Human Resources:
Building the workforce for nuclear power programmes

Callum Thomas, CEO

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Design

Planning

Construction & Commissioning

Operation & Maintenance

Safe Storage

Dismantling & Decommissioning

Planning
NUCLEAR
The workforce is a primary component of a nuclear power programme.
Nuclear Power Plant Construction - Breakdown in capital costs, in terms of labour, goods and materials

<table>
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<tr>
<th>Equipment</th>
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<td>12%</td>
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<td>Electrical and generating equipment</td>
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<tr>
<td>Mechanical equipment</td>
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<td>Instrumentation and control system (including software)</td>
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<tr>
<td>Project management services</td>
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<td>First fuel load</td>
<td>3%</td>
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<td><strong>Total</strong></td>
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Nuclear Power Plant Construction - Breakdown in capital costs, in terms of labour, goods and materials

37% = People

assuming on time construction

Building the workforce for a nuclear power programme

5 Steps
Step 1 – Alignment of Stakeholders

- Government
- Project Developer
- Reactor Vendor
- Supply Chain
- Education

Aligned, integrated approach
Step 1 – Alignment within an Organisation

Leadership
Learning & Development
Supply Chain
Procurement
Human Resources

Aligned, integrated approach
Step 2 – Workforce Plan

- Exactly which skills are required and when
- Aligned with overall project plan and schedule
- Adaptable to changes in project schedule
Step 3 – Sources and Pipelines of the people required

All available options to build the workforce:
• Nurtured – universities, apprenticeships
• Existing – nuclear industry, other industries
• Local, national, international
Step 4 – Capacity Building and Recruitment Strategy

- Direct hire, secondments, flexible contracts
- Select preferred route and contingent routes
- Develop internal capabilities to recruit/develop workforce
- Understand how to attract the required people
- Skills transfer and localisation plan
Step 5 – Build the Workforce

- Follow the Capacity Building and Recruitment strategy
- Invest in strong internal capability with external support
- Effective recruitment process managed professionally
- Regular update of recruitment schedule
- Feedback results to recruitment strategy and adapt
The 5 Steps

1. Alignment
2. Workforce Plan
3. Sources & Pipelines
4. Recruitment & Capacity Building Strategy
5. Build Workforce

* IAEA Publication – “Managing Human Resources in the Field of Nuclear Energy” – updated edition about to be published
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