

920-755-6857 REG SERVICES

526 P01 MAY 18 '04 13:19 43

TIME : MAY 18 '04 12:00
TEL NUMBER : 920-755-6857
NAME : REG SERVICES

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NBR	FILE	DATE	TIME	DURATION	PGS	TO	DEPT NBR	MODE	STATUS
525	17	MAY. 18	12:00	00:00	0	93014151222			M 50

... THIS TRANSMISSION WAS UNSUCCESSFUL. RE-TRANSMIT BEGINNING WITH PAGE 01 ...

POINT BEACH NUCLEAR PLANT

6610 Nuclear Road
Two Rivers, WI 54241

*release
in
part*

PHONE: (920) _____

FAX: (920) _____

FACSIMILE TRANSMITTAL

TO: Harold Chernoff FAX #: 301-415-1222
COMPANY: NRC
FROM: Jim Connolly TOTAL NUMBER OF PAGES SENT: 13
DATE: 05/18/04 TIME: _____
REMARKS: Transformer Breaker Issue Report.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 6
FOIA/PA-2004-0282

I-15

ORIGINAL

Event Investigation Report

Complete the evaluation of the human performance event using the following, as applicable:

1. Date and Time of the event: 5-17-04 2348hr CAP056776: 1X-04 Annunciator Alarm Activated by D52A Selector Switch Operation was initiated as a result of a selector switch manipulation by Maintenance.

2. Personnel Involved: [Signature]

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3. Department/Group Involved: Maintenance / Electrical

4. Program/Work Process/Activity Involved: PM /VO 0301793 Breaker inspection on H52-HK-2000-02 in the 13.8 bldg.

5. Unit: PBNP Unit 0

6. Mode/Power Level: U1 in Mode 6, U2 Mode 3

7. Describe the inappropriate action and conditions that led up to the event. Consider the following in this description:

- a. Was a conscious decision made or not made by the individual(s) involved?
There was a conscious decision made by the Lead Mechanic-Electrician. The Lead ME was in knowledge base to resolve the problem of not having power to the breaker test stand and cycled a disconnect D-52A that actually fed the D-52 Panel which feeds the test stand and other loads.
- b. Was the event a result of rule non-compliance, misapplication of a rule, or applying an incorrect rule? Yes, The Lead ME caused the event by not complying with the rule that only Operations can manipulate breakers/disconnects unless controlled by a procedure or danger tag series.
- c. Was the individual fully trained/knowledgeable of the task? Yes
- d. Did the individual make an error in judgment? Yes
- e. Was an intended action not performed due to shortcuts taken or inadequate tracking? Yes, the Lead ME took a shortcut by not "Stopping When Unsure".
- f. Was the individual overconfident or was their mental/physical state a factor? In his statement the Lead ME acknowledged he was feeling fatigued.
- g. Did the supervisor not identify error likely situations and error precursors?
The Supervisor did not conduct a formal Pre-Job brief and allowed the Lead ME to brief himself.

- h. Was there a process or organizational failure that led to this error (see table on next page)?

No Process Failure contributed to this event. Inadequate Communication within an Organization was the Organizational Failure Mode, due to lack of a formal pre-job brief

8. Summarize the inappropriate action in one sentence as follows:

[] opened the power transfer switch to the D-52 panel instead of Stopping When Unsure per PBNP managements expectation.

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9. Based on what you have learned, describe the error likely situations that were present at the time of the event. The ME Lead did not receive a formal pre-brief and did not recognize when he was in knowledge base.

- a. What Error Reduction Tools were not used or not used effectively? What Error Reduction Tools could have been used to prevent this event? Clearly state which is the one tool, which if used, would have had the greatest chance of being successful.

STAR, "ARE YOU READY CHECKLIST?" STOP WHEN UNSURE. "Stop When Unsure" would have had the greatest chance of being successful.

- b. Are these Error Reduction Tools going to provide the barriers to prevent recurrence? Where else should these barriers be applied?

Yes, provided they are used appropriately. These barriers should be applied performing any task.

Human Performance Failure Modes (From the NMC Trend Code Manual)

- | | |
|--|--------------------------------------|
| • Inattention | • Bored |
| • Distracted & Interrupted | • Multi-Tasking |
| • Time & Schedule Pressure | • Fear of Failure |
| • Spatial Disorientation | • Mindset/Preconceived Idea |
| • Inadequate Motivation | • Shortcuts Taken |
| • Unfamiliar or Infrequent Task | • Misdiagnosis |
| • Inadequate Knowledge of Standards | • Flawed Analytical Process or Model |
| • Inadequate Knowledge of Fundamentals | • Over Confident |
| • Inadequate Verification | • Cognitive Overload |
| • Inadequate Tracking (Place Keeping) | • Tired & Fatigued |
| • Habit/Reflex | • Lapse of Memory |
| • Imprecise Communication | • Wrong Assumptions |
| • Work Around | • Tunnel Vision |

Event Investigation Personnel Statement

Name: []

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Position: []

Event Date: 5-17-04

Handwritten statements are acceptable. Include the plant conditions prior to the event, your indications that a problem existed, your action as a result of those indications, noted equipment malfunctions or inadequacies, and any identified procedure deficiencies. Also, include any information you consider important to the review of this event and actions that may prevent recurrence. Use additional paper as necessary.

I assigned [] the breaker inspection job; ask him to review the package talked to him about what we were going to do with this package and how we were going to do the task we also discussed the possible need to go to training to get the M&TE for this job then asked [] to get the equipment needed for the task at hand. I handed out other jobs. I then inform the others supervisors that we change so of the job assignments to incorporate other priorities. I also told [] that I would talk to Dave Schutte to find out whether or not training still had the M&TE over in training or did there return it? I also asked Dave Schutte to please get the latest revision on the TPE for under-voltage testing that was also schedule for us to do. I then directed my attention to other jobs and tasks [] and myself were talking about the jobs and [] saw that I had other tasks that I was doing and volunteered to help with the OCC approval paperwork [] asked [] the questions so that he could fill out the form on that activity. When the copy of that form came back [] gave it to [] since he would be helping [] then brief the job himself and when to the job site and pull the breaker out and set up his tools. I then received a call that we shouldn't get started on the breaker inspection because of the risk being to high due to the G-05 being in question. I then beep [] to call my phone, which was done within a couple of minutes? I asked [] whether or not the breaker was still in the cubicle. His response was that it was already removed from the cubicle but that was all. I then told him that the job was on hold for now, but don't put up the M&TE and that I would get back with him. Mean time the D-08 ground came in and I directed my attention towards supporting finding the ground and getting that started, than got a beep from OCC that we can start back on the breaker PM, I then call OPS to verify that we can resume on the PM for the breaker in cubicle H52-HK-2000-02 the response was that we could resume the PM. At that point and time a call [] and told him that we can resume, therefore [] then removed the breaker again and started the PM once again. Later OPS over the page system paged "Andy Paulin call the control room" I then started walking to the under-voltage relay testing to find out what was going on met them halfway they told me that the job was stop until we know what happen. I then received a page to call the control room, I then called and talked to Ron Harper which told me that they lost indication for some of the 13.8 breaker and asked if I can come to the control room to find out what was wrong I reply that I wanted to go by the 13.8 bldg first and then come by, He said that would be fine. So I did,

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I look for any thing abnormal and asked C if anything unusual happen there response was nothing was unusual. I then when to the control room they filled me in on what they encountered it was determined base on the facts that we lost D-52 for about two minutes. I then went back to my desk and pulled some prints to try to find out what happen. I then walked out to D-52 to look at it closer. I then received a call from OPS that directed us to stop work on the breaker until we found out what went wrong, I got to the 13.8 bldg and started to ask some question and found out that we haven even hooked up to the test stand before the problem accorded. I then call Ron Harper and told him of the information that I received and asked him if we don't hook up to the test stand can we resume the PM on the breaker. He said that we could after we all fill out a statement on what we were doing at the time of the lost of the D-52. I told C and Ron Ferrence (QC) I asked a few more questions then C was telling what he did and he mention the he had a problem with the test stand and said that he cycled the disconnect D-52A at that point I told him that D-52A is what feeds D-52 and that is why we lost power, he then realized that he did made a mistake. We then informed operations what happen and that it was a human error that took place, and that we were going to fill out the Human Performance Event Investigation Tool form. Operation called me again to inform me that they wanted to talk to the two technicians, I told them that we would meet them in my cubical. Operation met us there and they wanted to know if the technicians knew that they down powered D-52 when they asked them earlier, the answer was no that they didn't know until I told them.

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Event Investigation Personnel Statement

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Position: [

Event Date: 5/17/04

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at approx 2300 started P.M. on 13.8KV Breaker H52-HK2000-02 at the test stand started to set up to charge bus spring on D 52 noticed relay that monitor feed to the test stand was not lit. The switch was in the on position this is not normal. Thinking D-52 A was an alternate source to the test panel, I opened the switch on D-52 A and opened the box to verify power. I then closed the box and restored the switch to normal. at this time the light in the relay was now on.

Shortly after there an announcement for Andy Paulin to call control was heard. Thinking something had happened during relay testing, when operators came into the 13.8 Building to investigate no connection was made to my actions which I believed were isolated from the event.

When talking with the supervisor and going over what I had done step by step it became clear I had down powered control power to D-52. This was then relayed to the control room by the supervisor.

Possible contributing factors. Fatigue due to a long run of 12 hr shifts.

Frustration over not having the bike ready for PMT.

Delays on getting permission to start work.

Once started having the job stopped and tearing down my set up and placing bike back in the cabinet.

Getting permission to restart work and having to set up a second time.

Knowledge we can operate test stands & equipment outside of independent of outside influences.

This task was infrequently performed.

Self imposed pressure to get something productive done.

Tools used for human performance. reviewed package.

Thoroughly. Read through prep sheet methodically.

Took a two minute stand down at the job site.

Event Investigation Personnel Statement

Name: [Signature] Ex 6

Position: [Signature]

Event Date: 5-17-04
5-18-04 Ex 6

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I WAS ASSISTING ANOTHER ELECTRICIAN WITH 13KV BREAKER MAINTENANCE. AFTER ARRIVING AT JOB SITE AND SETTING UP THE WORK AREA, THE KNIFE SWITCH NEXT TO THE BREAKER TEST STAND WAS OPENED TO CHECK FOR VOLTAGE IN COMING VOLTAGE TO TEST STAND. THEN KNIFE SWITCH WAS CLOSED AND BREAKER MAINTENANCE WAS RESUMED. AFTER A FEW MOMENTS A GAI-TRONICS ANNOUNCEMENT WAS MADE FOR ANDY PAULIN TO CALL THE CONTRALL ROOM. AT THIS TIME NO CONNECTION WAS MADE BETWEEN THE KNIFE SWITCH ACTUATION AND THE ANNOUNCEMENT. WHILE CONTINUING WITH THE BREAKER WORK AN A.O. AND C.O. CAME INTO THE ROOM TO CHECK THE PROBLEM OUT, THEY ASKED IF WE NOTICED ANYTHING OR IF OUR WORK COULD HAVE AFFECTED THE XO-4 TRANSFORMER INDICATION, SINCE THE BREAKER WAS NOT HOOKED UP TO ANYTHING AT THE TIME WE DIDN'T THINK SO. LATER (10-15 MIN.) OUR SUPERVISOR CAME IN AND RAN THROUGH ALL THE ACTIONS WE TOOK SO FAR AND AT THAT TIME IT WAS REALIZED WHAT THE KNIFE SWITCH WAS POWERING. HE THEN CALL OPERATIONS TO APPRISE THEM OF THE SITUATION.