

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

August 6, 1987

Docket No.: 50-269

Mr. H. B. Tucker, Vice President Nuclear Production Department Duke Power Company 422 South Church Street Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: CONFIRMATORY ORDER MODIFYING LICENSE EFFECTIVE IMMEDIATELY (TAC 65830)

Reference: Oconee Nuclear Station, Unit 1

The Nuclear Regulatory Commission has issued the enclosed Order for Oconee Nuclear Station, Unit 1. This Order confirms the commitments of Duke Power Company (the licensee) as stated in your letters dated April 6 and 7 and July 24, 28, 29, and 31, 1987.

By letter dated April 10, 1987, the NRC issued a Confirmatory Order for Oconee Nuclear Station that established new interim maximum allowable power levels and corresponding changes to the reactor protection system (RPS) high-flux trip setpoint for Unit 1 while the low-pressure injection (LPI) coolers and the reactor building cooling unit (RBCU) coolers were in a degraded mode.

The RBCUs and LPI provide decay heat removal after the design-basis accident, which is the loss-of-coolant accident. Heat is transferred through the LPI and RBCU coolers to the lake. To ensure adequate heat removal, the Final Safety Analysis Report for Oconee states that a lake temperature of 75°F was used for certain equipment design and analysis. The lake water temperature is measured at the condenser cooling water (CCW) inlet. You have informed the NRC that lake water temperatures have exceeded 75°F in 9 of the past 11 years. Your studies of the effects of higher lake water temperatures indicate a need to reduce the maximum allowable power level below that specified by the April 10, 1987 Order. Accordingly, we have issued the attached Confirmatory Order imposing temporary additional restrictions on maximum allowable power level as a function of lake water temperature.

This Order establishes new interim maximum allowable power levels and corresponding changes to the RPS high-flux trip setpoint for Oconee Unit 1 while the lake is at elevated temperatures and the low-pressure injection system coolers and the reactor building cooling unit coolers are in a degraded mode.

The Order will be in place until the end of Cycle 10, which is currently scheduled to end September 2, 1987. During the refueling outage at the end

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### Mr. H. B. Tucker

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of Cycle 10, in accordance with the requirements of the April 10, 1987 Order, the Unit 1 RBCU and LPI coolers will be cleaned, tested, evaluated for full-power operation, and approved for full-power operation by the Region II Regional Administrator before they are returned to service. This evaluation will consider the impact elevated lake water temperature has on the equipment.

In accordance with 10 CFR 50.59 you may justify the continued full-power operation of Oconee Units 2 and 3 in the event of elevated lakewater temperature as long as the Technical Specifications on the reactor high-flux trip setpoint do not have to be revised. Preliminary calculations indicate that Oconee Unit 2 setpoints will have to be reduced when lake water temperature is at or above 80°F. Reduced power operation for Oconee Unit 2 will be reviewed separately.

On July 31, 1987 at 3:00 pm, you received verbal authorization with a temporary waiver of compliance to operate Unit 1 at lake water temperatures above 75°F. To ensure that Unit 1 would operate at reduced RPS high flux trip setpoint when the lake reached 75°F, we understand that in anticipation you reduced the setpoint earlier in the week when lake water temperature reached  $74.5^{\circ}$ F.

A copy of this Order is being filed with the Office of the Federal Register for publication.

> Sincerely, Steven A. Varga, Director Division of Reactor Projects I/II

Enclosure: Order

cc w/enclosure: See next page

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Docket File NRC PDR T. Murley/J. Sniezek D. Nash, PTSB ARM/LFMB OGC-Bethesda

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\* SEE PREVIOUS CONCURRENCE

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Mr. H. B. Tucker Duke Power Company

cc: Mr. A. V. Carr, Esq. Duke Power Company P. O. Box 33189 422 South Church Street Charlotte, North Carolina 28242

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Honorable James M. Phinney County Supervisor of Oconee County Walhalla, South Carolina 29621 Oconee Nuclear Station Units Nos. 1, 2 and 3

Mr. Paul Guill Duke Power Company Post Office Box 33189 422 South Church Street Charlotte, North Carolina 28242

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### UNITED STATES OF AMERICA

#### NUCLEAR REGULATORY COMMMISSION

In the Matter of DUKE POWER COMPANY

Docket No. 50-269

(Oconee Nuclear Station, Unit 1)

## CONFIRMATORY ORDER MODIFYING LICENSE (EFFECTIVE IMMEDIATELY)

1.

Duke Power Company (DPC or the licensee) is the holder of Facility Operating License No. DPR-38, which authorizes the operation of Oconee Nuclear Station, Unit 1 (the facility) at power levels not to exceed 2568 megawatts thermal for each unit. The facility consists of a pressurized water reactor plant located at the licensee's site in Oconee County, South Carolina.

II.

For Oconee Unit 1, the reactor building cooling units (RBCUs) provide decay heat removal after the design-basis accident, which is the loss-ofcoolant accident (LOCA). In a post-accident situation, all three coolers operate continuously circulating the steam-air mixture past the cooling tubes of the RBCU to transfer heat from the containment atmosphere to the lowpressure service water (LPSW) system. Also, the low-pressure injection (LPI) system (in the recirculation mode) cools the water from the reactor building sump. For long-term cooling, the LPI pumps recirculate injected water from the reactor building sump to the core. Heat is transferred through the LPI coolers to the LPSW system.

By telephone on April 3, 1987, and by letter dated April 6, 1987, the licensee informed the NRC staff that recent fouling in the LPSW system (lake



water) side of the RBCUs and LPI coolers had resulted in an inability to transfer the total LOCA heat loads. Consequently, the licensee had reduced power level in Unit 1 to a maximum of 91.5% to match LOCA heat transfer requirements with the capability of the degraded heat exchangers.

In its letter of April 6, 1987, the licensee committed (1) to establish new interim maximum allowable power levels, (2) to change the reactor protection system (RPS) high-flux trip setpoints for Unit 1, and (3) to specify that the third non-engineered safeguards LPI pump for Unit 1 must be operable.

On April 10, 1987, the NRC issued an immediately effective Order confirming the licensee's commitments and establishing new interim maximum allowable power levels and corresponding changes to the RPS high-flux trip setpoint for Unit 1 while the LPI system coolers and the RBCUs are in a degraded mode.

By letters dated July 24, 28, 29, and 31, 1987, the licensee informed the NRC of the effects for Unit 1 of elevated water temperatures of Lake Keowee. In the letter dated July 24, 1987, the licensee stated that the lake water temperature is increasing and is expected to exceed the design-basis water temperature (75°F) used in the accident analysis documented in the Final Safety Analysis Report (FSAR) for the plant. The licensee stated that the lake temperature has exceeded 75°F in 9 of the past 11 years.

To determine the impact of higher lake water temperatures on station systems and components, the licensee evaluated the effects of temperatures of 80°F and 85°F. The results of the evaluation indicated that under elevated lake water temperature conditions, there is a need to reduce the maximum allowable power level below that specified by the Order of April 10, 1987.

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The licensee has committed to reduce power level until the Unit 1 heat exchangers have been fully cleaned and tested. That commitment is confirmed by this order which will be in place until the unit shuts down for refueling at the end of Cycle 10, which is currently scheduled for September 2, 1987. In accordance with the April 10, 1987 Order, the RBCUs and the LPI coolers will be cleaned, tested, evaluated for full-power operation, and approved for full-power operation by the Region II Regional Administrator before they are returned to service following the refueling outage at the end of Cycle 10. That evaluation will consider the impact elevated lake water temperature has on the equipment. In addition, the RPS high flux trip setpoint will be reduced to correspond to the appropriate maximum allowable power level to ensure that the power level will be maintained below the allowed maximum power level.

#### III.

In the July 24 and 29, 1987 letters, the licensee stated that the calculational methods used in determining the heat exchanger performance at the higher lake temperatures were the same as those used and documented in the April 6, 1987 submittal on heat exchanger fouling. The staff had reviewed these methods and found them acceptable before issuing the Confirmatory Order dated April 10, 1987. Using this same calculational technique, the licensee has determined that for Unit 1, power level reductions to 89.6% and 85.3% are appropriate when the lake water temperature exceeds 75°F and 80°F, respectively. These restrictions apply only until the end of Cycle 10 for Unit 1, when the heat exchangers will be cleaned and tested.

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The licensee provided a conservative calculation that compared the LOCA heat removal requirements with the current degraded heat exchanger capacity to ensure (1) that the post-LOCA equipment qualification temperature limits will not be exceeded and (2) that required decay heat removal requirements can be satisfied. This calculation indicated that a scram from the power levels set out above will produce decay heat levels within the heat exchanger capabilities. Actual heat transfer and flow rates through the degraded heat exchangers have been confirmed by testing. The licensee has committed to reduce the RPS high-flux trip setpoint to 91.5% of rated power for lake water temperatures up to 75°F, to 89.6% for temperatures between 75°F and 80°F, and to 85.3% for temperatures between 80°F and 85°F. The setpoint reductions will ensure that these power levels are not exceeded until the heat exchanger fouling is corrected. If lake temperatures exceed 85°F, Unit 1 will be shutdown.

The staff has reviewed the licensee's heat transfer calculational method and assumptions and has reviewed the overpower trip setpoints. On the basis of these reviews, the staff concurs that, with these sepoints, adequate accident heat removal capacity will be maintained with the current degraded heat exchangers and the projected elevated lake water temperatures.

The licensee has also evaluated the effects of the higher lake water temperature on other equipment and has concluded that the accident analysis is not affected. In the submittal dated July 28, 1987, the licensee stated that all of the equipment served by the service water system was purchased with a design inlet water temperature specification of 85°F, except for the turbine-driven emergency feedwater pump lube oil cooler. This cooler has a design inlet temperature of 78°F and is designed to control the lube oil temperature to between 130°F and 160°F. With the 78°F inlet temperature, the lube

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oil cooler has been tested to verify its capability to maintain an oil temperature of  $130^{\circ}$ F. Thus a 7°F increase in inlet water temperature will result in an oil temperature of approximately  $137^{\circ}$ F, which is within the  $130^{\circ}$ F -  $160^{\circ}$ F temperature range for acceptable turbine operation. The staff concurs with the licensee's assessment.

In the July 28, 1987 submittal, the licensee also stated that there are 18 temperature sensors that monitor lake water temperature, with the results printed hourly by the plant computer system. The temperature monitoring instrumentation is calibrated during every refueling outage. The peak lake water temperature is also recorded daily. The licensee committed to reduce the power level setpoints to the values indicated above when the lake temperature reaches 74.5°F and 79.5°F, as appropriate, to provide assurance that the plant will be operated in accordance with its design basis and within the requirements of the Order.

In the July 28 and 29, 1987 submittals, the licensee further stated that all of the design-basis accidents identified in the FSAR for Oconee Unit 1, and their attending single active failures, have been reviewed. This review confirmed that, with an assumed 85°F lake water temperature and appropriate reductions in power level, there will be no adverse impact on the public health and safety beyond that identified in the FSAR.

On the basis of the staff's previous approval of the licensee's calculational methodology, the verification of the operability of the components with an increased lake water temperature of 85°F based upon reduced power levels, and the licensee's assurance that the lake water temperature is being appropriately monitored with action taken to reduce power level and the highflux reactor trip setpoint as required, I conclude that there is reasonable

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assurance for safe plant operation until the end of Cycle 10. I further conclude that the heat removal capability provided at the reduced power level is adequate to ensure that no adverse consequences to the health and safety of the public will result beyond those identified in the FSAR.

I find the licensee's commitments acceptable and conclude that the plant's safety can be maintained until the fouling can be corrected and lake water temperatures decrease, and the unit returns to full power. I have determined that these commitments are required in the interest of the public health and safety and should, therefore, be confirmed by an immediately effective Order.

### IV.

Accordingly, pursuant to Sections 103, 161b, and 161i, of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.204 and Part 50, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, that license DPR-38, is amended as follows:

- If the lake water temperature exceeds 74.5°F, Oconee Unit 1 operation will be at reduced power levels and the RPS high flux trip setpoint will be reduced, as follows:
  - a. if the lake water temperature is equal to or less than 80°F, the RPS high flux trip setpoint shall be set so that the maximum allowable power level shall not exceed 89.6% rated power;
  - b. if the lake water temperature is greater than 79.5°F but equal to or less than 85°F, the RPS high flux trip setpoint shall be set so that the maximum allowable power level shall not exceed 85.3% rated power;

and

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- c. if Take water temperature exceeds 85°F, Unit 1 shall proceed to shut down in accordance with Technical Specification 3.0.
- 2. The peak lake water temperature shall be recorded daily.
- 3. Oconee Unit 1 shall not operate at any power level after the end of Cycle 10 unless the Regional Administrator, Region II, has approved the LPI and RBCU coolers for full power operation.

The Regional Administrator, Region II may relax or rescind any of the above conditions upon a showing by the licensee of good cause.

The licensee or any other person who has an interest adversely affected by this Order may request a hearing on this Order within 20 days of the date of its issuance. Any request for a hearing shall be addressed to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy shall be sent to the Office of the General Counsel, Assistant General Counsel for Enforcement, at the same address, and the Regional Administrator, Region II, at 101 Marietta Street, N.W., Suite 2900, Atlanta, Georgia 30303. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which the petitioner's interest is adversely affected by this Order and should address the criteria set forth in 10 CFR 2.714(d). A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

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If a hearing is to be held, the Commission will issue an Order designating the time and place of any such hearing. If a hearing is held, the issue to be considered at the hearing shall be whether this Order should be sustained.

Dated at Bethesda, Maryland, this

Ett of august 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

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James H. Sniezek, Deputy Director Office of Nuclear Reactor Regulation

**\*SEE PREVIOUS CONCURRENCE** 

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## April 16, 1987

# DOCKET NO.S. 50-269/270/287

MEMORANDUM FOR:	Rules and Procedures Branch Division of Rules and Records Office of Administration			
FROM:	Office of Nuclear Reactor Regulation			
SUBJECT:	Oconee Nuclear Station, Units 1, 2, and 3 (Duke Power Company)			

One signed original of the *Federal Register* Notice identified below is enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (5, 5) of the Notice are enclosed for your use.

	Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
	Notice of Receipt of Partial Application for Construction Permit(s) and Facility
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	Notice of Consideration of Issuance of Amendment to Facility Operating License.
	Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
	Notice of Availability of NRC Draft/Final Environmental Statement.
	Notice of Limited Work Authorization.
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	Notice of Issuance of Construction Permit(s).
	Notice of Issuance of Facility Operating License(s) or Amendment(s).
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	Notice of Granting Exemption.
	Environmental Assessment.
	Notice of Preparation of Environmental Assessment.
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Office of Nuclear Reactor Regulation

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Docket Nos. 50-269, 50-270 and 50-287

Mr. Hal B. Tucker Vice President - Nuclear Production Duke Power Company P. O. Box 33189 422 South Church Street Charlotte, North Carolina 28242

Dear Mr. Tucker:

SUBJECT: CONFIRMATORY ORDER MODIFYING LICENSE EFFECTIVE IMMEDIATELY

Reference: Oconee Nuclear Station, Units 1, 2 and 3

The Nuclear Regulatory Commission has issued the enclosed Confirmatory Order for Oconee Nuclear Station, Units 1 and 2. This Order confirms your commitments, as stated in your letters dated April 6 and 7, 1987.

This Order establishes new interim maximum allowable power levels and corresponding changes to the reactor protection system high flux trip setpoints for Oconee Units 1 and 2 while the low pressure injection system coolers and the reactor building cooling unit coolers are in a degraded mode from their intended operable condition at full power. The Order also specifies operability of the third non-engineered safeguards low pressure injection (LPI) pump for Units 1 and 2. This Order discusses the status of Unit 3 also.

On April 3, 1987, you received verbal authorization to operate at reduced power with a temporary waiver of compliance to midnight, April 8, 1987; confirmed by a letter from the Commission on April 7, 1987. On April 8, 1987, this authorization and temporary waiver was extended by the Commission staff to 5:00 p.m., April 10, 1987. By application dated April 6, 1987 with supplements, you applied for an emergency license amendment to govern operation of the Oconee Units 1 and 2 while the coolers identified above were in a degraded mode. This Order eliminates the need for the emergency license amendment and it is our understanding that your application will be withdrawn in writing.

A copy of this Order is being filed with the Office of the Federal Register for publication.

Sincerely, 161 Frank J. Miraglia, Director Division of PWR Licensing-B Enclosure Order cc w/enclosure See next page ΊI Region PWR#6 PWR#6 WR#h stis:bd GEdison JStolz Malia RIngram 4/10/87 4/10/87 87 4 //0 /87

Mr. H. B. Tucker Duke Power Company

cc: Mr. A. V. Carr, Esq. Duke Power Company P. O. Box 33189 422 South Church Street Charlotte, North Carolina 28242

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Mr. Robert B. Borsum Babcock & Wilcox Nuclear Power Generation Division Suite 220, 7910 Woodmont Avenue Bethesda, Maryland 20814

Manager, LIS NUS Corporation 2536 Countryside Boulevard Clearwater, Florida 33515

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Senior Resident Inspector U.S. Nuclear Regulatory Commission Route 2, Box 610 Seneca, South Carolina 29678

Regional Administrator U.S. Nuclear Regulatory Commission 101 Marietta Street, N.W. Suite 3100 Atlanta, GA 30303

Mr. Heyward G. Shealy, Chief Bureau of Radiological Health South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia, South Carolina 29201

Office of Intergovernmental Relations 116 West Jones Street Raleigh, North Carolina 27603

Honorable James M. Phinney county Supervisor of Oconee County Walhalla, South Carolina 29621 Oconee Nuclear Station Units Nos. 1, 2 and 3

Duke Power Company Post Office Box 33189 422 South Church Street Charlotte, North Carolina 28242

## UNITED STATES OF AMERICA

## NUCLEAR REGULATORY COMMISSION

In the Matter of

DUKE POWER COMPANY

Dockets Nos. 50-269 50-270 and 50-287

(Oconee Nuclear Station, Units 1, 2 and 3)

# CONFIRMATORY ORDER MODIFYING LICENSES (EFFECTIVE IMMEDIATELY)

Duke Power Company (DPC or the licensee) is the holder of Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 which authorize the operation of Oconee Nuclear Station, Units 1, 2 and 3 (the facilities) at power levels not in excess of 2568 megawatts thermal for each unit. The facilities consist of pressurized water reactors located at the licensee's site in Oconee County, South Carolina.

II.

On April 3, 1987, by telephone and subsequently by letter dated April 6, 1987, the licensee for Oconee Units 1, 2 and 3 informed the staff that recent fouling in the low pressure service water (LPSW) system (lake water) side of the reactor building cooling units (RBCU) and low pressure injection (LPI) coolers had resulted in an inability to transfer total design basis accident (DBA-LOCA) heat loads. Consequently, the licensee has reduced power levels in Oconee Units 1 and 2 to a maximum of 91.5% and 81.7%, respectively, in order to match accident (LOCA) heat transfer requirements with the capability of the degraded heat exchangers. Oconee Unit 3 is currently shutdown and its affected heat exchangers will be cleaned and performance tested during the outage and assured they are operable and declared operable for full power operation. Additional emergency actions have been proposed by the licensee to justify continued operation of Oconee Units 1 and 2 for the interim period until the fouling can be corrected as discussed below.

The Reactor Building Cooling Units (RBCU) provide the design heat removal capacity following a loss-of-coolant accident (LOCA) with all three coolers operating continuously and circulating the steam-air mixture past the cooling tubes to transfer heat from the containment atmosphere to the LPSW which is passed through the cooler tubes. The LPI system in the recirculation mode cools the water from the reactor building sump. Long term cooling is by recirculation of injected water from the reactor building sump to the core by the LPI pumps. Heat is transferred through the LPI coolers to the LPSW system.

By letter telecopied on April 6, 1987, the licensee committed to establish new interim maximum allowable power levels and change the reactor protection system (RPS) high flux trip setpoints for Oconee Units 1 and 2 and to specify operability for the third non-engineered safeguards LPI pump for Units 1 and 2.

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On April 3, 1987, verbal authorization was granted by the Office of Nuclear Reactor Regulation (NRR) for the licensee to continue operation. This authorization was granted only after a discussion and review of the facts as presented by the licensee in a telephone conference call with the NRC and by followup telecopy dated April 6, 1987. April 6 and 7, 1987 letters supplemented the original letter. The initial waiver of compliance would have expired at midnight on April 8, 1987. On the evening of April 8, 1987, it was extended to Friday, April 10, 1987 at 5:00 p.m.

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The licensee provided a conservative calculation which compared the LOCA heat removal requirements with the current degraded heat exchanger capacity in order to ensure that the post-LOCA equipment qualification temperature limits will not be exceeded and required decay heat removal requirements can be satisfied. The calculation indicated that a scram from the above indicated power levels for Oconee Units 1 and 2, respectively, will produce decay heat levels within the heat exchanger capabilities. Actual heat transfer and flow rates through the degraded heat exchangers have been confirmed by testing. The licensee has committed to reduce the RPS high flux trip setpoint to 91.5% and 81.7% of rated power for Units 1 and 2, respectively, in order to ensure that these power levels are not exceeded in the interim until the heat exchanger fouling can be corrected. The staff has reviewed the licensee's heat transfer calculational method and assumptions and reviewed the overpower trip setpoint and concurs that adequate accident heat removal requirements will be maintained with the current degraded heat exchangers.

The licensee has also explained why the fouling problem will not accelerate over the next six months and further degrade the coolers' performance. The licensee stated that the turbidity levels in the lake water are very low, and the fouling has only recently been noted with more than ten years of plant operation without cleaning the LPI and RBCU coolers. We have reviewed the information and concur that accelerated degradation during the interim period is unlikely. Also, increased flow through the LPI coolers will not diminish flow to these other coolers.

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In addition, the licensee has committed to ensure that adequate LPI cooling is provided in the interim by requiring the nonessential LPI pumps in

- 3 -III. both Units 1 and 2 to be operable. In the case of Unit 2, when operating at 81.7%, an upper limit of 55°F has been placed on the lake water temperature to ensure acceptable heat removal capability. Lake water temperature will be monitored daily for Unit 2 to verify compliance with the above limit. The licensee has also proposed weekly monitoring of lake water temperature for Unit 1 to assure that the design basis of 75°F is not exceeded. The staff finds the above commitments and surveillance to be conservative and acceptable for assuring heat transfer capability.

The licensee has committed not to operate Unit 2 with degraded coolers beyond midnight April 22, 1987. After that time, all LPI and RBCU coolers will have been cleaned and tested to verify that they are in an operable condition intended for full power plant operation.

The licensee will operate Unit 1 at reduced power until the end of Cycle 10 outage currently scheduled to begin August 29, 1987. Although the Unit 1 LPI coolers will be cleaned no later than April 30, 1987, they will not be tested and evaluated for full power operation until the Cycle 10 outage. Until that time, the licensee indicated that because of both the additional margin provided by cleaning the Unit 1 LPI cooler and because the fouling occurs slowly over an extended time period, these items will ensure adequate heat removal capability at the reduced power levels from the period of April 30 to August 29, 1987. The staff concurs with the licensee's assessment.

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The licensee has also evaluated other safety-related coolers serviced by the LPSW system. In addition to the LPI and RBCU coolers, the LPSW cools the high pressure injection pump motor bearing coolers, the motor driven emergency feedwater pump motor air coolers and the turbine driven emergency feedwater pump turbine bearing oil coolers. The licensee has discussed the testing

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program for these coolers which confirmed acceptable flow rates through them and believes that a similar fouling problem does not exist. We concur with the licensee's conclusion.

I find the licensee's commitments acceptable and conclude that the plants' safety can be maintained in the interim until the fouling can be corrected and the units returned to full power. In view of the foregoing, I have determined that these commitments are required in the interest of the public health and safety and should, therefore, be confirmed by an immediately effective Order.

IV.

Accordingly, pursuant to Sections 103, 161b, and 161i, of the Atomic Energy Act of 1954, as amended and the Commission's regulations in 10 CFR 2.204 and Part 50, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, that licenses DPR-38, DPR-47 and DPR-55 are amended as follows:

A. Oconee Unit 1, License No. DPR-38

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 Until the 1A LPI cooler is cleaned, tested, evaluated for full power operation, and approved for full power operation by the Regional Administrator, Region II, Oconee Unit 1 operation will be at reduced power levels and will have a reduced RPS high flux trip setpoint to ensure that adequate shutdown removal can be provided under accident conditions, as follows:

a. the RPS high flux trip setpoint shall be 91.5% rated power;

- b. the maximum allowable power level shall be 91.5% rated power; and
- c. in addition to the requirements of Technical Specification 3.3.2, the remaining non-ES LPI pump, capable of taking suction from the reactor building emergency sump and discharging into the RCS, shall be operable. The remaining

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non-ES LPI pump may be inoperable for a period of 24 hours. If the non-ES LPI pump is not restored to operable status within 24 hours, the reactor shall be placed in a hot shutdown condition within an additional 12 hours. If the requirements of 3.3.8(b) are not met within 24 hours following hot shutdown, the reactor shall be placed in a condition with RCS pressure below 350 psig and RCS temperature below 250°F within an additonal 24 hours.

 Oconee Unit 1 shall not operate at any power level after the end of Cycle 10 unless the Regional Administrator, Region II, has approved the 1A LPI cooler for full power operation.

### B. Oconee Unit 2, License No. DPR-47

 Until the 2A LPI cooler is cleaned, tested, evaluated for full power operation, and approved for full power operation by the Regional Administrator, Region II, Oconee Unit 2 operation will be at reduced power levels and will have a reduced RPS high flux trip setpoint to ensure that adequate shutdown heat removal can be provided under accident conditions, as follows:

a. the RPS high flux trip setpoint shall be 81.7% rated power;

- b. if lake water temperature is equal to or less than 55°F, the maximum allowable power level shall be 81.7% rated power; if the lake water temperature exceeds 55°F, Unit 2 shall proceed to shutdown in accordance with Technical Specification 3.0;
- c. in addition to the requirement of Technical Specification 3.3.2, the remaining non-ES LPI pump, capable of taking suction from the reactor building emergency sump and discharging into the RCS, shall be operable. The remaining non-ES LPI pump may be

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inoperable for a period of 24 hours. If the non-ES LPI pump is not restored to operable status within 24 hours, the reactor shall be placed in a hot shutdown condition within an additional 12 hours. If the requirements of 3.3.9 (c) are not met within 24 hours following hot shutdown, the reactor shall be placed in a condition with RCS pressure below 350 psig and RCS temperature below 250°F within additional 24 hours.

 Oconee Unit 2 shall not operate at any power level after midnight of April 22, 1987, unless the Regional Administrator, Region II has approved the 2A LPI cooler for full power operation.

## C. Oconee Unit 3, License No. DPR-55

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Oconee Unit 3 shall remain shutdown until the 3A and 3B LPI coolers are approved for full power operation by the Regional Administrator, of Region II.

The Regional Administrator, Region II, may relax or rescind any of the above conditions upon a showing by the licensee of good cause.

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The licensee or any other person who has an interest adversely affected by this Order may request a hearing on this Order within 20 days of the date its issuance. Any request for a hearing shall be addressed to the Director, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, Washington, D. C., 20555. A copy shall be sent to the Office of the General Counsel, Assistant General Counsel for Enforcement, at the same address, and the Regional Administrator, Region II at 101 Marietta Street, N. W., Suite 2900, Atlanta, Georgia 30303. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which the petitioner's interest is adversely affected by this Order and should address the criteria set forth in 10 CFR 2.714(d). A REOUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

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If a hearing is to be held, the Commission will issue an Order designating the time and place of any such hearing. If ahearing is held concerning this Order, the issue to be considered at the hearing shall be whether the licensee should comply with the requirements set forth in Section V of this Order. This order is effective on April 5, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

Frank J. Miraglia, Director Division of PWR Licensing-B

Dated at Bethesda, Maryland, this 5th day of April, 1987.

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