

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

	In scope	Out of scope
CO ₂ source	CCGT, maybe industrial sources	Coal-fired power plants (Heavy focus from NETL, Coal FIRST program)
“Expanding the box” solutions	Storage, direct air capture	Hydrogen via SMR or electrolysis, P2X, CO ₂ to fuels or valuable chemicals, selling specialty gases

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?