



Consumers
Power
Company

*Heistman
for PDR of R.M. 12-14-77*

Midland Project: P.O. Box 1963, Midland, Michigan 48540 - Area Code 517 631-0951

December 8, 1977

Mr. J. G. Keppler, Regional Director
Office of Inspection & Enforcement, Region 3
U.S. Nuclear Regulatory Commission
Glen Ellyn, IL 60136

MIDLAND PROJECT GWO 7020 - NRC SCHEDULE
File: 0652.1 Serial: 2718

Attached are copies of the NRC Schedule Activities Lists for Midland Units 1 and 2 for December 1977. The Construction Percent Complete is 32% for Unit 1 and 36% for Unit 2. Engineering is 78% complete.

Changes in the I-J Node Dates are as follows and apply to both units:

I-7235, J-7240	Change Complete to All-77
I-7240, J-7355	Change Start to All-77

All other information remains the same as reported for November 1977.

A handwritten signature in black ink, appearing to read 'T. C. Cooke'.

T. C. Cooke
Project Superintendent

TCC/DDJ/pp

Attachments

CC: W. G. Lovelace, Chief of Plans
Branch MNBB12117, Office of Mgt Information & Program Control
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

M. G. Koschik

8502090441 840517
PDR FOIA
RICE84-96 PDR

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NRC SCHEDULE FOR MIDLAND UNIT 1

Status Date December 1977

Construction 32% Complete

ACTIVITY	I-J Numbers	Start	Complete
Install Heat Sinks (Cooling Towers & Cooling Pond)	7045-7890	A8-73	8-80
Special Nuclear Material License Issued	0-7730	3-78	1-79
Special Nuclear Material Delivered	7730-7815	1-79	10-81
Install Control Room Consoles and Equipment	0-7805	11-77	11-81
Nuclear Instrumentation Installation and Calibration	0-7820	1-78	11-81
Accumulation of Environmental Data (One (1) or Two (2) Years)	0-7810	A2-75	A2-77
Applicant Submits Emergency Plan	0-7735	A2-74	4-78
Applicant Submits Security Plan	0-7740	A2-74	4-78
Install Startup Transformers	0-7520	A9-77	2-80
Perform NDT on Cables (Megger, Continuity, etc.)	0-7475	4-78	2-81
Applicant Submits QA Program for Operation	0-7745	A2-74	4-78
Install Conduit and Cable Trays	0-7405	A4-77	2-81
Install Batteries and Inverte.	0-7425	4-78	10-80
Applicant's Review and Approval of Test Results	0-7750	3-80	9-81
Install Primary Auxiliary Switchgear	0-7410	A6-77	2-81
Install Instrumentation Air System	0-7430	1-78	2-81
Applicant's Preparation of Power Ascension Test Program	0-7755	12-78	4-80
Install Cables (Instrumentation, Control & Power)	0-7415	12-78	2-81
Install Process Instruments	0-7435	1-78	2-81
Control Rod Drive Instrumentation & Operability Test	0-7670	3-81	6-81
Install Motor Control Centers (MCC's) and Secondary Distribution System	0-7420	A8-77	2-81
Process Control & Logic Instrumentation Calibration	0-7440	8-80	2-81
Containment Isolation Test	0-7590	2-81	6-81
Install Diesel Generator and Oil Tank Foundation	7020-7155	A10-77	7-78

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NRC SCHEDULE FOR MIDLAND UNIT 1

Status Date December 1977

ACTIVITY	I-J Numbers	Start	Complete
Install Diesel Generator and Tanks	7155-7445	7-78	6-79
Containment Purge Test	0-7690	2-81	6-81
Tendon Sheath Installation	7070-7130	A6-74	11-79
Tendon Installation and Tensioning	7130-7370	11-79	11-80
Containment Completion	7370-7595	11-80	4-81
Install RPV Internals	7305-7825	1-80	11-81
Install CRDM	7310-7455	1-80	2-81
Install Piping Hangers & Restraints	7205-7510	4-79	3-81
*Remobilize	0-7005	A3-73	A6-73
*Prepare Site	7005-7015	A6-73	A8-73
*Install Reactor Building Base Mat	7015-7050	A8-73	A7-74
*Install Containment Liner Plant and Concrete Walls to Spring Line	7050-7060	A7-74	A7-77
*Install Polar Crane	7060-7150	A7-77	A7-77
*Set Dome and Complete Exterior Concrete	7150-7200	A7-77	2-79
*Install RPV	7200-7300	2-79	4-79
*Install Primary Pressure Boundary Piping and All Piping Connected to Primary System Components	7300-7450	4-79	12-80
*Initial Flush of Reactor Coolant System	7450-7500	12-80	2-81
*Reactor Coolant System Cold Hydro Test	7500-7515	2-81	3-81
*Complete Base-Line Inspection	7515-7600	3-81	5-81
*Hot Functional Test	7600-7700	5-81	7-81
*Containment Integrity and Leak Rate Test	7700-7800	7-81	9-81
*Applicant Submits Program Test Results and Evaluation	7800-7950	9-81	11-81
*Core Loading	7950-7990	11-81	3-82
Install RPV Pedestal	7163-7165	A5-76	1-79

NRC SCHEDULE FOR MIDLAND UNIT 1

Status Date December 1977

ACTIVITY	I-J Numbers	Start	Complete
Integrated Safety Injection System Actuation and Flow Test	0-7525	2-81	5-81
Hot Functional Test MSIV	7628-7630	5-81	7-81
Install Major Component Shielding and Containment Cooling	7075-7095	A5-76	2-79
Install Primary Pumps	7210-7260	4-79	12-80
Integrated Residual Heat Removal System Actuation and Flow Test	0-7530	2-81	5-81
Main Feedwater Control Test	7623-7625	5-81	7-81
Prefabricate Liner Plant and Install Containment Penetrations	7-80-7170	A3-74	2-79
Install Pressurizer and System	7220-7270	2-79	4-79
Install Accumulator	7215-7265	4-79	12-80
Integrated Chemical and Volume Control System Test and Charging Pump Flow Test	0-7460	2-81	5-81
Pressurizer Performance Test	7638-7640	5-81	7-81
Install Containment Interior Concrete	7055-7085	A4-76	2-79
Install Steam Generator	7225-7275	2-79	4-79
Auxiliary Feedwater Control System Test	0-7535	10-79	5-81
Heat-up Rate Test	7643-7645	5-81	7-81
Containment Cooling and Spray	7090-7105	A3-77	3-81
Containment Cooling and Spray System Test	7105-7680	3-81	5-81
Cool-Down Rate Test (Capability)	7648-7650	5-81	7-81
Install Main Steam Line between MSIV and Turbine	0-7360	5-78	12-80
Install Main Steam Line Between MSIV and Steam Generator	0-7365	6-78	12-80
Diesel Generator Test	0-7540	9-79	5-81
Main Coolant Pump Hot Flow Test	7658-7660	5-81	7-81
Install Feedwater System	0-7280	4-78	12-80

NRC SCHEDULE FOR MIDLAND UNIT 1

Status Date December 1977

ACTIVITY	I-J Numbers	Start	Complete
Main Coolant Pump Flow Test	0-7545	2-81	5-81
CRDM Cooling Temperature Measurement	7663-7665	5-81	11-81
Install Makeup System (CVCS)	7245-7325	A2-77	12-80
Primary Component Cooling Water Flow Test	0-7465	2-81	5-81
Secondary Relief Valve Test	7633-7635	5-81	7-81
Install Auxiliary Building Foundation & Structures	7025-7230	A4-74	A4-76
Install RHR Heat System	7230-7335	A4-76	12-80
DC System Inverter Test	0-7560	12-79	5-81
Primary Relief Valve Actuation Test	7653-7655	5-81	7-81
Install Safety Injection System	7255-7340	A11-76	12-80
CRDM Cooling Flow Test	0-7565	2-81	5-81
Install Primary Component Cooling Water System	7125-7350	A5-76	12-80
Battery Capacity Test	0-7570	3-81	5-81
Install Borated Water Storage Tanks	0-7315	4-78	4-80
Instrument Air System Test	0-7575	2-81	5-81
Install Circulating Water Intake Structure, Piping and Controls	7030-7345	A8-76	12-79
Fire Protection System Test	0-7675	2-81	5-81
Construct Radioactive Waste Processing Area	7040-7110	5-78	11-78
Install Radioactive Waste System & Radiation Monitoring System	7110-7505	11-78	2-80
Radiation Waste & Monitoring System Test	7505-7895	2-80	11-81
Hydrogen Recombination System Test	0-7685	4-81	5-81
Install Fuel Pool and Associated Equipment	7115-7470	A9-75	5-81
Construct Turbine Generator Foundation	7035-7235	A4-76	A4-77
Install Condenser	7235-7240	A4-77	<u>A11-77</u>
Install Turbine Generator and Piping (Exclusive of Condensate & Feedwater)	7240-7355	<u>A11-77</u>	4-81

NRC SCHEDULE FOR MIDLAND UNIT 2

Status Date December 1977

Construction 36% Complete

ACTIVITY	I-J Numbers	Start	Complete
Install Heat Sinks (Cooling Towers & Cooling Pond)	7045-7890	A8-73	8-80
Special Nuclear Material License Issued	0-7730	3-78	1-79
Special Nuclear Material Delivered	7730-7815	1-79	10-80
Install Control Room Consoles and Equipment	0-7805	1-78	11-80
Nuclear Instrumentation Installation & Calibration	0-7820	6-78	11-80
Accumulation of Environmental Data (One (1) or Two (2) Years)	0-7810	A2-75	A2-77
Applicant Submits Emergency Plan	0-7735	A2-74	4-78
Applicant Submits Security Plan	0-7740	A2-74	4-78
Install Startup Transformers	0-7520	A9-77	2-79
Perform NDT on Cables (Megger, Continuity, etc.)	0-7475	4-78	2-80
Applicant Submits QA Program for Operation	0-7745	A2-74	4-78
Install Conduit and Cable Trays	0-7405	A4-77	2-80
Install Batteries and Inverter	0-7425	4-78	10-79
Applicant's Review & Approval of Test Results	0-7750	3-79	9-80
Install Primary Auxiliary Switchgear	0-7410	A6-77	2-80
Install Instrumentation Air System	0-7430	1-78	2-80
Applicant's Preparation of Power Ascension Test Program	0-7755	12-78	4-80
Install Cables (Instrumentation, Control & Power)	0-7415	1-78	2-80
Install Process Instruments	0-7435	1-78	2-80
Control Rod Drive Instrumentation & Operability Test	0-7670	3-80	6-80
Install Motor Control Centers (MCC's) and Secondary Distribution System	0-7420	A8-77	2-80
Process Control and Logic Instrumentation Calibration	0-7440	8-79	2-80
Containment Isolation Test	0-7590	2-80	6-80
Install Diesel Generator and Oil Tank Foundation	7020-7155	A10-77	7-78

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NRC SCHEDULE FOR MIDLAND UNIT 2

Status Date December 1977

ACTIVITY	I-J Numbers	Start	Complete
Install Diesel Generator and Tanks	7155-7445	7-78	6-79
Containment Purge Test	0-7690	2-80	6-80
Tendon Sheath Installation	7070-7130	All-73	2-79
Tendon Installation and Tensioning	7130-7370	2-79	1-80
Containment Completion	7370-7595	1-80	4-80
Install RPV Internals	7305-7825	1-79	11-80
Install CRDM	7310-7455	4-79	2-80
Install Piping Hangers and Restraints	7205-7510	9-78	3-80
*Remobilize	0-7005	A3-73	A6-73
*Prepare Site	7005-7015	A6-73	A8-73
*Install Reactor Building Base Mat	7015-7050	A8-73	A4-74
*Install Containment Liner Plate & Concrete Walls to Spring Line	7050-7060	A4-74	All-76
*Install Polar Crane	7060-7150	All-76	All-76
*Set Dome and Complete Exterior Concrete	7150-7200	All-76	7-78
*Install RPV	7200-7300	7-78	9-78
*Install Primary Pressure Boundary Piping and All Piping Connected to Primary System Components	7300-7450	9-78	12-79
*Initial Flush of Reactor Coolant System	7450-7500	12-79	2-80
*Reactor Coolant System Cold Hydro Test	7500-7515	2-80	3-80
*Complete Base-Line Inspection	7515-7600	3-80	5-80
*Hot Functional Test	7600-7700	5-80	7-80
*Containment Integrity and Leak Rate Test	7700-7800	7-80	9-80
*Applicant Submits Program Test Results and Evaluation	7800-7950	9-80	11-80
*Core Loading	7950-7990	11-80	3-81
Install RPV Pedestal	7163-7165	All-74	6-78

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ACTIVITY	I-J Numbers	Start	Complete
Integrated Safety Injection System Actuation and Flow Test	0-7525	2-80	5-80
Hot Functional Test MSIV	7628-7630	5-80	7-80
Install Major Component Shielding and Containment Cooling	7075-7095	All-74	7-78
Install Primary Pumps	7210-7260	4-79	12-79
Integrated Residual Heat Removal System Actuation and Flow Test	0-7530	2-80	5-80
Main Feedwater Control Test	7623-7625	5-80	7-80
Prefabricate Liner Plate and Install Containment Penetrations	7080-7170	A10-73	7-78
Install Pressurizer and System	7220-7270	7-78	9-78
Install Accumulator	7215-7265	9-78	12-79
Integrated Chemical and Volume Control System Test and Charging Pump Flow Test	0-7460	2-80	5-80
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Install Containment Interior Concrete	7055-7085	A9-74	7-78
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Containment Cooling and Spray	7090-7105	A9-74	3-80
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Install Main Steam Line Between MSIV and Turbine	0-7360	5-78	12-79
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Main Coolant Pump Hot Flow Test	7658-7660	5-80	7-80
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Main Coolant Pump Flow Test	0-7545	2-80	5-80
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Install Make-up System (CVCS)	7245-7325	A2-77	12-79
Primary Component Cooling Water Flow Test	0-7465	2-80	5-80
Secondary Relief Valve Test	7633-7635	5-80	7-80
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Install RHR Heat System	7230-7335	A4-76	12-79
DC System Inverter Test	0-7560	12-79	5-80
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CRDM Cooling Flow Test	0-7565	2-80	5-80
Install Primary Component Cooling Water System	7125-7350	A5-76	12-79
Battery Capacity Test	0-7570	3-80	5-80
Install Borated Water Storage Tanks	0-7315	4-78	4-79
Instrument Air System Test	0-7575	2-80	5-80
Install Circulating Water Intake Structure, Piping and Controls	7030-7345	A8-76	12-79
Fire Protection System Test	0-7675	2-80	5-80
Construct Radioactive Waste Processing Area	7040-7110	5-78	11-78
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