

November 8, 2001

Mr. Oliver D. Kingsley, President  
and Chief Nuclear Officer  
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Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, Illinois 60555

SUBJECT: CLINTON POWER STATION, UNIT 1 - ISSUANCE OF AMENDMENT  
(TAC NO. MB0861)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 141 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to the application from AmerGen Energy Company, LLC, dated December 29, 2000, as supplemented March 22 and July 27, 2001.

The amendment increases the Technical Specification allowed outage time from 3 to 14 days for a single inoperable Division 1 or 2 diesel generator.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

**/RA/**

Jon B. Hopkins, Senior Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-461

Enclosures: 1. Amendment No. 141 to NPF-62  
2. Safety Evaluation

cc w/encls: See next page

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\*See previous concurrence

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DATE	11/7/2001	11/8 /2001	11 / 01 /2001	11/07/2001

OFFICIAL RECORD COPY

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AMERGEN ENERGY COMPANY, LLC

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 141  
License No. NPF-62

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by AmerGen Energy Company, LLC (the licensee), dated December 29, 2000, as supplemented March 22 and July 27, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-62 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 141 are hereby incorporated into this license. AmerGen Energy Company, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

***/GFD for/***

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: November 8, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 141

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

Replace the following pages of the Appendix "A" Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3.8-1  
3.8-2

Insert Pages

3.8-1  
3.8-2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 141 TO FACILITY OPERATING LICENSE NO. NPF-62

AMERGEN ENERGY COMPANY, LLC

CLINTON POWER STATION, UNIT 1

DOCKET NO. 50-461

## 1.0 INTRODUCTION

By letter dated December 29, 2000, AmerGen Energy Company, LLC (the licensee), proposed changes to the Technical Specifications (TSs) for Clinton Power Station (CPS). The application of December 29, 2000, was supplemented by letters dated March 22 and July 27, 2001.

The proposed changes will revise TS 3.8.1, "AC Sources - Operating" to extend the present allowable outage time (AOT) [allowable completion time] for the Required Actions associated with restoration of an inoperable Division 1 or Division 2 Diesel Generator (DG) from 72 hours and 6 days from discovery of failure to meet the limiting condition for operation (LCO) to 14 days and 17 days from discovery of failure to meet the LCO.

The supplemental letters contained clarifying information and did not change the initial no significant hazards consideration determination and did not expand the scope of the original *Federal Register* notice.

## 2.0 BACKGROUND

The engineered safety feature (ESF) power system at CPS consists of three electrically independent, and physically isolated electrical divisions i.e., Division 1, Division 2 and Division 3; with Division 3 dedicated primarily to the high pressure core spray (HPCS) system. The ESF systems of any two of the three divisions provide for the minimum safety functions necessary to shut down the unit and maintain it in a safe shutdown condition. Each division consists of a class 1E, 4.16 kV bus with a dedicated DG feeding the various loads and down stream buses. Each 4.16 kV ESF bus has the following sources of power:

1. The 345 kV transmission via the station reserve auxiliary transformer (RAT).
2. An electrically and physically independent 138 kV offsite power source via the station emergency auxiliary transformer (ERAT).
3. An emergency onsite dedicated DG.

### 3.0 EVALUATION

The licensee has proposed the following changes to CPS TS Section 3.8.1.

- a. Revise the Completion Time for Required Action A.2  
From: "6 days from discovery of failure to meet LCO"  
To: "17 days from discovery of failure to meet LCO."

The completion time for Required Action A.2 (Restore offsite circuit to OPERABLE status) is changed from 6 days to 17 days from discovery of failure to meet LCO. This proposed change is acceptable because it is a commensurate change resulting from the DG completion time change.

- b. Revise the Completion Time for Required Action B.4  
From: "72 hours and 6 days from discovery of failure to meet LCO"  
To: "72 hours from discovery of an inoperable Division 3 DG, and 14 days, and 17 days from discovery of failure to meet LCO."

The proposed change to B.4 section (TS 3.8.1 AC Sources - Operating) is related to the Completion Time as listed below.

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One required DG inoperable	B.4 Restore required DG to OPERABLE status	72 hours from discovery of an inoperable Division 3 DG
		<u>AND</u>
		14 DAYS
		<u>AND</u>
		17 days from discovery of failure to meet LCO

The TS requirement for Division 3 DG completion time of 72 hours is based on the dedicated relationship between Division 3 DG and the HPCS. The Completion Time for restoring the HPCS to OPERABLE status is 14 days. Thus, the restoration for an inoperable Division 3 DG is 17 days from discovery of failure to meet the LCO (provided that the inoperable Division 3 DG is the only reason for declaring the HPCS inoperable and that the reactor core isolation cooling system is operable).

The primary change to Action B.4 is allowing the extension of the AOT from 72 hours to 14 days when either the Division 1 or Division 2 DG is inoperable. This change allows Division 1 DG or Division 2 DG to be inoperable for up to 14 days and 17 days from discovery of failure to meet LCO in Modes 1, 2 and 3.

The justification for the AOT is based upon a deterministic and risk-informed evaluation as follows:

### 3.1 Deterministic Evaluation

The licensee proposed changes will increase the length of time a DG can be out of service during the unit operation. The system at CPS is designed with adequate defense-in-depth to accomplish the safety function and the availability of ac sources for supplying power to the onsite Class 1E distribution system. Each of the three independent divisions can be powered from three independent sources of power (either from the two offsite sources or the associated DG). Thus, the safety-related equipment needed to mitigate the consequences of a postulated accident will have diverse power sources available to accomplish their functions.

The loss of a single power source by voluntary entry into a TS Action for DG maintenance does not reduce the amount of available equipment to a level below that necessary to mitigate a design-basis accident and a station blackout (SBO). The remaining power sources ensure that power will be provided to the necessary equipment during postulated accidents. Thus, with one DG out of service, there are sufficient means to accomplish the safety functions and prevent release of radioactive material in the event of an accident.

The proposed changes do not introduce new potential common-cause failure modes, and do not compromise protection against common-cause failure modes previously considered.

CPS is able to withstand and recover from a SBO event of four hours in accordance with the guidelines of Regulatory Guide (RG) 1.155 "Station Blackout" Revision O. The licensee stated that the results of the SBO analysis are not affected by the proposed changes. As the DGs are not assumed to be available during the SBO coping period.

The licensee will perform the following provisions/limitations/compensatory actions during the extended DG AOT that can mitigate any increase in risk:

- Verification that the RAT and the ERAT are operable.

- Verification of the correct breakers alignment and indicated power availability for each offsite circuit.

- A DG extended Completion Time will not be entered for scheduled maintenance purposes if severe weather conditions are expected.

- While in the proposed extended DG Completion Time, additional elective equipment maintenance or testing that requires the equipment to be removed from service will be evaluated and activities that yield unacceptable results will be avoided.

- The condition of the offsite power supply and switchyard, including transmission lines and ring bus breakers, will be evaluated.

No elective maintenance will be scheduled within the switchyard that would challenge the RAT connection or offsite power availability during the proposed extended DG Completion Time.

A Configuration Risk Management Program (CRMP) is in place at CPS in accordance with CPS commitments for compliance with 10 CFR 50.65 (monitoring the effectiveness of maintenance). The program provides assurance that risk-significant plant equipment configurations are precluded or minimized when plant equipment is removed from service.

### 3.2 Deterministic Finding

The staff finds the proposed change to extend the DG AOT from the current 72 hours to 14 days to be acceptable. Our finding is based on the following:

1. The availability of the offsite power sources via the RAT and the ERAT,
2. Verification that the offsite power sources are operable,
3. Implementation of the CRMP while a DG is in an extended completion time,
4. Avoidance of testing and maintenance of other equipment that after evaluation will yield unacceptable results if removed from service, and
5. No scheduling of preplanned maintenance when severe weather conditions are expected.

Also, we find that the changes made to the TS Bases section are consistent with the requested DG AOT extension and are acceptable.

### 3.3 Risk Evaluation

The Nuclear Regulatory Commission (NRC) staff used a three-tiered approach to evaluate the risk associated with the proposed TS changes. The first tier evaluated the probabilistic risk assessment (PRA) model and the impact of the completion time extensions for the DGs on plant operational risk. The second tier addressed the need to preclude potentially high risk configurations should additional equipment outages occur during the time when a DG is out of service. The third tier evaluated the licensee's configuration risk management program to ensure that the applicable plant configuration will be appropriately assessed from a risk perspective before entering into or during the proposed allowed outage times. Each tier and the associated findings are discussed below.

#### 3.3.1 Tier 1 Evaluation

The licensee used traditional PRA methodology to evaluate the requested completion time extension for Division 1 or Division 2 DGs. The Tier 1 NRC staff review of the licensee's PRA involved three aspects: (i) evaluation of the PRA model and application to the proposed completion time extension, (ii) evaluation of PRA results and insights stemming from the application, and (iii) discussion of the quality of the PRA.

(i) Evaluation of PRA Model and Application to the Completion Time Extension.

The staff reviewed the capability of the licensee's PRA model to analyze the risk stemming from the proposed completion time changes for Division 1 and Division 2 DGs, but did not perform a general review of the licensee's PRA.

The NRC previously performed a review of the licensee's individual plant examination (IPE) submittal, which was documented on February 27, 1997. The current review was based on the staff's screening process where the staff examined the licensee's internal events, PRA results and recent operational experience regarding availability and reliability of diesel generators. The staff concludes that the licensee's PRA results are reasonable, and the scope and depth of the PRA analysis support such a finding. Discussions with the licensee regarding recent data for DG reliability and availability did not indicate any adverse trends.

The licensee recalculated its PRA model to determine the effect of extending the DG completion time from 72 hours to 14 days. The PRA model for CPS was first established for the IPE that was submitted to the NRC by letter U-602040 dated September 23, 1992, in response to Generic Letter (GL) 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities - 10 CFR 50.54(f)." The NRC staff issued its safety evaluation (SE) for the CPS IPE by letter dated March 27, 1997, wherein the NRC staff concluded that the CPS IPE submittal met the intent of GL 88-20. In the SE accompanying this letter, the NRC cited certain issues which were classified as limitations or weaknesses in the PRA. The major PRA limitations identified in the NRC SE were addressed in the PRA via three subsequent updates through model changes, sensitivity studies, and data updates.

(ii) Evaluation of PRA Results and Insights

Risk-informed support for the proposed changes to the DG completion time (for either Division 1 or Division 2) is based on PRA calculations performed by the licensee to quantify the change in average core damage frequency (CDF) and average large early release frequency (LERF) resulting from the increase completion time for internal events. The licensee did not directly quantify the effect of the increased completion time for external events. To determine the effect of the proposed changes with respect to plant risk, the licensee used the guidance provided in RG 1.174 and RG 1.177.

The licensee performed an evaluation based on the assumption that the full, extended completion time (i.e., 14 days) would be applied once per DG per refueling cycle. The cycle time is based on the current 18-month fuel cycle (allowing for planned and unplanned plant outage time) for CPS for a net total cycle length of 475 operating days. DG reliability and availability are to be monitored and evaluated in relationship to Maintenance Rule goals to ensure that DG outage times do not degrade operational safety over time.

Internal Events

The incremental conditional core damage probability (ICCDP) and incremental conditional large early release probability (ICLERP) were computed per the definitions

in RG 1.177. The results of the risk evaluation, including the computed ICCDP and ICLERP, were submitted to the staff as follows: the reported base CDF estimate was  $1.3 \times 10^{-5}$  per year; the base LERF estimate was  $1.4 \times 10^{-7}$  per year; the differential CDF was  $6.1 \times 10^{-7}$  per year; the ICCDP was  $4.6 \times 10^{-7}$  per year; and the differential LERF was risk neutral as was the ICLERP.

The results of the risk evaluation were compared with risk significance guidelines from RG 1.174 for changes in the annual average CDF and LERF and from RG 1.177 for ICCDP and ICLERP. The ICCDP and ICLERP evaluation was based on DG 1A, which provides the limiting values for this risk metric. The value for the ICCDP (i.e.,  $4.7 \times 10^{-7}$ ) and the "risk neutral" value of ICLERP indicate that the proposed DG completion time change has only a small quantitative impact on plant risk.

In determining the values above, the licensee set the PRA quantification truncation limit to  $1 \text{E-}10/\text{yr}$  for sequence quantification. This is more than five orders of magnitude below the total CDF. The staff finds this an acceptable truncation limit for this risk-informed application.

#### External Events

In evaluating the effect of external event initiators on an extended DG completion time, the licensee addressed external events qualitatively. Where possible, the staff's review attempted to develop a numerical basis for its conclusions because the numerical value for the ICCDP developed by the licensee for internal initiators is close to the ICCDP guideline provided in RG 1.177.

The licensee performed the seismic portion of the individual plant examination of external events (IPEEE) using the Electric Power Research Institute (EPRI) seismic margins method, EPRI NP-6041-SL. In completing the margins approach, the licensee indicated it walked down core cooling equipment in each of the three electrical divisions that would be available following a loss of offsite power. Trains of equipment were identified and reviewed for each of four functions: reactivity control, reactor coolant pressure control, reactor coolant inventory control, and decay heat removal. All systems credited in this evaluation were screened out at the review-level earthquake value of 0.3g. This result is not unexpected as the safe-shutdown earthquake for CPS is 0.25g. However, the staff has determined this analysis did not address the issue of a loss of offsite power from an earthquake (perhaps at as low as 0.1g PGA) in combination with a diesel generator being out of service during a 14 day extended completion time. The licensee provided the staff with estimates of the return frequency of ground motions at 0.10g and 0.15g for the CPS site using the EPRI and Lawrence Livermore National Laboratory hazard estimates. When combined with the random failure frequency of the other DG, the estimated CDF was bounded by the frequency estimated in the Clinton PRA of loss of offsite power events that are not recovered within four hours.

The licensee addressed internal flooding in its IPEEE analysis, and stated that flooding initiators are included in the CPS PRA and its reported results. The licensee made an argument that the DGs are located in areas that are not vulnerable to flooding and indicated that the CDF from internal floods was not affected regardless of whether or not a diesel generator was out of service for a 14 day completion time. The licensee stated

that plant physical features support a conclusion that internal floods are not significant contributors to loss of offsite power events. The staff concurs in this conclusion.

The licensee performed an evaluation of high winds, external floods, and other external events in its IPEEE per NUREG-1407, "Procedural and Submittal Guidance for the individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities." The evaluation indicated that the CPS site conforms to NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," criteria and revealed no potential vulnerabilities. From this, the licensee concluded that the risk impact of the 14 day completion time extension for the DG is low. Independently, the staff determined that the frequency of these other external events (e.g., tornadoes, hurricanes, external floods, transportation accidents) causing a loss of offsite power is bounded by causes of offsite power already considered in the analysis.

With regard to plant risk during shutdown conditions, the licensee did not perform a quantitative evaluation of the proposed changes. The licensee expressed its opinion that it is reasonable to conclude that performing DG overhauls on-line rather than during outages will increase DG availability during outages. This should reduce shutdown risk by improving the availability of standby AC power sources for shutdown cooling equipment and other equipment needed to mitigate events that may be postulated to occur during shutdown. The staff concurs in this conclusion.

The staff finds that a small incremental increase in CDF estimated for the change in completion time from 3 to 14 days is consistent with the credit taken for the system in the PRA modeling, and that the review and updating of the PRA models by the licensee provide reasonable assurance that the models appropriately reflect the equipment and procedural characteristics at the plant.

(iii) Quality of the CPS PRA

The PRA model for CPS was developed from the IPE that was submitted to the NRC by letter U-602040 dated September 23, 1992, in response to GL 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities - 10CFR 50.54(f)." The NRC evaluation of the CPS IPE submittal, performed for the NRC by its contractors, Science & Engineering Associates, Inc., Concord Associates, and Sciencetech, Inc., found the CPS IPE met the intent of GL 88-20, but had weaknesses that might limit the use of the IPE for any other regulatory purposes. These weaknesses were then evaluated by CPS staff to determine the impact on the PRA and then prioritized for inclusion in future updates. The licensee stated that the major PRA limitations identified in the NRC SER were addressed via three subsequent updates to the PRA.

An independent assessment of the CPS PRA, using the Self-Assessment Process developed as part of the Boiling Water Reactor Owners' Group (BWROG) PRA Peer Review Certification Program, was completed to determine if the CPS PRA were comparable to other PRA programs in use throughout the industry. To this end, a PRA Certification Team completed an inspection and review of the CPS PRA in August 2000. Included in this review by the BWROG were the models and methodology used in the CPS PRA. The quality of the PRA and completeness of the PRA documentation were also assessed. The licensee stated in its December 29, 2000, submittal that the

certification team found the CPS PRA fully capable of addressing issues such as those associated with extending the Division 1 and Division 2 DG completion time from 72 hours to 14 days with a few enhancements. These enhancements, as they relate to quantification of SBO issues and DG availability, were addressed by the licensee as part of the analysis supporting its submittal.

The licensee indicated that the CPS PRA was certified in October 2000, and benefitted from pilot plant certifications and subsequent plant reviews of the other BWR-6 plants. The CPS PRA was updated again in December 2000 to refine and remove unnecessary conservatism that the licensee felt produced overly conservative results for certain PRA applications. This revision (i.e., Revision 3a) also incorporated some of the insights identified in the PRA certification process. This update was performed in accordance with the process defined at CPS for updating and maintaining the PRA.

Updating and maintenance of the PRA is controlled under CPS Nuclear Station Engineering Instructions (NSEI) EP-10, "Probabilistic Risk Assessment System Files"; EP-11, "Probabilistic Risk Assessment Project File"; EP-12, "Probabilistic Risk Assessment System Modeling and Quantification"; EP-14, "Control of Computer Codes and Input for the IPE"; EP-18, "Probabilistic Risk Assessment Applications"; and EP-19, "Design Change and Procedure Revision Review for Impact on the CPS PRA."

The staff's review of the CPS IPE stated that it made wide spread use of industry wide data, but could have benefitted from additional use of plant-specific data in quantifying its CDF estimates. At the time of the IPE submittal, CPS had only a few years of power operation. The CPS PRA now includes substantial input from plant-specific data collected from plant components. The licensee stated that the most recent PRA update collected maintenance work record data between 1987 and 1998 for components that had high values for the Fussell-Vesely or Risk Achievement Worth measures of importance.

### 3.3.2 Tier 2 Evaluation

The second tier addressed the need to preclude potentially high risk configurations by identifying the need for any additional constraints or compensatory actions that, if implemented, would avoid or reduce the probability of a risk-significant configuration during the time when one DG is out of service. The licensee identified the following actions will be performed once the license amendment is granted for the extended DG completion time:

A DG extended completion time will not be entered for scheduled maintenance purposes if severe weather conditions are expected.

While in the proposed extended DG completion time, additional elective equipment maintenance or testing that requires the equipment to be removed from service will be evaluated and activities that yield unacceptable results will be avoided.

The condition of the offsite power supply and switchyard, including transmission lines and ring bus breakers, will be evaluated.

No elective maintenance will be scheduled within the switchyard that would challenge the RAT connection or offsite power availability during the proposed extended DG completion time.

Operating crews must be briefed on the DG work plan, with consideration given to key procedural actions that would be required in the event of a loss of offsite power or SBO.

The licensee stated that TS 3.8.1 requires the RAT and ERAT to be operable during MODES 1, 2 and 3. When a DG becomes inoperable, offsite power operability is ensured by performing Required Action B.1, which requires a verification of the availability of the required offsite qualified circuits.

### 3.3.3 Tier 3 Evaluation

CPS has developed a program to help ensure the risk effect of out-of-service equipment is appropriately evaluated prior to performing a maintenance activity. The procedure that governs this process is CPS procedure No. 1151.12, "On-Line Risk Assessment." The licensee indicates this program requires an integrated review (i.e., both probabilistic and deterministic) to identify risk-significant plant equipment outage configurations in a timely manner both during the work management process and for emergency conditions during normal plant operation. Consideration is given to equipment unavailability, operational activities like testing or load dispatching, and weather conditions. This program includes provisions for performing a configuration-dependent assessment of the overall impact on risk of proposed plant configurations prior to, and during, the performance of maintenance activities that remove equipment from service. Risk is re-assessed if an equipment failure/malfunction or emergency condition produces a plant configuration that has not been previously assessed. For planned maintenance activities, an assessment of the overall risk of the activity on plant safety, including benefits to system reliability and performance, is currently performed by the licensee prior to scheduled work. The assessment includes the following considerations:

Maintenance activities that affect redundant and diverse SSCs that provide backup for the same function are minimized.

The potential for planned activities to cause a plant transient are reviewed and work on SSCs that would be required to mitigate the transient are avoided.

Work is not scheduled that is highly likely to exceed a TS or Operational Requirements Manual (i.e., a licensee controlled document containing requirements removed from the TS as part of conversion to the Improved Standard TS) completion time requiring a plant shutdown.

For Maintenance Rule Program High Risk Significant SSCs, the impact of the planned activity on the unavailability performance criteria is evaluated.

As a final check, a quantitative risk assessment is performed to ensure that the activity does not pose any unacceptable risk. This evaluation is performed

using the Level 1 PRA model. The results of the risk assessment are classified by a color code based on the increased risk of the activity.

The CPS program to monitor risk when pre-planned maintenance is performed is considered acceptable for this amendment.

The licensee stated that reliability and availability of the affected DGs at CPS are monitored under the Maintenance Rule (MR) Program as implemented by CPS procedure 1029.05, "Implementation of the Maintenance Rule at CPS." If the pre-established reliability or availability performance criteria are exceeded for the DGs, the licensee will consider 10 CFR 50.65 (a)(1) actions, including increased management attention and goal setting, in order to restore DG performance (i.e., reliability and availability) to an acceptable level. The licensee indicates its performance criteria are risk based and, therefore, are a means to manage the overall risk profile of the plant. An accumulation of large core damage probabilities over time is precluded by the performance criteria.

In practice, the licensee states its actual out-of-service time for the DGs is minimized to ensure that MR reliability and availability performance criteria for these components are not exceeded. The licensee stated that the DGs are all currently in the 10 CFR 50.65(a)(2) MR category (i.e., the DGs are meeting established performance goals).

The quality of the CPS PRA used in support of the proposed change in DG completion time extension is believed to be sufficient. In addition, the level of detail and scope of the PRA were appropriate for the proposed application. The staff did not identify any significant weaknesses or deficiencies associated with the licensee's risk analysis used to support the proposed change that could affect the overall quantitative conclusion. The results of the risk analysis indicate that the risk affect of the proposed change would be small. The staff finds that the licensee's application met the intent of the applicable RGs 1.174 and 1.177. The staff finds that the completion time for the Division 1 and 2 diesel generators may be extended to 14 days with a small effect on risk.

### 3.4 Risk Finding

Based on the above evaluation of risk, the NRC staff concludes that the licensee's request to extend the DG AOT from 3 days to 14 days is acceptable.

## 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The

Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (66 FR 7668). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 6.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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