

FMDP International Programs - Reactors Licensing Issues



Don Williams, Oak Ridge National Laboratory
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Task Description

- The purpose of this activity is to provide technical support to Gosatomnadzor (GAN), the Joint Steering Committee's (JSC) Special Working Group (SWG) on Regulatory Issues, and the Thermal Reactors Working Group in development of the required regulatory infrastructure for disposition of RF weapons-grade plutonium as MOX fuel in VVER-1000 reactors (AOP Task 3.1).
- FY 2000 Task Milestones:
 - Task program plan (February 2000: AOP Task Milestone 2)
 - Initial version of licensing roadmap/schedule (April 2000: informal milestone identified for ORNL by J. Baker)
 - Status report on GAN efforts to define VVER-1000 licensing requirements (September 2000: AOP Task Milestone 3)



Why Is This Task Important?

- Based on the Level 1 program roadmap and the 1999 LANL/GSPI workshops, there are a number of licensing/permitting actions required to support the design, construction, and operation of RF nuclear facilities (test and mission) being employed for disposition of RF nuclear materials.
- The RF regulatory infrastructure for supporting the materials disposition mission is not fully understood.
- A significant number of regulations needed by GAN for their mission-related licensing reviews do not exist. A similar situation may exist for other RF regulatory organizations.



Current Task Activities

- Task commenced December 1999.
- Outline of program plan developed (mid-January 2000) and coordinated with ORNL program managers (B. Bevard/D. Moses), LANL (S. Zygmunt), and PNNL (T. Grant). Work on the program plan is in progress.
- Organized task “kick-off” meeting with GAN
 - Scheduled for February 14-15, 2000 in Moscow
 - Joint activity with PNNL (Grant)
 - MD (S. Thomas) and LANL (W. Hahn) will participate
 - Agenda being coordinated with GAN
- Reviewed/commented on PNNL task orders for GAN support (development of regulations and roadmap)



Task Challenges

- **ORNL support for this task must enhance and complement a number of International Program activities.**
 - **Preparation of Level 2 roadmaps (VVER-1000 reactors and other RF materials disposition projects)**
 - **Development by GAN of their regulatory infrastructure to support the materials disposition mission, including the determination of schedules/resource needs for the work**
 - **Address April 2000 milestone for preparation of initial GAN roadmap/schedule (review at June 2000 JSC meeting)**
 - **Interacting with SWG on Regulatory Issues, as needed**
 - **Support PNNL on GAN deliverables/interactions**
 - **Support MD information needs on GAN licensing approach as compared to domestic (NRC) licensing actions**



Summary

- Based on the Level 1 program roadmap and the 1999 LANL/GSPI workshops, there are a number of licensing/permitting actions required to support the design, construction, and operation of RF nuclear facilities (test and mission) being employed for disposition of RF nuclear materials.
- The RF regulatory infrastructure for supporting the materials disposition mission is not fully understood.
- A significant number of regulations needed by GAN for their mission-related licensing reviews do not exist. A similar situation may exist for other RF regulatory organizations.
- ORNL's contributions to the U.S. materials disposition program have been viewed as adding value to DOE/MD's understanding of domestic licensing requirements and protocols. As such, DOE/MD should continue to fund ORNL involvement in the mission-related interactions with GAN.

