

Delivering the Nuclear Promise with IRMMA

Integrated Risk Management Mitigation Application (IRMMA) for online, outage and shutdown safety risk centralizes all program and performance risk information through an easy-to-use application to target lean and predictable critical paths, prompt response mitigation plans and constant, real time impacts of plant performance on risk profiles with integrated scheduling information. This eliminates information and program strategy silos to improve decision-making that supports shorter critical paths, cost effective operational excellence and financial predictability. IRMMA is innovation that replaces reactive outage management with outage design logic and specific mitigating planning.

Reduced Outage Times

Measurable benefit

- Optimized schedule leads to shorter outages.
- Pre-planned contingency plans reduce potential for outage extension due to emergent issues.

How does the system do this?

- Visual system and equipment availability displays allows for quick understanding of plant status during vertical-slice schedule reviews.
- Graphical logic simplifies pinch points and optimization paths.
- The interactive functional system simulator allows for instant 'what if' analysis and confirmation of success.

Minimize Risk of Lost Generation From Obsolete Parts

Measurable benefit

- Cost savings by avoiding or minimizing lost generation due to failed critical or obsolete parts.
- Provide mitigating strategies for failed critical or obsolete parts.

How does the system do this?

- Review and mitigation of schedule risk due to parts and materials, critical spares and obsolescence.
- Control and identify mitigating strategies by highlighting pinch points.

Shutdown Safety System Checklist

Back to - Systems Navigation Window		Systems Review - Core Cooling		Score	
Number of SG's available for DHR (auto)	A	B		2	
Is the refueling cavity filled?	YES	NO		1	
Number of RHR Trains available (auto)	A	B		1	
Is RCS Level above the Reduced Inventory Level? (>50% per Level Inst-1,2,3,4)	YES	NO			
Level Instrumentation (auto):	L1	L2	L3	L4	4

Outage Risk Management Scorecard

System	System Weighting Factor	Inventory Score	Outage Score	System Score
Spent Fuel Pool Cooling	Low	0.20	6 out of 6	0.004
Core Cooling	Low	0.10	4 out of 6	0.004
Reactivity	Medium	0.50	3 out of 3	0.011
Decay Heat Removal	High	0.37	Available	0.018
Component Cooling Water	Medium	0.50	Available	0.013
Normal Charging	Low	0.10	Available	0.001
RCS Safety Injection System (SIS)	Medium	0.20	Available	0.005
RCS Injection - Residual Heat Removal (RHR)	High	0.50	Available	0.025
General	Low	0.44	Available	0.004

0.019

0.066

Optimize Response and Recovery Due to Emergent Issues

Measurable benefit

- Reduces impact to critical path due to emergent issues.

How does the system do this?

- Allows for quick identification of mitigating strategies due to emergent schedule changes of equipment failures that impact schedule.
- Day-by-day resource planning and identification of critical staff scarcity, such as Licensed Operations or specialized craft.

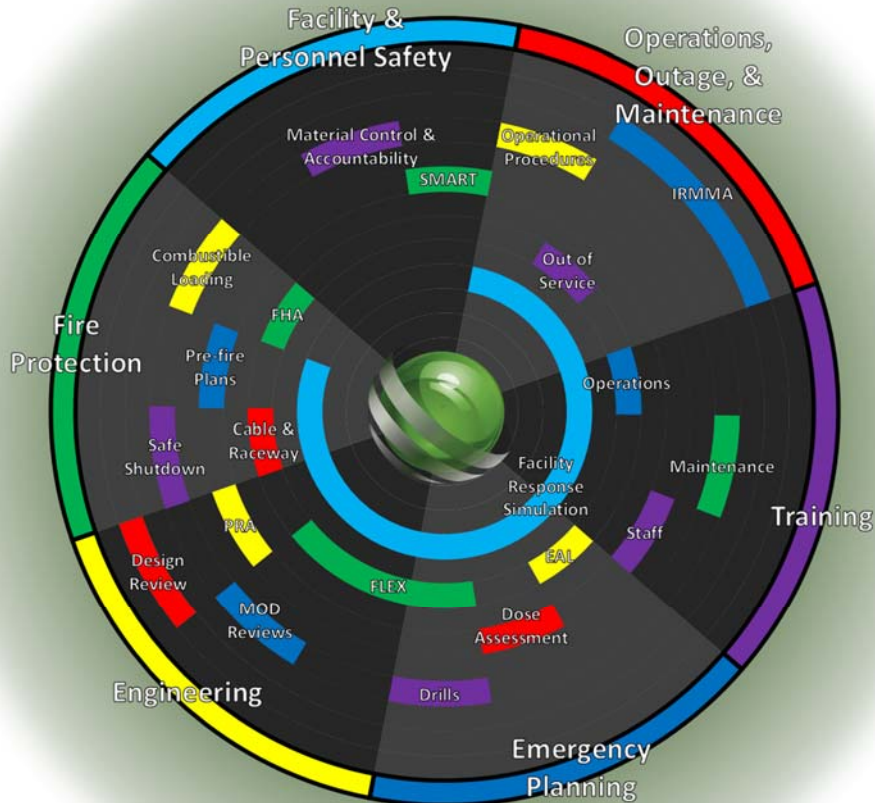
Protection of Schedule, Minimize Risk

Measurable benefit

- Improved risk informed decision making.
- Ability to review integrated impact on both shutdown and on-line units.

How does the system do this?

- Real time impacts on shutdown safety, resources scarcity and critical path during fully integrated schedule reviews.
- Ability to immediately understand the impact of emergent issues.



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AMMI

AMMI serves the global nuclear energy and manufacturing industries and their supply chains. AMMI provides expertise in solution development for:

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- Predictable supply chain performance and delivery through a member-consortium network of 50+ supplier's capabilities
- Nuclear warehousing, storage and logistics, including shared manufacturing facilities
- Time critical and specialized nuclear staff and services for outage readiness and execution, systems inspection and test and regulatory and standards compliance