# Power Companies' Declining Estimates of the Compliance Costs of the Mercury & Air Toxics Standards (MATS)

## FirstEnergy

- "Respecting the pending maximum achievable control of technology rules for mercury and hazardous air pollutants, we still expect investments of about **$2 billion to $3 billion** in our generation fleet to comply. Our investments are expected to primarily focus on reducing mercury, and particulate emissions at our supercritical units.

  "Again, as I mentioned last quarter, this analysis is ongoing. We do not plan to make any final decisions or announcements about plant status until after we have thoroughly evaluated the MACT rules and are -- that are expected to be finalized in December and develop a comprehensive plan taking into consideration both the MACT and CSAPR requirements and the results of the allowance auction."

  FirstEnergy, 2011 Q3 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/304211-firstenergys-ceo-discusses-q3-2011-results-earnings-call-transcript

- "Now last year, I told you that our spend -- our capital spend was $2 billion to $3 billion to comply with this rule when it was MACT. Now that we understand the rule and we've dug into it and analyzed the situation more deeply, we are right now looking at a **$1.3 billion to $1.7 billion** spend to comply. And we continue to work further to reduce that cost. And we will be in compliance by the spring of 2015. To ensure that our plan holds up, we've engaged a well-known independent engineering contractor to validate our approach and make sure that we -- our plan is solid when we start its implementation later this year.

  "The company is also well positioned regarding the EPA Cross-State Air Pollution Rule. Now as you all know that rule has been put on a stay, which does create some uncertainty. Now our plan for dealing with that rule is not yet fully developed, and it is largely dependent on what we finalize in terms of dealing with MATS later this spring."

  FirstEnergy, 2011 Q4 Earnings Call (James H. Lash, President, FirstEnergy Generation Corp.)
  http://seekingalpha.com/article/402961-firstenergys-ceo-discusses-q4-2011-results-earnings-call-transcript

- "Turning now to the investment required to address MATS at our remaining coal fleet. At our analyst meeting, we told you Jim Lash's team identified lower cost solutions and allowed us to cut our anticipated expenditures roughly in half, from $2 billion to $3 billion in our original estimate, down to $1.3 billion to $1.7 billion. As we continue to find alternative approaches to meeting these requirements, including the possibility of coal firing certain units with natural gas, I can say that we are now comfortable with the lower end of the revised range. We expect to finalize our plans later this year, and we will continue our efforts to further reduce these costs if possible."

  FirstEnergy, 2012 Q1 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/548851-firstenergys-ceo-discusses-q1-2012-results-earnings-call-transcript

- "Let's get started with an update on our generating units. As mentioned on previous occasions, we've been rigorously evaluating the environmental controls that will be needed to meet the new environmental regulations including the Mercury and Air Toxics Standards rule or MATS that is scheduled to go into effect in 2015.

  As a result of this analysis, we have significantly reduced our projected capital investment related to MATS compliance. We now estimate investment of about **$975 million** across our Fossil Fleet. This is down from the $1.3 billion to $1.7 billion estimate we provided in February and well below our initial projections of $2 billion to $3 billion. While we still have work to do to confirm and refine our current estimate, we're clearly moving in the right direction."

  FirstEnergy, 2012 Q2 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/790061-firstenergys-ceo-discusses-q2-2012-results-earnings-call-transcript

- "After a rigorous analysis of the necessary environmental controls, we have reduced our projected spend to $200 -- to $975 million, down from an original estimate of $2 billion to $3 billion. We also took proactive measures to implement more efficient fuel and dispatch strategies, trim maintenance costs, enhance operational flexibility and reorganize certain areas of business to ensure more appropriate staffing levels and reduced costs in light of the economy."

  FirstEnergy, 2012 Q4 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/1222651-firstenergy-management-discusses-q4-2012-results-earnings-call-transcript

- "Finally, with respect to the Mercury and Air Toxics Standards Rule, or MATS, we were granted extensions for compliance through April 2016 in both Pennsylvania and West Virginia for our Hatfield, Bruce Mansfield, Fort Martin, Harrison and Pleasants stations. These extensions provide for an additional year, as I said through April 16, for compliance at these units. And as we continue to refine our capital expenditures related to MATS, we are lowering our estimated costs to approximately **$925 million** from the $975 million previously reported."

  FirstEnergy, 2013 Q1 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/1411401-firstenergy-management-discusses-q1-2013-results-earnings-call-transcript

- "As a result of these closures, our MATS compliance costs are expected to decrease from around $925 million to approximately $650 million. And we continue to look for ways to refine and perhaps further reduce our expected MATS compliance costs.

  "The total reduction in capital over 5 years at these facilities, including $275 million for MATS, is approximately $500 million. From an earnings perspective, the closure of these facilities will be accretive by several cents annually going forward."

  FirstEnergy, 2013 Q2 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/1607132-firstenergy-corp-fe-management-discusses-q2-2013-results-webcast

- "Annual operating expenses have been reduced through our continued focus on managing fuel costs and O&M expense. And more importantly, our projected capital spending in the generation group over the next several years has been reduced by more than $1 billion through our recent actions. This includes additional reductions in our expected spend for compliance with Mercury and Air Toxics Standards , which is now at $465 million across the entire generation fleet, with only an estimated $240 million at our competitive units."

  FirstEnergy, 2013 Q3 Earnings Call (Anthony Alexander, CEO)
  http://seekingalpha.com/article/1808342-firstenergy-management-discusses-q3-2013-results-earnings-call-transcript

## Southern Company

- "As you'll recall, we previously provided a MATS compliance capital projection of up to $2.7 billion for the 2012 through 2014 time frame. We also indicated that this amount **could be reduced by $500 million to $1 billion**, depending primarily on the number of baghouses in our final compliance strategy, bringing the final number to between $1.7 billion and $2.2 billion.

  "Based on our current analysis, our projection for MATS compliance for 2012 through 2014 now totals $1.8 billion, representing a reduction of $900 million from our previous estimates. While the number of baghouses has been reduced to 4 or 5 from a high of as many as 17, other costs have been added to our plan to reflect the need for additive injection systems and related plant modifications. As before, this plan also includes significant investment in transmission projects as well as fuel switching to natural gas."

  Southern Company, 2012 Q2 Earnings Call (Art Beattie, CFO)
  http://seekingalpha.com/article/749651-southern-management-discusses-q2-2012-results-earnings-call-transcript

- "So it's -- so at least in terms of kind of what we said before with respect to MATS, we said $2.7 billion. And then we -- as we got kind of the new rule, not the proposed rule, we said it could be between **$0.5 billion or $1 billion less**, and therefore, we said $1.7 billion to $2.2 billion. Well, sure enough, it ended up at $1.8 billion. When you think about the total amount of CapEx, it was $18.2 billion or $18.3 billion, and now we kind of think it's going to be $16.4 billion, $16.3 billion, somewhere in that realm."

  Southern Company, 2012 Q2 Earnings Call (Thomas Fanning, CEO)
  http://seekingalpha.com/article/749651-southern-management-discusses-q2-2012-results-earnings-call-transcript

## AEP

- "Estimating the capital spend for our environmental effort. Originally, we started with a **$6 billion to $8 billion** anticipated capital outlay for these types of requirements. And that changed, from **$5 billion to $7 billion**, over a period of time when the EPA came up with the -- came out the rules, particularly on particulate matter. We had one situation where, instead of achieving 99.7% removal rate, the proposed rule was saying you had to achieve 99.9%, and that 0.2% was costing us about $800 million. So the EPA did listen and made the adjustments, so that adjusted reduction down as a result. And then now, we're saying the cost is going to be from **$4 billion to $5 billion**. And we've looked at technologies. We believe from a compliance standpoint that we can achieve further compliance reductions as a result of technology improvements, but also how we run the generation. So those are the kinds of things that we're looking at as well.

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  "So we believe it's going to be $4 billion to $5 billion, and we're committed to continuing down that process. But now -- right now, it says $4 billion to $5 billion."

  AEP, 2012 Q4 Earnings Call (Nicholas K. Akins, CEO)
  http://seekingalpha.com/article/1188551-american-electric-power-management-discusses-q4-2012-results-earnings-call-transcript

**Historical and Projected Environmental Investments**

| | 2009 Actual | 2010 Actual | 2011 Actual | 2012 Estimate | 2013 Estimate | 2014 Estimate |
|---|---|---|---|---|---|---|
| | | | (in thousands) | | | |
| Total AEP System (a) | $ 457,200 | $ 303,800 | $ 186,800 | $ 510,700 | $ 999,000 | $ 1,100,000 |
| APCo | 191,900 | 202,700 | 68,900 | 77,600 | 77,700 | 80,300 |
| I&M | 19,600 | 8,100 | 5,900 | 89,800 | 148,200 | 148,000 |
| OPCo | 224,800 | 97,400 | 63,000 | 122,800 | 187,300 | 128,700 |
| PSO | 1,000 | 1,200 | 6,500 | 43,400 | 134,600 | 164,600 |
| SWEPCo (b) | 10,700 | (10,500) | 11,000 | 75,700 | 230,500 | 288,100 |

(a) Includes expenditures of the subsidiaries shown and other subsidiaries not shown. The figures reflect construction expenditures, not equity investments in subsidiary companies. Excludes discontinued operations.
(b) SWEPCo 2010 actual environmental cost includes reclassifications of project costs for suspended capital projects.

AEP, Form 10-K (2011), p. 10
http://www.aep.com/investors/financialfilingsandreports/Filings/

| Historical and Projected Environmental Investments | | | | | | |
|---|---|---|---|---|---|---|
| | 2010 Actual | 2011 Actual | 2012 Actual | 2013 Estimate | 2014 Estimate | 2015 Estimate |
| | | | (in thousands) | | | |
| Total AEP System (a) | $ 303,800 | $ 186,800 | $ 235,400 | $ 544,000 | $ 760,000 | $ 850,000 |
| APCo | 202,700 | 68,900 | 50,800 | 59,000 | 48,000 | 84,000 |
| I&M | 8,100 | 5,900 | 30,400 | 42,000 | 84,000 | 88,000 |
| OPCo | 97,400 | 63,000 | 66,200 | 191,000 | 185,000 | 159,000 |
| PSO | 1,200 | 6,500 | 26,100 | 64,000 | 82,000 | 98,000 |
| SWEPCo (b) | (10,500) | 11,000 | 23,800 | 143,000 | 241,000 | 325,000 |

(a) Includes expenditures of the subsidiaries shown and other subsidiaries not shown. The figures reflect construction expenditures, not investments in subsidiary companies.
(b) SWEPCo 2010 actual environmental cost includes reclassifications of project costs for suspended capital projects.

AEP, Form 10-K (2012), p. 10
http://www.aep.com/investors/financialfilingsandreports/Filings/

| Historical and Projected Environmental Investments | | | | | | |
|---|---|---|---|---|---|---|
| | 2011 Actual | 2012 Actual | 2013 Actual | 2014 Estimate | 2015 Estimate | 2016 Estimate |
| | | | (in thousands) | | | |
| Total AEP (a) | $ 186,800 | $ 235,400 | $ 415,000 | $ 588,000 | $ 644,000 | $ 447,000 |
| APCo | 68,900 | 50,800 | 44,500 | 48,000 | 67,000 | 68,000 |
| I&M | 5,900 | 30,400 | 27,300 | 55,000 | 42,000 | 52,000 |
| OPCo (b) | 63,000 | 66,200 | 123,900 | - | - | - |
| PSO | 6,500 | 26,100 | 55,500 | 66,000 | 75,000 | 49,000 |
| SWEPCo | 11,000 | 23,800 | 134,000 | 217,000 | 312,000 | 118,000 |

(a) Includes expenditures of the subsidiaries shown and other subsidiaries not shown. The figures reflect construction expenditures, not investments in subsidiary companies. Excludes discontinued operations.
(b) Estimates for 2014, 2015 and 2016 reflect the transfer of all of OPCo generation assets which occurred on December 31, 2013.

AEP, Form 10-K (2013), p. 13
http://www.aep.com/investors/financialfilingsandreports/Filings/

## Duke Energy

- Over the past decade, we have invested approximately $5 billion to install equipment that comply with state and federal environmental requirements, leaving our coal-generating fleet well-controlled for both sulfur dioxide and nitrogen oxide. Additionally, when our new construction programs and related retirements are completed, approximately 90% of our coal generation capacity will have scrubbers in operation. As we look forward, based on when our current plan and assumptions, we expect **approximately $5 billion to $6 billion in additional capital expenditures over the next decade to comply with the portfolio of regulations.** We will continue to adjust and refine these planning assumptions as the EPA finalizes the remaining pending regulations.

  Duke Energy, 2011 Q2 Earnings Call (Jim Rogers, President & CEO)
  [http://seekingalpha.com/article/283979-duke-energys-ceo-discusses-q2-2011-results-earnings-call-transcript?part=single](http://seekingalpha.com/article/283979-duke-energys-ceo-discusses-q2-2011-results-earnings-call-transcript?part=single)

- As we enter 2013 and 2014, we expect to begin increasing our environmental spending. After the recent finalization of the utility mercury rules, we refined our CapEx estimates. To comply with the new regulations, as well as potential rules, which have not yet been finalized, including air emissions, coal ash and water intake, **we could spend around $5 billion over the next 10 years. This is at the low end of our previous $5 billion to $6 billion range.** Over the next 3 years, we expect to spend about $1 billion for environmental compliance.

  Duke Energy, 2011 Q4 Earnings Call (Lynn Good, CFO)
  [http://seekingalpha.com/article/372241-duke-energys-ceo-discusses-q4-2011-results-earnings-call-transcript](http://seekingalpha.com/article/372241-duke-energys-ceo-discusses-q4-2011-results-earnings-call-transcript)

- Next, let me review our environmental compliance expenditures. Over the past decade our legacy companies span approximately 7 billion investing in scrubbers and SCRs based on our current assumptions and the timing of final regulations and how the EPA will adopt rules around air, water and residual waste. **We currently estimate we will spend between 4.5 billion and 5.5 billion over the next 10 years** with 900 year [*sic*] expected to be spent in the 2014 to 2016 time frame. Approximately 85% of our expected environmental compliance investments within the Carolinas and Indiana both of these jurisdictions are the strong track record of allowing utilities to recovery cost related to environmental compliance investments. We have environmental tracking mechanisms in Indiana and Florida. In 2014 to 2016 we will spend 1.6 billion on nuclear fuel the cost of this recovered utilized is through our fuel costs [ph] and the other 1.4 billion is expected to be spent to expand our distribution system as we connect additional customers and increase our revenue base.

Duke Energy, 2013 Q4 Earnings Call (Steven Young, CFO)
http://seekingalpha.com/article/2028461-duke-energys-ceo-discusses-q4-2013-results-earnings-call-conference-transcript

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- "While the ultimate regulatory requirements for the Duke Energy Registrants from the group of EPA regulatory actions **will not be known until all the rules have been finalized**, for planning purposes, the Duke Energy Registrants currently estimate the cost of new control equipment that may need to be installed to comply with this group of rules could total $4.5 billion to $5 billion over the next 10 years."

  Duke Energy, Form 10-K (2011), p. 70
  http://www.duke-energy.com/investors/financials-sec-filings.asp

- "As a group, these non-GHG environmental regulations will require the Duke Energy Registrants to install additional environmental controls and accelerate retirement of some coal-fired units. While the ultimate regulatory requirements for the Duke Energy Registrants from the group of EPA regulatory actions will not be known until all the rules have been finalized, for planning purposes, the Duke Energy Registrants currently estimate the cost of new control equipment that may need to be installed to comply with this group of rules could total $5 billion to $6 billion, excluding AFUDC, over the next 10 years. This range includes estimated costs for new control equipment necessary to comply with the **MATS of $650 million to $800 million**."

  Duke Energy, Form 10-K (2012), p. 78
  http://www.duke-energy.com/investors/financials-sec-filings.asp

- "As a group, these non-GHG environmental regulations will require the Duke Energy Registrants to install additional environmental controls and accelerate retirement of some coal-fired units. While the ultimate regulatory requirements for the Duke Energy Registrants from the group of EPA regulatory actions will not be known until all the rules have been finalized, for planning purposes, the Duke Energy Registrants currently estimate the cost of new control equipment that may need to be installed to comply with this group of rules could total $4.5 billion to $5.5 billion, excluding AFUDC, over the next 10 years. This range includes estimated costs for new control equipment necessary to comply with the **MATS of $525 million to $625 million**."

Duke Energy, Form 10-K (2013), p. 71
http://www.duke-energy.com/investors/financials-sec-filings.asp

## PPL

- Starting in Kentucky. Now that we've signed contracts with various vendors, we've updated our estimate of capital spending necessary to complete our previously discussed environmental compliance projects [MATS and CSAPR]. **We now estimate these projects will come in closer to $2.5 billion, a reduction of $500 million from our original forecast.** We're able to deliver these savings to customers in Kentucky because we proactively addressed EPA regulations and were able to secure bids before others.

  PPL, 2012 Q3 Earnings Call (William Spence, COO)
  http://seekingalpha.com/article/990701-ppl-management-discusses-q3-2012-results-earnings-call-transcript