



PARTS ASSET MANAGEMENT SOLUTIONS (PAMS)

GE Vernova Hitachi Nuclear Energy (GVH) PAMS is a custom parts solution to help ensure the lifetime availability, reliability and performance of your electronics systems

Do you have quality parts available to keep your systems operational?

If your answer is “Maybe”, “No”, or “I don’t know”, you are not alone. Due to obsolescence, the risk of counterfeits and various supply chain constraints, ensuring a sufficient quantity of quality spare parts are on hand to safeguard that your plant is operational is challenging. As the industry leader in Boiling Water Reactor (BWR) technology, GE Vernova Hitachi Nuclear Energy (GVH) offers a wide range of products and services that

help ensure the safe operation and maintenance of the plant, while bringing greater efficiency and output. GVH Parts Asset Management Solutions (PAMS) provides nuclear plant customers a proven methodology that will enable the proactive identification of spare part issues and their associated solutions. Implementing PAMS will enable you to confidently answer “Yes! I do have quality parts available to keep my systems operational.”

PARTS Asset Management Solutions (PAMS) Methodology

The four steps to successfully deploying PAMS:



Key Tasks:	<ul style="list-style-type: none">• Site team and GVH define project scope, i.e. the systems and parts that will be evaluated to determine issues and associated solutions• Define operational meanings of key terms, i.e. critical parts, obsolescence, inventory management parameters, etc.	<ul style="list-style-type: none">• GVH completes a comprehensive analysis of the parts in scope and using GVH's proprietary database, generates a System Health Report (SHR)• SHR will identify obsolescence, end of life, shelf life, counterfeit risks and inventory management issues	<ul style="list-style-type: none">• Site Team and GVH collaborate to develop action plan• GVH deploys resources to implement action plan	<ul style="list-style-type: none">• Update System Health Report with current data for parts in scope• Repeat steps 1 – 3 for new systems added to scope
Deliverables:	<ul style="list-style-type: none">• Project scope defined	<ul style="list-style-type: none">• System health report• Customized recommended solutions	<ul style="list-style-type: none">• Deploy customized GVH solutions• Generate system improvement report	<ul style="list-style-type: none">• Up-to-date system health report

GVH System Health Report

Customer: XXXXXX

Plant: XXXXXX

System: NUMAC

Date: July 20, 2011

Spare Part Details				Inventory Management							Risk Categories					
GVH Equip. Package Number	Part number	Part Description	Qual Class	Total Install Unit 1	Total Install Unit 2	Customer Part Number	Inventory Qty	Qty On Order	Recom. 3-Year Spares	Recom. Qty To Order	Shelf Life (Months)	Shelf Life Risk	Obsolescence Rating	Failure Risk	Counterfeit Risk	Criticality (H, M, L)
64.xxxx	237xxxxxxx	Thermal Limit Monitor	NS	2	2	22203xxxxx	1	1		0	36					L
64.xxxx	234xxxxxxx	Logic Card	NS	4	4	022203xxxxx	1	0	1	0	36					L
64.xxxx	234xxxxxxx	Module	NS	2	2	022203xxxxx	1	0	1	0	36					L
64.xxxx	234xxxxxxx	I-O Board	NS	2	2	022203xxxxx	0	1	1	0	36					L
64.xxxx	304xxxxxxx	Logic Processor Monitor	S	4	4	22203xxxxx	0	2		0	36					H
64.xxxx	148xxxxxxx	RCVR Card Assembly	S	8	8	022203xxxxx	0	0	2	2	36					H
64.xxxx	148xxxxxxx	XMITR Card Assembly	S	12	12	022203xxxxx	0	0	2	2	36					H

Inventory Management:

Objective: Identify situations where Customer inventory quantities are less than "recommended spares" quantities

Legend:

- Customer inventory quantity less than recommended spares quantity
- Customer inventory quantity greater or equal to recommended spares quantity

Action Plan: highlighted in "Recommended Qty To Order" column need to be ordered

Shelf Life Risk:

Objective: Highlight parts whose shelf life has expired

Legend:

- Shelf Life Expired
- 80% Shelf Life Used
- Less Than 50% Shelf Life Used

Action Plan: Determine if expired shelf life parts are usable. GVH Engineering Services (ES) can provide options on how to extend shelf life periods

Counterfeit Risk:

Objective: Highlight parts that are linked to counterfeit components

Legend:

- Counterfeit identified
- No known counterfeits

Action Plan: GVH Engineering Services (ES) can provide details on the counterfeit components, i.e. manufacturer & methods to confirm counterfeits

Obsolescence Risk:

Objective: Highlight parts that are obsolete or have end-of-life notices

Legend:

- Part is obsolete or has obsolete components
- Part has end-of-life notices
- Part available

Action Plan: GVH provides the following solutions to resolve obsolescence issues:

- Expanded Exchange Service Program (EESP): GVH managed inventory of obsolete part
- Engineering Services (ES): Transactional obsolescence solutions

Failure Risk:

Objective: Identify parts that historically have failed across the global fleet

Legend:

- Part failure rate $\geq 10\%$
- Part failure rate $< 10\%$

Action Plan: GVH provides Engineering Services (ES) to proactively identify solutions to mitigate high failure rate parts

Criticality:

Objective: Customizable field used to prioritize issues

Legend:

- Per customer definition, highest priority
- Per customer definition, medium priority
- Per customer definition, lowest priority

Action Plan: Site Team and GVH use criticality ratings to prioritize which parts issues to resolve

GVH Solutions

Spare Parts:

- Quote-to-Order parts fulfillment
- Inventory Management
- OEM Certified

Expanded Exchange Services Program (EESP)

- Obsolescence Managed by GVH
- Parts shipped in 24 hours
- 5 Year Partnership

Engineering Services (ES)

- Obsolescence solutions identified during quote phase
- OEM Certified Replacements
- Better Alternative Than 3rd Party Reengineering

Learn more at gevernova.com/nuclear

