

Nuclear Utility Obsolescence Group Project

Obsolescence Prevention in Design Modifications

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Obsolescence Prevention in Design Modifications

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Ameren Missouri Ameren Missouri **Curtiss-Wright Corporation Dynamic Solutions Energy Northwest** Engine Systems, Inc. **Exelon Corporation** FirstEnergy Corporation MetalTek International, Inc. **Rolls-Royce Nuclear Engineering Services** Sandia National Laboratories SCANA Corporation Southern Company **UKM Management Consulting** ValvTechnologies, Inc.



Purpose:

To provide the Design Engineer a method to prevent obsolescence issues when selection equipment during the design modification process.



This Project is NOT to prevent equipment from becoming obsolete,

but to prevent the Design Engineer from selecting obsolete equipment.

Scope:

Any Design Modification that installs or replaces equipment.



Obsolescence Prevention Guidance Document:

- Introduction Reasons why equipment becomes obsolete
- Purpose and Scope
- Definitions
- Awareness of Obsolescence
- Procedure Recommendations
- Obsolescence Prevention Checklist





What is the Obsolescence Prevention Checklist?

Has Five (5) key questions that are asked by the Design Engineer to ensure that the new design is not impacted by obsolescence issues.

These questions are a starting point for the Design Engineer to open up a conversation with the supplier, vendor, and supply chain.





Ob	solete Equipment Checklist	Yes	No
Α.	Does the design change install equipment in the plant with models that are currently obsolete?		\checkmark
В.	Does the design change install equipment in the plant with models scheduled for upgrade in the near future by the vendor?		\checkmark
C.	Does the design change install equipment in the plant with models not currently stocked in the warehouse that could potentially be obsolete within the next 5 to 10 years (per discussion with vendor)?		
D.	Does the design change install equipment in the plant with models currently stocked in the warehouse that could potentially be obsolete within the next 5 to 10 years AND have a high usage rate or low number of stocked spares (per discussion with supply chain)?		\
E.	Does the design change install digital equipment which is known to have a short lifecycle?		\checkmark



Obsolescence Prevention Checklist

If all the questions are answered "No" no additional actions are required.

If any of these questions are answered **"Yes"**, ensure mitigating actions are taken to extend the lifecycle of the modification package.

Possible mitigating actions include, but are not limited to:

- ✓ Stocking additional spares
- ✓ Choosing an alternate design
- ✓ Developing a service agreement with the vendor
- ✓ Procurement of spares "At-Risk"
- ✓ Holding design approval until the next generation product is developed
 ✓ Etc.

If utilizing stocked equipment from the warehouse:

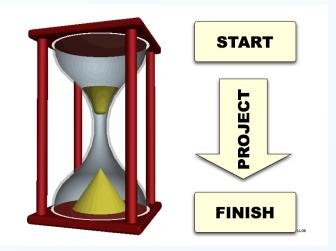
✓ If stocked equipment is obsolete, DO NOT USE without Supply Chain Management and Engineering Management approval.





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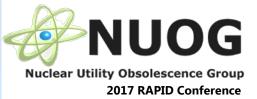
Status of the Guideline Document and Project?





- Guideline document was approved by NUOG in May 2016.
- Guideline document is in the NUOG Project Center (RAPID).
- Guideline document was forwarded to the Engineering Change Standardization Team to incorporate into the Standard Design Process (SDP) in August 2016.
- Obsolescence Checklist has been incorporated into the Standard Design Process (SDP) in December 2016.
- Guideline document published on INPO website in March 2017.
- Presentation at RAPID Conference in May 2017.





Questions

