

# GOVERNMENT ACCOUNTABILITY PROJECT

Institute for Policy Studies

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(202) 234-9382

August 13, 1982

Mr. James Keppler  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Dear Mr. Keppler:

On behalf of Mr. Howard, Ms. Mareello and myself, thank you for the opportunity to participate in the August 11, 1982 meeting in which Commonwealth Edison Company ("CECo") proposed C.F. Braun and Co. ("Braun") to conduct the independent investigation and corrective action program on the design implications at LaSalle from the charges against the Zack Company. Your action to invite public participation at the meeting, and to solicit public comments, was a healthy step. It adds legitimacy to the third-party investigation. We commend your initiative. Mr. Davis informed me that the enclosed comments on behalf of Mr. Howard and Ms. Mareello could be delivered on Monday, August 16, 1982.

Since the meeting, GAP has communicated with technical experts, public interest organizations, and the Atomic Industrial Forum to obtain references. We also read all references to Braun in the Nuclear Regulatory Commission ("NRC") Public Documents Room ("PDR"). On the basis of this review, Mr. Howard and Ms. Mareello do not object to Braun as the organization to conduct the third party investigation. They suggest, however, that the NRC impose the following conditions:

1. Final approval should await an NRC verification review of Braun's qualifications. This may already have been provided through the NRC vendor inspection program. As became obvious at the August 11 meeting, CECo knows almost nothing about Braun beyond compliments from unidentified General Electric ("GE") officials. There was no independent verification of Braun's record. That is much too casual a basis to select an organization for such a significant job.

To illustrate, the CECo selection process would not have met the standards utilities and contractors traditionally follow for selections to Approved Vendors Lists ("AVLs"). AVL selection generally follows a thorough review of the vendor's Quality Assurance manual, and a plant survey to see if the manual has been implemented in fact.

Further, our research at the Public Documents Room uncovered relevant information not included in Braun's August 11 slide show. First, a PDR computer printout added significant information about Braun's own corporate structure. Braun's parent company is Santa Fe International, a wholly owned subsidiary of Kuwait Petroleum Corporation. (Exhibit 1) Second, the PDR computer listed 879 design drawings prepared for GE by Braun. Third, the 1979 NRC Annual Report referenced Braun's application to participate in the Commission's design standardization program. (Exhibit 2) Fourth, the PDR contains several references to Braun as constructor of the Baily nuclear station. (Exhibits 3a-d)

Unless there is another C.F. Braun, these omissions raise questions whether the firm was completely forthright in its August 11 presentation. The NRC should identify and verify the quality of all Braun's previous nuclear-related work. Region III should also check to see whether Santa Fe International or the Kuwait Petroleum Corporation has done business with CECo. CECo was satisfied to take GE's word for Braun's track record. CECo officials at the August 11 meeting were satisfied to rely on their memories to verify Braun's financial independence. That is not good enough.

2. The charter should require that Braun officials schedule at least one meeting with Mr. Howard, Ms. Mareello, Mr. Perry, Mr. Grant and Mr. Cioni during the initial review of Zack Quality Assurance ("QA") records. On August 11, Braun immediately responded "No" to an inquiry whether it planned to work with the Zack whistleblowers. That was practically the only answer that Braun could provide without hesitation during the entire meeting. It raises questions how Braun knew that particular answer when they knew so little else. It also raises questions about Braun's independence from CECo.

Braun needs the expertise of the Zack whistleblowers to properly resolve the public safety questions about Zack's impact on safe operations at LaSalle. At first a Braun official stated the whistleblowers' input is unnecessary, since the inspection effort will be so comprehensive that thorough documentation reviews would be duplicative. When questioned about the practicality of comprehensive inspections, however, he contradicted himself and said that priorities could be determined through documentation review. No group of individuals is better qualified to assist with the initial records review than the Zack whistleblowers. Braun's unwillingness to work with them raises questions whether it will intentionally or inadvertently miss relevant problems that Mr. Howard and the others could pinpoint.

3. The charter should hold Braun responsible to directly investigate and draw conclusions for all Zack-related work at LaSalle. On August 11, CECo reported that it had continued to investigate the Zack allegations and was almost done. CECo officials added that they hoped Braun would not duplicate their efforts.

Braun must duplicate all of CECo's prior investigative work, or this exercise is little better than a public relations gimmick. The point of the third-party program is an independent investigation, not

an audit of the paperwork from Commonwealth Edison's own probe. This flaw threatens the legitimacy of the entire effort.

4. The NRC should receive all Braun interim and final work products simultaneously with Commonwealth Edison. At the meeting CECo explained that it would receive advance copies of everything Braun prepares, and would then forward everything without editing. If CECo is not going to change the documents, it does not need an advance copy. It merely needs time to study them before responding to NRC inquiries. Further, if the NRC receives copies of Braun's work at the same time as CECo, there will be no opportunities for mischief such as the Cloud Associates/Pacific Gas and Electric scandal at Diablo Canyon. This suggestion is necessary to structurally guarantee Braun's independence from CECo editing or censorship.

5. The charter should ensure that CECo cannot dismiss Braun from the project without prior notice to the NRC and an NRC-sponsored public meeting to justify the decision. Further, the NRC should make it clear that the licensing conditions will not be met for LaSalle if the NRC does not approve any such dismissal. The bottom line is that CECo selected Braun, is paying Braun's fee and can fire Braun. As a result, even if Braun previously were independent of CECo, it will not be in the context of this project. The current effort is the one that counts for LaSalle. This effort must remain independent through completion.

6. The charter should require that Braun subcontract any services for which its direct personnel are not qualified. Proof of qualifications should be provided for every task in Braun's LaSalle contract. On August 11, Braun admitted that no one on the tentative LaSalle team had experience in relevant fabrication or component testing, although its QC inspectors should be qualified for those areas. Braun also admitted that it had no previous experience with contracts where the mission involved taking apart and inspecting previously-completed work. In short, the LaSalle contract is a fresh challenge for Braun. It is impossible to predict all the potential tasks that may arise, or whether Braun's direct staff is qualified to respond to each possibility.

7. The charter should require Braun's proposed methodology to disclose relevant selection criteria and size of the samples for inspections and testing. It is impossible to have confidence in the results of an independent inspection and testing program if the selection criteria and size of the sample is a mystery.

8. The charter should require Braun to provide calculations demonstrating that it is possible to adequately complete its work during any proposed time frame for the contract. This is necessary to maintain credibility that Braun has not been hired to conduct a "rush job". To illustrate, on August 11 it became clear that it may well be physically impossible for Braun to inspect all the relevant hangers and ductwork by September 15, supposedly the target date for



completing the effort. Although CECo explained that Braun could work as long as it takes, there should be some basis to verify whether the proposed timetable for the project is realistic.

9. The charter should require Braun to support its proposed methodology through references to established professional codes (ASTM, ASME, ANSI, etc.). This will insure that Braun's methodology is a product of professional standards, rather than CECo's timetable for operations. For example, on August 11, Braun was not sure whether zinc paint affects accessibility for QC inspections. Braun should cite to the relevant code when it answers this question through its inspection plan, since the issue could significantly affect the reliability of Braun inspection results.

10. The charter should require that Braun report to the NRC any safety-related information it uncovers during the project. For example, the specific mission is to verify that Zack materials and work match the design. But the investigation may reveal information not taken into account in the original design.

While Braun should not necessarily expand the scope of its own effort in that event, the charter should guarantee full disclosure to the NRC.

Mr. Howard, Ms. Mareello and I accept your invitation and will look forward to participating in the next meeting on August 24.

Sincerely,

Thomas Devine  
Legal Director

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INFORMS THAT SANTA FE INTL CORP PARENT COMPANY OF OF BRAUN &  
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CORP. CF BRAUN & CO WILL CONTINUE TO DO BUSINESS UNDER BRAUN  
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FORWARDS AMEND 9 TO SAR IN RESPONSE TO NRC 790124 LTR  
DISCUSSING PRELIMINARY DESIGN APPROVAL EXTENSION.

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COMMENTS ON PROPOSED SPENT FUEL STORAGE REGS. SUGGESTS  
INCLUSION OF ACCEPTABLE DOSE CRITERIA. REQUESTS REASON FOR  
LIMITING SPENT FUEL STORAGE TO 20 YEARS.

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PR--72-43FR46309-781115  
PR-72

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additional out-of-reactor hot loop testing by CE showed the important role of flow-induced vibration in the control rods in the guide-tube wear problem. The vibration and, hence, the wear, was reduced by greasing some of the guide-tube coolant (water) tubes. Two fuel assembly modifications were designed to reduce the coolant flow. One involved inserting a sleeve cylinder in the top of the guide tube. The second involved reducing the size and number of flow holes in the bottom of the guide tube. Both modifications, in limited number, are being tested in currently operating cores to confirm the loop test results. The NRC has closely followed the analyses and experiments performed by CE and is in substantial agreement with the vendor that the results point to control rod flow-induced vibration as the principal factor in guide-tube wear. Therefore, design modifications intended to alter flow in the guide-tubes were judged appropriate. The NRC has approved the modified designs for limited operation on the basis that they will mitigate the wear problem. Approval of further design modification as a final solution to the problem will be contingent upon the results of further out-of-reactor experiments and examination of the modified assemblies which are currently subject to in-reactor operations.

The opportunity to evaluate the performance of guide tubes after reactor operations occurred during the Millstone Unit 2 refueling outage in the spring of 1979. Subsequent to the Millstone 2 refueling, the St. Lucie Unit No. 1 (Florida) and the Calvert Cliffs Unit No. 1 (Maryland) also provided evidence of the performance of the sleeved guide tubes. These inspections indicate that the sleeving modification has performed well as an interim solution to mitigate the guide-tube wear but that it does not eliminate the cause of the wear. (During the October-November 1979 refueling outage Calvert Cliffs Unit 2 was scheduled to undergo inspections of modifications made as interim solutions to guide tube wear.)

The NRC staff will continue to maintain close liaison with representatives of the licensees and vendors on this issue and any related problems. Approvals have been granted to allow operation of the CE plants on a cycle-specific basis with the stainless steel inserts. All proposed programs have been reviewed prior to taking action at any facility, and the staff has required that all inspection programs continue to be submitted for review well in advance of refueling shutdowns.

## PROGRESS IN STANDARDIZATION

The NRC believes that standardization of the design of nuclear power plants is in the interest of public health and safety, and of effective and efficient regulation. Thus, the NRC is committed to the support and use of standardization within the Commission's regulatory activities.

Four procedural options are available (see 1976 NRC Annual Report, p. 36, for details) to applicants for standardization of nuclear power plants: "Reference Systems" (approved design used repeatedly by reference), "Duplicate Plants" (approved design for several identical plants), "License to Manufacture" (approved design for manufacture of identical units at the central location), and "Replicate Plants" (reuse of recently approved custom design).

Since June 1973, when applications were first accepted which included a standardization option, the standardization program has realized substantial progress. Overall, approximately two-thirds of the applications received in the 1974-1978 time frame have employed one or more options of the standardization program. See Table 3 for a listing of the status of applications.

In August 1978, the Commission approved a number of changes to the program to encourage its expanded use, as well as to incorporate both industry and regulatory changes introduced since the program was first announced in 1972. The revised program adopted a good many such changes, some of which are as follows:

- (1) The term of holders of all new preliminary design approvals (PDAs) for reference system designs was extended from three to five years. Holders of all issued PDAs were given the opportunity to extend them to a full 5-year term.
- (2) Final design approvals (FDAs) for reference system designs were eligible for reference in applications for construction permits. Two types of FDAs were established. The first, denoted FDA-1, can be referenced from the time it is docketed to 3 years after expiration of the PDA on which it is based. The second, denoted FDA-2, can be referenced from the time it is docketed to 5 years after it is approved.
- (3) A qualification review was devised to permit the duplicated plant concept to be used in a manner similar to the reference system concept. In this regard, five-year preliminary duplicate design approvals (PDDAs) and final duplicate design approvals (FDDAs) were established which can be used in new applications for construction permits in a manner similar to the use of PDAs and FDAs under the reference system concept.
- (4) A qualification review was defined for replicate plants and the period for replication was established as 3 years after publication of the base plant Safety Evaluation Report.
- (5) A 5-year period of design approval was established for manufacturing licenses and an upper limit of 10 units was established.

Table 3. Standardization Applications

(as of August 31, 1979)

PROJECT	APPLICANT	DOCKET DATE	COMMENTS
<b>Reference Systems</b>			
<i>Nuclear Island</i> GESAR-238(NI)	General Electric	7/30/73	Nuclear Island, PDA-1 (Preliminary Design Approval) issued 12/22/75
→ <i>Turbine Island</i> C F BRAUN SSAR	C.F. Braun	12/21/74	Turbine Island Matched TO GESSAR-238(NI). PDA-5 Issued 5/07/76
<b>Nuclear Steam Supply System (NSSS)</b>			
BSAR-205	Babcock & Wilcox	3/01/76	PDA-12 issued 5/31/78
BSAR-241	Babcock & Wilcox	5/14/74	(withdrawn)
CESSAR	Combustion Engineering	12/19/73	PDA-2 issued 12/31/75
GASSAR	General Atomic	2/05/75	Review suspended at request of appli- cant.
CESSAR-238	General Electric	10/16/75	PDA-10 issued 3/10/77
CESSAR-251	General Electric	2/14/75	PDA-9 issued 3/31/77
RESAR-3S	Westinghouse	7/31/75	PDA-7 issued 12/30/76
RESAR-41	Westinghouse	3/11/74	PDA-3 issued 12/31/75
RESAR-414	Westinghouse	12/30/76	PDA-13 issued 11/14/78
<b>Balance of Plant (BOP)</b>			
BOPSSAR/BSAR-205	Fluor Power	10/31/77	BOP matched to BSAR-205
BOPSSAR/RESAR-41	Fluor Power	1/27/76	PDA-11 issued 8/17/77 BOP matched to RESAR-41
ESSAR/BSAR-205	Ebasco	5/19/78	BOP matched to BSAR-205
ESSAR/CESSAR	Ebasco	2/02/78	BOP matched to CESSAR
ESSAR/RESAR-414	Ebasco	11/23/77	BOP matched to RESAR-414
GAISSAR/BSAR-205	Gilbert Commonwealth	8/21/78	BOP matched to BSAR-205
GAISSAR/CESSAR	Gilbert Commonwealth	5/21/78	BOP matched to CESSAR
GAISSAR RESAR-414	Gilbert Commonwealth	8/21/78	BOP matched to RESAR-414
GIBBSSAR	Gibbs & Hill	5/10/77	BOP matched to RESAR-414
SWESSAR/BSAR-205	Stone & Webster	12/22/75	BOP matched to BSAR-205
SWESSAR/CESSAR	Stone & Webster	10/21/74	BOP matched to CESSAR PDA-6 issued 8/16/76
SWESSAR/RESAR-3S	Stone & Webster	10/02/75	BOP matched to RESAR-3S BPDA-8 issued 3/31/77
SWESSAR/RESAR-41	Stone & Webster	6/28/74	BOP matched to RESAR-41 PDA-4 issued 5/05/76



PROJECT	APPLICANT	DOCKET DATE	COMMENTS
Utility Applications Using Reference Systems			
Cherokee 1,2&3	Duke Power	5/24/74	References CESSAR. CP issued 12/30/77
Perkins 1,2&3	Duke Power	5/24/74	References CESSAR
South Texas 1&2	Houston Light and Power Co.	7/05/74	References RESAR-41 CPs issued 12/22/75
WPPSS 3&5	Washington Public Power Supply System	8/02/74	References CESSAR CPs issued 4/11/78
Palo Verde 1,2&3	Arizona Public Service	10/07/74	References CESSAR. CPs issued 05/25/76
Hartsville 1,2,3&4	Tennessee Valley Authority	11/22/74	References GESSAR-238(NI) CPs issued 05/09/77
Palo Verde 4&5	Arizona Public Service	03/31/78	References CESSAR
Black Fox 1&2	Public Service of Oklahoma	12/23/75	References GESSAR-238 (NSSS)
Phipps Bend 1&2	Tennessee Valley Authority	11/07/75	References GESSAR-38 CPs issued 1/16/78 (NI)
Erie 1&2	Ohio Edison Co.	3/01/77	References BSAR-205
Yellow Creek 1&2	Tennessee Valley Authority	3/16/76	References CESSAR
Duplicate Plants			
Byron 1&2	Commonwealth Edison	9/20/73	Two units at each of two sites. CPs issued 12/31/75
Braidwood 1&2			
Cherokee 1,2&3	Duke Power	5/24/74	Three units at each of two sites. Also references CESSAR. Cherokee CPs issued 12/30/77.
SNUPPS			
Wolf Creek	Kansas Gas & Electric Co. Kansas City Power & Light	5/17/74	Five units at four sites. CP issued 5/17/77
Callaway 1&2	Union Electric	6/21/74	CPs issued 4/14/76
Tyrone 1	Northern States Power	6/21/74	CPs issued 12/27/77
Sterline	Rochester Gas & Electric	6/21/74	CP issued 9/01/77
WNP			
Koshkonong 1&2	Wisconsin Electric Power Madison Gas & Electric Wisconsin Power & Light Wisconsin Public Service	8/09/74	Initially submitted under duplicate plant option with intent for as many as six total units at three sites. Utility's change in plans led to removal from standardization program by staff. Review discontinued because of site problems
License to Manufacture			
Floating Nuclear Plant (FNP) 1-8	Offshore Power Systems	7/05/73	Entire plant design
Replication			
Jamesport 1&2	Long Island Lighting	9/06/74	Replicates Millstone 3
Marble Hill 1&2	Public Service of Indiana	9/17/75	Replicates Byron 1&2
New England 1&2	New England Power & Light	9/09/76	Replicates Scabrook 1&2
Palo Verde 4&5	Arizona Public Service	3/31/78	Replicates Palo Verde 1,2&3
Haven 1	Wisconsin Electric Power	4/05/78	Replicates Koshkonong 1&2



Staff studies (NUREG-0427) have shown that the NRC standardization program is about at the break-even point, that is, the staff resources spent on the review of standardization plants and design approval applications is about equivalent to the resources that would have been used if only custom plants had been involved. To the extent that utilities reference approved designs in the future, the balance will become more and more favorable for the standardization program. On the other hand, should the staff be requested to review additional PDA's and new applications that do not reference PDA's, FDA's, or ML's (Manufacturing Licenses), the use of standardization to reduce the use of staff resources would not be realized.

Staff studies also have revealed that use of the standardization options have not, to date, resulted in a reduction of schedules. These studies show that the potential exists for significant schedule reductions only when there is preapproval of the Nuclear Steam Supply System (NSSS), the Balance of Plant (BOP), and the site, the three review areas that separately can define the critical path. Thus, a strong incentive exists for pursuing site approvals via the Early Site Review Program, since approved PDAs now exist for the NSSS and BOP portions of the plant. Utility-related matters of the application, such as the quality assurance program or the financial qualifications, generally do not control the overall review schedule.

Program actions completed during fiscal year 1979 included: (a) extending Balance-of-Plant PDAs to a full 3-year term; (b) extending six PDAs to a full 5-year term based upon a completeness review; and (c) issuing a PDA for RESAR-414. Additional reviews and policy initiatives were temporarily suspended in April 1979 as a result of the TMI-2 accident. Staff resources were re-directed to high priority activities associated with the accident-related studies.

## ADVANCED NUCLEAR POWER PLANTS

On April 7, 1977, President Carter issued a statement on Nuclear Power Policy which restated the role that nuclear energy was to have in the total energy prospects of the country. The President's policy would defer indefinitely the commercial reprocessing and recycling of plutonium produced in nuclear power reactors, restructure the U.S. breeder reactor program to give high priority to alternative designs, and defer the time when breeder reactors are to be commercialized.

During this reporting period, the NRC has continued its participation in the review and assessment of a variety of reactor types and fuel cycles being considered by the Department of Energy (DOE) as part of the Nonproliferation Alternative Systems Assessment Program (NASAP); it also continues performing

reviews and providing comments on the studies and assessments being performed under the International Nuclear Fuel Cycle Evaluation (INFCE) program. In its reviews and comments, the staff focused on the potential licensability of these reactor types and associated fuel cycles, with respect to safety and safeguards concerns and environmental acceptability.

Based on advanced reactor licensing experience and preliminary safety documents supplied by DOE, the staff prepared its initial comments on alternative reactors and fuel cycles and forwarded them to DOE in June 1979. These initial findings are summarized in the first of a series of reports to Congress published in October 1979.

## Clinch River Breeder Reactor

The status of the staff review of the Clinch River Breeder Reactor remained inactive throughout the year and will remain so pending enactment of legislation clarifying the status of the facility.

## Fast Flux Test Facility

The Fast Flux Test Facility (FFTF) is a major LMFBF test facility which, with a power of 400 megawatts (thermal), will provide an intense field of fast neutrons for irradiating fuels and materials in connection with advanced reactor research and development. The facility, which is located about 10 miles north of Richland, Washington, is owned by the Department of Energy (DOE) and is not subject to licensing by the NRC. An NRC staff safety review was performed, however, under terms of an interagency agreement with DOE. The staff completed the major part of its review effort and, in August 1978, issued its Safety Evaluation Report (NUREG-0358). A supplement to the SER (NUREG-0358, Supplement No. 1) was issued in May 1979. Sodium filling of one secondary sodium loop took place in July 1978. Fuel loading was expected in October 1979. Prior to full power operation, now scheduled for early 1980, a series of tests was to be performed to determine whether natural circulation is a viable method of removing decay heat as predicted by analyses.

The Advisory Committee on Reactor Safeguards (ACRS) was extensively involved in the review of FFTF and meetings addressing that review were held in July, August, September and November 1978. The ACRS concluded that the startup and operation of the FFTF is acceptable, provided that due regard is given to NRC consequences of certain low probability accidents, and other specified matters. DOE is presently evaluating the NRC staff recommendations regarding containment adequacy for low probability accidents.

# COMMERCIAL NUCLEAR POWER PLANTS

**Edition No.13**

NUS Corporation, 4 Research Place, Rockville, MD 20850

Cover Photo: Comanche Peak Steam Electric Station, Units 1 & 2 under construction near Glen Rose, TX, operated by Texas Utilities Generating Company and jointly owned by Dallas Power & Light Co., Texas Electric Service Co., Texas Power & Light Co., Texas Municipal Power Agency and Brazos Electric Power Cooperative.

January 1981

Additional copies  
\$5 each

Northern Indiana Public  
Service Co.

Northern States Power Co.

Nuclear Unit	Bailly	Monticello	Prairie Island-1	Prairie Island-2
Location	12 miles NE Gary	30 miles NW Minneapolis	40 miles SE Minneapolis	40 miles SE Minneapolis
State	Indiana	Minnesota	Minnesota	Minnesota
Type	BWR	BWR	PWR	PWR
Capacity, Mw Net	660	536	520	520
Containment	Type 5bg	Type 4g	Type 2e	Type 2e
Cooling	Tower (Natural)	Towers (Mechanical)	Towers (Mechanical)	Towers (Mechanical)
Reactor Supplier	GE	GE	Westinghouse	Westinghouse
Turbine-Gen. Mfr.	GE	GE	Westinghouse	Westinghouse
Engineer	S & L	Bechtel	FPI	FPI
Constructor	Braun	Bechtel	Utility	Utility
NRC Docket No.	50-367	50-263	50-282	50-306
Announced	12-66	4-8-66	2-3-67	6-27-67
Applied to NRC	8-28-70	8-12-66	4-7-67	8-30-67
Construction Permit	5-2-74	6-19-67	6-25-68	6-25-68
Operating License		9-8-70	8-9-73	10-29-74
Critical First Time		12-10-70	12-1-73	12-17-74
Commercial Operation	1989	6-30-71	12-16-73	12-21-74
Construction Progress	<5%, 11-79	Completed	Completed	Completed
Notes	No stack	Turnkey		

## REGION III

Report No. 50-367/78-01

Docket No. 50-367

License No. CPPR-104

Licensee: Northern Indiana Public Service Company  
5256 Hohman Avenue  
Hammond, Indiana 46325

Facility Name: Bailly Generating Station Nuclear I

Inspection At: Bailly Site, Porter, Indiana

Inspection Conducted: March 9 and 10, 1978

Inspectors: H. S. Phillips

3/30/78

*R. E. Konklin*  
J. E. Konklin *for*

3/30/78

*R. E. Konklin*  
Approved By: D. W. Hayes, Chief  
Projects Section *for*

3/30/78Inspection SummaryInspection on March 9 and 10, 1978 (Report No. 50-367/78-01)

Areas Inspected: Storage, maintenance and protection of materials and equipment; site preparation procedures and records; Review of commitments to Regulatory Guides. The inspection involved 28 inspector-hours onsite by two NRC inspectors.

Results: Of the three areas inspected no apparent items of noncompliance were identified in two areas; one apparent item of noncompliance was identified in one area (deficiency - failure to properly store and protect three of twenty-two main steam line pieces.



- Persons Contacted

- Principal Licensee Employees

- \*R. J. Bohn, Manager Nuclear Staff
- \*E. Kritzer, Jr., Sr. QA Engineer
- \*J. W. Dunn, Nuclear Staff Engineer
- \*\*C. A. Carlisle, General QA Engineer

C. F. Braun

- \*J. S. Fiedler, Project QA Engineer
- \*D. K. Maxwell, Site QC Supervisor
- \*M. R. Williams, QA Records Engineer

- \*denotes those present at the exit interview.
- \*\*telephone interview.

Licensee Action on Previous Inspection Findings

(Closed) Unresolved matter (50-367/77-06) - This matter concerned the use of penetrameters during the radiographing of weld joints which have differing thicknesses of metal. Current practice is to use two penetrameters rather than one.

(Closed) Unresolved matter (50-367/77-05) - Sargeant & Lundy letter dated November 30, 1977 regarding Field Change Request No. 8. resolved this matter which concerned design tolerances as related to H-Pile weld joints.

Functional or Program Areas Inspected

Inspection results are discussed in the following Sections.

Steel piping, was received December 27, 1977. This was the only item stored in this area and was stored per Level C requirements. Visual inspection revealed improper storage as recorded in Section II of this report.

The RIII inspector selected three of twenty-two pieces and reviewed the shipping records on hand for Pieces #15, 16 and 24. Receiving inspection records had been completed by the C. F. Braun Materials Supervisor and by the Quality Control inspector. The package also contained Supplier Certification from Associated Piping and Engineering Corporation, and G. E. QA Certification, dated December 19, 1977. These were received under Purchase Orders T-2350 and G. E. Purchase Order, 205 AG 923, Rev 15.

(3) Identification of Materials, Parts and Components

The inspector found that all items inspected were properly identified and were easily traced to pertinent records.

No items of noncompliance were identified in the above areas inspected.

2. Site Preparation

The inspector reviewed the PSAR, QA manuals and specifications to determine requirements. In addition the Manager of the NIPSCO Nuclear Staff was interviewed to review excavation activities previously accomplished. Calumet Trucking Company had performed the excavation work in accordance with Specification T-2984. This work was performed on July-September 1974. No blasting or fill placement was necessary to date because of the geological characteristics of the site. An additional fourteen (14) feet must be removed in the area where the reactor building will be located and approximately eight (8) more feet under the radwaste building.

a. QA Implementing Procedures

The nature of the excavation did not merit the development of detailed procedures; however, a procedural statement was found in Specification T-2984, Division 1 and 2. Also the control of ground water was outlined in this specification.

SECTION II

Prepared By G. F. Maxwell

Reviewed By R. L. Spessard, Chief  
Engineering Support Section 1

1. Review of Audit Records - Audits Conducted By Northern Indiana Public Service Co. (NIPSCO), Bailly Unit 1

a. The inspector reviewed the NIPSCO audit reports, including supportive correspondence and documentation related to the following NIPSCO audit reports:

- (1) Audit report No. 2116, date March 22, 1978; a follow-up audit of various procedures in the Quality/Project Manuals requiring revision, identified in audit report 2100.
- (2) Audit report No. 2100, date July 7, 1977; a C. F. Braun and Company quality-system audit.
- (3) Audit report No. 2107, date October 25-26-1977; a Sargent & Lundy QA Program audit.
- (4) Audit report No. 2095, date April 29, 1977; a vendor surveillance to determine capabilities for third party source control, relative to C. F. Braun and Company.
- (5) Audit report No. 2088, date April 25-27, 1977; a G. E. San Jose audit of GE BWR QA, relative to design and procurement.
- (6) Audit report No. 2082, date March 15, 1977; a Sargent & Lundy QA Program implementation audit.
- (7) Audit report No. 2078, date December 20-21, 1975; a final inspection and documentation review of the first lot of recirculation piping shipped to site - Pullman-Kellogg, Williamsport, PA.
- (8) Audit report No. 2068, date October 25, 1976; a surveillance of Liquid Penetrant examination of recirculation piping and of weld preparation for in service Ultrasonic Examination - Pullman-Kellogg, Williamsport, PA.

**Northern Indiana Public Service Company**  
 General Offices / 5265 Hohman Avenue / Hammond, Indiana 46325 / Tel.: 853-5200 (219)

July 26, 1978

M. SHORB  
 PRESIDENT-OPERATIONS

R. F. Heishman, Chief  
 Reactor Construction & Engineering Support Branch  
 U.S. Nuclear Regulatory Commission, Region III  
 9 Roosevelt Road  
 Glen Ellyn, Illinois 60137

Re: Northern Indiana Public Service Company  
 Bailly Generating Station Nuclear 1  
 Docket 50-367

Dear Mr. Heishman:

The following is Northern Indiana Public Service Company's resolution of the Notice of Violation identified in the NRC Inspector's Report 50-367/78-02, which was enclosed with your letter of June 26, 1978. Items A and C are infractions; item B is a deficiency.

- A. (1) NIPSCO's Nuclear Staff has prepared a draft of a procedure that addresses the requirements of 10CFR50.55(e), which is currently being circulated internally for comments.
- (2) The issuance of the procedure referenced in A(1) will terminate further noncompliance.
- (3) Full compliance is anticipated with the issuance and distribution of the procedure referenced in A(1). Issuance and distribution will be completed by August 15, 1978.
- B.1 (1) C. F. Braun, as Construction Manager, has responsibility for maintaining site records. The only permanent Quality records on site currently are those furnished by the NSSS vendor, General Electric Company, and the material certifications for the H-pile material. The General Electric Company provides a quarterly listing of Quality records which is currently used as an interim systematic index of NSSS Quality records on site. The H-pile material certifications are indexed. We recognize that the above described system is not suitable for the duration of the project.

JUL 27 1978



13 August 1982  
905 Rose Lane  
Naperville, IL 60540

To: James G. Keppler  
Regional Administrator  
USNRC - Region III

Re: All activities, oral and written, by concerned parties subsequent to A.T. Howard's visit to Region III offices on 3 May 1982.

Subject: Correspondent input/contribution to the integrity of the 'so called' independent review of the HVAC systems at the LaSalle Nuclear Power Site.

Bearing in mind the accumulated data of the past one hundred (100) days since my visit to your offices in Glen Ellyn, I hereby make the following as important issues on behalf of S. Manello and myself:

I Analysis of acts of ~~commission~~/commission by Region III's staff members to date point to broad areas of suspicion.

II Analysis of acts of omission/commission by Commonwealth Edison's personnel to date ~~and~~ to broad areas of suspicion.

III Commonwealth Edison's representation to Region III that they will hold options

received  
8/16/82

(2)

of discretion in letting you know what is 'going on' during the course of the review by C. F. Braun is tantamount to usurping the USNCC's powers of regulation.

IV Commonwealth Edison's adamant statement that an independent review would be awkward and take a great deal of time is suspect.

V Commonwealth Edison's twelfth hour concession to independent review after third party contribution is suspect.

VI Commonwealth Edison's insistence that T. Howard and S. Marella's contributions would not be needed and wouldn't be accepted is of paramount suspicion.

In view of the above categorical analyses and H. Denton's public commitment to allow third party responsible resources to the independent review acceptance/activity, I hereby make the following demands:

A. That Region III monitor the day by day activities of C. F. Braun in the sensitive audit

3)  
B. That Region III negotiate within their authority the most capable means to provide that same monitoring resource.

C. That Region III command that the independence, experience and 'hands on' knowledge of T. Howard and S. Morello be utilized by C.F. Braun in the independent review process.

The above consideration, Mr. Keppler, will guarantee that:

1. The proper agency (USNRC) will have full control of the licensing process.
2. A review with assurances of accuracy and lack of suspicion will be accomplished

Sincerely,

Albert T. Howard

Albert T. Howard

cc: N. Palladino

H. Denton

T. Devine

M. Cheray

J. Goodie

B. Garde

J. Whichen

S. Morello