Regulatory File Cy.

UNITED STATES ATOMIC ENERGY COMMISSION

Received w/Ltr Dated 5-7-70

NORTHERN STATES POWER COMPANY

Monticello Nuclear Generating Plant E-5979 Docket Number 50-263

AMENDMENT NO. 26

TO

APPLICATION FOR AEC CLASS 104b OPERATING
LICENSE FOR A UTILIZATION FACILITY

Northern States Power Company, a corporation organized under the laws of the State of Minnesota, applicant for an operating license for the Monticello Nuclear Generating Plant, hereby amends its application by submission of Amendment 26.

Amendment 26 describes our proposed modifications to sensitized stainless components attached to the Monticello nuclear pressure vessel.

This Amendment to the application contains no restricted or other defense information.

Dated May 7, 1970

NORTHERN STATES POWER COMPANY

By _____
D. F. McElroy

STATE OF MINNESOTA)

COUNTY OF HENNEPIN)

D. F. McElroy, being first duly sworn, says that he is the Vice President-Engineering of Northern States Power Company, a corporation organized and existing under and oy virtue of laws of the State of Minnesota, that he executed the foregoing application for amendment for the purpose therein set forth; that the statements made in said application for amendment are true and correct to the best of his knowledge and belief; that he was authorized to execute said application on behalf of said corporation; and that the seal affixed is the corporate seal of said corporation.

D. F. McElroy

Subscribed and sworn to before me

This 7 day of May, 1970

Robert E. Hessian

Robert E. Hessian
Notary Public, Hennepin County, Minnesota

My Commission Expires May 15, 1976

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AMENDMENT 26

This amendment describes proposed modifications to the furnace sensitized stainless steel components attached to the reactor pressure vessel. Table 1 lists the components and summarizes the type of modifications. A description of the types of modifications follows Table 1.

TABLE 1

| Component | | Spec. - Grade - & Condition | Proposed Modification |
|---|---|---|---|
| N1A & N1B | Recirculation Outlet Nozzles Safe End | SA240-Tp304 - Solution heat treated Rolled and Welded Furnace Sensitized | Clad ID only |
| N6A & N6B | Top Head Instrumentation Long weld neck flange | SA182-F304 - Solution heat treated Furnace Sensitized | Replace |
| N7 | Top Head Vent Long weld neck flange | SA182-F304 - Solution heat treated Furnace Sensitized | Replace |
| N8A & N8B | Jet Pump Instrumentation Nozzle Safe End | SA336-F8 - Solution heat treated Furnace Sensitized | Replace |
| N9 | CRD Hydraulic System Return Nozzle Safe End | SA336-F8 - Solution heat treated Furnace Sensitized | Replace |
| 20 | Weld buildup of Jet Pump mounting pads | SA298 Type 308 - Weld metal Furnace Sensitized | Overlay existing mounting pads and attachment welds |
| 32 | Various sizes - weld build-up of mounting pads | SA298 Type 308 - Weld metal Furnace Sensitized | Overlay Pad and attachment weld |

Description of Modifications

Replacement of Furnace Sensitized Stainless Nozzle Safe Ends and Long Weld Neck Flanges - Safe ends for nozzles N8A, N8B, & N9, and long weld neck flanges for N6A, N6B, & N7, will be removed by machining in a manner such that the weld buttering on the ferritic nozzles will not be disturbed.

Replacement safe ends are SA336-F8 forgings. Safe ends for N8A and N8B are each comprised of two half section forgings requiring two longitudinal welds. All replacement safe ends meet quality control requirements equal to those required in the original fabrication, i.e., USAS1 B31.1.0 upgraded to meet ASME Section 3 requirements in regards to materials, welding, non-destructive examinations and documentation thereof.

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All welds will be liquid penetrant examined and radiographed. In addition, a new baseline examination, which will be used as a reference for future inservice examinations, will be performed utilizing ultrasonic testing methods.

Cladding of Recirculation Outlet Nozzle Safe Ends - Safe ends for recirculation outlet nozzles N1A and N1B will be clad on the inside with SA298 - Type 308L. The inner circumference of the safe end is marked in 90° segments. These provide reference lines for the welder to follow in depositing his initial weld bead in each quadrant. Sequencing is such that longitudinal beads are deposited in groups of four in alternating quadrants to maintain minimum interpass temperatures. Each weld bead is approximately 10½" long and covers the entire safe end plus an overlap of the sensitized buttering on the ferritic nozzles and the primary coolant piping.

Liquid penetrant examinations using fluorescent penetrants will be performed both before and after weld overlaying. Any indications discovered as a result of the liquid penetrant examinations will be removed.

Cladding of the O.D. surfaces of these safe ends is not planned until such time there is reasonable assurance that this overlay would not interfere with future inservice ultrasonic examinations. These outer surfaces will be cleaned and liquid penetrant examined. Another baseline inspection will be performed using ultrasonic methods. This baseline will be used as a reference for future examinations.

Overlay of Mounting Pads - The existing mounting pads and attachment welds which are identified below, will be overlay clad with SA298 Type 308L.

| | |
|---|---|
| 20 | Jet pump mounting pads |
| 4 | Steam dryer hold down pads |
| 4 | Steam dryer support pads |
| 2 | Guide rod pads |
| 8 | Feedwater sparger line pads |
| 8 | Core spray piping pads |
| 6 | Surveillance sample holder pads |

Additional bracing for each of the 10 jet pump risers will be installed. The bracing material is Type 304. Twenty new mounting pads and attachment welds will be SA298 Type 308L.

All weld surfaces will be liquid penetrant examined both before and after weld overlaying. Any indications discovered as a result of the liquid penetrant examinations will be removed.

Jet Pump Replacement Castings - Spare non-carburized jet pump castings have been delivered and will be installed during the afore mentioned modification program.