MATS PROGRAM STATUS

- Regulates Mercury, Metals HAPS, Acid Gases and Dioxin/Furans
- **Mercury**
  - <1.2 lbs Hg/Tbtu (except Pirkey 4.0# Hg/TBbtu)
  - Monitored for reporting with Sorbent Traps on Fleet
  - Most plants will use mercury CEMS of operational indication
- **Acid Gases**
  - <0.002 lbs HCl/Mbtu
  - Reporting across fleet:
    - $SO_2$ as a surrogate (<0.2#$SO_2$/MBtu)
    - or-
    - ** Quarterly** stack testing for HCl
- **Non-Mercury Metal HAPS**
  - ** Quarterly** stack particulate monitoring (<0.03 lbs particulate/Mbtu)
- **Dioxin/Furans**
  - Boiler inspections, repairs and tuning ($CO$, $NO_x$, $O_2$)
  - Annual reporting required.
## Mercury Compliance Measures

<table>
<thead>
<tr>
<th>MERCURY</th>
<th>ACID GASES</th>
<th>Non-Hg Metals</th>
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<tbody>
<tr>
<td>SCR &amp; WFGD</td>
<td>WFGD</td>
<td>ESP – WFGD</td>
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<tr>
<td>ACI* &amp; Fabric Filter</td>
<td>SBC** &amp; Fabric Filter DFGS &amp; FF</td>
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<tr>
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* ACI – activated carbons are typically a halogenated variety.
** SBC – Sodium bicarbonate – dry injected into fluework.
Mercury Compliance Variables

- Numerous options to comply – very specific based upon plant.
  - Utilization of existing equipment.
  - Combustion process and acceptable fuel options.
    - Unit designed are specific to a specific type/range of coal.
    - Halogens in fuel --- Hg oxidation, corrosion, competing FGD reactions.
  - Economic Drivers
    - Cost benefit - capital to costly = retire units
    - Cost avoidance – maintain ESP for ash sales/avoid landfill expansion.
  - Holistic Process View (Total Evaluated Cost)
    - Sodium salts get to landfill and into landfill leachate.
    - Flyash collection in WFGD, contributes to increase arsenic in absorbers.
    - SCR ammonia slip affect on WFGD’s Hg removal.
    - ESP performance with additional particulate (AC, trona, SBC).
  - Equipment arrangement and space.
    - Utilize as much of existing equipment (ductwork, stack) in retrofits.
    - More remote areas increase capital and operating costs.
  - Schedule
    - Compliance date.
    - May limit options.