

E.W. Howell Co., LLC

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REQUEST FOR INFORMATION**No. 00029****TITLE:** Pressure Switches**DATE:** 11/3/2009**PROJECT:** BNL CCWF-II**JOB:**

TO: Attn: Alan Raphael
 Brookhaven National Laboratory
 Brookhaven Sciences Associates, LLC
 Project Modernization Office
 Upton, NY 11973-5000
 Phone: 631-344-5854

STARTED:**COMPLETED:****REQUIRED:** 11/10/2009**WORK****IMPACT:** Unknown**SCHEDULE****IMPACT:** Unknown**COST****IMPACT:** Unknown**QUESTION:**

11/3/09

Pressure Switches

Drawings MP-603 and MP-604 show differential pressure switches at the chillers which get wired back to the PLC system. Will the logic of the system use these switches to prove flow prior to starting the chiller, or are additional switches required to be installed and wired to the chiller control panel?

CC: File

PROPOSED SOLUTION:**ANSWER:**

Additional pressure differential switches (PDS) wired to the chiller control panel are not required.

MP-604 Condenser Water P&ID shows two PDS.

These are differential pressures between inlet and outlet condenser water for chillers 5 and 6. They are tagged in the PLC as DI_CHL5_PDS744 and DI_CHL6_PDS749 and constitute the chiller start permissive contacts. So, they are used to interlock the chillers from starting.

MP-603 Chilled Water P&ID shows two PDS.

They are tagged in PLC as DI_CHL5_PDS601 and DI_CHL5_PDS602. Because these indicate differential pressure between chilled water return and supply, they are not used for chiller start interlocks. They are used as chilled water flow monitors and are monitored in the HMI.

Gary Hida/Bill Harrison, Giffels/IBI Group

11-6-09

Requested By: E.W. Howell Co., LLC**Date:** _____**Signed:** _____

Lauren Bergin