



August 23, 1991

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Breazeale Nuclear Reactor Building

The Pennsylvania State University

University Park, PA 16802

Nuclear Regulatory Commission
Document Control Room
Washington, DC 20555

REF: Revision to the Safety Analysis Report
Penn State Breazeale Reactor
License No. R-2, Docket No. 50-05

Dear Sir or Madame:

On April 19, 1991, an amendment request was filed for the above-referenced license. The submittal included revisions to the Safety Analysis Report which introduced numerous new terms and acronyms related to the new reactor control system. For the convenience of the reader, a glossary was prepared and is hereby submitted as a further amendment to the Safety Analysis Report. Instructions for updating the report are as follows:

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Sincerely,

M. H. Voth

Marcus H. Voth, Director
Radiation Science and Engineering Center

Attachments

MHV/tjw

cc: Charles L. Hosler
NRC Region I Administrator

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Safety Analysis Report

for the

Penn State Breazeale Reactor

License Number R-2
Docket Number 50-05

The Pennsylvania State University
University Park, PA 16802

August 23, 1991

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Safety Analysis Report

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N. GLOSSARY

TRADEMARKS

TRADEMARKCOMPANY

IBM, AT	International Business Machines Corporation
PROTROL	Atomic Energy of Canada Ltd.
Megatorque	Motornetics Corporation; subsidiary of Nippon Seiko K.K. (NSK)
TRIGA	General Atomics, San Diego, CA.

GLOSSARY

ADC	Analog to Digital Converter.
AI	Analog Input.
AO	Analog Output.
BIOS	Basic Input/Output System.
CANDU	Canada Deuterium Uranium Nuclear Power Reactors (PHWR).
CCTV	Closed Circuit Television.
CPI	Computer Products Inc.
CRC	Cyclic Redundancy Check Code- This is a polynomial based error detection method typically used for network systems. This is a Consultative Committee on international Telephony and Telegraphy (CCITT) standard.
CSS	Control and Safety System.
DAC	Digital to Analog Converter.
DBE	Design Basis Event
dec	Decades - 10 folds of fraction full power.
DEFPAR	Definable Parameter (PROTROL block 0 tuning).
DCC	Digital Control Computer. The DCC-X computer performs all required protection, control, and monitoring functions. The DCC-Z computer performs only monitoring and historical data collection. The DCC-Z computer is not required to be operational for safe operation of the reactor.
DI	Digital Input.

DO	Digital Output.
DOS	Disk Operating System.
dps	Decades per Second.
EOT	End of Travel.
fac	Factor.
FC	Fission Chamber.
ffp	Fraction Full Power.
fps	Fractional Power (present value) per Second.
frac	Fraction.
GIC	Gamma Ion Chamber.
LED	Light Emitting Diode.
IO	Input/Output.
ILDB	Interloop Data Base.
LAN	Local Area Network.
LN	Natural Logarithm.
LSS	Limiting Safety System.
PCMS	Protection, Control and Monitoring System.
PSBR	Penn State Breazeale Reactor.
PSU	Penn State University.
RAM	Random Access Memory.
RSS	Reactor Safety System.
SCRAM	Reactor Safety Shutdown.
TC	Thermocouple.
TR	Transient Rod.

Watchdog Circuit A circuit consisting of a timer and a relay. The timer energizes the relay as long as it is reset prior to the expiration of the timing interval (see figure 7-7). If it is not reset within the timing interval, the relay will de-energize thereby causing a SCRAM. The term "kicked the watchdog" is slang for resetting the watchdog timer. The term "killed the watchdog" is slang for ceasing to reset the watchdog timer.

Wrap Around Describes the situation where an output signal is fed back so that the output signal can be verified (see figure 7-7).