**Reviewed documents PDR
2 February 2018**

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| **Chess no.** | **Document** | **Reviewer(s)** |
| [ESS-0047239](https://chess.esss.lu.se/enovia/link/ESS-0047239/21308.51166.24832.31373/valid) | System Description H09 Waste Building |  |
| [ESS-0183700](https://chess.esss.lu.se/enovia/link/ESS-0183700/21308.51166.55552.60395/valid) | System Requirements H09 Waste Building |  |
| [ESS-0145269](https://chess.esss.lu.se/enovia/link/ESS-0145269/21308.51166.10240.18962/valid) | Common Systems ICD |  |
| [ESS-0149469](https://chess.esss.lu.se/enovia/link/ESS-0149469/21308.51166.40448.63738/valid) | Acoustic Design Report |  |
| [ESS-0150420](https://chess.esss.lu.se/enovia/link/ESS-0150420/21308.51166.43264.53814/valid) | Technical Baseline architectural H09 |  |
| [ESS-0066113](https://chess.esss.lu.se/enovia/link/ESS-0066113/21308.51166.35328.10984/valid) | System description H09 Structure |  |
| [ESS-0082503](https://chess.esss.lu.se/enovia/link/ESS-0082503/21308.51166.36352.60313/valid) | System Requirements H09 Structure |  |
| [ESS-0149584](https://chess.esss.lu.se/enovia/link/ESS-0149584/21308.51166.45568.29236/valid)  | Radioactive Waste Transport Container ATB12K and applicable vehicles |  |
| [ESS-0150846](https://chess.esss.lu.se/enovia/link/ESS-0150846/21308.51166.24320.59494/valid) | Structural Document List H09 |  |
| [ESS-0150847](https://chess.esss.lu.se/enovia/link/ESS-0150847/21308.51166.13824.23314/valid) | Structural Model List H09 |  |
| [ESS-0150848](https://chess.esss.lu.se/enovia/link/ESS-0150848/21308.51166.62976.28572/valid) | Structural Drawing List H09 |  |
| [ESS-0150850](https://chess.esss.lu.se/enovia/link/ESS-0150850/21308.51166.54016.10157/valid) | Technical Baseline Structural H09 |  |
| [ESS-0145084](https://chess.esss.lu.se/enovia/link/ESS-0145084/21308.51166.5376.28425/valid) | Basis of structural design H09 |  |
| [ESS-0217448](https://chess.esss.lu.se/enovia/link/ESS-0217448/21308.51166.63488.5897/valid) | H09 doors and gates |  |
| [ESS-0066114](https://chess.esss.lu.se/enovia/link/ESS-0066114/21308.51166.35328.6238/valid) | System Description H09 Electrical |  |
| [ESS-0082464](https://chess.esss.lu.se/enovia/link/ESS-0082464/21308.51166.43776.9613/valid) | System Requirements H09 Electrical |  |
| [ESS-0206993](https://chess.esss.lu.se/enovia/link/ESS-0206993/21308.51166.12288.17738/valid) | ELECTRICAL DUCTING GROUND |  |
| [ESS-0206995](https://chess.esss.lu.se/enovia/link/ESS-0206995/21308.51166.3840.19479/valid) | ELECTRICAL DUCTING PLAN |  |
| [ESS-0147168](https://chess.esss.lu.se/enovia/link/ESS-0147168/21308.51166.7680.24830/valid) | Electrical Plot File |  |
| [ESS-0149257](https://chess.esss.lu.se/enovia/link/ESS-0149257/21308.51166.57344.60767/valid) | Electrical Drawing List |  |
| [ESS-0002381](https://chess.esss.lu.se/enovia/link/ESS-0002381.13/21308.51166.513.7944) | Fire Safety Strategy Report |  |
| [ESS-0066112](https://chess.esss.lu.se/enovia/link/ESS-0066112/21308.51166.51712.30772/valid) | System Description H09 HVAC |  |
| [ESS-0082489](https://chess.esss.lu.se/enovia/link/ESS-0082489/21308.51166.48384.18911/valid) | System Requirements H09 HVAC |  |
| [ESS-0190272](https://chess.esss.lu.se/enovia/link/ESS-0190272.1/21308.51166.47616.55378) | HVAC Connections to Earthwork systems H09 |  |
| [ESS-0185517](https://chess.esss.lu.se/enovia/link/ESS-0185517.1/21308.51166.55296.37972) | HVAC Drains and thresholds in H09 |  |
| [ESS-0145191](https://chess.esss.lu.se/enovia/link/ESS-0145191/21308.51166.20480.60497/valid) | HVAC Waste Water Flow chart H09 Baseline |  |
| [ESS-0145190](https://chess.esss.lu.se/enovia/link/ESS-0145190/21308.51166.20480.56537/valid) | HVAC Risk water Flow chart H09 Baseline |  |
| [ESS-0145192](https://chess.esss.lu.se/enovia/link/ESS-0145192/21308.51166.20480.24299/valid) | HVAC Cooling water Flow chart H09 Baseline |  |
| [ESS-0145195](https://chess.esss.lu.se/enovia/link/ESS-0145195/21308.51166.62208.22356/valid) | HVAC Water heating Flow chart H09 Baseline |  |
| [ESS-0145189](https://chess.esss.lu.se/enovia/link/ESS-0145189/21308.51166.20480.34636/valid) | HVAC Ventilation Flow chart H09 Baseline |  |
| [ESS-0145194](https://chess.esss.lu.se/enovia/link/ESS-0145194/21308.51166.59136.64615/valid) | HVAC Controlled ventilation Flow chart H09 Baseline |  |
| [ESS-0145193](https://chess.esss.lu.se/enovia/link/ESS-0145193/21308.51166.50944.19382/valid) | HVAC Sprinkler Flow chart H09 Baseline |  |
| [ESS-0066109](https://chess.esss.lu.se/enovia/link/ESS-0066109/21308.51166.18944.43382/valid) | System Description H09 Process |  |
| [ESS-0082494](https://chess.esss.lu.se/enovia/link/ESS-0082494/21308.51166.60416.57236/valid) | System Requirements H09 Process |  |
| [ESS-0150425](https://chess.esss.lu.se/enovia/link/ESS-0150425/21308.51166.42240.58575/valid) | P&ID DIW Distribution |  |
| [ESS-0150426](https://chess.esss.lu.se/enovia/link/ESS-0150426/21308.51166.5376.22116/valid) | P&ID RISK WATER SUPPLY MANIFOLD |  |
| [ESS-0150427](https://chess.esss.lu.se/enovia/link/ESS-0150427/21308.51166.5376.49870/valid) | P&ID RESIN TANK TA008 |  |
| [ESS-0150428](https://chess.esss.lu.se/enovia/link/ESS-0150428/21308.51166.13568.42368/valid) | P&ID TRITIUM BOILER |  |
| [ESS-0150429](https://chess.esss.lu.se/enovia/link/ESS-0150429/21308.51166.46336.22455/valid) | P&ID IAR Distribution |  |
| [ESS-0150430](https://chess.esss.lu.se/enovia/link/ESS-0150430/21308.51166.13568.10281/valid) | P&ID PURIFICATION |  |
| [ESS-0150431](https://chess.esss.lu.se/enovia/link/ESS-0150431/21308.51166.17664.50440/valid) | P&ID EVAPORATOR |  |
| [ESS-0150432](https://chess.esss.lu.se/enovia/link/ESS-0150432/21308.51166.38144.29269/valid) | P&ID RESIN TANK TA009 |  |
| [ESS-0150433](https://chess.esss.lu.se/enovia/link/ESS-0150433/21308.51166.27649.10364/valid) | P&ID WASTE TANK TA012 |  |
| [ESS-0150434](https://chess.esss.lu.se/enovia/link/ESS-0150434/21308.51166.60416.61958/valid) | P&ID HOLD TANK TA001 |  |
| [ESS-0150435](https://chess.esss.lu.se/enovia/link/ESS-0150435/21308.51166.45824.50869/valid) | P&ID HOLD TANK TA002 |  |
| [ESS-0150436](https://chess.esss.lu.se/enovia/link/ESS-0150436/21308.51166.13056.17034/valid) | P&ID HOLD TANK TA003 |  |
| [ESS-0150437](https://chess.esss.lu.se/enovia/link/ESS-0150437/21308.51166.14848.37527/valid) | P&ID HOLD TANK TA004 |  |
| [ESS-0150438](https://chess.esss.lu.se/enovia/link/ESS-0150438/21308.51166.23040.55473/valid) | P&ID HOLD TANK TA005 |  |
| [ESS-0150439](https://chess.esss.lu.se/enovia/link/ESS-0150439/21308.51166.23040.13388/valid) | P&ID RELEASE TANK TA006 |  |
| [ESS-0150440](https://chess.esss.lu.se/enovia/link/ESS-0150440/21308.51166.49408.55924/valid) | P&ID RELEASE TANK TA007 |  |
| [ESS-0150441](https://chess.esss.lu.se/enovia/link/ESS-0150441/21308.51166.4352.21029/valid) | P&ID CWL DISTRIBUTION |  |
| [ESS-0150442](https://chess.esss.lu.se/enovia/link/ESS-0150442/21308.51166.61696.50745/valid) | P&ID LSC UTILITY PANEL |  |
|  | Etc…. |  |

**Reference documents**

|  |  |
| --- | --- |
| **Chess no.** | **Document** |
| [ESS-0149584](https://chess.esss.lu.se/enovia/link/ESS-0149584/21308.51166.45568.29236/valid)  | Radioactive Waste Transport Container ATB12K and applicable vehicles |
| [ESS-0184371](https://chess.esss.lu.se/enovia/link/ESS-0184371/21308.51166.6401.2687/valid) | Basis for the H09 load plan |
| [ESS-0173270](https://chess.esss.lu.se/enovia/link/ESS-0173270/21308.51166.56320.14722/valid) | Card reader drawing H09 |
|  | Etc… |

**All Committee Comments and Recommendations**

**Summary**:

**Responses to specific charge items**:

1) Have system requirements been defined and are they complete and adequate enough to ensure acceptable system performance?

2) Is the proposed design expected to meet the functional and performance requirements, and are interfaces properly identified and defined?

3) Have appropriate options and alternatives been considered in selecting the design approach? Are there further value engineering opportunities that should be considered?

4) Is the proposed design sufficiently mature to proceed to final design?

5) Have major project risks and safety hazards been identified, characterized, and mitigated where appropriate?

6) Are the project plan and cost estimates reasonable?

**Detailed Comments and Recommendations**

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| --- | --- | --- |
| Comment/Recommendation | Category 1 or 2\* | Committee Member |

**Individual Comments**

Below are all individual comments, that means some comments are already mentioned above and can be replied by reference.

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\* Category 1 means that the design team should address this recommendation prior to proceeding to final/detailed design, and Category 2 means that the design team should address this recommendation in due course during the final design process).