

ZCAP ZION STATION COMMUNITY ADVISORY PANEL

MINUTES OF THE MEETING HELD ON MAY 21, 2012 AT THE ZION-BENTON HIGH SCHOOL / NEW TECH CAMPUS, ZION, IL

Present: Brent Paxton, Chairman
Craig Dyke
Cynthia Johnson
John Lewis, Secretary
Audrey Liddle
Kent McKenzie
Doug Ower
Linda Sittig
Patrick Thurman

Absent: Joel Brumlik
Craig Mason
Rep. JoAnn Osmond, Deputy Chairman

Item 1: Call to Order

The Chairman called the meeting to order at 6:05 pm.

Item 2: Approval of Minutes

The Panel had no comments on the minutes of the February 27, 2012 meeting. Chief Lewis motioned to accept the minutes, seconded by Ms. Liddle and this was carried unanimously by the Panel.

Item 3: Chairman's Remarks

The Chairman said that a regular venue for the ZCAP meetings had thus far not been found and he hoped that the school location would work well. He reminded all attendees of cell phone etiquette. The Chairman had received apologies from Representative Osmond who was in legislative session in Springfield and he noted that Mr. Mason was caught in heavy traffic and may not be able to attend.

Item 4: ZionSolutions Presentations

Decommissioning Project Update

by Patrick Daly, General Manager

The safety statistics to date in 2012 have not been good with six OSHA recordables; all were categorized as strains/sprains/pain and involved work outside the radiologically-controlled area. This is receiving management attention and actions include a focus on human performance and a training program to improve situational awareness.

Regarding radiation protection, the maximum radiation dose a worker can receive annually is 5 Rem set by the Nuclear Regulatory Commission (NRC) and by ALARA Regulations (“As Low As Reasonably Achievable”). The workforce is within the ZionSolutions’ administrative levels which are less than half of the regulatory limits. It was noted that there is more contamination in Unit-1 containment than was found in Unit-2.

On the regulatory side, the following was noted:

- an NRC license amendment will be sought for the fuel building crane upgrade;
- the Security Plan for the Independent Spent Fuel Storage Installation (ISFSI) must be submitted to the NRC for review and approval;
- there were no cited violations from recent NRC Region III inspections; and
- the NRC intends to hold a Public Meeting in the near future in Zion.

The Decommissioning Trust Fund balance at the beginning of the project was \$801.4 million; it has earned \$59.9 million in investments (net of taxes and fees); disbursements of \$189.2 million have been made; and the balance at March 31, 2012 was \$672.1 million. A description of the major expenses to date was provided.

The rail work was completed with rail ties replaced and three lines added on site. The project now waits for Union Pacific to connect the site rail to the main lines so that empty cars can be received. One unit train (approximately 30-35 cars) will leave for Clive, Utah by year-end. The project is no longer connected to the switchyard and receives power off-site from a lower voltage electrical system requiring smaller pumps for service water. The Unit-1 heavy lift system is in place.

The Unit-1 cavity and Unit-1 large component removal preparations were described. It was noted that the reactor head will be segmented and shipped by rail to Clive for disposal, unlike the Unit-2 reactor head which went in one piece by road. Welding will ensure that there are no leaks during the cavity flooding.

The spent fuel milestones are:

- 2012 Fuel modifications and fuel inspections – completed (the largest inspection and sipping campaign to date in the country). Some assemblies were identified for different handling (requiring an additional sleeve in the canister).

- 2012 ISFSI and Monitoring Station construction – engineering is completed and contract is out for bids; construction should begin in July.
- 2013 Transfer of spent nuclear fuel to dry storage begins.
- Continued safe operation and maintenance of the spent fuel pool.

The first dry cask storage canisters should arrive this summer; there will be dry runs in the fall, followed by dry runs with inspected by the NRC inspections; and the fuel campaign can begin in spring 2013.

Following is the major work remaining for 2012:

- ISFSI construction.
- Heavy haul path construction (so that the transporter can go from the fuel building to the vertical concrete cask (VCC) construction pad, pick up the concrete overpack, back to the fuel building, and then to the ISFSI south of the switchyard).
- Unit-1 reactor vessel preparatory work.
- Unit-1 steam generators removal.
- Complete Unit-2 reactor internals segmentation.
- Complete asbestos remediation in the auxiliary building.
- VCC construction (vendor should begin constructing overpacks next month).
- Fuel building crane upgrade.
- Continue MARSAME characterization of the turbine building (no contamination has been found so far but work will continue).

In response to questions from Mr. Ower, it was clarified that there will be separate Security Plans for the ISFSI and the rest of the site. A presentation on ISFSI operations will be provided to the ZCAP at its November 2012 meeting.

Reactor Vessel Segmentation

by David Brown, Manager of Decontamination & Decommissioning (D&D) and Construction

Mr. Brown explained that the major components of the reactors are the reactor vessel and the reactor internals. Due to the levels of radioactivity segmentation is mechanically performed under water and he described the different tools that are used as well as the mock-up testing that takes place. The water is treated and then discharged in accordance with regulatory permits. The schedule of segmentation activities was presented.

The reactor vessel and the majority of the reactor vessel internals will be Class A low-level radioactive waste which will go to EnergySolutions' disposal facility in Clive, Utah. There will be approximately 2,500 cubic feet of Class B and C waste for which the company is entering into a disposal contract with Waste Control Specialists (WCS). The B and C waste will be safely stored on site per regulations until it can be transported by truck to the new WCS facility in Texas. Both reactors will have some Greater Than Class C (CTCC) waste and this will be stored with the spent fuel on site in dry cask storage until the Government provides a permanent disposition path.

Environmental Department Update
by Darlene Murphy, Environmental Manager

Ms. Murphy's presentation focused on three areas: Compliance with the National Pollutant Discharge Elimination System (NPDES) to comply with the Clean Water Act; Risk Management actions taken for the protection of Lake Michigan; and Environmental Stewardship particularly given the fact that the plant is located between two State Parks.

Ms. Murphy referred to the company's partnership with community groups to rescue snakes from a den under a section of the rail crossing that was being refurbished. Recognition awards were presented for partnership in environmental stewardship to the following for the successful snake rescue and release:

Chris Kubic, Zion resident and Grayslake High School Teacher
Rob Carmichael, Lake Forest Wildlife Discovery Center
Mike Corn, College of Lake County Biology Professor
Brad Semel, IDNR Biologist (not present)

Item 5: Public Comment and Questions

The Chairman asked members of the public who wished to make comments or ask questions to introduce themselves. He noted that the ZCAP Charter has a three-minute limit per person.

Mr. Paul Kakuris asked about intake pipes and their size in connection with the NPDES and also about the Migratory Bird Treaty Act in regards to environmental stewardship. Dave Brown responded that there are 2 inlet pipes, 14 feet in diameter. Ms. Murphy explained that the Canada Goose is protected by the Migratory Bird Treaty Act and the project is careful not to disturb geese or their goslings.

Mr. Kakuris enquired whether the design of the ISFSI is available to view. Mr. Daly said that the design is available through the NRC ADAMS website, although security aspects are not public. A presentation on the ISFSI design would be provided at the ZCAP's next meeting.

Mr. Tom Rielly, Executive Principal of Vista 360, in referring to the status of the decommissioning trust fund said there appeared to be a \$45 million difference between the actual trust fund account balance and the balance reported to the ZCAP. He left some material with the Panel and asked them to look into this.

Ms. Linda Lewis had a question concerning how radiation is monitored at the site during different stages of operation, including during transportation. Mr. Daly said that the project would provide a presentation at the next ZCAP meeting on radiation monitoring. He explained that the monitoring program begins with employees as there is training to be a radiation worker and at every work location surveys are taken prior to work starting and these continue "real time"

as work progresses by using area monitors and thermoluminescent dosimeters throughout the site. The Illinois Emergency Management Agency (IEMA) has its own monitoring systems real time. The transportation requirements are very specific. For dry cask storage (65 casks total) it is essential to make sure that the vent screens are clear.

Ms. Marilyn Shineflug asked about the amount and types of components that are released into Lake Michigan. Ms. Murphy explained that only routine non-contact cooling water is released. Mr. Daly said that the topic of water release criteria and regulations would be the subject of a future ZCAP presentation.

Item 6: Old Business

The Chairman noted there was no Old Business from the February 2012 meeting.

Item 7: New Business

The Chairman said that several ideas for future presentations had come out of this meeting but if the Panel had other suggestions they should let him know. The next meeting would be on August 27, 2012.

Item 8: Adjournment

The Chairman entertained a motion to adjourn the meeting. Motion made by Ms. Sittig and seconded by Chief Lewis. The Motion was carried unanimously by the Panel. The meeting was adjourned at 7:15 pm.