Mr. Mike Garretson
Manager, Compliance Assurance Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Subject: Quad Cities Nuclear Power Station
NPDES Permit No. IL0005037
Provisional Variance Request – Emergency Application

Dear Mr. Garretson:

Exelon Generation Company, L.L.C. ("Exelon") hereby requests that the Illinois Environmental Protection Agency ("IEPA" or "Agency") grant a provisional variance for Quad Cities Nuclear Power Station ("Quad Cities," "Station" or "Facility"), pursuant to Section 35(b) of the Environmental Protection Act ("Act") 415 ILCS 5/35. Exelon submits this Emergency Application for a provisional variance consistent with IEPA procedures at 35 Ill. Adm. Code 180.204. Quad Cities is located on the Mississippi River in Rock Island County. The Station discharges wastewater pursuant to NPDES Permit No. IL0005037, which IEPA issued on December 17, 2001. ("NPDES Permit"). The Station submitted its NPDES Permit renewal application to the Agency on November 18, 2004.

Station Description

Quad Cities Station is a nuclear-fueled steam electric generating facility located near Cordova, Illinois, on the Mississippi River at River Mile 506.8. The two boiling water reactors have a combined maximum generating capacity of 1824 megawatts electric. Circulating water used to cool and condense the steam from the generating process is withdrawn from and discharged to the Mississippi River.

Quad Cities operates a condenser cooling water system in open cycle mode. In this mode, cooling water is drawn from the Mississippi River into an intake canal, passes through the plant systems, and is discharged via diffusers into the Mississippi River

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(Outfalls 001 and 002). The maximum design flow is 2253 cfs or 1,011,000 gpm. Open cycle operation with the diffusers was initially permitted by the IEPA on December 22, 1983.

Relief Requested

A provisional variance is being requested from the restrictions in Special Condition 6B of the NPDES Permit, which limit the number of excursion hours to 1% (87.6 hours) of the hours in a 12-month period ending with any month and, which provide that water temperatures in the Mississippi River shall at no time exceed by more than 3 °F the maximum limits of 86 °F in July, 86 °F in August and 85 °F in September.

Specifically, Exelon requests that a provisional variance be issued to Quad Cities Station, which: (1) grants relief from the 87.6 hour limitation for an additional 100 hours; and (2) which increases the maximum limits for July and August from 86° F to 88° F and for September from 85° F to 87° F during the provisional variance period. During excursion hour periods these maximum standards can be exceeded by no more than 3° F. The provisional variance period will begin on the date that the 87.6 permitted excursion hours are exhausted or on the date that the Station first exceeds the current excursion hour limit (i.e., 89° in July and August or 88° F in September), which is predicted to occur on or about July 23, 2005, based on current weather conditions and ambient river temperature conditions. The provisional variance period will end on the date that the additional 100 hours are used, but in no case later than 45 days following the start of the provisional variance period.

Necessity for Request

Special Condition 6B of NPDES Permit limits the temperature at the edge of the mixing zone to the maximum monthly temperature standards set forth at 35 Ill. Admin. Code 303.341 (86 °F in July and August and 85 °F in September), except when the Station is using excursion hours, during which time the temperatures at the edge of the mixing zone may be 3°F warmer than these limits. As a rule, the Quad Cities Station has been able to operate well within both the 87.6 excursion hour limit and the 3°F allowance due to the fact that the ambient temperatures of the River (measured upstream of the discharge) generally remain below the non-excursion hour limit. Even when the ambient river temperatures begin to approach the non-excursion hour limits, the significant river flows, which are generally characteristic of the Mississippi River, are sufficient to allow the Station to avoid using a significant percentage of its excursion hour allowance. It is only during periods when the ambient river temperatures are very close to or exceed the non-excursion hour limits or during periods of extreme low flows that the Station is forced to use a significant number of its excursion hour allowance.

When the ambient river temperatures exceed the non-excursion hour limits, the Station has no option other than to use excursion hours, and once its allotment of excursion hours is depleted, the Station must cease operating to maintain compliance with the

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NPDES Permit. Partial deratings or adding cooling facilities (such as cooling towers) will not cause the Station to achieve compliance with the 87.6 excursion hour limit that already is exceeded even before any heat is added as a result of Station operations

Similarly, as ambient river temperatures begin to approach the temperatures allowed during excursion hour periods (i.e. 89°F in July and August and 88°F in September) the plant's ability to try to assure that river temperatures do not exceed these excursion hour temperatures through deratings becomes increasingly limited, and, ultimately, shutdown would become the only option. However, the instances in which ambient temperatures have reached these extreme temperatures have been very infrequent and short-lived.

During the drought years 1987 through 1989, Quad Cities Station used 45.2 hours in 1987, 108.3 hours in 1988 (allowed by Provisional Variance No. PCB-88-129), and 23.2 hours in 1989. From 1990 through 2000, high ambient river temperatures and low river flows resulted in Quad Cities Station using a total of 24.5 excursion hours. Between 1990 and 2000, maximum ambient river temperatures at the Quad Cities Station Intake exceeded 86 °F on five occasions (July 14, 15, 16, 1995, when Mississippi River flow was 45,000 cfs and July 30, 31, 1999, when Mississippi River flow was 94,000 cfs).

In 2001, daily maximum ambient temperatures in the Mississippi River at the Quad Cities Station Intake gradually increased from 76.9 °F on July 3rd to a high of 87.8 °F on August 8th. For eight days, maximum ambient river temperatures at the Quad Cities Station intake exceeded 86 °F. During that time, the Station used 57.5 hours of the 87.6 allowed. As in prior years, use of the excursion hours during 2001 was related to the ambient upstream river temperatures approaching and exceeding 86 °F. River flows were higher than normal during 2001, thereby reducing the number of excursion hours used.

As you are aware, Illinois is enduring its driest summer in 134 years on record, which began in March 2005. Ambient river temperatures recorded for July 2005 have been much warmer than normal. The daily maximum ambient temperatures in the Mississippi River at the Quad Cities Station intake have gradually increased from 75.2°F on July 5th to levels at or above the discharge limits. Specifically, on July 16th and 18th, 2005, the maximum ambient river temperature at the Quad Cities intake reached 86 °F. On July 17th, maximum ambient river temperatures at the intake exceeded 86 °F. These abnormal ambient river temperatures result from the combined effect of air temperature, dew point, wind speed and cloud cover. In addition, Mississippi River flow is presently at a dramatically low level of 39,000 cfs with a prediction to drop to 25,000 cfs by Sunday, July 24, 2005. Normal River flow for this time of year is 68,000 cfs. As a consequence of these unusually hot and humid weather conditions and drastically low flows, the capacity of the Mississippi River to dissipate heat has been drastically reduced beyond its normal capabilities.

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As a result of these extreme conditions, on Saturday, July 16, 2005, Quad Cities Station used 5 excursion hours, on Sunday, July 17th, the Station used 16 excursion hours, and on Monday July 18th, Quad Cities used 7.5 excursion hours, totaling 28.5 excursion hours to date.

Based on long range weather forecasts, it is very likely that the unusual drought and temperature conditions experienced this summer will continue for several weeks, causing the ambient river temperatures to exceed the non-excursion hour limits for significant periods of time, and, at times, to approach the excursion hour limits. Under these circumstances, it is expected that the Station may use up all of its permitted excursion hours or contribute to River temperatures exceeding excursion hours limits on or about July 23, 2005. Unless relief is granted by way of this provisional variance request, it is likely that the Station will be forced to shut down for correspondingly significant durations.

In cooperation with IEPA's request that Exelon explore long-term thermal relief options, Exelon retained: (1) expert biologists to conduct a Fisheries Biothermal Assessment, which defines fish responses to thermal impacts; and (2) a renowned expert on fresh water mussels to perform a Unionid Mussel Biothermal Assessment, which evaluates possible impacts to mussels from plant operations under existing and proposed thermal conditions. Exelon has shared drafts of these studies and its draft long-term regulatory relief proposal with federal and State regulators, including IEPA, USEPA, USFWS, Iowa DNR, and Illinois DNR, with whom related discussions are currently underway. The next scheduled meeting with these agencies is scheduled for early August. The goal of Exelon's long-term regulatory relief proposal is to substantially mitigate the need for the emergency type relief requested herein. However, current and forecasted extreme weather, drought conditions and lowering river flows compel this urgent request for relief.

Assessment of Environmental Impacts

Because Quad Cities Station is not proposing to increase cooling water flows or increase the temperature of cooling water discharges, there will be no increase in impingement or entrainment as a result of the issuance of the requested Provisional Variance. Additionally, because the ambient river temperature increase has been gradual, resident fish species have either acclimated to the higher temperature or have found thermal refuge. Therefore, resident fish species will not be subject to any heat shock as a result of increasing the allotment of excursion hours for Quad Cities Station.

The biological studies undertaken as part of Exelon's above-mentioned investigation of long-term, permanent relief options considered the effects on species of fish and shellfish that could result from increasing the number of excursion hours available to the plant. While these studies currently are under review, they fully support the conclusion that granting the requested Provisional Variance will not cause significant or unacceptable adverse effects to these species. Species of fish that are likely to be

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Impacted from being exposed to temperatures in the excursion zone will already have taken refuge from the higher than normal ambient river temperatures. Therefore, no fish mortality should result from operations authorized by the Provisional Variance.

Shellfish do not have similar thermal avoidance capabilities. However, the recently conducted biological studies show that the mussel (unionid) species in beds that are closest to the plant's discharge are generally more temperature tolerant, and are capable of surviving relatively short-term elevated thermal exposures. Species thought to be less thermally-tolerant inhabit beds located further downstream, in the Cordova Bed, located about 1 mile downstream from the plant. However, because the considerable distance between the plant to the Cordova and the flow characteristics of the River (that cause much of the plant's thermal discharge to avoid the Cordova Bed) the Provisional Variance should not cause any appreciable harm to mussel species downstream of the plant.

Alternatives to Requested Relief

Quad Cities Station generally uses excursion hours during periods of extreme heat and low-river flows. Due in part to the mixing capacity provided by the Mississippi River, and the fact that ambient river temperatures rarely exceed the non-excursion hour NPDES Permit limits, only a relatively small percentage of the permitted excursion hours typically are used to cover any one of these periods. Additional hours are kept in reserve to deal with future periods of extreme weather or other contingencies. However, this year, the unusually dry, hot and humid weather conditions have caused the ambient river temperatures to approach and exceed the non-excursion hour discharge temperature limits more often and for longer periods of time than normally occurs. As a result, Quad Cities Station was required to use a substantial number of the permitted excursion hours and has too few in reserve to deal with projected weather conditions during the rest of July, August and September. Currently, Quad Cities is expected to run out of permitted excursion hours on or about July 23, 2005. In addition, ambient River temperatures may begin to approach the current excursion hour limit for July (i.e. 89°F) in the next few days.

Unless a provisional variance is issued, when the Station runs out of permitted excursion hours, it will have to shut down during all times that the ambient river temperatures are at or above the non-excursion hour limit, or when ambient temperatures approach the excursion hour limits. Based on river temperatures recorded so far this summer and long range weather projections for the balance of the season, it is likely that there will be a number of extended periods during which ambient river temperatures will be at or above the non-excursion hour limits, and infrequent periods when the temperatures approach even the excursion hour limits.

As previously explained, neither the option of derating the units nor of obtaining additional temporary cooling capacity will allow the Station to maintain compliance with the limitation of 87.6 excursion hours if the ambient river temperatures exceed the

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applicable temperature limits. The only option would be for the Station to shut down once the ambient River temperatures are at or exceed 86° F in July and August, or 85° F in September. Similarly, without relief from the excursion hour limits, plant shut down would be required if the ambient temperatures approach these limits.

Without the power that Quad Cities Station could generate as a result of the requested provisional variance, there is increased risk that the energy needs of Exelon's customers may not be met during the next few weeks, when there is the greatest demand for electricity resulting from extreme heat conditions. In addition, depending on the operating status of other generating stations in the area, Quad Cities Station continued operation may be essential for voltage support for the Commonwealth Edison Company and Mid American Transmission systems.

Mitigative Actions to be Taken During the Variance Period

During the period when the Station uses any additional excursion hours authorized by the requested provisional variance, Quad Cities Station will do the following: (1) continuously monitor the intake and discharge temperatures and assess water temperatures at the edge of the mixing zone specified in the NPDES Permit; (2) on a daily basis, inspect the intake and discharge areas to assess any mortalities to aquatic life, and report the results of these monitoring activities to the Agency within 30 days of the expiration of the provisional variance (or such other time as agreed upon by the Agency); and (3) notify the Agency of any significant adverse environmental conditions observed that might be caused by operations authorized by the provisional variance, including mortalities to fish or other aquatic life, investigate the cause of such conditions, provide the Agency updates regarding the situation, including when normal conditions return, and submit a report to the Agency regarding these matters within 30 days of the expiration of the provisional variance period (or such other time as agreed upon by the Agency).

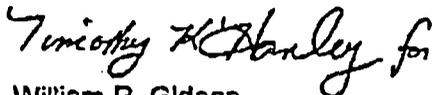
Summary

Exelon seeks relief from Special Condition 6B of Quad Cities NPDES permit as described above. For the reasons described above, Exelon believes that not granting this provisional variance to Quad Cities Station will impose an arbitrary and unreasonable hardship. A negative decision will almost certainly result in a loss of generating capacity in Northern Illinois during periods of great electrical demand and could impact voltage support for the Commonwealth Edison Company and Mid American Transmission systems. There are presently no provisional variance orders in effect for Quad Cities Station.

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If you should have any questions regarding these matters, please feel free to contact Vicki Neels at (309) 227-3200 or Mark Stuhlman at (309) 227- 2765 from Quad Cities or John Petro, Senior Environmental Analyst, Exelon Generation at (630) 657-3209.

Very Truly Yours,



William R. Glendon
Plant Manager
Quad Cities Station

CC: Marcia Wilhite, IEPA
Roger Calloway, IEPA
Blaine Kinsley, IEPA
Connie Tonsor, IEPA



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

217/782-0610

December 17, 2001

RECEIVED
DEC 17 2001

MAJON

Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, Illinois 60555

IEPA

Re: Exelon Generation Company, LLC
Quad Cities Generating Station
NPDES Permit No. IL005037
Modification of NPDES Permit (After Public Notice)

Gentlemen:

The Illinois Environmental Protection Agency has reviewed the request for modification of the above-referenced NPDES Permit and issued a public notice based on that request. The final decision of the Agency is to modify the Permit as follows:

Special Condition 6 of the NPDES permit has been changed to reflect a modification of the Temperature Monitoring Curve which is used in conjunction with power capacity and stream data to determine compliance with the the temperature limits at the edge of the mixing zone 500 feet downstream of the diffusers. The compliance language of Special Condition 6 has also been reorganized to provide greater clarity in establishing what data is to be collected and the frequency of collection.

Enclosed is a copy of the modified Permit. You have the right to appeal this modification to the Illinois Pollution Control Board within a 35 day period following the modification date shown on the first page of the permit.

Should you have any question or comments regarding the above, please contact Blaine Kinsley of my staff.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:BAK:99123001.daa

Attachment: Modified Permit

cc: Records
Compliance Assurance Section
Peoria Region
US EPA

GEORGE H. RYAN, GOVERNOR

NPDES Permit No. IL0005037

Illinois Environmental Protection Agency
Bureau of Water, Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Iowa Department of Natural Resources
Wastewater Section
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50316

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified (NPDES) Permit

Expiration Date: May 31, 2005

Issue Date: May 26, 2000
Effective Date: June 1, 2000
Modification Date: December 17, 2001

Name and Address of Permittee:

Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, Illinois 60555

Facility Name and Address:

Quad Cities Generating Station
22710 206th Avenue North
Cordova, Illinois 61242
(Rock Island County)

Discharge Number and Name:

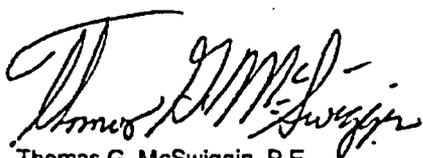
001/002 Open Cycle Diffusers
B01 Wastewater Treatment System
C01 Sanitary Waste Treatment Plant
A02 Radwaste Treatment System Blowdown

Receiving Waters:

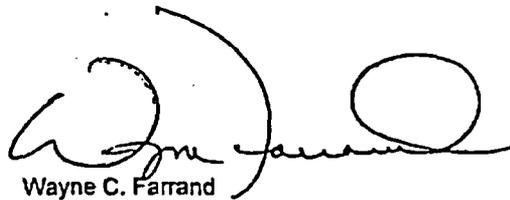
Mississippi River
Mississippi River
Mississippi River
Mississippi River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



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NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 and 002 Open Cycle Diffusers

This discharge consists of:

Approximate Flow

Main Condenser Cooling Water	970.4 MGD
House Service Water	40MGD
Radwaste Treatment System Blowdown*	0.051 MGD
Wastewater Treatment Plant Effluent	0.034 MGD
Sanitary Waste Treatment Plant Effluent	0.008 MGD
House Service Water Strainer Backwash	0.126 MGD
Intake Screen Backwash	0.508 MGD
Units 1 and 2 Oil/Water Separators	Intermittent
Fish Culture Facilities	Intermittent
Crib House Floor Drain Sump**	

Flow (MGD)		Daily	24 hr total
pH	See Special Condition No. 1	1/Month	Grab
Total Residual Chlorine/Total Residual Oxidant***	0.2	1/Week	Grab
Temperature	See Special Condition No. 6	Daily	Continuous Recording

*This sub-waste stream discharges only through Outfall 002, all other sub-waste streams are common to both Outfalls 001 and 002.
 **This sub-waste stream is an alternate routing from Outfall 001(b). See Special Condition 18.
 ***See Special Conditions 3 and 4. The discharge limit of 0.2 mg/l applies when chlorine compounds are used as the sole biocide. See Special Condition 15 for requirements when bromine biocides are used.

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1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		
Outfall(s): B01 Wastewater Treatment System****						
This discharge consists of:*****					Approximate Flow (MGD)	
Flow (MGD)					1/Week	24 hr total
Total Suspended Solids			15	30	1/Week	8 hr Composite
Oil and Grease			15	20	1/Month	Grab
Outfall(s): C01 Sanitary Waste Treatment Plant (DMF 0.06 MGD)						
					Approximate Flow 0.008 (MGD)	
Flow (MGD)					2/Month	24 hr total
pH	See Special Condition No. 1				2/Month	Grab
BOD ₅	15	30	30	60	2/Month	24 hr Composite
Fecal Coliform	See Special Condition No. 9				2/Month	Grab
Total Suspended Solids	15	30	30	60	2/Month	24 hr Composite

****Wastewater Treatment System effluent is routed through an oil/water separator prior to discharge.

*****The listed contributory waste streams all pass through an oil/water separator (Unit 1/2 oil/water separator) prior to entering the wastewater treatment plant. Crib House Floor Drain Sump water may be discharged directly to Outfalls 001/002 open cycle diffuser as an alternate route. See Special Condition 18.

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PARAMETER	LOAD LIMITS		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	lbs/day		LIMITS mg/l			
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): A02 Radwaste Treatment System Blowdown*****

This discharge consists of:

Approximate Flow 0.0422 (MGD)

- Reactor Water
- Contaminated Floor Drains
- Equipment Drains
- Condensate Demineralizer Filter Backwash
- Reactor Cleanup Demineralizer Filter Backwash
- Laboratory Wastewater
- Sodium Pentaborate Tank Testing Drainage

Flow (MGD)				Daily	24 hr total
Total Suspended Solids		15	30	1/Week When Discharging	Grab
Oil and Grease		15	20	1/Month When Discharging	Grab
Boron	See Special Condition No. 17			1/Discharge Period	Grab

*****The permittee shall comply with the Nuclear Regulatory Commission Title 10 (10 CFR 0.735-1) regulations for discharge and monitoring of radioactive wastewater discharges. Wastewater is generally batch treated and recycled, therefore the daily average discharge rate from Outfall No. A02 does not reflect influent flow rates.

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Special Conditions

SPECIAL CONDITION 1. The pH shall be in the range 6.0 to 9.0.

SPECIAL CONDITION 2. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 3. A minimum of three grab samples shall be taken at approximately five minute intervals in the discharge bay at the diffuser pipes during the respective sodium bromide and/or chlorine injection period of a generating unit allowing for lag time between the initiation of injection and the point of sampling before the first grab sample is taken. The individual values and average (mean) values for each set of samples shall be reported including the Unit sampled, the times samples were collected, the time and duration of the sodium bromide and/or chlorine dosing period plus the rate and amount (lbs.) of sodium bromide and/or chlorine applied. For purposes of reporting, the daily discharge shall be the average of all non-zero values measured in a day and the monthly average shall be the average of all daily discharges.

For the purpose of determining compliance, the highest single instantaneous TRC/TRO concentration measured on any day will be regarded as the daily maximum concentration. Total residual oxidant concentration shall be measured and reported in terms of total residual chlorine.

SPECIAL CONDITION 4. Neither total residual chlorine nor total residual oxidant may be discharged from any unit's main condenser for more than two hours in any one day. Not more than one of the unit's main condensers may discharge total residual chlorine or total residual oxidant at any one time unless the permittee can demonstrate to the Agency that doing so will not violate water quality limitations of the State. Simultaneous chlorination of the generating units will require a modification of the permit. The Agency will public notice the permit modification.

SPECIAL CONDITION 5. Nothing in this permit affects or abrogates the responsibilities or commitments of the Permittee herein as set forth in the agreement entered into by the Permittee in the consolidated cases of Izaak Walton League of America, et. al. v. Schlesinger, No. 2208-71 and People of the State of Illinois, et. al, v. United States Atomic Energy Commission, No. 2208-71 (U.S. District Court, District of Columbia).

SPECIAL CONDITION 6. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone:

- A. Maximum temperature rise above natural temperature must not exceed 5°F.
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F. (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	45	45	57	68	78	85	86	86	85	75	65	52

- C. The area of diffusion of an effluent in the receiving water is a mixing zone, and that mixing zone shall not extend:
 - i) over more than 25 percent of the cross sectional area or volume of flow in the Mississippi River;
 - ii) more than 26 acres of the Mississippi River

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The following data shall be collected and recorded:

1. Weekly determination of the river flow rate (daily when the river flows fall below 23,000 cfs).
2. Daily determination of the ambient river temperature (at or upstream of station intakes).
3. Daily recording of station discharge rate.
4. Daily continuous recording of the temperature of the station discharge.
5. Daily determination of station load.
6. As deemed necessary according to the above data, daily determination of the cross-sectional average temperature at the 500 foot downstream cross-section in the river.

Compliance with the thermal limitations of Special Condition 6 shall be demonstrated as follows:

1. When river flow is 21,000 cfs or greater and the ambient river temperature is 5° F or more lower than the monthly limiting temperatures, the temperature monitoring curve¹ establishes that the permittee is in compliance for all power generation levels;
2. When the river flow is less than 21,000 cfs and/or the ambient river temperature is within 5° F of the monthly limiting temperatures, the permittee shall demonstrate compliance using either:
 - a. Plant load, river flow, ambient river temperature, and the temperature monitoring curve, or
 - b. Field measurement² of the river cross-sectional average temperature taken 500 feet downstream of the diffusers.

In the event that compliance monitoring shows that the permittee has exceeded the monthly limiting temperature, the number of hours of such exceedance shall be reported on the permittee's Discharge Monitoring Report.

¹The temperature monitoring curve identified as Figure 2 in the December 2000 "Revised Temperature Monitoring Curve for Quad Cities Nuclear Generating Station".

²When conditions such as ice formation render the Mississippi River inaccessible to marine activity, the Permittee may demonstrate compliance with the thermal limitations of Special Condition 6 by using the most recent field measurement data collected at a river flow equal to or less than the flow for which field measurement data cannot be collected. The most recent field measurement data shall be normalized to the power production level for the day when the river was inaccessible.

SPECIAL CONDITION 7. There shall be no discharge of polychlorinated biphenyl compounds from any discharge.

SPECIAL CONDITION 8. There shall be no discharge of complexed metal bearing wastestreams and associated rinses from chemical metal cleaning, unless this permit has been modified to include the new discharge.

SPECIAL CONDITION 9. The daily maximum fecal coliform count examined twice per month shall not exceed 400 per 100 ml.

SPECIAL CONDITION 10. Commonwealth Edison Company's demonstration for the Quad Cities Nuclear Power Station in accordance with Section 316(a) and 316(b) of the Clean Water Act was approved by IEPA by letter dated July 28, 1981 and by the Iowa Department of Environmental Quality (IDEQ) by letter dated May 18, 1981. Based on these conclusions the following actions by the permittee are required:

- A. The permittee shall monitor fish impingement once per week, year round. Each year's data shall be tabulated and compared to historical fish impingement data for the same period with the results submitted to IEPA Permit Section and Compliance Assurance Section by July 28, each year.
- B. The permittee shall monitor water temperatures as described in Special Condition 6.

SPECIAL CONDITION 11. A permittee who wishes to establish the affirmative defense of upset as defined in 40 CFR 122.41(n) shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: An upset occurred and that the permittee can identify the cause(s) of the upset; the permitted facility was at the time being properly operated; the permittee submitted notice of the upset as required in standard condition 12 of this permit; and the permittee complied with any remedial measures required in standard condition 4 of this permit.

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SPECIAL CONDITION 12. Discharge is allowed from the Unit 1 oil/water separator and the Unit 2 oil/water separator in accordance with the Spill Prevention Control and Countermeasure Plan (SPCC). If an applicable effluent standard or water quality related effluent limitation is promulgated under Section 301 and 302 of the Clean Water Act (CWA) and that effluent or water quality standard or limitation is more stringent than any effluent or water quality limitations in this permit, or controls a pollutant not limited in this NPDES Permit, the Agency shall revise or modify the permit in accordance with the promulgated standard and shall notify the permittee.

SPECIAL CONDITION 13. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

SPECIAL CONDITION 14. The completed Discharge Monitoring Report forms shall be mailed and received by the IEPA no later than the 28th day of the following month, unless otherwise specified by the permitting authority. Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62706
Attention: Compliance Assurance Section

SPECIAL CONDITION 15. A discharge limit of 0.05 mg/l (instantaneous maximum) shall be achieved for total residual oxidant when bromine biocides are used for condenser biofouling control, in accordance with Special Condition 3.

SPECIAL CONDITION 16. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 17. The permittee shall monitor for boron during periods when Sodium Pentaborate is discharged as a result of tank testing and connection drainage from components in the radwaste treatment system. The effluent boron concentration in the subject discharge shall not cause the receiving stream to exceed the water quality standards in Section 302 of 35 Ill. Adm. Code, Chapter 1, Subtitle C. This permit may be modified to include effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice the permit modification.

SPECIAL CONDITION 18. Crib House Floor Drain Sump shall only be routed to the Outfall 001/002 Open Cycle Diffusers during periods when increased pump seal cooling water leakage is significant enough so as to overload the wastewater treatment plant. Alternate routing of this discharge shall not take place in lieu of proper maintenance and operation of the circulating pumps.

ATTACHMENT H
Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, Ch. 111 1/2 Ill. Rev. Stat., Sec. 1001-1052 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended, 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.
- (9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment including monitoring and control equipment, practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.
- (10) **Monitoring and records.**
 - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.
 - (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
 - (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.
 - (a) **Application.** All permit applications shall be signed as follows:
 - (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
 - (b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a); and
 - (2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and
 - (3) The written authorization is submitted to the Agency.

- (c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (12) Reporting requirements.
- (a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
- (e) Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:
- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 hours;
- The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- (f) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or (e), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(a).
- (g) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) Transfer of permits. A permit may be automatically transferred to a new permittee if:
- (a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
- (b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees; and
- (c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (14) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
- (1) One hundred micrograms per liter (100 ug/l);
- (2) Two hundred micrograms per liter (200 ug/l) for acetone and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
- (4) The level established by the Agency in this permit.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
- (15) All Publicly Owned Treatment Works (POTW) must provide adequate notice to the Agency of the following:
- (a) Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to Sections 301 or 305 of the Clean Water Act if it were directly discharging those pollutants; and
- (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (16) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
- (1) User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
- (2) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
- (3) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (17) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.
- (18) Any authorization to construct issued to the permittee pursuant to 35 Bl. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
- (19) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
- (20) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.
- (21) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (22) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit shall, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (23) Collected screening, sludges, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
- (24) In case of conflict between these standard conditions and any other conditions included in this permit, the other conditions shall govern.
- (25) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Bl. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board.
- (26) The provisions of this permit are severable, and if any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, IL 61242-9740

www.exeloncorp.com

PM-05-009

July 22, 2005

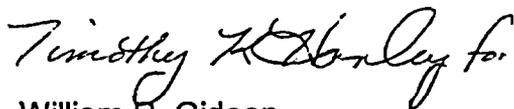
Mr. Roger Callaway
Compliance Assurance Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: Quad Cities Nuclear Power Station NPDES Permit No. IL0005037
Provisional Variance Request – Emergency Application IEPA 05-07

Dear Mr. Callaway:

Thank you for the time, consideration and attention IEPA dedicated to Exelon's provisional variance request. We sincerely appreciate all of your efforts. Below is Quad Cities Station's Certificate of Acceptance of the Provisional Variance Order issued by IEPA in this matter.

Very Truly Yours,



William R. Gideon
Plant Manager
Quad Cities Station

Certificate of Acceptance

I(We), Timothy K Hanley, hereby accept and agree to be bound by all terms and conditions of the provisional variance granted by the Agency in matter IEPA 05-07 dated July 22, 2005.

Exelon Generation Co. L.L.C/Quad Cities Station
Petitioner

Timothy K Hanley
Authorized Agent

Acting Plant Manager
Title

7/22/05
Date