

The current challenges and good practices of utilities

“Improvement of TEPCO's ALARA process”

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Tokyo Electric Power Company (TEPCO) had made a great effort to reduce radiation exposure and enhance radiation protection, in which Radiation Protection (RP) staff members had played an important role of the dose reduction with chemistry staff members. RP staffs put a priority on how effectively implement the individual dose reduction in low cost; however, the efforts to put a priority on ARALA process was slightly made. Recent radiation exposure at NPPs of TEPCO is worse than that in Western countries because of the concentration of improvement work in 2003. However, this was the worst period for TEPCO and this fact rose up power for ARALA program.

RP group manager of the head office as a leader and staffs of RP, radiation safety, chemistry and maintenance were organized as project team for the program of setting target dose level to start improving ALARA process. The approaches for ALARA process improvement are summarized in 3 points.

- Reviewing the current situation “As-Is”
- Identifying the gap between the current situation” As-Is” and what it should be “To-Be” process.
- Focusing on interface between RP and maintenance staff at work planning and post-outage steps.

As the result of current reassessment, (1) Lack of mid- and long-term target and (2) Lack of communication between RP and maintenance group were pointed out. In the current situation, RP staffs are related to maintenance work but they do not have communication with maintenance staffs. RP should be involved to maintenance work more positively, and give proposal and feedback for maintenance staffs.

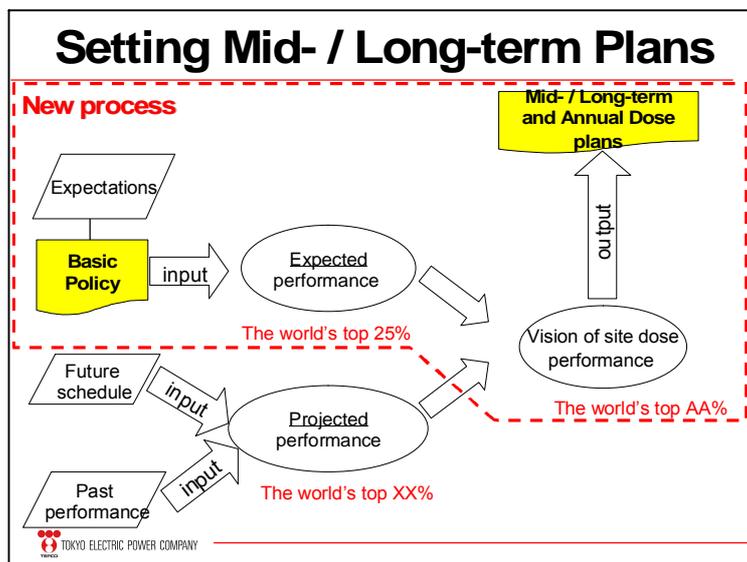
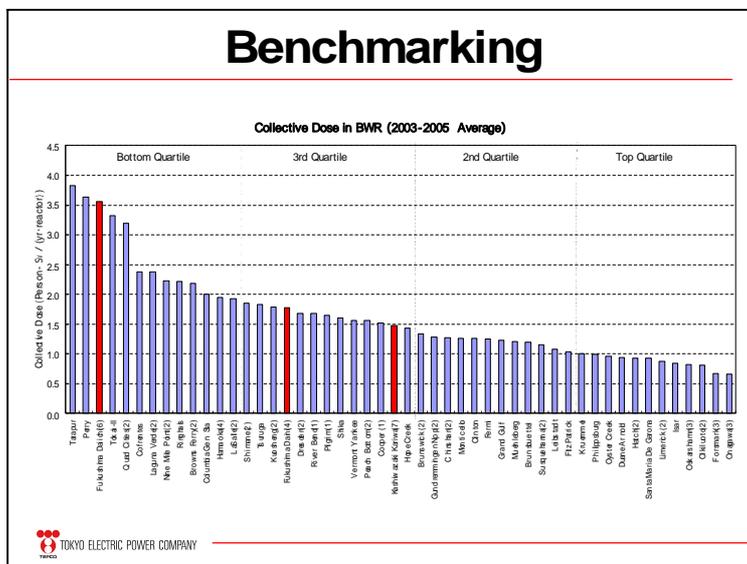
Improvement of ALARA process is consists of two major processes. One of them is to set mid-/long-term dose target. The other hand is to settle annual plans. For settling the mid- / long-term dose target, basic policy is presented by officials at Nuclear Power Station that could achieve dose reduction level in the top 1/4 in the world, and then Operation plan, improvement of works, measures for dose reduction etc., is settled along with it.

About the settlement of dose target, RP staffs promote the improvement of the communication through three steps that work assessment, work review, and follow up

after work.

- Proposing dose reduction measures to maintenance team and join before outage contract.
- Sharing information of detailed work schedule with maintenance team and contractors.
- Preparing outage report with lessons learned in the outage and reporting out to maintenance team.

Medium- and long-term dose target is set as the goal after FY2007. Regarding the outage dose target, 2 or 3 plants are selected at each power station and they are under trial operation.



Interface between Maintenance and RP

