



WNA

NEW BUILD LICENSING

CONFERENCE

Role of the regulator, operator, the supplier and tso regarding design and manufacturing documentation
- identification of best practice

Iva Kubanova

PROJECT DOCUMENTATION CONTROL



Contract

- All crucial aspects relevant to project documentation should be agreed in a contract (types, list of documents, schedule of handover, rules for workflow, rules for approval,...)

Quality Assurance Program / System

- Project documentation control – important part of QA, procedures must be agreed ideally during contracting stage or very soon after contract signature

Interested Parties Involvement

- All relevant parties must be identified, their roles agreed and implemented into Contract and QA procedures
- Human and other resources plans must reflect agreed roles

Efficient Document Management System

- Ideally one electronic system supplied as an integral part of the Supply
- Ideally shared by all interested parties

INTERESTED PARTIES INVOLVEMENT ASPECTS



Ultimate Responsibility of Licensee for Nuclear Safety

- Responsibility for nuclear safety cannot be fully transferred to any party
- Involvement of Licensee in Project documentation control is one of possible mechanisms how to execute responsibility for nuclear safety
- Documentation for information / for approval

Intelligent Customer Concept

- Each licensee together with Regulator decides the scope of application of the Concept
- Tradition and current national practice can cause different application scopes in different countries

NEED OF LICENSEE



Project documentation must enable licensee:

- to keep track of the Project development
- to review and approve selected documentation
- to have detailed knowledge of the Plant design and the Plant systems, equipment and their functions, effective operation and maintenance
- to check if the Plant design and Plant systems, equipment and its functions meets all relevant requirements, specifications and the applicable Codes and Standards as well as licensing requirements
- to train the staff for operation, testing, maintenance and possible further development of the Plant systems and equipment
- to operate and maintain the Plant systems after the Final Takeover during all the Operational States and Incident/Accident Conditions
- Etc.

INTERESTED PARTIES INVOLVEMENT AND THEIR ROLES



Regulator

- Role is defined in national legal system, including types of approvals related to documentation
- Generally the right for access to any Project documentation
- Licensee should agree with Regulator common rules and procedures

Supplier

- Role is defined by Contract and Scope of Supply (who elaborates particular types of documentation)
- Role can differ based on contract type (EPC contract, other types of Contract)
- Responsibility for the overall supplier chain (subcontractors)

Other parties like TSO

- Role must be exactly defined and incorporated in Contract and agreements with Regulator

TEMELIN PROJECT EXPERIENCE



PROJECT DOCUMENTATION STRUCTURE EXAMPLE



- **General requirements documents**
- **Project organization and planning**
- **Quality and environmental control**
- **Industrial safety, fire protection, wastes**
- **Site conditions**
- **Permitting and Licensing**
- **General technical documentation**
- **Mechanical area**
- **Electrical area**
- **I&C area**
- **Civil area**
- **Safety and radiation**
- **Core and nuclear fuel**
- **Procurement documentation**
- **Construction, erection and testing**

PROJECT DOCUMENTATION STRUCTURE EXAMPLE



- **Commissioning**
- **Operation and maintenance**
- **Physical protection system**

Each category involved

- **List of particular documents**
- **Identifier (for information / for approval by Licensee)**
- **Project phase (when elaborated)**

PROJECT DOCUMENTATION CONTROL CHALLENGES



- **Understanding of documentation types and their rough content**
- **Scope of documentation for approval (CEZ wanted more than Suppliers)**
- **Commercial discussions (impacts to Project schedule and finance in case of delays during documentation review and approval)**
- **Access to manufacturing records (CEZ expectation was to see them practically on-line in information system – documentation management system, Suppliers had difficulties to accept it or sometimes denied it)**

Sample

CONCLUSION



- **Project documentation topics must be agreed in time in a balanced way**
- **Licensee should have reasonable requirements**
- **Suppliers should understand responsibility for nuclear safety of Licensee and need to keep track of the Project development**



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thanks for your attention

