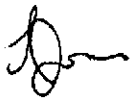


CALIFORNIA INSTITUTE OF TECHNOLOGY
Laser Interferometer Gravitational Wave Observatory (LIGO) Project

To: J. Worden
From: L. Jones 
Phone: 2970
Refer to: LIGO-E950095-00-B
Date: November 13, 1995

Subject: PSI's Specification for 112 cm and 122 cm gate valves, AV049-2-005, Rev. 0


My comments on the Preliminary issue of the subject document are as follows:

- 4.1.1 & 4.1.4: Can we get them to manifold the pumping annuli for the valve flange, gate, and bonnet seals? This would seem desirable. Shall we specify the line size, connection type & size? For our planning: do we need to utilize annulus pumping during module acceptance testing and during LIGO hold pumping? Would the auxiliary pump sets be appropriate for that?
- 4.1.6: These support details will be needed by CBI ASAP. How quickly can they be supplied (dimensions, loads)?
- 4.1.11: Weld joint details are TBD by CBI--how soon do you need to have these?
- 4.1.14: CBI will review the 21,000 lb additional piping load requirement. How soon is this response required?
- 4.1.16 & Flange drawings: I believe that Parker's recommendations are for 16 microinch finish for vacuum O-rings. Shouldn't we require that?
- 4.2.2: What does "working height" mean (controller bracket height)?
- Packaging information for shipping was not included. How are the flanges and weld stubs planned to be protected & sealed?
- Witnessing privileges: can CBI witness the design review and shop leak test, if they desire?

lj

cc: M. Coles
G. Stapfer
R. Weiss
Chronological File
Document Control Center

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