UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
COMMONWEALTH EDISON CO.,	)	Docket Nos. STN
	)	
Byron Station	)	50-454 and 50-455
	)	
(Units No. 1 and No. 2)	)	Operating License

LEAGUE OF WOMEN VOTERS OF ROCKFORD, ILLINOIS' FIRST INTERROGATORIES TO, AND ACCOMPANYING REQUEST FOR DOCUMENTS FROM, COMMONWEALTH EDISON CO.

Pursuant to 10 C.F.R. Secs. 2.740b and 2.741, the League of Women Voters of Rockford, Illinois ("League") requests that Commonwealth Edison Co., by an officer or officers with knowledge, answer the following interrogatories separately and fully in writing, under oath or affirmation, within 14 days after service.

PLEASE OBSERVE the definitions and instructions contained in I below. These definitions and instructions are an essential part of these Interrogatories and have been provided to you in order to describe with reasonable particularity the information requested herein.

I

DEFINITIONS AND INSTRUCTIONS

The following definitions and instructions shall be used and applied by you in connection with your answer to these Interrogatories.

1. "Communication" shall mean and include all "documents" as hereinafter defined and all written, oral, telephonic or other inquiries, discussions, conversations, negotiations, agreements, understandings, meetings, letters, notes, telegrams, advertisements, press releases, publicity releases, trade releases, and interviews.

2. As used herein, "document" includes, but is not limited to, written "communication" (as defined), in any form, papers, photographs, films, recordings, memoranda, books, records, accounts, communications, writings, letters, telegrams, mailgrams, correspondence, notes of meetings or of conversations or of phone calls, interoffice memoranda or written communications of any nature, recordings of conversations either in writing or upon any mechanical or electronic or electrical recording devices, notes, accountant's statements or summaries, budgets, exhibits, appraisals, work papers, reports, projects, tabulations, purchase orders, invoices, canceled checks or check stubs, receipts, studies, surveys, legal opinions, affidavits, interrogatories, legal briefs, legal motions, judgments, complaints, legal complaints, answers, legal answers, counterclaims, vouchers, minutes of meetings, designs, drawings, plans, manuals, notebooks, worksheets, contracts, agreements, letter agreements, bills of lading, warehouse receipts, timesheets, promissory notes, diaries, desk calendars, circulars, charts, logs, ledgers, schedules, transcripts, news releases, advertisements, press books, advertising materials, publicity releases, trade releases, press releases, teletype messages, licenses, permits, financial statements, appointment books, payment records, stenographers' notebooks, punchcards and computer printout sheets, computer data, telecopier transmissions, articles of incorporation, articles of association, by-laws, rules, expense records, criteria, regulations, directives, hotel charges, stock

transfer books, proposals, prospectuses, offers, orders, logs, objections, brochures, films, pictures, video tapes, video cassettes, inquiries, contracts, evaluations, promotional material, production and sales or license material, whether formal or informal; and all drafts, revisions, and differing versions (whether formal or informal) of any of the foregoing, and also all copies of any of the foregoing which differ in any way (including handwritten notations or other written or printed matter of any nature) from the original.

3. The term "relate to" or "relating to" shall mean: consist of, refer to, reflect or be in any way logically or factually connected with the matter discussed.

4. The words "and" and "or" shall be read herein in the conjunctive or disjunctive or both, as the case may be, all to the end that the interrogatories be applied which results in the more expansive answer.

5. If you claim privilege regarding (or advance any reason or objection for not providing) any information requested herein, please set forth with particularity all underlying reasons therefor, and identify and maintain all related documents and communications for possible inspection and/or ruling by a Licensing Board or Court.

II

INTERROGATORIES

Interrogatory No. 1

Concerning Contention 1A:

(a) state specifically what Commonwealth Edison Company ("CECO") has done to evaluate and/or alter its generic QA/QC programs as used at its Byron plant ("Byron") in response to the proceedings regarding CECO's La Salle Plant;

(b) state specifically what CECO has done to evaluate and/or alter its QA/QC program at Byron in response to the continuing IE reports citing QA/QC deficiencies at the Byron Plant;

(c) describe with particularity what has been done to re-evaluate the quality and conformance level of work performed under the QA/QC procedures which have subsequently been determined to be inadequate; and

(d) identify and produce all documents relied upon in the preparation of the answers to parts (a), (b), and (c) of Interrogatory No. 1.

Interrogatory No. 2

Concerning Contention 8:

(a) (i) state whether CECO has compiled for Byron a list or lists of "important to safety" equipment as that term is defined in the November 20, 1981 Memorandum of Harold R. Denton, "Standard Definitions for Commonly Used Safety Classification Terms" and, if the response is in the negative, state with particularity why no such list has been compiled;

(ii) if such a list of important to safety equipment has been compiled, produce the list(s) and state specifically for each piece of equipment included therein the criteria used to classify it as important to safety and what environment was assumed during that classification;

(iii) state whether all components of each item of equipment on the list of important to safety equipment also have been qualified as important to safety and, if so, the criteria used and what environment was assumed for the qualification of those components; and

(iv) state with specificity how equipment included in important to safety equipment lists differ from safety related equipment;

(b) state whether CECO has undertaken or is undertaking a site-specific probabilistic risk assessment ("PRA") or similar study or analysis for the Byron Plant to confirm the accuracy of any list of important to safety equipment or for any other purpose; if not, indicate whether or not CECO plans at any time to undertake such a study or analysis;

(c) provide a copy of the PRA performed for CECO's Zion facility (which the Byron FSAR states is similar in design to Byron);

(d) state with specificity each instance where a Byron PRA would differ from the Zion PRA and provide a listing of major differences between Byron and Zion which would affect PRA and risk assessment results, specifying in each instance the impact of the difference on the probability of accidents and radioactive releases and on the consequences of such accidents and/or releases;

(e) state whether you agree that a Byron-specific PRA would be useful for the safe operation of the Byron Plant;

(f) state whether you agree that a Byron-specific PRA is necessary for the safe operation of the Byron Plant;

(g) state whether you agree that a Byron-specific PRA would be useful for understanding large accidents and their mitigation (including emergency preparedness) at Byron;

(h) if your answer to (e), (f) or (g) is no, explain in detail the reasons for your answer, and if your answer to (b) is no, explain in detail why no Byron-specific PRA is contemplated; and

(i) identify and produce all documents relied upon in the preparation of your answers to Interrogatory No. 2.

Interrogatory No. 3

Concerning Contention 19:

(a) state whether any Byron site-specific accident consequence model has been constructed and what computer program, if any, was used in its construction;

(b) provide a copy of the material used or to be used as input for construction of the Byron site-specific accident consequence and a copy of the field model;

(c) describe with particularity the dates, locations, scope, and subsequent evaluations of any off-site emergency drills conducted or planned to be conducted in relation to Byron and indicate with specificity any differences between the Byron drills conducted or planned and drills previously carried out at the Zion facility;

(d) identify and produce all documents relied upon or referred to in your answers to parts (a), (b), and (c) of this Interrogatory; and

(e) provide a citation or citations to the document or documents where the State of Illinois has designated 10 miles as the radius of the Low Population Zone and 50 miles for the radius of the Emergency Planning Zone, and also where the State has discussed the considerations involved in and/or the reasons for so designating those radii.

Interrogatory No. 4

Concerning Contention 22:

(a) state what specific measures are currently being taken or are expected to be taken by CECO to prevent or inhibit the process of steam generator tube degradation, which causes include but are not limited to flow-induced vibration in the preheater section, and state for each such measure whether (and, if so, how) it differs from measures previously adopted at other nuclear plants;

(b) for each of the accident scenarios which have been postulated as applicable to Byron, describe with particularity what radicactive material would be released by a steam generator tube failure, the form in which it would be released, and in what possible pathways it would be released;

(c) provide copies of all operating procedures concerning steam generators, water quality, and chemistry control and any other operating procedures which are significant to the control of the operation of the steam generators within the design limitations, including but not limited to pressure, temperature, fatigue and corrosive limits, and if any of the above procedures are not yet available but are expected to be produced prior to operation of the Byron Plant, provide the titles of these procedures;

(d) describe in detail the design features and material specified for the steam generators at Byron Units 1 and 2, including but not limited to the differences, if any, in components for use at Unit 1 and Unit 2 and the reasons for these differences, and provide a list of other U. S. nuclear units furnished by Westinghouse which utilize the same steam generator designs as are found at Byron; if exact duplicatates do not exist, identify which plants utilize the individual design and material features employed at Byron;

(e) provide copies of procedures and/or specifications pertaining to the in-service inspection of the steam generators, including but not limited to procedures and/or specifications related to the maintenance of occupational radiation exposure ALARA;

(f) provide copies of any reports available to CECO concerning results of generic studies of steam generator problems conducted by or for CECO, EPRI, the NRC, National Laboratories, other utility groups, consultants, any other entity, group or individual, and if such reports contain recommendations for changes or provisions that could be implemented at the Byron Plant, provide a description of CECO's evaluation of such recommendations and whether or not they have been or are being implemented at Byron and indicate with specificity the reasons for CECO's response to that evaluation;

(g) provide detailed information concerning CECO's evaluation of the potential cracking problem of steam generators as described in NRC Information Notice 82-37, dated September 16, 1982, as it may apply to the Byron steam generators, and if this problem is applicable to Byron, describe in detail the corrective actions, if any, to be taken by CECO, or if no corrective actions are planned, describe in detail the reasons for CECO's position on this problem;

(h) identify and produce all documents not already requested above relating to or relied upon in your answer to Interrogatory No. 4.

Interrogatory No. 5

Concerning Contention 23:

(a) state whether any Byron-specific PRA or similar study, including but not limited to failure modes and effects analyses, systems interaction analyses, and dependency analyses, and either utilizing or not utilizing a list of important to safety equipment, has been performed to identify potential adverse systems interactions at Byron, and (i) if yes, provide a copy of the study and its results, (ii) if no, describe in detail the reasons why no such study has been done, and (iii) if no dependency analysis has been done, state with specificity what assurance there is, if any, that common cause failure will not impact upon more than one redundant safety system or function;

(b) if no such study as described in part (a) above has been done, state (i) whether a Byron-specific PRA or similar study as detailed in part (a) of this Interrogatory would be useful in the safety evaluation and operation of the Byron

Plant, (ii) whether such a study would be necessary in the safety evaluation and operation of the Byron Plant, and (iii) if your answer to (i) or (ii) above is no, specify the reasons on which that position is based;

(c) state whether CECO has identified or knows of any attempts to identify potential adverse systems interaction with respect to the Byron Plant, and if yes, describe with particularity the identification process and its results;

(d) state whether CECO has taken any steps or knows of any steps which have been taken by others to respond to the concerns addressed by Dr. S. Hanauer to E. G. Case (NRC), August 18, 1977, quoted in paragraph 3.1.3 of the Affidavit of Richard B. Hubbard and Gregory C. Minor, November 12, 1980, and if yes, describe those actions in detail;

(e) state whether an accident resulting from a combination of human error and equipment failure could occur at Byron, and specify the reasons for your answer;

(f) state whether any study of the kind identified in (a) above has been performed for any other CECO nuclear plant, and, if so, produce a copy of each such study and state with particularity why such a study has been performed at other CECO plant(s) but not at Byron; and

(g) identify and produce all documents relating to or relied upon in your answer to Interrogatory No. 5.

Interrogatory No. 6

Concerning Contention 32:

(a) state with specificity what CECO believes to be adequate environmental qualification methodology for use at Byron;

(b) state with specificity what CECO has done, is doing, or proposes to do at Byron to satisfy the environmental qualification methodology outlined in subpart (a) above;

(c) state whether you agree that such methodology should apply to Byron's important to safety equipment and to components thereof as well as to safety-related equipment, and explain your answer in detail;

(d) state with specificity whether all Byron important to safety equipment has been qualified per the requirements of NUREG-0588 and, if not, state with specificity which equipment has and has not been so qualified;

(e) state with specificity whether all Byron safety related equipment has been qualified per the requirements of NUREG-0588 and, if not, state with specificity which equipment has and has not been so qualified;

(f) state whether the NRC has completed its review of CECO's equipment qualification program at Byron and, if not, provide the schedule for its completion;

(g) state with specificity the regulatory criteria used to judge the adequacy of CECO's equipment qualification program at Byron; and

(h) identify and produce all documents relied upon in or relating to your answers to Interrogatory No. 6.

Interrogatory No. 7

Concerning Contention 39 and with regard to the Byron FES, pp. 5-57 to 5-59:

(a) state with particularity the basis for the estimated groundwater travel time from the Byron Plant to the nearest spring and then to the Rock River as 24 years and describe with particularity any field tests which have been performed to verify this conclusion;

(b) state with particularity the basis for the conclusion that the travel time for most of the accident-affected groundwater would be greater than 24 years and describe with particularity any field tests which have been performed to verify this conclusion;

(c) state with particularity the basis for the conclusion that in the event of release of radionuclides into the water pathways, "measurable retardation" by the dolomite aquifer, especially for cesium, would occur during the groundwater travel process, and indicate what specific effects that retardation would have on CECO's exposure dose calculations;

(d) state with particularity the number and location of municipal wells actually unaffected by recharge from a contaminated Rock River because they screen into aquifers not closely connected to the water table aquifer, and the specific effects of that figure on CECO's exposure dose calculations;

(e) state with particularity (i) the reasons that the current amount of grouting beneath the plant site would be ineffective to prevent contamination of groundwater flow, (ii) the reasons additional grouting and well point dewatering would allow isolation of "radioactive contamination near the source" when the present grouting does not, and (iii) the reasons why additional steps are not now being taken to interdict the flow of contaminated groundwater if the current level of grouting will be ineffective for that purpose;

(f) in the event of a radioactive release to the underground aquifers, indicate with specificity what measures have been taken or are planned to be taken in the future to prevent the further migration of contaminated material away from the Byron site;

(g) for each of the accident scenarios postulated as applicable to Zion which would also be applicable to Byron and which were assumed to lead to the release of radioactive materials to the groundwater or to the area beneath the Byron plant, or in the vicinity of the Byron plant, state with specificity by isotopes what varieties of radioactive material would be released, the range of core temperatures which have been assumed for any accident scenarios involving a core melt, and the assumed depth to which the core could sink, and the basis for these assumptions at Byron;

(h) state with particularity any data known to CECO on potentiometric surfaces for the Byron site (and the region surrounding the Byron site) water table aquifer and confined aquifer;

(i) state with particularity all data known to CECO on the permeability and/or transmissivity of the water table aquifer and confined aquifer in the Byron area, including all measurements and how those measurements were made;

(j) state with particularity all data known to CECO on the measurements of the porosity of the rocks underlying the Byron site, the specific yield of the Byron site aquifers, and how those measurements were made;

(k) state with specificity all data known to CECO on the dispersivity of the Byron water table aquifer and confined aquifer and the methods used to acquire that data; and

(l) identify and produce all documents relied upon in or relating to your answers to Interogatory No. 7.

Interrogatory No. 8

Concerning Contention 42:

(a) state whether worker radiation exposure levels at Byron were calculated with a current dose-conversion factor based on models contained in ICRP-2 (NUREG/CR-0150);

(b) if the answer to (a) above is no, indicate what method was used;

(c) do you agree that low doses of radiation produce more cancers per rem than high doses of radiation, and if your answer is no, explain in detail the reasons for this position;

(d) state specifically the realistic person-rem dose per year for each Byron reactor and why you consider that dose to be realistic, the number of major reactor overhauls, including but not limited to the replacement of steam generators, expected to be performed during the lifetime of each reactor, and the resulting person-rem from each of those overhauls;

(e) state specifically the provisions made for the staffing of a Byron health physics department and for the training of that staff;

(f) provide copies of any studies performed by, or known to, CECO concerning expected values of in-plant radiation exposure and of design and procedure changes, addition of equipment and/or tools to reduce such exposure;

(g) as regards steam generators, provide detailed information on material selection, hardware configuration, maintenance tooling, and access platforms and cranes that have been specified so as to reduce or minimize the in-plant radiation exposure;

(h) describe with particularity all Byron plant features which have been modified or added so as to provide a reduction of in-plant radiation exposure;

(i) provide copies of all CECO procedures written for the implementation of ALARA provisions at Byron; and

(j) identify and produce all documents relied upon in or relating to your answers to Interrogatory No. 8 not otherwise requested above.

Interrogatory No. 9

Concerning Contention 61:

(a) state in detail how the current environmental qualification methodology which CECO is using for Byron differs from the methodology in use prior to the events at TMI-2;

(b) with regard to the discussion in the Byron FSAR concerning NUREG 0737 and Byron equipment which is similar or identical to the equipment which failed at TMI-2, state with particularity which items of equipment and components of equipment in that discussion have been classified as important to safety and which have been classified as safety related only;

(c) state whether a full Class 9 analysis of Byron has been conducted to establish the worst case environment for use in qualification of equipment important to safety, and (i) if your answer is yes, provide all data on the study, and (ii) if your answer is no, explain in detail the reasons why such an analysis was not conducted;

(d) state whether a full Class 9 analysis of Byron has been conducted to establish the worst case environment for use in qualification of safety related equipment, and (i) if your answer is yes, provide all data on the study, and (ii) if your answer is no, explain the reasons why such an analysis was not conducted;

(e) state with particularity what safety margins are used by CECO in establishing the range of accident environments that equipment important to safety must be qualified to withstand;

(f) state with particularity what safety margins are used by CECO in establishing the range of accident environments that safety related equipment must be qualified to withstand; and

(g) identify and produce all documents relied upon in or relating to your answer to Interrogatory No. 9.

Interrogatory No. 10

Concerning Contention 62:

(a) state whether or not you agree that multiple independent or common-cause failures of systems and equipment are possible at Byron;

(1) if your answer is no, explain the reasons for your answer in detail;

(2) if your answer is yes, state with particularity (i) which Byron-specific multiple failure sequences you believe could lead to a class 9 accident, (ii) what measures CECO is employing or contemplating employing to prevent or mitigate the occurence and the effects of such class 9 accidents, and (iii) if no Byron-specific multiple failure sequences/class 9 scenarios have been developed, explain in detail why they have not been; and

(b) identify and produce all documents relied upon in or relating to your answers to Interrogatory No. 10.

Interrogatory No. 11

Concerning Contention 63:

(a) state specifically which systems, equipment, and equipment components at Byron which were classified as non-safety related prior to the events at TMI have been, as a result of those events, reclassified important to safety, safety related, or have been assigned to an intermediate category between safety related and non-safety related, and if no such reclassification has occurred, explain in detail why not;

(b) state whether any Byron-specific non-design basis studies, including but not limited to a PRA, have been done or are planned in order to evaluate or reclassify any equipment classified as non-safety related prior to TMI-2, and if no such studies have been done or are planned, explain in detail why not;

(c) State with specificity whether CECO has evaluated improvements in risks which might result from the addition of safety features, including but not limited to filtered/vented containment, to reduce the releases during a Class 9 accident at Byron, and (i) if your answer is yes, provide all data regarding that evaluation, and (ii) if your answer is no, explain in detail why not;

(d) State with specificity whether CECO has evaluated the improvement in risks that may result from the addition of a core catcher beneath the pressure vessel to delay release of core melt material to the environment, and (i) if your answer is yes, provide all data regarding that evaluation, and (ii) if your answer is no, explain in detail why not; and

(e) identify and produce all documents relied upon in or relating to your answer to Interrogatory No. 11.

Interrogatory No. 12

Concerning Contention 77:

(a) state specifically each piece of important to safety equipment and the components of such equipment which have been environmentally qualified by subjecting them first to the aging effects of radiation, temperature, and vibration, and then subjecting them to seismic testing requirements, and state with particularity the design, procedures, content, and results of any such testing;

(b) if no such qualification procedures have been employed, explain in detail why not;

(c) state whether all Byron important to safety equipment has been analyzed and qualified for the full plant life (estimated at 30-40 years), and if not, state in detail which equipment has not been and the length of time for which it has been qualified;

(d) state whether all Byron safety related equipment has been analyzed and qualified for the full plant life (estimated at 30-40 years), and if not, state in detail which safety related equipment has not been and the length of time for which it has been qualified;

(e) state whether all Byron important to safety equipment has a qualified life established through an acceptable qualification program, and (i) if yes, identifity and provide all documents relevant thereto, and (ii) if no, explain why in detail;

(f) state whether all Byron safety related equipment has a qualified life established through an acceptable qualification program, and (i) if yes, identify and provide all documents relevant thereto, and (ii) if no, explain why in detail; and

(g) identify and produce all documents relied upon in or relating to your answers to Interrogatory 12.

Interrogatory No. 13

Concerning Contention 108:

(a) state whether you agree that the effects of accident-related radiation releases at Byron could reach as far as 100 miles;

(1) if your answer is no, state the maximum distance you contend the effects of such radiation releases could reach and state in detail the reasons for your answer, and include all data on any Byron-specific studies which have been done or which support those reasons; or

(2) if your answer is yes, (i) indicate what provisions have been made for emergency plans for areas beyond the 50-mile EPZ, and (ii) if no such plans have been made, state with particularity why not;

(b) state whether any Byron-specific accident consequence study (including any computer study) has been done to determine the adequacy of the 10 and 50-mile EPZ's and, if such a study has been done, identify and produce the data used, the program used, the assumptions used, and the results of the study;

(c) if no such study has been done, state with particularity why not;

(d) state whether CECO has considered the effectiveness of using an actual consequence analysis resulting from a Class 9 accident to establish a realistic EPZ or extended EPZ for Byron, and (i) if your answer is yes, provide all data regarding that evaluation, and (ii) if your answer is no, explain in detail why not;

(e) state whether the impact of a radiological accident at Byron has been evaluated by neighboring states, and, if so, indicate whether that evaluation included each state's emergency preparedness and planning;

(f) explain in detail what provisions have been made at Byron for the possibility that, during an accident, personnel would be excluded from the EOF or other facilities due to ground dose exposure in the vicinity;

(g) describe in detail what steps have been taken to insure that field monitoring teams at Byron will be capable of providing the necessary data to update dose calculations during an emergency;

(h) state in detail what accuracy is expected for the value of radiation releases (in curies of each isotope released) which are to be used in dose calculation or offsite doses during an accident at Byron;

(i) state in detail the accuracy with which iodine release (in curies of Iodine) is expected to be known during an accident at Byron as well as the resulting accuracy of the prediction of thyroid dose of the plume and ingestion EPZ's; and

(j) identify and produce all documents relied upon in or relating to your answers to Interrogatory No. 13.

Interrogatory No. 14

Concerning Contention 109:

(a) with reference to the Class 9 accident scenarios and release categories which have been postulated for Zion in its PRA which would also be applicable to Byron, what quantities of actinide isotopes have been assumed to be released during core melt accidents, specifically including, but not limited to, the released quantities of plutonium, neptunium, and americium;

(b) identify with particularity and provide a detailed geologic map of the rock outcroppings located in or near the Rock River in the vicinity of the Byron site;

(c) state with particularity all data concerning any model which has been used to measure radionuclide migration into the groundwater, and in particular include information on the assumptions used regarding chemical reactions with and/or retardation of radionuclides by material of the rock underlying the Byron site; and

(d) identify and produce all documents relied upon in or relating to your answers to Interrogatory 14.

Interrogatory No. 15

Concerning Contention 111:

(a) state specifically all data concerning provisions made for calculating radiation dosage at Byron for the widely varying radiosensitivity to cancer induction by ionizing radiation which is found in a heterogenous population;

(b) state specifically what plans or provisions CECO has made for monitoring by air the micro-meteorological patterns of ground passage and radioactive fallout following Byron plant accidents involving releases of radiation to the air pathway;

(c) state specifically the plans which CECO has developed for training the public, and in particular public officials such as police and firemen, for procedures to be followed during a radiological emergency at Byron in order to reduce radiation exposure to the public;

(d) state specifically the reasons for calculating internal dose and dose commitments at Byron to periods typically of 50 years, where the current life expectancy is approximately 70 years;

(e) state whether you agree that the acceptable radiation level for the Byron plant when operating in conformance with ALARA should be one mrem per year, and give detailed reasons for your answer;

(f) state whether you agree that Byron should have a minimum of 50 off-area monitoring stations equiped with air samplers, fallout trays, gummed paper collectors, and rain water collectors to evaluate the alpha as well as the beta and gamma activity, and (i) if your answer is no, give detailed reasons for your answer; (ii) if your answer is yes, state with specificity what plans CECO has to establish such monitoring stations and the number of such stations planned;

(g) state whether you agree that NTA thick emulsion film monitoring is insufficient for a personnel neutron monitoring program at Byron, and (i) if your answer is no, explain your answer in detail; (ii) if your answer is yes, explain in detail what other monitoring techniques CECO is planning to use, including but not limited to electrochemical etching of polycarbonate foils and CR-39 foils;

(h) (i) explain with particularity the methods CECO is planning to use at Byron for: (1) identifying short-lived iodine and noble gases; (2) identifying the chemical form of radioiodine; (3) distinguishing between airborne gases and particulates; and (4) measuring quantitatively the carbon-14;

(ii) if no monitoring systems, as described in subpart (i) above, are planned, state in detail the reasons that no such monitoring will be conducted;

(i) state whether you agree that it is unsatisfactory to measure only absolute values of alpha, beta, and gamma dose levels at Byron, and (i) if your answer is yes, specify in detail what CECO is doing to measure the emissions of individual radionuclides at Byron; (ii) if your answer is no, give detailed reasons for your answer;

(j) identify and produce all documents relied upon in or relating to your answers to Interrogatory 15.

Interrogatory No. 16

Concerning Contention 112:

(a) state whether you agree that spreading a given level of person rems across progressively larger numbers of people results in an increasing number of malignancies, and (i) if your answer is no, give detailed reasons for your answer, (ii) if your answer is yes, explain in detail the reasons for the expected utilization of large numbers of transient workers at the Byron Plant;

(b) describe in detail what design changes have been made on the Byron steam generators to reduce the frequency with which maintenance is required and to eliminate the need for their replacement or to allow replacement without occupational exposure;

(c) describe in detail any proposed educational program on radiation protection and the effects of radiation exposure, including genetic, teratogenic, and somatic effects, which will be offered to or required of all Byron employees;

(d) describe in detail any prospective program for fecal analyses, differential blood counting, wound decontamination, and lense opacity examination of Byron plant workers;

(e) describe in detail any plans which have been made for dry runs prior to any "hot" operations and/or emergency procedures to be followed by Byron plant personnel in the event of an emergency;

(f) describe in detail any provisions which have been made for only assigning plant workers beyond childbearing age to "hot" operations;

(g) explain in detail all provisions which have been made for recordkeeping and the computerization of records of worker radiation exposure at Byron, including but not limited to recordkeeping with regard to: alpha, beta, gamma, fast neutron, thermal neutron, epithermal neutron, urine and feces analyses; medical records; potential and actual radiation incidents; skin and clothing contamination; any diagnosis of malignancy; birth defects; and the confidentiality and availability to workers of such records; and

(h) identify and produce all documents relied upon in or relating to your answer to Interrogatory No. 16.

Interrogatory No. 17

(a) Separately with respect to each of the League's Revised Contentions Nos. 1A, 8, 19, 22, 28, 32, 34, 39, 41, 42, 47, 53, 54, 61, 62, 63, 71, 77, 106, 108, 109, 111, and 112, state in specific detail:

(i) Do you agree that each such Revised Contention is related or applicable to, in whole or in part, a consideration of continued construction and/or permission to operate each or both of the Byron Units? If your answer to this question with respect to any Revised Contention is yes, please explain your answer in detail. If your answer to this question is no with respect to any Revised Contention, please explain your answer in detail, including all factual and other reasons why you believe each such Revised Contention is unrelated or inapplicable to the Byron Units;

(ii) With respect to each "no" answer in (i) above, state in specific detail whether it is your position that the problem or issue raised by each such Revised Contention is totally inapplicable and unrelated to the Byron Units, in the sense that no consideration of

any kind need be had concerning each such Revised Contention's relation or applicability to the Byron Units;

(iii) If any part of your answer to (i) or (ii) above relating to any Revised Contention is based in whole or in part upon the position that the subject matter of a Revised Contention is inapplicable (or unrelated) because (1) the subject matter has been considered at the construction phase hearing of the Byron Units; (2) the subject matter is barred from consideration at the operating hearings herein by an NRC regulation, rule, criterion, policy or convention; or (3) a Revised Contention has not specifically set forth a sufficient nexus (within the meaning of the River Bend Decision, ALAB-444, 6 N.R.C. 760 [1977]) regarding the Byron Units, then with respect to each such answer regarding each such Revised Contention, please also state in specific detail, giving reasons for your position:

(a) Regarding (iii)(1) above, why it is your position that no facts or events have occurred subsequent to the issuance of the construction permits herein which present a sufficient ground for re-examining the subject mater of the Revised Contention at the operating stage herein;

(b) Regarding (iii)(2) above, what NRC regulation, rule, criterion, policy or convention you believe bars consideration of the subject matter of the Revised Contention, and why you contend that there is no reason for waiving the applicability of any such regulation, rule, policy, criterion or convention to this proceeding; and

(c) Regarding (iii)(3) above, what fact, opinion, or other analysis of which you are aware (specifically and in detail explaining such fact, opinion, or other analysis) which can form the basis for a sufficient nexus to the Byron Units; in connection with your answer to this subpart, if you state you are unaware of any facts, opinions, or analyses which can form such nexus, please also state in detail whether (and, if so, why) you believe it is impossible, as a matter of scientific or environmental application, for any nexus to be supplied whatsoever.

Interrogatory No. 18

(a) To the extent not done in connection with each Interrogatory above, identify with particularity (including dates, addressor, addressee and subject matter) each document and communication which you either:

(i) have consulted or in any way reviewed in connection with any of your answers to these interrogatories; and/or

(ii) believe should be considered or reviewed in connection with any such answer,

in both cases specifying also in detail which document and communication relates, and in what manner it relates, to each of your Interrogatory answers.

Interrogatory No. 19

(a) Identify all persons who prepared or assisted in the preparation of any of the answers or parts of the answers to any of the above Interrogatories, specifying for each person which answer(s) he or she prepared or assisted in preparing.

(b) For each of the League's Revised Contentions listed in Interrogatory 17(a), state the following:

(i) the identity of each person expected to be called as a witness at the hearing or otherwise to submit testimony or Affidavit(s) concerning that Contention;

(ii) the substance of the witness's testimony or Affidavit(s); and

(iii) the witness's professional or other qualifications to testify or give Affidavit(s) on the subject matter on which the witness will testify or give Affidavit(s).

Interrogatory No. 20

(a) Identify all persons (and their two closest assistants) whose advice was sought in the preparation of any of the answers or parts of the answers to any of the above Interrogatories, specifying for each person the answer(s) or portions of answers on which their advice was sought.

(b) For each of the League's Revised Contentions listed in Interrogatory 17(a) above, state the following:

(i) the identity of each person (and their two closest assistants) whose advice is expected to be sought regarding the submission of hearing testimony or Affidavit(s) concerning that Contention;

(ii) the substance of both the testimony and Affidavit(s) on which the advice will be sought and the substance of that advice; and

(iii) each person's professional or other qualifications to render advice on the subject matter of the testimony and/or Affidavit(s) on which his advice will be given.

ROCKFORD LEAGUE OF WOMEN VOTERS,

By: _____
One of Their Attorneys

Myron M. Cherry, p.c.
Peter Flynn, p.c.
CHERRY & FLYNN
Three First National Plaza
Suite 3700
Chicago, Illinois 60602
(312) 372-2100

PROOF OF SERVICE

I certify that a copy of the foregoing League of Women Voters of Rockford, Illinois' First Interrogatories to, and Accompanying Request for Documents from, Commonwealth Edison Co. were served upon all parties of record herein, by postage prepaid and properly addressed mail, this 15th day of October, 1982.

Bruce Ross