Horizon's QA Graded Approach for the Supply Chain

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Objectives

- Origins of expectations for QA in nuclear new build
- Define the graded approach to QA
- How Horizon determines its QA Grades
- How and where the QA Grade may impact the supply chain
- Advise where help is available
Nuclear Industry QA Expectations

- ISO 9001
- IAEA’s GS-R-3 - nuclear safety culture, competency and oversight
- UK Regulators; License Conditions and TAGs e.g. T/AST/077 (TAG77)
- Manufacturing codes and standards e.g. ASME NQA-1 (adapted for UK)
- Horizon’s specifications will capture the above requirements for cascading to the supply chain
The Graded Approach

- Horizon as Intelligent Customer at the head of the supply chain has ultimate responsibility for quality.
- Horizon must prioritise its oversight and quality controls in areas of most significant impact on nuclear safety.
- Conversely, work of low risk will receive minimal levels of oversight and control.
- Risks other than nuclear safety need to be considered in the graded approach.
Horizon’s Approach to QA Grading

Horizon Procedure: ‘QA Grading and the Application of Quality Assurance in Project and Procurement Activities’

- Benchmarked against AWE, EDF Energy, IAEA and Magnox best practice
- Grades A, B, C, U ⇒ A, B, C, D
- Starting point of Safety Classification of the plant, but applies to services as well as items
- Other risks; novelty, complexity, H&S, environment, security, programme and cost
Horizon Oversight and Controls

- Horizon determines QA grade for identified work
- EOI (as appropriate) and Pre-qualification questionnaire (PQQ)
- Specification and Request For Proposal (RFP) - QA requirements
- Tender assessment to select supplier - ability to meet specification
- Approval of supplier – potential for further assessment by audit
- Contract award – to approved supplier for identified scope of work
- Inaugural meeting – accepted and marked up QA documents and agreement to start work
- Monitoring and inspection – according to QPs, often by IAs
- Receipt and close out – records, CFSI, review & improvement
# Application of the Quality Grades

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Required</th>
<th>Optional</th>
<th>Not required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO9001 certification</td>
<td>AB</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Pre-qualification questionnaire</td>
<td>ABCD</td>
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<tr>
<td>Specification/RFP QA requirements</td>
<td>ABCD</td>
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<tr>
<td>Tender/approval assessment - desktop evaluation</td>
<td>ABCD</td>
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<tr>
<td>Tender/approval assessment - audit evaluation</td>
<td>A</td>
<td>B</td>
<td>CD</td>
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<tr>
<td>Provision of Quality Assurance Programme</td>
<td>AB</td>
<td>C</td>
<td>D</td>
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<tr>
<td>Provision of Quality Plan</td>
<td>AB</td>
<td>C</td>
<td>D</td>
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<tr>
<td>SQEP Assessment</td>
<td>A</td>
<td>BC</td>
<td>D</td>
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<tr>
<td>Review and acceptance of procedures</td>
<td>A</td>
<td>BCD</td>
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Help

- Speak to Horizon’s Supply Chain QA Team today for advice on QA requirements and grading
- Know the codes and standards that apply to your product or service
- Awareness of regulatory guidance
- Nuclear Advanced Manufacturing Research Centre (NAMRC) Fit for Nuclear (F4N)
- National Skills Academy for Nuclear (NSAN) Triple Bar
- And other business support agencies present here today