### **TESTIMONY OF N. K. (NICK) AKINS**

# FOR AMERICAN ELECTRIC POWER, THE EDISON ELECTRIC INSTITUTE AND THE UTILITY SOLID WASTE ACTIVITIES GROUP

# LEGISLATIVE HEARING BEFORE THE HOUSE SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES ON H.R. 493, COAL ASH RECLAMATION, ENVIRONMENT, AND SAFETY ACT OF 2009

## February 12, 2009

Good morning. My name is Nick Akins. I am the Executive Vice President – Generation for American Electric Power ("AEP"). I would like to thank the Subcommittee for the opportunity to present this statement on behalf of AEP, the Edison Electric Institute ("EEI") and the Utility Solid Waste Activities Group ("USWAG") on the "Coal Ash Reclamation, Environment, and Safety Act of 2009" and the issue of the safe management of coal ash at impoundments operated by the electric utility industry.<sup>1</sup>

### Utility Commitment to Dam Safety

The electric utility industry remains committed to ensuring the integrity and safe operations of dams and impoundments in which we manage coal combustion byproducts (CCBs), including coal ash. Utilities have safely managed hundreds of coal ash dams and water impoundments for decades. However, the incident that occurred at TVA is unacceptable, and therefore we agree with the objective of H.R. 493 to put in place appropriate federal mechanisms that will help ensure that coal ash dams continue to be managed safely going forward.

The utility industry is taking the ash spill at TVA's Kingston Power Plant very seriously. In the wake of the spill, utility companies re-examined their dam safety and inspection activities. Many companies, AEP included, are taking immediate steps to ensure that

<sup>&</sup>lt;sup>1</sup> EEI is an association of U.S. shareholder-owned electric companies, international affiliates, and industry associates worldwide. EEI's U.S. members serve roughly 90 percent of the ultimate customers in the shareholder-owned segment of the industry and nearly 70 percent of all electric utility ultimate customers in the nation, and generate nearly 70 percent of the electricity produced in the United States. USWAG is a consortium of EEI, the National Rural Electric Cooperative Association ("NRECA"), and over 100 electric utility operating companies located throughout the country. NRECA is the national association of rural electric cooperatives, many of which are small businesses. Together, USWAG members represent more than 85 percent of the total electric generating capacity of the United States and service.

safety inspections are up to date. A number of State regulatory agencies, including those in Arizona, Minnesota, Ohio, Pennsylvania, and West Virginia, are also conducting additional inspections of utility impoundments to assess their structural soundness. We welcome this additional level of scrutiny to provide assurance that our facilities are being operated in a safe manner.

It is important to note that many State regulations already require detailed permitting, design, inspection and maintenance requirements for CCB surface impoundments under their respective dam safety and environmental regulations. In addition to State dam safety regulations, many utilities adhere to their own guidelines for the routine inspection, monitoring and maintenance of CCB impoundments consistent with federal dam safety guidelines. Utilities also implement measures to ensure the structural integrity of CCB surface impoundments, including ensuring that:

- surface impoundments are designed, constructed and maintained in accordance with prudent engineering practices;
- surface impoundments are regularly inspected for changes in appearance or structural weaknesses; and
- if a structural weakness is identified, steps are taken to eliminate the condition or structural weakness.

These measures serve to ensure that CCB impoundments are operated to safely manage CCBs. AEP's Dam Safety Inspection and Monitoring Program serves as one example of the industry's CCB impoundment operations. AEP has operated coal ash impoundments for decades and currently owns and operates 40 earthen dam impoundments used to store cooling water, fly ash and bottom ash at its power plants. This total includes:

- Eleven large fly ash and bottom ash impoundments located in Ohio, West Virginia, Kentucky and Indiana;
- Six large water storage impoundments located in Texas, Oklahoma, Arkansas and Louisiana; and
- Several smaller ash storage impoundments located throughout our service territory.

AEP's Safety Inspection and Monitoring Program is based on federal dam safety guidelines and applicable state dam safety regulations and includes the following key components:

- AEP's large dams are inspected annually by engineering staff under the direction of a professional engineer. The large dams are also inspected more frequently by plant staff.
- Many of AEP's smaller facilities are inspected routinely by plant staff and every two to three years by engineering staff.
- The large dams at several plants are equipped with instrumentation (for example, piezometers, surface survey monuments and slope indicators) to monitor the dam's structural conditions. Monitoring data for the instrumented dams are collected at least annually and a report outlining the condition and inspection results and recommendations is provided to the plant for implementation.

Design modifications and expansions to existing dams are performed by professional engineers and reviewed by an independent professional engineer. In addition, the designs are reviewed and approved by the appropriate state regulatory dam safety officials.

#### Utility Industry View of H.R. 493 – Need for Federal/State Coordination

In light of the measures that AEP and others in the industry are taking to ensure the safety and integrity of CCB impoundments, we agree with the objective of H.R. 493 – ensuring dam safety. Because different state approaches exist for regulating dam safety, the principle of having some level of federal oversight or standards to provide consistency across the country has merit. We also support the concept of inventorying the existing universe of CCB impoundments. In order to develop an effective federal response to impoundment safety, it makes sense to first characterize the universe of covered facilities and assess their integrity. In fact, we understand that U.S. EPA already is beginning the process of inventorying and assessing the structural integrity of coal ash surface impoundments across the country.

Another important step in developing a federal response to CCB impoundment safety is understanding the extent and effectiveness of existing state regulatory programs. As explained above, many states, including those in which AEP operates, already have dam safety programs. Better understanding the scope and effectiveness of existing state programs will allow decision makers to determine what is working at the state level, identify gaps in state regulations and decide how existing programs can be improved. When gaps are found, we need to develop an effective federal response to fill those gaps.

In short, the first step in considering a new federal dam safety program for CCB impoundments should be to determine the scope of the problem and then to coordinate any federal action with existing federal guidelines and state regulations. As I mentioned

earlier, we understand that U.S. EPA already is inventorying and assessing the safety of CCB impoundments. We respectfully suggest that the Committee coordinate its actions with the efforts and findings of that agency.

Absent this type of coordination, we are concerned about the potential of duplicative and overlapping regulation of CCB impoundments. For example, although the Office of Surface Mining, ("OSM") has expertise regarding dam safety involving coal or mining wastes at coal mines, OSM may not be best suited for addressing management standards for coal ash, which is generated and managed by an entirely different industry – the electric utility industry. We respectfully suggest that the Committee first consider which regulatory body is most appropriate for developing federal regulations concerning the integrity of coal ash impoundments.

Further, as I stated previously, there are existing state regulations addressing coal ash impoundments, and it is imperative that any federal program not produce overlapping or duplicative regulations. We need an effective, but coordinated approach. For example, while H.R. 493 provides that states having Surface Mining Control and Reclamation Act (SMCRA) authority can apply for authority to regulate coal ash impoundments under a federal program, many states that have already developed regulations for coal ash impoundments do not have SMCRA authority. These state regulations may be working effectively, but as the bill is currently structured, H.R. 493 appears to contemplate a potentially duplicative federal program overlay creating dual and possibly competing regulations.

#### Beneficial Use of CCBs

While we focus on ensuring dam safety, our industry also remains committed to continuing and expanding the array of beneficial uses of CCBs, including, among others, as raw material in Portland cement, for mine reclamation, as replacement for cement in concrete and grout, as mineral filler in asphaltic concrete, as aggregate for highway subgrades and road base material, and as a component of flowable fill. The beneficial use of CCBs conserves natural resources and energy, reduces greenhouse gas ("GHG") emissions, and reduces the amount of CCBs that need to be disposed. The U.S. EPA extolled the benefits of CCB beneficial use in its written testimony last month during the Senate Environment and Public Works Committee oversight hearings on the TVA coal ash release. The EPA noted that by recycling 13.7 million tons of fly ash in 2007, in place of Portland Cement, the United States saved nearly 73 trillion BTUs of energy, equivalent to the annual energy consumption of more than 676,000 households. This also reduced greenhouse gas emissions of 12.4 million metric tons of CO2, which is equivalent to the annual GHG emissions of 2.3 million cars. Given these environmental benefits, AEP and the utility industry continues to work to maximize the

options for CCB beneficial use. However, until full beneficial use of CCBs is achieved, continued management of CCBs in an environmentally responsible manner will remain an essential commitment of electric power generators.

In sum, we support a program that ensures the structural integrity and safety of coal combustion byproduct impoundments, but want to also ensure that any federal program is efficient and effective. We would welcome the opportunity to work further with the Subcommittee on the development of a federal approach to ensure that CCB impoundment safety be managed in a coordinated manner.

I would like to thank the Subcommittee for the opportunity to present the views of AEP, EEI and USWAG on this issue. I would be happy to answer any questions you have concerning my testimony.