MINUTES OF THE FORTY-EIGHTH MEETING OF THE WASTE AND FACILITIES MANAGEMENT COMMITTEE HELD ON JANUARY 13, 2014

Pursuant to a notice and agenda dated December 27, 2013, the forty-eighth (48th) meeting of the Waste and Facilities Management Committee of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY was convened at 10:15 a.m. on Monday, January 13, 2014, in the Authority's Albany Office at 17 Columbia Circle, Albany, New York, and by video conference in the Authority's New York City Office at 485 Seventh Avenue, 10th floor, New York, New York.

Elizabeth W. Thorndike, Ph.D., Chair of the Committee, was present in Albany. Richard Kauffman, Chair of NYSERDA and member of the Committee, was present in New York City.

Also present in Albany were John B. Rhodes, President and CEO; Janet Joseph, Vice President for Technology and Strategic Planning; Tom Barone, Acting Vice President for Operations and Energy Services; Jeff Pitkin, Treasurer; Hal Brodie, General Counsel; Allyson Zipp, Assistant Counsel and Secretary to the Committee; Paul Bembia, West Valley Program Director, and Alyse Peterson, Senior Project Manager.

Dr. Thorndike called the meeting to order, noted the presence of a quorum, and stated that a Notice of the meeting was mailed to Committee members and the press on December 27, 2013. A copy of this notice is attached hereto as Exhibit A.

The first item on the agenda concerned approval of the Minutes of the forty-seventh (47th) meeting, held on September 16, 2013. A copy of the Minutes was included with the December 27, 2013, mailing. Whereafter, upon motion duly made and seconded, and by unanimous voice vote, the minutes of the forty-seventh meeting were approved.

Dr. Thorndike then asked Treasurer Jeff Pitkin to provide a report regarding the Authority's Fiscal Year 2014-15 Budget for the West Valley Site Management Program and radioactive waste policy and nuclear coordination activities. Mr. Pitkin stated that the Budget for

the West Valley program state appropriation revenue is \$12.1 million, an increase of \$5.6 million from the prior year. In FY 2013-14, the Budget for appropriation revenue was reduced based on state appropriation funding received but unexpended at the end of FY 2012-13. This Budget restores appropriation funding to its normal level. The Budget for West Valley program expenditures is \$12.1 million, an increase of \$100,000 over the prior year. The State's share of projected West Valley Demonstration Project costs is \$8.1 million, which is unchanged from the prior year. The net increase of \$100,000 reflects a slight increase in costs for State-Licensed Disposal Area (SDA) maintenance and monitoring activities and other non-Project costs. Funding for the State Low-Level Radioactive Waste Management Program remains unchanged from the prior year at \$150,000.

Based on Mr. Pitkin's report, upon motion duly made and seconded, and by unanimous voice vote, the Committee recommended that the Board adopt the Resolution approving the Authority's Fiscal Year 2014-15 Budget for the West Valley Site Management Program and radioactive waste policy and nuclear coordination activities as presented. A copy of this Resolution is attached hereto as Exhibit B.

The Committee next received a status report from Director Paul Bembia on West Valley Site Management Program activities. Mr. Bembia briefed the Committee on items related to the SDA and the West Valley Demonstration Project.

Regarding the SDA, Mr. Bembia provided an update on the increase in the leachate level in disposal Trench 14, of which he first informed the Committee in April 2013. This increase does not present a threat to public health and safety or the environment. The leachate level is 14 feet below the ground surface and the increase is very slow, less than one inch total in 2013 and only 4.7 inches total since 2011. A hydrogeologist has been engaged to identify the cause and possible mitigation measures for the increase. After evaluating the data, the hydrogeologist believes that the leachate elevation increase is related to an increase in the groundwater elevations in the area, and this increase in groundwater elevations appears to be related to the installation of a groundwater barrier wall and a membrane cover at the adjacent NRC-Licensed Disposal Area (NDA) by the Department of Energy (DOE) at the end of 2008. The final report

from the hydrogeologist will be submitted to NYSERDA soon, and Mr. Bembia will brief the Committee further on this issue once the West Valley team has had a chance to consider the findings and recommendations in that report.

Regarding the West Valley Demonstration Project, Mr. Bembia briefed the Committee on two items. First, the DOE has completed construction on the new interim high-level waste (HLW) storage facility, a dry-cask storage pad similar to that used to store spent nuclear fuel at some nuclear power plants on which the HLW canisters will be stored inside large shielded storage casks. The concrete pad is 144 feet long, 100 feet wide and 3 feet thick. The HLW pad was constructed using two separate placements of concrete. Each placement required about 100 concrete delivery trucks that arrived at the site every 3 to 6 minutes over a 10 hour period. During the excavation for the concrete pad, some contaminated soil was discovered. The contaminated soil was removed from the pad excavation and placed in containers. The remainder of the soil from the excavation was placed in a nearby stockpile area, and DOE will be conducting additional characterization of the soil in the stockpile area in the spring.

Second, Mr. Bembia provided an update on the federal West Valley Demonstration Project budget. As of the January 13 Committee meeting, the appropriation bill containing specific funding levels for the DOE environmental cleanup program had not yet been prepared.

In response to a question from Dr. Thorndike regarding timing of the appropriation process, Mr. Bembia stated he understood from news reports that Congress anticipated it might conclude its negotiations by Wednesday, but it could be the end of the week before everything was completed and signed by the President. Mr. Bembia also confirmed Dr. Thorndike's understanding that the funds that were added back into the proposed budget by the Western New York Congressional delegation were restored to the Non-Defense Environmental Management account, the account from which the Project is funded, and not specifically restored to the Project budget itself.

Mr. Kauffman asked, regarding the leachate level increase in SDA Trench 14, what uncertainty was associated with attributing the increase to the NDA groundwater barrier wall and

whether any modeling was planned. Mr. Bembia stated that relatively soon after the NDA barrier wall was installed, a significant change had been seen in the ground water elevations just outside the NDA. A very similar elevation change was seen right at the end of the two SDA trenches at issue, and there were no other changes in ground water conditions anywhere else around those trenches. Both NYSERDA staff and the hydrogeologist believe the increase in the SDA trenches is related to that change in groundwater elevation – that's the main source of water into any of the trenches now that the SDA is covered. With respect to modeling, Mr. Bembia stated that he understood the hydrogeologist was going to be recommending some groundwater modeling of potential mitigation measures to evaluate the impacts of different types of measures. Mr. Kauffman clarified that he was asking about unintended consequences of possible remedial measures – for example, the NDA barrier wall causing the change in groundwater elevation. Mr. Bembia confirmed that aspect would be looked at as part of the planned modeling.

Mr. Kauffman then asked, regarding the soil stockpile created during the excavation of the HLW storage facility, whether it was normal practice to stockpile contaminated soil in this way. Mr. Bembia explained that DOE had not been expecting to find contamination. During the excavation, the soil was moved into the stockpile and the plan had been that the soil would remain there to provide a bit of a physical barrier between the road and the new HLW storage facility. However, contamination was then unexpectedly found during the excavation. DOE believes it removed the contamination from the excavation, but is going to go back and do more testing on the stockpile just to make sure there is no contamination in the pile. Mr. Bembia said, as for normal practice, there are contaminated soil piles on site that are being managed, and this pile is now being managed in the same way. For example, stormwater controls have been put in place to prevent the spread of contamination anywhere else.

Dr. Thorndike then asked first, whether the hydrogeologist considered climate changerelated issues in evaluating the Trench 14 leachate level increase, specifically increased precipitation, and second, what NYSERDA is doing in terms of modeling, studies, or other analysis, specifically with respect to increased precipitation, for these types of situations. In response to the Trench 14 question, Mr. Bembia stated that an evaluation of precipitation versus the increases seen in Trench 14 had been conducted and there was no correlation to suggest that the leachate level increase was related to an increase in precipitation. With respect to the bigger picture, Mr. Bembia said that efforts are being made to incorporate climate change into modeling as part of looking towards the Phase 2 decommissioning decision. This will impact modeling equations for such areas as ground water issues, surface water flow issues (erosion issues), and the effectiveness of engineered barriers and erosion controls. While it is not resolved yet how that incorporation will take place, it is recognized as a very important issue. Dr. Thorndike commented that climate change creates uncertainty, and Mr. Bembia agreed that it may be, with respect to the long-term calculations, that incorporating climate change will basically increase the uncertainty with respect to the modeling results.

The Committee next received a report from Ms. Alyse Peterson on NYSERDA's nuclear coordination and radioactive waste policy activities. Ms. Peterson reported that NYSERDA, on behalf of the State of New York, filed comments with the Nuclear Regulatory Committee (NRC) regarding its September 2013 draft Waste Confidence Generic Environmental Impact Statement (GEIS). The GEIS addresses the environmental impacts of continuing to store spent nuclear fuel on-site at a commercial nuclear reactor after the end of the reactor's licensed life of operation until the fuel's final disposition in a geologic repository. The draft GEIS concludes that the NRC should issue a revised Waste Confidence Rule that generically addresses the environmental impacts of continued storage and that site-specific environmental impacts need not be considered for future licensing actions. The NYS comments include input from the Department of Public Service and the Office of the Attorney General, and present objections both to the NRC's generic approach and to some of the fundamental assumptions in the GEIS.

Ms. Peterson also reported that a recent United States Court of Appeals decision directed the DOE to suspend collection of fees from commercial nuclear utilities for high-level nuclear waste disposal until there is a plan to deal with the waste.

Dr. Thorndike asked General Counsel Hal Brodie whether the Court of Appeals decision would have any impact on NYSERDA's long-term lawsuit regarding West Valley waste disposal fees. Mr. Brodie responded that while it might have – indeed NYSERDA had been in the process of writing a letter to the court informing it of the Court of Appeals decision – last month

that aspect of NYSERDA's lawsuit was dismissed. Mr. Brodie stated that he would be providing a comprehensive report on the topic to the Board at the upcoming Board meeting.

Mr. Kauffman then asked for clarification regarding NYSERDA's role with respect to the NRC's draft Waste Confidence Rule. Ms. Peterson explained that NYSERDA was involved due to its role as the State's Nuclear Coordinator and as the State's Liaison Officer to the NRC. Under those roles, NYSERDA both reviews and comments itself on the item, and coordinates input from other interested State agencies and then as Liaison submits the comments to NRC. Mr. Kauffman then asked for confirmation that with respect to West Valley this has no impact on

The last item on the agenda concerned other business. There being none, upon motion duly made and seconded and upon unanimous voice vote, the meeting was adjourned.

West Valley. Mr. Bembia confirmed that was correct.

Respectfully submitted,

Benjamin Levitan

Secretary to the Committee

Beijan M. Jento



NOTICE OF MEETING AND AGENDA

December 27, 2013

TO THE MEMBERS OF THE WASTE AND FACILITIES MANAGEMENT COMMITTEE:

PLEASE TAKE NOTICE that the forty-eighth (48th) meeting of the WASTE AND FACILITIES MANAGEMENT COMMITTEE of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY will be held in the Authority's Albany Office at 17 Columbia Circle, Albany, New York, and by video conference in the Authority's New York City Office at 485 Seventh Avenue, 10th floor, New York, New York, on Monday, January 13, 2014, commencing at 10:15 a.m., for the following purposes:

- 1. To consider the Minutes of the forty-seventh (47th) meeting of the Committee held on September 16, 2013;
- 2. To receive a report from the Treasurer regarding the Authority's Fiscal Year 2014-15 Budget and to consider and act upon a resolution recommending approval of that Budget;
- 3. To receive a status report on West Valley Site Management Program activities;
- 4. To receive a status report on radioactive waste policy and nuclear coordination activities;
- 5. To transact such other business as may properly come before the Committee.

Members of the public may attend the meeting at either of the above locations. The Authority will be posting a video of the meeting to the web within two business days of the meeting. The video will be posted at http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings.aspx.

Allyson Zipp Secretary to the Waste and Facilities Management Committee

Exhibit B

Resolut	ion No.	
IXCSOIUI	IOH INO.	

RESOLVED, that the proposed fiscal year 2014-15 Budget submitted to the Members for consideration at this meeting, with such non-material, editorial changes and supplementary schedules as the President and Chief Executive Officer, in his discretion, may deem necessary or appropriate, be and it hereby is approved for submission to the persons designated in Sections 1867(4) and 2801 of the Public Authorities Law.