

APPENDIX A

CHRONOLOGY OF COMPLIANCE DIVISION INSPECTIONS
CONSOLIDATED EDISON COMPANY
INDIAN POINT NUCLEAR GENERATING STATION UNIT 2

<u>Date</u>	<u>Type Inspection</u>	<u>Scope of Inspection</u>
5/10-12/66	Shop Inspection - Combustion Engineer- ing, Chattanooga, Tennessee	Inspected shop facilities and discussed procedures for fab- ricating the reactor vessel.
11/2/66	"	Reviewed fabrication progress of reactor vessel. Observed work in progress and discussed fabrication techniques.
5/2/67	Site Inspection Management Meeting	Initial meeting with Con Ed management to discuss Division of Compliance inspection program during reactor construction.
5/24-26/67	Shop Inspection - Combustion Engineer- ing, Chattanooga, Tennessee	Reviewed fabrication progress, observed work in progress, and inspected records of welding, plate material properties and radiography.
8/1, 16, 22/67	Site Inspection	Reviewed construction organization responsibilities. Inspected con- tainment liner installation. Reviewed quality control program for concrete, reinforcement bar and containment liner activities. The program relating to blasting control was discussed.
11/29-30/67	Site Inspection	Reviewed corrective actions on containment liner bulge. Inspected records on containment liner plate and reinforcement bar materials. Reviewed cadweld splice quality control program and information relating to decrease in cadweld strengths. Inspected concrete compressive strength results. Reviewed blasting control program.

<u>Date</u>	<u>Type Inspection</u>	<u>Scope of Inspection</u>
2/27-28/68	Site Inspection	Reviewed quality control records on cadweld splicing, concrete, containment liner and blasting. Reviewed quality assurance program relative to procurement of off-site components.
4/22-24/68	Vendor Inspection -- Combustion Engineer- ing, Chattanooga, Tennessee	Reviewed records of reactor vessel fabrication. Witnessed initial closure of reactor vessel head and hydrostatic testing of the vessel.
3/14/68	Site Inspection	Reviewed quality assurance programs and availability of records for procured components.
6/17-18/68	Site Inspection	Inspected containment liner, cadweld splice, concrete, and blasting records. Reviewed the spent fuel storage liner installation. Inspected steam generator components and reviewed photographs of the steam generator movement from the barge to the site.
6/19/68	Site Inspection	Reviewed vendor inspection reports for procured components. Reviewed purchase specification for the steam generators and the safety injection accumulators.
7/8-9/68	Vendor Inspection Chicago Bridge & Iron, Greenville, Pennsylvania	Reviewed purchasing, quality control, production, and records control for fabrication of the containment liner.
9/27 and 30/68	Site Inspection	Reviewed records pertaining to the containment liner, cadweld splicing and concrete. Reviewed the material receipt inspection program and welding procedures for the safety injection system. Inspected component storage areas. Visually observed the conditions relating to the steam generators and reactor vessel. An initial review of training and preoperational testing was made.

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10/8/68	Site Inspection	Reviewed electrical design criteria relating to cable sizing and tray loading.
11/20-21/68	Site Inspection	Reviewed testing records for cad-weld splicing and concrete activities. Reviewed actions taken to resolve quality deficiencies in the conventional and safety injection system pipe. Inspected the reactor vessel, steam generators, and reactor coolant pumps for visible deficiencies.
1/7-9/69	Vendor Inspection - Dravo Corporation, Marietta, Ohio	Inspected fabrication and quality control records pertaining to pipe procured.
1/20 and 24/69	Site Inspection	Reviewed cadweld splicing and concrete test records. Inspected records and procedures pertaining to field fabrication of the reactor coolant system and the steam generator girth welding. Reviewed resolution status of identified conventional pipe deficiencies. Observed machining of the reactor vessel lower internal supports and electrical installation.
3/4-5/69	"	Reviewed records pertaining to cad-weld splicing and reactor coolant system welding. Inspected safety injection system weld records and field conditions. Observed steam generator fitup and girth welding and reviewed associated records. Inspected external storage of components.
3/18-21/69	Vendor Inspection - Westinghouse Electric Corporation, Lester, Pennsylvania	Reviewed quality control programs and essential documentation for the steam generators.

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4/22-23/69	Site Inspection	Reviewed pipe specifications, vendor assembly records, storage and installation as related to investigations of piping fabricators' practices.
4/17 and 5/15, 22, 23/69	"	Reviewed quality control records for cadweld splicing, reactor coolant system welding, safety injection system site erection, and the spent fuel pit liner. Reviewed actions taken relative to safety injection and conventional system pipe component deficiencies. Inspected revised steam generator girth weld procedures and records relating to this activity. Reviewed activities associated with pipe fabrication investigations.
6/17, 7/1-2/69	"	Inspected quality control records for cadweld splicing, concrete placement, and welding for the reactor coolant and safety injection systems. Reviewed electrical cable placement control programs and status of investigation relating to pipe procurement. Inspected pipe supports, component outside storage and code stamping of components.
7/23-24/69	Site Inspection	Reviewed progress relating to resolutions pertaining to pipe investigation. Inspected portions of the safety injection system mechanical components to determine proper physical arrangements. Reviewed welder and weld procedure qualification and welding performance for the control rod vessel head seal welds.

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8/26, 27, 29/69 and 9/10/69	Site Inspection	Reviewed the status of the pipe investigation and the proposed organizational changes relating to the establishment of the Wedco, subsidiary of Westinghouse. Observed reactor coolant system welding. Inspected the electrical cable placement and separations programs. Reviewed the physical layout and preoperational checkout of the fuel storage building. Reviewed procedures for fuel element receipt and storage.
9/30/69 and 10/1-2/69	"	Continued the review of the pipe investigation. Reviewed welding records for the reactor coolant safety injection systems. Inspected electrical cable placement program and conformance to separation criteria. Observed the initial receipt and handling of fuel assemblies. Reviewed records relating to containment liner installation at the construction access openings. Reviewed reactor vessel nozzle weld overlay process. Observed attachment of reactor vessel internals vibration detector and control programs for the vessel internals.
12/9-19/69	Quality Control Audit at the site, Con Ed Engineering offices, and Westinghouse Electric Company at Monroeville and Cheswick, Pennsylvania.	Team inspection to evaluate quality control of preselected portions of the reactor coolant, safety injection, main steam, and electrical systems.
2/10/70	Management Meeting	Discussed results of quality control audit performed in December 1969.

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1/22/70 and 2/6 and 11/70	Site Inspection	Reviewed final status of pipe investigation. Inspected the general preoperational test program and initial portions of system flushing and hydrostatic testing procedures. Reviewed conformance to reactor pressure boundary criteria for installed components.
3/26-27/70	"	Continued inspection of preoperational testing program. Reviewed placement and surveillance activities for electrical cables, placement of cadwelds at the containment construction access openings, and status of resolution of items identified during the Quality Control Audit.
4/10, 21, 22/70	"	Continued inspection of the preoperational test program, electrical cable placement, and containment closure. Reviewed the proposed operating organization and status of operator training. Reviewed installation of vibrational detection instrumentation for the core internals.
5/6-8/70	"	Continued inspection of preoperation test program, electrical installation and containment closure. Reviewed status of mechanical surface cleanup.
5/22, 25, 26/70, 6/3, 11, 12, 15, 16/70	"	Continued inspection of the preoperational testing program, electrical installation control programs, mechanical systems cleanup review, and evaluation of reactor pressure boundary components. Made initial inspection of radiation monitoring and waste handling systems.

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6/26 and 29/70, 7/8-9/70	Site Inspection	Witnessed the reactor coolant system hydrostatic test. Continued inspection of preoperational test programs, electrical installation reviews, and previously identified and unresolved items. Made initial inspection of the operating procedure program and nuclear facility safety committee structure and involvement. Reviewed status of previously identified items requiring resolution.
7/30/70 8/4, 5, 19, 24, 25/70	"	Continued inspections of preoperational test programs. Reviewed status of electrical installation, mechanical systems cleanup, reactor pressure boundary, and containment closure activities. Reviewed conditions noted during preservice UT inspection of the pressurizer.
9/8, 23, 25/70	"	Continued inspection of preoperational test program, mechanical system cleanup & containment closure activities. Reviewed installation control programs for pipe supports. Examined ultrasonic test data for the pressurizer base plate material.
10/7, 8, 13, 14/70	"	Continued inspection of the preoperational testing program, mechanical system cleanup, containment closure, and pipe support installation. Reviewed pipe penetration bellows welding and materials documentation. Continued inspection relating to reactor pressure boundary components, electrical design reviews, and electrical cable placement surveillance. Reviewed organization and involvement of the Nuclear Safety Committee. Continued evaluation of the pressurizer base plate material. Reviewed status of previously identified items requiring resolution.