

2.3 Pyroprocess Subsystem and Component System

Requirements and an inner interface of the pyroprocess subsystem and component system were defined. An inner interface divided into 4 parts; ① High-end process includes vol-oxidation and off-gas. ② Pyroprocess includes electrolytic reduction, electro refiner, electro winning, and salt waste process. ③ System engineering technology includes remote operation, safeguards, and transportation/storage. ④ Utilities include the PRIDE facility. Figure 3 shows an inner interface between the components of the PRIDE.

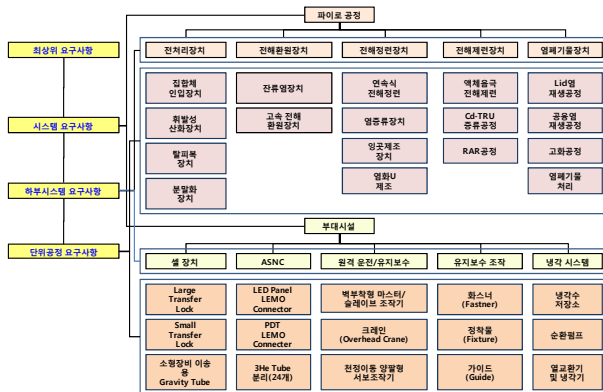


Figure 3. An inner interface between the major process of the PRIDE based on system engineering procedure

3. Conclusions

As high-level requirements proposed to this paper were sample data, more requirements such as a core function, safety, security, outer interface, procurement and maintenance will be defined in the next stage. System engineering and requirements engineering technology will be provided a need strategy in order to verify a validity of a pyroprocess technology in design, test, and operation stage.

REFERENCES

[1] IEEE Computer Society, IEEE Standards for Application and Management of the Systems Engineering Process, IEEE Std 1220-2005, 2005.
[2] Charles V. Park, High-Level Functional and Operational Requirements for the Advanced Fuel Cycle Facility, INL/EXT-06-12059, 2006.