

ZCAP ZION STATION COMMUNITY ADVISORY PANEL

MINUTES OF THE MEETING HELD ON AUGUST 29, 2011 AT THE BEST WESTERN MARKET SQUARE, ZION, IL

Present: Brent Paxton, Chairman
Rep. JoAnn Osmond, Deputy Chairperson
Craig Dyke
Cynthia Johnson
John Lewis, Secretary
Audrey Liddle
Kent McKenzie
Doug Ower
Linda Sittig

Item 1: Call to Order

The Chairman called the meeting to order at 6:00 pm and asked members of the Panel to introduce themselves. He requested that cell phones be muted during the meeting.

Item 2: Approval of Minutes

The Panel had no comments on the minutes of the June 27 meeting. Mr. McKenzie motioned to accept the minutes, seconded by Representative Osmond and this was carried unanimously by the Panel.

Item 3: Chairman's Remarks

The Chairman thanked *ZionSolutions* for making the meeting arrangements.

Item 4: Zion Station Decommissioning Project Update

Mr. Patrick Daly, General Manager of *ZionSolutions*, gave a presentation on recent and upcoming decommissioning work activity. He said that for future meetings the ZCAP should tell the company what they are interested in and *ZionSolutions* would provide the right subject matter expert. A Project update, including safety statistics, would be given at every meeting.

Mr. Daly's presentation included a safety status update. There have been no lost time accidents and two recordable injuries for the year. The project plans a staff safety awareness day on

August 31, which will be *ZionSolutions*' first-year anniversary at Zion Station. Mr. Daly reported on the damage caused by the microblast winds on July 11.

The Level 1 schedule will be provided on the company's website. Some work has been accelerated but the interim milestones and end date are unchanged.

Mr. Daly provided an update on the containment openings, reactor vessel work and spent fuel assembly modification work. Mr. Daly explained that some of the fuel assembly nozzles require modifications prior to their transfer to dry cask storage. Westinghouse is contracted to undertake the fuel modification work, which will take several months and be performed underwater. Every single fuel assembly will then be characterized prior to fuel loading.

Mr. Daly described the on-site fabrication process for the vertical concrete casks (VCC's), which will be visible to the public at the end of Shiloh Boulevard where the fabrication pad will be situated. The main purpose of the casks is for shielding the canisters that will hold the spent nuclear fuel – but during construction of the concrete casks, Mr. Daly emphasized that there will be no fuel in the casks. The empty fabricated casks will be moved inside the spent fuel pool building for fuel canister loading. The subcontractor for the dry cask fuel fabrication, NAC International, is using three fabricators in Pennsylvania, Utah and Japan. The first Greater Than Class C (GTCC) waste canister and liner arrived at the site from Utah on August 22. *ZionSolutions* will eventually take delivery of four more of these canisters.

Mr. Daly described the general preparations for segmentation of the Unit 2 reactor vessel internals. He also described reactor cavity preparations to get ready to remove the Unit 2 reactor vessel head. Shipment of the reactor vessel head will be by truck to Clive, Utah in the late fall. It will be over-sized, over-weight and permitted, meeting Department of Transport requirements. The shipment will have escorts and will be done in coordination with the Zion Police Department. The reactor head is made of metal and will be packaged. Asbestos abatement work is being conducted through Local 225 and the bulk of thermal insulation is disposed at the Zion landfill.

The Chairman suggested that some public awareness be conducted during construction of the fabrication pad and empty VCC's since it may be visible. He agreed with Mr. Daly that the best way to do this would be through a sign explaining the activity.

There were no other questions or comments from the Panel on the decommissioning status.

Item 5: *ZionSolutions* Decommissioning Trust Fund Presentation

Mr. Lou Balducci, *ZionSolutions* Director / Finance and Project Control, provided a presentation on the nuclear decommissioning trusts. This included the background, current status, accessing the fund (following Nuclear Regulatory Commission (NRC) regulations), trust fund management – the key players and their roles, the trust fund balances as of September 1, 2010 and June 30, 2011, and the majority of expenses incurred.

Representative Osmond asked about income from the sale of clean material. Mr. Daly responded that this income is offset against expenses so that the trust fund investments can continue to grow.

Mr. Ower commented that this project seems to be tantamount to a fixed price contract. Mr. Daly said that *ZionSolutions* is taking all the risk and there is no path back to ratepayers. Because of the risk profile it is not certain that the company will realize a profit. Mr. Ower then asked whether the entire decommissioning trust fund would be used for decommissioning. Mr. Daly anticipated that the majority would be used and *ZionSolutions* has capped what its profits could be. This is different from other decommissionings, so similar risk-based projects and Federal Acquisition Regulations were examined to determine what profit would be appropriate. A 15% profit would be excellent for the Project but is uncertain. A major risk is transferring the fuel from wet to dry storage without unexpected cost increases. For example the fuel nozzle modifications were an unexpected cost of \$17 million and the price has also escalated for stainless steel.

The Chairman asked that with the company's profits capped, was it correct that at the end of the project any excess funds would be returned to Exelon. Mr. Daly clarified that the end state for *ZionSolutions* is when the two NRC plant licenses are amended to release the bulk of the property for unrestricted reuse. Approximately 10 acres will remain under NRC license and include the dry cask fuel storage facility and its buffer zone. The amended licenses will be returned to Exelon. The final end state is when the spent fuel is gone and the dry cask fuel storage facility has been decommissioned. Exelon held back money from the decommissioning trust funds for this purpose.

Mr. Ower requested clarification about the use of the vertical concrete casks that will be constructed at the plant. Mr. Daly explained that they are the overpacks for the fuel canisters at the on-site dry cask storage facility and are not transportable; when the fuel is eventually transported, the fuel canisters will be removed from inside the overpacks and placed into transportable casks.

Ms. Sittig asked for an update on Yucca Mountain and the Texas waste disposal facility. Mr. Daly referred to the Federal Blue Ribbon Commission that is not recommending putting Yucca Mountain on the table but is recommending that the Government pursue an interim dry fuel storage site (fuel from decommissioned plants first and then from operating plants). The Texas Compact is opening the facility owned by Waste Control Specialists (WCS) to Class B and C waste and *ZionSolutions* is in negotiation with WCS. Class B and C waste is comprised of metal components that are highly irradiated; the bulk of the Zion Station decommissioning waste is Class A low-level waste that will go to Clive, Utah for disposal.

The Chairman noted that the approved minutes and the presentations will be posted on the *ZionSolutions* website.

Item 6: Public Comment and Questions

The Chairman asked members of the public who wished to make comments or ask questions to speak from the microphone and state their name; the ZCAP Charter has a three-minute limit per person.

Mr. Sean Hession of the Zion-Benton High School News asked whether there would be less attention to safety and other regulations because *ZionSolutions* is performing the decommissioning for less money. Mr. Daly said that the NRC regulations are the same no matter who performs the decommissioning. NRC Region III is located an hour away and there is an inspector on site one week a month. Public and employee health and safety are the first priority. Mr. Daly also said that Exelon's strategy had been to leave the trust funds to grow until 2013 or later. The difference is that *ZionSolutions* can control the costs for low-level waste disposal because its parent company owns the disposal site. At other decommissioned plants the utilities could go back to the ratepayers for more money when they under-estimated the amount of their low-level waste. In response to Mr. Hession's question about the volume of low-level waste, Mr. Daly said that none would be left at the site. There have already been eight truck shipments to Clive, Utah and the bulk will go by rail in the future. It would be 12 months before the rail system could be underway. It was anticipated that there would be 3.5-3.8 million cubic feet of low-level waste.

Mr. David Kraft of the Nuclear Energy Information Service (NEIS), a nuclear power watchdog, said he was concerned about the relationship between the ZCAP and the community as the Panel was a company initiative. He asked how concerns would be registered. The Chairman recalled that he had received an email from Linda Lewison and he would ask *ZionSolutions* to consider making her communication available on its website. He felt that the website would be the biggest vehicle.

Mr. Kraft asked what entity exists for conflicts between the greater stakeholders at large, e.g. regarding Hardened On-Site Storage (HOSS). The Chairman said that questions should go to him or Larry Booth, *ZionSolutions* Outreach Manager, and they would be distributed to the Panel members and put on the website with the answers by *ZionSolutions*. Mr. Kraft said that there may be issues where there is a conflict and the entity could be legal or regulatory, for example the current lawsuit against *ZionSolutions*. The Chairman noted that the ZCAP is an advisory panel and they do not have a hammer. Their role is to hear questions and concerns from the community at large.

Representative Osmond said that the ZCAP decides what to put on the meeting agendas and noted that the Panel had requested this evening's presentation on the decommissioning trusts funds, and that the public's comments/questions can be incorporated into future meetings.

Ms. Marilyn Shineflug, a resident of Lake Bluff and an ex-Mayor of Antioch, asked how the disposal charges are computed. Mr. Daly explained that the parent company will charge *ZionSolutions* commercial rates for disposal at Clive, Utah. These would be similar to the rates charged in the "life of plant" agreements that utilities have with *EnergySolutions*. Mr. Daly noted that the Department of Energy has preferred disposal rates over commercial entities.

A Zion resident, who lives one-and-a-half miles from the plant, noted that Yucca Mountain has become political because of its proximity to Las Vegas, but Zion residents are also living close to spent nuclear fuel. Mr. Daly said that *ZionSolutions* has people on its staff who worked at the Yucca Mountain office before it shut down. They could provide a technical presentation.

The Chairman noted that items for future discussion could be the Blue Ribbon Commission and Yucca Mountain.

In response to the question “what is low-level radioactive waste,” Mr. Daly said it is piping, pumps, concrete and general debris that has some contamination. He explained that spent fuel is high-level waste that will be stored in canisters and casks on site. The Clive, Utah disposal facility can only take low-level waste and only the Federal Government can move high-level waste. At the project’s peak, there will be approximately one train shipment per month to Utah.

A Winthrop Harbor resident asked whether there is any increased risk to the local community. Mr. Daly said that the risks are more industrial than radiological. Operating nuclear plants have an emergency planning zone (EPZ) but Zion is not required to have an EPZ because there is no scenario with off-site consequences.

There was a question about security during the transport process. Mr. Daly explained that security costs were included as a part of project management. The site has been staffing up and training security officers to support the fuel transfer from wet to dry storage. There will always be armed security officers. There is no hazard associated with the transport of low-level waste and no security is required.

Mr. Dyke, ZCAP member, asked if there were any airborne or groundwater risks. Mr. Daly said there was not and he described how the fuel would be moved to dry storage. He also explained that the low-level waste would be packaged inside buildings.

Ms. Johnson, ZCAP member, asked about exposure laws and whether safety statistics and logs were available. Mr. Daly referred to the ALARA regulations – which stand for “as low as reasonably achievable” – under which an employee may receive a maximum radiation dose per year of 5 Rem, per NRC regulations. *ZionSolutions’* administrative annual limit is one-fifth of the NRC limit and it has an annual “ALARA budget” which is set by job. Mr. Daly said that at a future ZCAP meeting *ZionSolutions* would provide a presentation on radiation protection controls.

Ms. Diane Ower, whose father was a retired pipefitter who had worked on the plant construction, was concerned about any long-term effects and asked if there were contributions to a Superfund cleanup in the future. Mr. Daly said there was not as Zion Station was not a Superfund site. Commercial nuclear plants are not operated in secrecy and when decommissioning is complete everything is removed. *ZionSolutions* will go through a process to fully characterize the site, monitor groundwater and verify that the site meets federal standards for release and the NRC will have an independent firm independently verify that at the end of decommissioning. Decommissioning is a very controlled process and radiation protection standards are set

conservatively and have been in place for a generation. There is also an international agency involved in setting worldwide conservative standards. Unlike an oil refinery or a chemical plant with solvents, spent nuclear fuel is metal and ceramic and not liquid.

Mr. Tom Rielly of Vista 360 thanked the Panel for their service. His question concerned the decommissioning trust fund balance as he said regulatory documents in 2007 show a balance of \$870 million yet on September 1, 2010 the balance was \$810 million. Mr. Balducci said that Exelon had plant expenditures and also held money back before the trust funds were transferred to *ZionSolutions* for its future costs associated with spent fuel storage. He also noted that there could have been market fluctuations in the value of the fund. Mr. Rielly asked what the legal authority had been to move the funds from the Northern Trust Company in Chicago to BNY Mellon in New York. Mr. Balducci said the authority was with the investment advisors. He confirmed that the company does have fiduciary responsibility.

Ms. Linda Lewison, an energy policy consultant, noted that the decision has been made to go with dry cask storage but said that in addition to that HOSS would strengthen the casks. Although it would add to the costs it could provide additional safeguards. She said that HOSS experts are available and could provide presentations to the Panel.

Item 7: Any Other Business

The Chairman asked Panel members if they liked the order of this meeting agenda. Chief Lewis suggested having “old business” and “new business” sections and he confirmed that the agenda’s order was OK. The Chairman said that the next meeting would include “items discussed” and he asked the ZCAP to let him know of topics they would like on the agenda.

Chief Lewis noted that the ZCAP was created to be a conduit with the public and the ZCAP members are in the process of learning about the project. He would be glad to have people come to him with questions.

Mr. Daly said that it was important the public had accurate information and not rely on rumors.

Item 8: Adjournment

The Chairman motioned to adjourn the meeting, seconded by Chief Lewis and carried unanimously by the Panel. The meeting was adjourned at 7:50 pm.