



Midland Project: P.O. Box 1963, Midland, Michigan 48640 - Area Code 517 631-0951

September 24, 1982

Mr. W. D. Shafer, Chief  
Midland Project Section  
US Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

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6.4 CONSTRUCTION GROUNDWATER CONTROL

- 6.4.1 Subcontractor shall design, furnish, install, operate, and maintain a temporary dewatering system including observation wells, and shall submit for Contractor's review and approval



a detailed procedure describing the materials, method of dewatering, design assumptions, and the approximate location of major components. As a minimum, this procedure shall be in accordance with the provisions of the following sections.

- 6.4.2 Subcontractor shall furnish and install an adequate dewatering system and perform all operations required to remove and control the subsurface water so that the excavation, construction, soil replacement, and backfilling operations can be performed under stable subsoil conditions. At the first six observation wells installed, Subcontractor shall drill to el 570'-0" and determine whether any sandy soil stratum exists from which pumping can be accomplished. This determination will be made by Contractor's resident geotechnical engineer or designated representative based on continuous split spoon samples (taken by Subcontractor) of material between elevations 570 and 585. All wells shall extend to the bottom of the deepest sand stratum under each well or to a minimum elevation of el 583'-0" when clay till is encountered above that elevation.

The wells shall be installed in such a manner that the water level in the fill is drawn down to approximately the interface of the fill and natural soil. If the natural soil at the dewatering well location is cohesionless, the wells shall be installed so that the water level in the natural cohesionless material is drawn down below the depth of any excavation made in that material. Where such situations occur, the groundwater level shall be lowered a minimum of 2 feet below the base of the excavation, provided relatively pervious soil exists below the excavation. If the material below the base of the excavation is



cohesive and relatively impervious, the water in any cohesionless material may be drawn down by localized dewatering techniques such as sumping.

- 6.4.3 The maximum anticipated elevation of the groundwater table is el 627'.
- 6.4.4 Subcontractor shall dispose of all surface and subsurface water in a manner that will not endanger public health, property, or any portion of construction by others in the area. The water shall be conveyed through piping from the dewatering system to the cooling pond and will be monitored by Contractor for soil particles and flow in accordance with the provisions of Section 6.5. Surface water and water discharged from pumps, which are required to remove localized pockets of trapped groundwater within the excavation as determined by Contractor, do not require soil particle monitoring before disposal.
- 6.4.5 Subcontractor shall install standby pumping equipment available for immediate operation as may be required to maintain dewatering on a continuous basis, and shall operate such standby equipment if the primary pumping system is not operating properly. The system shall be operated, maintained, and monitored 24 hours a day, 7 days a week through the entire period of underpinning operation.
- 6.4.6 Subcontractor shall install petcocks, bushings, and nipples at each dewatering well for obtaining soil particle monitoring samples. The system petcocks shall be located on a horizontal run of pipe, below the centerline of the pipe, but not within 20 degrees of the pipe invert.
- 6.4.7 The method of well installation both inside and outside of structures shall be in accordance with Subcontractor's approved procedure;



however, jetting shall not be permitted for installing dewatering wells.

- 6.4.8 Subcontractor shall design and install a dewatering system assuming that none other exists for the purpose of this specification.

However, Contractor may make available to Subcontractor selected wells on the existing permanent dewatering system on a limited and temporary basis.

- 6.4.9 Subcontractor may locate wells within the boundaries of the SWPS and CWIS. The location of all installed wells, however, will be approved by Contractor. Holes shall be drilled in accordance with Section 10.6.

- 6.4.10 Contractor's permission to proceed with installing the dewatering system proposed by Subcontractor will only concern the basic methods Subcontractor intends to use. However, all minimum requirements as stated in Sections 6.4 and 6.5 of this specification shall be met. Acceptance of the dewatering system will be based on the demonstrated performance of that system to meet the requirements of Section 6.5.

- 6.4.11 Subcontractor shall seal all dewatering and observation wells buried, abandoned, or left in place with grout or lean concrete after the dewatering operation is discontinued, in accordance with the most recent Michigan Wells Act and Subcontractor's approved procedure. Subcontractor shall obtain Contractor's approval prior to sealing wells.

- 6.4.12 With Contractor-furnished material, Subcontractor shall repair all holes drilled in the CWIS and SWPS for use in dewatering. The holes shall be repaired in accordance with Section 10.5 of this specification.



6.4.13 The dewatering operation shall be controlled so the amount of soil particles in the discharge water is limited to 10 ppm. Soil particles are defined as inorganic nonmetallic materials coarser than 0.05 mm for Subcontractor's temporary wells and 0.005 mm for Contractor's permanent dewatering wells.

6.4.14 Subcontractor shall prepare dewatering records for wells as required by ACT 218 P.A. 1972, which is an amendment to ACT 294 P.A. 1965, Ground Water Quality Control Act.

The dewatering well record form shall either be completed for every well or a composite record made for several wells. The composite record may be used where the subsurface conditions are similar, the surface relief relatively level, and the static water level at a constant depth. Depending on variations in subsurface conditions, one or several composites may be necessary.

6.4.15 Subcontractor shall design, furnish, and install temporary observation wells at the locations indicated in the design drawings.

6.4.16 The installation, monitoring, and removal of the temporary observation wells shall be in accordance with the following.

- a. The wells in the undisturbed natural soil shall consist of 1/2-inch  $\varnothing$  slotted polyvinylchloride (PVC) well screens (3 feet long) and 1/2 inch  $\varnothing$  Schedule 40 PVC riser pipes.

The wells in the fill material shall consist of 1-1/4-inch  $\varnothing$  slotted PVC well screens (3 feet long) and 1-1/4-inch  $\varnothing$  Schedule 40 PVC riser pipes.



All PVC shall conform to  
ASTM F 480.

- b. A filter pack shall be placed around the well screen. The gradation of the filter pack and slot size of the well screen shall be approved by Contractor prior to installation.
- c. A minimum of 1 foot of grout shall be placed above the filter pack.
- d. Deleted
- e. Observation wells shall be installed to monitor groundwater level in the fill and the undisturbed natural soil. Wells to monitor the water level in the fill shall be installed at an elevation no lower than 1'-0" (+6") above the undisturbed natural soil. Wells to monitor the water level in the undisturbed natural soil shall be installed such that the tip of the well screen is at elevation 570'-0" (+2'-0") and the bottom of the grout seal is to be 2'-0" (+6") below the interface of the fill and the undisturbed natural soil but no higher than el 590'-0". The interface of the fill and undisturbed natural soil shall be determined by the Contractor's resident geotechnical engineer or his designated representative. The installed elevations of the wells shall be transmitted to Contractor within 1 week of installation.
- f. Observation wells shall be monitored daily by Subcontractor and the results



transmitted to Contractor weekly.

- g. Subcontractor shall seal observation wells, in accordance with Subcontractor's approved procedure, after the dewatering operation is discontinued.

6.4.17 Subcontractor shall include a description of the temporary dewatering wells (installed by Subcontractor) and observation wells in the temporary dewatering procedure. As a minimum this description shall include the following:

- a. Materials, descriptions, and dimensions for all items used
- b. Filter pack material, gradation, and method of installation
- c. Diameter of well and method of drilling
- d. Method of dewatering well development
- e. Method of removing and sealing well

6.4.18 Subcontractor shall submit to Contractor for review and approval detail drawings of the dewatering wells (including locations) and observation wells prior to start of work.

6.4.19 Deleted

6.4.20 The installation of the dewatering and observation wells will be inspected by Contractor's resident geotechnical engineer or his designated representative and documented in accordance with Section 4.3.





- 6.4.21 For dewatering and observation wells, all holes with an annulus larger than 6 inches shall have the filter material tremied. For wells 6 inches and smaller, the filter material shall be poured in and tamped.
- 6.4.22 The dewatering system shall be operated continuously unless directed otherwise by Contractor.
- 6.4.23 The eductor tank shall conform to the following:
  - a. The tank shall be baffled to prevent turbulence.
  - b. The system supply line intake shall be located on the bottom half of the tank and a minimum of 18 inches above the invert of the tank.
  - c. The tank overflow line shall be placed to allow Contractor to take direct flow measurements.

U.S. NUCLEAR REGULATORY COMMISSION  
REGION #1

SUBJECT



10-11-81



**Consumers  
Power  
Company**

PRINCIPAL STAFF			
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PAO		SCS	orig + 3
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Dean L. Quamme  
Site Manager  
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

March 6, 1984

Mr John J Harrison, Chief  
Midland Section, Region III  
Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER GWO 7020  
CONSTRUCTION COMPLETION PROGRAM IMPLEMENTATION  
SUPPORT OF TURBINE ROLL MILESTONE  
File: 0655 UFI: 99\*08 Serial: CSC-7421

REFERENCE: D L Quamme letter to John J Harrison dated February 15, 1984,  
Serial CSM-0734

This letter is a supplement to the referenced letter, and provides additional information on the scope of work required to support the Turbine Roll test milestone. As stated in the attachment package to the referenced letter, portions of seven Q-listed systems, located in seven plant modules are required for Turbine Roll milestone. Two of these seven systems, ODEC and OEAA, have been turned over to Consumers Power Company. A further definition of scope for these seven systems and a description of the Construction Completion Program (CCP) process we intend to use, is given in the following paragraphs.

TURNED OVER SYSTEMS

In general, the Quality Verification Program (QVP) will be performed on turned over Q-listed systems in accordance with the module schedule for completing the CCP. QVP will be completed on turned over commodities which have closed Inspection Records. Any turned over item having an open Inspection Record will be handled as a turnover exception (TOE) list item, and worked in accordance with Section 9.0 of the CCP. Completed portions of open Inspection Records on turned over commodities will be 100% reinspected for accessible attributes as stated in Section 1.0 of the CCP. This reinspection will be accomplished when TOE is worked off.

As regards to the Turbine Roll milestone, within Module 800, which was released for Status Assessment and QVP (QVP) activities by the NRC in October, 1983, it is our intention to perform the QVP on those commodities which will be below the water line after the Service Water Bays are flooded for the Turbine Roll milestone (Scoped Areas 800 E, F, and G). Following the completion of the Phase I QVP activities for the flooded area, the CCP process of

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management review, NRC hold point release and Phase II work off of Phase I results will be performed. No preoperational test procedures will be released for performance until the QVP has been completed on the affected system.

NON-TURNED OVER SYSTEMS

A detailed breakdown of known work scope on the Q-listed items for portions of the five non-turned over systems is given on the marked-up P&IDs provided with the referenced letter. A take-off listing of commodities is provided in Attachment 1. Most of the commodities listed are approximately 80% installed, with remaining work consisting of minor items such as shims, leveling plates, and small members. Other work includes items resulting from the Phase I Status Assessment and QVP, and stress piping and hanger walkdowns performed by Engineering. All work on the Q-listed portions of these systems required for Turbine Roll will be performed in accordance with the CCP, in the following order: Phase I Status Assessment and QVP, Management Review process, NRC hold point release, and Phase II work following release in accordance with Section 4.5.4 of the CCP.

Please contact us should you require additional information in replying to our request for module releases for the Turbine Roll milestone, as described in the referenced letter.

DLQ/BHP/klw

Attachments

CC DSHood, Project Manager-Midland w/out attachment  
RJCook, Midland Resident Inspector w/out attachment  
JGKepler, Regional Administrator, Region III w/out attachment

BCC: SHHowell, M-1180  
JWCook, P26-336B  
TABuczynski, Midland  
JNLeech, P24-507  
DFLewis, Bechtel  
DJVandeWalle, P24-614B  
MIMiller, IL&B, Chicago  
FCWilliams, IL&B, Washington, DC  
GALow, P12-237A  
NRC Correspondence File, P24-517  
UFI, P24-517  
FJWalraven, P24-517  
Hearings File, P24-517  
CMS, Midland  
RAWells, Midland  
Al Braber, LIS  
Reading Copy: (P24-505, Rotha Boroff)  
    DMBudzik  
    RJEhardt  
    LSGibson  
    DTPerry



NRC Inspection Report Items

Miscellaneous Items Ready For Closure

<u>Item</u>	<u>Type</u>	<u>Subject</u>	<u>Closure Location</u>
79-12-05	Unresolved	Pressure Test of Pressurizer Relief Valve	Site
80-09-01	Deficiency	Leveling of Internal Core Support Structure	Site
*80-30/31-01	Unresolved	Battery Rack Acidic Environment	Site
81-12-09/10	Violation	Lack of Approved Procedures Covering Rework	Site
81-20-01	Unresolved	Cable Tray Dividers	Site
82-05-01	Deviation	QA Staffing	Site
82-06-02	Violation	Cable Pulling	Site
82-18-02/01	Violation	Dewatering Fines Monitoring	Site
82-18-03/02	Violation	Slope Layback	Site
82-20-01	Open	Training of RMS Personnel for Emergency Procedures and Training of Crafts	Site
83-03-02	Unresolved	Expansion of Excavation Permit System to Underpinning	Site
83-13/14-03	Deviation	Slope Layback in the Drifts	Site

NRC Inspection Report Items

Items Dealing With Hanger Design

The following items all were initiated by I Yen, and need to be resolved by a scheduled trip to Ann Arbor with a possibility of going to ITT Grinnell in Providence.

<u>Item</u>	<u>Type</u>	<u>Subject</u>	<u>Closure Location</u>
78-19-02	URI	Locking Devices on Bolts used in ITT Grinnel	Ann Arbor
78-19-03	URI	ITT Grinnell Evaluation of Bolt Holes Near Edge of Plate	Ann Arbor
79-01-02	URI	Adequacy of Drawing Hanger Review	Ann Arbor
79-05-02	URI	Additional reviews of ITT Hanger Design	Ann Arbor or Providence
79-05-03	URI	Bechtel System for Design Interface of Hanger Loadings on Existing Structures	Ann Arbor
80-11/12-01	URI	Bolted Joints	Ann Arbor
82-07-01	URI	Review of Other Disciplines for Handling of CPDC's	Ann Arbor



50.55(e) Reports Ready For Closure

<u>NRC Number</u>	<u>No</u>	<u>Description</u>
77-03	0.4.9.12	ITT/Grinnel Pipe Supports
78-01	0.4.9.13	RCP Motor Flange
78-06	0.4.9.18	Small Break Analysis
81-05	0.4.9.53	Shear Reinforcement at Major Containment Penetrations

Bulletins - Circulars - Notices Ready For Closure

*BULLETIN	73-01	Faulty Overcurrent Trip Delay Device in Circuit Breakers for Engineered Safety Systems
*BULLETIN	74-01	Valve Deficiencies
*BULLETIN	74-06	Defective Westinghouse Type W-2 Control Switch Component
*BULLETIN	74-08	Deficiency in ITE Molded Case Circuit Breakers, Type HE-3
*BULLETIN	74-09	Deficiency in General Electric Model 4kV Magna-Blast Breakers
*BULLETIN	74-12	Incorrect Coils in Westinghouse Type SG Relays at Trojan
*BULLETIN	74-15	Misapplication of Cutler-Hammer Three Positioned Maintained Switch, Model 10250T
BULLETIN	74-16	Improper Machining of Pistons in Colt Industries (Fairbanks-Morse) Diesel Generators
BULLETIN	78-12	Atypical Weld Material in Reactor Pressure Vessel Welds
BULLETIN	80-16	Potential Misapplication of Rosemount, Inc Models 1151 and 1152 Pressure Transmitters with either "A" or "D" Output Codes.
BULLETIN	82-01	Alteration of Radiographs of Welds in Piping Assemblies.
BULLETIN	82-03	Stress Corrosion Cracking in Thick-Wall, Large Diameter, Stainless Steel, Recirculation System Piping at BWR Plants.
BULLETIN	82-04	Deficiencies in Primary Containment Penetration Assemblies.
BULLETIN	83-02	Stress Corrosion Cracking in Large Diameter Stainless Steel Recirculation System Piping at BWR Plants.
CIRCULAR	76-01	Crane Hoist Control Circuit Modifications
CIRCULAR	76-05	Hydraulic Shock and Sway Suppressors Maintenance of Bleed and Locking on ITT Grinnell's Model Number Figure 200 and 201 Catalog PH-74-R

*CIRCULAR	77-02	Potential Heavy Spring Flooding
CIRCULAR	77-06	Effects of Hydraulic Fluid on Electrical Cables
CIRCULAR	78-05	Inadvertent Safety Injection during Cooldown
*CIRCULAR	78-13	Inoperability of Multiple Service Water Pumps
CIRCULAR	78-15	Check Valves Fail to Close in Vertical Position
CIRCULAR	79-05	Moisture Leakage in Stranded Wire Conductors
CIRCULAR	79-11	Design/Construction Interface
CIRCULAR	79-12	Potential Diesel Generator Turbocharger Problem
CIRCULAR	80-16	Operational Deficiency on Rosemount Model 510DU Trip Units and Model 1152 pressure Transmitters
CIRCULAR	80-17	Fuel P'n Damage to Water Jet from Baffle Plate Corner
CIRCULAR	80-21	Regulation of Refueling Crews
CIRCULAR	81-05	Self-Aligning Rod End Bushings for Pipe Supports
CIRCULAR	81-06	Potential Deficiency Affecting Certain Foxboro 10 to 50 Milliampere Transmitters
CIRCULAR	81-07	Control of Radioactively Contaminated Material
CIRCULAR	81-08	Foundation Materials
CIRCULAR	81-09	Containment Effluent Water Heat Bypasses Radioactivity Monitor
CIRCULAR	81-11	Inadequate Decay Heat Removal During Reactor Shutdown

CIRCULAR	81-12	Inadequate Periodic Test Procedure of PWR Protection System
CIRCULAR	81-14	Main Steam Isolation Valve Failures to Close
NOTICE	79-06	Stress Analysis of Safety-Related Piping
NOTICE	79-09	Spill of Radioactively Contaminated Resin
NOTICE	79-11	Lower Reactor Vessel Head Insulation Support Problem
NOTICE	79-12	Attempted Damage to New Fuel Assemblies
NOTICE	79-13	Indication of Low Water Level in the Oyster Creek Reactor (BWR)
NOTICE	79-16	Nuclear Incident at Three Mile Island
NOTICE	79-17	Source Holder Assembly Damage from Misfit between Assembly and Reactor Upper Grid Plate (Westinghouse Units only)
NOTICE	79-18	Skylab Reentry
NOTICE	79-28	Overloading of Structural Elements due to Pipe Support Loads
NOTICE	79-29	Loss of Nonsafety-Related Reactor Coolant System Instrumentation during Operation.
NOTICE	79-32	Separation of Electrical Cables for HPCI and ADS (BWR only)
NOTICE	79-37	Cracking in Low Pressure Turbine Discs
NOTICE	80-04	BWR Fuel Exposure in Excess of Limits
NOTICE	80-06	Notification of Significant Event and Supplement

NOTICE	80-17	Potential Hazards Associated with Interchangeable Parts on Radiographic Equipment
NOTICE	80-20	Loss of Decay Heat Removal Capability at Davis-Besse Unit I while in Refueling Mode
NOTICE	80-22	Breakdowns in Contamination Control Programs
NOTICE	80-23	Loss of Suction to Emergency Feedwater Pumps
NOTICE	80-24	Low Level Radioactive Waste Burial Criteria
NOTICE	80-25	Transportation of Pyrophoric Uranium
NOTICE	80-27	Degradation of Reactor Coolant Pump Studs
NOTICE	80-29	Broken Studs on Terry Turbine Steam Inlet Flange
NOTICE	80-30	Potential for Unacceptable Interaction between the Control Rod Drive Scram Function and Nonessential Control Air at Certain G E BWR Facilities
NOTICE	80-33	Determination of Teletherapy Timer Accuracy
NOTICE	80-35	Leaking and dislodged Iodine-125 Implant Seeds
NOTICE	80-37	Containment Cooler Leaks and Reactor Cavity Flooding at Indian Point 2
NOTICE	80-45	Potential Failure of BWR Backup Manual Scram Capability
NOTICE	81-02	Transportation of Radiography Devices
NOTICE	81-04	Cracking in Main Steam Lines
NOTICE	81-06	Failure of ITE Model K-600 Circuit Breaker

NOTICE	81-07	Potential Problem with Water Soluble Purge Dam Materials used during Inert Gas Welding
NOTICE	81-08	Repetitive Failures of Limitorque Operator SMB-4 Motor-to-Shaft Key
NOTICE	81-10	Inadvertent Containment Spray due to Personnel Error
NOTICE	81-11	Alternate Rod Insertion for BWR Scram Represents a Potential Path for Loss of Primary Coolant.
NOTICE	81-12	Guidance on Order Issued January 9, 1981, Regarding Automatic Control Rod Insertion on Low Control Air Pressure (BWR only).
NOTICE	81-13	Jammed Source Rack in a Gamma Irradiator
NOTICE	81-14	Potential Overstress of Shafts on Fisher Series 9200 Butterfly Valves with Expandable T-Rings
NOTICE	81-15	Degradation of Automatic ECCS Actuation Capability by Isolation of Instrument Lines.
NOTICE	81-16	Control Rod Drive System Malfunction (BWR only)
NOTICE	81-17	Never Issued
NOTICE	81-18	Excessive Radiation Exposure to Fingers
NOTICE	81-19	Lost Parts in Primary Coolant System
NOTICE	81-20	Test Failures of Electrical Penetration Assemblies
NOTICE	81-21	Potential Loss of Direct Access to Ultimate Heat Sink
NOTICE	81-22	Section 235 and 236 Amendments to the Atomic Energy Act of 1954

NOTICE	81-23	Fuel Assembly Damage due to Improper Positioning of Fuel Handling Equipment
NOTICE	81-24	AFW Pump Turbine Bearing Failures
NOTICE	81-26	Compilation of Health Physics Related Information Items
NOTICE	81-27	Flammable Gas Mixtures in the Waste Decay Tanks in BWR Plants.
NOTICE	81-28	Failure of Rockwell-Elward Main Steam Isolation Valves
NOTICE	81-29	Equipment Qualification Testing Experience
NOTICE	81-30	Velan Swing Check Valves
NOTICE	81-31	Failure of Safety Injection Valve to Operate Against Differential Pressure.
NOTICE	81-32	Transfer and/or Disposal of Spent Generators
NOTICE	81-33	Locking Devices Inadequately Installed on Main Steam Isolation Valves
NOTICE	81-34	Accidental Actuation of Prompt Public Notification System
NOTICE	81-35	Check Valve Failures
NOTICE	81-36	Replacement Diaphragms for Robertshaw Valve (Model No VC-210)
NOTICE	81-37	Unnecessary Radiation Exposure to Public and Workers during Events Involving Thickness and Limit Measuring Devices.
NOTICE	81-38	Potentially Significant Equipment Failures Resulting from Contamination of Air-Operated Systems
NOTICE	81-39	EPA Crosscheck Program Low-Level Radioiodine in Water Intercomparison Study

NOTICE	82-01	AFW Pump Lockout Resulting from Westinghouse W-2 Switch Circuit Modification
NOTICE	82-02	Westinghouse NBFDR Relay Failures in Reactor Protection Systems at Certain Nuclear Power Plants
NOTICE	82-03	Environmental Tests of Electrical Terminal Blocks
NOTICE	82-04	Potential Deficiency of Certain Agastat E-7000 Series Time Delay Relays
NOTICE	82-05	Increasing Frequency of Drug-Related Incidents
NOTICE	82-07	Inadequate Security Screening Programs
NOTICE	82-09	Cracking in Makeup Coolant Lines at B&W Plants
NOTICE	82-10	Following Up Symptomatic Repairs to Assure Resolution of the Problem
NOTICE	82-11	Potential Inaccuracies in Wide Range Pressure Instruments Used in Westinghouse Designed Plants
NOTICE	82-12	Surveillance of Hydraulic Snubbers
NOTICE	82-13	Failure of General Electric Type HFA Relays
NOTICE	82-15	Notification of Nuclear Regulatory Commission (NRC)
NOTICE	82-16	HPCI/RCIC High Steam Flow Set Points
NOTICE	82-18	Assessment of Intakes of Radioactive Materials by Workers
NOTICE	82-19	Loss of High Head Safety Injection Emergency Boration and Reactor Coolant Makeup Capability
NOTICE	82-20	Check Valve Problems



NOTICE	82-21	Buildup of Enriched Uranium in Effluent Treatment Tanks
NOTICE	82-22	Failures in Turbine Exhaust Lines
NOTICE	82-23	Main Steam Isolation Valve Leakage
NOTICE	82-24	Water Leakage from Uranium Hexafluoride Overpacks
NOTICE	82-26	RCIC and HPCI Turbine Exhaust Check Valve Failure (BWR only)
NOTICE	82-27	Fuel Rod Degradation Resulting from Water-Jet Baffle Impingement
NOTICE	82-28	Hydrogen Explosion while Grinding in Vicinity of Drained and Open RCS
NOTICE	82-29	Control Rod Drive (CRD) Guide Tube Support Pin Failures at Westinghouse PWR (Westinghouse Plants only)
NOTICE	82-30	Loss of Thermal Sleeves in RCS Piping at Certain Westinghouse PWR Plants
NOTICE	82-31	Overexposure of Diver during Work in Fuel Storage Pool
NOTICE	82-33	Control of Radiation Levels in Unrestricted Areas Adjacent to Brachytherapy Patients (Medical Institutions only)
NOTICE	82-35	Failures of Three Check Valves on HPI Lines to Pass Flow
NOTICE	82-36	Respirator Users Warning for Certain 5-Minute Emergency Escape Self-Contained Breathing Apparatus
NOTICE	82-37	Cracking in the Upper Shell to Transition Cone Girth Weld of a Steam Generator on an Operating PWR
NOTICE	82-38	Change in Format and Distribution System for IE Bulletins, Circulars and Information Notices

NOTICE	82-39	Service Degradation of Thick Wall Stainless Steel Recirculation System Piping at BWRs
NOTICE	82-40	Deficiencies in Primary Containment Electrical Penetration Assemblies
NOTICE	82-41	Failure of Safety Relief Valve to Open at a BWR
NOTICE	82-42	Defects Observed in Panasonic Model 801 and Model 802 Thermoluminescent Dosimeters
NOTICE	82-43	Deficiencies in LWR Air Filtration/Ventilation Systems
NOTICE	82-44	Clarification of Emergency Plan Exercise Requirements
NOTICE	82-45	PWR Low Temperature Overpressure Protection
NOTICE	82-46	Defective and Obsolete Combination Padlocks
NOTICE	82-51	Overexposure in PWR Cavities
NOTICE	82-52	Equipment Environmental Qualification Testing Experience - Update of Test Summaries Previously Issued in IN 81-29
NOTICE	82-54	Westinghouse NBFD Relay Failures in Reactor Protection Systems
NOTICE	82-55	Seismic Qualification of Westinghouse AR Relay with Latch Attachment used in Westinghouse Solid-State Protection System.
NOTICE	83-01	Ray Miller, Inc.
NOTICE	83-07	Nonconformities with Materials Supplied by Tube-Line Corp
NOTICE	83-09	Safety and Security of Irradiators
NOTICE	83-12	Incorrect Boron Standards

NOTICE	83-13	Design Misapplication of Bergen Patterson Standard Strut Restraints
NOTICE	83-14	Dewatered Spent Ion Exchange Resin Susceptability to Exothermic Chemical Reaction
NOTICE	83-15	Falsified Pre-Employment Screening Records
NOTICE	83-16	Contamination of Auburn Steel Company with Cobalt-60
NOTICE	83-20	ITT Grinnel Figure 306/307 Mechanical Snubber Attachment Interferences
NOTICE	83-21	Defective Emergency Use Respirators
NOTICE	83-22	BWR Safety/Relief Valve Failures
NOTICE	83-26	Failure of Safety/Relief Valve Discharge Line Vacuum Breakers
NOTICE	83-29	Fuel Binding Caused by Fuel Rack Deformation
NOTICE	83-32	Rupture of Americium-241 Source(s) Contained in Well Logging Device
NOTICE	83-34	Event Notification Information Worksheet
NOTICE	83-35	Fuel Movement with Control Rods Withdrawn
NOTICE	83-37	Transformer Failure Resulting from Degraded Internal Connection Cables
NOTICE	83-39	Failure of Safety/Relief Valves to Open at a BWR - Interim Report
NOTICE	83-42	Reactor Mode Switch Malfunction
NOTICE	83-44	Potential Damage to Redundant Safety Equipment as a Result of Backflow through the Equipment and Floor Drain System
NOTICE	83-52	Radioactive Waste Gas System Events

NOTICE	83-53	Primary Containment Isolation Valve Discrepancies
NOTICE	83-54	Common Mode Failure of Main Steam Isolation Nonreturn Check Valves
NOTICE	83-55	Misapplication of Valves by Throttling beyond Design Range
NOTICE	83-59	Dose Assignment for Workers in Non-Uniform Radiation Fields
NOTICE	83-60	Falsification of Test Results for Protection Coatings
NOTICE	83-61	Alleged Use of Stand-Ins for Welder Qualification Tests
NOTICE	83-62	Failure of Redundant Toxic Gas Detectors Positioned at Control Room Ventilation Air Intakes
NOTICE	83-63	Potential Failure of Westinghouse Electric Corp Type SA-1 Differential Relays
NOTICE	83-64	Lead Shielding Attached to Safety-Related Systems without 10CFR50.59 Evaluations
NOTICE	83-66	Fatality at Argentine Critical Facility
NOTICE	83-67	Emergency Use Respirator Material Defect Causes Production of Noxious Gases
NOTICE	83-68	Respirator User Warning - Defective Self-Contained Breathing Apparatus Air Cylinders
NOTICE	83-73	Radiation Exposure from Gloves Contaminated with Uranium Daughter Products.
NOTICE	83-74	Rupture of Cesium-137 Source used in Well-Logging Operations
NOTICE	83-80	Use of Specialized "Stiff" Pipe Clamps
NOTICE	83-82	Failure of Safety Relief Valves to Open at BWR - Formal Report

NOTICE

83-84

Cracked and Broken Piston Rods in Brown Boveri Electric Type 5HK Circuit Breakers



**Consumers  
Power  
Company**

**J A Mooney**  
Executive Manager  
Midland Project Office

General Offices: 1945 West Parnell Road, Jackson, MI 49201 • (517) 788-0774

*Has*

SC	<i>✓</i>	<i>enig 3</i>
SGA		
ENP		<i>Has</i>

February 27, 1984

Mr J J Harrison  
Midland Project Section  
U S Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER GWO 7020  
AUXILIARY BUILDING UNDERPINNING RESPONSE TO JANUARY 4-6, 1984  
NRC AUDIT QUESTIONS  
File: 0485.16.1 UFI: 42\*05\*22\*04 Serial: CSC-7375  
0460.2 12\*16  
00211(S)

REFERENCE: JAMooney letter to JJHarrison, serial CSC-7292, dated February 8, 1984.

Enclosed are Figure 8-8 and 8-9 for Attachment 8 to our February 8, 1984 letter which were inadvertently omitted.

*JAMooney*

JAM/GMM/klw

Attachment

CC RFWarnick, NRC Region III  
RBLandsman, NRC Region III  
RJCook, NRC Senior Resident Inspector, Midland Site  
DSHood, Project Manager Midland

MAR 1 1984

8403060426

CONSUMERS POWER COMPANY  
Midland Units 1 and 2  
Docket No 50-329/50-330

Letter Serial CSC-7375 Dated February 27, 1984

At the request of the Commission and pursuant to the Atomic Energy Act of 1954, and the Energy Reorganization Act of 1974, as amended and the Commission's Rules and Regulations thereunder, Consumers Power Company submits J A Mooney letter to J J Harrison serial CSC-7375, dated February 27, 1984.

CONSUMERS POWER COMPANY

By J A Mooney  
J A Mooney  
Executive Manager

Sworn and subscribed before me this 27<sup>th</sup> day of February, 1984.

Patricia A. Luffer  
Notary Public

My Commission Expires 3-4-86

PATRICIA A. LUFFER  
Notary Public, Bay County, MI  
My Commission Expires Mar. 4, 1986

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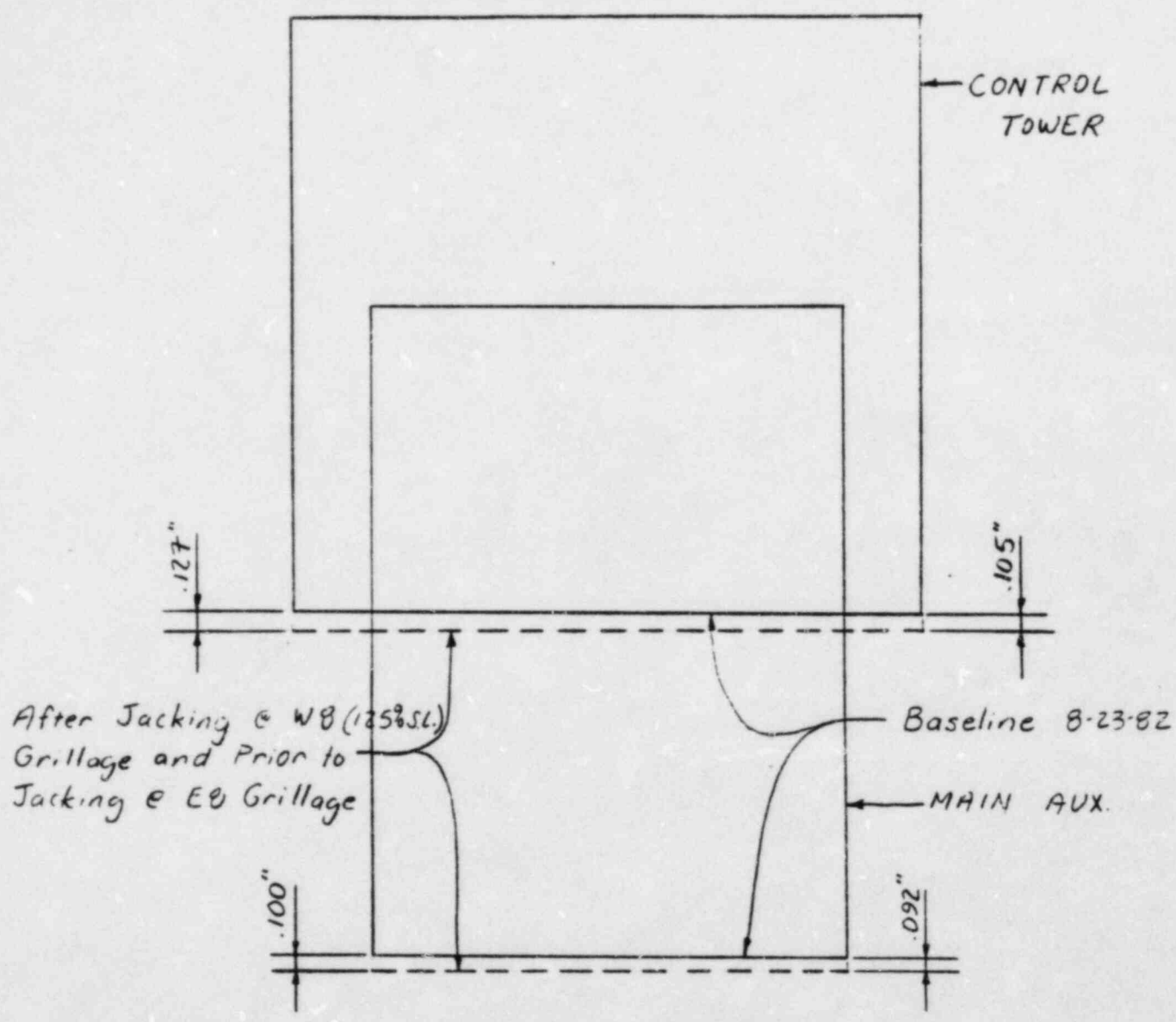
Ms Lynne Bernabei  
Government Accountability Project  
1901 Q Street, NW  
Washington, DC 20009



BCC JWCook, P-26-336B  
DLQuamme, Midland (3)  
TABuczynski, Midland-207  
JNLeech, P-24-507  
DASommers, P-14-106 (For SER Related Issues)  
DFLewis, Bechtel  
DJVandeWalle, P-24-614B  
MIMiller, IL&B, Chicago  
FCWilliams, IL&B, Washington, DC  
GALow, P-12-237A  
NRC Correspondence File, P-24-517  
UFI, P-24-517  
BJWalraven, P-24-517  
Hearings File, P-24-517

6.6

W ← E

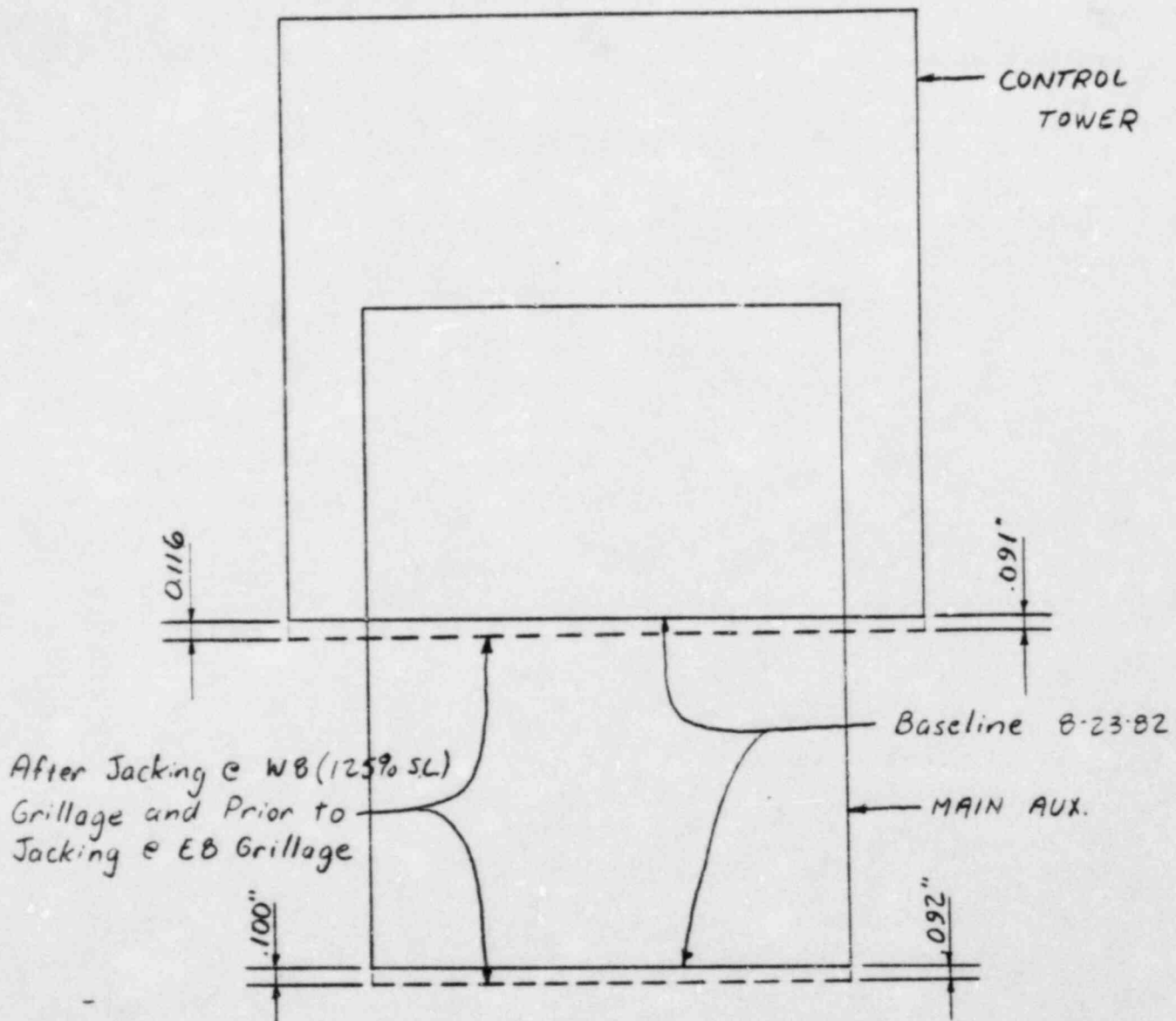


DEFORMED SHAPES AT COLUMN LINES G & Kc

FIGURE 8-8

6.6

W E



DEFORMED SHAPES AT COLUMN LINES G & H

FIGURE 8-9



attachments sent  
to DIMB 2/17/84

Dean L Quamme  
Site Manager  
Midland Project

Midland Project PO Box 1963, Midland, MI 48640 • (517) 631-8650

February 15, 1984

Mr John J Harrison, Chief  
Midland Section, Region III  
Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER  
CONSTRUCTION COMPLETION PROGRAM IMPLEMENTATION  
SUPPORT OF TURBINE ROLL MILESTONE  
File: 0655 UFI: 99\*08 Serial: CSM-0734

This is to advise you of Consumers Power Company desire and intent to proceed with that work necessary to support a Turbine Roll Test in mid-1984 and to request your concurrence to same.

Paragraph 4.5.4 (Special Procedures) of the Construction Completion Program (CCP) recognizes the desirability of allowing installation of specific items to support the turnover schedule prior to full release of an area for Phase 2 work. This paragraph further identifies in general those requirements that must be met to allow that work to proceed. It is clearly the intent of Consumers Power Company to rigidly control this work to assure absolute compliance to the requirements of the CCP.

During the week of February 6, 1984, Consumers Power Company representatives met with you and Mr Gardner, and separately with the Site Resident Inspectors to explain the details of the work to be done. The package of information attached to this letter was used as the basis of those explanations. In summary, the package contains the following information:

1. General identification of plant systems involved.
2. Brief description of the turbine roll activity.
3. Scope of work described in level of effort, i.e., non-manual manhours for status assessment and QVP and craft manhours for Q and non-Q work.
4. Prerequisites to initiation of the work and control systems for execution of the work.
5. Identification of modules in which affected systems are located.

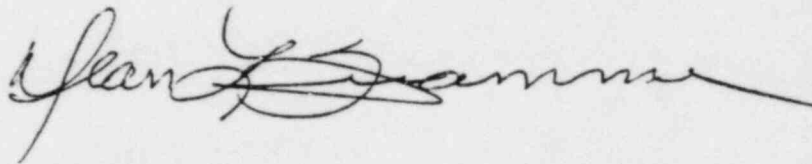
FEB 17 1984

~~8402220L79~~

6. Commodity lists identifying the detailed portions of each affected system that requires status assessment and/or QVP.
7. Marked-up system P&IDs identifying exact portion of each system required.

As has been identified to you in our meeting on this subject, portions of Q systems are required that are not located in modules currently released to Consumers by the NRC. As indicated above, the attachment clearly identifies these modules.

Considering the above, Consumers Power Company requests your concurrence to pursue the turbine roll milestone as described herein and requests the release of those portions of required systems contained in modules not currently released that are required to support this milestone.



CC: DSHood, Project Manager-Midland w/out attachment  
RJCook, Midland Resident Inspector w/out attachment  
JGKepler, Regional Administrator, Region III w/out attachment



**Consumers  
Power  
Company**

Dean L. Quamrie  
Site Manager  
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

February 9, 1984

Mr G A Hierzer  
Bechtel Power Corporation  
P O Box 2167  
Midland, MI 48640

PRINCIPAL STAFF		
<i>RA</i>	<i>Yes</i>	DPRP
O/RA		DE
A/RA		DRMSP
RC		DRMA
PAO		SCS <i>✓</i>
SGA		ML
ENF		File <i>RA</i>

*orig+3*

MIDLAND ENERGY CENTER GWO 7020  
RELEASE OF SWO #FSW 33  
File: 0402.2, 16.13, M-151 UFI: 50\*20\*03, 08\*06\*03 Serial: CSC-7317

Stop Work Order #FSW 33 has been released by MPQAD effective 11:25 A.M. on February 9, 1984. Bechtel is requested to formally advise The Zack Company of this release. A copy of the released Stop Work Order is attached.

DLQ/DDJ/klp

cc: JGKeppler, NRC Region III  
JHarrison, NRC Region III  
RJCook, NRC Site  
RAWells, MPQAD  
BHPeck, MEC  
NIREichel, MEC  
DDJohnson, MEC

FEB 15 1984

8402220457



# STOP WORK ORDER

PROJECT HVAC Subcontract, ZACK and MPQAD-HVACA Inspection	10. SUBJECT OF STOP WORK ORDER: HVAC "Q"-listed Work	1. STOP WORK ORDER NO: FSW-33
ORAL STOP WORK ORDER GIVEN: BY: AJBoos      TO: RAWells DATE: 10-21-83    TIME: 9:50 PM	12. WORK STOPPED: DATE: 10-22-83    TIME: 9:00 AM	2. PREPARED BY: <i>Len W. Loti</i>
11. DESCRIPTION OF CONDITIONS REQUIRING STOP WORK ACTION: Problems with referencing of drawings and specifications in the BPCo FCR/FCN process have created an indeterminate condition with respect to work that has been or could be performed to Q listed drawings and specifications. <u>REFERENCE AUDIT MSA-83-32</u> As a result of this condition the following Stop Work is being issued:		3. DATE: 10-22-83    TIME: 5:40 PM
BPCo Project or Field Engineering Approval of FCNs or FCRs. Fabrication, Installation and inspection in the HVAC area. Allowable exceptions to the above items are as noted below: A. Actions to maintain safe plant working conditions. B. Actions to maintain calibrated instruments. C. Actions to implement the storage and maintenance program.		4. APPROVED BY: <i>David A. Hager</i>
		5. DATE: 10-22-83
		6. FILE: 16.13
		7. THIS STOP WORK ORDER LISTED TO: GAHierzer JLWood
		8. REFERENCES:  See pg. 3

13. CORRECTIVE ACTION TAKEN:
- A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only
    - 1. Bechtel corrective action taken as described in JARutger's letter to RAWells (com 136478, BLC-18614) dated December 7, 1983 and GAHierzer's letter to RAWells (BCCC-8800) dated December 9, 1983. (See Attachments 1 & 2)
  - B. Fabrication, installation and inspection of HVAC Q-Listed work by Zack (including Tuttle & Bailey) and HVAC Assurance.
    - 1. Bechtel corrective action taken as described in G A Hierzer's letter to R A Wells (BCCC-9003R) dated February 9, 1984 (See Attachment 3).

14. METHOD OF CORRECTIVE ACTION VERIFICATION:
- A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only
    - 1. MPQAD review and approval of PEP4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100.
    - 2. MPQAD review of training records for BPCo project construction, engineering and administrative personnel.

Completion of corrective action verified and Stop Work lifted for BPCo Project and Field Engineering approval of FCNs and FCRs.

By *DA Hager* Date 12-9-83  
 Time 1810

15. COMPLETION OF CORRECTIVE ACTION VERIFIED BY: _____ DATE: _____	17. STOP WORK ORDER LIFTED BY: _____ DATE: _____ TIME: _____
-----------------------------------------------------------------------	-----------------------------------------------------------------

- D. Receipt of materials (no inspection for receipt acceptance to be performed)
  - E. Training and Certification of QA/QC personnel.
  - F. HVAC Weld Justification Program.
  - G. See Item 5 below for subsequent allowable exceptions.
4. As a minimum, the following actions shall be taken prior to lifting this Stop Work Order in part or total:
- A. Perform a review and analysis to evaluate the extent of the problem.
  - B. Take appropriate programmatic action based on 4(a) above.
  - C. Reinstruct Bechtel Project Engineering, Field Engineering, Field Document Control and Project Document Control personnel in the generation approval and distribution of the FCR/FCN Form to prevent the problem from recurring.
  - D. Establish a mechanism for lifting of this Stop Work on a partial basis.
5. In support of corrective actions necessary to resolve this Stop Work Order, the following additional exceptions to the Stop Work Order are allowed:
- A. Any FCR with only RE interim approval that has not received PE final disposition and any FCN with PFE approval but not yet dispositioned by Project Engineering is allowed to be processed in accordance with FPD-2.000 Rev. 10, FPD-1.000 Rev. 16, FID-2.100 Rev. 4, PEP-4.62.1 Rev. 0 and ADP-2.12 Rev. 0. These FCNs/FCRs shall be processed through Phase 1, 2 and 3 in accordance with FID-2.400, "FCR/FCN Review and Resolution Program."

Prepared By R. L. Oliver

Date 11-3-83 2:27 p.m.

Approved By \_\_\_\_\_

David A. Taggart

Date \_\_\_\_\_

11-3-83





DISTRIBUTION FOR STOP WORK ORDER

Sheet 3 of 3 of Stop  
Work Order FSW-33

KDBailey  
JABauer  
DEBeaudoin  
WRBird  
JEBrunner  
FWBuckman  
JWCook  
MADietrich  
GFEwert  
WJFriedrich @ (QC)  
EWGoold @ (Planning & Scheduling)  
WDGreenwell  
PKHansen  
GAHierzner  
EMHughes  
DJones  
HPLeonard @ (PAD)  
BWMarguglio  
REMcQue  
JKMeisenheimer @ (Soils)  
JAMooney  
BHPeck  
DLQuamme  
JARutgers  
DATaggart @ (PAP)  
RAWells  
JLWood @ (HVAC)  
Subcontractors @  
Construction Completion Group Supervisor (Group disbanded)

BLOCK 15. (continued)

B. Fabrication, installation, and inspection of HVAC Q-Listed work (includes Architectural, Civil, Instrumentation, Electrical and Mechanical Disciplines)

1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated which apply to work in the scope defined in B. above. Verification included MPQAD review of Phase I adequacy, review of Phase II Resolution Sheets, and audit of Phase III Composite Log.
2. Per BPCo letter #BCCC-9003R dated February 9, 1984, Work Prints will be issued to Zack and will be used for work in the scope as defined in B above. This is consistent with BPCo's response to CPCo MCARR DAT-1 provided by BPCo Transmittal No. 54944, dated January 26, 1984.

Completion of corrective action verified and Stop Work lifted for work in scope defined in B above.

By *David H. Lynt* Date 2-9-84

Time 11:25 AM

DAT  
DEC 08 1983

Bechtel Power Corporation

Com 236478

Post Office Box 2167  
Midland, Michigan 48640



BLC-18614

December 7, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, MI 48640

ATTACHMENT 1 To  
Stop Work Order  
FSW-33

Attention: R. A. Wells

Midland Plant Units 1 & 2  
Bechtel Job 7220  
FSW-33 THROUGH 41  
(FCR/FCN APPROVAL)

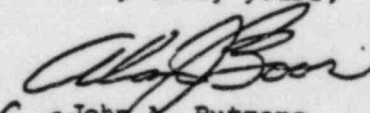
Your action is requested to partially lift the subject stop work orders to allow Field Engineering and Project Engineering approval of Field Change Requests/Field Change Notices (FCR's/FCN's). This request is based on completion of the following actions:

- 1) PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MSA-32-32-03F and MSA-83-32-04F. In summary, the process corrective action includes new FCR and FCN forms which provide for more positive control.
- 2) Project personnel have been reinstructed to the procedures noted above in accordance with their departments respective training programs.

Bechtel is currently undertaking a review of Specification G-34, "General Specification for Field Change Notice", to formulate a change to our FCN program. Until such time as the program is revised, construction will only initiate Q-listed FCN's to provide as-built information to Project Engineering in accordance with Section 3.3 of G-34. Non-Q FCN's will be initiated as they were prior to the issuance of the stop work orders.

If you have any questions on this matter, please contact me.

Very truly yours,

  
for John A. Rutgers

JAR/AJB/lmr

Written Response Requested: No

Com Use: NA

cc: (See attached list)

cc: J. W. Cook  
D. L. Quamme  
B. Peck  
J. A. Mooney  
H. Leonard  
D. Taggart  
J. Meisenheimer  
W. Friedrich

Becnel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 2 To  
Stop Work Order  
FSW-33

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
PROCESSING CYCLE FCR/FCN  
BCCC-8800

Dear Mr. Wells:

To allow the processing cycle for FCR/FCN to begin, the following steps have been outlined as a guide to control the FCR/FCN approval and distribution activities. See Attachment 1.

- 1) FCRs may be written by the field engineers, signed by the Project Field Engineer (PFE), assigned a number in Field Document Control, and transmitted to Project Engineering. (The FCRs will be prioritized by Construction.)
- 2) Project Engineering will begin their review of these FCRs upon receipt from Construction.
- 3) Construction will advise Project Document Control of the schedule for release of composite register on a discipline by discipline basis (based on an MPQAD approval) and will require that Project Document Control approve the FCRs for distribution based on the release schedule.  
NOTE: The FCR must be written exclusively against those discipline drawings that have been released in the above mentioned schedule. This will ensure that FDCC will not receive FCRs from Project Engineering until the discipline's register has been audited by MPQAD.

FCNs will follow the same basic philosophy as modified by COM 136478. The PFE approval will be the check point which must adhere to the schedule of releasing drawings by discipline.

If an FCR (FCN) references an affected drawing which is in a discipline not yet released by FDCC, Project Engineering (PE) will not issue the affected FCR (FCN).

Very truly yours,

*G.A. Hierzer*  
for G.A. Hierzer  
Site Manager

GAH/JR/jrm  
cc: D. Quamme  
D. Taggart  
Attachment



Attachment 3 to  
Stop Work Order FSW-33

# Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



February 9, 1984

Consumers Power Company  
P.O. Box 31  
Midland, MI 48640

Attention: R. A. Wells

Job 7220 Midland Project  
Midland Plant Units 1 & 2  
FSW 33  
BCCC-9003R

Dear Mr. Wells:

Your action is requested to partially lift the subject Stop Work Order (SWO) to allow the initiation of HVAC related work. This request is based on completion of the following actions pursuant to Block 13 Item 4 of the order:

Item No.

Action

4A

A review of all FCRs/FCNs generated which apply to the related work has been performed in accordance with FID-2.400, "FCR/FCN Review and Resolution Program".

We have updated the design document register and distribution lists to reflect the results of this review.

4B & 4C

As described in J. A. Rutgers' letter of December 7, 1983 (BLC-18614), PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MFS-83-32-03F and 83-32-04F. All appropriate project personnel have been reinstructed to these procedures in accordance with their department's respective training programs.

In addition, Bechtel Field Procedure FPZ 1.000 has been revised. The intent of this revision is to issue "work prints" to Zack rather than "Controlled Drawings". All appropriate Subcontract personnel have been reinstructed in the use of this procedure (attachment A). The changes resulting from FPZ 1.000 have been communicated to the Zack Company through Subcontract Change Notice (SCN D-398). This SCN notified the Zack Company of new definitions and procedures associated with document distribution.

Consumers Power Company  
BCCC-9003R  
Page 2

4D

The Zack Company has also revised procedures MB-FP-1, MB-FP-3, MB-FP-5, MB-FP-7A, MB-FP-7B, MB-FP-7C, and MB-FP-12. All appropriate Zack personnel have been reinstructed to these procedures in accordance with their respective training programs. Documentation supporting this is attached (attachment B).

4E & 4F

As the document control registers are released the "Controlled Drawings" will be reviewed to insure that Zack has the latest revisions of all documents and associated change paper. Upon release of the Zack Stop Work Order and the appropriate release of discipline Stop Work Orders (Bechtel) the "Controlled Prints" will be replaced by "Work Prints" per FPZ 1.000.

Yours very truly,

*G. A. Hierzer*  
G. A. Hierzer  
Site Manager

GAH/JAB/fc

Attachments: A) Bechtel Subcontracts Training Documentation  
B) Zack Subcontracts Training Documentation





**Consumers  
Power  
Company**

Dean L Quamme  
Site Manager  
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

February 9, 1984

Mr G A Hierzer  
Bechtel Power Corporation  
P O Box 2167  
Midland, MI 48640

PRINCIPAL STAFF	
RA*	DRRP
D/RA	DE
A/RA	DRMSP
FC	DRMA
PAO	SCS ✓
CSA	ML
SHF	File

*orig+3*

MIDLAND ENERGY CENTER GWO 7020  
RELEASE OF SWO #FSW 35

File: 0402.2, 16.13, FSC-206 UFI: 50\*20\*03, 08\*06\*03 Serial: CSC-7319

Stop Work Order #FSW 35 has been released by MPQAD effective 2:48 P.M. on February 9, 1984. Bechtel is requested to formally advise GEO Construction Testing of this release. A copy of the released Stop Work Order is attached.

DLQ/DDJ/klp

cc: JGKepler, NRC Region III  
JJHarrison, NRC Region III  
RJCook, NRC Site  
RAWells, MPQAD  
BHPeck, MEC  
NIREichel, MEC  
DDJohnson, MEC

FEB 15 1984

*8402220012*



# STOP WORK ORDER

PROJECT: GEO Construction Testing	10. SUBJECT OF STOP WORK ORDER: All "Q" listed work to BPCo drawings and specifications	1. STOP WORK ORDER NO: FSW-35
11. STOP WORK ORDER DATES: TO: AJBoos BY: RAWells DATE: 10/21/83 TIME: 9:50 PM	12. WORK STOPPED: DATE: 10/21/83 TIME: 11:00 PM	2. PREPARED BY: DEHolthaus <i>DE Holthaus</i>
DESCRIPTION OF CONDITIONS REQUIRING STOP WORK ACTION: Problems with referencing of drawings and specifications in the BPCo FCR/FCN process have created an indeterminate condition with respect to work that has been or could be performed to "Q" listed drawings and specifications REF: MSA-83-32. As a result of this condition the following Stop Work is being issued: 1. BPCo Field or Project Engineering approval of FCN's or FCR's 2. Installation and inspection of "Q" listed work in the GEO Construction Testing area.		3. DATE: 10/22/83 TIME: 6:30 PM
		4. APPROVED BY: <i>[Signature]</i>
		5. DATE: 10/22/83 TIME: 10-22-83
		6. FILE: 16-13
		7. THIS STOP WORK ORDER INDEXED TO:
		<del>GEO Construction Testing</del>
		8. DISTRIBUTION:
		See page 3
		Also: R. D. Davis
		D. S. Preslar

**CORRECTIVE ACTION PLAN:**

A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only

1. Bechtel corrective action taken as described in JARutger's letter to RAWells (Com 136478, BLC-18614) dated December 7, 1983 and GAHierzler's letter to RAWells (BCCC-8800) dated December 9, 1983. (See Attachments 1 & 2)

B. Installation and Inspection of Q-Listed Work in the GEO Construction Testing area.

1. Bechtel corrective action taken as described in GAHierzler's letter to RAWells (BCCC-9008) dated February 8, 1984 (See Attachment 3)

**METHOD OF CORRECTIVE ACTION VERIFICATION:**

A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only

1. MPQAD review and approval of PEP4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100.
2. MPQAD review of training records for BPCo project construction, engineering and administrative personnel.

Completion of corrective action verified and Stop Work lifted for BPCo Project and Field Engineering approval of FCNs and FCRs. This is a Phase III activity.  
 By *[Signature]* Date 12-9-83  
 Time 1820

**COMPLETION OF CORRECTIVE ACTION VERIFIED:** See Block 15 for details. Initials: *[Signature]* Date: 2-9-84

**17. STOP WORK ORDER LIFTED:** See Block 15 for details. Initials: *[Signature]* Date: 2-9-84 TIME: 2:48 PM

4 D-4-84

3. Allowable exceptions are as noted below:

- a) Actions to maintain safe plant working conditions.
- b) Actions to maintain calibrated instruments.
- c) Actions to implement the storage and maintenance program.
- d) Receipt of materials (no inspections to be performed on received materials).
- e) Training and Certification of GEO NDE personnel.
- f) See Item 5 below for subsequent allowable exceptions.



4. As a minimum, the following actions shall be taken prior to lifting this Stop Work Order in part or total:

- a) Bechtel and MPQAD to perform a review and analysis to evaluate the extent of the problem.
- b) Bechtel and MPQAD to take appropriate programmatic action based on 4A.
- c) Reinspect EPCO, Project Engineering, Field Engineering, and Document Control personnel in the generation and approval of the FCR/FCN form to prevent the problem from recurring.
- d) Bechtel and MPQAD to establish a mechanism for lifting of this Stop Work on a partial basis.
- e) Bechtel and MPQAD to establish a method for upgrading subcontractor with the correct specifications and drawings.
- f) Subcontractor to purge existing files of any erroneous specifications and drawings, FCN's and FCR's.
- g) Subcontractor to identify any work or inspection performed to any specifications, drawings, FCR's or FCN's, that have been identified as in error. Identification shall be per their nonconformance procedure.

5. In support of corrective actions necessary to resolve this Stop Work Order, the following additional exceptions to the Stop Work Order are allowed:

- A) Any FCR with only REinterim approval that has not received PE final disposition and any FCN with PFE approval but not yet dispositioned by Project Engineering is allowed to be processed in accordance with FPD-2.000 Rev. 10, FPD-1.000 Rev. 16, FID-2.100 Rev. 4, PEP-4.62.1 Rev. 0 and ADP-2.12 Rev. 0. These FCN's/FCR's shall be processed through Phase 1 2 and 3 in accordance with FID-2.400, "FCR/FCN Review and Resolution Program."

Prepared By R. Poliver

Date 11-3-83 2:32 P.M.

Approved By [Signature]  
David A. Tappan

Date 11-3-83

11-3-83



DISTRIBUTION FOR STOP WORK ORDER

KDBailey  
JABauer  
DEBeaudoin  
WRBird  
JEBrunner  
FWBuckman  
JWCook  
MADietrich  
GFEwert  
WJFriedrich @ (QC)  
EWGoold @ (Planning & Scheduling)  
WDGreenwell  
PKHansen  
GAHierzer  
EMHughes  
DJones  
HPLeonard @ (PAD)  
BWMarguglio  
REMcCue  
JKMeisenheimer @ (Soils)  
JAMooney  
BHPeck  
DLQuamme  
JARutgers  
DATaggart @ (PAP)  
RAWells  
JLWood @ (HVAC)  
Subcontractors @  
Construction Completion Group Supervisor (Group disbanded)

BLOCK 15 (continued).

- B. Installation and inspection of Q-Listed work in the GEO Construction Testing area includes Architectural, Civil, Instrumentation, Electrical and Mechanical Disciplines
1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated which apply to work in the scope defined in B. above. Verification included MPQAD review of Phase I adequacy, review of Phase II Resolution Sheets, and audit of Phase III Composite Log.
  2. Per BPCo letter #BCCC-9008, dated February 8, 1984, Work Prints will be issued to GEO Construction Testing and will be used for work in the scope defined in B above. This is consistent with BPCo's response to CPCo MCARR DAT-1 provided by BPCo Transmittal No. 54944, dated January 26, 1984.

Completion of corrective action verified and Stop Work lifted for work in scope defined in B above.

By *J. Maguire* Date 2-9-84  
Time 2:48 PM

DAT  
DEC 08 1983

Bechtel Power Corporation

Com 136478

Post Office Box 2167  
Midland, Michigan 48640



BLC-18614

December 7, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, MI 48640

ATTACHMENT 1 To  
Stop Work Order  
FSW-35

Attention: R. A. Wells

Midland Plant Units 1 & 2  
Bechtel Job 7220  
FSW-33 THROUGH 41  
(FCR/FCN APPROVAL)

Your action is requested to partially lift the subject stop work orders to allow Field Engineering and Project Engineering approval of Field Change Requests/Field Change Notices (FCR's/FCN's). This request is based on completion of the following actions:

- 1) PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MSA-32-32-03F and MSA-83-32-04F. In summary, the process corrective action includes new FCR and FCN forms which provide for more positive control.
- 2) Project personnel have been reinstructed to the procedures noted above in accordance with their departments respective training programs.

Bechtel is currently undertaking a review of Specification G-34, "General Specification for Field Change Notice", to formulate a change to our FCN program. Until such time as the program is revised, construction will only initiate Q-listed FCN's to provide as-built information to Project Engineering in accordance with Section 3.3 of G-34. Non-Q FCN's will be initiated as they were prior to the issuance of the stop work orders.

If you have any questions on this matter, please contact me.

Very truly yours,

A handwritten signature in dark ink, appearing to read "John A. Rutgers", is written over a printed name. The signature is fluid and cursive.  
for John A. Rutgers

JAR/AJB/lmr

Written Response Requested: No

Com Use: NA

cc: (See attached list)

cc: J. W. Cook  
D. L. Quamme  
B. Peck  
J. A. Mooney  
H. Leonard  
D. Taggart  
J. Meisenheimer  
W. Friedrich

# Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 2 to  
Stop Work Order  
FSW35

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
PROCESSING CYCLE FCR/FCN  
BCCC-8800

Dear Mr. Wells:

To allow the processing cycle for FCR/FCN to begin, the following steps have been outlined as a guide to control the FCR/FCN approval and distribution activities. See Attachment 1.

- 1) FCRs may be written by the field engineers, signed by the Project Field Engineer (PFE), assigned a number in Field Document Control, and transmitted to Project Engineering. (The FCRs will be prioritized by Construction.)
- 2) Project Engineering will begin their review of these FCRs upon receipt from Construction.
- 3) Construction will advise Project Document Control of the schedule for release of composite register on a discipline by discipline basis (based on an MPQAD approval) and will require that Project Document Control approve the FCRs for distribution based on the release schedule.  
NOTE: The FCR must be written exclusively against those discipline drawings that have been released in the above mentioned schedule. This will ensure that FDCC will not receive FCRs from Project Engineering until the discipline's register has been audited by MPQAD.

FCNs will follow the same basic philosophy as modified by COM 136478. The PFE approval will be the check point which must adhere to the schedule of releasing drawings by discipline.

If an FCR (FCN) references an affected drawing which is in a discipline not yet released by FDCC, Project Engineering (PE) will not issue the affected FCR (FCN).

Very truly yours,

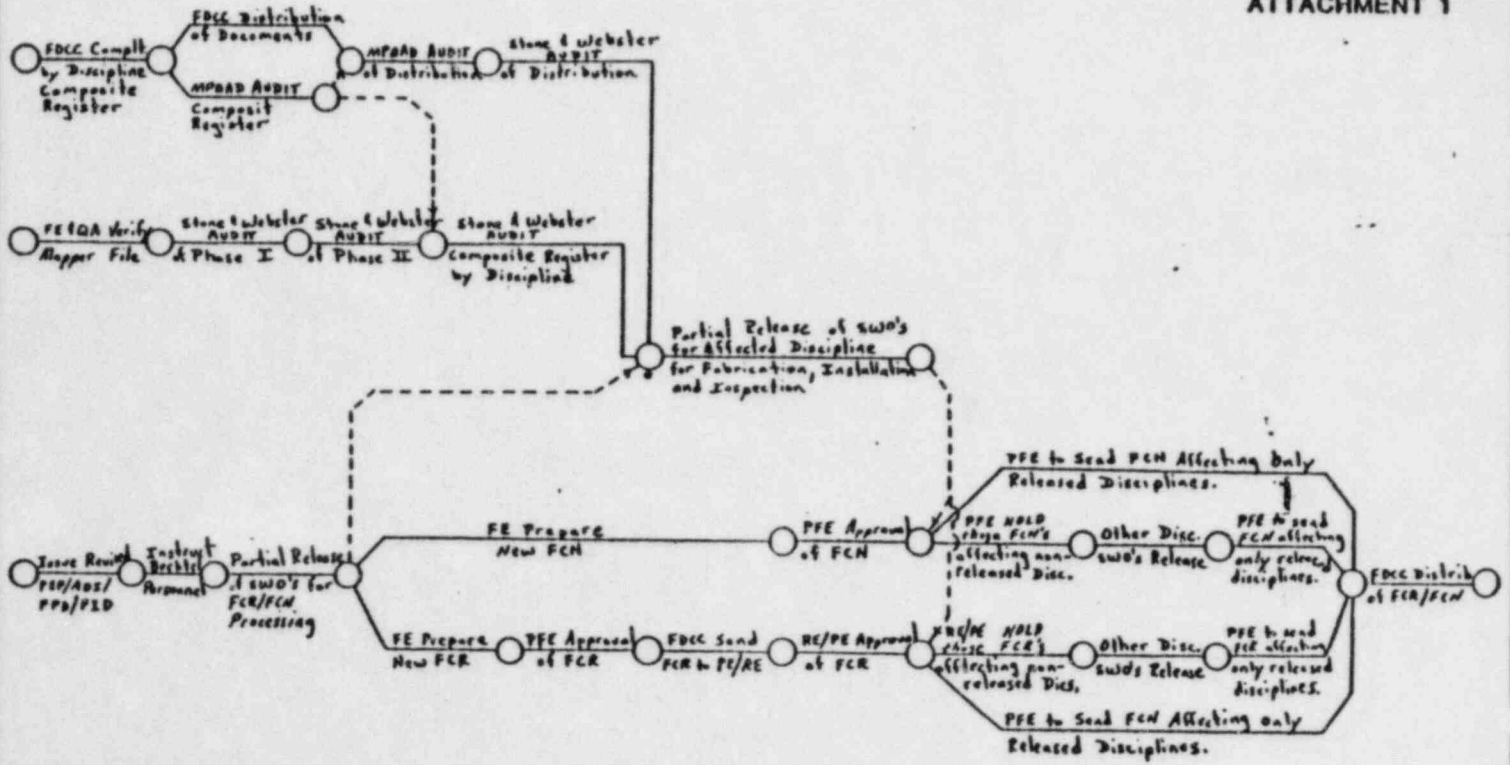
*G.A. Hierzer*  
G.A. Hierzer  
Site Manager

GAH/JR/jrm  
cc: D. Quamme  
D. Taggart  
Attachment



**FCR/FCN  
PROBLEM RESOLUTION**  
(SWO Item 13, Steps 4b/c/d)

**FCR/FCN  
PROCESSING**  
(SWO Item 13, Step 4e &  
SWO's 36.37 Item 13, Steps 4 e/f/g)



TITLE:  
GENERIC SCHEDULE FOR  
RESOLVING STOP WORK ORDERS  
33 THRU 41

REV.	BY	CKD	APVL	DATE
0	PFS			12/1/83

~~3~~  
Attachment 3 to Stop Work  
Bechtel Power Corporation order  
FSW 35

Post Office Box 2167  
Midland, Michigan 48640  
February 8, 1984



Consumers Power Company  
P.O. Box 1963  
Midland, MI 48640

Stop Work Order  
FSW-35

Attention: R. A. Wells  
Executive Manager - MPQAD

Midland Plant Units 1 & 2  
Bechtel Job 7220  
FSW-35  
BCCC-9008

Dear Mr. Wells:

Your action is requested to lift the subject Stop Work Order to allow the initiation of work by GEO Construction Testing. This request is based on the following actions pursuant to Block 13, Item 4 of the order:

Item No.

Action

4A

A review of all FCRs/FCNs generated which apply to related work has been performed in accordance with FID-2.400, "FCR/FCN Review and Resolution Program".

We have updated the design document registers and distribution lists to reflect the results of this review.

4B & 4C

As described in J. A. Rutgers' letter of December 7, 1983 (BLC-18614), PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000, and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MFS-83-32-03F and MSA-83-32-04F. All appropriate project personnel have been reinstructed to these procedures in accordance with their department's respective training programs.

In addition, Bechtel Field Procedure FPZ-1.000 has been revised. The intent of this revision is to now issue "Work Prints" rather than "Controlled Prints" to GEO Construction Testing (GEO). All appropriate Bechtel personnel involved with the GEO subcontract have been retrained in this procedure per FPG-2.000. In line with this revision to FPZ-1.000, Subcontract Change Notice D-048 was sent to GEO. This SCN notified GEO that they would now be receiving "Work Prints" rather than "Controlled Prints". It further requested that GEO revise their Document Control Procedures and train appropriate personnel in the handling of the change paper.

R. A. Wells  
FSW-35  
Page 2

Item No.

Action

GEO accordingly revised procedure No. 2.4 "Document Control" and has retrained all appropriate personnel. A statement of this retraining is attached.

4E & 4F

As the appropriate Document Control registers are released, the "Controlled" drawings are reviewed to insure that GEO has the latest revisions with all change paper. Upon release of the GEO Stop Work, The "Controlled" prints will be replaced by "Work Prints" per FPZ-1.000.

*G. A. Hierzer*  
G. A. Hierzer

GAH/JAB/tvm  
020907T3

Written Response Requested: Yes

Response Requested by: 2-9-84

Attachment



Construction Testing

February 8, 1984

Bechtel Power Corporation  
P. O. Box 2167  
Midland, Michigan 48640

Attention: Mr. G. A. Hierzer  
Site Manager

Serial Letter No. GCT-206-766

Gentlemen:


Subject: Midland Plant Units 1 & 2  
Consumers Power Company  
Bechtel Job No. 7220  
Subcontract No. 7220-FSC-206  
Training of Procedure 2.4

On February 7, 1984, Mr. Arnold W. Morrill was instructed, by telephone, to follow the new instructions as stated in Procedure 2.4 Rev. C for the handling of all Client documents.

If we may be of further assistance, please feel free to contact this office.

Very truly yours,

GEO CONSTRUCTION TESTING, INC.

  
Clifton Johnson  
Quality Control Manager

CJ:pcb  
cc: A. Morrill

RECEIVED

FEB 9 1984

BECHTEL POWER CORP.  
JOB 7220  
PER 873...FSC-206

RE 2/9/84  
FSC V  
CIV V  
2/15/84  
SAS 2-9-84



**Consumers  
Power  
Company**

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

February 8, 1984

PRINCIPAL STAFF	
RA	DRP
D/RA	DE
A/RA	DRASE
S	DRRA
AD	SCS
TA	IL
TE	File Dos

*right 3*

Mr G A Hierzer  
Bechtel Power Corporation  
P O Box 2167  
Midland, MI 48640

MIDLAND ENERGY CENTER GWO 7020

RELEASE OF SWO #41

File: 0460.3, 0655.3, 0436 UFI: 73\*, 99\*08, 12\*50 Serial: CSC-7306

- REFERENCES: 1) Release of CIO Hold Point Oil for Mechanical Discipline  
2) MPQAD Release of SWO #41 for Mechanical Discipline

As a result of the February 8, 1984 release of Stop Work Order FSW-41 for mechanical discipline documents, Bechtel Power Company is released for Status Assessment in the above noted discipline for modules 340, 102, 120 410 and 800.

It is expected this Phase I work will be performed in a careful and prudent manner with proven satisfactory results prior to any accelerated work efforts in the above identified modules.

In accordance with your recently approved procedures, Status Assessment shall utilize Status Assessment Prints (SAPs) issued from Field Document Control Center (Station 59).

Bechtel Power Company shall insure that only personnel who have satisfactorily completed all training requirements for Status Assessments will perform this activity.

*DLQ/NIR/klp*

- cc: JGKepler, NRC Region III  
JJHarrison, NRC Region III  
RJCook, NRC Site  
RAWells, MPQAD  
BHPeck, MEC  
NIReichel, MEC

FEB 16 1984



STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, BOSTON, MASSACHUSETTS 02107

February 8, 1984

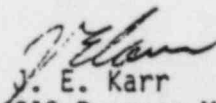
Mr. D. L. Quamme  
Consumers Power Company  
Midland Nuclear Plant  
3500 E. Miller Road  
Midland, Michigan 48640

Subject: Docket No. 50-329/330  
Midland Plant - Units 1 and 2  
Overview of the Construction  
Completion Program  
Serial No. SWMCP-029

Re: FCR/FCN Review  
CIO Hold Point No. 011

CIO has completed a review of FCR/FCN's for the mechanical discipline and considers the results of this review to be satisfactory.

This releases CIO Hold Point Number 011 in its entirety.

  
J. E. Karr  
CIO Program Manager

FB/nl

cc:  
JGKepler, US NRC Glen Ellyn, IL  
JHarrison, US NRC Glen Ellyn, IL  
RJCook, US NRC Midland (site)  
RAWells, CPCo Midland (site)  
RBKelly, S&W  
APAmoruso, S&W



Rev. 1 11/3/83

## STOP WORK ORDER

MIDLAND PROJECT  
QUALITY ASSURANCE DEPARTMENT

PAGE 1

9. PROJECT: MPQAD BECHTEL POWER	10. SUBJECT OF STOP WORK ORDER: Balance of Plant Q-listed work to Bechtel Drawings and Specifici-	1. STOP WORK ORDER NO: FSW - 41
11. ORAL STOP WORK ORDER GIVEN: BY: AJBoos      BY: RAWells DATE: 10/21/83      TIME: 9.50PM	12. WORK STOPPED:      cations DATE: 10/22/83      TIME: 1.00PM	2. PREPARED BY: P Dae
13. DESCRIPTION OF CORRECTIVE ACTIONING STOP WORK ACTION:  Problems with referencing of drawing and specifications in the BP Co FCR/FCN process have created an indeterminate condition with respect to work that has been or could be performed to "Q"-listed drawings and specifications (Ref: Audit MSA-83-32).  As a result of this conditon, the following stop work is being issued: 1) BP Co Project and Field Engineering approval of FCN/FCRs. 2) Fabrication, installation, and inspection of Q-listed work in the Balance of Plant area.		3. DATE: 10-23-83      TIME: 1400
		4. APPROVED BY: <i>David A. Tugant</i>
		5. DATE: 10-23-83      TIME: 10/23
		6. TIME: 16.13
		7. NAME STOP WORK ORDER ISSUED BY: W. Freidrich E. Hughes G. Hierzer
		8. INFORMATION:  See Sheet 3

## 14. CORRECTIVE ACTION TAKEN:

- A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only
1. Bechtel corrective action taken as described in JARutgers letter to RAWells (Com 136478, BLC-18614) dated December 7, 1983 and GAHierzer's letter to RAWells (BCCC-8800) dated December 9, 1983. (See Attachments 1 & 2)

## 15. LISTED OF CORRECTIVE ACTION VERIFICATION:

- A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only
1. MPQAD review and approval of PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100.
  2. MPQAD review of training records for BPCo project construction, engineering and administrative personnel.

Completion of corrective action verified and Stop Work lifted for BPCo Project and Field Engineering approval of FCNs and FCRs. This is a Phase III activity.

By *D. Tugant* Date 12-9-83  
Time 1821

## 16. COMPLETION OF CORRECTIVE ACTION VERIFIED

BY:      DATE:

## 17. STOP WORK ORDER LIFTED

BY:      DATE:      TIME:

6 24 11-22  
5 24 11-13-83  
4 24 11-13-83

3. Allowable exceptions are as noted below:

- a) Actions to maintain safe plant working conditions.
- b) Actions to maintain calibrated instruments.
- c) Removal of paint on welds of hangers.
- d) Training and certification of QA/QC Inspection personnel.
- e) Actions to implement the storage and maintenance programs, including QC area inspections for equipment protection. However, no final QC acceptance will be allowed that are based on Bechtel Q-listed drawings and specifications.
- f) Continue to issue and validate Nonconformance Reports (NCR), but no concurrence of NCR disposition is allowed if based on BPCo Drawings & Specifications.
- g) See Item 5 below for subsequent allowable exceptions.

4. As a minimum, the following actions shall be taken prior to lifting this Stop Work Order in part or total:

- a) Perform a review & analysis to evaluate the extent of the problem.
- b) Take appropriate programmatic corrective action based on Item 4A above.
- c) Reinstruct BPCo Project Eng., Field Eng. and Document Control personnel in the generation approval and distribution of the FCN/FCR form to prevent the problem from recurring.
- d) Establish a mechanism for lifting of this Stop Work on a partial basis.

5. In support of corrective actions necessary to resolve this Stop Work Order, the following additional exceptions to the Stop Work Order are allowed:

- A. Any FCR with only RE interim approval that has not received PE final disposition and any FCN with PFE approval but not yet dispositioned by Project Engineering is allowed to be processed in accordance with FPD-2.000 Rev. 10, FPD-1.000 Rev. 16, FID 2.100 Rev. 4, PEP-4.62.1 Rev. 0 and ADP-2.12 Rev. 0. These FCNs/FCRs shall be processed through Phase 1, 2 and 3 in accordance with FID-2.400, "FCR/FCN Review and Resolution Program."

Prepared By R. L. Oliver

Date 11-3-83 2:42 P.M.

Approved By [Signature]

David A. Suggs

Date 11-3-83

11-3-83



DISTRIBUTION FOR STOP WORK ORDER

Work Order FSW-41  
6  
RET 1/3/13

KDBailey

JABauer

DEBeaudoin

WRBird

JEBrunner

FWBuckman

JWCook

MADietrich

GFEwert

WJFriedrich @ (QC)

EWGoold @ (Planning & Scheduling)

WDGreenwell

PKHansen

GAHierzer

EMHughes

DJones

HPLeonard @ (PAD)

BWMarguglio

REMcCue

JKMeisenheimer @ (Soils)

JAMooney

BHPeck

DLQuamme

JARutgers

DATaggart @ (PAP)

RAWells

JLWood @ (HVAC)

Subcontractors @

Construction Completion Group Supervisor (Group disbanded)

MPlumb

RPope

BLOCK 14 (continued)

- B. Inspection For Architectural Related Work (Only Document Control Station 14)
  - 1. Bechtel corrective action taken as described in GAHierzer's letter to RAWells (BCCC-8779) dated December 9, 1983 as applied to all architectural related work. (See Attachment 3)

BLOCK 15 (continued)

- B. Inspection For Architectural Related Work (Only Document Control Stations 14)
  - 1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated which apply to architectural related work at Document Control Station 14 only. Verification included MPQAD review of Phase I adequacy, review of Phase II Resolution Sheets, and audit of Phase III Composite Log and document distribution. *For Drawings only.*

Completion of corrective action verified and Stop Work lifted for Architectural related work at Station 14. *For drawings & their attach. only.*

By *D. A. [Signature]* Date 12-11-83  
 Time @ 1500



BLOCK 15 (continued)

D. Inspection, Status Assessment, and related work for the Architectural and Civil disciplines.

1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated and applying to the architectural and civil disciplines. Verification included MPQAD review of Phase I adequacy, review of Phase II resolution sheets, and audit of Phase III registers.
2. Per the response to Management Corrective Action Request, DAT-1 provided by BPCo Transmittal No. 54944, dated January 16, 1984, inspection, status assessment, and related work shall utilize Work Prints and/or Status Assessment Prints (SAPs) issued only from FDCC, Station 59.

Completion of corrective action and Stop Work Order lifted for Architectural and Civil.

By David A. Taggart Date 1-20-84  
Time 11:15 AM

Effective January 24, 1984, completion of corrective actions described in B.1 and D.2 of Block 14 above has been verified by MPQAD and the Stop Work lifted for the I & C discipline. Verifications and limitations for I & C are as described in D.1 and D.2 above (in Block 15).

By B PALMER FOR Date 1-24-84  
DA TAGGART Time 12:35 PM

Effective January 26, 1984, completion of corrective actions described in B.1 and D.2 of Block 14 above has been verified by MPQAD and the Stop Work lifted for the Electrical discipline. Verifications and limitations for Electrical are as described in D.1. and D.2 above (in Block 15.)

By B PALMER FOR Date 1-26-84  
DA TAGGART Time 2:12 PM

Effective February 8, 1984, completion of corrective actions described in B.1 and D.2 of Block 14 above has been verified by MPQAD and the Stop Work lifted for the Mechanical discipline. Verifications and limitations for Mechanical are as described in D.1 and D.2 above (in Block 15).

By David A. Taggart Date 2-8-84  
Time 3:45 PM

DAT  
DEC 08 1983

Bechtel Power Corporation

Com 136478

Post Office Box 2167  
Midland, Michigan 48640



BLC-18614

December 7, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, MI 48640

ATTACHMENT 1 To  
Stop Work Order  
FSW-41

Attention: R. A. Wells

Midland Plant Units 1 & 2  
Bechtel Job 7220  
FSW-33 THROUGH 41  
(FCR/FCN APPROVAL)

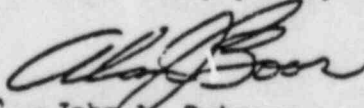
Your action is requested to partially lift the subject stop work orders to allow Field Engineering and Project Engineering approval of Field Change Requests/Field Change Notices (FCR's/FCN's). This request is based on completion of the following actions:

- 1) PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MSA-32-32-03F and MSA-83-32-04F. In summary, the process corrective action includes new FCR and FCN forms which provide for more positive control.
- 2) Project personnel have been reinstructed to the procedures noted above in accordance with their departments respective training programs.

Bechtel is currently undertaking a review of Specification G-34, "General Specification for Field Change Notice", to formulate a change to our FCN program. Until such time as the program is revised, construction will only initiate Q-listed FCN's to provide as-built information to Project Engineering in accordance with Section 3.3 of G-34. Non-Q FCN's will be initiated as they were prior to the issuance of the stop work orders.

If you have any questions on this matter, please contact me.

Very truly yours,

  
for John A. Rutgers

JAR/AJB/lmr

Written Response Requested: No

Com Use: NA

cc: (See attached list)

cc: J. W. Cook  
D. L. Quamme  
B. Peck  
J. A. Mooney  
H. Leonard  
D. Taggart  
J. Meisenheimer  
W. Friedrich

# Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 2 To  
Stop Work Order  
FSW-41

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
PROCESSING CYCLE FCR/FCN  
BCCC-8800

Dear Mr. Wells:

To allow the processing cycle for FCR/FCN to begin, the following steps have been outlined as a guide to control the FCR/FCN approval and distribution activities. See Attachment 1.

- 1) FCRs may be written by the field engineers, signed by the Project Field Engineer (PFE), assigned a number in Field Document Control, and transmitted to Project Engineering. (The FCRs will be prioritized by Construction.)
- 2) Project Engineering will begin their review of these FCRs upon receipt from Construction.
- 3) Construction will advise Project Document Control of the schedule for release of composite register on a discipline by discipline basis (based on an MPQAD approval) and will require that Project Document Control approve the FCRs for distribution based on the release schedule.  
NOTE: The FCR must be written exclusively against those discipline drawings that have been released in the above mentioned schedule. This will ensure that FDCC will not receive FCRs from Project Engineering until the discipline's register has been audited by MPQAD.

FCNs will follow the same basic philosophy as modified by COM 136478. The PFE approval will be the check point which must adhere to the schedule of releasing drawings by discipline.

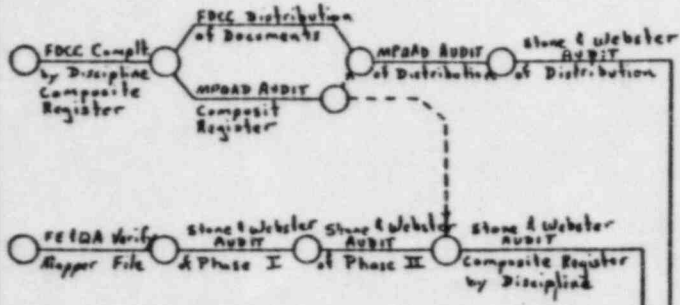
If an FCR (FCN) references an affected drawing which is in a discipline not yet released by FDCC, Project Engineering (PE) will not issue the affected FCR (FCN).

Very truly yours,

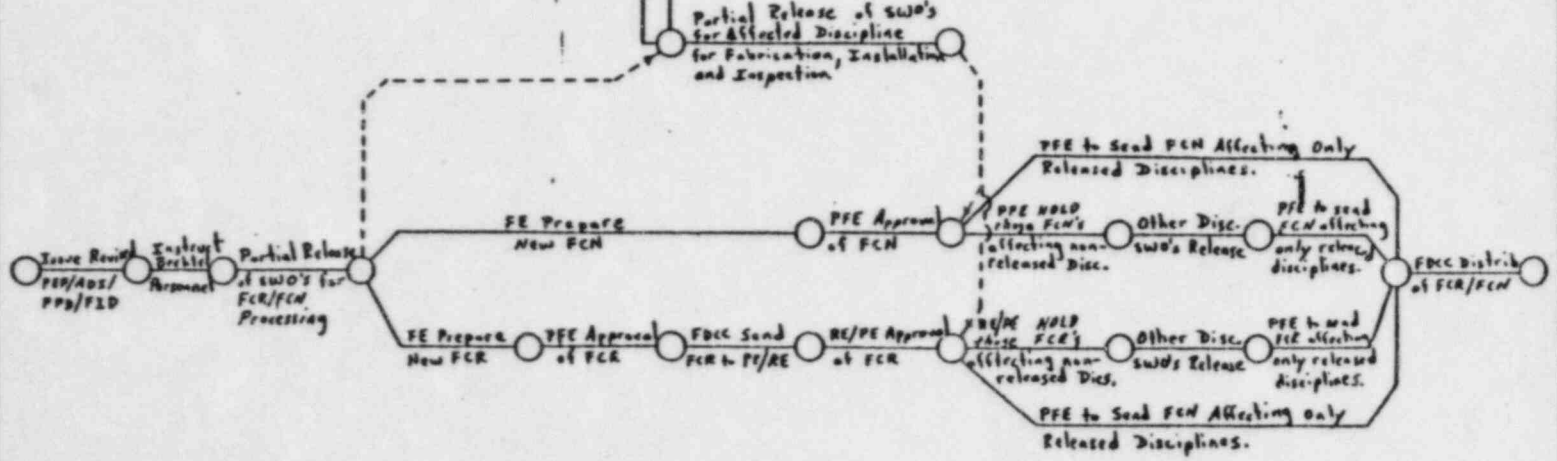
*G.A. Hierzer*  
G.A. Hierzer  
Site Manager

GAH/JR/jrm  
cc: D. Quamme  
D. Taggart  
Attachment

**FCR/FCN  
PROBLEM RESOLUTION**  
(SWO Item 13, Steps 4b/e/d)



**FCR/FCN  
PROCESSING**  
(SWO Item 13, Step 4a &  
SWO's 36,37 Item 13, Steps 4 a/f/g)



TITLE:  
GENERIC SCHEDULE FOR  
RESOLVING STOP WORK ORDERS  
33 THRU 41

REV.	BY	CHKD.	APVL.	DATE
0	PFJ			12/1/83



Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 3 To  
Stop Work Order  
FSW-41

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
MIDLAND PLANT UNITS 1 & 2  
FSW-34 Through 41  
BCCC-8779

Dear Mr. Wells:

Your action is requested to partially lift the subject Stop Work Orders (SWO) to allow the initiation of architectural related work which includes architectural status assessment under the Construction Completion Program (CCP). This request is based on completion of the following actions pursuant to Block 13, Item 4 of the order:

Item No.

Action

4A

A review of all FCRs/FCNs generated which apply to architectural related work governed by the CCP has been performed in accordance with FID-2.400, "FCR/FCN Review and Resolution Program".

We have updated the design document distribution to reflect the results of this review. As a part of this step, we have removed architectural drawings from the sticks and work print distribution pending resolution of outstanding FCRs and FCNs in other disciplines affecting these drawings.

No hardware problems in architectural were noted in the review under FID-2.400.

4B & 4C

As described in J.A. Rutgers' letter of December 7, 1983 (BLC-18614), PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000, and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MFS-83-32-03F and MSA-83-32-04F. All appropriate project personnel have been reinstructed to these procedures in accordance with their department's respective training programs.

R.A. Wells  
BCCC-8779  
Page 2

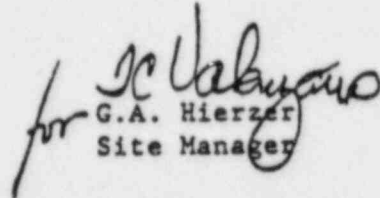
Item No.Action

4D

As described in G.A. Hierzer's letter of December 9, 1983 (BCCC-8800) the mechanism for partial lifting of SWO has been established.

If you have questions on this matter, please contact me.

Very truly yours,

*for*   
G.A. Hierzer  
Site Manager

GAH/AJB/jrm

cc: D. Quamme  
D. Taggart



**Consumers  
Power  
Company**

Dean L. Quamme  
Site Manager  
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

February 7, 1984

PRINCIPAL STAFF		
✓ Das	CPRP	
V/RA	DE	
V/RA	DRMSP	
	DRMA	
DO	SCS ✓	
RA	ML	
FE	FTI	Das

*elig +3*

Mr G A Hierzer  
Bechtel Power Corporation  
P O Box 2167  
Midland, MI 48640

MIDLAND ENERGY CENTER GWO 7020  
CONSTRUCTION TRAINING RECORDS  
File: 0655.3, B1.1.7, 0400.2 UFI: 99\*08, 53\*50\*04, 06\*02  
Serial: CSC-7298

Per the attached CIO letter SWMCP-028 dated February 7, 1984 the personnel on lists dated January 19 and 31, 1984 are cleared to perform Status Assessment.

DLQ/DDJ/klp

cc: JGKeppler, NRC Region III w/a  
JHarrison, NRC Region III w/a  
RJCook, NRC Site w/a  
RAWells, MPQAD w/a  
NIReichel, MEC w/a  
BHPeck, MEC w/a  
DDJohnson, MEC w/a

FEB 16 1984

*8402220384*



STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, BOSTON, MASSACHUSETTS 02107

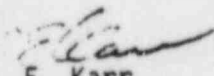
February 7, 1984

Mr. D. L. Quamme  
Consumers Power Company  
Midland Nuclear Plant  
3500 E. Miller Road  
Midland, Michigan 48640

Subject: Docket No. 50-329/330  
Midland Plant - Units 1 and 2  
Overview of the Construction  
Completion Program  
Serial No. SWMCP-028

Re: Midland Energy Center  
Training of Construction Personnel  
Reference CCo Correspondence  
CSC-7201 1/20/84 and CSC-7275 2/2/84

As requested in your transmittal number CSC-7289 of 2/6/84, please be advised that CIO has performed sampling inspections of the Construction Training Records of those personnel noted in the attachments of the above referenced correspondence. The results of the sampling inspection were satisfactory. Personnel listed on the attachments are cleared to perform status assessment.

  
J. E. Karr  
CIO Program Manager

JEK/nl

cc:  
JGKeppler, US NRC Glen Ellyn, IL  
JHarrison, US NRC Glen Ellyn, IL  
RJCook, US NRC Midland (site)  
RAWells, CCo Midland (site)  
RBKelly, S&W  
APAmoruso, S&W



**Consumers  
Power  
Company**

Dean L Quamme  
Site Manager  
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

January 31, 1984

Mr J E Karr  
Stone & Webster Michigan, Inc  
P O Box 2167  
Midland, MI 48640

MIDLAND ENERGY CENTER GWO 7020  
MPQAD QAR RT-00010

File: 0460.3, B1.1.7, 0655 UFI: 99\*08, 73\* Serial: CSC-7255

By letter dated October 13, 1983 from RAWells, Stone & Webster was notified that the Midland Project Quality Assurance Department (MPQAD) had initiated Quality Action Request RT-00010. This QAR was issued to track the broad review of MPQAD inspection personnel qualification and certification records.

The review for Quality Control Division personnel has been completed. The QAR has been closed, and a copy is attached for your information. A new QAR No. RT-00025 has been initiated for the review of Soils Division and HVAC Assurance Branch inspection personnel qualification and certification records.

Also, attached for your use is a computer printout showing QC Division personnel who hold task certifications as of January 27, 1984.

*Dean L Quamme*

DLQ/GFE/klp

cc: JGKepler, NRC Region III w/o att  
RJCook, Resident NRC Inspector w/o att  
RAWells, MPQAD w/o att  
NIRichel, MEC w/o att

PRINCIPAL STAFF	
RA	DRP
D/RA	DE
A/RA	DRMSP
RC	DRMA
PAO	SCS
SGA	ML
ENF	File

*orig+3*

FEB 6 1984

840208024L





STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, BOSTON, MASSACHUSETTS 02107

Mr. D. L. Quamme  
Consumers Power Company  
Midland Nuclear Plant  
3500 E. Miller Road  
Midland, Michigan 48640

January 24, 1984

Docket No. 50-329/330  
Midland Plant - Units 1 and 2  
Overview of the Construction  
Completion Program  
FCR/FCN Hold Point  
Serial No. SWMCP-017

CIO has completed a sampling review of Phase I and II of the following documents:

- FCR's/FCN's affecting Instrumentation and Control Documents
- FCR's/FCN's affecting Civil Documents

Results of the sampling were satisfactory. Therefore, Hold Point 011 has been released for Civil and Instrumentation and Control documents.

J. E. Karr  
CIO Program Manager

SWB/nl

cc:  
JGKepler, US NRC Glen Ellyn, IL  
JJHarrison, US NRC Glen Ellyn, IL  
RJCook, US NRC Midland (site)  
RAWells, CCo Midland (site)  
RBKelly, S&W  
APAmoruso, S&W





6 24 1-22-84  
5 24 11-13-83  
FSW-41

3. Allowable exceptions are as noted below:

- a) Actions to maintain safe plant working conditions.
- b) Actions to maintain calibrated instruments.
- c) Removal of paint on welds of hangers.
- d) Training and certification of QA/QC Inspection personnel.
- e) Actions to implement the storage and maintenance programs, including QC area inspections for equipment protection. However, no final QC acceptance will be allowed that are based on Bechtel Q-listed drawings and specifications.
- f) Continue to issue and validate Nonconformance Reports (NCR), but no concurrence of NCR disposition is allowed if based on BPCo Drawings & Specifications.
- g) See Item 5 below for subsequent allowable exceptions.

4. As a minimum, the following actions shall be taken prior to lifting this Stop Work Order in part or total:

- a) Perform a review & analysis to evaluate the extent of the problem.
- b) Take appropriate programmatic corrective action based on Item 4A above.
- c) Reinspect BPCo Project Eng., Field Eng. and Document Control personnel in the generation approval and distribution of the FCN/FCR form to prevent the problem from recurring.
- d) Establish a mechanism for lifting of this Stop Work on a partial basis.

5. In support of corrective actions necessary to resolve this Stop Work Order, the following additional exceptions to the Stop Work Order are allowed:

- A. Any FCR with only RE interim approval that has not received PE final disposition and any FCN with PFE approval but not yet dispositioned by Project Engineering is allowed to be processed in accordance with FPD-2.000 Rev. 10, FPD-1.000 Rev. 16, FID 2.100 Rev. 4, PEP-4.62.1 Rev. 0 and ADP-2.12 Rev. 0. These FCNs/FCRs shall be processed through Phase 1, 2 and 3 in accordance with FID-2.400, "FCR/FCN Review and Resolution Program."

Prepared By R. L. Oliver

Date 11-3-83 2:42 P.M.

Approved By David A. Lagas

Date 11-3-83  
11-3-83



DISTRIBUTION FOR STOP WORK ORDER

Work Order FSW-41 12-11-80

KDBailey

JABauer

DEBeaudt.in

WRBird

JEBrunner

FWBuckman

JWCook

MADietrich

GFEwert

WJFriedrich @ (QC)

EWGoold @ (Planning & Scheduling)

WDGreenwell

PKHansen

GAHierzer

EMHughes

DJones

HPLeonard @ (PAD)

BWMarguglio

REMcCue

JKMeisenheimer @ (Soils)

JAMooney

BHPeck

DLQuamme

JARutgers

DATaggart @ (PAP)

RAWells

JLWood @ (HVAC)

Subcontractors @

Construction Completion Group Supervisor (Group disbanded)

MPlumb

RPope

BLOCK 14 (continued)

B. Inspection For Architectural Related Work (Only Document Control Station 14)

- 1. Bechtel corrective action taken as described in GAHierzer's letter to RAWells (BCCC-8779) dated December 9, 1983 as applied to all architectural related work. (See Attachment 3)

BLOCK 15 (continued)

B. Inspection For Architectural Related Work (Only Document Control Stations 14)

- 1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated which apply to architectural related work at Document Control Station 14 only. Verification included MPQAD review of Phase I adequacy, review of Phase II Resolution Sheets, and audit of Phase III Composite Log and document distribution. For Drawings on 14.

Completion of corrective action verified and Stop Work lifted for Architectural related work at Station 14. For drawings & their attach. only.

By [Signature] Date 12-11-83  
Time @ 1500

*[Handwritten initials and date]*  
12-11-83

BLOCK 14 (continued)

C. Inspection, Status Assessment and Related Work For Architectural (Document Control Stations 14 (includes Spec's) 48 a, b & d and 55.)

1. Same as B.1. above.

D. Inspection, Status Assessment, and Related Work for the Architectural and Civil disciplines.

1. For Architectural, same as B.1. above.

2. For Civil, Bechtel corrective action taken as described in BPCo letter BCCC-8867, GAHierzer to RAWells, dated December 30, 1983.

E. Inspection, Status Assessment and related work for the I & C discipline.

1. Same as B.1 and D.2 above.

BLOCK 15 (continued)

B. Inspection, Status Assessment and Related Work For Architectural (Document Control Stations 14 (includes spec's), 48 a, b & d and 55.)

1. MPQAD completion of reviews, and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated which apply to architectural. Verification included MPQAD review of Phase I adequacy review of Phase II Resolution Sheets and audit of Phase III Composite Log and document distribution. Verified and released for Architectural for Document Control Stations 14, 48 a, b & d and 55.

Completion of corrective action and Stop Work lifted for Architectural at Stations 14, 48 a, b & d and 55.

By *D. Maggart* Date 12-13-83  
Time 9:15 AM

~~Effective January \_\_\_\_\_, 1984, completion of corrective actions described in B.1 and B.2 of Block 14 above has been verified by MPQAD and the Stop Work lifted for the I&C discipline. Verifications and limitations for I & C are as described in D.1 and D.2 above (in Block 15).~~

By \_\_\_\_\_ Date \_\_\_\_\_  
Time \_\_\_\_\_

REF  
1/23/8

BLOCK 15 (continued)

D. Inspection, Status Assessment, and related work for the Architectural and Civil disciplines.

1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated and applying to the architectural and civil disciplines. Verification included MPQAD review of Phase I adequacy, review of Phase II resolution sheets, and audit of Phase III registers.
2. Per the response to Management Corrective Action Request, DAT-1 provided by BPCo Transmittal No. 54944, dated January 16, 1984, inspection, status assessment, and related work shall utilize Work Prints and/or Status Assessment Prints (SAPs) issued only from FDCC, Station 59.

Completion of corrective action and Stop Work Order lifted for Architectural and Civil.

By David A. Taggart Date 1-20-84  
Time 11:15 AM

Effective January 24, 1984, completion of corrective actions described in B.1 and D.2 of Block 14 above has been verified by MPQAD and the Stop Work lifted for the I & C discipline. Verifications and limitations for I & C are as described in D.1 and D.2 above (in Block 15).

By B Palmer FOR Date 1-24-84  
DA TAGGART Time 12:35 PM

DAT  
DEC 08 1983

Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



Com 136478

BLC-18614

December 7, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, MI 48640

ATTACHMENT 1 To  
Stop Work Order  
FSW-41

Attention: R. A. Wells

Midland Plant Units 1 & 2  
Bechtel Job 7220  
FSW-33 THROUGH 41  
(FCR/FCN APPROVAL)

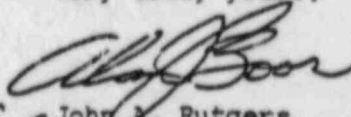
Your action is requested to partially lift the subject stop work orders to allow Field Engineering and Project Engineering approval of Field Change Requests/Field Change Notices (FCR's/FCN's). This request is based on completion of the following actions:

- 1) PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MSA-32-32-03F and MSA-83-32-04F. In summary, the process corrective action includes new FCR and FCN forms which provide for more positive control.
- 2) Project personnel have been reinstructed to the procedures noted above in accordance with their department's respective training programs.

Bechtel is currently undertaking a review of Specification G-34, "General Specification for Field Change Notice", to formulate a change to our FCN program. Until such time as the program is revised, construction will only initiate Q-listed FCN's to provide as-built information to Project Engineering in accordance with Section 3.3 of G-34. Non-Q FCN's will be initiated as they were prior to the issuance of the stop work orders.

If you have any questions on this matter, please contact me.

Very truly yours,

  
for John X. Rutgers

JAR/AJB/lmr

Written Response Requested: No

Com Use: NA

cc: (See attached list)

cc: J. W. Cook  
D. L. Quamme  
B. Peck  
J. A. Mooney  
H. Leonard  
D. Taggart  
J. Meisenheimer  
W. Friedrich

# Bechte' Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 2 To  
Stop Work Order  
FSW-41

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
PROCESSING CYCLE FCR/FCN  
BCCC-3800

Dear Mr. Wells:

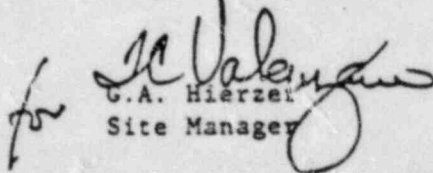
To allow the processing cycle for FCR/FCN to begin, the following steps have been outlined as a guide to control the FCR/FCN approval and distribution activities. See Attachment 1.

- 1) FCRs may be written by the field engineers, signed by the Project Field Engineer (PFE), assigned a number in Field Document Control, and transmitted to Project Engineering. (The FCRs will be prioritized by Construction.)
- 2) Project Engineering will begin their review of these FCRs upon receipt from Construction.
- 3) Construction will advise Project Document Control of the schedule for release of composite register on a discipline by discipline basis (based on an MPQAD approval) and will require that Project Document Control approve the FCRs for distribution based on the release schedule.  
NOTE: The FCR must be written exclusively against those discipline drawings that have been released in the above mentioned schedule. This will ensure that FDCC will not receive FCRs from Project Engineering until the discipline's register has been audited by MPQAD.

FCNs will follow the same basic philosophy as modified by COM 136478. The PFE approval will be the check point which must adhere to the schedule of releasing drawings by discipline.

If an FCR (FCN) references an affected drawing which is in a discipline not yet released by FDCC, Project Engineering (PE) will not issue the affected FCR (FCN).

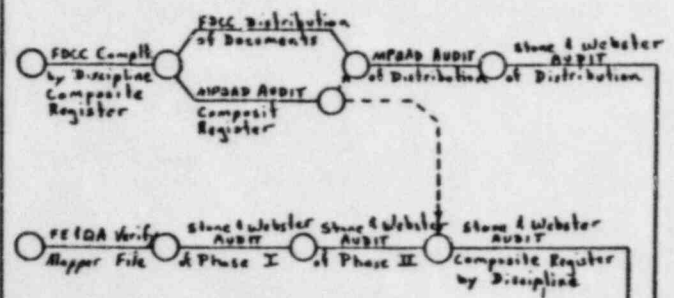
Very truly yours,

  
C.A. Hierzel  
Site Manager

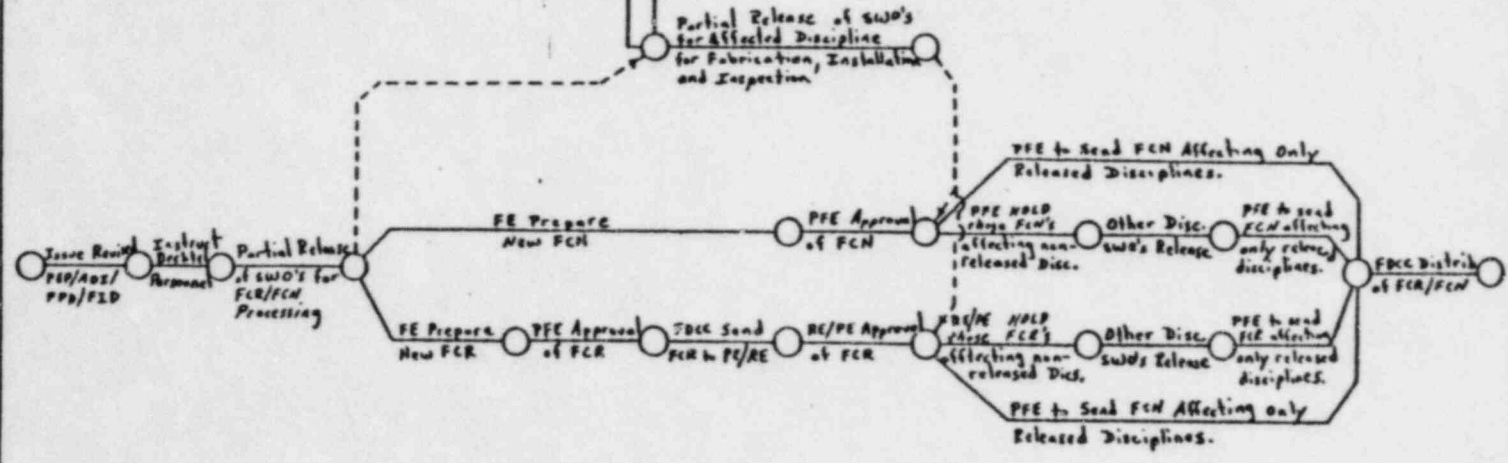
GAH/JR/jrm  
cc: D. Quamme  
D. Taggart  
Attachment



**FCR/FCN  
PROBLEM RESOLUTION**  
(SWO Item 13, Steps 4b/d)



**FCR/FCN  
PROCESSING**  
(SWO Item 13, Step 4a & SWO's 35,37 Item 13, Steps 4 a/f/g)



TITLE:  
GENERIC SCHEDULE FOR  
RESOLVING STOP WORK ORDERS  
33 THRU 41

REV.	BY	CHKD	APVL	DATE
0	PFE			12/1/83

# Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 3 To  
Stop Work Order  
FSW-41

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
MIDLAND PLANT UNITS 1 & 2  
FSW-34 Through 41  
BCCC-8779

Dear Mr. Wells:

Your action is requested to partially lift the subject Stop Work Orders (SWO) to allow the initiation of architectural related work which includes architectural status assessment under the Construction Completion Program (CCP). This request is based on completion of the following actions pursuant to Block 13, Item 4 of the order:

Item No.

Action

4A

A review of all FCRs/FCNs generated which apply to architectural related work governed by the CCP has been performed in accordance with FID-2.400, "FCR/FCN Review and Resolution Program".

We have updated the design document distribution to reflect the results of this review. As a part of this step, we have removed architectural drawings from the sticks and work print distribution pending resolution of outstanding FCRs and FCNs in other disciplines affecting these drawings.

No hardware problems in architectural were noted in the review under FID-2.400.

4B & 4C

As described in J.A. Rutgers' letter of December 7, 1983 (ELC-18614), PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000, and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MFS-83-32-03F and MSA-83-32-04F. All appropriate project personnel have been reinstructed to these procedures in accordance with their department's respective training programs.

R.A. Wells  
BCCC-8779  
Page 2

Item No.

Action

4D

As described in G.A. Hierzer's letter of December 9, 1983 (BCCC-8800) the mechanism for partial lifting of SWO has been established.

If you have questions on this matter, please contact me.

Very truly yours,

*for G.A. Hierzer*  
G.A. Hierzer  
Site Manager

GAH/AJB/jrm

cc: D. Quamme  
D. Taggart



STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, BOSTON, MASSACHUSETTS 02107

December 13, 1983

Mr. D. L. Quamme  
Consumers Power Company  
Midland Nuclear Plant  
3500 E. Miller Road  
Midland, Michigan 48240

Subject: Docket No. 50-329/330  
Midland Plant - Units 1 and 2  
Overview of the Construction  
Completion Program  
Serial No. SWMCP-001

Sample inspections of controlled stick drawings and FCR/FCN attachments were performed by CIO at the Document Control Stations Number 14, located in the Support Service Building, and Stations 48 a, b and d, located in the Area Teams 25 through 29 Building. The review was considered acceptable as meeting the requirements of FID-2.400 Rev. 3, Review and Resolution Program. Stations 14 and 48 a, b and d are considered satisfactory for start of QVP activities and Status Assessment.

NIR 009 was issued December 12, 1983, for rejection of the lot of drawings at Station 55. Corrective action had been accomplished by MPQAD. CIO verified that the missing drawing had been added to the controlled stick drawings, and performed a sample inspection of the drawings at this station. The review was considered to be satisfactory and acceptable in meeting the requirements of FID-2.400 Rev. 3, Review and Resolution Program.

As the corrective action had been completed on December 12, 1983, CIO will issue NIR 009 as closed on December 13, 1983.

Station 55 is considered satisfactory for start of Status Assessment, and QVP QC.

Very truly yours,

S. W. Baranow  
Program Manager

SWB/fs

CC:  
JGKepler, US NRC Glen Ellyn, IL  
JHarrison, US NRC Glen Ellyn, IL  
RJCook, US NRC Midland (site)  
✓RAWells, CPCo Midland (site)  
RBKelly, S&W  
APAmoruso, S&W

DISTRIBUTION FOR DAT-133-83

KDBailey, AAO-7220  
JAEauer, Midland  
DEBeaudoin, Midland  
WRBird, P-14-418A  
FWBuckman, P-14-113  
JWCook, P-26-336B  
MADietrich, Bechtel-Midland  
GFEwert, Midland  
WJFriedrich, Bechtel-Midland  
EWGgold, Midland  
WDGreenwell, AAO-7220  
FKHansen, AAO-7220  
GAHierzer, Bechtel-Midland  
EMHughes, AAO-7220  
EJones, JSC-206B  
HPLeonard, Midland  
BWMarguglio, JSC-220A  
REMcCue, Midland  
JKMeisenheimer, Midland  
JAMooney, P-14-115A  
EHPeck, Midland  
DLQuamme, Midland  
JANutgers, AAO-7220  
DATaggart, Midland  
RAWells, Midland  
JLWood, Midland  
MPlumb, Midland  
RPope, Midland

To Distribution  
FROM DAtaggart, Midland  
DATE December 12, 1983  
SUBJECT MIDLAND ENERGY CENTER PROJECT - STOP  
WORK ORDER FSW-41 CLARIFICATION  
CC File FSW-41

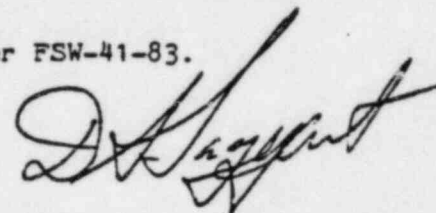
**Consumers  
Power  
Company**

INTERNAL  
CORRESPONDENCE

DAT-133-83

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Please note clarification on page 4 of 4 of Stop Work Order FSW-41-83.





**Consumers  
Power  
Company**

James W Cook  
Vice President - Projects, Engineering  
and Construction

General Offices: 1945 West Farnall Road, Jackson, MI 49201 • (517) 788-0453

January 20, 1984

*Miss*

PRINCIPAL STAFF	
<i>Das</i>	

*right 3*

*Das  
Original + Attachment  
to SCS*

Director of Office of Inspection  
and Enforcement  
Att Mr Richard C DeYoung  
US Nuclear Regulatory Commission  
Washington, DC 20555

MIDLAND PROJECT - ALAB-106 QUARTERLY REPORT  
DOCKETS NOS 50-329 AND 50-330  
FILE: 0.4.6 SERIAL: 26670

Pursuant to the second and third conditions of the Memorandum and Order ALAB-106 dated March 26, 1973, and Amendment No 1 to the Midland Plant Construction Permits, we are submitting ten copies of our forty-fourth (44th) report covering the period January 1, 1984 through March 31 1984. This report normally would have been submitted by January 1, 1984.

*James W. Cook*

JWC/WRB/lr

CC: RJCook, USNRC Resident Inspector  
Midland Nuclear Plant

JGKepler, NRC Region III

OC0184-0035A-MP01

JAN 27 1984

*840202016L*

CONSUMERS POWER COMPANYREPORT # 44, December 31, 1983

Pursuant to Conditions 2FB and 2FC of Construction Permits CPPR-81 and CPPR-82, the following report covers the period January 1, 1984 through March 31, 1984.

- A) Construction work to be performed during this period. See Attachment A.
- B) Personnel with quality related duties who were assigned to the Midland Project during the period October 1 through December 31, 1983, and who are expected to be on site through March 31, 1984, and who will be trained as necessary to perform the functions required to them, are as follows:

1) Midland Project Quality Assurance/Quality Control

Adachi, J K	QA Soils	Brown & Root
Agerter, W	QCD Consultant	PAC
Anderson, T O	QA Insp Eval	Butler
Antill, J S	QC Mech	Butler
Baker, L R	QC Mech	BPCo
Barfield, P	QC Mech	Lincoln
Barnes, B T	QC Grp 3 Sys Team	Interglobal
Barnhart, R	QC Mech	Butler
Bartz, M G	QC Mech	BPCo
Beacham, E	PAP Ins Ev	NES
Bingham, P M	T/O T/O AS	Courter & Co
Blanchard, D E	PAD Tech Svcs	CPCo
Brown, N R	QSD QC Training	Butler
Browne, C	QCD QC Elec	BPCo
Bukoski, R F	QA Soils	G/C
Burch, T	QSD QC Training	SAI
Cochran, D	PAP QVP Gp	EI
Cochran, G P	QCD QC Mech	BPCo
Collins, J K	QC Soils	Butler
Coppeler, D	Audit Section	NUTECH
Covey, A E	QCD Bulk Hanger Grp	PDS
Dahms, E M	QSD Training	CPCo
DelValle, W B	QCD QC Mech	Butler
Doody, R P	PAP Insp Eval	Butler
Eagle, G R	DAS DQAE/Ann Arbor	CPCo
Elmore, D E	QCD QC Mech	Butler
Finch, F R	QCD QC Elec	SAI
Folks, G L	QSD QA Training	UST
Fitzgerald, G J	PAP Insp Eval	Lincoln
Gamon, T H	Audit Section	MAC



Gonzales, J F	QC Soils	EG&G
Gebbart, R P	QCD QC Mech	Butler
Giddens, T L	QCD QC Elec	Butler
Gunser, K J	QCD QC Mech	BPCo
Hallebeck, D D	PAP Insp Eval	SAI
Haroney, N J	QCD QC Mech	RPCo
Heber, R J	QC Soils	Butler
Hedzik, W	Audit Section	MAC
Herndon, G W	QCD QC Elec	SAI
Holleran, T V	QCD QC Elec	SAI
Holthaus, D	PAE W/NDE	GR Lakes
Howard, F P	QCD Pers Admin	BPCo
Jacobs, H D	QCD QC Rec/Insp	BPCo
Joseph, D E	QCD QC Civil	BPCo
Kay, R T	PAD Weld & NDE Grp	GR Lakes
Kessinger, A E Jr	QC HVAC	SAI
Kross, D C	QCD QC Elec	Lincoln
Lada, G	QCD QC Mech	BPCo
Lambert, H J	QCD QC Mech	EG&G
Lee, F S	QCD QC Mech	Butler
Limper, E J	PAD Insp Eval	BPCo
Lockler, M E	QCD QC Mech	PDS
Lunsford, D G	Audit Section	NUTECH
Martin, A	QCD QC Mech	BPCo
Martin, D (NMI)	PAD Weld & NDE Grp	EG&G
Mathias, J M	QC Soils	BPCo
Matthews, CA	QC Soils	BTX
McLeod, K A	QC Soils	BPCo
McCluan, J D	QCD Area Teams	BPCo
McClure, A C	QCD QC Mech	BPCo
Merritt, R A	QCD QC Mech	BPCo
Miner, S C	QA Soils	GR Lakes
Moss, B	QSD QC Training	UST
Mouser, E R	QCD QC Civil	SAI
Nagel, R E	QSD QA Training	Cygna
Neumann, T R	QSD QA Training	UST
Nelon, S	QCD QC Civil	BPCo
Newcomb, C H	QCD QC Elec	BPCo
Noble, J T	QCD QC Mech	BPCo
Nordstrom, H B	QCD QC Mech	BPCo
Notarmuzi, A L	Audit Section	Butler
Nott, D A	PAD Insp Eval	CPCo
Nunes, H P	PAE Civil	SAI
O'Brien, J K	QCD QC Mech	Courter & Co
Oehlenschlager, C R	QCD QC Mech	BPCo
Osborne, W G	QCD QC Elec	BPCo
Pandey, V	T/O TST Assur	Lehigh
Parnley, L R	QCD QC Mech	BPCo
Passanante, S R	QCD QC Mech	BPCo
Pickering, W R	QCD QC Civil	SAI

Pitcock, G S	QCD QC Mech	BPCo
Ponke, D	PAD Insp Eval	SAI
Porfilio, T L	PAD QVP Group	MAC
Rehan, T L	QCD QC MEch	Butler
Riley, E J	PAP Tech Svcs	CPCo
Rivera, F H	QCD QC Mech	UST
Ronk, D	QSD Plan/Sched	CPCo
Santiago, M K	QCD QC Mech	BPCo
Saucier, A E	QCD QC Mech	Butler
Savage, J L	PAE Civil	PDS
Savoie, R A	PAD Insp Eval	CPCo
Scherer, R K	QC HVAC	SAI
Schulmeister, F H	PAP QVP Group	CPCo
Siever, T J	QCD QC Mech	BPCo
Simms, R	QSD QC Training	G/C
Simon, F D	QCD QC Mech	PDS
Skaggs, E O	QSD Prgm Dev	G/C
Skates, M L	QCD QC Mech	Butler
Smith, D	QCD QC Mech	BPCo
Smith, S P	QCD QC Mech	Volt
Stallings, G R	QCD QC Mech	BPCo
Stinson, D G	QCD QC Civil	Trans Tech
Strozier, R D	QSD QC Training	Cyigna
Sumrow, J O	QCD QC Elec	NES
Tremaine, D O	QCD QC Mech	BPCo
Tyree, B E	QCD QC Mech	Lincoln
VanDoorne, D L	QCD QC Civil	BPCo
Vienhage, S A	QC Soils	BPCo
Vogt, J V	DAD Design	BPCo
Walenga, C G	DAD Design	CPCo
Walker, L M	QCD QC Elec	SAI
Walker, P H	QCD QC Civil	BPCo
Weaver, C E	QCD QC Mech	BPCo
Weiss, G F	QC Soils	SAI
Wells, R A	Ex Mgr	CPCo
Williams, H K	QCD QC Elec	BPCo
Wollrab, J H	QC Mech	Butler
Wyrick, R E	QCD QC Mech	BPCo
Yee, S B (Bandla)	DAD Design	PAC
Zalewski, C E	PAD Insp Eval	Butler
Zalitis, J	QCD QC Rec/Insp	BPCo
Zelinski, T J	QCD QC Elec	SAI

- C) Quality Assurance qualifications of supervisors and engineers listed in B above are attached to this report.
- D) The following personnel no longer are performing quality-related tasks at the Site:

Baggett, R B		B&W
Beacham, E F	Ins Eval	NES
Binderman, P R		B&W
Bingham, P M	T/O As	Courter & Co
Black, G T	QA Trng	SAI
Booth, P K	QC Electrical	PDS
Bowen, C J		B&W
Brownell, J A	GSO Teams/NDE	BPCo
Budrick, R G	Mech	CPCo
Cain, B L	QC Mechanical	Victor
Cannon, D J	Electrical	Lincoln
Carey, P L		B&W
Carroll, K J		B&W
Cazier, F N	Hngr/R	Butler
Chafin, H M	QC Electrical	BPCo
Chain, W G		B&W
Cote, A H	QC MEchanical	BPCo
Couty, R C	Ins Eval	Butler
Creech, J E	QC Trng	Butler
Delaney, D A	C Weld	BPCo
Dinunzio, C A	QA Trng	Cygna
Dipietro, J J	QC Mechanical	BPCo
Dunning, D P	QC Mechanical	Butler
Durkee, D R		B&W
Ellison, C D	QC Civil	Lincoln
Evans, F G B	QC Mechanical	Brown & Root
Evans, J R	QC Mechanical	UST
Fedorow, W	QC Electrical	G/C
Feinberg, B	QC Mechanical	UST
Fey, G L		B&W
Fredianelli, D L	Mechanical	BPCo
Fremgen, J J	QC Mechanical	Courter & Co
Gillenwater, R L	QC Trng	G/C
Gingras, D A	I&C	TAD
Gossett, W W	QC Electrical	BPCo
Gragg, D J	QC Mechanical	BPCo
Gregory, B M	Audit	MAC
Grubich, R J	QC Mechanical	BPCo
Gudritz, R T		B&W
Gunser, K J	QC Mechanical	BPCo
Gustafson, K S	SP Proj	BPCo
Hartz, C E	QC Trng	G/C
Hendley, J J		B&W
Hendrickson, D L	Pln/Sch	PMA
Hogan, S K	QC MEchanical	Butler
Hollenbeck, D C		B&W

Johnson, M	B&W	
Kalemba, E M	QC Mechanical	BPCo
Keen, M A		B&W
Kidd, J A		B&W
Kirker, S D	QC Civil	BPCo
Kirkland, M	Design	BPCo
Kunski, J F	Doc Mc	BPCo
Lauck, J A	I&C	Butler
Lenczewski, M E	Yd/Ins	BPCo
Longstreet, M S	QC Services	
Lynch, K B		B&W
Matkin, C R	Hngr/R	NIC
McConaughy, M L	QC Mechanical	BPCo
Miller, C J	Instru	BPCo
Moncrieff, G D	Electrical	PDS
Montoya, T A	QC Electrical	UST
Mosher, E A	Pr Dev	BPCo
Murdock, V D	QC Mechanical	BPCo
Neumann, T R	QA Trng	UST
Nosseck, W C	Pl/Sch	PMA
O'Brien, J K	QC Mechanical	Courter & Co
Oberle, R J	Prgm dev	CPCo
Oehlschlager, C R	QC Mechanical	BPCo
Orr, M H	Doc Mc	BPCo
Patton, W P	QC Electrical	Butler
Petty, G E	QC Electrical	Butler
Ray, F L	QC Mechanical	BPCo
Revich, S	QC Electrical	BPCo
Roark, B D II	QC Electrical	Butler
Robinson, F R	Prgm Dev	UST
Rodgers, C J	QVP Gp	PAC
Russell, R D	Civil	SAI
Schroder, G		B&W
Schulz, P J	Wldn-S	BPCo
Scott, R		B&W
Sellers, R A	QC Mechanical	PDS
Smith, S P	QC Mechanical	Volt
Smith, W M	QC Electrical	BPCo
Stama, T G	Wld/In	BPCo
Sumrow, J O	QC Electrical	NES
Tellier, D P		B&W
Urbanawiz, E J	QC Trng	BPCo
Urbanawiz, M K	QC Mechanical	BPCo
Webb, T L		B&W
Williams, D A	Weld & NDE Grp	Butler
Yatchak, J R	Tst As	EG&G
Yurik, T W		B&W
Zawilla, J J		B&W

QUARTERLY REPORT

January 1984 through March 1984

1. Complete review, resolution sheets and distribution of FCR's/FCN's for release of stop work orders 33-41.
2. Begin status assessment for Civil, Mechanical Instrumentation, and Electrical disciplines with module 340 followed by release of additional modules.
3. Training will continue per the Construction Completion Plan requirements.
4. Continue installation of "Non-Q" Civil, Electrical and Mechanical work items throughout the plant on Unit 2, Common and Unit 1 non-deferred systems and areas.
5. Resume "Q" work following status assessment, Phase I of the Construction Completion Plan, to support systems required for Turbine Roll.
6. Resume underpinning activities for the Auxiliary, Service Water and Circulating Water Buildings under the direction of the Field Soils Organization.
7. Subcontractor, B & W, to resume installation of the NSSS system in Unit 2.
8. Subcontractor, Zack, to resume installation of HVAC for Unit 2, Common and Unit 1 non-deferred systems.
9. Resume "Q" work on Turned Over Systems in all areas of the plant under the direction of the General Services Organization.



**Consumers  
Power  
Company**

*ms*

Dean L Quamme  
Site Manager  
Midland Project

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

January 20, 1984

Mr G A Hierzer  
Bechtel Power Corporation  
P O Box 2167  
Midland, MI 48640

PRINCIPAL STAFF	
✓ RA	DE
D/RA	DE
A/RA	DEMSR
RC	DRMA
PAO	SCS
SGA	ML
ENF	File

*orig 3*

MIDLAND ENERGY CENTER GWO 7020  
PARTIAL RELEASE OF SWO #41

File: 0460.3, 0655, 0456 UFI: 73\*, 99\*08, 12\*50 Serial: CSC-7202

- REFERENCES: 1) Release of CIO Hold Points 013 and 014  
2) MPQAD Partial Release of SWO #41

As a result of the January 20, 1984 partial release of Stop Work Order FSW-41 for all civil and architectural documents, Bechtel Power Company is released for Status Assessment in these disciplines for modules 340, 102, 120, 410 and 800.

It is expected this Phase I work will be performed in a careful and prudent manner with proven satisfactory results prior to any accelerated work efforts in the above identified modules.

In accordance with your recently approved procedures, Status Assessment shall utilize Status Assessment Prints (SAPs) issued from Field Document Control Center (Station 59).

Bechtel Power Company shall insure that only personnel who have satisfactorily completed all training requirements for Status Assessments will perform this activity.

*Dean L Quamme*

DLQ/DDJ/dmh

- cc: JGKepler, NRC Region III, w/a  
JHarrison, NRC Region III, w/a  
RJCook, NRC Site, w/a  
RAWells, MPQAD, w/a  
BHPeck, MEC, w/a  
NIReichel, MEC, w/a

JAN 28 1984

*8401310213*

**STONE & WEBSTER**  
**CONSTRUCTION IMPLEMENTATION**  
**OVERVIEW**  
**MIDLAND NUCLEAR PLANT J.O. NO. 14509**

ITEM NUMBER	HOLD POINT NUMBER 013
<input type="checkbox"/> TRACKED ACTION ITEM	
<input type="checkbox"/> TRACKED INFORMATION ITEM	
<input type="checkbox"/> TRACKED RECOMMENDATION ITEM	
<input type="checkbox"/> UNTRACKED ITEM	
<input checked="" type="checkbox"/> HOLD POINT NOTIFICATION	

REFERENCE(S) CPCo Letter, File B1.1.1.7, Serial CSM-0710, FCR/FCN Stop Work Orders, 12-22-83

CONDITION DETAILS This Report provides notification of the establishment of a CIO Hold Point at the conclusion of CPCo activities for Phase III Resolution of FCR/FCNs.

Hold Point: Prior to issue of documentation lifting the CPCo Stop Work Order related to civil discipline (other than Stations 8, 10, 12, 24 and 64).

Using the response section below, CPCo should notify CIO when the documentation necessary to lift the Stop Work identified above has been prepared, but prior to its issue. CIO will then perform its evaluation and notify CPCo when this Hold Point is lifted by signing in the "Response Verified/Closed" block below and returning the completed form to CPCo.

YES (PAGE NO.'S)  NO

ATTACHMENTS

DATE RESPONSE REQ'D. Prior to lifting Stop Work	INITIATOR/DATE <i>J. Elan</i> 1-10-84	INITIATION APPROVED/DATE <i>J. Elan</i> 1-10-84
----------------------------------------------------	------------------------------------------	----------------------------------------------------

RESPONSE

For the Civil discipline, Phases I and II are complete for the FCR/FCN review. Phase III has been completed for FDCC (Station 59). Based on the forgoing, the requirements to lift Stop Work Order Nos. FSW-34, FSW-36, FSW-39, FSW-40 and FSW-41 for the Civil discipline at Station 59 have been met. The document registers are intended to be released for the issuance of Work Prints and Status Assessment Prints (SAPs) at the FDCC (Station 59) as described in CPCo letter Serial CSM-0719 DLQuamme to SWBaranow, dated January 16, 1984.

YES (PAGE NO.'S)  NO

ATTACHMENTS

EST. CORRECTIVE ACTION COMPLETION DATE: <i>Action Complete</i>	RESPONDENT <i>J. Elan</i>	TITLE <i>Const. Supt.</i>	DATE <i>1/17/84</i>
-------------------------------------------------------------------	------------------------------	------------------------------	------------------------

RESPONSE ACCEPTED <i>J. Elan</i>	DATE <i>1-18-84</i>	RESPONSE VERIFIED/CLOSED <i>J. Baranow</i>	DATE <i>1/20/84</i>
-------------------------------------	------------------------	-----------------------------------------------	------------------------

**STONE & WEBSTER**  
**CONSTRUCTION IMPLEMENTATION**  
**OVERVIEW**  
**MIDLAND NUCLEAR PLANT J.O. NO. 14509**

ITEM NUMBER	HOLD POINT NUMBER
	014
<input type="checkbox"/> TRACKED ACTION ITEM	
<input type="checkbox"/> TRACKED INFORMATION ITEM	
<input type="checkbox"/> TRACKED RECOMMENDATION ITEM	
<input type="checkbox"/> UNTRACKED ITEM	
<input checked="" type="checkbox"/> HOLD POINT NOTIFICATION	

REFERENCE(S) CPCo Letter File B.1.1.1.7, Serial CSM-0713, FCR/FCN Stop Work Orders, 12/22/83

CONDITION DETAILS This Report provides notification of the establishment of a CIO Hold Point at the conclusion of CPCo activities for Phase III Resolution of FCR/FCNs.

Hold Point: Prior to issue of documentation lifting the CPCo Stop Work Order related to architectural discipline (other than Stations 14, 55, 48A, 48B and 48D)

Using the response section below, CPCo should notify CIO when the documentation necessary to lift the Stop Work has been prepared, but prior to its issue. CIO will then perform its evaluation and notify CPCo when this Hold Point is lifted by signing in the "Response Verified/Closed" block below and returning the completed report to CPCo.

YES (PAGE NO.'S)  NO

ATTACHMENTS

DATE RESPONSE REQ'D.	INITIATOR/DATE	INITIATION APPROVED/DATE
Prior to lifting Stop Work	<i>J. E. Lan</i> 1-10-84	<i>J. E. Lan</i> 1-10-84

RESPONSE

For the Architectural discipline, Phase I and II is complete for the FCR/FCN review. Phase III has been completed for FDCC (Station 59). Based on the forgoing, the requirements to lift Stop Work Order Nos. FSW-34, FSW-36, FSW-39, FSW-40 and FSW-41 for the Architectural discipline at Station 59 have been met. The document registers are intended to be released for the issuance of Work Prints and Status Assessment Prints (SAPs) at the FDCC (Station 59) as described in CPCo letter Serial CSM-0719, DLQuamme to SWBaranow, dated January 16, 1984.

YES (PAGE NO.'S)  NO

ATTACHMENTS

EST. CORRECTIVE ACTION COMPLETION DATE	RESPONDENT	TITLE	DATE
<i>Action Complete</i>	<i>J. E. Lan</i>	<i>Car 59 SPT</i>	<i>1/17/84</i>

RESPONSE ACCEPTED	DATE	RESPONSE VERIFIED/CLOSED	DATE
<i>J. E. Lan</i>	<i>1-18-84</i>	<i>J. E. Lan</i>	<i>1/21/84</i>





# STOP WORK ORDER

<p>3. PROJECT MPQAD RECENTLY POWER</p>	<p>10. SCOPE OF STOP WORK ORDER Balance of Plant Q-listed work to Bechtel Drawings and Specifications</p>	<p>1. STOP WORK ORDER NO. FSW - 41</p>
<p>11. ORG STOP WORK ORDER NO: BY: AJBoos      BY: RAWells DATE: 10/21/83      TIME: 9.50PM</p>	<p>12. WORK STOPPED:      cations DATE: 10/22/83      TIME: 1.00PM</p>	<p>2. PREPARED BY: P. Doe</p>
<p>13. DESCRIPTION OF CORRECTIVE ACTION INCLUDING STOP WORK ACTION:</p> <p>Problems with referencing of drawing and specifications in the BP Co FCR/FCN process have created an indeterminate condition with respect to work that has been or could be performed to "Q"-listed drawings and specifications (Ref: Audir MSA-83-32).</p> <p>As a result of this condition, the following stop work is being issued:</p> <ol style="list-style-type: none"> <li>1) BP Co Project and Field Engineering approval of FCN/FCRs.</li> <li>2) Fabrication, installation, and inspection of Q-listed work in the Balance of Plant area.</li> </ol>		<p>3. DATE: 10-23-83      TIME: 1400</p> <p>4. APPROVED BY: <i>David A. Juggan</i></p> <p>5. DATE: 10-23-83      TIME: 10/23/83</p> <p>6. TIME: 16.13</p> <p>7. NAME STOP WORK ORDER DURING THE:</p> <p>W. Freidrich E. Hughes G. Hierzer</p> <p>8. <del>REMARKS</del></p> <p>See Sheet 3</p>

14. CORRECTIVE ACTION TAKEN:

- A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only
1. Bechtel corrective action taken as described in JARutgers letter to RAWells (Com 136478, BLC-18614) dated December 7, 1983 and GAHierzer's letter to RAWells (BCCC-8800) dated December 9, 1983. (See Attachments 1 & 2)

15. KIND OF CORRECTIVE ACTION VERIFIED:

- A. BPCo Project and Field Engineering Approval of FCNs and FCRs Only
1. MPQAD review and approval of PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100.
  2. MPQAD review of training records for BPCo project construction, engineering and administrative personnel.

Completion of corrective action verified and Stop Work lifted for BPCo Project and Field Engineering approval of FCNs and FCRs. This is a Phase III activity.

By *D. Juggan* Date 12-9-83  
Time 1821

16. CONFIRMATION OF CORRECTIVE ACTION VERIFIED:

17. STOP WORK ORDER LIFTED:

BY:	DATE:	BY:	DATE:	TIME:
-----	-------	-----	-------	-------

3. Allowable exceptions are as noted below:

- a) Actions to maintain safe plant working conditions.
- b) Actions to maintain calibrated instruments.
- c) Removal of paint on welds of hangers.
- d) Training and certification of QA/QC Inspection personnel.
- e) Actions to implement the storage and maintenance programs, including QC area inspections for equipment protection. However, no final QC acceptance will be allowed that are based on Bechtel Q-listed drawings and specifications.
- f) Continue to issue and validate Nonconformance Reports (NCR), but no concurrence of NCR disposition is allowed if based on BPCo Drawings & Specifications.
- g) See Item 5 below for subsequent allowable exceptions.

4. As a minimum, the following actions shall be taken prior to lifting this Stop Work Order in part or total:

- a) Perform a review & analysis to evaluate the extent of the problem.
- b) Take appropriate programmatic corrective action based on Item 4A above.
- c) Reinstruct BPCo Project Eng., Field Eng. and Document Control personnel in the generation approval and distribution of the FCN/FCR form to prevent the problem from recurring.
- d) Establish a mechanism for lifting of this Stop Work on a partial basis.

5. In support of corrective actions necessary to resolve this Stop Work Order, the following additional exceptions to the Stop Work Order are allowed:

- A. Any FCR with only RE interim approval that has not received PE final disposition and any FCN with PFE approval but not yet dispositioned by Project Engineering is allowed to be processed in accordance with FPD-2.000 Rev. 10, FPD-1.000 Rev. 16, FID 2.100 Rev. 4, PEP-4.62.1 Rev. 0 and ADP-2.12 Rev. 0. These FCNs/FCRs shall be processed through Phase 1, 2 and 3 in accordance with FID-2.400, "FCR/FCN Review and Resolution Program."

Prepared By R. L. Oliver

Date 11-3-83 2:42 P.M.

Approved By [Signature]  
David A. Taggart

Date 11-3-83

11-3-83

CONTRIBUTION FOR STOP WORK ORDER

Work Order FSW-419

KDBailey

JABauer

DEBeaudoin

WRBird

JEBrunner

FWBuckman

JWCook

MADietrich

GFEwert

WJFriedrich @ (QC)

EWGoold @ (Planning & Scheduling)

WDGreenwell

PKHansen

GAHierzer

EMHughes

DJones

HPLeonard @ (PAD)

BWMarguglio

REMcCue

JKMeisenheimer @ (Soils)

JAMooney

BHPeck

DLQuamme

JARutgers

DATaggart @ (PAP)

RAWells

JLWood @ (HVAC)

Subcontractors @

Construction Completion Group Supervisor (Group dishanded)

MPlumb

RFope

BLOCK 14 (continued)

- B. Inspection For Architectural Related Work (Only Document Control Station 14)
  - 1. Bechtel corrective action taken as described in GAHierzer's letter to RAWells (BCCC-8779) dated December 9, 1983 as applied to all architectural related work. (See Attachment 3)

BLOCK 15 (continued)

- B. Inspection For Architectural Related Work (Only Document Control Stations 14)
  - 1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.4J0 for FCRs/FCNs generated which apply to architectural related work at Document Control Station 14 only. Verification included MPQAD review of Phase I adequacy, review of Phase II Resolution Sheets, and audit of Phase III Composite Log and document distribution. *For Drawings Only*

Completion of corrective action verified and Stop Work lifted for Architectural related work at Station 14. *For drawings & their attach. only.*

By *D. J. [Signature]* Date 12-11-83  
 Time @ 1500

BLOCK 14 (continued)

- C. Inspection, Status Assessment and Related Work For Architectural (Document Control Stations 14 (includes Spec's) 48 a, b & d and 55.)
1. Same as B.1. above.
- D. Inspection, Status Assessment, and Related Work for the Architectural and Civil disciplines.
1. For Architectural, same as B.1. above.
  2. For Civil, Bechtel corrective action taken as described in BPCo letter BCCC-8867, GAHierzler to RAWells, dated December 30, 1983.

BLOCK 15 (continued)

- B. Inspection, Status Assessment and Related Work For Architectural (Document Control Stations 14. (includes spec's), 48 a, b & d and 55.)
1. MPQAD completion of reviews, and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for FCRs/FCNs generated which apply to architectural. Verification included MPQAD review of Phase I adequacy review of Phase II Resolution Sheets and audit of Phase III Composite Log and document distribution. Verified and released for Architectural for Document Control Stations 14, 48 a, b & d and 55.

Completion of corrective action and Stop Work lifted for Architectural at Stations 14, 48 a, b & d and 55.

By *D. Saggart* Date 12-13-83  
Time 9:15 AM

BLOCK 15 (continued)

D. Inspection, Status Assessment, and related work for the Architectural and Civil disciplines.

1. MPQAD completion of reviews and audit activities of Bechtel corrective actions as defined in BPCo FID-2.400 for PCR/FCNs generated and applying to the architectural and civil disciplines. Verification included MPQAD review of Phase I adequacy, review of Phase II resolution sheets, and audit of Phase III registers.
2. Per the response to Management Corrective Action Request, DAT-1 provided by BPCo Transmittal No. 54944, dated January 16, 1984, inspection, status assessment, and related work shall utilize Work Prints and/or Status Assessment Prints (SAPs) issued only from FDCC, Station 59.

Completion of corrective action and Stop Work Order lifted for Architectural and Civil.

By

David A. Tugnut

Date

1-20-84

Time

11:15 AM

DAT  
DEC 08 1983

Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



Com 136478

BLC-18614

December 7, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, MI 48640

ATTACHMENT 1 To  
Stop Work Order  
FSW-41

Attention: R. A. Wells

Midland Plant Units 1 & 2  
Bechtel Job 7220  
FSW-33 THROUGH 41  
(FCR/FCN APPROVAL)

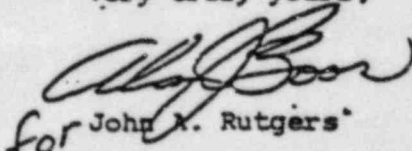
Your action is requested to partially lift the subject stop work orders to allow Field Engineering and Project Engineering approval of Field Change Requests/Field Change Notices (FCR's/FCN's). This request is based on completion of the following actions:

- 1) PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000 and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MSA-32-32-03F and MSA-83-32-04F. In summary, the process corrective action includes new FCR and FCN forms which provide for more positive control.
- 2) Project personnel have been reinstructed to the procedures noted above in accordance with their departments respective training programs.

Bechtel is currently undertaking a review of Specification G-34, "General Specification for Field Change Notice", to formulate a change to our FCN program. Until such time as the program is revised, construction will only initiate Q-listed FCN's to provide as-built information to Project Engineering in accordance with Section 3.3 of G-34. Non-Q FCN's will be initiated as they were prior to the issuance of the stop work orders.

If you have any questions on this matter, please contact me.

Very truly yours,

  
for John A. Rutgers

JAR/AJB/lmr

Written Response Requested: No

Com Use: NA

cc: (See attached list)

cc: J. W. Cook  
D. L. Quamme  
B. Peck  
J. A. Mooney  
H. Leonard  
D. Taggart  
J. Meisenheimer  
W. Friedrich



Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 2 To  
Stop Work Order  
FSW-41

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
PROCESSING CYCLE FCR/FCN  
BCCC-8800

Dear Mr. Wells:

To allow the processing cycle for FCR/FCN to begin, the following steps have been outlined as a guide to control the FCR/FCN approval and distribution activities. See Attachment 1.

- 1) FCRs may be written by the field engineers, signed by the Project Field Engineer (PFE), assigned a number in Field Document Control, and transmitted to Project Engineering. (The FCRs will be prioritized by Construction.)
- 2) Project Engineering will begin their review of these FCRs upon receipt from Construction.
- 3) Construction will advise Project Document Control of the schedule for release of composite register on a discipline by discipline basis (based on an MPQAD approval) and will require that Project Document Control approve the FCRs for distribution based on the release schedule.  
NOTE: The FCR must be written exclusively against those discipline drawings that have been released in the above mentioned schedule. This will ensure that FDCC will not receive FCRs from Project Engineering until the discipline's register has been audited by MPQAD.

FCNs will follow the same basic philosophy as modified by COM 136478. The PFE approval will be the check point which must adhere to the schedule of releasing drawings by discipline.

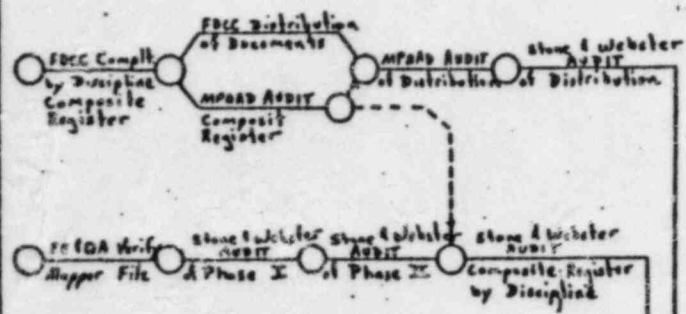
If an FCR (FCN) references an affected drawing which is in a discipline not yet released by FDCC, Project Engineering (PE) will not issue the affected FCR (FCN).

Very truly yours,

*G.A. Hierzel*  
for G.A. Hierzel  
Site Manager

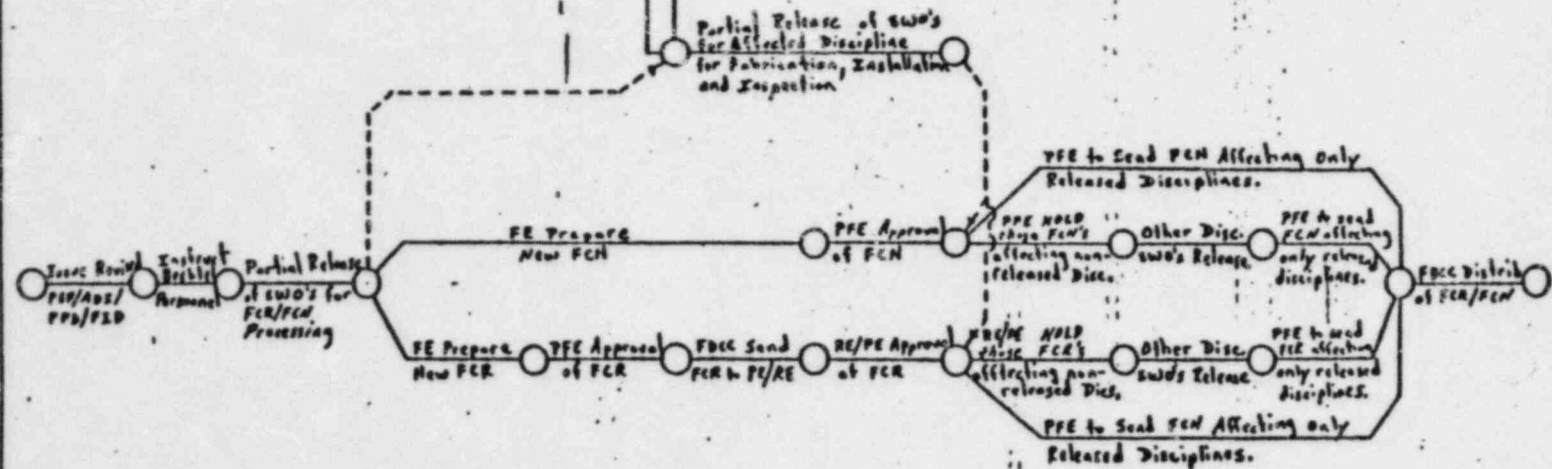
GAH/JR/jrm  
cc: D. Quamme  
D. Taggart  
Attachment

**FCR/FCN  
PROBLEM RESOLUTION**  
(SWO Item 13, Steps 4a-f/d)



**FCR/FCN  
PROCESSING**

(SWO Item 13, Step 4a & SWO's 26,27 Item 13, Steps 4 a/f/g)



TITLE:  
GENERIC SCHEDULE FOR  
RESOLVING STOP WORK ORDERS

REV.	BY	CRD.	APV.	DATE
0	PFJ			12/1/83

# Bechtel Power Corporation

Post Office Box 2167  
Midland, Michigan 48640



December 9, 1983

Consumers Power Company  
P.O. Box 1963  
Midland, Mi. 48640

ATTACHMENT 3 To  
Stop Work Order  
FSW-41

Attention: R.A. Wells  
Executive Manager - MPQAD

Job 7220 Midland Project  
MIDLAND PLANT UNITS 1 & 2  
FSW-34 Through 41  
BCCC-8779

Dear Mr. Wells:

Your action is requested to partially lift the subject Stop Work Orders (SWO) to allow the initiation of architectural related work which includes architectural status assessment under the Construction Completion Program (CCP). This request is based on completion of the following actions pursuant to Block 13, Item 4 of the order:

Item No.

Action

4A

A review of all FCRs/FCNs generated which apply to architectural related work governed by the CCP has been performed in accordance with FID-2.400, "FCR/FCN Review and Resolution Program".

We have updated the design document distribution to reflect the results of this review. As a part of this step, we have removed architectural drawings from the sticks and work print distribution pending resolution of outstanding FCRs and FCNs in other disciplines affecting these drawings.

No hardware problems in architectural were noted in the review under FID-2.400.

4B & 4C

As described in J.A. Rutgers' letter of December 7, 1983 (BLC-18614), PEP 4.62.1, ADI 2.12.10, FPD-1.000, FPD-2.000, and FID-2.100 have been revised to provide process corrective action to prevent recurrence of the problems noted in MPQAD Audit Findings MFS-83-32-03F and MSA-83-32-04F. All appropriate project personnel have been reinstructed to these procedures in accordance with their department's respective training programs.

R.A. Wells  
BCCC-8779  
Page 2

Item No.

Action

4D

As described in G.A. Hierzer's letter of December 9, 1983  
(BCCC-8800) the mechanism for partial lifting of SWO has been  
established.

If you have questions on this matter, please contact me.

Very truly yours,

*for G.A. Hierzer*  
G.A. Hierzer  
Site Manager

GAH/AJB/jrm

cc: D. Quamme  
D. Taggart