Midwest Generation’s “Unpaid Health Bills”:

The Hidden Costs of Soot and Smog from the Fisk and Crawford Coal Plants in Chicago
Speakers

Howard Learner, Executive Director, Environmental Law & Policy Center

Dr. Kristi Pullen, Science Fellow, Environmental Law & Policy Center

Warren Lavey, Senior Fellow, Environmental Law & Policy Center

Alderman Joe Moore, 49th Ward Sponsor, Chicago Clean Power Ordinance
Fisk and Crawford Coal Plants

- Owned by Midwest Generation
- Located in more densely populated areas than any other coal plants in the nation

- **Fisk**
  - 1111 W. Cermak Rd., Pilsen
  - 326 MW plant
  - Originally built in 1903 and the rebuilt in 1959.

- **Crawford**
  - 3501 S. Pulaski Rd., Little Village
  - 532 MW plant (2 generating units)
  - Originally built in 1924, current generating units were built in 1958 and 1961
Research on Health Impacts of Particulate Matter Since 2002 Harvard Study

- **2006 EPA Revised Standard for Particulate Matter**
  - Health effects associated with exposure to fine particulate matter (PM$_{2.5}$) include premature death, non-fatal heart attacks, increased hospital admissions for respiratory and cardiovascular disease, etc.

- **2009 Integrated Science Assessment for Particulate Matter**
  - Found that a causal relationship exists between short- and long-term exposure to PM$_{2.5}$ and mortality, as well as cardiovascular effects.

- **2010 EPA Clean Air Transport Rule**
  - Found that reducing SO$_2$ and NO$_x$ in 31 States and D.C. would prevent 14,000 to 36,000 premature deaths, 21,000 cases of acute bronchitis and other harms.
  - Achieve $120$ billion - $290$ billion in savings nationwide, compared to $2.8$ billion in costs to the energy sector.

  - Found that coal plant pollution created approximately $62$ billion in damages nationwide in 2005. Over 90% of this damage caused by PM.
Economic Impact of Soot and Smog
From the Fisk and Crawford Coal Plants
(National Research Council)

$121 million per year ($127 million in 2010 dollars)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Crawford</th>
<th></th>
<th></th>
<th>Fisk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emissions Amount</td>
<td>Damages ($ per ton)</td>
<td>Est. Damages ($mil)</td>
<td>Emissions Amount</td>
<td>Damages ($ per ton)</td>
</tr>
<tr>
<td></td>
<td>(tons)</td>
<td></td>
<td></td>
<td>(tons)</td>
<td></td>
</tr>
<tr>
<td>Sulfur dioxide</td>
<td>9,238</td>
<td>6,400</td>
<td>59.1</td>
<td>4,615</td>
<td>8,360</td>
</tr>
<tr>
<td>Nitrogen oxide</td>
<td>2,237</td>
<td>1,700</td>
<td>3.8</td>
<td>1,123</td>
<td>1,840</td>
</tr>
<tr>
<td>Fine particulates</td>
<td>457</td>
<td>17,500</td>
<td>8.0</td>
<td>203</td>
<td>38,900</td>
</tr>
<tr>
<td>Coarse particulates</td>
<td>841</td>
<td>821</td>
<td>0.7</td>
<td>359</td>
<td>1,890</td>
</tr>
<tr>
<td></td>
<td>Total Estimated</td>
<td>$71.6 million</td>
<td></td>
<td>Total Estimated</td>
<td>$49.3 million</td>
</tr>
<tr>
<td></td>
<td>Damages</td>
<td></td>
<td></td>
<td>Damages</td>
<td></td>
</tr>
</tbody>
</table>

(National Research Council estimates using 2005 data and 2007 dollars)
Total Health Damages Since 2002: $750 Million – 1 Billion

Emissions and Damages have continued since 2002 Harvard study

- Total health damages of $750 million - $1 billion (using National Research Council model)
- Recent sulfur dioxide emissions from Fisk and Crawford similar to 1999 and 2005 levels
- Nitrogen oxides emissions in several recent years exceeded levels modeled by the National Research Council
- Direct particulate matter emissions increased in reported years

Fisk Coal Plant photo by Eric Allix Rogers
Taking Action to Clean Up Fisk and Crawford

• **2006 Illinois Combined Pollutant Standard**
  – SO₂ reductions phase in through 2019
  – Does not address direct PM or CO₂

• **2009 Lawsuit by U.S. Department of Justice and Illinois Attorney General against Midwest Generation**
  – Argues that Midwest Generation plants have been modified without proper permits and have exceeded opacity limits (a measurement of PM)

• **2010 Chicago Clean Power Ordinance**
  – Requires Fisk and Crawford plants to reduce PM pollution by 90% and CO₂ pollution by 50% within 3-4 year timeframe
  – Supported by a coalition of over 40 health, business, environmental and community groups
  – Currently in City Council Rules Committee
Please notify the operator if you would like to ask a question.

Download the report:
*Midwest Generation’s “Unpaid Public Health Bills”: The Hidden Costs of Soot and Smog from the Fisk and Crawford Coal Plants in Chicago* and related resources at [www.elpc.org/coalcosts](http://www.elpc.org/coalcosts)

Please refer other requests or follow up questions to:
Peter Gray [pgray@elpc.org](mailto:pgray@elpc.org) 312-795-3715