Appendix A – Charge to the Physics Validation Review Panel

A) What is the Scientific and/or Technical Merit of the Proposed Research? In particular,

- Does the proposed experiment address important problems in plasma science, plasma technology, fusion energy science, or fusion energy technology?
- How does the proposed experiment compare with other research in its field, both in terms of scientific and/or technical merit and originality?
- What is the likelihood that it will lead to new or fundamental advances?

B) How appropriate is the proposed Method or Approach? In particular,

- Are the physics requirements for the proposed facility appropriate for the mission?
- Has a sound physics basis been established for developing the conceptual design?
- Does the proposed research employ innovative concepts or methods?
- Does the applicant recognize significant potential problems and consider alternative strategies?

C) Are the project personnel, management arrangements, research environment and institutional support adequate to carry out the proposed program? Does the proposed experiment take advantage of unique facilities and capabilities and/or make good use of collaborative arrangements?

D) How reasonable, appropriate and adequately defined is the proposed budget?

E Are the plans for developing the conceptual and engineering designs and for finalizing cost and schedule appropriate?

F) How well does the proposed research address the FESAC 10-Year goal to determine the attractiveness of a Compact Stellarator?