Human Resources Capacity Building as a Strategy in Strengthening Nuclear Knowledge Sustainability in the Experimental Fuel Element Installation of BATAN-Indonesia

RATIH LANGENATI, BAMBANG HERUTOMO, ARIEF SASONGKO ADHI

Center of Nuclear Fuel Technology

B A T A N
The Energy Demand Forecast

Assumptions for population base on DEN projection

Comparison of GDP projections by DEN and others

Indonesia Energy Mix at Democracy Scenario, with limitation, high carbon price

Indonesia Power Plant Installed Capacity at Democracy Scenario, with limitation, high carbon price

Source: Feasibility Study for Bangka Nuclear Power Plant Project - non site aspect
RECENT RESEARCH ACTIVITIES

1. Development of Nuclear Fuel for Research Reactor

2. Research of Nuclear Fuel for Power Reactor

3. Research of Structure Material for Nuclear Fuel
In order to maintain human resources capacity related to nuclear fuel production technology, a nuclear knowledge preservation program is implemented in the EFEI.

The program includes coaching/training, mentoring, and documenting important knowledge.

The program activities are monitored and evaluated quarterly for its improvement in the following year.
Coaching and training activities are conducted regularly to improve the personnel’s knowledge and skills related to nuclear fuel fabrication technology, conversion technology, various standardized testing methods, and so on.

A coaching is like an on the job training for an operator candidate for a certain instrument or process.

A training on the other hands emphasizes on the aspects of “what-why-how” of a knowledge transfer.

Through these coaching and training activities, it is expected that the knowledge transfer can run efficiently and effectively.
Sharing knowledge

• An atmosphere to encourage knowledge sharing is created in the facility. All personnel are encouraged to express the problems that they face and their ideas in their works. Teamwork plays a very important role here.
• The knowledge sharing atmosphere in the facility increases the rate of knowledge transfer process.
• It can also improve the work performance of all personnel.
Mentoring also plays a very important role in the transfer of knowledge activities. The purpose of mentoring is to provide junior personnel with the skills to get the works done appropriately.

The discussions can be done during the daily briefing or at any time if necessary.
“Coffee morning” forums are held monthly and usually the top management attends those forums.
• Documentation of all important work activities are stored in the nuclear knowledge management portal.
• All personnel are obliged to upload the information that they have related to their works to the portal database directly or with an assistance from the portal operators.
• Information uploaded includes notes, pictures, and videos.