

BROOKHAVEN NATIONAL LABORATORY  
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Department of Nuclear Energy

December 20, 1983

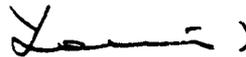
Mr. E. Chelliah  
Reliability and Risk Assessment Branch  
Division of Safety Technology  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Erul:

Enclosed please find a summary report of the IP-3 Site Visit on November 21, 22 and 23 by the Risk Evaluation Group. This was the first visit out of the four called for in our form 189 for FIN A-3725, "FT/IFMEA Application on IP-3 for Systems Interaction".

If you have any questions please do not hesitate to contact me.

Sincerely yours,



Ioannis A. Papazoglou, Group Leader  
Risk Evaluation Group

IAP/dm  
Enc.

cc: R. Hall w/o enc.  
R. Bari "  
W. Kato "  
F. Coffman w/enc.  
A. Thadani "

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BROOKHAVEN NATIONAL LABORATORY  
MEMORANDUM

DATE: December 7, 1983  
TO: I. A. Papazoglou  
FROM: R. Youngblood *RW*  
SUBJECT: Summary of IP-3 Site Visit

1.1 Introduction

On November 21, 22, and 23, a team representing BNL visited Indian Point 3 (IP-3). This was done as part of the Systems Interaction Study of IP-3, which is being conducted by BNL.

The primary purpose of this visit (the first of four mandated in the Statement of Work) was plant familiarization. A secondary purpose was obtaining further documentation.

This memorandum provides a general description of the visit and offers comments which are intended to help in the planning of future visits.

1.2 List of BNL Participants

From the Risk Evaluation Group: George Bozoki  
Robert Fitzpatrick  
Anthony Fresco  
Nelson Hanan  
Robert Youngblood

From the Human Factors and Engineering Analysis Group: William Luckas

From Impell Corporation: Sati Mitra

## 2.1 Day 1 (November 21)

### Morning: Processing

Some weeks previously, a letter was apparently sent from NRC to NYPA discussing a general agenda for the meeting. It is our understanding that, based on discussions with BNL personnel, the letter had recommended that the first day be given over to containment, the second day to the auxiliaries and the secondary side, and the third day to discussions with control room personnel in the control room.

The BNL team arrived in the area the night before so as to get an early start. For several reasons, however, the first half of the first day was spent on administrative procedures. BNL had not communicated with NYPA directly, and, as a result, little direct coordination of the visit had actually taken place. Additionally, some of the cognizant NYPA personnel were out of town, and those present were unsure at first how to process us. (The issues are: how deeply to go into health physics training, what types of escorts are appropriate, where do we get to go, etc.) It was late morning before BNL gained access. When BNL was told that the normal IP-3 day shift is 7AM to 3:30PM, it became clear that it was infeasible to visit containment on the first day after all. The remainder of the morning was given over to discussion of the agenda for the rest of the visit, and of what documentation BNL would be able to get while at IP-3.

The IP-3 personnel with whom we had the most contact were Robert Schimpf, Stephen Smith, and Donald Vinchkoski. As it turned out, Mr. Schimpf met with us briefly a few times, but Messrs. Smith and Vinchkoski actually conducted the tours and answered most of our questions. All three are newly licensed Senior Reactor Operators who are also engineers.

### Afternoon: AFWS

From after lunch (around 1:30) until the end of the day shift (around 3:30), BNL toured the auxiliary feedwater system. We saw portions of the main feedwater piping and valves, portions of the steam lines, safety relief valves, atmospheric valves, and the auxiliary feedwater system itself. On this tour, as on all others, numerous polaroid pictures were taken of what we saw.

## 2.2 Day 2 (November 22)

### Morning: Containment

BNL arrived at around 8, and proceeded to enter containment. One of us saw the top of the pressurizer; we all saw the RCPs, part of the steam generators and steam and feedwater lines, the seal table, RHR heat exchangers, weld channel system, various valves and piping associated with the CVCS and HPI, accumulators and various containment penetration.

### Afternoon: Auxiliary Building

We saw various parts of the CVCS, the Safety Injection System, the Nitrogen System, the Pipe Penetration area, the component cooling system, the CVCS auxiliary panel, RHR System, etc.

## 2.3 Day 3 (November 23)

### Morning: Control Building

We saw one of the diesels (some of us saw all three), some of the battery enclosures, inverters, rows of vital 480V breakers, the instrument air system, a cable penetration area, the motor generator sets for the control rod power, the reactor trip breakers, etc. We also spent some time in the control room, walking down the panel. Two members of the group (Luckas and Mitra) did not make this tour; they spent the morning going over procedures, and later visited the control room briefly.

### Afternoon: Wrap-up

A brief meeting was held between the BNL group, Stephen Smith and Donald Vinchkowski of NYPA, and the NRC Resident Inspector, Thomas Kenny. BNL was invited to summarize its visit. The BNL response was as follows.

The primary purpose of the visit was plant familiarization, and this purpose was largely accomplished, in that we had been able to see much of

what we needed to see. The timing of the visit was premature from the point of view of our project time-table, but it was clear that going through containment now (rather than later) was a good idea, and we felt that it had been beneficial. (Its prematurity was offset by the convenience of entering now rather than closer to startup or after startup.) Certainly, we learned some of what we would need to know in order to plan a more focused exploration of selected areas. We expressed gratitude to Stephen Smith and Donald Vinchowski for their genuine helpfulness during the tours.

RY/dm

cc: IP-3 Participants  
R. Bari  
R. Hall  
W. Kato