TABLE 2.2.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS
(continued)

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
6. Main Steam Line Radiation - High, High#	≤ 3.0 x full power background	≤ 3.6 x full power background
7. Drywell Pressure - High	≤ 1.68 psig	≤ 1.88 psig
8. Scram Discharge Volume Water Level - High		
a. Float Switch	Elevation 110' 10.5"	Elevation 111' 0.5"
b. Level Transmitter/Trip Unit	Elevation 110' 10.5"*	Elevation 111' 4.5"*
9. Turbine Stop Valve - Closure	≤ 5% closed	≤ 7% closed
10. Turbine Control Valve Fast Closure, Trip Oil Pressure - Low	≥ 530 psig	≥ 465 psig
11. Reactor Mode Switch Shutdown Position	NA	NA
12. Manual Scram	NA	NA

*80.5" above instrument zero EL 104' 2" for Level Transmitter/Trip Unit A&B (South Header) 83.25" above instrument zero EL 103' 11.25" for Level Transmitter/Trip Unit C&D (North Header)

#Within 24 hours prior to the planned start of the hydrogen injection test, with reactor power at greater than 22% of RATED THERMAL POWER, the normal full power radiation background level and associated trip setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and the associated trip setpoints shall be set within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection test or within 12 hours of establishing reactor power levels below 22% of RATED THERMAL POWER, while these functions are required to be OPERABLE.

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

ACTION

ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 21 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 22 - Be in at least STARTUP within 6 hours.

ACTION 23 - Close the affected system isolation valves within one hour and declare the affected system inoperable.

ACTION 24 - Restore the manual initiation function to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

ACTION 25 - Restore the manual initiation function to OPERABLE status within 8 hours or close the affected system isolation valves within the next hour and declare the affected system inoperable.

ACTION 26 - Establish SECONDARY CONTAINMENT INTEGRITY with the Filtration, Recirculation and Ventilation System (FRVS) operating within one hour.

ACTION 27 - Lock the affected system isolation valves closed within one hour and declare the affected system inoperable.

ACTION 28 - Place the inoperable channel in the tripped condition or close the affected system isolation valves within one hour and declare the affected system inoperable.

ACTION 29 - Place the inoperable channel in the tripped condition or establish SECONDARY CONTAINMENT INTEGRITY with the Filtration, Recirculation, and Ventilation System (FRVS) operating within one hour.

NOTES

* When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

** When any turbine stop valve is greater than 90% open and/or when the key-locked bypass switch is in the Norm position.

\# Refer to Specification 3.1.5 for applicability.

\#\# Within 24 hours prior to the planned start of the hydrogen injection test, with reactor power at greater than 22% of RATED THERMAL POWER, the normal full power radiation background level and associated trip setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip setpoints may be adjusted during the test progress based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and the associated trip setpoints shall be set within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection test or within 12 hours of establishing reactor power levels below 22% of RATED THERMAL POWER, while these functions are required to be OPERABLE.

(a) A channel may be placed in an inoperable status for up to 2 hours for required surveillance without placing the trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter.

(b) Also trips and isolates the mechanical vacuum pumps.

(c) Also starts the Filtration, Recirculation and Ventilation System (FRVS).

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
7. RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION		
a. Reactor Vessel Water Level - Low, Level 3	≥ 12.5 inches*	≥ 11.0 inches
b. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	≤ 82.0 psig	≤ 102.0 psig
c. Manual Initiation	NA	NA

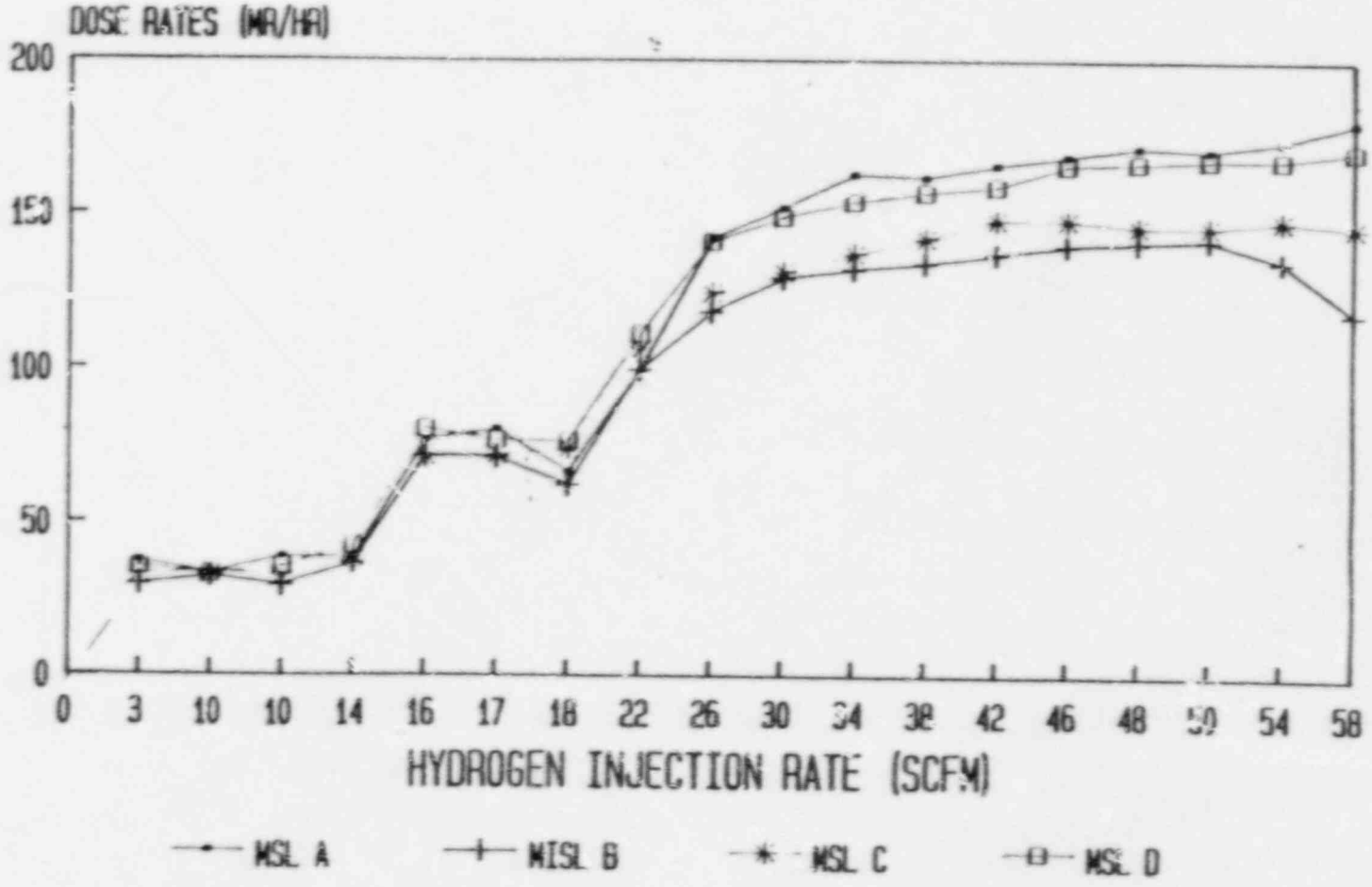
*See Bases Figure B 3/4 3-1.
**Initial setpoint. Final setpoint to be determined during startup test program.
***These setpoints are as follows:
160°F - RWCU pipe chase room 4402
140°F - RWCU pump room and heat exchanger rooms
135°F - RWCU pipe chase room 4505
#30 minute time delay.
##15 minute time delay.
###Within 24 hours prior to the planned start of the hydrogen injection test, with reactor power at greater than 22% of RATED THERMAL POWER, the normal full power radiation background level and associated trip setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and the associated trip setpoints shall be set within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection test or within 12 hours of establishing reactor power levels below 22% of RATED THERMAL POWER, while these functions are required to be OPERABLE.

INSERT
FOR TECHNICAL SPECIFICATION TABLES

2.2.1-1, Reactor Protection System Instrumentation Setpoints
3.3.2-1, Isolation Actuation Instrumentation
3.3.2-2, Isolation Actuation Instrumentation Setpoints

The hydrogen water chemistry (HWC) system shall not be placed in service until reactor power reaches 20% of RATED THERMAL POWER. After reaching 20% of RATED THERMAL POWER, and prior to operating the HWC system, the normal full power background radiation level and associated trip setpoints may be increased to levels previously measured during full power operation with hydrogen injection. Prior to decreasing below 20% of RATED THERMAL POWER and after the HWC system has been shutoff, the background level and associated setpoint shall be returned to the normal full power values. If a power reduction event occurs so that the reactor power is below 20% of RATED THERMAL POWER without the required setpoint change, control rod motion shall be suspended (except for scram or other emergency actions) until the necessary setpoint adjustment is made.

HYDROGEN MINI TEST
MAIN STEAM-LINE MONITOR RESPONSE



ATTACHMENT 3

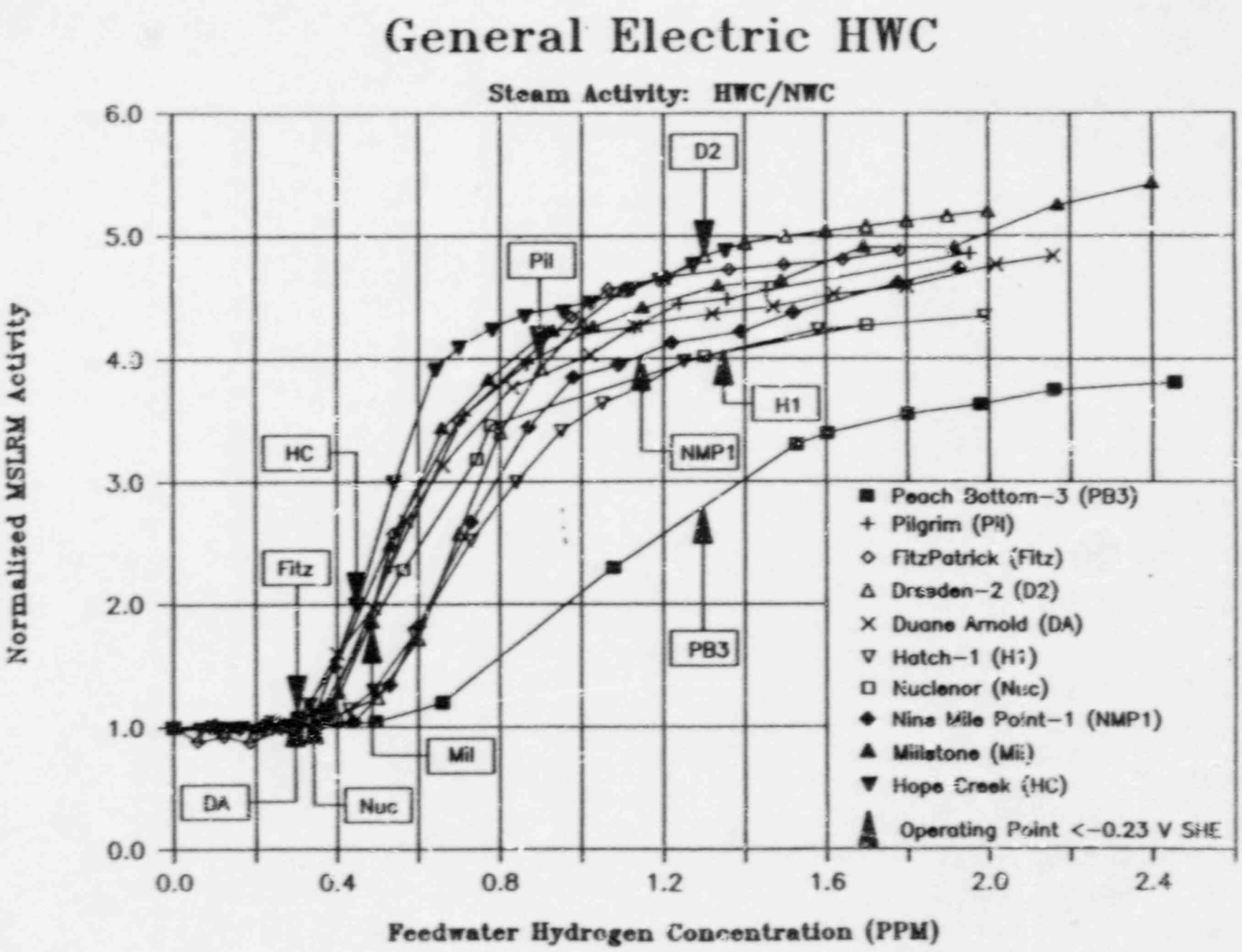


Figure 1-3 Normalized MSLRM Activity vs Feedwater Hydrogen Concentration in Ten HWC Mini Tests

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	:	Docket No. 50-352
PHILADELPHIA ELECTRIC COMPANY	:	
(Limerick Generating Station, Unit No. 1)	:	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Application for Amendment of Facility Operating License NPF-39 in the above captioned matter were served on the following by deposit in the United States Mail, first class postage prepaid, on the 29th day of September, 1988.

William T. Russell, Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

T. J. Kenny
U.S. Nuclear Regulatory Commission
Senior Resident Inspector
P.O. Box 47
Sanatoga, PA 19464

Thomas Gerusky, Director
Bureau of Radiological Protection
Department of Environmental Resources
P.O. Box 2063
Harrisburg, PA 17120

Eugene J. Bradley

Eugene J. Bradley

Attorney for
Philadelphia Electric Company