

**RULEMAKING ISSUE**  
**NOTATION VOTE**

**RESPONSE SHEET**

**TO:** Brooke P. Clark, Secretary  
**FROM:** Chairman Hanson  
**SUBJECT:** SECY-21-0098: Proposed Rule: Advanced Nuclear  
Reactor Generic Environmental Impact Statement  
(RIN-AK55;NRC-2020-0101)

Approved  X  Disapproved  X  Abstain       Not Participating      

**COMMENTS:** Below       Attached  X  None      

**Entered in STARS**

Yes  X   
No      

\_\_\_\_\_  
Signature  
Christopher T. Hanson

\_\_\_\_\_  
Date 08/23/2022

Chairman Hanson's Comments on SECY-21-0098, "Proposed Rule: Advanced Nuclear Reactor Generic Environmental Impact Statement (RIN 3150-AK55; NRC-2020-0101)"

I thank the staff for preparing the draft advanced nuclear reactor generic environmental impact statement (ANR GEIS). The NRC needs to be prepared for a variety of future scenarios, including one that requires the agency to respond to a significant number of license applications. By developing the ANR GEIS, the staff has demonstrated our agency's continued commitment to advanced reactor readiness and regulatory certainty. While the development of a generic analysis by the staff is integral to agency preparedness, I am not convinced that codification of the ANR GEIS is necessary or beneficial at this juncture. Therefore, I approve issuance of the ANR GEIS for public comment, but I disapprove continuation of the rulemaking process at this time. The staff should update the *Federal Register* Notice accordingly.

A significant body of knowledge and experience supports the draft ANR GEIS, including environmental impact statements generated to support ten new light water reactor combined license applications, five early site permit applications, and many more power reactor license renewals. This data is critical to the ANR GEIS and serves as a solid basis for the staff's conclusions. However, the plant parameter envelope methodology used to develop this GEIS is novel, and with every novel approach, there are lessons to be learned. Further, we have never had a GEIS for new reactor construction, let alone the kinds of novel technologies currently under development. I expect that as we receive new applications and use the GEIS to review them, we will be able to identify ways to improve its useability or simply confirm the assumptions made by the staff.

Therefore, codifying the ANR GEIS at this stage would be premature. We have multiple examples of uncoded generic analyses, including the majority of our GEISs, which are continually used by applicants and the staff. Codified or not, these analyses promote consistency, efficiency, and regulatory certainty. As with these other generic analyses, the staff should utilize the ANR GEIS to review upcoming applications. After five years, the staff should determine whether the ANR GEIS should be updated using lessons learned from these early reviews of advanced reactor applications and provide an options paper to the Commission that explores the utility of codifying the analysis in our regulations.

Lastly, the ANR GEIS uses the definition of "advanced nuclear reactor" from the Nuclear Energy Innovation and Modernization Act (NEIMA). However, the agency has moved away from using this definition in other contexts and should carefully consider what purpose this definition serves for the ANR GEIS. There appears to be no technical reason that analyses in the ANR GEIS could not be applied to any new reactor application provided the reactor application meets the values and the assumptions of the plant parameter envelopes and the site parameter envelopes used to develop the GEIS. The staff should use the public comment process to solicit feedback on the current definition and alternative options.