

Configuration Management Benchmarking Group IAEA Advisory Group Meeting

Configuration Management Throughout Plant Life-Time June 19-23, 2000

By Rick Harris, CMBG Steering Committee Chair

The International Atomic Energy Agency (IAEA) is currently sponsoring a project, called "Configuration Management Throughout Plant Life-Time," to write a guideline document for nuclear power plant Configuration Management. On June 19-23, I represented the Configuration Management Benchmarking Group (CMBG) at an Advisory Group Meeting (AGM) at IAEA headquarters in Vienna, Austria to provide feedback on the initial draft document. The meeting included representatives from China, the Czech Republic, France, Germany, Korea, Russia, and the United States, and was chaired by Brian Grimes, who is retired from the US NRC.

In an unusual arrangement, two separate divisions of the IAEA (Nuclear Power and Nuclear Installation Safety) teamed up to sponsor this project. Last fall a team from France, Germany, Spain and the US prepared the first draft. The same team will use the work we did in the AGM to draft the final document in October and will issue it by the end of the year as an IAEA document.

To put things in perspective, participants in the CMBG conferences we have held since 1994 have represented utilities from every US utility and several utilities outside the US. This that represents only about one-fourth of the nuclear power plants in the world. Not surprisingly, the issues that most concerned these representatives of the international community are the same ones that we have discussed repeatedly at the CMBG conferences.

We focused primarily on the essential programmatic issues that define a good CM program. The three highest priority concerns, which we elected to address first, were linking operational configuration to design configuration, assessing your CM program, and addressing the value of the erosion of organizational knowledge through attrition and personnel migration. We tried to include language that would promote a strong CM culture in the organization and ensure a protection of the design basis.

One key issue for everyone was the turnover of organizational knowledge from one organization to another. This can be a significant challenge for plants where the original design authority might even be from a difference country than the operating company. Even if the information transferred includes the know-how, it may not include the "know-why," which is equally important to retain.

The proposed guideline includes many of the same principles and language from CM documents in the US. It will include a version of the 3-ball model from NIRMA TG-19, and the figure from INPO AP-929 showing the relationship of operational configuration, design requirements and design bases.

Representatives were also interested in the same project related issues such as design basis reconstitution, automation of processes and automation of documentation. However we all agreed that improving processes is more important than automating bad existing processes. The draft guideline includes language to support that assertion.

I am encouraged that the many of the nations of the world which operate nuclear plants are rapidly approaching a global consensus about what is important to good CM practices. Effective CM is accomplished not merely by identifying deficiencies and completing projects to correct problems, but with a strong programmatic emphasis throughout the organization to maintain CM all of the time.

Attendees:

Chair - Brian Grimes, US NRC, retired (USA)
Se-Woo Cheon, Korea Atomic Energy Research Institute (Korea)
Rick Harris, CMBG (USA)
Jurgen Lockau, Siemens AG (Germany)
Raymond Petit, French Nuclear Energy Society (France)
Dusan Plavjanik, Dukovany Nuclear Power Station (Czech Republic)
Ren Yongzhong, Shanghai Nuclear Research and Design Institute (China)
Jiri Zdarek, Nuclear Research Institute (Czech Republic)

IAEA Attendees

Aybars Gurbinar,
Andrei Kassilov, *Scientific Secretary*
A Kazennov, *Scientific Secretary*
Vojtech Kotyza,



Group photo:

Seated (L-R): Pladjavik, Grimes, Kazennov; Standing (L-R): Petit, Zdarek, Yongzhong, Kotyza, Harris, Lockau, Cheon