

FIRSTENERGY CORP

Form PX14A6N

May 02, 2012

NAME OF REGISTRANT: Green Century Capital Management

NAME OF PERSON RELYING ON EXEMPTION: Green Century Capital Management

ADDRESS OF PERSON RELYING ON EXEMPTION: 114 State Street, Suite 200, Boston, MA 02109

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Shareholder Proposal:

Report on Coal Combustion Waste

FirstEnergy Corporation Symbol: FE

Filed by: Green Century Capital Management and the Camilla Madden Charitable Trust

## FIRSTENERGY CORPORATION FAILS TO DISCLOSE COAL ASH RISK AND MITIGATION EFFORTS TO INVESTORS

We urge you to vote in favor of Proxy Item number 5—Shareholder proposal on Coal Combustion Waste.

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. The failure to properly manage coal ash can expose utilities to significant environmental, financial and regulatory risk. In the Proponent's opinion, FirstEnergy has failed to provide investors with sufficient information regarding how or whether 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.

According to the company's 2011 10-K, 65% 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, particularly at its 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 sufficient information on the efforts it is taking to reduce environmental and health hazards related to CCW.

This is not a solicitation of authority to vote your proxy. Please DO NOT send us your proxy card; Green Century Capital Management is not able to vote your proxies, nor does this communication contemplate such an event. Green Century Capital Management urges shareholders to vote for Item number 5 following the instruction provided on the management's proxy mailing.

## Introduction

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, making it the second largest waste stream in the United States. Coal ash or coal combustion waste (CCW) contains arsenic, mercury, lead, and other toxins which have been linked to cancer, neurological damage, reproductive failure, organ failure, and other serious health problems as well as widespread damage to ecosystems.<sup>1</sup>

In 2010 FirstEnergy and Allegheny Energy merged which, according to the company, “more than doubled FirstEnergy's highly efficient, supercritical coal capacity.”<sup>2</sup> This has exposed the company to even more coal ash related risk. As a result, investors believe it is more important than ever for the company to disclose how it is managing such risks but its current disclosure is insufficient.

According to its website, the company has 17 coal-fired generation facilities but information on how the coal ash produced is managed at each is spotty and inconsistent. For example, the company produces fact sheets for each of its facilities and four of these provide very cursory information on how the coal ash is managed at each facility while the rest are silent. The disclosure provided in the fact sheets is insufficient but it is even more problematic that the majority of the fact sheets do not provide any information on how the company is managing the very real risks associated with coal ash. Furthermore, the company's sustainability report states that its Little Blue Run Dam in Ohio and Pleasants Power Station on West Virginia utilizes “wet” storage for its CCW. This method involves pumping ash-contaminated wastewater into massive ponds contained by earthen dams. Given the company's limited disclosure, the proponent finds it difficult and speculative to determine whether these are the only two wet facilities owned by the company. Furthermore, the company fails to address the procedures and protections it has in place to ensure the company is minimizing and mitigating the impacts and risks associated with such operations.

This is the second year that this proposal will go to a vote. Last year, 36 percent of shares voted supported the proposal. This demonstrates that a significant number of shareholders are very concerned about this issue and believe the existing disclosure is insufficient.

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

### FINANCIAL AND LITIGATION RISKS:

Given the toxic nature of coal ash, its management brings with it significant financial risks. Recent catastrophic events at CCW storage facilities show that the methods of storage implemented by FirstEnergy pose significant risks. 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 hundreds of million or possibly billions of dollars.

- According to a 2011 Union of Concerned Scientist report, “The full extent of leakage from coal ash disposal sites is unknown, how-ever, because many states do not require groundwater monitor-ing and federal oversight has been inconsistent.”<sup>3</sup>
- A 2010 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.”<sup>4</sup> Clearly, this demonstrates that CCW has resulted in documented contamination and environmental risks, which could pose financial risks to the

companies involved.

Wet coal ash storage risks:

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

- 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.<sup>5</sup> TVA estimated total cleanup costs at up to \$1.2 billion.<sup>6</sup> 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.
- 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.<sup>7</sup>
- 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.
- According to Power Magazine, the spill means “a black eye for TVA’s reputation that will take years to heal.”<sup>8</sup> 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.” 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.<sup>9</sup>

Direct wet storage risks to FirstEnergy

One of FirstEnergy’s most significant risks is its ownership of an enormous wet ash facility, the Little Blue Run dam at the Bruce Mansfield Plant in Shippingport, Ohio.

The Little Blue Run dam is 400 feet tall and covers a surface area of 967 acres.<sup>10</sup> It is at least 30 times larger than the TVA dam that breached in 2008.<sup>11</sup> Every day, up to 3.2 million gallons of coal ash waste is sent to the Little Blue Run Dam facility.<sup>12</sup>

There have been documented seeps and leakage from Little Blue Run and there is evidence of increased levels of arsenic in wells around the pond.<sup>13</sup>

- In March 2012, House of Representative member David McKinley (R-WV) sent a letter to the West Virginia Department of Environmental Protection where he highlights that “my constituents are concerned about seepage” from Little Blue Run and notes that during a visit his by his staff they noticed “heavy moisture throughout the neighborhood...[which] leads to my concern that the pump system may not be sufficient enough to correct the problem.”<sup>14</sup> McKinley has been a strong supporter of companies reliant on coal and has proposed legislation that would remove the EPA’s authority to regulate coal ash; therefore his inquiry is even more noteworthy.

- According to Earthjustice, the seepage from Little Blue Run has been “clocked at a maximum of 775 gallons per minute, a volume greater than the combined flow from seven fire truck hoses.”<sup>15</sup>
- In October 2010, Little Blue Run was the subject of a feature story on CNN, which suggested the pond might be contaminating local water.<sup>16</sup>
- 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.<sup>17</sup>
- According to media reports quoting 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.”<sup>18</sup> Investors require more information on how the company is managing its risks in this area.
  - According to a 2010 report by The Environmental Integrity Project, Earthjustice and the Sierra Club:
    - o “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 Contaminate Levels (MCLs) at many on-site groundwater monitoring wells.”<sup>19</sup>
    - o “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.”<sup>20</sup>
    - o 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.

The Little Blue Run has been rated as “high hazard” by the National Inventory of Dams. This rating means that in the event breach caused by a failure or mis-operation, the resulting release would probably cause loss of human life.<sup>21</sup> TVA’s Kingston pond was also a “high hazard” impoundment.

According to its 2011 Sustainability Report, the company also operates a wet facility at its Pleasants Power Station in West Virginia. But even less information is available on its operations and impacts.

#### Dry coal ash storage risks:

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.<sup>22</sup> 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.”<sup>23</sup>

According to the company's 2010 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."<sup>24</sup> 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 2011 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)."<sup>25</sup> 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."<sup>26</sup>

Furthermore, given that the company controls 17 facilities that rely on coal combustion and states that only two of these utilize wet storage, investors are left to speculate that remaining facilities utilize dry storage.

Recycling of coal ash can pose risks:

According to the company's 2011 Sustainability report, "Approximately 27 percent of the CCB from First Energy generating plants is beneficially re-used."<sup>27</sup> But the company fails to provide investors with information on how it manages the risks associated with coal ash recycling.

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."<sup>28</sup> Such a 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 60 Minutes report, EPA Administrator Lisa Jackson commented that she has "no data to say that [coal ash re-use in specific instances] is safe at this point."<sup>29</sup> 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:

- Dominion Virginia Power supplied 1.5 million tons of fly ash to use as structural fill for a golf course in Chesapeake, Virginia.<sup>30</sup> Once the course was built, toxins from the ash leached into groundwater and contaminated surrounding neighborhoods. In February 2012, a lawsuit representing 400 people living near the golf course and seeking \$2 billion in damages, was filed. A similar suit representing over 400 people seeking \$1 billion was dropped last summer after a judge ruled that the plaintiffs had not sufficiently demonstrated they had suffered damages from well contaminations. The 2012 suit brings new evidence demonstrating that well-water testing showed there were elevated levels of toxic chemicals.<sup>31</sup>
- 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."<sup>32</sup>

Given these risks, the proponents contend the company should provide more information on how the company is managing the risks associated with the recycling of coal ash.

#### REGULATORY RISK:

Currently, coal ash ponds and dry storage facilities for CCW are subject to less regulation than landfills accepting household trash. However, new regulations have been introduced in Congress and are under review at the EPA.<sup>33</sup>

#### EPA regulations

In light of findings that link coal ash to several public health threats and instances of severe environmental degradation, the EPA is considering regulating coal ash as a hazardous waste.<sup>34</sup> 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. Because of this delay, in April 2012 Earthjustice, on behalf of 11 environmental and public health groups, sued the EPA to set a deadline to pass coal ash rules.<sup>35</sup>

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 provide investors with any granularity on the possible steps that would be required to bring its operations into compliance nor the costs that would be incurred.

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.

#### Federal legislation

A coal ash bill has passed the House of Representatives and has been introduced into the Senate, which would eliminate the federal government's ability to regulate coal ash and leave oversight to the states. There is concern from environmental advocates and the Obama Administration that the bill does not go far enough to protect human health and the environment. The Obama Administration is opposed to the legislation and has issued an official statement stating that the provisions are “insufficient to address the risks associated with coal ash disposal and management.”<sup>36</sup>

#### Regulatory consensus: Water monitoring and disclosure

The broader regulatory regime is in flux, but consensus has emerged that increased monitoring of coal ash waste facilities is necessary and increased disclosure of that information is necessary. The various regulatory structures proposed by the EPA and the coal ash-related bills in Congress (including those that have been lambasted in the environmental community and by the President for not going far enough to protect against coal ash related risk) all include provisions calling for increased groundwater monitoring around ash disposal sites and calls for increased transparency of this information.

#### State-level regulation

If regulation is left 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. Furthermore, a recent review by Earthjustice and Appalachian Mountain Advocates of the coal ash regulation in 37 states covering over 98 percent of all coal ash produced made some startling findings:

“Our review reveals that most states do not require all coal ash landfills and ponds to employ the most basic safeguards required at household trash landfills, such as composite liners, groundwater monitoring, leachate collection systems, dust controls and financial assurance; nor do states require that coal ash ponds be operated to avoid catastrophic collapse. In addition, most states allow the placement of toxic coal ash in water tables and the siting of ponds and landfills in wetlands, unstable areas and floodplains. When measured against basic safeguards that the U.S. Environmental Protection Agency (EPA) identified as essential to protect health and the environment, state regulatory programs fail miserably to guarantee safety from contamination and catastrophe.”<sup>37</sup>

The proponents are concerned that state-level protections are insufficient to protect against potential coal ash related risk. Furthermore, 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.

The company has recently updated its environmental report, but still fails to address many of the central concerns of the proposal. Specifically, this report does not provide any information on whether its ponds and landfills have liners or caps and its information on ground water monitoring is minimal and insufficient for investors to determine if the company is adequately addressing the associated risks.

#### FirstEnergy lags behind its peers in reporting on coal ash

Not only has the company 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.



- Duke Energy provides detailed information on each coal fired power plant, including its location and whether the bottom and fly ash at each facility are handled wet or dry.<sup>38</sup>
- Progress Energy reports that it has “installed groundwater-monitoring wells around all our active ash ponds and take samples multiple times a year. We will work with state agencies to develop action plans based upon the results, if needed.”<sup>39</sup> In addition, it discloses the frequency of its tests along with the specific components it tests for, along with general information on the process.<sup>40</sup>
- MDU Resources provides information on the size and depth of each of its ponds along with the type of liner and a detailed discussion of its groundwater monitoring protocols at each facility.<sup>41</sup>

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.

Due to risks associated with wet ash storage, investors urge FirstEnergy to provide the following information:

- The portion of the company’s coal ash that is stored wet.
- The percentage of the company’s coal ash stored dry.
- For each disposal facility (pond and landfill), please disclose whether a pond is lined and the type of lining.
- If a disposal facility is not lined, the procedures the company has in place to ensure that there is no leaching.
  - Disclose whether the company has leachate collection systems at coal ash ponds.
  - 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.
  - Provide details of company plans to transition impoundments to dry storage.
  - Disclose the company’s plan to remediate its existing wet storage facilities.
    - Disclose any other actions to transition to safer storage.
- What measures FirstEnergy is taking to ensure dry storage does not pose additional public health or environmental threats.
- 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?

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.

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.

## 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 and potentially other 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. Now that the company has completed its merger with Allegheny Energy and substantially increased its exposure to coal-ash related risks, this type of disclosure is more important than ever.

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. The Proponent urges shareholders to vote in favor of the proposal, to request FirstEnergy 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.

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## NOTES

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- Coal ash is currently promoted by an EPA-American Coal Ash Association partnership called "C<sup>2</sup>P<sup>2</sup>." C<sup>2</sup>P<sup>2</sup> 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 C<sup>2</sup>P<sup>2</sup> website, include lower greenhouse gas emissions for cement and a reduction of the need to mine new materials.

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