The Beyond Coal Campaign In Texas
General Outline

(1) the nature of the campaign – background, objectives;
(2) what financial research was conducted, how it was produced and disseminated;
(3) what were the targets of the financial information;
(4) how the financial information and analysis was used in the campaign – media, educating opinion leaders, leadership or team building, fundraising; and
(5) what worked and what would you do differently in the future.
Are we making progress? You decide.

<table>
<thead>
<tr>
<th></th>
<th>Texas Rank</th>
<th>Texas Rank</th>
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<tbody>
<tr>
<td></td>
<td>2000</td>
<td>2009</td>
</tr>
<tr>
<td>NOx emissions</td>
<td>1</td>
<td>1</td>
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<tr>
<td>SO2 emissions</td>
<td>5</td>
<td>3</td>
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<tr>
<td>CO2 emissions</td>
<td>1</td>
<td>1</td>
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<tr>
<td>VOC* emissions</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Particulate emissions (PM10)</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Emissions of toxic chemicals</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Mercury emissions</td>
<td>1</td>
<td>1</td>
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</tbody>
</table>

* Volatile organic compounds
1. Harrington
2. Tolk
3. Oklaunion
4. Monticello
5. Welsh
6. Pirkey
7. Martin Lake
8. Big Brown
9. Limestone
10. Twin Oaks
11. Gibbons Creek
12. Sandow
13. Fayetteville
14. Parish
15. Deely Spruce
16. San Miguel
17. Coleto Creek
18. Oak Grove
19. Sandy Creek
Big Three criteria emissions are 25.52% of TX’s total emissions

Statewide comparison of Luminant to ~2,000 Texas Industrial Plants:

1. 185,665 tons total Luminant's Big Three SO2 (33.8%)
2. 33,449 tons total Luminant's Big Three NOx (10.0%)
3. 126,825 tons total Luminant's Big Three CO (37.6%)
4. 732 tons total Luminant's Big Three VOCs (0.007%)
5. 6,150 tons total Luminant's Big Three PM10 (11.4%)
6. 393 pounds total Luminant's Big Three Lead (0.01%)
7. Total: 352,822 tons
How Dirty are Luminant's Big Three Coal Plants in Texas?

Statewide comparison of Luminant to 19 Texas Coal Plants:

1. 447,654 tons total Texas coal plant SO2 (Luminant = 41.5%)
2. 109,386 tons total Texas coal plant NOx (Luminant = 30.6%)
3. 176,915 tons total Texas coal plant CO (Luminant = 71.7%)
4. 2,106 tons total Texas coal plant VOCs (Luminant = 34.8%)
5. 17,073 tons total Texas coal plant PM10 (Luminant = 36.0%)
6. 3.12 tons total Texas coal plant Lead (Luminant = 6.3%)
7. **Total: 753,136 tons total Texas coal plant criteria emissions (46.85% of Tx)**
Who is Luminant?

<table>
<thead>
<tr>
<th>FUEL TYPE</th>
<th>CAPACITY (MW)</th>
<th>NUMBER OF PLANTS</th>
<th>NUMBER OF UNITS</th>
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<tbody>
<tr>
<td>Nuclear</td>
<td>2,300</td>
<td>1</td>
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<tr>
<td>Coal</td>
<td>8,017</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Natural gas</td>
<td>5,110</td>
<td>8</td>
<td>26</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15,427</strong></td>
<td><strong>14</strong></td>
<td><strong>40</strong></td>
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Generation Summary

- Nuclear: 15%
- Coal: 52%
- Natural Gas: 33%

- Nuclear: 26%
- Natural Gas: 2%
- Coal: 72%
Big Brown is the target, but Monti 1 and 2 announced idle with CSAPR Support EPA to do the work

Framework: Federal rules force Luminant to invest in pollution control and they’re near bankrupt

Organize townhalls In East Texas, and Dallas

Regional and Local media

Litigation, Ensure Texas doesn’t bail them out

Narrative: Luminant is the worst polluter in Texas; Luminant has broken its promise to clean up; Luminant wants special treatment
Coal will soon abide by air quality regulations that, for the most part, the rest of industrial America complies with already.

- Cross State Air Pollution Rule (“CASPER” for SO2, NOX ozone) (2011 (final) – stayed but this is what prompted Luminant to announce idling of 2 units (1200 MW); unfortunately, now also put on hold)

- Air Toxics/EGU MACT (Acid Gases, Mercury, Dioxin, etc) (2014 compliance)

- Haze FIP May 2015 (Luminant and Fayette subject to this); partial FIP says comply with CSAPR – very unclear what this means for Texas

- 1 hour NOx/SO2 National Ambient Air Quality Standards (2010 (final) – NOx 2021/22 compliance; SO2 compliance 2017 (SIPS due 2013/14)) We’ve already modeled exceedences

- Water Pollution / Water Use
What Costs Would Be Incurred?  
$3.6 billion

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<thead>
<tr>
<th>Plant</th>
<th>FGD Scrubber SO2</th>
<th>Activated Carbon Injection Mercury</th>
<th>ESP Particulates Mercury</th>
<th>SNCR NOx</th>
<th>SCR NOx</th>
<th>Baghouse Mercury</th>
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<tbody>
<tr>
<td>Martin Lake 1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>Martin Lake 2</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<td>Martin Lake 3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>Monticello 1</td>
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Chart 2: Big Brown, Martin Lake and Monticello Coal Plant Values ($ billions)
What do we different for 2013?

We’re more aggressive;
We get another financial report out earlier and push it with a wider range of electeds;
We work with the unions on a just transition;
We retire 2400 MW of dirty old coal by 2016.
Discussion:
- Feedback on Plan
- Next Steps