



## **Keck Next Generation Adaptive Optics Control Software Architecture Review Charge and Review Process**

Erik Johansson  
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The NGAO Project Manager has asked me to lead an internal review of the Control Software Architecture we are proposing for NGAO. The purpose of the review is to evaluate the proposed architecture to confirm that it will meet the requirements of NGAO and can be used to design and implement the NGAO distributed control system. A successful review will give confidence to the NGAO controls team and to the larger NGAO design team that the NGAO Control System can successfully be implemented using the proposed architecture.

We have assembled a review panel consisting of two experts from the NGAO team and two from Keck Observatory. The review panel has been provided a detailed design document describing the proposed software architecture. Some supplemental material including this document, requirements for the architecture, and middleware performance comparisons will be provided to them as well. Using this material, the panel is asked to evaluate the proposed architecture for the following:

- Technical feasibility
- Risk
- Satisfies requirements
- Cost effectiveness

The review will take place on Monday, August 24, at 9 AM HST. We will use PolyCom video to connect with participants from CalTech and UCSC. The review committee consists of the following people:

- Al Conrad (WMKO), Chair
- Kevin Tsubota (WMKO)
- Don Gavel (UCSC)
- Rich Dekany (CalTech).

The presentation team consists of the following people:

- Erik Johansson (WMKO)
- Jimmy Johnson (WMKO)
- Doug Morrison (WMKO).

The agenda for the review is as follows (all times are HST):

9:00 AM: Welcome and introductions  
9:05 AM: Overview Presentations  
10:50 AM: Break  
11:00 AM: Open discussion and questions  
12:00 Noon: Review committee closed session  
12:45 PM: Review committee feedback to team

Reviewers may submit written questions to the Control SW team on areas or issues they would like to see covered during the review. Questions should be directed to Erik Johansson ([erikj@keck.hawaii.edu](mailto:erikj@keck.hawaii.edu)). Questions received by COB on Wednesday, August 19, will be addressed with a written response during the review presentations. We will make every attempt to provide formal written responses to questions received after the 19<sup>th</sup>; however, we may only be able to provide verbal responses, depending on the circumstances.

At the conclusion of the review, the committee is asked to provide the NGAO Project Manager and the Controls SW team with verbal feedback as to their recommendations and concerns. A final report of

findings, recommendations and comments is requested within one week of the review. The written report should be addressed to the NGAO Project Manager.

Thank you for your participation in the review process and for helping to ensure the success of the NGAO Control System.