

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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December 4, 1984

Docket No. 50-336
B11335

Director of Nuclear Reactor Regulation
Attn: Mr. James R. Miller, Chief
Operating Reactors Branch #3
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

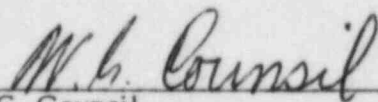
Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Degraded Grid Voltage

As you requested, the procedures dealing with degraded grid voltage at Millstone Unit No. 2 are attached. Also attached is a brief explanation of how these procedures are used.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



W. G. Council
Senior Vice President

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Docket No. 50-336

Attachment I

Millstone Nuclear Power Station, Unit 2

December, 1984

Millstone Nuclear Power Station Unit No. 2

Degraded Grid Voltage

- References:
1. NNECO Operating Procedure OP2374B, Rev. 4, Changes 1 and 2, Items 8.2(a) and 8.2(b), Normal Station Service Transformer 15G - 2S.
 2. NNECO Operating Procedure OP2347B, Rev. 4, Item 8.2, Normal Station Service Transformer 15G - 2S.
 3. NNECO Operating Procedure OP2347A, Rev. 5, Item 8.2, Reserve Station Service Transformer 15G - 22S.
 4. NNECO Operating Procedure OP2384, Rev. 2, Engineered Safeguards Actuation.

As you requested, the procedures dealing with supply of degraded grid voltages to the Millstone Unit No. 2 emergency buses are attached.

1.0 Degraded Voltage 90% (Level 2)

- 1.1 When the plant is in the normal mode, Reference #1 applies to the Normal Station Service Transformer. At 90% voltage operator action is required within a four (4) hour period.
- 1.2 When the plant is in the normal mode, Reference #4 applies to the transformer 15G - 22S. At 90% voltage the transformer 15G - 22S, (Reserve Station Service Transformer) with a time delay of 8+ or -2 seconds is automatically tripped from the emergency buses and the loads are transferred to the diesel generators.
- 1.3 The time delay in Item 1.1 above allows for corrective action before the equipment suffers loss of life. The time delay in Item 1.2 allows for the starting of large motors.

2.0 Degraded Voltage 70% (Level 1/Undervoltage/Loss of Normal Power)

- 2.1 The transformer 15G - 2S is automatically blocked from closing onto the 6.9 kV 25A&B and 4.16 KV 24A&B buses during a 70% voltage condition, Reference #2. This means that the transformer 15G - 2S is blocked from supplying the emergency buses.
 - 2.1.1 When the plant is in the normal or accident mode, Reference #4 applies to the transformer 15G - 2S. At 70% voltage the transformer 15G - 2S, with a time delay of 0.5 seconds, is automatically tripped from the emergency buses and the loads are transferred to the diesel generators.
- 2.2 The transformer 15G - 22S is automatically blocked from receiving the in-house buses 24 C&D for an auto transfer during a 70% voltage condition, Reference #3. This means that Item 2.1.1 above will automatically take over.

Also the transformer 15G - 22S is automatically blocked from closing onto the 6.9 kV buses 25A & B. This means that the transformer 15G - 22S will not be supplying large non-emergency loads, Reference #3.

- 2.2.1 When the plant is in the normal or accident mode, Reference #4 applies to the transformer 15G - 22S. At 70% voltage the transformer 15G - 22S with a time delay of 0.5 seconds is automatically tripped from the emergency buses and the loads transferred to the diesel generators.

Attachment II
Millstone Nuclear Power Station, Unit 2

December, 1984