

MGA Geologic Carbon Storage Utility Design Recommendations

OBJECTIVES OF THE POLICY

The Advisory Group agreed that the following objectives should inform the design of a geologic carbon storage utility:

- Create certainty by offering a known CO₂ sequestration option.
- Create an entity that can identify and implement an on-going state-wide or geologic basin-wide CO₂ sequestration management plan.
- Reduce the complexity and create transparent oversight of managing multiple projects in a region, acquiring property rights, and addressing property damage and other liability issues.
- Manage the cost of geologic carbon storage development
- Facilitate early sequestration resource exploration and development that will be necessary for wide-scale deployment of CCS.
- Resolve the question of long-term liability by the utility retaining both the management of and liability from project siting in perpetuity.
- Does not compete with existing commercial operations such as enhanced oil recovery or enhanced gas recovery that have the potential to accomplish needed sequestration.

DESIGN RECOMMENDATIONS FOR STATE-WIDE OR BASIN-SCALE GEOLOGIC CARBON STORAGE UTILITY

1.0 STRUCTURE AND JURISDICTION

- 1.1 The geologic carbon storage (GCS) utility would be responsible for reliably receiving and distributing CO₂ to geologic storage sites, which it would also manage in perpetuity. For these services, the utility would recover its cost in rates, along with a reasonable rate of return. Its value would be to create certainty and reliability in developing geologic storage at a system-wide scale. It is not intended to compete with otherwise commercial operations, such as enhanced oil recovery or enhanced gas recovery.
- 1.2 (Alternative 1) The authority to develop geologic carbon sequestration projects in a state or province, that are not otherwise commercial, will be granted only to one investor-owned utility in the jurisdiction. The utility offers a fee for service, which is regulated by the state or provincial utility regulatory commission. The utility may contract its commercial services and operations to private or public sector entities.
 - 1.2.1 **Note:** This jurisdictional utility could be a subsidiary of a larger utility that operates across jurisdictions in a particular geologic basin.
- 1.3 (Alternative 2) The authority to develop geologic carbon sequestration projects in this state or province, that are not otherwise commercial, will be granted to the a non-profit regional carbon sequestration authority for a particular geologic basin that has been approved by the U.S. Federal Energy Regulatory Commission or by [insert Canadian authority], and that provides geologic carbon sequestration

services to any commercial entity seeking to sequester CO₂ such basin. The authority offers a fee for service and is regulated by the (FERC/state utility regulatory commission or [Canadian entity]). The utility may contract its commercial services and operations to private or public sector entities.

1.3.1 **Note:** An analogous model could be a regional transmission organization or RTO.

2.0 SERVICES AND OPERATION

- 2.1 The utility (authority) will provide geologic carbon sequestration services for a reasonable fee to any commercial entity seeking to geologically sequester CO₂ in the [jurisdiction or basin].
- 2.2 The utility (authority) will explore and characterize potential sites for geologic carbon sequestration within the [jurisdiction or basin].
- 2.3 The utility will manage all geologic storage projects in the [jurisdiction or basin]. This includes but is not limited to:
 - 2.3.1 Project site development, operation and closure
 - 2.3.2 Long-term monitoring and maintenance
 - 2.3.3 Any necessary remediation
- 2.4 The utility will coordinate the management of existing GCS projects, both closed and operational, in the [jurisdiction or basin].
- 2.5 The utility will develop and regularly update a plan for managing existing and estimated future GCS projects.
- 2.6 The utility is will develop the infrastructure, such as pipelines, necessary to facilitate projects in the [jurisdiction or basin].

3.0 PROPERTY RIGHTS AND LIABILITY

- 3.1 All liability associated with GCS projects will be held by the utility (authority).
- 3.2 (OPTION 1) The utility (authority) will purchase all surface and subsurface property rights necessary to develop and operate GCS projects and pipeline infrastructure.
 - 3.2.1 The appropriate state or provincial agency will develop a process that allows for the utility (authority) to unitize property rights under a project. In order to unitize a project, the utility (authority), must first obtain 75 percent of the property rights necessary to develop the project.
- 3.3 (OPTION 2) The state or province grants the utility (authority) the right to petition the appropriate state or provincial agency for the condemnation of the surface and subsurface property necessary to develop GCS projects and pipeline infrastructure.

4.0 FEES AND REVENUES

- 4.1 (Option 1) The utility will operate on a fee for service basis, through a tariff that is approved through a state or provincial utility regulatory commission.
 - 4.1.1 The fee will be applied by the utility to any commercial operation that contracts with the utility to manage CO₂ for injection purposes.
 - 4.1.2 The utility will set aside a portion of its revenue to cover the very long-term management of CO₂, to cover the period when revenue declines or ceases due to lack of additional sequestration capacity.
 - 4.1.3 The utility may recover all costs and fees associated with:
 - 4.1.3.1 Providing services and managing operations identified that are identified in section 2.0, including all exploration and development prior to the contracting for service in its rates¹.
 - 4.1.3.2 Property rights acquisition and liability management associated in section 3.0
 - 4.1.3.3 Very long-term management costs identified in section 4.1.2.
 - 4.1.4 The utility will be able to recover a reasonable rate of return for its services.

- 4.2 (Option 2) The nonprofit authority will operate on a fee for service basis
 - 4.2.1 The authority will be governed in a manner analogous to a regional transmission organization (RTO), along the lines of MISO or PJM.

¹ There will be an initial period when this utility (authority) will be undertaking significant saline formation exploration and development before many capture projects come on line and revenue is generated through a fee for service.