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Date: 24 February 2008

Refer to: L080020-00-R

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Interferometer Sensing and Control: Conceptual and Design Requirements Review

Review schedule

- Documentation available by ~2/27
- Committee questions provided to the ISC team by ~3/12
- Committee and ISC team telecon week of 3/31
- Committee report issued on or about 4/7

Documentation under review

Interferometer Sensing and Control Design Requirements, LIGO-T070236

AdvLIGO Interferometer Sensing and Control Conceptual Design, LIGO-T070247

(Documents to be updated; most recent version at any given time can be found on the AdL Wiki at http://ilog.ligo-wa.caltech.edu:7285/advligo/ISC_Requirements_and_Conceptual_Design_Review)

Charge

The following review committee charge has been developed with the [Guidelines for AdL Construction Activities](#) (M050220-06) in mind, to which the committee should refer, but tailored to this review:

1) With regard to requirements:

- a. determine whether the requirements identified in the Design Requirements Document (DRD) are complete (including functional, performance and interface requirements),
- b. advise whether proposed requirement values are appropriate,
- c. if needed, recommend additional requirements to be specified, and
- d. recommend other appropriate actions.

2) With regard to the conceptual design:

- a. evaluate the conceptual design of the ISC to determine if it is consistent with the DRD

- b. advise on whether the recycling cavity design selection is appropriate and based upon sufficiently complete information,
- c. advise whether the design is sufficiently developed to proceed with the Preliminary Design phase.
- d. advise whether the Project cost and schedule appears appropriate
- e. advise whether there are any significant remaining or newly-perceived risks in meeting the requirements

3) With regard to the preliminary design:

- a) advise on the preliminary design work plans, in particular the prototyping and testing plans

The committee should develop a set of actions as a result of the review, and should follow up on the completion of the actions as part of the review process