ADLAS®
a proven method to facilitate licensing

ADLAS®

ADVANCED LICENSING AND SAFETY METHOD FOR NUCLEAR POWER PLANTS

Fortum ADLAS® is a proven and efficient way to formulate Nuclear Plant requirements and a systematic configuration management method. It delivers a complete, unified and hierarchical licensing documentation with clear traceability from plant level requirements to equipment level specifications.

FORTUM ADLAS® BACKGROUND

Nuclear projects have typically faced licensing challenges related to transparency and traceability of requirements and application of defense-in-depth in design. Especially when licensing digital automation systems or when changing the functionality of systems.

Fortum ADLAS® was developed as a response to these challenges during Loviisa NPP automation renewal in Finland. Since then it has been used in several licensing projects succesfully with Finnish Nuclear Safety Authority (STUK). The method is compatible within most of the nuclear regulatory environments.

ADLAS® can be used by Owners and Vendors both in new builds and major retrofits.

FORTUM ADLAS® METHOD

Method is a systematic and well documented way to draft the licensing documents from top to down. ADLAS® concentrates on high level but gives a solid basis to lower level documents.

Requirements are elaborated in an unified way in order to create transparent requirement hierarchy. Since requirements are set to each level of the hierarchy, also Verification & Validation become hierarchical and predefined.

The graded approach is applied in all steps of the process leading to high safety level in critical systems and optimized cost level. Because of the nature of the method (traceability of the requirements through the structures), it is well received by regulators and enables once through licensing.

WE OFFER:

- **Plant level safety design**
- **Functional architecture engineering**
- **Automation architecture engineering**
- **Process, electrical and layout architecture engineering**
- **Control room and procedures architecture design**
- **Analyses concept specification**
- **Qualification and test concepts**

KEY BENEFITS:

- **Increases safety due to more accurate requirement management for critical systems**
- **Reduces risk of delays - due to well structured licensing documents - with good traceability of requirements**
- **Graded safety approach reduces investment and Operation & Maintenance costs by avoiding oversizing equipment**

OTHER RELATED SERVICES

Fortum offers related Verification and Validation services such as deterministic accident analyses and plant modelling with **Apros® Process Simulation Software**. We also provide plant level deterministic failure analysis, preliminary PRA (incl. core damage frequency and radioactive releases), dispersion modelling and dose calculations (broad setup of possible contamination pathways including agricultural and wild products).

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