Breakout Session 1 – Potential process solutions

Attributes that CCS-equipped plant might need to be relevant to the future grid

- Low capex; marginal cost good enough to get dispatched
- Reconfigurable/modular: the optimal capture rate will likely increase over time
- Ability to quickly change CO₂ capture rate and power required (think: asset to be traded just like the power plant)
- Shift load to periods of low LMPs
- Help remove CO₂ from the atmosphere
## Potential program scope

<table>
<thead>
<tr>
<th>CO₂ source</th>
<th>In scope</th>
<th>Out of scope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCGT, maybe industrial sources</td>
<td>Coal-fired power plants (Heavy focus from NETL, Coal FIRST program)</td>
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<tr>
<td>“Expanding the box” solutions</td>
<td>Storage, direct air capture</td>
<td>Hydrogen via SMR or electrolysis, P2X, CO₂ to fuels or valuable chemicals, selling specialty gases</td>
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Breakout Session 1 – Questions

- For expected ramp rates and turndown, can current CCS process designs handle that?

- Given these prompts, what technology attributes do you think will be most valuable?

- Are there CO₂ capture technologies that are particularly amenable (or not) to these needs?

- How compelling is the DAC integration idea?