NRC's Jaczko guests at ANS's first webinar

BY RICK MICHAL

N A FIRST-of-a-kind event, the American Nuclear Society, in cooperation with the Nuclear Regulatory Commission, on October 4 hosted a webinar on nuclear issues. NRC Chairman Gregory Jaczko answered questions posed by ANS member Dan Yurman, a noted nuclear blogger and a regular contributor to the ANS Nuclear Cafe blog, in a live and unscripted session.

The idea for hosting the webinar and thus advancing ANS's social media presence was supported by ANS President Eric Loewen and other officers. "I applaud the inaugural webinar with NRC Chairman Gregory Jaczko," Loewen said. "The joint webinar—NRC and ANS—showed a new tool that the nuclear science and technology community can use to better advance our message about the safe atomic applications available to benefit mankind."

The webinar was scheduled to last an hour, but Jaczko made himself available for an additional half hour. Most of the questions had been submitted beforehand by bloggers and/or ANS members, and so Jaczko knew in advance what would be coming at him, although Yurman was allowed to ask follow-up questions. Those questions that Yurman did not ask because of time constraints were answered later on the NRC's blog site at <http://publicblog.nrc-gateway.gov/>.

No "bombshell" comments were made during the session, as Jaczko calmly explained the NRC's positions on such things as the decision to stop work on the review of the Department of Energy's license application for the Yucca Mountain repository and the NRC's recommendation of a 50mile evacuation zone around Fukushima Daiichi for U.S. citizens in Japan.

Yurman, on his own blog site—*Idaho* Samizdat (<http://djysrv.blogspot.com/>) commented after the session that Jaczko was pleasant, conversational, and well prepared, and that the chairman had invested a lot of time to be ready for the event and to extend it another 30 minutes from the origIn ANS's inaugural webinar, NRC Chairman Gregory Jaczko answered questions about Yucca Mountain, Fukushima Daiichi, and other topics.



NRC Chairman Gregory Jaczko (at right) was the guest during ANS's inaugural webinar on October 4. For 90 minutes, he answered questions posed by ANS member and blogger Dan Yurman. (Photo: Fritz Schneider/Clark Communications)

inal 60-minute allotment. In addition, Yurman quoted lead NRC spokesman Eliot Brenner as saying that the webinar experience "exceeded all expectations."

More than 60 people signed on to the webinar, and another 15 listened in through a toll-free phone number, and so the event was considered a success by ANS and the NRC. According to statistics, a good number of the listeners stayed tuned in for the entire show.

Laura Scheele, ANS manager of communications and policy, said that the ANS Public Information Committee is looking into hosting additional webinars on a variety of topics. David Pointer, who chairs the committee, noted that using communications tools such as webinars could enhance ANS members' communications and public information activities. Other new communication tools established by ANS are the ANS Nuclear Cafe blog (<www.ansnuclearcafe. org>), which recently celebrated its one-year anniversary, and the ANS Facebook page.

What follows are excerpts from the webinar on a variety of topics.

Fukushima Daiichi

When asked about the NRC's decision to recommend to U.S. citizens a 50-mile evacuation zone around the Fukushima Daiichi plant following the accident resulting from the devastating earthquake and tsunami in March, Jaczko explained that the NRC had internal discussions "about what we were seeing and what we were postulating would be happening or could be happening" in Japan. "Based on that," he said, "we did some analyses, took some best judgments about what we thought would be reliable inventories and releases from reactors given the conditions we were anticipating, and ran some simple codes that gave us indications that there was potential for releases out to distances of about 50 miles, or approximately in that range.

"Given that information," Jaczko continued, "we communicated with the executive branch and gave them our sense that, from a technical perspective, if in the United States we were seeing similar things, we would be looking at enhanced evacuations." Based on the NRC's advisement, the U.S. Department of State issued a travel advisory that recommended that Americans stay at least 50 miles away from Fukushima.

Yurman stayed on the Fukushima questioning, asking about Jaczko's testimony to Congress in the week after the accident during which he had noted that there was little or no water in Unit 4's spent fuel pool, and as a result, the plant was releasing high levels of radiation. By June, however, it had become apparent that the spent fuel had remained covered with water the entire time, that the fuel did not catch on fire as had that the biggest one is the need for reliable instrumentation for spent fuel pools. "The task force we established to look at Fukushima made a recommendation in that area, that it was important to have good instrumentation that could continue to provide reliable information even after a significant event like the earthquake and the tsunami," he said.

Yucca Mountain

The NRC terminated its review of the Yucca Mountain license application as of October 1, the start of fiscal year 2012. "We no longer have a program for Yucca Mountain," Jaczko said. "The licensing board has suspended their proceeding, and we, as others, will wait and see if Congress or the federal government pursues another option for a geologic repository."

Yurman commented that some people are concerned that the NRC has overturned the Atomic Safety and Licensing Board's decision that the NRC should continue its review of the Yucca Mountain application. Jaczko replied that he serves as the chief executive officer for the NRC.

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been reported in the media, and that there was little or no damage to the spent fuel pool. "What information did you rely on in March to make the assertion that the pool was uncovered, and what lessons learned can you point to from this change in circumstances in looking toward future situations where you might be called on to make similar analyses?" Yurman asked.

Jaczko responded that the NRC "provided what was our best understanding of the situation. Thankfully, the pool appeared to be in a different condition than what we believed at that time. But I would say that this was a small piece of what we were looking at at the time, and the indications of high radiation levels at the site were accurate. . . . I think that the issue that we were really more concerned with, and I think at that time one of the things I testified to, was the fact that such high radiation levels at the site meant that you were going to have challenges doing remediation and other mitigation measures for the plant."

Regarding lessons learned, Jaczko said

mal legal proceedings, or what we call the formal adjudicatory proceedings or licensing actions, the commission serves as an appellate body of the licensing board," he said. "So the commission establishes the regulations that the licensing boards are required to foltheir decisions are appeal-

and that the commis-

sion has a role to set

policy. "In these for-

low. Ultimately, their decisions are appealable to the commission. The commission has the final authority on the outcomes of those proceedings."

Vermont Yankee

The state of Vermont contends that it has the authority to decide whether or not Entergy's Vermont Yankee nuclear power plant should be kept open—even though the NRC has renewed the plant's operating license and litigation into the matter is currently ongoing. Yurman asked whether states would now start making decisions about the future of nuclear reactors, and Jaczko replied that they already do make such decisions.

"In those states where there is a traditional public utility, the states do have the authority to approve the kinds of generating sources that would exist in that state," Jaczko said. "Where the NRC has exclusive jurisdiction is on matters relating to nuclear safety." The litigation in Vermont, he continued, is ultimately about whether the state's actions are in line with its authority, or whether it has edged into the NRC's authority. "I think we'll all watch with interest as the court moves forward and comes to some decisions in the [Vermont Yankee] proceedings," he said.

Aging reactors

Exelon's Oyster Creek is the oldest reactor in the U.S. fleet. When its license renewal came up in 2009, the NRC had some concerns about the aging plant but ultimately renewed the license. Subsequently, in an unrelated agreement with the state of New Jersey, Exelon agreed to shut down Oyster Creek within the next 10 years. Yurman asked Jaczko if more situations involving aging reactors were coming up, and if so, what would be the agency's approach to the issue.

Jaczko responded that an NRC license is an authorization to operate, but not a requirement to operate. "Determinations about whether a plant operates are really going to come down to economic issues and whether it is economically viable for a plant to make equipment modifications or equipment upgrades," he said, "and that's a decision that utilities ultimately have to make. For us, the most important thing is that we have a good, solid program to identify issues that may have safety significance. A reactor that is operating under its regular 40-year license falls under our normal inspection program and our normal oversight program. For a plant that gets a license extension, there is an additional requirement, and that is to have what we call aging management programs." These programs, he said, ensure that the plant operator is able to monitor the potential impact of aging on equipment, systems, and structures so that they don't have a negative effect on the overall safety of the plant.

Jaczko said that it would be no surprise to see some plants have their licenses renewed but not operate for the full 20 years of their extended licenses. "In many ways, it's akin to the same kind of thing [as] a car with 150 000 or 200 000 miles on it and the clutch goes, and at some point you make the decision whether it's worth it to replace the clutch or finally move on to another car," he said. "Those are decisions that the utilities have to make. I think that as the plants age, there will clearly be equipment that will need to be replaced, and there will always be a question of whether that replacement is economically viable for the potential two or three more years perhaps that the plant will operate."

Fort Calhoun

There was some controversy about how prepared the Omaha Public Power District was for the flooding that occurred at the Fort Calhoun nuclear power plant in June. Yurman asked Jaczko to explain his assessment of the situation at Fort Calhoun and the role of the NRC in helping OPPD get ready for the flood.

Jaczko answered that during an inspection about two years ago, an NRC inspector noted that he didn't believe that flood protection measures at the site were sufficient to deal with a likely maximum-level flood. As a result of those inspection findings, Fort Calhoun modified its plan to deal with a much higher level of flooding. "I think that was very good work on the part of the agency," Jaczko said, "and it proved itself effective and necessary this summer when we saw the very high water levels on the Missouri River."

The issue of flooding is something that the NRC is looking at as part of the lessons learned from the Fukushima accident, he noted. "One of the recommendations of the task force was that about every 10 years, utilities and licensees should reevaluate all of their external hazards to ensure that they have the most up-to-date analysis, that those analyses are accurate, that changing conditions have been taken into consideration, and that new information has been incorporated," he said.

IG report

In June 2010, Jaczko was the subject of a highly publicized report by the NRC Inspector General that was critical of the way he does business. The report was especially critical of his management style, which, Yurman said, left some members of the public with the impression that perhaps the NRC was getting too political.

Jaczko said that since becoming chairman, he comes to work every day to do his job better than the day before. He acknowledged the report's comments on concerns about the way he does his job, but, he said, "the fundamental findings of that report were that all the actions related to Yucca Mountain were appropriate. That is really the heart of what was in that report. I think it's fair to say that Yucca Mountain is probably one of the most controversial issues that this agency will ever deal with."

Jaczko added that he thinks the Yucca Mountain issue showed the strength of the NRC. "We have had a large number of staff who have expressed disagreements with decisions that I have made, decisions that the commission has made, in regard to Yucca Mountain. I think that's a good thing. It shows that people are not afraid to speak up and talk about what their views are."

Other topics discussed during the webinar included fire protection at nuclear plants, uranium mining, prescriptive- and performancebased regulations, small modular reactors, the recommendations of the Blue Ribbon Commission on America's Nuclear Future, control room upgrades, and crisis management. The complete transcript of the webinar is available on the NRC's blog site at <http://public-blog.nrc-gateway.gov/>. Alternative Energy. Alternative Engineering.

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