August 31, 2010

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA/**

SUBJECT: STAFF REQUIREMENTS – COMGBJ-10-0004/COMGEA-10-0001 – USE OF RISK INSIGHTS TO ENHANCE SAFETY FOCUS OF SMALL MODULAR REACTOR REVIEWS

The staff should provide to the Commission a policy paper, with near-term efforts focused on integral pressurized water reactor designs, that addresses the following:

a) Development of a framework, implementation strategy, and plans and schedules to more fully integrate the use of risk insights into pre-application activities and the review of small modular reactor applications (SMR), consistent with Commission Policy Statements. The initial effort should focus on how risk insights would be used to identify risk-significant systems, structures, and components (SSCs) and other aspects of the design that contribute most to safety.

b) Alignment of review focus and resources, consistent with regulatory requirements, to risk-significant SSCs and other aspects of the design that contribute most to safety to enhance the efficiency of the review process. The plan should address the use of risk insights in determining which portions of existing review guidance (e.g., standard review plans) should be applied to SMRs.

c) Development of risk-informed licensing review plans for each of the SMR reviews including the associated pre-application activities.

d) Development of a new risk-informed regulatory framework building, as a long-term objective, on the SMR reviews, insights gained from the NGNP review activities and the earlier Technology Neutral Framework presented in NUREG-1860.

e) How the staff intends to develop resolution strategies for – and engage the Commission on – the substantive policy considerations for SMR licensing laid forth in SECY-10-0034, "Potential Policy, Licensing, and Key Technical Issues for SMR Designs." Some of these policy issues include accident source terms that would be used for the assessment of the effectiveness of the containment and plant mitigation features, site suitability, and emergency planning; requirements for operator staffing for small or multi-module facilities; and security and safeguards requirements for SMRs.

f) A discussion of how staff would propose to align (or de-conflict) NRC resources within the New Reactors area to support this development should be included in the paper.

g) The paper should also provide a discussion on the timing and approach for seeking external stakeholders' views on this proposal.

h) The plans and schedules to be included in the staff's paper should account for the existence of ongoing pre-licensing activities with small modular reactor (SMR) vendors who have already discussed their licensing strategies with the NRC staff. In developing this paper, the staff should seek input from SMR vendors and other relevant external stakeholders.

(EDO) (SECY Suspense: 6 months from date of SRM)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR