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April 8, 1982

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Byron Station Units 1 and 2
Braidwod Station Units 1 and 2
Compliance with NRC Regulations
NRC Docket Nos. 50-454, 50-455,
50-456 & 50-457

Reference: (a) February 3, 1982 letter from
B. J. Youngblood to L.O. DelGeorge

Dear Mr. Denton:

This is to provide information requested in reference (a) regarding compliance with NRC regulations at Byron and Braidwood.

The enclosed Table 1 indicates the extent of compliance with the requirements of 10 CFR 20, 50, and 100. NRC review of this material is required for closure of Confirmatory Issue 36 of the Byron SER.

One signed original and (15) fifteen copies of this letter are provided for your use.

Please address questions regarding this matter to this office.

Very truly yours,

T.R. Tramm

T.R. Tramm
Nuclear Licensing Department

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FINAL SAR

TABLE 1

BYRON/BRAIDWOOD COMPLIANCE

WITH 10CFR 20, 50 AND 100

Regulation (10 CFR)	Compliances
20.1(a)	This regulation states the general purpose for the Part 20 regulations and does not impose any independent obligations on licensees.
20.1(b)	This regulation describes the overall purpose of the Part 20 regulations. It does not impose any independent obligations on licensees.
20.1(c)	Conformance to the ALARA principle is ensured by Company policies, appropriate Technical Specifications and radiation protection procedures. Chapters 11 and 12 of the FSAR describe specific equipment and design features used in these efforts.
20.2	This regulation establishes the applicability of the Part 20 regulations and imposes no independent obligations on licensees.
20.3	This regulation defines words and phrases used in PART 20. It does not impose independent obligations on licensees.
20.4	The units of radiation dose defined in this regulation are accepted.
20.5	The units of radioactivity specified in this regulation are accepted.
20.6	This regulation specifies the authorized interpretor of PART 20. It does not impose independent obligations on licensees.
20.7	This regulation gives the address of the NRC and does not impose independent obligations on licensees.
20.101	The radiation dose limits specified in this regulation will be complied with through the implementation of and adherence to administrative policies and controls and appropriate radiation protection procedures developed for this purpose. Conformance is documented by the use of appropriate personnel monitoring devices and the maintenance of all required records.

TABLE 1 (SHEET 2)

Regulation (10 CFR)	Compliances
20.102	The "Determination of Prior Dose" required by regulations 20.102(a), 20.102(b) and 20.102(c) are accepted. Records will be kept on form NRC-4 or on a clear and legible record containing all the information required in that form. These records will contain the required signatures and be retained and preserved. Administrative policies and radiation protection procedures will control all determinations.
20.103(a)	Compliance with this regulation is ensured by implementation of appropriate health physics procedures relating to air sampling for radioactive materials, and bio-assay of individuals for internal contamination. Adminstrative policies and controls provide adequate margins of safety for the protection of individuals against intake of radioactive materials. The systems and equipment described in Chapters 11 and 12 of the FSAR provide the capability to minimize these hazards.
20.103(b)	Appropriate process and engineering controls and equipment, as described in Chapters 11 and 12 of the FSAR, are installed and operated to maintain levels of airborne radioactivity as low as reasonably acheivable. When necessary, as determined by station administrative guidelines, additional precautionary procedures are utilized to limit the potential for intake of radioactive materials.
20.103(c)	The Byron/Braidwood respiratory protection program will comply with this regulation and follow the guidance of Regulatory Guide 8.15. See Byron/Braidwood FSAR section 12.5.
20.103(d)	This regulation describes further restrictions which the Commission may impose on licensees. It does not impose any independent obligations on licensees.
20.103(e)	The proper notification specified by this regulation will be made to the appropriate authority within the appropriate time limit.
20.103(f)	Plant respiratory protection programs were not in effect prior to December 29, 1976 and, therefore, the regulation does not apply.

TABLE 1 (SHEET 3)

Regulation (10 CFR)	Compliances
20.104	Conformance with this regulation is ensured by appropriate company policies regarding employment of individuals under the age of 18 and the station procedures restricting these individuals' access to the station restricted areas.
20.105(a)	The anticipated average radiation levels for unrestricted areas are discussed in FSAR Subsection 12.3.1.11.
20.105(b)	Byron/Braidwood stations administrative policies and technical specifications control the use and transfer of radioactive materials, thus assuring compliance with this regulation. Design limits for dose rates and occupancy times for unrestricted areas are provided in FSAR Subsection 12.3.1.11.
20.106(a)	Conformance with the limits specified in this regulation is ensured through the implementation of station procedures and applicable Technical Specifications which provide adequate sampling and analyses and monitoring of radioactive materials in effluents prior to and during their release. The level of radioactivity in station effluents is minimized to the extent practicable by the use of appropriate equipment designed for this purpose, as described in Chapter 11.0 of the FSAR.
20.106(b)&(c)	Commonwealth Edison does not currently intend application for limits in excess of those specified in 20.106(a) for unrestricted areas.
20.106(d)	Radioactivity concentrations at the boundary of restricted areas will be within the limits specified by this regulation. Appropriate allowances for dilution and dispersion of radioactive effluents are made in conformance with this regulation, and are described in detail in Chapter 11.0 of the FSAR.
20.106(e)	This regulation provides criteria by which the Commission may impose further limitations on releases of radioactive materials made by a licensee. It imposes no independent obligations on licensees.
20.106(f)	This regulation states that the provisions of 20.106 do not apply to disposal of radioactive material into sanitary sewerage systems. It imposes no independent obligations on licensees.

TABLE 1 (SHEET 4)

Regulation (10 CFR)	Compliances
20.107	This regulation clarifies that Part 20 regulations are not intended to apply to the intentional exposure of patients to radiation for the purpose of medical diagnosis or therapy. It does not impose any independent obligations on licensees.
20.108	This regulation describes criteria by which the Commission may require a licensee to provide an individual appropriate boi-assay services. The Byron/Braidwood radiation protection program will include a bio-assay program following the guidance of Regulatory Guide 8.9.
20.201(a)	This regulation defines "survey" as an evaluation of radiation hazards. It imposes no independent obligations on licensees.
20.201(b)	The surveys required by this regulation are performed at adequate frequencies and contain such detail as to be consistent with the radiation hazard being evaluated. Applicable health physics procedures require these surveys and provide for their documentation in such a manner as to ensure compliance with the regulations of 10 CFR 20. Refer to FSAR Subsection 12.5.
20.202(a)	Applicable health physics procedures set forth policies and practices which ensure that all individuals are supplied with and required to use appropriate personnel monitoring equipment. Work procedures are established to provide additional control of personnel working in radiation areas and to ensure that the level of protection afforded to these individuals is consistent with the radiological hazards in the work place. Refer to FSAR Subsection 12.5.
20.202(b)	This regulation provides some definitions of phrases used in this Part. It does not impose any independent obligations on licensees.
20.203(a)	The conventional radiation caution colors and "three-bladed design" radiation symbol prescribed by this regulation are accepted.
20.203(b)	The posting requirement for "Radiation Areas" prescribed by this regulation are accepted.

TABLE 1 (SHEET 5)

Regulation (10 CFR)	Compliances
20.203(c)	The requirements of this regulation are accepted. Radiation protection design features (FSAR Section 12.3) and the health physics program (section 12.5) are the instruments of implementation.
20.203(d)	This regulation defines "Airborne Radioactivity Areas" and requires specific posting. It is accepted and complied with by use of adminstrative controls and the health physics program.
20.203(e)	This regulation requires additional posting requirements. It is accepted and complied with by use of administrative controls and the health physics program.
20.203(f)	The container labeling requirements of this regulation will be complied with by appropriate adminstrative controls and radiation protection procedures.
20.204	The exceptions to part 20.203 specified by this regulation will be used where appropriate. Safe and proper application of these exception will be provided by radiation protection procedures.
20.205	All of the requirements of this regulation pertaining to procedures for picking up, receiving, and opening packages of radioactive materials are implemented by the health physics program and controlled by adminsitrative procedures.
20.206	Radiation protection training is provided for all Byron/Braidwood station personnel as part of the General Employee Orientation Training. This training is as specified in 10CFR 19.12, and is described in FSAR Subsection 13.2.1.12.
20.207	The storage and control requirements for licensed materials in unrestricted areas are conformed to and documented through the implementation of station health physics procedures.
20.301	The general requirements for waste disposal set forth in this regulation are complied with through station health physics procedures, the Technical Specifications, and the provisions of the station license. Chapter 11.0 of the FSAR describes the solid waste disposal system installed at the station.

TABLE 1 (SHEET 6)

Regulation (10 CFR)	Compliances
20.302	No such application for proposed disposal procedure as described in this regulation is contemplated.
20.303	No such plans for disposal of licensed material by release into sanitary sewage systems as provided for in this regulation are contemplated.
20.304	This regulation was deleted effective January 28, 1981.
20.305	The volume reduction system incorporates a dry waste processor for incinerating DAW (dry active waste) and contaminated oil by way of hot sand, thereby reducing it to ash. Section 11.3.3 of the FSAR describes the estimated gaseous waste releases from this volume reduction system.
20.306	Disposal of licensed material by any means other than as described in response to regulation 10CFR 20.301 is not contemplated.
20.401	Records of Surveys, radiation monitoring and disposal of licensed materials are maintained as part of the Radiation Protection procedures.
20.402	An inventory and control program has been established as part of the Radiation Protection procedures to account for all licensed material. Any loss or theft of licensed material in quantities large enough to be hazardous to persons in unrestricted areas shall be reported according with the requirements of this regulation.
20.403	This regulation establishes notification guidelines for incidents involving licensed material and special nuclear material that has caused or threatens to cause excessive radiation exposures, releases, loss of operating facilities and excessive property damage. Compliance is assured by implementing adminstrative procedures and by the health physics program.
20.404	Section 20.404 was deleted effective September 17, 1973.
20.405	Compliance with the reporting requirements of this regulation is assured by implementing administrative procedures and by the health physics program.
20.406	This regulation was deleted effective September 17, 1973.

TABLE 1 (SHEET 7)

Regulation (10 CFR)	Compliances
20.407	Records that will supply the data needed to complete the personnel monitoring reports required by this regulation are maintained by implementing radiation protection procedures.
20.408	The report of radiation exposure required by this regulation upon termination of an individual's employment or work assignment is generated through the provisions of a station health physics procedure.
20.409	The notification and reporting requirements of this regulation, and those referred to by it, are satisfied by the provisions of a station health physics procedure.
20.501	This regulation provides for the granting of exemptions for Part 20 regulations, provided such exemptions are authorized by law and will not result in undue hazard to life or property. It does not impose independent obligations on licensees.
20.502	This regulation notifies licensees that the Commission may impose upon any licensees requirements which are in addition to the regulations of Part 20. It does not impose independent obligations on licensees.
20.601	This regulation describes the remedies which the Commission may obtain in order to enforce its regulations and sets forth those penalties or punishments which may be imposed for violations of its rules. It does not impose any independent obligations on licensees.
Appendix A	Appendix A is not used.
Appendix B	Appendix B lists concentration limits above background for radioactive isotopes. As described in the response to regulations 10CFR 20.103 and 10CFR 20.106, these limits are observed.
Appendix C	Appendix C lists quantities of radioactive isotopes and is referenced in 10CFR 20.203(e), 10CFR 20.203(f) and 10CFR 20.303. Refer to the compliances to those regulations.
Appendix D	This appendix lists the addresses and telephone numbers of the NRC regional offices, and does not impose any independent obligations on licensees.

TABLE 1 (SHEET 8)

Regulations (10 CFR)	Compliances
50.1	This regulation merely states the purpose of the Part 50 regulations and does not impose any independent obligations on licensees.
50.2	This regulation defines terms used in Part 50 and does not impose independent obligations on licensees.
50.3	This regulation governs the interpretation of the regulations by the NRC and does not impose independent obligations on licensees.
50.4	This regulation gives the address of the NRC and does not impose independent obligations on licensees.
50.8	This regulation states that OMB approval was obtained for the reporting, recordkeeping and application requirements contained throughout 10CFR50, and does not impose independent obligations on licensees.
50.10	This regulation specifies the activities which require a license from the NRC. CECo is in compliance with this regulation and will not conduct any such activities at the Byron/ Braidwood stations without an NRC license.
50.11	This regulation defines exceptions and exemptions from licensing requirements. It imposes no independent obligations on licensees.
50.12	This regulation provides for the granting of exemptions from 10 CFR Part 50 regulations, provided that such exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. It does not impose independent obligations on licensees.
50.13	This regulation says that a license applicant need not design against acts of war. It imposes no independent obligations on licensees.
50.20	This regulation states the ocmmission shall issue only two classes of license. It imposes no independent obligation on licensees.
50.21	These regulations defines class 104 licenses. It does not impose any independent obligations on licensees.

TABLE 1 (SHEET 9)

Regulation (10 CFR)	Compliances
50.22	This regulation defines class 103 licenses. It imposes no independent obligations on licensees.
50.23	This regulation allows the commission to issue a construction permit prior to the issuance of a license. It imposes no independent obligations on licensees.
50.24	This regulation was deleted effective December 29, 1970.
50.30	This regulation sets forth procedural requirements for the filing of license applications concerning items such as place of filing, oath or affirmation, number of copies of application, application for operating license, filing fees, and an environmental report. The procedural requirements of this regulation have been met in the license application and will continue to be met for subsequent amendments to the license application.
50.31	This regulation allows for combining several applications for different kinds of licenses. It does not impose independent oblications on licensees.
50.32	This regulation allows incorporation, of clear and specific reference information contained in previous applications, in his application. It does not impose independent obligation on licensees.
50.33	This regulation requires the licensee's application to contain certain general information, such as identification of the applicant, construction completion dates and a list of regulatory agencies with jurisdiction over the applicant's rates and services. This information is provided in the operating license application.
50.33a	This regulation requires applicants for construction permits to submit information required for the antitrust review. The requirements set forth by this regulation were satisfied at the time the application for a construction permit was submitted.

TABLE 1 (SHEET 10)

Regulation (10 CFR)	Compliances
50.34(a)	This regulation sets forth requirements which govern the content of technical information in the Preliminary safety Analysis Report and is relevant to the construction permit stage. The requirements of this regulation were satisfied as part of the construction permit application.
50.34(b)	A Final Safety Analysis Report (FSAR) has been prepared and submitted, which addresses in the chapters indicated the information required:
	(1) site evaluation factors - Chapter 2
	(2) structures, systems and components - Chapters 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
	(3) radioactive effluents and radiation protection - Chapters 11, 12
	(4) design and performance evaluation - ECCS performance is discussed and shown to meet the requirements of 10CFR50.46 in Chapters 6 and 15.
	(5) results of research programs - Chapter 1
	(6) (i) organization structure - Chapter 13
	(ii) managerial and adminstrative controls - Chapters 13 and 17. Chapter 17 discusses compliance with the quality assurance requirements of Appendix B.
	(iii) plans for preoperational testing and initial operations - Chapter 14
	(iv) plans for conduct of normal operations - Chapter 13 and 17. Surveillance and periodic testing is specified in the Technical Specification.
	(v) plans for coping with emergencies - Emergency Plan (Chapter 13).
	(vi) Technical Specifications - prepared in conjection with the Staff (Chapter 16)
	(vii) not applicable, since the operating license application was filed prior to February 5, 1979.

TABLE 1 (SHEET 11)

Regulation (10 CFR	Compliances
50.34(b)	(7) technical qualifications - Chapter 13 (8) operator requalifications program - Chapter 13.
50.34(c)(d) & (e)	The information comprising the physical security plant and the safeguards contingency plan for the Byron/Braidwood stations has been submitted under separate cover pursuant to 10CFR2 paragraph 2.790(d). These plans have been protected from unauthorized disclosure.
50.34(f)	As stated in the opening sentences of this regulation, it does not apply to Byron/Braidwood. However, conformance to TMI-related requirements is described in Appendix E of the FSAR.
50.34a(a)	The design basis and system description of the liquid radwaste system are provided in FSAR Subsections 11.2.1 and 11.2.2, respectively. The design basis and system description of the gaseous radwaste system are provided in FSAR Subsections 11.3.1 and 11.3.2, Respectively.
50.34a(b)	The estimated quantities of principal radionuclides expected to be released through the liquid and gaseous radwaste systems are provided in FSAR Subsections 11.2.3 and 11.3.3, respectively. The description of the solid radwaste system is provided in FSAR Section 11.4.
50.34a(c)	See descriptions of compliance to 50.34a(a) and 50.34a(b).
50.35	This regulation is relevant to the construction permit stage rather than the operating license stage.
50.36(a)	Technical Specifications for Byron/Braidwood will be based on "Standard Technical Specification for Westinghouse Pressurized Water Reactors." NUREG-0452, Revision 4. See FSAR Chapter 16.0.
50.36(b)	The Byron/Braidwood Technical Specifications will be derived from analyses and evaluations included in the FSAR.
50.36(c)	The Byron/Braidwood Technical Specifications will include the following items: 1) safety limits, limiting safety system settings, and limiting control settings, 2) limiting conditions for operation, 3) surveillance requirements, 4) design features, and 5) administrative controls.

TABLE 1 (SHEET 12)

Regulation (10 CFR)	Compliances
50.36(d)	This regulation pertains to existing technical specifications for licenses which have already been issued. The Byron/Braidwood technical specifications will be issued with the operating license.
50.36a	Radiological effluent technical specifications will be issued for Byron/Braidwood with the operating license, in compliance with this regulation.
50.37	This regulation requires the applicant to agree to limit access to restricted data. This requirement was satisfied at the time of application for the construction permit.
50.38	This regulation prohibits the NRC from issueing a license to foreign controlled entities. As stated in the application for an operating license, CECo is eligible to receive this license.
50.39	This regulation provides that applications and related documents may be made available for public inspection. This imposes no direct obligations on applicants and licensees.
50.40(a)	The design and operation of the facility is to provide reasonable assurance that the applicant will comply with NRC regulations, including those in 10CFR20, and that the health and safety of the public will not be endangered. The basis for CECo's assurance that the regulations will be met and the public protected is contained in this document and in the license application and the related correspondence over the years. In addition, the process by which the plant is designed, constructed and reviewed, including reviews by the applicant, the applicants architect-engineer, the NSSS vendor and the NRC staff provides further assurance that the public health and safety will not be endangered
50.40(b)	This regulation proposes no requirements upon an applicant for a Class 103 license.

TABLE 1 (SHEET 13)

Regulation (10 CFR)	Compliances
50.40(c)	The issuance of a license to the applicant will not be inimical to the common defense and security or to the health and safety of the public. The individual showings of compliance with particular regulations contained in this section as well as the contents of the FSAR and related correspondence on the record, plus the lengthy process of design, construction, and review by the applicant, the applicants architect-engineer, the NSSS vendor, and the government ensure that the license will not be inimical to the health and safety of the public. Compliance with the requirements in 10 CFR 50.40(a) demonstrate that a license will not be inimical to the common defense and security.
50.40(d)	The requirements set forth in this regulation have been satisfied in that Environmental Reports have been submitted in accordance with 10 CFR 51 as part of the operating license application.
50.41	This regulation applies to Class 104 licenses, and as such does not apply to this application.
50.42	This regulation requires the Commission to consider additional standards in determining whether or not a license should be issued (i.e., 1) that the proposed activities will serve a useful purpose proportionate to the quantities of special nuclear material or source material to be utilized and 2) that due account will be taken of the antitrust advice provided by the Attorney General. Information pertinent to these standards was made known to the Commission at the consturction permit stage 1) by the licensing board verification of the need for power and 2) by the Attorney General's satisfactory review of the antitrust information. An update of this information has been provided with the operating license application, in accordance with Regulatory Guide 9.3.
50.43	This regulation imposes certain duties on the NRC and addresses the applicability of the Federal Power Act and the right of government agenices to obtain NRC licenses. It imposes no direct obligations on licensees.

TABLE 1 (SHEET 14)

Regulation (10 CFR)	Compliances
50.44(a)	A combustible gas control system is provided as described in FSAR section 6.2.5. This system consists of four subsystems as follows: 1) a hydrogen monitoring system, 2) a hydrogen recombiner, 3) a mixing system, and 4) a post-LOCA purge system. This system will control the concentration of combustible gas generated from zirconium-water reaction, metal corrosion and radiolytic decomposition of water in the core and containment sump, and maintain the concentration at safe levels.
50.44(b)	The containment hydrogen monitoring system is described in FSAR subsection 6.2.5.2.2. The containment atmosphere mixing system is described in FSAR subsection 6.2.5.2.3. The hydrogen recombiner and post-LOCA purge systems are described in FSAR subsections 6.2.5.2.1 and 6.2.5.2.4, respectively.
50.44(c)	An analysis which demonstrates that the post-LOCA hydorgen concentration inside containment remains below 4% by volume is provided in FSAR subsection 6.2.5.3. In addition, a vent is provided on the reactor vessel head which meets the requirements of paragraph (c)(3)(iii)of this regulation. This reactor vessel head vent is described in Appendix E, section E.19 of the FSAR.
50.44(d)	The Byron/Braidwood facility is demonstrated to be in compliance with 10CFR 50.46(b) as described in FSAR subsections 15.6.5.3.3. The amount of hydrogen generated from the zirconium-water reaction is assumed to be 5 times that calculated in FSAR subsection 15.6.5.3.3, and this hydrogen is assumed to be released instantaneously following the LOCA for purposes of this calculation, thus complying fully with this regulation.
50.44(e)	The primary means of hydrogen control in the Byron/Braidwood facilities is the hydrogen recombiner. A post-LOCA purge system is provided as backup.
50.44(f)	This regulation applies to facilities whose notice of hearing on application for a construction permit was published between December 22, 1968 and November 5, 1970.

TABLE 1 (SHEET 15)

Regulation (10 CFR)	Compliances
50.44(g)	This regulation applies to facilities whose notice of hearing on the application for a construction permit was published on or before December 22, 1968.
50.44(h)	This regulation defines terms used in previous paragraphs of 50.44, and imposes no obligations on the licensee.
50.45	This regulation provides standards for construction permits and is not material to this operating license proceeding.
50.46(a)	FSAR section 6.3 describes the emergency core cooling system which is provided for the Byron/Braidwood facilities. The ECCS evaluation model used to calculate ECCS cooling performance during a postulated loss-of-coolant accident are in conformance with 10CFR50 Appendix K, as also described in FSAR section 6.3.
50.46(b)	The acceptance criteria contained in this regulation are met as demonstrated by the analysis results contained in FSAR Subsection 15.6.5.3.3
50.46(c)	This regulation defines terms used in the previous paragraphs of 50.46, and imposes no obligations on the licensee.
50.46(d)	This regulation explains that the requirements of 50.46 are in addition to other requirements applicable to the ECCS contained in 10CFR50. It imposes no obligations on the licensee.
50.47	Emergency plans for the Byron/Braidwood facilities are still under preparation. While the applicants general system wide response plans, and the Byron/Braidwood onsite emergency plans are complete and have been submitted to the NRC staff for review, the offsite plans are not yet complete. These plans will be completed and demonstrated to be in compliance with this regulation prior to issuance of a full power operating license.
50.48(a)	A description of the fire protection equipment and program for the Byron/Braidwood stations is provided in the "Fire Protection Report in Response to Appendix A of BTP APCSB 9.5-1.

TABLE 1 (SHEET 16)

Regulation (10 CRF)	Compliances
50.48(b)	Although this regulation applies only to plants licensed to operate prior to January 1, 1979, an evaluation of the conformance of the B/B fire protection program to Appendix R has been prepared and submitted to the NRC under separate cover.
50.48(c)	This regulation concerns the scheduling of any modification required to meet Appendix R for operating plants. It is not applicable to Byron/Braidwood.
50.48(d)	This regulation concerns the scheduling of changes to the fire protection programs accepted by the NRC staff in Fire Protection Safety Evaluation Reports for operating plants. It is not applicable to Byron/Braidwood.
50.48(e)	This regulation specifies that for plants licensed to operate after January 1, 1979, fire protection modifications shall be completed in accordance with provisions of the operating license. Compliance with General Design Criterion 3 of Appendix A has been demonstrated, so no modifications will be necessary.
50.50	This regulation provides that the NRC will issue a license upon determining that the application meets the standards and requirements of the Atomic Energy Act and the regulations and that the necessary notifications to other agencies or bodies have been duly made. It imposes no direct obligations on licensees.
50.51	This regulation specifies the maximum duration of licenses. Compliance will be affected simply by the Commission's writing the license so as to comply.
50.52	This regulation provides for the combining in a single license of a number of activities. It imposes no independent obligation on the licensee.
50.53	This regulation provides that licenses are not to be issued for activities that are not under or within the jurisdiction of the United States. Byron/Braidwood is within the United States and subject to the jurisdiction of the United States.

TABLE 1 (SHEET 17)

Regulation (10 CFR)	Compliances
50.54	These regulations specify conditions that are incorporated in every license issued. Compliance is effected by including these conditions in a license when issued.
50.55	These regulations provide conditions for construction permits and are not material to the Byron/Braidwood operating license procedings.
50.55a(a)	Structures, systems and components for Byron/Braidwood are designed, fabricated, constructed, tested and inspected to quality standards commensurate with their importance. FSAR Table 3.2-1 provides details.
50.55a(b)	This section provides guidance concerning the approved edition and addenda of the ASME Boiler and Pressure Vessel Code, Sections III and XI.
50.55a(c)	Compliance with Section III of the ASME B&PV code for pressure vessels within the reactor coolant system boundary is discussed in FSAR Section 5.2. Table 5.2-1 lists the code edition and addenda used for each component.
50.55a(d)	The specific edition and addenda of the ASME B&PV code applied to piping within the reactor coolant system boundary is listed in FSAR Table 5.2-1.
50.55a(e)	The specific edition and addenda of the ASME B&PV code applied to pumps within the reactor coolant system boundary is listed in FSAR Table 5.2-1.
50.55a(f)	The specific edition and addenda of the ASME B&PV code applied to valves within the reactor coolant system boundary is listed in FSAR Table 5.2-1 and discussed in FSAR Subsection 5.2.1.
50.55a(g)	Provisions for inservice inspection are described in FSAR Section 6.6 for Class 2 and 3 components. Such provisions for components within the reactor coolant pressure boundary are discussed in FSAR Section 5.4. Specific relief from the requirements of this section will be requested when determined to be necessary according to 10CFR50.55a(g)(5).
50.55a(h)	The protection system for the Byron/Braidwood plants meets the requirements of IEEE-279-1971 as discussed in FSAR Sections 7.1, 7.2, 7.3 and 7.6.

TABLE 1 (SHEET 18)

Regulation (10 CFR)	Compliances.
50.55a(i)	Compliance with the fracture toughness requirements of 10CFR50 Appendix G for pressure retaining components of the reactor coolant pressure boundary are discussed in FSAR Subsection 5.3.1.5. Compliance with the material surveillance requirements of 10CFR50 Appendix H for the reactor vessel are discussed in FSAR Subsection 5.3.1.6.
50.55a(j)	This regulation applies to power reactors for which a notice of hearing on an application for a provisional construction permit or a construction permit has been published on or before December 31, 1970. It is not applicable to Byron/Braidwood.

TABLE 1 (SHEET 19)

Regulation (10 CFR)	Compliances
50.55b	This regulation has been revoked.
50.55e	This regulation is proposed, and in addition, it will only apply to fuel reprocessing plants.
50.56	This regulation provides that the Commission will, in the absence of good cause shown to the contrary, issue an operating license upon completion of the construction of a facility in compliance with the terms and conditions of the construction permit. This imposes no independent obligations on the applicant.
50.57(a)	This regulation requires the Commission to make certain findings prior to the issuance of an operating license.
50.57(b)	The license, as issued, will contain appropriate conditions to ensure that items of construction or modification are completed on a schedule acceptable to the Commission.
50.57(c)	This regulation provides for a low-power testing license.
50.58	This regulation provides for the review and report of the Advisory Committee on Reactor Safeguards .
50.59	These regulations define changes, tests and experiments for production and utilization facilities, and provides guidance for record keeping of such and licensing when required. Commonwealth Edison has procedures to ensure that any changes, tests or experiments which may involve unreviewed safety questions are properly reviewed and reported.
50.60	This regulation has been deleted.
50.65	This regulation has been deleted.
50.70	These regulations require licensees to permit inspection of this records, premises, activities and licensed materials, and to provide space for Commission inspection personnel. Such space has been provided at the Byron/Braidwood stations, and a resident inspector has been assigned.
50.71	These regulations address the maintenance of records and the making of reports. CECo will comply with these regulations for the Byron/Braidwood stations.
50.72	Notification of significant events to the NRC will be made in accordance with this regulation. Commonwealth Edison has procedures which ensure compliance with this regulation.

TABLE 1 (SHEET 20)

Regulation (10 CFR)	Compliances
50.78	This regulation requires holders of construction permits to submit installation information and permit verification by the International Atomic Energy Agency, if requested by the commission.
50.80	This regulation provides that licenses may not be transferred without NRC consent. No application for transfer has been made by CECo.
50.81	This regulation permits the creation of mortgages, pledges, and liens on licensed facilities, subject to certain provisions. It prohibits secured creditors from violating the Atomic Energy Act and the Commission's regulations.
50.82	This regulation provides for the termination of licenses. It is not applicable to the application for license of Byron/Braidwood.
50.90	This regulation allows a holder of a construction permit or license to apply for amendment of the permit or license.
50.91	This regulation provides the Commission guidance in issuing license amendments.
50.100	These regulations govern the revocation, suspension, and modification of licenses by the commission under defined unusual circumstances.
50.101	These regulations govern the revocation, suspention, and modification of licenses by the commission under defined unusual circumstances.
50.102	These regulations govern the revocation, suspension, and modification of licenses by the commission under defined unusual circumstances.
50.103	These regulations govern the revocation, suspension, and modification of licenses by the commission under defined unusual circumstances.
50.109	This regulation specifies the conditions under which NRC may require the backfitting of a facility. It imposes no independent obligations on licensees.
50.110	This regulation governs enforcement of the Atomic Energy Act, the Energy Reorganization Act of 1974, and the NRC's regulations and orders.

TABLE 1 (SHEET 21)

Regulation (10 CFR)	Compliances
Appendix A	The extent to which the Byron/Braidwood stations structures, systems and components important to safety conform to the "General Design Criteria for Nuclear Power Plants" is discussed in Section 3.1 of the FSAR. Each of the GDC are listed, and a detailed discussion of how Byron/ Braidwood conforms to the criterion follows immediately.
Appendix B	Chapter 17 of the Byron/Braidwood FSAR describes the Quality Assurance program for the Byron/ Braidwood stations. The program is in compliance with the requirements of Appendix B.
Appendix C	This appendix was deleted effective March 31, 1982.
Appendix D	This appendix has been superseded by 10 CFR Part 51. As noted in the discussion for 10 CFR 50.40(d), the requirements of Part 51 have been satisfied.
Appendix E	This appendix specifies requirements for emergency plans. Emergency plans are being developed to provide reasonable assurance that appropriate measures can and will be taken in the event of an emergency to protect the public's health and safety and prevent damage to property. The new criteria for emergency planning developed subsequent to the event at Three Mile Island, Unit 2 are factored into the emergency plans for CECo.
Appendix F	This appendix applies to fuel reprocessing plants and related waste management facilities, not to power reactors and is, therefore, not applicable.
Appendix G	Fracture toughness compliance can be found in FSAR Section 5.3.1.5 Assurance of adequate fracture toughness of ferritic materials in the reactor coolant pressure boundary (ASME Code, Section III, Class 1 components) is provided by compliance with the requirements for fracture toughness testing included in NB-2300 to Section III of the ASME Code and Appendix G of 10CFR50.

TABLE 1 (SHEET 22)

Regulation (10 CFR)	Compliances
Appendix H	Reactor vessel material surveillance program requirements are delineated in this part. Technical Specifications and operating procedures have been established to implement their requirements. Further information is provided in FSAR Chapter 5.0.
Appendix I	This appendix provides numerical guides for design objectives and limiting conditions for operation to meet the criteria "as low as is reasonably achievable" for radioactive material in light water-cooled nuclear power reactor effluents. FSAR Chapters 2.0, 11.0, and 12.0 discuss the extent to which the criteria for Appendix I are met.
Appendix J	Reactor containment leakage testing for water-cooled power reactors is delineated in this appendix. These requirements are given in the Technical Specifications. Additional information concerning compliance can be found in FSAR Chapter 6.0, Sections 6.2.3 and 6.2.6.
Appendix K	This appendix specifies features of acceptable ECCS evaluation models. As stated in FSAR Section 6.3, the ECCS subsystem functional parameters are integrated so that the Appendix K requirements are met over the range of anticipated accidents and single failure assumptions. In addition, the ECCS evaluation model used to demonstrate conformance with 10 CFR 50 46 (see FSAR Section 15.6.5) is in conformance with Appendix K requirements.
Appendix L	This appendix identifies the information required to be submitted by the applicant to the Attorney General to satisfy the requirements when applying for a facility license. The requirements of this appendix were satisfied prior to the time of application for the operating license.
Appendix M	This appendix provides guidelines for licensing of plants of standard design by application for a manufacturing license. In this option, site features are not considered in plant design. This Appendix is not applicable to Byron/Braidwood, since the specific site requirements were considered in the plant design.

TABLE 1 (SHEET 23)

Regulation (10 CFR)	Compliances
Appendix N	This appendix sets forth guidelines applicable to duplicate plant designs on multiple sites. The Byron/Braidwood application is submitted in accordance with Appendix N, and meets all of the requirements therein.
Appendix O	Appendix O dictates guidelines for the Staff in reviewing standardization of design. No independent obligation on the licensee is required.
Appendix P	This proposed appendix is applicable only to fuel reprocessing plants, and therefore, does not apply to Byron/Braidwood.
Appendix Q	This appendix covers pre-application early review of site suitability issues, and is not applicable to Byron/Braidwood.
Appendix R	Appendix R Covers fire protection programs for operating nuclear power plants. The fire protection program and equipment for the Byron/Braidwood stations are described in the report "Fire Protection Report in Response to Appendix A of BTP APCSB 9.5-1." A description of the conformance to Appendix R was submitted under separate cover.
100.1	This regulation explains the purpose of this part, and imposes no independent obligations on licensees.
100.2	This regulation explains that this part is applicable to stationary power and test reactors. The Byron and Braidwood reactors fall into this category. This regulation imposes no independent obligations on licensees.
100.3	This regulation provides definitions of words and phrases used in this part, and imposes no independent obligations on licensees.
100.10(a)	The characteristics of the reactor design and proposed operation are provided throughout the FSAR.
100.10(b)	The Byron/Braidwood sites geography and demography are provided in the respective Sections 2.1 of the FSAR.

TABLE 1 (SHEET 24)

Regulation (10 CFR)	Compliances
100.10(c)	The physical characteristics of the Byron and Braidwood sites are found in the respective sections of the FSAR as follows: 1) meteorology-Section 2.3, 2) Hydrology-Section 2.4, and 3) Geology and Seismology-Section 2.5.
100.10(d)	All characteristics of the site have been adequately considered and compensated for in the design of these stations.
100.11(a)	The exclusion area, low population zone and population center distance have been determined for both the Byron and Braidwood sites, and are described in FSAR Sections 2.1.1.3, 2.1.3.4 and 2.1.3.5, respectively.
100.11(b)	The two units at each of the Byron and Braidwood sites are independent to the extent that an accident in one unit will not initiate an accident in the other unit. As described in FSAR Chapters 11.0 and 15.0, the radioactive effluent releases for both units do not exceed the allowable limits of applicable regulations.
Appendix A	Appendix A to 10 CFR part 100 provides seismic and geologic siting criteria for nuclear power plants. The suitability of the Byron and Braidwood sites with regard to the criteria of this appendix is thoroughly documented in the respective Chapters 2.0 of the FSAR.