

108050000-TD80022-R00

Spallation Neutron Source

Site Utilities Grinder Pump Controls Functional System Design (FSD)

January, 2003

SNS Project Engineer



A U . S . D e p a r t m e n t o f E n e r g y M u l t i l a b o r a t o r y P r o j e c t

SPALLATION NEUTRON SOURCE

Argonne National Laboratory • Brookhaven National Laboratory • Lawrence Berkeley National Laboratory • Los Alamos National Laboratory • Oak Ridge National Laboratory

Site Utilities Grinder Pump System Controls Description
TD80022 Rev 0, January 13, 2003

Operating Philosophy

Purpose:

The purpose of the grinder pump system operation is to:

- a) Provide alarm indication for pump failure, low or high level alarm, and loss of power.

Assumptions:

None

Operator Controls and Operating Modes

Running both pumps simultaneously is not acceptable.

OPERATOR INTERFACE DEFINITIONS

Local Hardware/Manual Operator Controls

- 1) Off – Turn off each grinder pumps (*P-GP-01, P-GP-02*)
- 2) On – Turn on each grinder pumps (*P-GP-01, P-GP-02*)

Software HMI/EPICS Digital Operator Controls

None

Software HMI/EPICS Digital Displays

None

Software HMI/EPICS Analog Operator Controls

None

Software HMI/EPICS Analog Displays

None

Alarms

- 1) Power loss failure (*YA9702*)
- 2) Grinder pump failure (*YA9701*)
- 3) Low or high level alarm (*LA9701*)

Control Logic Description

None

