

**Risk Informed Steering Committee  
Public Meeting  
Presentation by Working Group #2  
on Treatment of Uncertainties**

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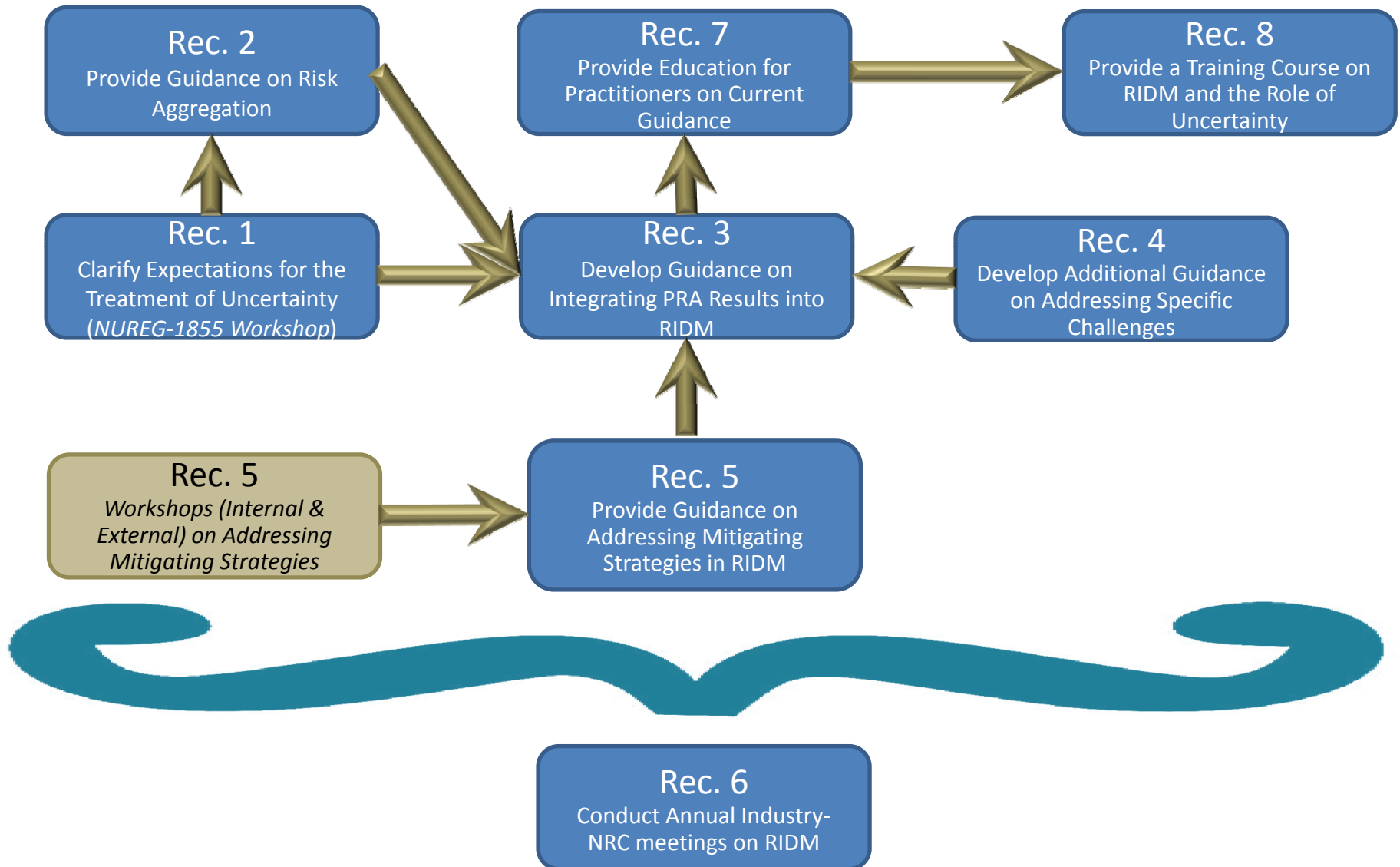
# Introduction

- ❖ NEI WG#2 submitted white paper providing eight recommendations.
- ❖ NRC WG#2 has evaluated the eight recommendations.
- ❖ NRC WG#2 has identified short-term and long-term activities supporting the eight recommendations, and line organization responsibilities.

# Summary of NEI Recommendations and Lead Line Organizations

NEI Recommendation	Lead Organization
1. Clarify Expectations for the Treatment of Uncertainty	RES
2. Provide Guidance on Risk Aggregation particularly in light of uncertainties ( <i>note: subsumed into Rec. 1</i> )	RES
3. Develop Guidance on Integrating PRA Results into a Decisionmaking Framework	RES-NRR-NRO
4. Develop Additional Guidance on Addressing Specific Challenges	RES
5. Provide Guidance on Addressing Mitigating Strategies in RIDM	NRR\NRO
6. Conduct Annual Industry-NRC meetings on RIDM	NRR\NRO
7. Provide Education for Practitioners on Current Guidance	RES-NRR-NRO
8. Provide a Training Course on Risk-informed Decisionmaking and the Role of Uncertainty	RES-NRR-NRO-OCHCO

# NRC Perception of Inter-Relationships of NEI Working Group 2 Recommendations



# RES Lead with NRR and NRO Support and Participation (1 of 2)

- ❖ NUREG-1855, Revision 1 has been made publicly available
  - Documented technical guidance relating to treatment of uncertainties and “Aggregation” relative to risk-informed decisionmaking
- ❖ Develop and hold a workshop of NUREG-1855 which will “pilot” (i.e., test) the guidance (2015).
  - Development of workshop has been initiated and is co-sponsored with EPRI
  - Workshop tentatively scheduled for fall 2015; Will include testing guidance on Aggregation
- ❖ Immediately after workshop, develop insights from workshop and applications to determine if and where revision to NUREG is warranted (early 2016).
- ❖ Develop interim guidance (ISG) while NUREG-1855 is being revised to address insights from workshop and applications (2016).

# RES Lead with NRR and NRO Support and Participation (2 of 2)

- ❖ Review other NRC guidance documents:
  - Identify where technical aspects need guidance development such as probabilistic flood hazard analysis (2015/2016)
  - Identify if implementations of RIDM concepts, including consideration of uncertainties, are appropriately consistent (2015/2016)
  - Update guidance documents, as appropriate (NRR or NRO may be lead dependent on the document)(2016/2017/2018)
- ❖ Review currently available PRA training to identify gaps related to training on RIDM with a focus on the role of uncertainties (2015)
  - Develop or revise training to address the identified gaps (NRR or NRO may be lead dependent on the training)(2016/2017)
- ❖ Develop training course on NUREG-1855 (2016)
  - Detailed course for practitioners for internal and external stakeholders (2017)
  - Short (~1/2 to hour) web-based course for managers; be combined with ASME short web-based course on standard, and short web-based course on RG 1.200 (2016)

# NRR/NRO Lead with RES Support and Participation

- ❖ Initiate effort to address the treatment of mitigating strategies within PRA (2015)
- ❖ Hold internal workshop to discuss technical issues associated with providing PRA credit to Mitigating Strategies
  - To be scheduled to occur in 2015
  - Hold public meetings to receive external input (2015/2016)
    - For example, develop enhanced guidance on ex-control room human actions and methods to assess reliability of components
- ❖ Support research activities, as well as any other efforts that may enhance the understanding of the technical aspects related to addressing the uncertainty associated with external hazards and events; for example, probabilistic flood hazard analysis

# In Conclusion

- ❖ Objectives of Working Group #2 accomplished
  - Short-Term & Long-Term activities have been identified.
  - Lead organizations have been identified.
  - Stated dates may change due to higher or competing priorities and available resources.
- ❖ Continued collaboration between internal and external stakeholders will be key to success.