## KNF-SF-06

# EUP (Enriched Uranium Product) Supply Management

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It is a procedure that manages an overall system of supplying EUP, which is the most important raw material for manufacturing nuclear fuel. EUP Supply Management not only manages schedules but also performs management work for the supply system as a whole including prediction and analysis of uranium quantity, analysis of proper time of uranium purchase, and proposing various plans for supplying uranium.

Based on experience of performing ESM services in the BNPP project, our company was able to develop capabilities in every part of the front-end fuel cycle project ranging from uranium supply to manufacture and supply of nuclear fuel. When exporting nuclear fuel in the future, it is possible to become more competitive.

# **Description**

## Background and Necessity

- Based on experience for purchasing and management plan for uranium, which is essential for manufacturing nuclear fuel, the scope of the company's business has expanded to include the front-end fuel cycle of all nuclear fuels
- Available to successfully perform the fuel supply project through an integrated management system from uranium to nuclear fuel manufacturing
- Improve competitiveness and ability to negotiate when exporting nuclear fuel
- Available to accumulate skills to manage nuclear materials of front-end fuel cycle

#### Work Contents

- · Management of uranium supply contract
- Develop and manage quantity and schedule of uranium delivery based on uranium supply contract
- Establish and operate a short- and long-term management plan for EUP delivery
  - Establish an annual EUP supply management plan
  - Establish a mid- and long-term EUP supply management plan
  - Predict and manage an operating budget for annual EUP management

- Appropriate inventory management for uranium
  - Calculation of uranium quantity and inventory management in the U3O8– Conversion–Enrichment process
- Management of EUP transport
  - Domestic customs clearance of EUP and performing inland transport
- Performing inspection, acceptance and Book Transfer of EUP
  - Receiving inspection of EUP delivered by supplier(s)
  - Effective uranium management through Book Transfer

# **Experience**

- The field(s) which requires EUP procurement necessary for supplying nuclear fuel
- Competitors in nuclear fuel manufacturing have been performing services for EUP supply management
- The service is necessary if a nuclear power plant performs supply and demand of uranium on its own

### Technology Readiness Level (TRL)

Actual system proven through operation

## Business Model

Technology

Licensing

Joint Search

Service Execution

Others

#### **Distinctiveness**

#### Characteristics

- Perform effective management of front-end fuel cycle(field of nuclear fuel supply) project through uranium supply management
- Available to provide a solution related to uranium supply to nuclear fuel supplier(s) by utilizing related projects
- Demonstrate performance for uranium supply management through successful BNPP project experience

#### Benefits

- Available to effectively manage projects in the field of overall nuclear fuel manufacturing through uranium supply management
- Retain complete project experience and skills as a front-end fuel cycle company
- Improve competitiveness when exporting nuclear fuel in the future

#### **Deliverables**

- Various reports for EUP supply management(mid- and long-term report, analysis report for annual uranium supply management, budget operating report, etc.)
- Uranium inventory management and analysis report
- · Services for EUP supply management
- Performing acceptance, inspection, and book transfer of EUP
- Issuance of EUP supply notice(Preliminary, Final), etc.