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A PECO Energy/British Energy Company

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## Clinton Power Station

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U-603405  
1A.120

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Docket No. 50-461

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

Subject: AmerGen Revised Response to Generic Letter 86-04,  
"Policy Statement On Engineering Expertise On Shift"

Dear Madam or Sir:

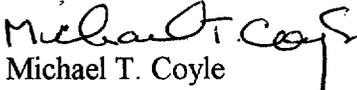
The purpose of this letter is to provide a revised AmerGen Energy Company (AmerGen), LLC response to Generic Letter (GL) 86-04, "Policy Statement On Engineering Expertise On Shift." Illinois Power Company Letter U-600540, dated April 18, 1986, described the Clinton Power Station (CPS) program for the Shift Technical Advisor (STA) position in response to GL 86-04. That letter stated that CPS had elected to utilize option 2 of GL 86-04, that is, a dedicated STA position using personnel who meet the STA criteria of NUREG-0737, Item I.A.1.1. The CPS Updated Safety Analysis Report (USAR) delineated the requirements for an STA position to support plant operations, as stipulated in NUREG-0737, "Clarification of TMI Action Plan Requirements."

Option 1 of GL 86-04 prescribes that one of the qualified senior licensed personnel required on shift by 10 CFR 50.54(m)(2) may be assigned duties of the STA if qualified. GL 86-04 provided a copy of the Federal Register notice of the policy statement on engineering expertise on shift. The noted policy statement stated that, "The Commission prefers a combined SRO/STA position (Option 1)." It is AmerGen's intent to primarily utilize Option 1 of GL 86-04. However, due to a shortage of personnel qualified for the dual role STA/SRO position, and AmerGen's desire to maintain the STA position for future personnel development, CPS will utilize GL 86-04 Options 1 and 2.

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Attached for your information is the revision to the CPS USAR to reflect the AmerGen position as stated above. Please contact Mr. Michael A. Reandeau, Director-Licensing, at (217) 935-8881, extension 3448, should there be any questions regarding the information provided in this letter.

Sincerely yours,

  
Michael T. Coyle  
Site Vice President

GBS/blf

Attachment

cc: NRC Clinton Licensing Project Manager  
NRC Resident Office, V-690  
Regional Administrator, Region III, USNRC  
Illinois Department of Nuclear Safety

Managers, consideration is given to the need to prevent administrative duties from detracting from the primary responsibility of ensuring safe operation of the plant.

### Shift Supervisors

Shift Supervisors are Licensed Senior Reactor Operators assigned to the Control Room Supervisor, Field Supervisor or Shift Resource Manager.

The Shift Supervisors report to the Shift Manager on their shift and assist the Shift Manager in supervising and directing the employees who operate the plant. The Shift Supervisors ascertain and remain aware of plant equipment conditions by reviewing reports and making personal inspections. They are responsible for scheduling certain routine tests and maintenance activities. Shift Supervisors are SRO licensed and have the authority to direct plant shutdown when observations of plant equipment or conditions indicate that a nuclear safety hazard exists or as directed by approved procedures. A Shift Supervisor may serve as the fire brigade leader when not assigned as Control Room Supervisor

### Shift Technical Advisors

The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit.

The STA shall have a bachelor's degree or equivalent in a scientific, engineering or engineering technology discipline and have received specific training in the response and analysis of the plant for transients and accidents. The STA shall also receive training in plant design and layout, including the capabilities of instrumentation and controls in the control room.

The NRC Policy Statement on Engineering Expertise on Shift (Generic Letter 86-04) offered two options for meeting the requirements for providing engineering expertise on shift and meeting licensed operator staffing requirements. Option 1 allows one of the Senior Reactor Operator (SRO) positions to be combined with the STA position into a dual role SRO/STA position. Option 2 allows the use of a dedicated STA position on shift. Option 2 was implemented at Clinton Power Station. As an advisor to the Shift Manager, the STA shall have no authority to direct the activities of the shift, however, he will be assigned duties which are integrated with other on-shift activities. If the dual role SRO/STA position is needed, the STA Training Program Description will be revised based on analysis of this position to allow the use of the dual role SRO/STA.

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Replace the "Shift Technical Advisors" section on page 13.1-9 with the following:

Shift Technical Advisors

The Shift Technical Advisor (STA) function is to provide advisory technical support on shift in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit.

The STA shall have a bachelor's degree or equivalent in a scientific, engineering or engineering technology discipline and have received specific training in the response and analysis of the plant for transients and accidents. The STA shall also receive training in plant design and layout, including the capabilities of instrumentation and controls in the control room.

The NRC Policy Statement on Engineering Expertise on Shift (Generic Letter 86-04) offers two options for meeting the requirements for providing engineering expertise on shift and meeting licensed operator staffing requirements.

**Option 1: Combined SRO/STA Position**

This option is satisfied by assigning an individual who has met the STA educational and training requirements, identified in the STA Training Program Description, to each shift as one of the required SROs per Table 13.1-3.

**Option 2: Continued Use of STA Position**

This option is satisfied by placing on each shift a dedicated STA who meets the educational and training requirements identified in the STA Training Program Description.

Either Option 1 or Option 2 may be used on each shift. CPS may use Option 1 on some shifts and Option 2 on other shifts. If Option 1 is used for a shift, then the separate STA position may be eliminated for that shift.

The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating.

- \* The fire brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

#### 13.1.2.3.1.3 Minimum Shift Complement

The Minimum Shift Complement shown in Table 13.1-3 represents the normal number of personnel required on shift during Power Operations, Startup and Hot Shutdown, Cold Shutdown, Refueling and the Emergency Plan on Shift Requirements.

Normal staffing requirements are taken from 10 CFR 50.54(m) Minimum Requirements per Shift for On-Site Staffing of Nuclear Power units by Operators and Senior Operators Licensed under 10CFR50 Part 55 and the current minimum requirements for implementation of the CPS Emergency Plan, Table 2-1.

*FROM*

Each shift crew shall include a Shift Manager or a person qualified and designated to act as a Shift Manager. Further, each shift crew shall include an individual qualified by education and experience to act as a Shift Technical Advisor during operating modes 1, 2, and 3. This individual may be replaced by a member of the operating shift supervision present when the NRC determines the additional training that is required for shift supervision to fill the role of STA.

During refueling operations, a separate Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling shall supervise these operations and shall have no other concurrent duties.

An around-the-clock Radiological Protection Program is implemented by the presence of at least one Radiation Protection technician meeting ANS/ANSI 3.1-1978 qualifications. Additional personnel are assigned as necessary to provide adequate coverage to meet station needs as determined by Radiation Protection supervision. RP Technicians report to the Radiation Protection Shift Supervisor.

Shift crew composition may be one less than the minimum requirements for a period of time not to exceed two hours in order to accommodate an unexpected absence of on-duty shift crew members provided immediate action is taken to restore composition to within the minimum requirements as stated. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

To

Each shift crew shall include a Shift Manager or a person qualified and designated to act as a Shift Manger. Further, each shift crew shall include an individual qualified by education and experience to act as a Shift Technical advisor during operating modes 1, 2, and 3. If properly qualified per the STA Training Program Description, a Senior Reactor Operator may perform the STA function. If the Shift Manger or Control Room Supervisor fulfills the STA function, an additional SRO who has no concurrent emergency duties shall perform the Emergency Plan role of providing independent oversight.

FROM

Table 13.1-3  
Minimum Shift Complement

Job Title	ANSI 3.1(1978) Equivalent	Minimum Shift Complement <sup>3,7</sup>
Shift Manager <sup>1</sup>	Supervisors Requiring NRC Licenses (4.3.1)	1
Shift Supervisor (Control Room Supervisor [CRS])	Supervisors Requiring NRC Licenses (4.3.1)	1
Plant Operator	Operators (4.5.1)	2
Unit Attendant / Nuclear Equipment Operator (Non Licensed Operator) <sup>2</sup>	Operators (4.5, 4.5.1)	3
Shift Technical Advisor <sup>6</sup>	NA	1
Radiation Protection Shift Supervisor	Supervisors Not Requiring NRC Licenses (4.3.2)	1
Radiation Protection Personnel (RP)	Technicians (4.5.2)	3 <sup>4</sup>
Chemistry Personnel	Technicians (4.5.2)	1
Electrical Maint. or C&I Technician	Maintenance Personnel (4.5.3)	1
Mechanics	Maintenance Personnel (4.5.3)	1
Fire Brigade	NA	5 <sup>5</sup>
Rescue Operations	NA	2 <sup>5</sup>

- <sup>1</sup> The Shift Manager shall receive instruction in supervisory skills as specified in ANSI 3.1-1981, Section 5.2.1.8.
- <sup>2</sup> The NLO fulfills the on shift requirement for an E-Plan Notification/Communicator until an Emergency Response Organization member arrives.
- <sup>3</sup> This column represents the minimum staffing required to be on shift at all times by the Emergency Plan Table 2-1. Once an emergency has been declared additional staffing will be summoned.
- <sup>4</sup> One RP Tech is for in-plant surveys, two RP Technicians are for Access Control, RP coverage, etc. (see Emergency Plan Table 2-1 for details).
- <sup>5</sup> Positions manned by shift personnel assigned other functions.
- <sup>6</sup> The STA is required in Modes 1, 2, and 3. The STA is not required during Modes 4 and 5. The Emergency Plan functions normally supported by the STA will be fulfilled by the Operations Technical Advisor or the STA during Modes 4 and 5.
- <sup>7</sup> The allowances of Technical Specification 5.2.2.c for shift crew composition to be one less than the minimum requirements of 10CFR50.54(m)(2)(i) and Technical Specifications 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

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Add/Change the following information to Table 13.1-3 on page 13.1-26

Shift Technical Advisor <sup>6</sup>	NA	1 <sup>8</sup>
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<sup>8</sup> If properly qualified per the STA Training Program Description, a Senior Reactor Operator may be combined with the STA position. Under these conditions the STA function will still be satisfied, and there will be an individual specifically dedicated to the Emergency Plan role.