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U.S. NUCLEAR REGULATORY COMMISSION
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Washington, DC 20555

Gentlemen:

DOCKET 50-266 AND 50-301
RESPONSE TO GENERIC LETTER 91-11
RESOLUTION OF GENERIC ISSUES 48,
"LCOs FOR CLASS 1E VITAL INSTRUMENT BUSES,"
AND 49, "INTERLOCKS AND LCOs FOR CLASS 1E
TIE BREAKERS" PURSUANT TO 10 CFR 50.54(F)
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

This letter is in response to NRC Generic Letter No. 91-11, "Resolution of Generic Issues 48, 'LCOs For Class 1E Vital Instrument Buses,' and 49, 'Interlocks and LCOs For Class 1E Tie Breakers' Pursuant to 10 CFR 50.54(f)," dated July 18, 1991. In the Generic Letter you directed all licensees to provide the NRC with certification, within 180 days of receipt of the subject Generic Letter, that they have either implemented the appropriate procedures or prepared justification that such procedures are not needed to fulfill the following requirements:

1. Limit the time that a plant is in possible violation of the single-failure criterion with regard to the Class 1E vital instrument buses and tie breakers.
2. Require surveillances of these components.
3. Ensure that, except for the times covered in Item (1), the plant is operating in an electrical configuration consistent with the regulations and its design bases.

After careful evaluation and consideration of the above requirements, we have concluded that the present and planned controls at Point Beach Nuclear Plant (PBNP) are adequate to satisfy the intent of this Generic Letter. Justification for our conclusion follows.

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LCOs and Surveillances For Class 1E Vital Instrument Buses

Each PBNP unit utilizes four separate and independent reactor protection instrument channels termed Channels I, II, III and IV; color-coded red, white, blue and yellow. Each instrument channel is supplied by a separate Class 1E 120 volt AC instrument bus. Each Class 1E instrument bus is made up of two sub-buses (for example, buses 1Y04 and 1Y104). For each instrument channel, one inverter is dedicated to the Unit 1 instrument bus and a second is dedicated to the Unit 2 instrument bus. A third inverter is available as a spare which can swing between either unit's instrument buses of the same "color." This spare inverter allows either dedicated inverter to be taken out of service for preventive maintenance, corrective maintenance, or normal surveillance requirements, while maintaining power to reactor protection instrumentation. While it is physically possible to supply similar buses of two units by the same swing inverter, administrative controls are in place to prevent the swing inverter from supplying power to both units' instrument buses at the same time.

There are no cross-ties between the instrument buses of the same unit. However, it is physically possible to cross-connect DC power supplies of two inverters supplying two instrument buses of the same unit. Simultaneously snuffing breakers 72-302 and 72-402 would cross-connect 125 volt DC buses D03 and D04. However, interlocks prevent this lineup from occurring. Likewise, shutting breakers 72-104 and 72-204 concurrently would cross-connect 125 volt DC buses D01 and D02. Plant modification 90-134 will provide an interlock to prevent simultaneous closure of these breakers. Operating instructions presently restrict the above lineups. Since the breakers require manual operation, no single credible event could cause two of the breakers to simultaneously close.

Because physical and administrative controls prevent one power source from concurrently supplying more than one vital instrument bus, we are not in jeopardy of violating the single-failure criterion for Class 1E vital instrument buses. Therefore, we have concluded that an LCO or surveillance is not needed to satisfy the above requirements.

LCOs and Surveillances for Class 1E Tie-Breakers

The Class 1E tie-breakers at PBNP consist of breakers 1B52-16C and 2B52-40C (Unit 1 and Unit 2 common tie-breakers for 480 volt safeguards buses B03/B04) and 1A52-61 and 2A52-71 (Unit 1 and Unit 2 common tie-breakers for 4160 volt safeguards buses

A05/A06). In addition, simultaneously shutting contactors 1B491 and 2B391 would connect safeguards buses 1B04 and 2B03 and shutting contactors 1B3212H and 2B4212B would connect buses 1B03 and 2B04. However, interlocks and plant operating instructions prevent the simultaneous closure of these contactors.

Presently, the normal configuration for the A05/A06 bus tie-breakers consists of (1) tie-breakers racked out, (2) tie-breakers physically removed from their cubicles, (3) DC control power fuses in "OFF," and (4) control switches in pull-out. The B03/B04 bus tie-breakers are normally racked in with DC control power fuses "OFF" and control switches in pull-out. Because the B03/B04 bus tie-breakers are maintained racked in, plant modification 90-175 has been approved to install an annunciator that will indicate in the control room if the B03/B04 tie-breaker is either advertently or inadvertently closed. This annunciator is being installed in response to Electrical Distribution System Functional Inspection (EDSFI) Deficiency 90-201-08, "Single Failure of Safeguards 480 volt AC Bus Tie-Breaker." This deficiency identified the new configuration with control power secured and the inability to remotely monitor tie-breaker position. Annual maintenance is also conducted on all of the above tie-breakers to verify proper operation.

Point Beach Nuclear Plant Licensee Event Report 301/80-005-00 reported an improper electrical lineup of buses 2A05 and 2A06. During a training walkdown of the safeguards electrical supply cabinets, it was discovered that the 2A05/2A06 tie-breaker was shut. The improper lineup probably occurred after a loss of AC power test on May 2, 1980, but was not discovered until June 9, 1980. To prevent recurrence of this event, the breaker was uniquely identified on the electrical layout board, and procedure changes were implemented to include an electrical lineup check after performance of the loss of AC power test and prior to return to power.

The allowable duration for use of the common tie-breakers is administratively controlled in plant operating instructions to be less than eight hours. PBNP Technical Specification Change Request 132, "LCO's For Power Distribution on Safeguards Buses," was submitted to the NRC on September 22, 1989, to allow the use of the tie-breakers for up to eight hours. A modification to this request is being reviewed in-house to provide a more acceptable duration for use of the tie-breakers and to allow their use only when the associated reactor is shutdown.

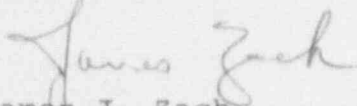
Since the A05/A06 tie-breakers are physically removed from their cubicles and the B03/B04 tie-breakers are disabled while

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providing remote position indication at all times, we have concluded that a surveillance in addition to the yearly maintenance inspections is not needed to satisfy the above requirements.

Please contact us if you have any questions regarding the above information.

Sincerely,



James J. Zach
Vice President
Nuclear Power

Copies to NRC Regional Administrator, Region III
NRC Resident Inspector

Subscribed and sworn to before me
this 23rd day of January, 1992.


Notary Public, State of Wisconsin

My commission expires 5-22-94.