Statement of the Exploratory Plasma Research (EPR) Executive Committee

The members of the EPR (formerly ICC) Executive Committee urge the FESAC subcommittee on MFE Priorities to consider the following high-level recommendations:

1. The EPR Committee calls attention to the fact that funding for the ICC Program has been reduced to less than 3% of the overall FES budget. Given the high leverage of the program, the opportunities for breakthroughs, and major contributions to workforce development, the Committee feels that funding in the range of 5-10% of the overall FES budget is justified and appropriate.

2. The focus of the ICC Program was recently shifted toward addressing exclusively the recognized scientific and technological (S&T) gaps of the tokamak approach to fusion energy. We recommend a more inclusive ICC/EPR Program that BOTH continues to address recognized S&T gaps of MFE development (as identified in the Thrusts of the MFES ReNeW report) AND encourages the proposal of any exploratory fusion research aimed at reducing the cost and time-scale for fusion energy development, for both tokamak and non-tokamak approaches.

3. A reinvigorated ICC/EPR Program should adopt additional criteria for evaluating new and continuing research programs within its portfolio. The criteria should include the potential for (i) economic competitiveness of the proposed fusion energy development path, and/or (ii) overcoming recognized critical S&T gaps for fusion energy development. Fusion systems analyses should be utilized for developing goals and methodology for the reinvigorated program. The program criteria should be developed through expert input and consensus.

Signed by the following members of the EPR Executive Committee:

Scott Hsu, LANL
Brett Chapman, University of Wisconsin
Harry McLean, LLNL
Brian Nelson, University of Washington
Simon Woodruff, Woodruff Scientific
Michael Brown, Swarthmore College, Chair (Recused)