

September 28, 1984

Mr. H. R. Denton, Director Office of Nuclear Reactor Regulation U. S. NUCLEAR REGULATORY COMMISSION Washington, D. C. 20555

Attention: Mr. D. G. Eisenhut, Director

Division of Licensing

Gentlemen:

DOCKET NOS. 50-266 AND 50-301
RESPONSE TO GENERIC LETTER 84-15
PROPOSED STAFF ACTIONS TO IMPROVE AND MAINTAIN
DIESEL GENERATOR RELIABILITY
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

On July 17, 1984 we received Generic Letter 84-15 entitled, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability", which was dated July 2, 1984. Generic Letter 84-15 and its enclosures present the Commission staff's proposals for assuring adequate diesel generator reliability.

1. Reduction in Number of Cold Fast Start Surveillance
Tests for Diesel Generators

We agree with NRC "... that an overall improvement in diesel generator reliability and availability can be gained by performing diesel generator starts for surveillance testing using engine prelube and other manufacturer recommended procedures to reduce engine stress and wear". The Point Beach Nuclear Plant Technical Specifications call for one cold fast start per refueling outage as recommended in Generic Letter 84-15. All other diesel starts conform to the manufacturer's recommended procedures.

2. Diesel Generator Reliability Data

Attached are tables listing the last 100 diesel generator starts for each diesel generator. Unit 3D was 100% reliable for the last 20 starts and 98% reliable for the last 100 starts. Unit 4D was 100% reliable for the last 100 starts. Although we do not maintain a diesel generator reliability record specifically in the manner outlined in Regulatory

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Guide 1.108 or maintain a yearly report on diesel generator reliability, each diesel's machinery history log contains sufficient information to permit independent determination of statistical validity. In addition, Point Beach has an ongoing trend analysis program which monitors important engine parameters. This program creates a detailed machinery history and can identify changes in operating characteristics as they develop.

### 3. Diesel Generator Reliability

Generic Letter 84-15 proposes a 31-day surveillance for diesel generators that are at least 95% reliable and increased surveillance for 90 to 95% reliable diesels; diesels that are less than 90% reliable would be disqualified and placed in a requalification program. The reliability goal of 95% is reasonable. However, we believe that this goal is best achieved by means other than complex and prescriptive Technical Specifications. Technical Specifications, by their nature, are inflexible and difficult to change. As ASTM standards, which are quoted in the proposed Technical Specification Section 4.8.1.1.2(c), are revised or as the reliability program is modified, these Technical Specifications would need to change. It is for this reason that, as an example, the inservice inspection Technical Specifications refer to the ASME Boiler and Pressure Vessel Code. We suggest that a similar program would work for diesel generator reliability. If reliability would fall below 95%, a pre-approved diesel generator reliability program would be implemented.

While we agree that a strong program should be implemented if diesel generator reliability falls below 95%, we consider testing a diesel once every seven days excessive. Such excessive testing is likely to result in increased wear, increased repair frequency, increased downtime, and an overall reduction in reliability. We suggest that a frequency of once every fourteen days would be more reasonable.

A yearly limit on the total cumulative time that a plant may operate with one of the diesel greators inoperable was also proposed. Although from a purely statistical standpoint this would appear to increase reliability by decreasing diesel outage

time, it could potentially create a situation where preventative or corrective maintenance would be postponed in order to avoid exceeding the yearly downtime limit. This could significantly reduce diesel reliability and would be contrary to the program's goals.

We agree that a diesel generator disqualification should not cause a limiting condition for operation until it fails to requalify. This would allow the diesel generator to requalify without requiring the shutdown of the plant.

If you have any questions regarding this submittal, please contact us.

Very truly yours,

fu his

R. W. Britt

Attachments

Copy to NRC Resident Inspector

Subscribed and sworn to before me this 28th day of September 1984.

Notary Public, State of Wisconsin

My Commission expires May 4,1986.

### ATTACHMENT

# DIESEL GENERATOR 3D TEST STARTS

03/17/82 03/31/82 04/14/82 04/15/82 04/15/82 04/20/82 04/28/82 04/28/82 05/12/82 05/12/82 05/14/82 05/26/82 06/09/82 06/21/82	(LER 82-012)	01/05/83 01/19/83 01/26/83 02/02/83 02/16/83 02/18/83 02/23/83 03/02/83 03/09/83 03/09/83 03/16/83 03/23/83 03/30/83	(LER 83-002) (Successful restart)	01/04/84 01/18/84 02/01/84 02/15/84 02/29/84 03/01/84 03/14/84 03/28/84 04/11/84 04/18/84 05/04/84 05/16/84 05/19/84
08/18/82 09/01/82 09/15/82 09/20/82 09/21/32 09/22/82 09/23/82 09/24/82 09/29/82 10/13/82 10/27/82 11/10/82 11/12/82 11/24/82 12/08/82 12/15/82 12/22/82		06/08/83 06/21/83 06/22/83 07/07/83 07/22/83 08/03/83 08/17/83 08/17/83 09/14/83 09/14/83 10/23/83 10/23/83 10/24/83 10/25/83 10/26/83 10/27/83 10/29/83 11/09/83 11/09/83 11/23/83 12/07/83 12/14/83 12/21/83		07/25/84 08/08/84 08/22/84 09/05/84 09/17/84 09/18/84 09/19/84

Note: Diesel generator 3D was 100% reliable for the last 20 starts and 98% reliable for the last 100 starts as of September 20, 1984.

### ATTACHMENT

# DIESEL GENERATOR 4D TEST STARTS

02/10/82	01/12/83	01/11/84
02/17/82	01/19/83	01/25/84
02/24/82	01/26/83	02/08/84
03/03/82	02/09/83	02/22/84
03/10/82	02/23/83	03/01/84
03/24/82	03/09/83	03/07/84
04/07/82	03/23/83	03/21/84
04/15/82	03/24/83	04/04/84
04/19/82	03/25/83	04/18/84
04/20/82	03/26/83	04/29/84
04/28/82	04/06/83	04/30/84
05/06/82	04/13/83	05/01/84
05/14/82	04/20/83	05/02/84
05/19/82	05/04/83	05/03/84
06/02/82	05/18/83	05/04/84
06/16/82	06/01/83	05/09/84
06/21/82	06/15/83	05/19/84
06/22/82	06/21/83	05/23/84
06/23/82	06/29/83	06/06/84
06/24/82	07/13/83	06/20/84
06/30/82	07/18/83	07/04/84
07/14/82	07/19/83	07/18/84
07/28/82	07/20/83	08/01/04
08/11/82	07/21/83	08/15/84
08/25/82	07/22/83	08/19/84
09/08/82	07/27/83	09/12/84
09/23/82	08/10/83	
09/24/82	08/24/83	
10/06/82	09/07/83	
10/20/82	09/21/83	
11/03/82	10/05/83	
11/12/82	10/19/63	
11/17/82	10/28/83	
12/01/82	11/02/83	
12/15/82	11/16/83	
12/29/82	11/30/83	
	12/14/83	
	12/28/83	

Note: Diesel generator 4D was 100% reliable for the last 100 starts as of September 20, 1984.