ZCAP ZION STATION COMMUNITY ADVISORY PANEL

MINUTES OF THE MEETING HELD ON AUGUST 27, 2012
AT THE NEW TECH HIGH/ZION-BENTON HIGH SCHOOL

Present: Brent Paxton, Chairman
Rep. JoAnn Osmond, Deputy Chairman
Joel Brumlik
Cynthia Johnson
John Lewis, Secretary
Audrey Liddle
Craig Mason
Kent McKenzie
Doug Ower
Linda Sittig
Patrick Thurman

Absent: Craig Dyke

Item 1: Call to Order

The Chairman called the meeting to order at 6:00 pm. The Panel members introduced themselves; apologies for his absence were received from Mr. Craig Dyke.

Item 2: Approval of Minutes

The Panel had no comments on the minutes of the May 21, 2012 meeting. Ms. Sittig motioned to accept the minutes, seconded by Mr. McKenzie and carried unanimously by the Panel.

Item 3: Chairman's Remarks

The Chairman requested cell phone etiquette during the meeting.

Item 4: Zion*Solutions* Presentations

Mr. Daly introduced Mr. John Christian, President of Zion*Solutions*, who had been at the site for other meetings and was pleased to attend the ZCAP meeting.

inspections have been favorable. Environmental monitoring reports are posted on the company website.

Radiological Monitoring by the Illinois Environmental Management Agency (IEMA)
by Cecil Settles, Head of the Nuclear Facility Inspection Section, IEMA Bureau of Nuclear Facility Safety

Mr. Settles explained that IEMA's goals are to independently monitor licensed activities at Zion and to provide the earliest possible notice to the public of increases in radiation levels or releases of radioactive material. IEMA therefore works closely with the NRC, who have regulatory authority and access to IEMA's information, and with Zion*Solutions*. Mr. Settles described IEMA's Monitoring Plan to monitor potential effluents and radiation levels and the Gamma Detection Network (GDN) which comprises sensitive radiation detection sensors around the plant. Currently 8 older sensor installations are about 2 miles from the site and will be removed once newer design systems are installed closer to the site (3 have already been installed at or near the fence line and 4 remain to be installed before fuel is transferred to dry storage next spring). The new GDN design uses spread-spectrum radio to transmit data to IEMA's computer centers in Springfield which is more reliable than phone lines, carries more data and is more economical. IEMA's environmental monitoring includes air sampling (weekly), environmental dosimetry (quarterly) and lake monitoring (quarterly). IEMA's Inspectors routinely evaluate project progress and are kept informed of Zion*Solutions*' project schedules. There is a local technician and others are based in Springfield. IEMA will continue the radiation monitoring program at Zion after decommissioning has been completed.

Trust Fund Update; Economic Impact; and Independent Audit
by Lou Baldacci, VP Business Systems & CFO

Mr. Baldacci explained that the trust fund balance reported to the ZCAP includes expenses incurred but not yet withdrawn from the trust (i.e. a cash balance), whereas the balance reported to the NRC is less because it does not include those outstanding disbursements (i.e. accrual basis). On a cash basis, the trust fund status as of June 30, 2012 was: balance at the beginning of decommissioning $801.4 million; earnings (net of taxes and fees) $64 million; disbursements $238.6 million; ending balance $626.8 million. The majority of disbursements were for project management, procurement of casks and canisters for dry fuel storage, planning and preparation for spent fuel storage, asbestos remediation, units 1 and 2 containment preparation and support, and plant maintenance and security. The major expense categories as of June 30, 2012 were Units 1 and 2 reactor vessels, Unit 2 reactor internals segmentation preparation, waste disposal, rail improvements, establishment of temporary utilities, Unit 2 containment large components, and ISFSI pad design. In response to Panel questions, Mr. Balducci said the higher cost items are in the first five years and so far the project is close to budget with no sizeable cost overruns. A payment was made to the City of Zion for permits for the entire project.

Mr. Baldacci presented charts showing project expenditures by percentages and dollar amounts to Illinois vendors, non-Illinois vendors, Energy*Solutions* and payroll. Lists of those major vendors were also provided.

An independent auditor will be engaged to provide independent attestation services to verity that withdrawals from the trust fund are for valid decommissioning purposes, are appropriately approved and documented. The Request for Proposal was mailed to 8 Chicago area CPA firms, 3 finalists were interviewed and Zion*Solutions* is close to awarding the contract so that the audit can commence as soon as possible and a report provided by year-end.

Design of the Independent Spent Fuel Storage Installation (ISFSI)
by Bruce Holmgren, VP Fuel Transfer & Dry Fuel Storage

The spent nuclear fuel is currently in wet storage in the fuel building but will be moved into dry cask storage. There will be 61 canisters of fuel and 4 canisters of Greater-Than-Class-C waste stored in the 4-acre ISFSI located at the south end of the switchyard. Zion*Solutions* will use NAC International's dry spent fuel storage system, the MAGNASTOR system, which includes vertical concrete cask overpacks, transportable storage canisters that have a cell basket design for 37 fuel assemblies, and a transfer cask system. The canisters are built at 3 off-site locations. The concrete cask construction can be viewed at the end of Shiloh Boulevard. Under the NRC Title 10 Code of Federal Regulations, Part 72 comprises the NRC licensing requirements for the independent storage of spent nuclear fuel, high-level radioactive waste and Greater-Than-Class-C waste. Mr. Holmgren described the NRC licensing process that NAC International must follow for its MAGNASTOR system. License Amendment 3 is required before fuel can be loaded and the amendment is expected to be approved by the NRC by year-end. All documents are available on the NRC website. Mr. Holmgren also listed the contents that go into the NRC Safety Evaluation Report and the highlights of the NRC General License that is held by Zion*Solutions*. The MAGNASTOR design criteria, when compared to the NRC's design criteria, shows the robustness of the MAGNASTOR system against beyond-design-basis threats.

In response to Mr. Ower's question about what would happen if there was a blockage to the cask vents, Mr. Holmgren said weeks could pass before a blockage had to be cleared. Ms. Johnson asked about temperature monitoring and Mr. Holmgren explained that the concrete air outlets at the top of the casks are monitored and there is a passive cooling system from the bottom of the cask.

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. David Blackwell requested clarification on lake monitoring and Mr. Settles said that there are 2 "grab sample" monitors at the lake.

Ms. Verena Owen had follow-up questions regarding storm water management and discharge monitoring, including action limits for radioactive air/water discharges. Ms. Darlene Murphy of Zion*Solutions* said that the project has a Storm Water Management Program which includes

testing of suspended solids like oil and grease to ensure there are no liquid discharges. Mr. Chris Baker said that there are discharge limits – it's not a zero amount – but no above-regulation amounts have been detected. There is continuous source monitoring.

Mr. David Kraft asked about the availability of the independent results and whether the public would have access to detailed line-by-line expenditures. Mr. Daly explained that the purpose is to have the independent auditor view the appropriateness of expenditures and write an opinion on it; line expenditures would not be available to the public.

Mr. Kraft also enquired whether an aircraft crash at the ISFSI had ever been taken into consideration and Mr. Daly said that NRC regulations do not specifically cover that scenario.

Ms. Linda Lewison asked whether trust fund money had ever been used to buy Energy*Solutions* stock. Mr. Balducci said they had not and explained that the investments have to be conservative, with none in company or nuclear industry stock. The investment portfolio is less than 20% in equities and the remainder in fixed income.

Ms. Marilyn Shineflug noted that NAC International does not manufacture its own canisters and wondered what the experience is of the manufacturing companies. Mr. Daly confirmed that the canisters are fabricated by GE in Pennsylvania, Hitachi in Japan and Peterson in Utah. All those companies have extensive experience in making canisters for NAC International and the other major dry cask companies such as Holtec International and Transnuclear Inc. of Tennessee (a subsidiary of Areva). The NRC performs audits to ensure the canisters are being built to specifications and Zion*Solutions* performs its own audits.

Mr. Tom Rielly noted that an independent auditor is to be appointed but he said the audit would meet no financial standard. He called on the ZCAP to consider a resolution that would require full financial disclosure.

Mr. Butler had a question regarding the turbine building and waste water treatment facility. Zion*Solutions* Environmental Manager, Darlene Murphy described the type of inputs to the Wastewater Treatment Facility. At this point since so many of the plant systems are no longer running, the inputs are primarily Turbine building sumps, roof drains (rainwater) and noncontact cooling water for a total of approximately 12,000 gallons per day.

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Mr. Parker asked about the dimensions of the vertical concrete casks. Mr. Daly said that the entire presentation to the ZCAP, which contains the cask and canister dimensions, would be posted on the company's website. The disposal site for low-level waste will be the Clive, UT disposal site, 75 miles west of Salt Lake City.

Ms. Lewison sought clarification on the requirement for Zion*Solutions* to carry a $200 million letter of credit. Mr. Daly said that the letter of credit is a financial assurance instrument, like a bond. Mr. Christian explained that $200 million is on deposit at J.P. Morgan and Zion*Solutions* pays a fee to them. That fee is an allowable decommissioning expense. The fee varies and is not a fixed rate, for example it was $12.5 million last year and is expected to be in the $8 million/$9

million range this year. If Zion*Solutions* defaults, the bank pays the $200 million to a backup decommissioning trust fund so that it can be used. The company hopes to reduce the letter of credit in later years of the project.

Mr. Kraft enquired about the cost of each canister and Mr. Holmgren said it is a little less than $1 million per canister.

Item 6: Old Business

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

Item 7: New Business

The next meeting will be on November 26, 2012 and the Chairman hoped it would be at the same venue.

Item 8: Adjournment

The Chairman entertained a motion to adjourn the meeting. Motion made by Mr. McKenzie and seconded by Chief Brumlik. The Motion was carried unanimously by the Panel. The meeting was adjourned at 7:35 pm.