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Original Date 6-21-81

Revised Date _____

DUKE POWER COMPANY
OCONEE NUCLEAR STATION
HANDLING OF HEAVY LOADS

1.0 Purpose

The purpose of this directive is to define load paths for cranes and hoists that will lift heavy loads. It will also discuss rigging practices and use of monorails.

2.0 References

- 2.1 NUREG-0612
- 2.2 ANSI B30.2-1976
- 2.3 ANSI B30.9-1971
- 2.4 ANSI B30.16-1973
- 2.5 ANSI N14.6-1978

3.0 Definitions

- 3.1 Heavy Load - A load whose weight is greater than the combined weight of a single spent fuel assembly and its handling tool.
- 3.2 Load Path - The safest path that will be followed when a heavy load is being moved by a crane or hoist.
- 3.3 Monorail - A specific fixed structural rail, usually an I-beam, on which a lifting device is placed to make lifts on a specific piece of equipment in a predetermined direction.

4.0 Administration

4.1 Load Paths

Load paths will be identified for each crane that will lift and move a heavy load around irradiated fuel, decay heat removal or safe shutdown equipment. The load paths will be defined on the attached enclosures for each crane or hoist.

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The appropriate enclosure will be attached to the pendant of the crane or hoist, or will be placed in the cab of the crane. On each enclosure will be the load path defined, any restrictions on the crane, special lift information and inspection requirements. Revisions to the enclosures will be made thru or by the Accountable Engineer on cranes and hoists.

In making a lift, the load path defined shall be utilized if a heavy load is being moved. The load path should be used for all other lifts but is not mandatory.

4.2 Inspections

All lifting devices at station shall be inspected according to the applicable ANSI standard.

The only exception to this is the special lifting devices which shall be inspected to the requirements in ANSI N14.6-1978. This is due to NUREG-612's interpretation of special lifting devices. The special lifting devices will be defined and placed in the station's PM program by the Accountable Engineer on cranes or will be included in the installation instructions.

4.3 Rigging

Rigging shall be performed by qualified people. Qualification will involve experience and/or training. Instructions for complex rigging will be included on the enclosure for the specific crane or hoist. In all rigging practices, the proper lifting device should be selected according to the weight of load to be moved.

4.4 Monorails

Monorails are installed in the plant for a specific piece of equipment. Their intended use is for aid in removal of that piece of equipment. Since the monorail is fixed, the load path for it is the area directly under it. Lifting devices used on them are essentially portable and should be sized according to their weight.

4.5 Movement of Loads

In moving of Heavy Loads, the following items shall be considered:

1. Move steadily with load along the specified load path.
2. Move as close to the floor as possible.
3. Insure rigging is secure and adequately sized.
4. If for any reason there is an obstruction in the load path, the closest, most direct route shall be made to move around it and back to the load path if obstruction cannot be moved.

5.0 Enclosures

- 5.1 Turbine Aisle Crane
- 5.2 Aux Turbine Aisle Crane
- 5.3 Heater Bay Crane
- 5.4 Pump Aisle Crane
- 5.5 Spent Fuel Pool Receiving Area Crane
- 5.6 Spent Fuel Pool Receiving Area Aux Crane
- 5.7 Reactor Building Polar Crane (Hot Shutdown)
- 5.8 Reactor Building Polar Crane (Cold Shutdown)

5.9 Monorails

4.3 Rigging

Rigging shall be performed by qualified people. The rigging will involve experience and/or training. Instructions on rigging will be included on the envelope for the specific crane or hoist. In all rigging practices, the proper lifting device shall be selected according to the weight of the load.

ENCLOSURE # 5.9Crane Name MonorailsCrane # AB-6 AB-17
AB-16 AB-31Safe Load Path

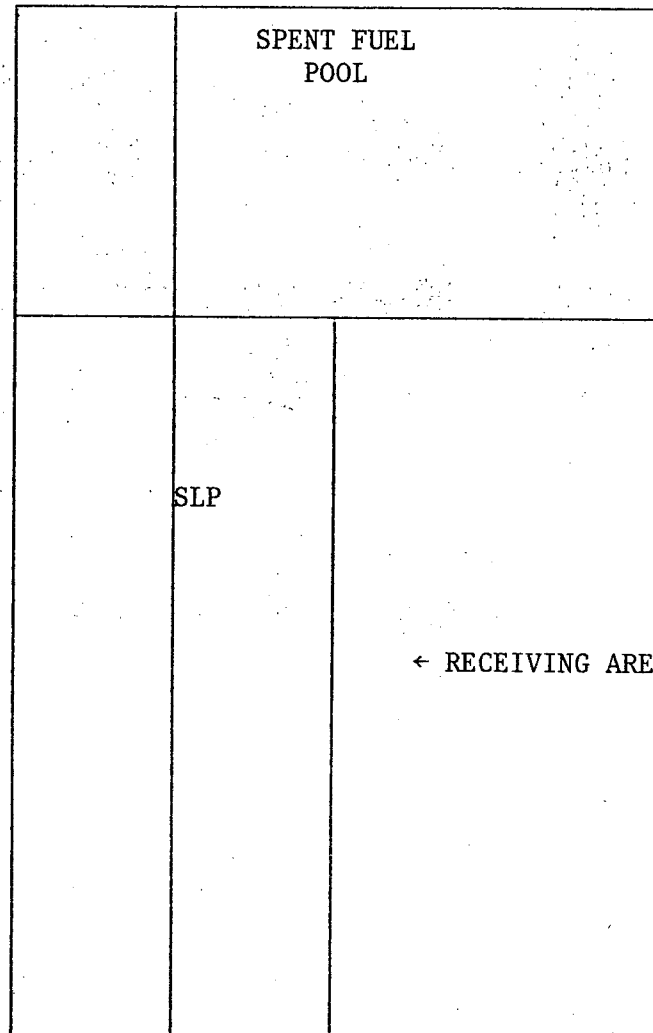
*Monorail Itself

AB-6	Decay Heat Cooler Hoist
AB-16	Spent Fuel Cooler Monorail
AB-17	Spent Fuel Cooler Monorail
AB-31	Decay Heat Cooler Hoist

Restrictions: Limit lifts on these monorails to cold shutdown status.

Heavy Lift:
Instruction+
Equipment

Inspection Instructions and Comments:

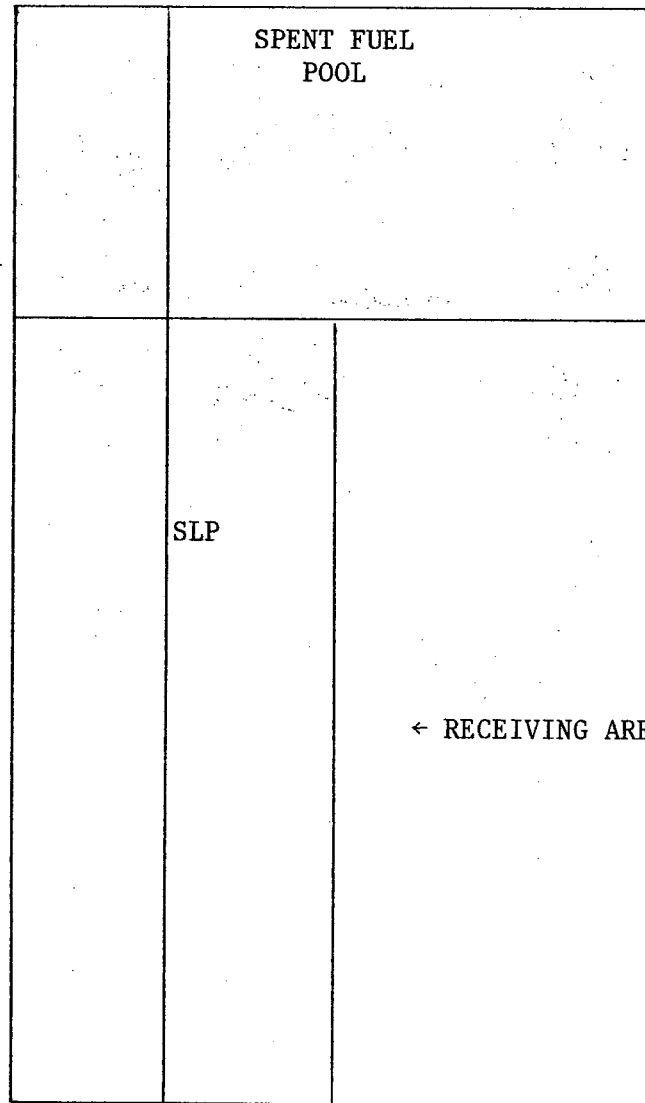
Crane Name SFP Receiving Area Crane # C-21Safe Load Path

NOTE: FOLLOW SAFE
LOAD PATH AS OUTLINED
ON FLOOR

Restrictions: None

Heavy Lift: Spent Fuel Shipping Cask
Equipment+
Instruction

Inspection Instructions and Comments:
MP/0/A/3000/10A Periodic inspection and Maintenance

ENCLOSURE # 5.6Crane Name AUX SEP Receiving AreaCrane # C-23Safe Load Path

NOTE: FOLLOW SAFE
LOAD PATH AS OUTLINED
ON FLOOR

Restrictions: None

Heavy Lift: Spent Fuel Shipping Cask
Equipment+
Instruction

Inspection Instructions and Comments:
MP/0/A/3000/10A - Periodic inspection and Maintenance