Mr. R. P. Powers Senior Vice President Nuclear Generation Group American Electric Power Company 500 Circle Drive Buchanan, MI 49107-1395

SUBJECT: ANNUAL ASSESSMENT LETTER - D. C. COOK NUCLEAR POWER STATION

(REPORT 50-315/01-01; 50-316/01-01)

Dear Mr. Powers:

On May 2, 2001, the NRC staff completed its End-of-Cycle plant performance assessment of the D. C. Cook Nuclear Power Station. The End-of-Cycle review for the D. C. Cook Nuclear Power Station involved the participation of all technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the period April 1, 2000 to March 31, 2001. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections which may conflict with your plant activities.

Throughout this assessment period, D. C. Cook performance was monitored through the NRC Inspection Manual Chapter (IMC) 0350 process. In addition, following the restart of Unit 2 in June 2000, the NRC recommended transitioning D. C. Cook to the Reactor Oversight Process. Based on performance insights developed by the IMC 0350 panel and the Reactor Oversight Process, D. C. Cook Nuclear Power Station was operated in a manner that preserved public health and safety. All inspection findings were classified as having very low safety significance (Green). Performance Indicators that have been reported indicate performance at a level requiring no additional NRC oversight (Green), with the exception of a Unit 1 White PI for unplanned power changes which crossed the Green-White threshold after approximately 2,400 critical hours of operation. Regarding Unit 1 reactor power changes to address equipment issues, including main feedwater condenser cooling water issues, we plan to conduct Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area." We plan on implementing this inspection procedure after your corrective action program review of these equipment problems is completed. In addition, based on insights developed from augmented inspections in performance areas where PIs are still under development, no findings were identified which warranted additional NRC attention.

The NRC staff determined that overall plant operations at D. C. Cook have been conducted safely and in accordance with regulatory requirements and license commitments. Plant operations at D. C. Cook, including the restart of both Units, were conducted in a controlled and

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deliberate manner. Unit 2 operated well since restart in June 2000, with only one shutdown for about a week in late January 2001 to resolve rod control system problems. Aside from the main feedwater condenser cooling water problems affecting Unit 1, there have not been any significant operational problems, significant operator errors, or procedure adherence problems associated with either Unit since restart.

Overall maintenance was conducted safely and effectively. Overall response to equipment problems was good, and engineering and maintenance personnel provided good support in troubleshooting and evaluating issues in a timely manner. The post-restart backlog of condition reports, corrective maintenance activities, and engineering modification packages continues to present a challenge and we recognize that you have committed additional resources and established work down curves to reduce the backlog.

Your staff has expended extensive effort to correct problems with implementation of the Maintenance Rule Program. Although your corrective actions have resulted in improvements, some aspects of Maintenance Rule implementation continue to be a challenge based on recently identified issues regarding several Unit 1 auxiliary feedwater system maintenance preventable functional failures. There has been an overall improvement in the quality of engineering products based on engineering inspections conducted prior to Unit 1 restart. Performance in radiation safety, emergency preparedness, and security were acceptable.

Based on corrective action program inspections conducted prior to Unit 2 restart and a subsequent Problem Identification and Resolution inspection, substantial improvement has been noted in implementation of your corrective action program. There was one area where corrective action problems were identified regarding the assessment and long term resolution of heat exchanger nonconforming conditions. We will continue to evaluate effectiveness of corrective actions through performance of the baseline inspection program.

In developing the inspection plan for D. C. Cook, the NRC staff considered the availability of performance indicators in each of the strategic performance areas. Due to incomplete performance indicators in the Reactor Safety strategic performance area, we intend to continue with augmented inspection through sampling more activities in the Mitigating Systems and Emergency Preparedness cornerstones. Baseline inspections that we plan to augment are emergent work, equipment alignment, maintenance rule, non-routine evolutions, operability evaluations, operator workarounds, surveillance testing, post maintenance testing, refueling outages, and emergency preparedness drills. The performance indicators in the Radiation Safety strategic performance area and the Safeguards strategic performance area are considered valid; consequently, we intend to perform the baseline inspections in these areas. The panel will continue to assess plant performance and operating experience, evaluate the continuing need for augmented inspection, and recommend when NRC oversight can return to the routine inspection program.

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The enclosure details the scheduled inspections that will occur through May 31, 2002. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature.

For your information, the NRC is in the process of aligning the inspection and assessment cycle with the calendar year. In order to transition to a calendar year cycle (January 1 - December 31), the next inspection and assessment cycle will consist of only three quarters (i.e., the second, third, and fourth calendar quarters of CY 2001). As a result, a quarterly review will be conducted for the third calendar quarter (July 1 - September 30) in lieu of a mid-cycle review. The impact on the inspection plan, which is included as an enclosure, is minimal. Activities planned for the transition cycle represent only 60-80 percent of those activities that would be accomplished during a typical 12-month inspection and assessment cycle.

This letter also confirms the public meeting to take place at 1:00 p.m. (ET) on July 6, 2001, as agreed upon by members of our staffs. The meeting will be held in the Training Building. The results of this assessment and any responses that you may have will be discussed as well as any other appropriate subjects. At the end of the meeting we will provide the public an opportunity to ask questions regarding these End-of-Cycle plant performance assessment results.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact A. Vegel at (630) 829-9620 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Geoffrey E. Grant, Director Division of Reactor Projects

Docket Nos. 50-315; 50-316 License Nos. DPR-58; DPR-74

Enclosure: D. C. Cook Inspection/Activity Plan

See Attached Distribution

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cc w/encl: A. C. Bakken III, Site Vice President

J. Pollock, Plant Manager

M. Rencheck, Vice President, Nuclear Engineering R. Whale, Michigan Public Service Commission Michigan Department of Environmental Quality

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