Shareholder Proposal:

Report on Coal Combustion Waste

FirstEnergy Corporation  Symbol:  FE

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FIRST ENERGY CORPORATION FAILS TO DISCLOSE COAL ASH RISK AND MITIGATION EFFORTS TO INVESTORS

Burning coal has significant environmental externalities that carry financial and regulatory risks. Each year, coal combustion leads to the creation of over 130 million tons of coal ash, which is a byproduct that contains arsenic, mercury, lead, and other toxins. Coal ash management can expose utilities to significant environmental, financial and regulatory risk. FirstEnergy has failed to provide investors with sufficient evidence on how it is addressing or mitigating coal ash-related risks, particularly the potential for water contamination, in its SEC filings, on its website, or in other public documents.

54% of FirstEnergy’s electricity generation is derived from coal combustion.

Shareholders are being asked to vote FOR a report on the company’s efforts, above and beyond current compliance, to reduce environmental and health hazards associated with coal combustion waste contaminating water (including the implementation of caps, liners, groundwater monitoring, and/or leachate collection systems), and how those efforts may reduce legal, reputational and other risks to the company’s finances and operations.

Rationale for a “FOR” vote:

1. FirstEnergy’s ash storage practices at the Little Blue Run dam expose the company to significant financial and regulatory risks due to environmental and health hazards caused by coal ash.

2. FirstEnergy’s public disclosure on this issue is insufficient. The company does not provide information on the efforts it is taking to reduce environmental and health hazards related to CCW.

Burning Coal Results in Toxic Coal Ash

- The toxins in coal combustion waste (CCW) have been linked to cancer, neurological damage, reproductive failure, organ failure, and other serious health problems as well as widespread damage to ecosystems.¹
- Coal ash is the second largest waste stream in the United States.²
- A U.S. Environmental Protection Agency (EPA) study of 85 CCW disposal sites found that approximately 80% either had proven or potential damage.³ There are over 2,000 CCW storage, management and/or disposal sites in the United States, suggesting that there are approximately 1600 sites across the country that may be causing damage and need be monitored and mitigated.⁴
- According to a recent Union of Concerned Scientist report, “The full extent of leakage from coal ash disposal sites is unknown, however, because many states do not require groundwater monitoring and federal oversight has been inconsistent.”⁵
- A new report, by the Environmental Integrity Project, Earthjustice and the Sierra Club, “has identified 39 more coal combustion waste (CCW) disposal sites [editorial note: including the
Little Blue Run facility) in 21 states that have contaminated groundwater or surface water with toxic metals and other pollutants. Their analysis ...builds on a report released in February of 2010, which documented similar damage at 31 coal combustion waste dumpsites in 14 states. When added to the 67 damage cases that the U.S. Environmental Protection Agency (USEPA) has already acknowledged, the total number of sites polluted by coal ash or scrubber sludge comes to at least 137 in 34 states. This total represents nearly a three-fold increase in the number of damage cases identified in EPA’s 2000 Regulatory Determination on the Wastes from the Combustion of Fossil Fuels.”6 Clearly, this demonstrates that CCW has resulted in documented contamination and environmental risks which could pose financial risks to the companies involved.

1. FIRSTENERGY’S ASH STORAGE PRACTICES EXPOSE THE COMPANY TO SIGNIFICANT FINANCIAL AND REGULATORY RISKS:

FINANCIAL RISKS:

Recent catastrophic events at CCW storage facilities show that the methods of storage implemented by FirstEnergy are insufficient. Cleanup and mitigation costs for breaches of CCW wet storage dams, leachate from dry storage and environmental and health hazards associated with groundwater contamination have cost its peer companies up to billions of dollars.

Wet Storage: FirstEnergy Company’s Little Blue Run Dam utilizes “wet” storage for its CCW. This method involves pumping ash-contaminated wastewater into massive ponds contained by earthen dams, and is the traditional way that coal-fired utilities have managed their coal ash. Little Blue Run is 400 feet tall and covers a surface area of 967 acres.7 Every day, up to 3.2 million gallons of coal ash waste is sent to the Little Blue Run Dam facility.8

There have been documented seeps and leakage from Little Blue Run, located at the Bruce Mansfield plant.9 There is evidence of increased levels of arsenic in wells around the pond.

- For example, in October 2010, Little Blue Run was the subject of a feature story on CNN which suggested the pond may be contaminating local water.10
- Reports by the New York Times and others have drawn attention to CCW’s impact on waterways, as a result of leaking CCW storage sites or direct discharge into surrounding rivers and streams.11
- According to an official of the Environmental Integrity Project, “‘[FirstEnergy has] 10 of 69 monitoring wells on site showing elevated spikes for arsenic—that’s as recent as the first and second quarters of this year,’ she said. ‘The monitoring wells are the sentinels that say there’s a problem at the site and if not addressed, will leave the site.” Investors require more information on how the company is managing its risks in this area.
- According to a recent report by The Environmental Integrity Project, Earthjustice and the Sierra Club:
  - “Discharges to groundwater and surface water from the 1,300-acre “Little Blue” surface impoundment have exceeded MCLs [maximum contaminate level] for arsenic and other parameters in multiple off-site residential drinking wells prompting several property buyouts by FirstEnergy, exceeded Pennsylvania Water Quality Criteria (PA WQC)...in Mark’s Run and other off-site surface water sources, and pervasively exceeded federal Maximum Contaminant Levels (MCLs) at many on-site groundwater monitoring wells.”12
  - “At least 22 private wells have already been contaminated with CCW pollutants above the primary or secondary MCLs, including the township building’s well. FirstEnergy has
already purchased several of these contaminated properties and/or supplied the residents thereof with an alternative drinking water supply.\textsuperscript{13}

- This indicates the company faces substantial financial risks—property buyouts, expenses related to providing alternative water sources, potential enforcement actions and fines—along with potential reputational damages as a result of its operations at Little Blue Run. Investors require more disclosure on how the company is managing these risks.

A dam breach at a Tennessee Valley Authority (TVA) facility clearly demonstrates the substantial risks related to dam failure at a “wet” storage facility could include:

- **FINANCIAL**: In December 2008, a dam broke at a large CCW wet storage pond at the TVA coal plant in Kingston, TN and covered more than 300 acres in eastern Tennessee with coal ash sludge.\textsuperscript{14} TVA estimated total cleanup costs at up to $1.2 billion.\textsuperscript{15} The company has committed to spending $43 million on economic development projects in Roane County, where the spill took place, and has also spent $40.2 million buying out individual homeowners in the area surrounding the plant.

- **LITIGATION**: TVA is also facing significant litigation costs as a result of the spill. Since December 2008, at least 57 lawsuits representing more than 560 individual plaintiffs have been filed against the utility claiming property damage, health problems, and other damages as a result of the spill.\textsuperscript{16}

- **OPERATIONAL**: The TVA spill could have significantly impacted the company’s operations. Though the Kingston plant was able to regain partial functionality by storing its coal ash in its other two ponds, many facilities are faced with having only one storage pond and would therefore be forced to shut down in the event of a spill.

- **REPUTATIONAL**: According to Power Magazine, the spill means “a black eye for TVA’s reputation that will take years to heal.”\textsuperscript{17} In addition to the significant water pollution caused by the spill, respiratory threats can pose significant health risks to surrounding communities. A local Tennessee newspaper reported that the ash “dries easily and blows around,” creating an exposure pathway “wherever [the ash] is carried by the wind.”\textsuperscript{18} Environmental tests have come up positive for heavy metals and locals have experienced increased respiratory problems, forcing many away from their homes to avoid the remnants of the spill.\textsuperscript{19}

**FIRSTENERGY-SPECIFIC RISK**: The Little Blue Run Dam has been rated as “high hazard” by the National Inventory of Dams. This rating means failure or mis-operation will probably cause loss of human life.\textsuperscript{20} TVA’s Kingston pond was also a “high hazard” impoundment.

Due to the above risks, investors urge FirstEnergy to provide the following information:

- The portion of FirstEnergy’s coal ash that is stored wet
- Portion of FirstEnergy’s coal ash ponds that are lined and type of lining
- If the ponds are not lined, how the Company ensures that there is no leaching
- Disclosure of any ponds that have leached and what has been done to remedy the situation
- Type of monitoring conducted at coal ash ponds including frequency and list of parameters monitored
- Presence of leachate collection systems at coal ash ponds
- Provide details of company plans to transition impoundments to dry storage
- Company plan to remediate its existing wet storage facilities
- Any other actions to transition to safer storage
Currently the company has provided only a superficial discussion of its coal combustion waste management processes and very little discussion of the relative risks and risk reduction methods.

**Dry Storage:** Ash that is not stored “wet” in ponds is often stored “dry” in landfills or in mines. Clay liners, which are often used to line the bottom of ash landfills, have been shown insufficient to prevent leaching of CCW contaminants into groundwater.21 Experts recommend that landfills must have composite liners and leachate collection and treatment systems to prevent environmental and health hazards. In a letter to the Office of Management and Budget (OMB), five prominent scientists concluded that “based on what science tells us from the tiny fraction that have been studied, the cost of as-yet unrecognized or ignored harm to human health and wildlife [from coal ash] can be reasonably anticipated to exceed all the previously mentioned costs combined.”22

According to the company’s CSR report “LBR [Little Blue Run] is nearing full capacity and, consistent with FirstEnergy’s long-term strategy of dry management of all unused CCB generated by our 24 coal-fired units, will be replaced by a dry disposal facility.”23 Given the company’s increasing dependence on dry storage, investors require more information on how the company is managing the risks inherent to this type of storage.

According to figures cited in a recent Union of Concerned Scientists report, “Industry sources estimate that converting a coal plant to dry handling of its bottom ash would cost $20 million to $30 million per unit, that conversion to dry handling of fly ash would cost $15 million per unit (or $200 per ton of fly ash), that building a new landfill would cost $30 million, and that new wastewater treatment facilities would cost $80 million to $120 million per facility (ICF International 2010; EOP Group 2009).”24 The report notes that the above industry figures may be inflated but concluded, “clearly anyone making a long-term investment in a coal plant that currently lacks the capability to safely handle its coal ash faces the risk of significant new costs.”25

*Risks from leachate of “dry” storage include:*

- **FINANCIAL:** In 2000, the Agency for Toxic Substances and Disease Registry conducted tests on landfills in Pines, Indiana where Northern Indiana Public Service Company (NIPSCO) had been depositing coal ash. The Agency discovered elevated levels of boron, manganese, arsenic, benzene, and other toxic substances in the town’s groundwater sources, including drinking wells. As a result, the town of Pines was determined a Superfund site and the Northern Indiana Public Service Company (NIPSCO), along with the landfill operator, was required to spend millions of dollars to fund immediate delivery and continual supply of bottled water to residents along with a long-term study to assess long-term human health and ecological impact risks associated with the Pines site.26
- **FINANCIAL:** Recent cases demonstrate that contaminated site cleanup and mitigation costs may exceed millions of dollars per site, especially considering that at least 75% of existing landfills do not have adequate liners.27

Given the risks associated with dry coal ash management which could impact shareholder value, the Proponents believe it is necessary for the company to provide more information on the protections it employs to limit the environmental and health hazards associated with CCW. To fulfill the proposal, the proponents request the company provide information in the following areas:

- The percentage of coal ash stored dry
- Percentage of First Energy’s coal ash dry landfills that are lined and type of liner
- Type and extent of financial assurance maintained for fly ash landfills
- What measures FirstEnergy is taking to ensure dry storage does not pose additional public health or environmental threats
- Type of monitoring conducted at coal ash landfills including frequency and list of parameters monitored
- Presence of leachate collection systems at coal ash landfills
- Plans for post-closure care and monitoring of all coal ash landfill units. If monitoring will occur, describe what type of how long this will occur.
- What direct discharge to surface waters exists from CCW units and do these discharges hold permits that place limits on discharge of pollutants to surface water. If so, what are these limits?

**Recollecting of Coal Ash:** According to the company’s CSR report, “[a]proximately 45 percent of the CCB from First Energy generating plants is beneficially re-used.” But the company fails to provide investors with information on how it manages the risks associated with coal ash collecting.

In its opposition statement FirstEnergy touts the environmental benefits of CCW and claims “[t]he characteristics of CCW enable beneficial use and management to be undertaken safely.” The proponents contend this statement ignores new information and possible associated risks.

In March 2011, The EPA Office of the Inspector General released a report with the following title: “EPA Promoted the Use of Coal Ash Products With Incomplete Risk Information.” Such an cautionary title from a government agency gives investors pause and heightens the need for the company to be transparent on the risks associated with this disposal method.

Furthermore, in a recent 60 Minutes report, EPA Administrator Lisa Jackson commented that she has “no data to say that [coal ash re-use] is safe at this point.” There are documented cases of significant environmental and health impacts from the reuse of ash for some purposes.

**Risks associated with recycling coal ash include:**
- **FINANCIAL AND LITIGATION:** Dominion Virginia Power supplied 1.5 million tons of coal ash to use as structural fill for a golf course in Chesapeake, Virginia. Once the course was built, toxins from the ash leached into groundwater and contaminated surrounding neighborhoods. Two lawsuits have been filed against Dominion; one brought by 400 local residents seeking more than $1 billion in damages, and another brought by 62 local homeowners asking for $1.25 billion to remove the coal ash, clean and restore the site, and pay for public water and sewer for the local neighborhoods. The second suit also seeks millions more to pay for properties, homes, medical bills and nuisances caused by the golf course development.
- **REGULATORY:** In November 2009, the Office of the Inspector General (OIG) announced in a report on a potential cover-up of risk assessment information on coal ash that “it identified a potential issue related to the EPA's promotion of beneficial use through its Coal Combustion Product Partnership and have referred the question how EPA established a reasonable determination for these endorsements to the appropriate OIG office for evaluation.”

FirstEnergy’s opposition statement states: “The characteristics of CCW enable beneficial uses and management to be undertaken safely.” However, multiple instances demonstrate that the toxins in coal ash have contaminated groundwater through uses assumed to be “safe” and that there are significant financial risks associated with environmental consequences of ash recycling.
REGULATORY RISK:

Currently, coal ash ponds and dry storage facilities for CCW are subject to less regulation than landfills accepting household trash.  

The EPA is considering regulating coal ash as a hazardous waste in light of findings that link coal ash to several public health threats and instances of severe environmental degradation. A hazardous waste designation would require the industry to spend billions of dollars to overhaul current ash storage practices. The new rules have been delayed and at this time, it is unclear when they will be published.

The company does acknowledge that the EPA is currently reviewing its coal ash regulations and that this process could impact its operations. But the company fails to discuss what is requested by the Proposal, which is what kinds of measures it is taking to reduce these potential costs.

For instance, a hazardous waste designation of coal combustion waste would require the industry spend billions of dollars to overhaul current ash storage practices and could—as the company acknowledges—result in significant changes to storage, management, disposal and reuse practices. FirstEnergy may face substantially increased costs associated with the material and could even be forced to close down coal-fired power plants. While the proponents commend the company for the fact that it has provided some disclosure in its most recent 10-K, FirstEnergy provides no information on what it is doing to increase its ability to transition from wet storage to secure dry storage or to otherwise withstand the significant cost increases that could be imposed by new regulations.

If the EPA does not regulate coal ash as hazardous waste and leaves it up to the states, the company still faces risk. The proponents note that state regulations for storing coal ash are less consistent than those for containing household waste and that such regulation do not provide assurance against groundwater and other contamination. Again, the Proposal seeks disclosure of what measures the company is taking to reduce potential costs and risks associated with the likely problems of consistency and under-regulation of CCWs if the EPA chooses to largely leave these regulatory controls to the states.

There is no further disclosure of how current company efforts may be reducing legal, reputational and other risks to the company’s finances and operations. Since its level of disclosure of environmental protection measures is minimal, there is also insufficient disclosure of how those (undisclosed) efforts may reduce risks to the company, which is a significant concern to investors.

2. FIRSTENERGY’S PUBLIC DISCLOSURE ON THIS ISSUE IS INSUFFICIENT:

The company has not provided investors with sufficient information to enable them to determine whether the company recognizes and is properly managing the risks associated with its CCW storage, management, and disposal practices.

In its resolve clause, the Proposal contains specific guidelines regarding the types of information sought regarding strategies for reducing environmental and health hazards associated with potential water contamination. These include “implementation of caps, liners, groundwater monitoring and/or leachate collection systems,” and “how those efforts may reduce legal, reputational and other risks to the company’s finances and operations.” None of this pivotal information is included in the Company’s reporting.

FirstEnergy lags behind its peers in reporting on coal ash
Not only has the company has not provided investors with sufficient information to enable them to determine whether the company recognizes and is properly managing the risks associated with its CCW storage, management, and disposal practices, but its existing disclosures currently fall short of sector peers.

**Leaders in the industry disclose risks related to coal ash in:**
- Public documents and websites (Duke Energy, Progress Energy)

**Leaders in the industry have agreed to increase disclosure on:**
- Coal ash management and disposal practices (Xcel)
- Risk mitigation efforts (Xcel)

**Leaders in the industry have committed to:**
- Install synthetic caps and liners at existing and new coal ash landfills (Duke Energy)
- Convert from wet to dry storage (Duke Energy)

**Leaders in the industry have responded to a similar shareholder proposal with comprehensive reports:**
- MDU Resources
- CMS Energy

FirstEnergy’s public documents provide no information on the environmental and health impacts, financial, regulatory, and reputational risks as described in this memo and how the company is prepared or preparing to address them. **This lack of information in FirstEnergy’s SEC filings, website or other public documents leads shareholders to request a report on the efforts the company is taking to mitigate risks associated with CCW.**

**CONCLUSION:**
An increasing number of studies and reports underscore that current practices for storing, managing, reusing, and disposing of CCW are insufficient to protect human and environmental health, and to protect utilities from financial and regulatory risk. The possibility of regulating CCW as a hazardous waste in the United States, public sentiment across the country, and recent high-profile incidences of environmental and health hazards associated with CCW suggest that the sector as a whole is placing itself at greater risk by not addressing these issues in an aggressive and transparent way.

FirstEnergy in particular, due to its storage of CCW in the Little Blue Run wet pond and dry landfills may face serious risks associated with potential spills, groundwater contamination, or other environmental and health hazards resulting from its CCW.

Investors are not being given adequate disclosure as to how the significant risks associated with FirstEnergy’s CCW storage practices are and will be managed. First Energy needs to report to investors on the company’s efforts, above and beyond current compliance, to reduce environmental and health hazards associated with coal combustion waste, and how those efforts may reduce legal, reputational and other risks to the company’s finances and operations.

**NOTES**


Coal ash is currently promoted by an EPA-American Coal Ash Association partnership called “C³P².” C³P² also involves the Utility Solid Waste Activities Group (USWAG), Department of Energy (DOE), Federal Highway Administration (FHWA), the Electric Power Research Institute (EPRI), and the United States Department of Agriculture Agricultural Research Service (USDA-ARS). The mission of the partnership is “to promote the beneficial use of coal combustion products and the environmental benefits that result from their use.” Some of the benefits of reusing coal ash, according to the C³P² website, include lower greenhouse gas emissions for cement and a reduction of the need to mine new materials.

