

ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC LEADERSHIP TEAM

December 2023



The mission of the PWR Owners Group is to improve the competitiveness of member plants through cost-effective resolution of issues common to more than one member, and to provide a superior regulatory interface in support of member activities.



THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Mission & Vision

Safety Analysis is the analytical framework that demonstrates safe operation of a nuclear facility. The value that the Analysis Committee brings is the ability to simulate complex phenomena and leverage both utility and vendor expertise to support safe and cost-effective performance of nuclear plants on a cost shared basis.

The ASC strives to develop positions, methods, processes, and tools that provide great value to the membership to solve emergent issues generically, identify cost-effective improvements to plant operation, and support improvements to Emergency Procedures.

MISSION STATEMENT

The Mission of the Analysis Committee (ASC) is to utilize its membership's knowledge and experience to improve plant safety, resolve emergent issues, improve plant operational margins, and implement cost improvements at member's sites.



VISION STATEMENT

The Vision of the PWROG Analysis Committee (ASC) is to support industry efforts to proactively identify beneficial projects and help manage emergent issues for the world-wide fleet as needed.

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

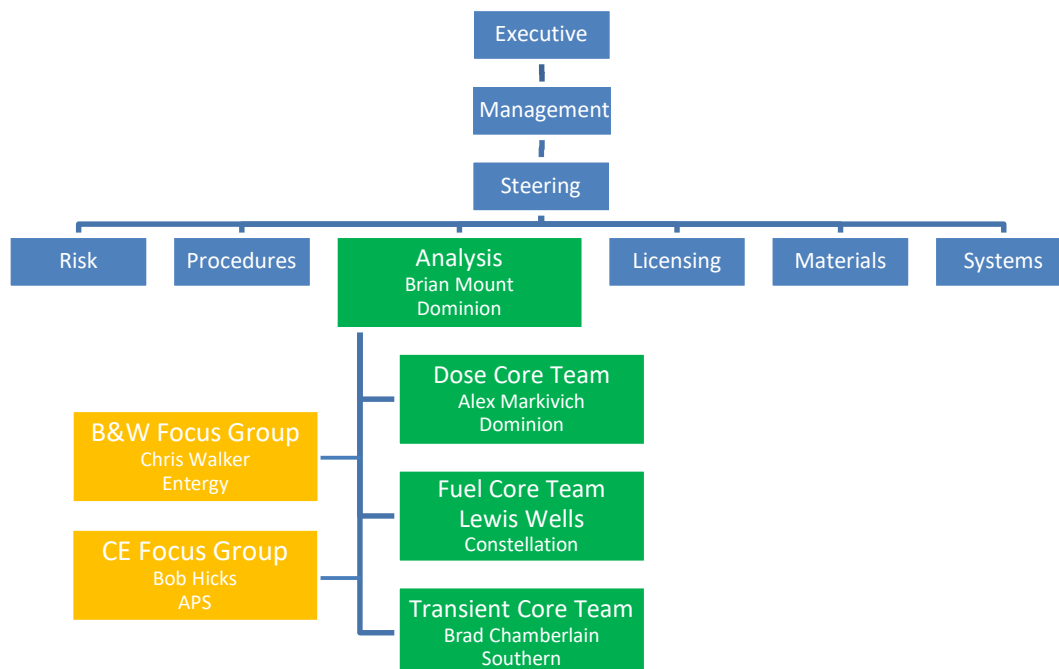
ASC Organization

As one of the six technical committees of the PWROG, the ASC welcomes participation from all utility and vendor members with any level of interest in the activities and projects of the committee. Member and guest participation in ASC meetings is an essential element that enables the ASC to meet the Mission and Vision of the committee.

The ASC is led by a Chair who is voted by the active membership according to the PWROG Charter and Operations Manual. The ASC Chair participates on the Steering Committee with the Chairs of the other technical committees, which enables coordination between the groups as well as interaction with the Management Committee representatives.

Within the ASC, Core Teams or Focus Groups may be initiated to allow members to coordinate activities related to a specific technical focus area. The Core Teams provide input and direction on a group of related activities and drive the creation of new projects ideas that are presented to the full ASC for consideration. The Focus Groups delve deeper into specific technical questions and may coordinate with one or more of the Core Teams. Participation in these groups is optional and open to all members and participants. Each group is led by a utility member that is approved by the ASC Chair. These teams may be created or modified as the needs of the committee change.

Analysis Committee Organizational Structure



THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

The success of the ASC is driven by its people. The table below provides an overview of the general responsibilities of the different roles that an individual can fulfill within the ASC.

ASC ROLE		DESCRIPTION	RESPONSIBILITY/EXPECTATION
	ASC Chair	Elected by the ASC membership and endorsed by the Steering and Management Committee	• Drive the Mission and Vision of the ASC • Preside over all formal ASC meetings • Represent the ASC both within the PWROG and in front of the industry and NRC • Other responsibilities as outlined in the PWROG Charter and Operations Manual
	ASC Program Director	Vendor Member assigned by the PWROG Project Management Office to facilitate the operations of the committee	• Facilitate the organization and execution of all formal ASC meetings • Record all formal correspondence, including final approved Project Authorizations • Respond to member requests and questions • Other responsibilities as outlined in the PWROG Charter, Operations Manual, and Guidelines
	ASC Vice-Chair	Appointed by the ASC Chair	• Preside over ASC activities when the Chair is not available. • This is a leadership development position for individuals and supports succession planning
	ASC Core Team Lead	Appointed by the ASC Chair	• Lead activities in a specific ASC focus area • Organize meetings and present focus area updates at each full Technical Committee meeting. • Interface with vendors as necessary to keep projects moving and develop new PAs • Participate in monthly leadership meetings with the Chair and Program Director
	ASC Focus Group Lead	Appointed by the ASC Chair	• Coordinates with the Core Teams to represent the CE or B&W design • Investigates opportunities for CE and/or B&W units to increase the value received from the PWROG activities.

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC ROLE		DESCRIPTION	RESPONSIBILITY/EXPECTATION
	ASC PA Champion	A volunteer ASC Member that leads the development of a PA	• Works with applicable ASC Core Team Lead and vendor technical lead to develop a specific PA technical description and description of how a product is intended to be implemented • Solicits input from applicable Core Team and/or Focus Group members • Informally endorses a PA prior to vote by the ASC
	ASC Primary Member	Designated by a member utility as the Primary member for a site or for the entire fleet	• Voting according to the PWROG Charter and Operations Manual • Active participation in discussions and sharing OE at the three annual ASC meetings • Active participation in at least one Core Team • Coordinating utility responses to ASC surveys and requests • Involving site and utility Subject Matter Experts in relevant Core Team and Focus Group topics and meetings.
	ASC Alternate Member	Designated by a member utility as a back-up or supplemental member for a site or for the entire fleet	• Delegation of Primary Member responsibilities as agreed or in the absence of the Primary Member
	ASC Participant	Other utility members that participate in or follow specific activities of interest, but are not actively engaged in the committee operations.	• Introducing themselves when they join a meeting, especially if joining late • Active participation in discussions and sharing OE
	ASC Vendor Member	As vendor members of the PWROG, both Westinghouse and Framatome may assign representatives for participation in the meetings, as approved by the ASC Chair.	• Active participation in discussions and sharing OE • Active participation in at least one Core Team • Contributing SME feedback regarding problems or issues brought up by the utility members during ASC meetings
	ASC Guests	Industry or NRC representatives invited to participate in ASC meetings or activities	• Introducing themselves when they join a meeting, especially if joining late • Active participation in relevant discussions

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Focus Area Activities

The Focus Area Activities section provides a high-level summary of both general ASC activities and the applicable Core Team activities. This section is intended to be updated periodically to ensure that the ASC Strategic Roadmap remains a living document with a goal to demonstrate the committee's continuous effort to drive forward to fulfil the ASC's Mission and Vision.

The tables that follow provide the current roadmap of ASC activities. Each table summarizes the roadmap with the following content for each Focus Area:

- Active PAs – Summary of the active ASC Project Authorizations
- Follow Activities – Summary of activities being led by outside groups that the ASC is supporting or following
- Draft PA Ideas being Developed – List of project topics and products under discussion
- Long-Term Interests to Pursue – List of technical areas of interest for the long-term consideration

The Long-Term Interests to Pursue are intended to inspire PA ideas and other activities to follow, which should result in the development and completion of Project Authorizations that bring value to the ASC members. Final ASC products are issued on the PWR Owner's Group website, at www.pwrog.com. All deliverables are issued via letter (format OG-YY-nnn) and can be accessed associated with via the PA's project folder or via searching in the products list.

Current ASC Focus Areas driving to the ASC Mission and Vision:

1. ASC Recurring Activities
2. Dose Core Team
3. Fuel Core Team
4. Transient Core Team
5. B&W Focus Group
6. CE Focus Group

The following guideline is provided for PA development to ensure pricing and value alignment between the ASC Leadership and the vendor leads developing the technical scope.

Project "Size"	Generic (assumes 40 shares in '22)	Cafeteria
Small	< \$200k (< 700 hours)	< \$2500 per share
Medium	\$200k - \$500k (700-1700 hours)	\$2500 - \$7500 per share
Large	> \$500k (> 1700 hours)	> \$5000 per share

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC Focus Area #1

ASC Recurring Activities

Recurring activities that are beneficial to the Mission of the ASC.

Active PAs and Self Assessments

- PA-ASC-2044 ASC Operations Support 2024-2025 (Generic)

Follow Activities

- Interfacing with other TC's; participation in RISD screenings and review selective new PAs for potential synergies or collaboration
- Continue to foster a forum for sharing OE, best practices, and solutions between members
- Proactively developing products that facilitate a predictable regulatory environment
- Knowledge Transfer and new engineer engagement
- Maintain the ASC member relationships to enable emergent responses and gather fast feedback as needed.
- PA-LSC-1895 Eliminate Unnecessary Information from the Design Features Chapter of the TS (TSTF-593)
- RS-2022-041 Revise 10 CFR 50.36 "Technical Specifications"
- RS-2022-035 Relocate TSs Applicable During Shutdown Conditions to Plant Program (Modes 5 and 6)

Draft PA Ideas being Developed

- None.

Long-Term Interests to Pursue

- Gather ideas for ASC Panel Discussions (deep dive) for Future meetings
 - HEU impacts on safety analysis and feed reduction, operations pinch points (FdH and FQ, 24 month fuel-cycles)
 - Safety Analysis role in the 50.69 IDP process
 - Expert panel career Lessons Learned (school of hard knocks)

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC Focus Area #2

Dose Core Team

The mission of the Dose focus area is to identify and oversee ASC activities that improve analytical margin for responding to emergent issues, improving loading pattern economics, relaxing dose-related Technical Specification limits, and influencing plant modifications.

Active PAs and Self Assessments

- Core Damage Assessment.

Follow Activities

- PA-LSC-1955 Relax Shield Building Requirements During Startup
- PA-LSC-1995 R0 Revise Ventilation System Completion Times RISD-2022-043 (possible dose impact)
- Follow-up on implementation of PWROG-21039-P “Implementation Guide for PWROG-19030-P, “Asymmetric Natural Circulation Cooldown – Revised Strategies” (PA-ASC-1897)
- PA-LSC-new – Accident Induced Primary-to-Secondary Leakage Limit (w/ EPRI) (RISD-2022-015)
- RMSC-FRIACT (Future Risk-Informed Application Core Team)
- RG 1.183 Rev 2 Finalization and Implementation
- Review of Regulatory Basis for Increased Enrichment (Appendix A, 50.67 AST and Appendix B, 50.68 Criticality)

Draft PA Ideas being Developed

- PA-ASC-1988 Fuel Pin Pressure for Fuel Handling Accident (RISD-2023-005)
- RMSC Risk-Informed Dose Metrics (RISD-2023-028)

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Long-Term Interests to Pursue

- Compile Dose Benefits to aid in justifying future projects
- Recommendations from PWROG-21023-P, ASC-1793 Dose Margin Improvement work
- Source Term Focus Group
- High burnup / high enrichment fuel and/or ATF and/or FFRD
- Beta dose impact on electronics (EQ)
- PA-ASC-1989 Statistical Dose Analysis Approach (need RISD)
- PA-ASC-1907- Non-LOCA Iodine Spiking Guidance Revision (w/ Nat'l Lab)
- Level-3 PRA (waiting for JCNRM Level 3 Standard ~2024)

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC Focus Area #3

Fuels Core Team

The mission of the Fuel focus area is to identify and oversee ASC activities that improve analytical margin to fuel related limits (e.g. DNBR, LOCA, Fuel Mechanical, etc), improve outage during by relaxing requirements for physics testing, resolving emergent issues that challenge thermal limits, and improving fuel-related Technical Specifications.

Active PAs and Self Assessments

- PA-ASC-1680R2, "Relaxation of the Quadrant Power Tilt Ratio Technical Specification" (Café)
- PA-ASC-1671R1, "Hydrogen-Based Transient Cladding Strain Limit" (Café)

Follow Activities

- NRC activities related to FFRD – INL supporting risk-informed justifications
- NRC/NEI/Industry Activities related to AFM/ATF
- PRM-50-124, Petition for Rulemaking on LOCA from Ralph Meyer
- PA-LSC-1886 Relocating TS 3.9.3 Nuclear Instrumentation
- PA-PSC-1946 EPRO Lessons Learned and Expanded Guidance
- PA-ASC-1998 Eliminate Immediate Suspension of Irradiated Fuel Movements from TS
- RS-2022-020 Relocate Fuel Storage Requirements to Licensee Control (~2024)
- Review of Regulatory Basis for Increased Enrichment (Appendix F – Fuel Dispersal)

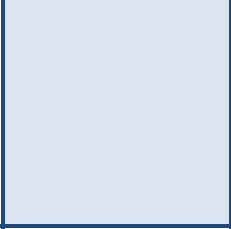
Draft PA Ideas being Developed

- PA-ASC-2068 Reduction in Number of Accessed MIDS Flux Thimbles
- PA-ASC-2064 Additions to Framatome Seismic LOCA Topical

Long-Term Interests to Pursue

- PA-ASC-1891 DNB Improvements (relaxation of fuel failure mechanisms)
- Incore/Excore calibration
- Extending interval between flux maps
- Improved methods to detect fuel leakers
- Spent fuel pool management (additional to PSC-1848)
- Reload analysis limitations

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

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- Outage improvements
 - Undue burden on reactor engineer or operations
 - Support implementation of new fuel designs
 - Addressing evolving regulatory requirements related to FFRD

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC Focus Area #4

Transient Core Team

The mission of the Transient focus area is to identify and oversee ASC activities that simulate plant accident responses to improve the bases for Emergency Procedures, to develop positions and approaches to generic NRC regulations, to reduce refueling outage durations, and to improve plant operation.

Active PAs and Self Assessments

- PA-ASC-1661R3, “Functional Restoration Guidelines FR-C.1 and FR-H.1, Inadequate Core Cooling Response Update and Considerations for Low Pressure Feedwater Addition in Loss of Secondary Heat Sink” (Café)
- PA-ASC-1904, “Analysis of RCS Temperature and Mechanical Transients during Post-Event Recovery” (Generic RISD-2021-024)
- PA-ASC-1987 Simulator Thermal Mixing Model (Generic RISD-2023-003)
- On Hold : PA-ASC-1905, “Time-to-Boil Guideline” (Generic RISD-2021-030)
- On Hold : PA-ASC-1990 Credit for Non-Safety Grade Equipment and Systems in Nuclear Safety Analyses (RISD-2023-004)

Follow Activities

- Monitor 50.46c Rulemaking (potential PA-ASC-1585 50.46c Support)
- EOP Steering Committee (synergy with ASC Focus Groups for B&W and CE)
- Tangent activities related to Asymmetric Natural Circulation Cooldown (PA-ASC-1666)
- PA-LSC-1972 R0, “Eliminate Simultaneous Diesel Generator Start Surveillance Requirement”
- PA-MS-2005, “PWR Core Barrel Lower Girth Weld Failure Operability Feasibility Assessment”

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

	Draft PA Ideas being Developed • PA-ASC-2054 Industry PTS Analysis and Guidance for ASC and PSC (ESDW-22-006) • PA-ASC-2065 Steam Generator Tube Rupture Long Term Recovery Analysis and Strategy Rebaseline (Generic) • PA-ASC-1999 Generic DAS Functional Requirements for Westinghouse Plants (need RISD)
	Long-Term Interests to Pursue • Recommendations from PWROG-19032-NP, Risk-Informed Safety Analysis • SGTR Asymmetric Cooldown (PA-ASC-1885) • Boric Acid Precipitation Improvements (PA-ASC-1768), tied to 50.46c • Safety analysis support for Second License Renewal • Temporary Containment Cooling Methods • Statistical Containment Analysis

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC Focus Area #5

B&W Focus Group

The B&W focus group implements the ASC mission for the B&W plants to maximize value obtained from the PWROG and to integrate the collective expertise of the B&W SMEs.

Active B&W Cafeteria PAs and Self-Assessments

- None

Follow Activities

- PAs under development in ASC Core Teams

Draft PA Ideas being Developed

- TBD

Long-Term Interests to Pursue

- Support analysis needs of the PSC B&W group
- Low pressure feed strategies and ICC from ASC-1661 (EOP Steering Committee)

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC Focus Area #6	
CE Focus Group	The CE focus group implements the ASC mission for the CE plants to maximize value obtained from the PWROG and to integrate the collective expertise of the CE SMEs.
	Active CE Cafeteria PAs and Self Assessments • None
	Follow Activities • PAs under development in ASC Core Teams
	Draft PA Ideas being Developed • TBD
	Long-Term Interests to Pursue • Support analysis needs of the PSC CE group • Low pressure feed strategies and ICC from ASC-1661 (EOP Steering Committee)

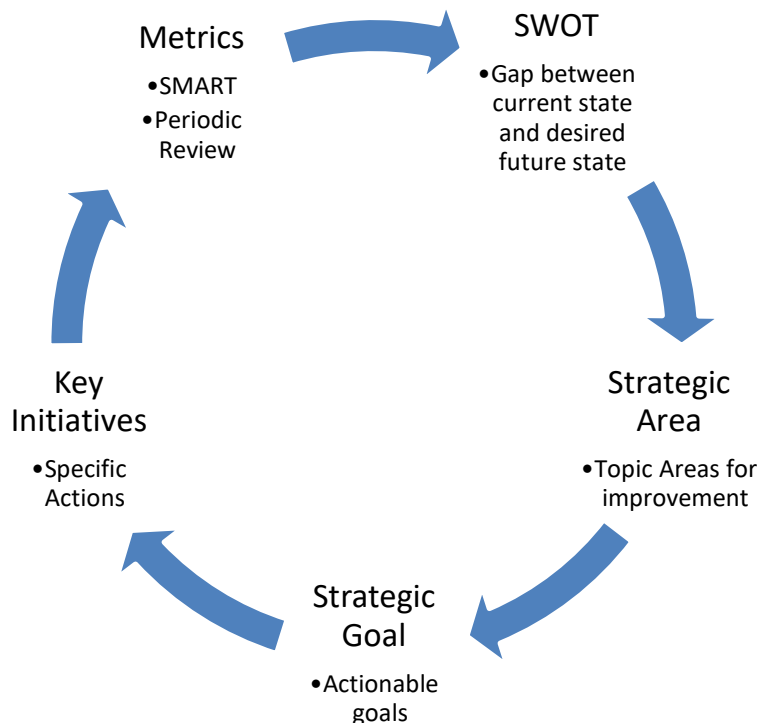
THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Strategic Initiatives

In order to confirm that the committee continues to drive towards the Mission and Vision, the ASC periodically reviews the committee operations and identifies areas for improvement and development.

One tool to identify gaps between the current state of the ASC and the desired future state of the committee is the SWOT. The SWOT is a brainstorming discussion to identify the Strengths and Weaknesses within the ASC as well as the Opportunities and Threats that exist outside of the ASC. The results of the last SWOT performed are contained in the Appendix.

Based on the results of the SWOT and combined with input and recommendations from the ASC Chair and Core Team leads, a set of Strategic Initiatives was defined. These initiatives are organized into topic areas with a clearly defined Goal and a set of general Initiatives that drive towards the desired Goal. The general Initiatives are split into near-term activities (3-12 months) and longer-term activities (1-2 years). Specific Actions associated with the activities will be tracked as part of the ASC Action Log. In order to track the progress towards each Strategic Goal, metrics are identified that can be tracked and reviewed during each ASC committee meeting to allow the initiative to be confirm or revised depending on the progress and success. Once initiatives are achieved, ongoing activities can be considered for including as a bullet point within the appropriate ASC Focus Area or archived as part of an OG letter.



ASC Strategic Areas Dec 2023

1. Project Authorizations
2. Networking and Development
3. Communication
4. Product Knowledge Sharing
5. Collaboration

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Strategic Initiatives

Strategic Area #1
Project Authorizations
Strategic Goal
Proactively develop high value PAs in ASC Focus Areas
Key Initiatives 3-12 mo
• Develop project ideas to support outage reductions, improve plant operations, support plant life extension, gain margins to improve core loading patterns • Leverage the diversity of members backgrounds (WEC, Framatome, LOCA, transient, core design, dose, etc.) to develop PA ideas • Increase benefit and ROI statements in the PAs
Key Initiatives 1-2 years
• Consider building upon past ASC work for future PAs • Become more strategic in developing industry positions, identify blind spots before they become issues • Develop an approach to demonstrate the value/benefit of being proactive versus reactive in performing work • Implement risk insights into PAs

Strategic Area #2
Networking and Development
Strategic Goal
Foster networking and individual development within the ASC
Key Initiatives 3-12 mo
• Increase sharing of experiences, knowledge of design basis, regulatory basis, plant experience, and transient analysis expertise • Improve onboarding of new members
Key Initiatives 1-2 years
• Outreach to new utility employees to develop future ASC members

See ASC Action Log for specific actions

Metric
• Two or more new PAs discussed for development per Technical Committee Meeting • Target 2 approved Generic PAs per year • Use the KPI metrics Excel sheet to provide ROI on ASC PAs

Metric
• Target at least 1 utility presentation per meeting • Achieve 90% return on Roundtable scripts • Recruit at least 1 international member to each Core Teams • Develop an ASC New Member orientation presentation by end of 2024

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Strategic Area #3 Communication	Strategic Area #4 Product Knowledge Sharing	Strategic Area #5 Collaboration
Strategic Goal Improve communication of ASC value and capabilities to others	Strategic Goal Increase accessibility to ASC products and knowledge	Strategic Goal Increase effective collaboration with other PWROG committees
Key Initiatives 3-12 mo • Implement a way to socialize topics deeper into the utilities' organization • Increase international engagement	Key Initiatives 3-12 mo • Improve member ability to perform searches on the PWROG sites by supporting the SC initiative on website improvements • Develop transition plans for CT leads and key ASC SMEs	Key Initiatives 3-12 mo • Reach out to MSC to understand more about their fluence activities
Key Initiatives 1-2 years • Develop a strategy to communicate the value and capabilities of the ASC to both internal PWROG members, including other subcommittees, and other utility personnel	Key Initiatives 1-2 years • Create member training on available products • Support business initiative to develop a tool or process to enhance accessibility of existing ASC products	Key Initiatives 1-2 years • Determine what is needed to close the gap between PRA and deterministic analyses and work with RMSC to fill the gap.
See ASC Action Log for Specific Actions		
Metric	Metric	Metric
• Maintain participation from ASC "participants" (not the main or alt member) • Hold at least 1 webinars per year involving International Members in the morning hours • Members share ASC meeting highlights within their company.	• Review website best-practices at each meeting • Create and distribute an overview for the top 5 ASC historical products by the end of 2024	• Measure an increase in number of ASC members supporting other committees • Support the LWRS project to develop an approach to use risk-insights in the dose analysis (assuming it is funded)

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

APPENDIX

An initial brainstorming session was held with ASC Leadership and vendor representatives in March 2021 to provide input into the development of the Strategic Initiatives developed initially developed in April 2021. The general questions that were focus of the brainstorming session and provided in the table below. An updated review meeting was held in March 2023. A summary of the compiled SWOT results from March 2021 and March 2023 are contained on the following pages.

It is recommended that the SWOT results be reviewed and updated at least every two years in conjunction with review and updating of the associated Strategic Initiatives.

Typical SWOT Questions		
	Helpful To achieving the objective	Harmful To achieving the objective
Internal origin (attributes of the organization)	<i>Strength – Helpful / Internal</i> - What does the committee do well? - What are the committee’s unique skills? - What expert or specialized knowledge does the committee have? - What experience does the committee have? - What do you do better as a group than others do alone?	<i>Weakness – Harmful – Internal</i> - In what areas does the committee need to improve? - What resources does the committee lack? - What parts of the committee are not “value added”? - Where does the committee need further education and/or experience?
External origin (attributes of the environment)	<i>Opportunity – Helpful / External</i> - What are the PWROG’s business goals that the committee is currently working towards? - How can the committee do more with the existing members or industry groups? - How can the committee use technology to enhance existing or develop new products? - Are there new target audiences that the committee has the potential to reach?	<i>Threat – Harmful / External</i> - What obstacles does the committee face? - What are the activities of outside groups that conflict with the committee? - What are “the others” doing that you’re not? - What’s going on in the economy? - What’s going on in the industry?

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC SWOT Results – March 2021		
<u>SW</u> <u>OT</u>	Helpful To achieving the objective	Harmful To achieving the objective
Internal origin (attributes of the organization)	<i>Strength – Helpful / Internal</i> • Communications – Strong relationship with the PSC • Sharing knowledge – Forum for sharing OE and sharing best practices and solutions between members, quickly able to tap into industry experience • Value – Experience and Knowledge of design basis, regulatory basis, plant experience, expertise, credibility • Value – Excellent collaboration between vendor and utilities to solve issues at low cost • Value – PWROG products are tools/codes/expertise that most utility do not have • Value – Enables industry to react consistently to emerging issues	<i>Weakness – Harmful – Internal</i> • Communication – Communicating our value (\$\$) to outside groups and site executives/management – don't do a good job of selling ourselves since our products are not flashy • Communication – Gauging interest in PA topics, initial interest and initial budget constraints (right-sizing a project) • Communication? Projects? – Stuck in our way, siloed from the other TCs • Sharing knowledge – Knowledge not being transferred efficiently to younger generation, we have an aging brain trust • Sharing knowledge – Accessibility – Need to know what has already been done, especially needed for younger members • Projects – Difficulty in developing Generic Projects • Projects – Can't clearly define "pain" (specific problem to solve), waiting until it is "broken" is too late • Projects – Reactive instead of proactive • Projects – Lack of clear implementation guidance in PAs, difficulty to know where or how or whether a product was implemented (sits on the shelf for a rainy day?) • Projects – Different business models (competing needs at different sites, needs of sites going for licensing renewal vs those who are not, different perceived value of projects)

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

ASC SWOT Results – March 2021		
<u>SW</u> <u>OT</u>	Helpful To achieving the objective	Harmful To achieving the objective
External origin (attributes of the environment)	<i>Opportunity – Helpful / External</i> • Communication – Improve communication with other committees • Communication – More member participation and engagement • Communication – Communicate the value of deterministic analysis in parallel with risk-informed approaches, collaborating more with RMSC • Communication – International members – getting them more involved • Sharing knowledge – Showcase past ASC products and make them more accessible • Sharing knowledge – Knowledge base, sharing knowledge, develop the next generation • Methods – Develop universal tools that everyone in the industry can use • Methods – Leverage higher order methods (CFD, FEA, Monte Carlo, big data, national labs) into solving issues, including those outside of the design/licensing basis • Methods – Learning how to implement risk-insights more systematically into our work, use simpler approaches • Projects – Supporting plant life extension • Projects – Develop approaches to gain margin/efficiency in key areas (outage, etc) • Projects – Be creative to develop Generic programs • Projects – Leverage past ASC work • Projects – Develop industry positions, identify blind spots before they become issues • Projects – Break away from “this is how we’ve always done it”	<i>Threat – Harmful / External</i> • Communication – Challenges related to communication and alignment horizontally and vertically within PWROG groups (TC, MC, EC) • Communication – NRC in transition • Sharing knowledge – Generational turnover, staffing cuts on site, risk of repeating mistakes of the past • Methods – Lack of streamlined approach to implement advanced technologies (ATF, RIPE) and codes (CASL) • Methods – There is a gap in understanding/application of PRA/Risk-informed solutions versus traditional design-basis deterministic approaches • Projects – Limited budgets, especially for Cafeteria projects • Projects – Different NSSS designs make it difficult to develop Generic PAs • Projects – Prioritization Matrix criteria may not reflect perceived value of ASC programs • Value of ASC ○ viewing us as stuck in our way and expensive ○ not understanding need to maintain the design and licensing basis (already designed, so why is more work always needed?) ○ don’t see what we are capable to do outside of design/licensing basis ○ see us only as reactive “tax” instead of bringing proactive value added

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

SWOT Description - March 2023	Category	Likes	TOPIC AREA
Further awareness is needed among the members to ensure that plant issues are not ignored and missed because other plants have not encountered similar problems. Need to remain proactive in identifying problems and then formulating a cost-effective solution.	Opportunities	3	Projects
Should we consider if SMRs, should be included in the PWROG? Especially if they are pressurized water reactors. Pushing for modernization of analysis methods (ex. CFD), statistical methods (like statistical dose analysis), etc.	Opportunities	2	Methods
Benefits section needs strengthened, especially with the reduced rate through PWROG.	Opportunities	2	Projects
Solutions on European plants may help the US fleet.	Opportunities	1	Projects
Work with reps in other committees to get involved with their PAs that have ASC involvement.	Opportunities	0	Collaboration
PA-ASC-1987 is an example of an opportunity the PWROG is not ready to support, work performed by member utilities. Being able to consider third party sources for projects is a missed opportunity.	Opportunities	0	External Groups
Offer training to the NRC to facilitate their understanding of the different plants or analyses.	Opportunities	0	External Groups
Invite the NRC to our meetings to gain information.	Opportunities	0	External Groups
Get SMRs to provide an overview of their designs/approach.	Opportunities	0	External Groups
2. NRC may benefit from a safety analysis tutorial sponsored by the PWROG at the vendors.	Opportunities	0	External Groups
3. Improved coordination with EPRI, NEI, and INPO to prevent duplication of effort, scope overlap, and expertise encroachment.	Opportunities	0	External Groups
3. Personnel changes at the NRC may open permit new ideas or approaches.	Opportunities	0	External Groups
4. Discussions and presentations with NEI at each other's meetings could improve both NEI and PWROG ASC	Opportunities	0	External Groups
Power Uprates on the Horizon	Opportunities	0	Projects

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

There is an opportunity to expand into the Dry Cask Storage area. A working group level committee may be appropriate to start with, with HOLTEC and NAC involved to do lessons learned / problems / where things are going (like our round table)	Opportunities	0	Projects
1. A primary opportunity needs to be supporting plant operations. Increased communication with the Operations organizations could help identify items the ASC could work to improve.	Opportunities	0	Collaboration
Wish to do more with risk-informed efforts within the ASC. Instead of saying why we can't do something, identify the challenges and what might be needed to overcome it.	Opportunities	0	Collaboration
1. To assist our plants in demonstrating margin for issues related to equipment reliability.	Opportunities	0	Projects
If SMRs can use an analysis method or approach, then why can't the operating plants.	Opportunities	0	Methods
SLR support	Opportunities	0	Projects
Lots of plants are doing work with IRA money - can collaborate there.	Opportunities	0	Projects
2. There are younger safety analysis engineers that need to participate to bring fresh ideas. They need to ask, "Why do we do it that way?"	Opportunities	0	Sharing Knowledge
Vendor support is strong. New faces are starting to show up (need to help them get to speed). I like the international presentations we had last time.	Strengths	1	Our People
1. Collaborative spirit	Strengths	1	Our People
2. Experience level skews to high	Strengths	1	Our People
1. Open communication	Strengths	0	Communication
Working relationship with ERG Core Team Doing better with generic projects	Strengths	0	Collaboration
A core of dedicated individuals that pulls together to resolve issues.	Strengths	0	Our People
Collective knowledge of the group. Flexibility to pivot to emergent issues	Strengths	0	Our People
Collaboration between vendor and utilities	Strengths	0	Our People
Wealth of knowledge. (Fun to estimate the years of experience of the group)	Strengths	0	Our People
3. There are a number of long-term members that have significant history on a number of subjects.	Strengths	0	Our People
The ability for all the plants to get together and discuss what issues they are dealing with and how other plants either have dealt with the issue in the past or are in the process of dealing with.	Strengths	0	Our People

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Identifying issues in a responsive manner in an open platform following an effective due diligence process. Offering technical solutions for issues that are recurring in the industry/plant design.	Strengths	0	Projects
2. Willingness to actively look for common issues that may have a common resolution.	Strengths	0	Projects
Key SMEs may retire and it would be a big loss.	Threats	2	Our People
NRC reviewers and younger and/or less experienced. It takes more time and effort to train them on how the different plants work.	Threats	1	External Groups
Missed opportunities. Promotions and retirement. (knowledge transfer)	Threats	1	Sharing Knowledge
Retirements of key people. Loss of staff at utilities allows for less time to be engaged in ASC	Threats	1	Sharing Knowledge
2. There needs to be better advertising to the plants regarding what the ASC does and can do to assist Operations and to reduces cost. Most units at the plants don't know what the PWROG does in general.	Threats	0	Communication
1. There could be better communication across various PWROG committees. Periodically other committees do things that impact ASC's ability to move forward in a timely manner.	Threats	0	Collaboration
1. NRC reviewers need more experience to develop a perspective that embodies the standard of "Reasonable Assurance."	Threats	0	External Groups
The biggest "threat" is money. Unless the work is being driven by an external group or there is a large "payback /benefit" to the Utility, there is always higher priority work that needs the funding	Threats	0	Projects
Many ASC members are also proficient in 50.59 which conflicts with LSC being the committee for 50.59 support.	Threats	0	Projects
A thorough evaluation should be performed to ensure that opportunities are not circumvented due to the lack of financial/technical resources. In today's rapidly changing world, more innovation can be applied to attain the objectives of the committee.	Threats	0	Projects
Declining participation and lack of applicable projects	Threats	0	Projects

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

We seem to be driving the Procedures Committee for changes to the EOP/ERG. The PC should be the group that is coming to us saying, please provide us analysis/insights into "x"	Weaknesses	3	External Groups
Process level small improvement item: I would like the website to work a bit better. As it is, I often need to find the most current document from an email from Danielle. I offered to help with the improvement	Weaknesses	1	Communication
Time difference with Europe - they are not able to participate in our afternoon meetings.	Weaknesses	1	Communication
We don't have specific break-outs for the members (European/Asian).	Weaknesses	1	Communication
Different agenda/motivation for each site	Weaknesses	1	Projects
Current PA scoring doesn't emphasize using Risk-Informed approaches.	Weaknesses	1	Projects
1. Need more representatives to step up to lead teams.	Weaknesses	1	Sharing Knowledge
2. Need to facilitate knowledge transfer and effective retention to new representatives.	Weaknesses	1	Sharing Knowledge
Participation from all utilities. There seem to be a handful of utility members that dominate a majority of the discussions and projects. It would be nice to find ways to get more participation.	Weaknesses	1	Our People
Need more projects that are applicable to Chapter 6/15 safety analysis. We have a lot of projects that are related to areas that are not directly safety analysis (EP/Simulator training/ERGs).	Weaknesses	1	Our People
We don't use new technologies or new ways of solving problems. Could use more PRA or CFD.	Weaknesses	0	Methods
3. Many utilities have small safety analysis staffs. It is difficult to get participation from the smaller utilities or those without corporate safety analysis units.	Weaknesses	0	Our People
4. There are a number of long-term members that have significant history on a number of subjects and these individuals may be retiring soon.	Weaknesses	0	Our People
The ASC, and PWROG in general, is very slow to respond to issues. The PA process is designed for longer term projects which there are very few. The budgeting process requires an issue to be known and outlined 18 months before work can be started. PA-ASC-1904 is a poster child. This could easily be a generic CR that each plant would need to address, but 2 years after initial discussions on whether the plants were OK, we are just getting started.	Weaknesses	0	Projects

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

PA development process. It amazes me the number of PAs other committees are able to bring to vote compared to the ASC. PAs planned to be voted in April 2023: ASC-1; LSC-9; MSC-7; PSC-1; RMSC-7; SEE-8. Working relationship with TBD and EPG Core Teams Only see why something can't be done When was the last time we had a PA less than \$200K total price, besides PA-ASC-1897?	Weaknesses	0	Projects
Not sure if the ASC actively seeks/scans the industry operating experience database to self-identify issues that are likely to become an industry-wide problem. Not sure regarding the level of collaboration that ASC has with organizations like INPO to understand and initiate solutions resolving a given issue.	Weaknesses	0	Projects
2. Due to the makeup of the industry, the majority of the projects are only applicable to Westinghouse plants.	Weaknesses	0	Projects
Knowledge of European plants is limited. Difficult to know if a product is applicable, and regulations are different.	Weaknesses	0	Sharing Knowledge
1. Knowledge and background level varies widely. This is good and bad.	Weaknesses	0	Sharing Knowledge

THE ANALYSIS COMMITTEE STRATEGIC ROADMAP

Record of Revisions

Revision #	Date	Description
0	May 2021	Initial Release of ASC updated Strategic Roadmap and process
1	July 2021	Updated based on 7/16/2021 ASC Leadership Call.
2	August 2021	Updated at the August ASC meeting to revise the Focus Area tables to update the PAs Under Development and the Long-Term interests.
3	February 2022	Updated following the December 2021 meeting to update the ASC Leadership org chart and the PA topics for the core teams.
4	April 2022	Added a definition of Small/Medium/Large funding targets for Generic and Cafeteria PAs
5	June 2022	Updated with current status of PAs.
6	August 2022	Updated following the August 2022 meeting.
7	December 2022	Updated following the December 2022 meeting.
8	April 2023	Updated following the Strategic Planning review session and April 2023 ASC meeting.
9	December 2023	Updated following the August 2023 meeting.