6 CO₂ Capture, Transport, and Storage

6.1 CO₂ Capture

Among the potential (new) units that the model can build in EPA Base Case v.4.10 are advanced coal-fired units with CO₂ capture (carbon capture).¹ The cost and performance characteristics of these units are shown in Table 4-13 and are discussed in Chapter 4.

Besides offering carbon capture capabilities on potential units that the model builds from scratch, EPA Base Case v.4.10 also provides carbon capture as a retrofit option for existing pulverized coal plants. The incremental costs and performance assumptions for these retrofits are shown in Table 6-1.

Table 6-1 Performance and Unit Cost Assumptions for Carbon Capture Retrofits on Pulverized Coal Plants

450-750 MW	> 750 MW
1,972	1,599
3.00	1.98
2.35	2.35
-25%	-25%
33%	33%
90%	90%
	1,972 3.00 2.35 -25% 33%

Note:

¹Incremental costs are applied to the derated (after retrofit) MW size.

The capital costs shown in Table 6-1 are based on the costs reported for Case 1 in a study² performed for the U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL) by a team consisting of Alstom Power, Inc., American Electric Power (AEP), ABB Global, and the Ohio Coal Development Office. For Case 1 this comprehensive engineering study, conducted from 1999-2001, evaluated the impacts on plant performance and the required cost to add facilities to capture greater than 90% of the CO₂ emitted by AEP's Conesville Ohio Unit #5. This is a 450 MW subcritical³ pulverized bituminous coal plant with a lime based FGD, and an electrostatic precipitator for particulate control. The carbon capture method that was evaluated was an amine-based scrubber using the Kerr-McGee/ABB Lummus Global commercially available monoethanolamine (MEA) process. In this system the flue gas leaves the FGD (which has been modified to reduce the SO₂ concentration as required by the MEA process) and is cooled and ducted to the MEA system where more than 96% of the CO₂ can be removed. For use in EPA Base Case v.4.10 the capital cost was scaled to be applicable to the MW capacity sizes shown in Table 6-1 and converted to constant 2007\$ from the 2006\$ costs reported in the NETL study.

007.pdf. A summary of costs for each of the cases appears in Table 3-65 (p. 139).

¹The term "New Advanced Coal with CCS" encompasses various technologies that can provide carbon capture. These include supercritical steam generators with carbon capture and integrated gasification combined cycle (IGCC) with carbon capture. For purposes of characterizing the cost and performance characteristics of advanced coal with carbon capture, IGCC with carbon capture was used in Table 4-13.

² Carbon Dioxide Capture from Existing Coal-Fired Power Plants" DOE/NETL-401/110907. Final Report (Original Issue Date, December 2006) Revision Date, November 2007 (http://www.netl.doe.gov/energy-analyses/pubs/CO2%20Retrofit%20From%20Existing%20Plants%20Revised%20November%202

³"Subcritical" refers to thermal power plants that operate below the "critical temperature" and "critical pressure" (220 bar) where boiling, i.e., the formation of steam bubbles in water, no longer occurs. Such units are less efficient than "supercritical" and "ultra supercritical" steam generators.

A capacity derating penalty of 25% was assumed, based on reported research and field experience as of the summer of 2010. The corresponding heat rate penalty was 33%. (For an explanation of the capacity and heat rate penalties and how they are calculated, see the discussion under VOM in section 5.1.1.)

Since the fixed (FOM) and variable operating and maintenance (VOM) costs from the Conesville study were given without documentation, another NETL study⁴ which fully documented these costs was used to obtain the FOM and VOM values shown in Table 6-1. For FOM and VOM, the cost differential was calculated between Case 9, a 550 MW subcritical pulverized coal plant with CO_2 capture, and Case 10, a comparable unit but without CO_2 capture. These differentials provided the VOM and FOM costs for the "450-750 MW" case in Table 6-1. For the "greater than 750 MW" case these costs were scaled up by the ratio of a unit with an effective capacity of 750 MW to the effective capacity of the 450-750 MW case raised to a power (k), where k reflects the elasticity of the costs due to economies of scale. (The same approach was used to scale the capital costs.) For capital, FOM, and VOM, the value of k was 0.65, 0.30, and 1 respectively.

6.2 CO₂ Storage

The capacity and cost assumptions for CO₂ storage in EPA Base Case v.4.10 are based on GeoCAT (Geosequestration Cost Analysis Tool), a spreadsheet model developed for EPA by ICF International in support of EPA's draft Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide Geologic Storage Wells.⁵ The GeoCAT model combines detailed characteristics of sequestration capacity by state and geologic setting for the U.S. with costing algorithms for individual components of geologic sequestration of CO₂. The outputs of the model are regional sequestration cost curves that indicate how much potential storage capacity is available at different CO₂ storage cost points.

The GeoCAT model includes three modules: a unit cost specification module, a project scenario costing module, and a geologic and regional cost curve module. The unit cost module includes data and assumptions for 120 unit cost elements falling within the following cost categories:

- Geologic Site Characterization
- Monitoring the movement of CO₂ in the subsurface
- Injection Well Construction
- Area of Review and Corrective Action (including fluid flow and reservoir modeling during and after injection and identification, evaluation, and remediation of existing wells within the area of review)
- Well Operation
- Mechanical Integrity Testing
- Financial Responsibility (to maintain sufficient resources for activities related to closing and remediation of the site)
- General and Administrative

_

⁴"Cost and Performance Baseline for Fossil Energy Plants" DOE/NETL-2007/1281, Volume 1: Bituminous Coal and Natural Gas to Electricity, Final Report (Original Issue Date, May 2007) Revision 1, August 2007 (http://www.netl.doe.gov/energy-analyses/pubs/Bituminous%20Baseline_Final%20Report.pdf). The VOM and FOM cost calculations for Case 9 appear in Exhibits 4-14 (p. 349) and for Case 10 in Exhibit 4-24 (p. 373).

⁵"Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO₂) Geologic Sequestration (GS) Wells," *Federal Register*, July 25, 2008 (Volume 73, Number 144), pp. 43491-43541. www.epa.gov/fedrgstr/EPA-WATER/2008/July/Day-25/w16626.htm and www.epa.gov/safewater/uic/wells_sequestration.html#reqdevelopment.

Of the ten cost categories for geologic CO₂ sequestration listed above, the largest cost drivers (in roughly descending order of magnitude) are well operation, injection well construction, and monitoring.

The costs derived in the unit cost specification module are used in the GeoCAT project scenario costing module to develop commercial scale costs for seven sequestration scenarios of geologic settings:

- saline reservoirs,
- · depleted gas fields,
- depleted oil fields,
- enhanced oil recovery,
- enhanced coal bed methane recovery,
- enhanced shale gas, and
- basalt

EPA's application of GeoCAT includes only storage capacity for the first four scenarios. The last three reservoir types are not included because they are considered technically uncertain and minor for the foreseeable future.

The results of the project scenario costing module are taken as inputs into the geologic and regional cost curve module of GeoCAT which generates national and regional "cost curves" indicating the volume of sequestration capacity in each region and state in the U.S. as a function of cost. This module contains a database of sequestration capacity by state and geologic reservoir type. It incorporates assessments from the U.S. Department of Energy's "Carbon Sequestration Atlas of the United States and Canada", enhanced by ICF International to include assessments of the Gulf of Mexico, shale gas sequestration potential, and the use of distribution of proved oil and gas recovery by region to estimate CO₂ potential in areas not covered in the DOE atlas. The geologic and regional cost curve module also has a characterization of regionalized costs, drilling depths, and other factors that go into the regional cost curves.

For EPA Base Case v.4.10 GeoCAT identified storage opportunities in 33 of the lower 48 continental states and storage cost curves were developed for each of them.⁸ The storage curve for California is designated as California offshore. Louisiana and Texas have both onshore and offshore storage cost curves. In addition, there are Atlantic offshore and Pacific offshore storage

Carbon Se

⁶"Carbon Sequestration Atlas of the United States and Canada", U.S. Department of Energy, National Energy Technology Laboratory, Morgantown, WV, March, 2007.

⁷Detailed discussions of the GeoCAT model and its application for EPA can be found in U.S. Environmental Protection Agency, Office of Water, "Geologic CO₂ Sequestration Technology and Cost Analysis, Technical Support Document" (EPA 816-B-08-009) June 2008, http://www.epa.gov/ogwdw000/uic/pdfs/support_uic_co2_technologyandcostanalysis.pdf and Harry Vidas, Robert Hugman and Christa Clapp, "Analysis of Geologic Sequestration Costs for the United States and Implications for Climate Change Mitigation," Science Digest, Energy Procedia, Volume 1, Issue 1, February 2009, Pages 4281-4288. Available online at www.sciencedirect.com. ⁸The states without identified storage opportunities in EPA Base Case v.4.10 are Connecticut, Delaware, Idaho, Iowa, Maine, Maryland, Massachusetts, Minnesota, Missouri, New Hampshire, New Jersey, North Carolina, Rhode Island, Vermont, and Wisconsin. This implies that these states did not present storage opportunities for the four sequestration scenarios included in EPA's inventory, i.e., saline reservoirs, depleted gas fields, depleted oil fields, and enhanced oil recovery.

cost curves. The result is a total of 37 storage cost curves which are shown in Appendix 6-1 ("CO₂ Storage Cost Curves in EPA Base Case").⁹

The cost curves shown in Appendix 6-1 are in the form of step functions. This implies that in any given year a specified amount of storage is available at a particular step price until either the annual storage limit (column 4) or the total storage capacity (column 5) is reached. In determining whether the total storage capacity has been reached, the model tracks the cumulative storage used up through the current year. Once the cumulative storage used equals the total storage capacity, no more storage is available going forward at the particular step price.

There are several additional things to note about the cost curves in Appendix 6-1. First, besides electric sector demand for CO₂ storage, there is expected to be demand from the industrial sector as well. Therefore, before being incorporated into EPA Base Case v.4.10, the original CO₂ storage capacity in each storage region was reduced by an estimate of the storage required for CO₂ generated by industrial sector sources. To do this, ICF first estimated the level of industrial demand in each CO₂ storage region expected at an allowance price of \$150 per ton. ¹⁰ (An allowance price of \$150/ton was chosen to provide a conservative estimate of the amount of storage available to the electricity sector, since under most CO₂ policies that would be analyzed with EPA Base Case v.4.1.0 the allowance price is expected to be below \$150/ton.) Then, for each region ICF calculated the ratio of the industrial demand to total storage capacity available for less than \$10/ton. (An upper limit of \$10/ton was chosen because the considerable amount storage available up to that price could be expected to exhaust the industrial demand.) Converting this to a percent value and subtracting from 100%. ICF obtained the percent of storage capacity available to the electricity sector for less than \$10/ton. Finally, the "Annual Step Bound (MMTons)" and "Total Storage Capacity (MMTons)" was multiplied by this percentage value for each step below \$10/ton in the cost curves for the region to obtain the reduced storage capacity that went into the storage cost curves for the electric sector in EPA Base Case v.4.10. Thus, the values shown in Table 6-1 represent the storage available to the electric sector.

Second, price steps from region to region are the same. (That is, CO_2STEP5 (column 2) has a step cost value of \$4.54/Ton (column 3) across all storage regions (column 1). This across-region price equivalency holds for every step.) However, the amount of storage available in any given year (labeled "Annual Step Bound (MMTons)" in column 4) and the total storage available over all years (labeled "Total Storage Capacity (MMTons)" in column 5) vary from region to region. Third, in any given region, the cost curves are the same for every year. Thus, the step cost, step bound, and total storage capacity shown in columns 4 and 5 in Appendix 6-1 remain the same from year to year. This feature implies the assumption that over the modeling time horizon, i.e., 2012-2050, no new storage will need to be added to augment the storage that is in today's storage inventory. This assumption is not meant to imply that additional storage is unavailable. It only implies that for purposes of modeling the assumption will only be revisited if model runs requiring storage exhaust key components in the storage inventory.

Finally, in each storage cost curve included in Appendix 6-1, CO₂STEP1 through CO₂STEP3 show a negative cost, and CO₂STEP4 shows a zero cost. These steps in the cost curves represent storage available from enhanced oil recovery (EOR) where oil producers either pay or

6-4

⁹For consistency across the emission costs represented in v.4.10, the costs shown in Appendices 9-1 and 9-2 are expressed in units of dollars per short ton. In IPM documentation and outputs the convention is to use the word "tons" to indicate short tons and the word "tonnes" to indicate metric tons. In discussing CO₂ outside of the modeling framework, the international convention is to use metric tons. To obtain the \$/tonne equivalent multiply the \$/ton values shown In Appendices 9-1 and 9-2 by 1.1023.

¹⁰The approach that ICF employed to estimate industrial demand for CO₂ storage is described in ICF International, "Methodology and Results for Initial Forecast of Industrial CCS Volumes," January 2009.

offer free storage for CO₂ which they inject into mature oil wells to enhance the amount of oil recovered. ¹¹

6.3 CO₂ Transport

Each of the 32 IPM model regions can send CO_2 to the 37 regions represented by the storage cost curves in Appendix 6-1. The associated transport costs (in 2007\$/Ton) are shown in Appendix 6-2 (CO_2 Transportation Matrix in EPA Base Case v.4.0).

These costs were derived by ICF International by first calculating the pipeline distance from each of the CO_2 Production Regions to each of the CO_2 Storage Regions listed in Appendix 6-2. (For example, the distance from MACS to Louisiana Onshore was estimated as 997 miles.) Since there are large economies of scale for pipelines, CO_2 transportation costs would depend on how many power plants and industrial CO_2 sources could share a pipeline over a given distance. Consequently, ICF's method assumes that the longer the distance from the source of the CO_2 (in our example MACS) to the sink for the CO_2 (in our example Louisiana Onshore), the more chance there is for other sources to share in the transportation costs with the pipeline diameter growing with distance as more sources are fed into the same system. Cost components include pipeline costs (in \$/inch-mile) and cost of service (in \$/ton per 75 miles). These cost components in turn are functions of the required diameter and thickness of the pipeline and the flow capacity of the pipeline, which themselves are functions of the assumed number of power plants using the pipeline. Table 6-2 illustrates the build-up of cost for the MACS to Louisiana Onshore example.

This example comes to \$20.11 per ton of CO_2 (in 2007\$) for the overall miles pipeline distance traveled. (This is the short ton equivalent to the \$22.17 metric tonne value shown in Table 6-2.)

Table 6-2 CO₂ Transport Cost Calculation Example – MACS to Louisiana Onshore

CARBON DIOXIDE PIPELINES								
Outside Dia. Inches	Inside Dia. Inches	Wall Thickness Inches		Pipeline Cost in Inch-Mile	Total Cost of Service in \$/metric ton per 75 miles or 121 km	Flow Capacity in metric tons/day	Flow Capacity in million standard cubic feet per day (60 degrees F and 14.73 psi)	Number of 500 MW IGCC plants accomodated
12.75	12.0	0.39	\$	75,000	\$4.36	10,775	203	0.97
16	15.0	0.49	\$	78,116	\$3.25	19,139	361	1.73
24	22.5	0.73	\$	84,119	\$2.02	53,385	1,007	4.83
30	28.2	0.92	\$	86,399	\$1.56	93,887	1,771	8.49
36	33.8	1.10	\$	88,678	\$1.27	148,913	2,808	13.46
42	39.4	1.28	\$	90,958	\$1.10	219,942	4,148	19.88

Maximum CO2 tranport needs would be 11,064 tonnes per power plant per day. Cost of service based on 7 cents per kWh electricity.

Example Spacial As	sumptions			
	Miles	\$/Mile per Tonne	Cost per Tonne	Annual Cost per Power Plant @85 Utilization Rate
Single Power Plant Pipeline (12 inch, small gathering) distance in miles	25	\$0.058	\$1.45	\$4,986,315
Two Power Plant Pipeline (16 inch, large gathering) distance in miles	25	\$0.043	\$1.08	\$3,717,211
Eight Power Plant Pipeline (30 inch, mainline) distance in miles	947	\$0.021	\$19.64	\$67,400,166
Total Distance & Costs	997	\$0.022	\$22.17	\$76,103,692

_

¹¹There is also a market for CO₂ injection in enhanced coal bed methane (ECBM) production. ECBM is excluded from EPA's inventory as discussed earlier.

Appendix 6-1 CO₂ Storage Cost Curves in EPA Base Case 4.10

Note: The curves for each region are applicable in each model run year 2012 - 2050.

CO ₂ Storage	Step	CO ₂ Storage	cable in each model run y Annual Step Bound	Total Storage Capacity
Region	Name	Step Cost	(MMTons)	(MMTons)
		(2007\$/Ton)		
	STEP1	-13.61	1	45
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	6
	STEP5	4.54	31	1,568
	STEP6	9.07	39	1,967
	STEP7	13.61	38	1,895
	STEP8	18.14	0	9
	STEP9	22.68	4	186
Alabama	STEP10	27.22	13	639
	STEP11	31.75	0	7
	STEP12	36.29	0	14
	STEP13	40.82	0	0
	STEP14	45.36	1	68
	STEP15	49.90	0	0
	STEP16	54.43	0	14
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	121	6,026
	STEP6	9.07	145	7,275
	STEP7	13.61	113	5,659
	STEP8	18.14	0	0
	STEP9	22.68	38	1,887
Arizona	STEP10	27.22	0	1
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
Arkansas	STEP1	-13.61	1	62
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	○ I L I T	0.00	J	U
	STEP5	4.54	146	7,297

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP7	13.61	142	7,110
	STEP8	18.14	1	35
	STEP9	22.68	51	2,568
	STEP10	27.22	3	128
	STEP11	31.75	0	0
	STEP12	36.29	1	53
	STEP13	40.82	0	0
	STEP14	45.36	1	71
	STEP15	49.90	0	0
	STEP16	54.43	1	53
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	1,832	91,580
	STEP6	9.07	2,211	110,528
	STEP7	13.61	1,706	85,311
	STEP8	18.14	0	0
	STEP9	22.68	0	0
Atlantic Offshore	STEP10	27.22	569	28,437
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
California	STEP1	-13.61	19	941
Onshore	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	2	121
	STEP5	4.54	1,227	61,357
	STEP6	9.07	1,966	98,304
	STEP7	13.61	367	18,335
	STEP8	18.14	11	531
	STEP9	22.68	70	3,516
	STEP10	27.22	30	1,507
	STEP11	31.75	0	0
	STEP12	36.29	16	797
	STEP13	40.82	0	0
	STEP14	45.36	21	1,063

CO₂ Storage Region	Step Name	CO₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP15	49.90	0	0
	STEP16	54.43	16	797
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	3	136
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	13	627
	STEP6	9.07	16	801
	STEP7			804
		13.61	16	
	STEP8	18.14	1	35
0-1	STEP9	22.68	7	353
Colorado	STEP10	27.22	1	59
	STEP11	31.75	0	0
	STEP12	36.29	0	22
	STEP13	40.82	0	0
	STEP14	45.36	1	30
	STEP15	49.90	0	0
	STEP16	54.43	0	22
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	2	105
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	456	22,813
	STEP6	9.07	550	27,479
	STEP7	13.61	426	21,317
	STEP8	18.14	0	13
	STEP9	22.68	143	7,172
Florida	STEP10	27.22	1	33
	STEP11	31.75	0	0
	STEP12	36.29	0	20
	STEP13	40.82	0	0
	STEP14	45.36	1	26
	STEP15	49.90	0	0
	STEP16	54.43	0	20
	STEP17	58.97	0	0
	STEP17	63.50	0	0
		68.04	0	0
Georgia	STEP19		0	0
Georgia	STEP1	-13.61		
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0

CO ₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP4	0.00	0	0
	STEP5	4.54	42	2,117
	STEP6	9.07	51	2,555
	STEP7	13.61	40	2,000
	STEP8	18.14	0	0
	STEP9	22.68	0	0
	STEP10	27.22	13	667
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	3	165
	STEP2	-9.07	0	16
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	309	15,455
	STEP6	9.07	373	18,653
	STEP7	13.61	303	15,168
	STEP8	18.14	1	73
	STEP9	22.68	108	5,420
Illinois	STEP10	27.22	4	180
	STEP11	31.75	0	0
	STEP12	36.29	2	109
	STEP13	40.82	0	0
	STEP14	45.36	3	144
	STEP15	49.90	0	0
	STEP16	54.43	2	108
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
Indiana	STEP1	-13.61	0	17
	STEP2	-9.07	0	2
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	164	8,195
	STEP6	9.07	198	9,890
	STEP7	13.61	167	8,332
	STEP8	18.14	0	1
	STEP9	22.68	56	2,781
	STEP10	27.22	0	2
	STEP11	31.75	0	0

CO ₂ Storage Region	Step Name	CO ₂ Storage Step Cost	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP12	(2007\$/Ton) 36.29	0	
	STEP13	40.82	0	0
	STEP14	45.36	0	1
	STEP15	49.90	0	0
	STEP16	54.43	0	1
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	6	287
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	37	1,863
	STEP6	9.07	50	2,513
	STEP7	13.61	66	3,323
	STEP8	18.14	14	685
	STEP9	22.68	32	1,620
Kansas	STEP10	27.22	0	0
	STEP11	31.75	0	0
	STEP12	36.29	12	620
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	7
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	54	2,694
	STEP6	9.07	86	4,310
	STEP7	13.61	16	808
	STEP8	18.14	1	26
	STEP9	22.68	4	208
Kentucky	STEP10	27.22	1	64
•	STEP11	31.75	0	0
	STEP12	36.29	4	182
	STEP13	40.82	0	0
	STEP14	45.36	1	52
	STEP15	49.90	0	0
	STEP16	54.43	1	39
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	2	86

CO ₂ Storage Region	Step Name	CO₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP1	-13.61	20	1,012
	STEP2	-9.07	0	0
	STEP3	-4.54	3	130
	STEP4	0.00	0	0
	STEP5	4.54	918	45,891
	STEP6	9.07	1,127	56,334
	STEP7	13.61	949	47,463
	STEP8	18.14	7	353
	STEP9	22.68	47	2,342
Louisiana	STEP10	27.22	334	16,704
Onshore	STEP11	31.75	0	0
	STEP12	36.29	8	397
	STEP13	40.82	0	0
	STEP14	45.36	26	1,292
	STEP15	49.90	3	134
	STEP16	54.43	11	530
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	8	397
	STEP1	-13.61	23	1,128
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	0	0
	STEP6	9.07	0	0
	STEP7	13.61	661	33,069
	STEP8	18.14	2,535	126,766
	STEP9	22.68	0	0
Louisiana	STEP10	27.22	677	33,829
Offshore	STEP11	31.75	2,208	110,376
	STEP12	36.29	992	49,604
	STEP13	40.82	20	1,012
	STEP14	45.36	1,695	84,765
	STEP15	49.90	0	0
	STEP16	54.43	1,338	66,898
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	1,159	57,975
Michigan	STEP1	-13.61	1	62
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	339	16,935
	STEP6	9.07	409	20,471
	STEP7	13.61	323	16,130
	STEP8	18.14	0	, . • •

CO ₂ Storage Region	Step Name	CO ₂ Storage Step Cost	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP9	(2007\$/Ton) 22.68	108	5,380
	STEP10	27.22	0	7
	STEP11	31.75	0	6
	STEP12	36.29	0	4
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	2
	STEP16	54.43	0	0
	STEP17	58.97	0	3
	STEP18	63.50	0	0
	STEP19	68.04	0	2
	STEP1	-13.61	2	117
	STEP2	-9.07	0	0
	STEP3	-4.54	0	18
	STEP4	0.00	0	0
	STEP5	4.54	552	27,623
	STEP6	9.07	668	33,410
	STEP7	13.61	522	26,080
	STEP8	18.14	1	63
	STEP9	22.68	4	221
Mississippi	STEP10	27.22	178	8,877
Micolocippi	STEP11	31.75	0	0
	STEP12	36.29	1	71
	STEP13	40.82	0	0
	STEP14	45.36	3	157
	STEP15	49.90	0	0
	STEP16	54.43	2	95
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	1	71
Montana	STEP1	-13.61	4	194
Montana	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	1,608	80,381
	STEP6	9.07	1,941	97,053
	STEP7	13.61	1,505	75,253
	STEP8	18.14	8	396
	STEP9	22.68	513	25,652
	STEP10	27.22	23	1,131
	STEP11	31.75	0	0
	STEP12	36.29	8	391
	STEP13	40.82	0	0
	STEP14	45.36	13	652
	STEP15	49.90	0	0
	STEP16	54.43	10	522

CO ₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	8	391
	STEP1	-13.61	5	241
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	91	4,549
	STEP6	9.07	110	5,499
	STEP7	13.61	91	4,538
	STEP8	18.14	8	376
	STEP9	22.68	41	2,068
North Dakota	STEP10	27.22	22	1,110
	STEP11	31.75	0	0
	STEP12	36.29	8	384
	STEP13	40.82	0	0
	STEP14	45.36	13	640
	STEP15	49.90	0	0
	STEP16	54.43	10	512
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	8	384
	STEP1	-13.61	0	11
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	15	734
	STEP6	9.07	18	881
	STEP7	13.61	17	859
	STEP8	18.14	0	11
	STEP9	22.68	7	337
Nebraska	STEP10	27.22	1	25
	STEP11	31.75	0	0
	STEP12	36.29	0	15
	STEP13	40.82	0	0
	STEP14	45.36	0	20
	STEP15	49.90	0	0
	STEP16	54.43	0	15
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
Nevada	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	60	3,024

CO ₂ Storage Region	Step Name	CO ₂ Storage Step Cost	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP6	(2007\$/Ton) 9.07	73	3,650
	STEP7	13.61	73 56	2,821
	STEP8	18.14	0	0
	STEP9	22.68	19	940
	STEP10	27.22	0	0
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	13	672
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	36	1,791
	STEP6	9.07	67	3,338
	STEP7	13.61	103	5,130
	STEP8	18.14	6	285
	STEP9	22.68	59	2,960
New Mexico	STEP10	27.22	21	1,033
	STEP11	31.75	0	0
	STEP12	36.29	6	293
	STEP13	40.82	0	0
	STEP14	45.36	8	391
	STEP15	49.90	0	0
	STEP16	54.43	6	293
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
New York	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	0	0
	STEP6	9.07	0	8
	STEP7	13.61	1	54
	STEP8	18.14	0	15
	STEP9	22.68	1	39
	STEP10	27.22	0	7
	STEP11	31.75	0	0
	STEP12	36.29	0	23
	STEP13	40.82	0	0

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	213	10,634
	STEP6	9.07	257	12,835
	STEP7	13.61	206	10,320
	STEP8	18.14	0	13
	STEP9	22.68		
Ohio	STEP9	22.06 27.22	71	3,551
Offic	STEP10 STEP11	31.75	1	33 0
			0	
	STEP12	36.29	3	130
	STEP13	40.82	0	0
	STEP14	45.36	1	26
	STEP15	49.90	0	0
	STEP16	54.43	0	20
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	1	66
	STEP1	-13.61	18	898
	STEP2	-9.07	2	116
	STEP3	-4.54	3	154
	STEP4	0.00	0	0
	STEP5	4.54	2	117
	STEP6	9.07	10	502
	STEP7	13.61	41	2,070
	STEP8	18.14	8	387
	STEP9	22.68	35	1,767
Oklahoma	STEP10	27.22	36	1,779
	STEP11	31.75	0	0
	STEP12	36.29	9	436
	STEP13	40.82	0	0
	STEP14	45.36	22	1,116
	STEP15	49.90	0	0
	STEP16	54.43	12	581
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	9	436
Oregon	STEP1	-13.61	0	0
•	STEP2	-9.07	0	0

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	171	8,530
	STEP6	9.07	206	10,294
	STEP7	13.61	161	8,036
	STEP8	18.14	0	0
	STEP9	22.68	54	2,679
	STEP10	27.22	0	0
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	0	0
	STEP6	9.07	0	0
	STEP7	13.61	309	15,432
	STEP8	18.14	331	16,535
	STEP9	22.68	573	28,660
Pacific Offshore	STEP10	27.22	0	2
	STEP11	31.75	0	3
	STEP12	36.29	198	9,921
	STEP13	40.82	331	16,537
	STEP14	45.36	265	13,234
	STEP15	49.90	0	0
	STEP16	54.43	2	83
	STEP17	58.97	0	8
	STEP18	63.50	2	110
	STEP19	68.04	222	11,123
Pennsylvania	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	52	2,611
	STEP6	9.07	84	4,178
	STEP7	13.61	19	972
	STEP8	18.14	1	34
	STEP9	22.68	5	262
	STEP10	27.22	2	86

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP11	31.75	0	0
	STEP12	36.29	4	206
	STEP13	40.82	0	0
	STEP14	45.36	1	69
	STEP15	49.90	0	0
	STEP16	54.43	1	52
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	2	93
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	43	2,126
	STEP6	9.07	51	2,565
	STEP7	13.61	40	2,000
	STEP8	18.14	0	0
	STEP9	22.68	13	667
South Carolina	STEP10	27.22	0	0
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
South Dakota	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	219	10,933
	STEP6	9.07	264	13,196
	STEP7	13.61	206	10,313
	STEP8	18.14	0	0
	STEP9	22.68	69	3,438
	STEP10	27.22	0	1
	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP19	(2007\$/Ton) 68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	21	1,035
	STEP6	9.07	33	1,657
	STEP7	13.61	6	319
	STEP8	18.14	0	0
	STEP9	22.68	0	0
Tennessee	STEP10	27.22	0	0
1611165566	STEP10	31.75	0	0
	STEP11	36.29	0	0
	STEP 12 STEP 13	40.82	0	0
	STEP 13 STEP 14	45.36		
	STEP14 STEP15		0	0
	STEP 15 STEP 16	49.90	0	0
		54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	113	5,633 0
	STEP2	-9.07	0	
	STEP3	-4.54	14	724
	STEP4	0.00	0	0
	STEP5	4.54	1,800	90,016
	STEP6	9.07	2,195	109,766
	STEP7	13.61	1,913	95,669
	STEP8	18.14	25	1,258
T O I	STEP9	22.68	228	11,406
Texas Onshore	STEP10	27.22	690	34,524
	STEP11	31.75	0	0
	STEP12	36.29	38	1,887
	STEP13	40.82	0	0
	STEP14	45.36	81	4,041
	STEP15	49.90	0	0
	STEP16	54.43	38	1,887
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
Texas Offshore	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	0	0
	STEP6	9.07	0	0
	STEP7	13.61	397	19,842

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP8	18.14	1,521	76,059
	STEP9	22.68	0	0
	STEP10	27.22	400	19,999
	STEP11	31.75	1,324	66,192
	STEP12	36.29	595	29,762
	STEP13	40.82	4	197
	STEP14	45.36	1,000	49,998
	STEP15	49.90	0	0
	STEP16	54.43	796	39,801
	STEP17	58.97	3	133
	STEP18	63.50	0	0
	STEP19	68.04	627	31,338
	STEP1	-13.61	4	195
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	2	106
	STEP6	9.07	4	184
	STEP7	13.61	5	251
	STEP8	18.14	1	36
	STEP9	22.68	3	137
Utah	STEP10	27.22	1	46
	STEP11	31.75	0	0
	STEP12	36.29	0	12
	STEP13	40.82	0	0
	STEP14	45.36	0	16
	STEP15	49.90	0	0
	STEP16	54.43	0	12
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
Virginia	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	0	0
	STEP6	9.07	0	0
	STEP7	13.61	0	21
	STEP8	18.14	0	9
	STEP9	22.68	1	53
	STEP10	27.22	0	23
	STEP11	31.75	0	0
	STEP12	36.29	0	14
	STEP13	40.82	0	0
	STEP14	45.36	0	18
	STEP15	49.90	0	0

CO ₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP16	54.43	0	14
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	162	8,101
	STEP6	9.07	196	9,777
	STEP7	13.61	155	7,738
	STEP8	18.14	0	0
	STEP9	22.68	52	2,579
Washington	STEP10	27.22	0	0
3	STEP11	31.75	0	0
	STEP12	36.29	0	0
	STEP13	40.82	0	0
	STEP14	45.36	0	0
	STEP15	49.90	0	0
	STEP16	54.43	0	0
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	0
	STEP1	-13.61	0	0
	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0
	STEP5	4.54	47	2,351
	STEP6	9.07	75	3,761
	STEP7	13.61	14	, 721
	STEP8	18.14	1	38
	STEP9	22.68	5	227
West Virginia	STEP10	27.22	2	94
•	STEP11	31.75	0	0
	STEP12	36.29	1	73
	STEP13	40.82	0	0
	STEP14	45.36	2	75
	STEP15	49.90	0	0
	STEP16	54.43	1	57
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	0	10
Wyoming	STEP1	-13.61	6	324
, ,	STEP2	-9.07	0	0
	STEP3	-4.54	0	0
	STEP4	0.00	0	0

CO₂ Storage Region	Step Name	CO ₂ Storage Step Cost (2007\$/Ton)	Annual Step Bound (MMTons)	Total Storage Capacity (MMTons)
	STEP5	4.54	2,644	132,195
	STEP6	9.07	3,198	159,909
	STEP7	13.61	2,486	124,304
	STEP8	18.14	2	100
	STEP9	22.68	836	41,794
	STEP10	27.22	10	496
	STEP11	31.75	0	0
	STEP12	36.29	1	65
	STEP13	40.82	0	0
	STEP14	45.36	7	339
	STEP15	49.90	0	0
	STEP16	54.43	2	87
	STEP17	58.97	0	0
	STEP18	63.50	0	0
	STEP19	68.04	1	65

Appendix 6-2 CO₂ Transportation Matrix in EPA Base Case v.4.10

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Alabama	26.30
	Arizona	3.50
	Arkansas	19.34
	Atlantic Offshore	35.66
	California Onshore	13.36
	Colorado	9.43
	Florida	34.30
	Georgia	32.10
	Illinois	23.54
	Indiana	25.54
	Kansas	11.13
	Kentucky	29.06
	Louisiana Onshore	22.58
	Louisiana Offshore	23.19
	Michigan	28.53
	Mississippi	23.21
	Montana	18.29
AZNM	North Dakota	18.73
AZINIVI	Nebraska	11.58
	Nevada	9.20
	New Mexico	3.30
	New York	34.34
	Ohio	30.66
	Oklahoma	12.63
	Oregon	20.63
	Pacific Offshore	12.18
	Pennsylvania	33.49
	South Carolina	32.35
	South Dakota	16.24
	Tennessee	27.12
	Texas Onshore	15.99
	Texas Offshore	21.22
	Utah	7.90
	Virginia	32.84
	West Virginia	30.89
	Wyoming	12.76
CA-N	Alabama	37.36
	Arizona	11.27
	Arkansas	30.35
	Atlantic Offshore	46.55
	California Onshore	4.67
	Colorado	17.69
	Florida	45.34
	Georgia	43.10
	Illinois	33.75
	Indiana	35.78

CO ₂ Production Region	CO₂ Storage Region	Cost (2007\$/Ton)
	Kansas	21.53
	Kentucky	39.54
	Louisiana Onshore	33.61
	Louisiana Offshore	34.04
	Michigan	37.98
	Mississippi	34.28
	Montana	22.73
	North Dakota	23.59
	Nebraska	19.92
	Nevada	5.18
	New Mexico	13.42
	New York	43.93
	Ohio	40.66
	Oklahoma	23.52
	Oregon	14.68
	Pacific Offshore	5.49
	Pennsylvania	43.47
	South Carolina	43.30
	South Dakota	22.18
	Tennessee	37.87
	Texas Onshore	26.74
	Texas Offshore	31.95
	Utah	12.50
	Virginia	43.36
	West Virginia	41.28
	Wyoming	18.13
CA-S	Alabama	33.45
	Arizona	7.46
	Arkansas	26.55
	Atlantic Offshore	42.90
	California Onshore	6.99
	Colorado	15.09
	Florida	41.31
	Georgia	39.32
	Illinois	30.57
	Indiana	32.59
	Kansas	18.18
	Kentucky	36.20
	Louisiana Onshore	29.58
	Louisiana Offshore	29.90
	Michigan	35.22
	Mississippi	30.34
	Montana	21.82
	North Dakota	22.54
	Nebraska	17.41
	Nevada	4.60
	New Mexico	9.72

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	New York	41.12
	Ohio	37.62
	Oklahoma	19.87
	Oregon	17.43
	Pacific Offshore	5.27
	Pennsylvania	40.45
	South Carolina	39.59
	South Dakota	20.67
	Tennessee	34.35
	Texas Onshore	22.59
	Texas Offshore	27.79
	Utah	10.69
	Virginia	40.00
	West Virginia	38.01
	Wyoming	16.62
COMD	Alabama	15.38
	Arizona	26.11
	Arkansas	13.19
	Atlantic Offshore	16.86
	California Onshore	34.86
	Colorado	18.43
	Florida	22.02
	Georgia	16.05
	Illinois	4.75
	Indiana	4.82
	Kansas	15.43
	Kentucky	8.40
	Louisiana Onshore	16.98
	Louisiana Offshore	20.13
	Michigan	4.81
	Mississippi	15.10
	Montana	18.69
	North Dakota	17.74
	Nebraska	16.28
	Nevada	30.94
	New Mexico	23.94
	New York	10.57
	Ohio	7.45
	Oklahoma	15.12
	Oregon	34.88
	Pacific Offshore	35.76
	Pennsylvania	10.14
	South Carolina	15.15
	South Dakota	16.60
	Tennessee	9.56
	Texas Onshore	20.39
	Texas Offshore	20.75

CO₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
-	Utah	23.86
	Virginia	11.68
	West Virginia	9.22
	Wyoming	19.55
	Alabama	20.59
	Arizona	39.27
	Arkansas	23.19
	Atlantic Offshore	13.07
	California Onshore	48.11
	Colorado	31.74
	Florida	22.09
	Georgia	16.20
	Illinois	16.14
	Indiana	14.22
	Kansas	28.47
	Kentucky	11.74
	Louisiana Onshore	24.54
	Louisiana Offshore	27.30
	Michigan	11.58
	Mississippi	22.44
	Montana	30.66
DSNY	North Dakota	29.63
	Nebraska	29.57
	Nevada	44.25
	New Mexico	37.07
	New York	5.72
	Ohio	8.97
	Oklahoma	27.58
	Oregon	47.39
	Pacific Offshore	48.99
	Pennsylvania	6.18
	South Carolina	14.74
	South Dakota	29.17
	Tennessee	14.78
	Texas Onshore	30.61
	Texas Offshore	28.92
	Utah	37.14
	Virginia	9.36
	West Virginia	9.81
ENTO	Wyoming	32.53
ENTG	Alabama	7.84
	Arizona	21.51
	Arkansas	3.44
	Atlantic Offshore	16.70
	California Onshore	31.99 17.06
	Colorado	17.06
	Florida	16.30

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Georgia	13.09
	Illinois	8.81
	Indiana	9.87
	Kansas	11.85
	Kentucky	11.53
	Louisiana Onshore	6.63
	Louisiana Offshore	9.61
	Michigan	15.04
	Mississippi	5.45
	Montana	22.95
	North Dakota	22.36
	Nebraska	16.04
	Nevada	27.84
	New Mexico	19.32
	New York	19.12
	Ohio	14.70
	Oklahoma	9.24
	Oregon	35.90
	Pacific Offshore	31.01
	Pennsylvania	17.17
	South Carolina	13.34
	South Dakota	19.94
	Tennessee	8.76
	Texas Onshore	10.31
	Texas Offshore	9.93
	Utah	22.29
	Virginia	14.87
	West Virginia	13.49
	Wyoming	20.78
ERCT	Alabama	11.70
ENOT	Arizona	17.85
	Arkansas	6.89
	Atlantic Offshore	22.16
	California Onshore	28.61
	Colorado	16.48
	Florida	19.08
	Georgia	18.02
	Illinois	15.08
	Indiana	16.40
	Kansas	11.44
	Kentucky	18.11
	Louisiana Onshore	7.38
	Louisiana Offshore	7.88
	Michigan	21.40
	Mississippi	8.61
	Montana	24.73
	North Dakota	24.42
	Nebraska	16.44

CO ₂ Production Region	CO₂ Storage Region	Cost (2007\$/Ton)
	Nevada	24.59
	New Mexico	15.94
	New York	25.74
	Ohio	21.33
	Oklahoma	8.37
	Oregon	34.69
	Pacific Offshore	26.55
	Pennsylvania	23.80
	South Carolina	18.68
	South Dakota	21.63
	Tennessee	15.19
	Texas Onshore	4.33
	Texas Offshore	6.27
	Utah	20.59
	Virginia	21.28
	West Virginia	20.06
	Wyoming	21.08
FRCC	Alabama	7.71
	Arizona	33.74
	Arkansas	14.94
	Atlantic Offshore	8.78
	California Onshore	44.39
	Colorado	29.83
	Florida	4.12
	Georgia	5.33
	Illinois	16.83
	Indiana	15.92
	Kansas	24.61
	Kentucky	13.10
	Louisiana Onshore	11.59
	Louisiana Offshore	12.45
	Michigan	20.06
	Mississippi	10.73
	Montana	34.81
	North Dakota	34.07
	Nebraska	28.72
	Nevada	40.31
	New Mexico	31.64
	New York	20.09
	Ohio	16.78
	Oklahoma	21.91
	Oregon	48.66
	Pacific Offshore	42.80
	Pennsylvania	17.31
	South Carolina	6.76
	South Dakota	31.99
	Tennessee	11.23
	Texas Onshore	19.12

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Texas Offshore	14.75
	Utah	35.06
	Virginia	12.94
	West Virginia	13.74
	Wyoming	33.33
	Alabama	12.18
	Arizona	23.91
	Arkansas	9.40
	Atlantic Offshore	16.05
	California Onshore	33.36
	Colorado	17.01
	Florida	19.59
	Georgia	14.19
	Illinois	3.25
	Indiana	4.03
	Kansas	13.08
	Kentucky	7.95
	Louisiana Onshore	13.27
	Louisiana Offshore	16.40
	Michigan	8.25
	Mississippi	11.47
	Montana	19.47
OWAN	North Dakota	18.64
GWAY	Nebraska	15.15
	Nevada	29.31
	New Mexico	21.68
	New York	13.25
	Ohio	9.20
	Oklahoma	12.12
	Oregon	34.74
	Pacific Offshore	33.66
	Pennsylvania	12.01
	South Carolina	13.61
	South Dakota	16.90
	Tennessee	7.49
	Texas Onshore	16.70
	Texas Offshore	16.94
	Utah	22.59
	Virginia	11.76
	West Virginia	9.55
	Wyoming	19.15
LILC	Alabama	20.91
	Arizona	40.31
	Arkansas	23.89
	Atlantic Offshore	12.75
	California Onshore	49.26
	Colorado	32.87
	Florida	21.86
	Fiorida	∠1.80

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Georgia	16.18
	Illinois	17.12
	Indiana	15.16
	Kansas	29.50
	Kentucky	12.40
	Louisiana Onshore	24.99
	Louisiana Offshore	27.68
	Michigan	12.79
	Mississippi	22.91
	Montana	31.94
	North Dakota	30.91
	Nebraska	30.72
	Nevada	45.37
	New Mexico	38.10
	New York	6.99
	Ohio	9.97
	Oklahoma	28.52
	Oregon	48.65
	Pacific Offshore	50.04
		7.14
	Pennsylvania South Carolina	14.74
	South Dakota	30.42
	Tennessee	15.36
	Texas Onshore	31.26
	Texas Offshore	29.36
	Utah	38.30
	Virginia	9.62
	West Virginia	10.45
	Wyoming	33.74
MACE	Alabama	18.55
	Arizona	38.48
	Arkansas	21.68
	Atlantic Offshore	10.69
	California Onshore	47.66
	Colorado	31.26
	Florida	19.72
	Georgia	13.89
	Illinois	15.24
	Indiana	13.24
	Kansas	27.66
	Kentucky	10.19
	Louisiana Onshore	22.64
	Louisiana Offshore	25.32
	Michigan	11.60
	Mississippi	20.57
	Montana	30.99
	North Dakota	29.97
	Nebraska	29.18

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Nevada	43.73
	New Mexico	36.26
	New York	6.45
	Ohio	8.24
	Oklahoma	26.53
	Oregon	47.58
	Pacific Offshore	48.24
	Pennsylvania	5.49
	South Carolina	12.45
	South Dakota	29.27
	Tennessee	13.07
	Texas Onshore	29.00
	Texas Offshore	27.02
	Utah	36.75
	Virginia	7.30
	West Virginia	8.23
	Wyoming	32.43
MACS	Alabama	16.44
	Arizona	36.43
	Arkansas	19.46
	Atlantic Offshore	9.47
	California Onshore	45.76
	Colorado	29.37
	Florida	18.22
	Georgia	12.14
	Illinois	13.21
	Indiana	11.19
	Kansas	25.61
	Kentucky	7.98
	Louisiana Onshore	20.47
	Louisiana Offshore	23.18
	Michigan	10.24
	Mississippi	18.39
	Montana	29.61
	North Dakota	28.61
	Nebraska	27.33
	Nevada	41.79
	New Mexico	34.20
	New York	6.22
	Ohio	6.46
	Onio Oklahoma	
		24.39
	Oregon	46.05
	Pacific Offshore	46.19
	Pennsylvania	4.10
	South Carolina	10.68
	South Dakota	27.73
	Tennessee	10.85
	Texas Onshore	26.78

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
-	Texas Offshore	24.84
	Utah	34.89
	Virginia	5.40
	West Virginia	6.02
	Wyoming	30.75
	Alabama	18.02
	Arizona	36.52
	Arkansas	20.34
	Atlantic Offshore	11.63
	California Onshore	45.53
	Colorado	29.13
	Florida	20.31
	Georgia	14.14
	Illinois	13.33
	Indiana	11.38
	Kansas	25.71
	Kentucky	8.92
	Louisiana Onshore	21.83
	Louisiana Offshore	24.66
	Michigan	9.25
	Mississippi	19.72
	Montana	28.62
	North Dakota	27.60
MACW	Nebraska	27.00
	Nevada	41.62
	New Mexico	34.31
	New York	4.24
	Ohio	6.18
	Oklahoma	24.75
	Oregon	45.23
	Pacific Offshore	46.26
	Pennsylvania	3.35
	South Carolina	12.68
	South Dakota	26.94
	Tennessee	12.01
	Texas Onshore	27.78
	Texas Offshore	26.20
	Utah	34.58
	Virginia	7.16
	West Virginia	7.03
	Wyoming	30.15
MECS	Alabama	16.68
	Arizona	29.60
	Arkansas	15.92
	Atlantic Offshore	15.62
	California Onshore	38.19
	Colorado	21.83

CO₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
-	Florida	22.17
	Georgia	15.84
	Illinois	7.49
	Indiana	6.33
	Kansas	18.94
	Kentucky	7.85
	Louisiana Onshore	19.10
	Louisiana Offshore	22.23
	Michigan	3.25
	Mississippi	17.07
	Montana	21.14
	North Dakota	20.13
	Nebraska	19.62
	Nevada	34.33
	New Mexico	27.44
	New York	7.11
	Ohio	4.97
	Oklahoma	18.56
	Oregon	37.67
	Pacific Offshore	39.24
	Pennsylvania	7.16
	South Carolina	14.68
	South Dakota	19.37
	Tennessee	10.21
	Texas Onshore	23.33
	Texas Offshore	23.15
	Utah	27.18
	Virginia	10.10
	West Virginia	7.73
	Wyoming	22.60
MRO	Alabama	19.01
	Arizona	19.94
	Arkansas	13.69
	Atlantic Offshore	23.49
	California Onshore	27.89
	Colorado	11.66
	Florida	26.95
	Georgia	21.76
	Illinois	9.29
	Indiana	10.96
	Kansas	10.29
	Kentucky	15.09
	Louisiana Onshore	18.68
	Louisiana Offshore	21.50
	Michigan	11.53
	Mississippi	17.42
	Montana	11.90

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	North Dakota	11.07
	Nebraska	9.34
	Nevada	24.07
	New Mexico	17.93
	New York	17.48
	Ohio	14.76
	Oklahoma	11.48
	Oregon	27.61
	Pacific Offshore	29.28
	Pennsylvania	17.42
	South Carolina	21.18
	South Dakota	9.43
	Tennessee	15.05
	Texas Onshore	18.97
	Texas Offshore	21.26
	Utah	16.81
	Virginia	18.68
	West Virginia	16.31
	Wyoming	12.27
NENG	Alabama	23.42
	Arizona	42.41
	Arkansas	26.33
	Atlantic Offshore	14.98
	California Onshore	51.13
	Colorado	34.79
	Florida	24.11
	Georgia	18.58
	Illinois	19.32
	Indiana	17.41
	Kansas	31.63
	Kentucky	14.85
	Louisiana Onshore	27.50
	Louisiana Offshore	30.19
	Michigan	14.53
	Mississippi	25.42
	Montana	33.26
	North Dakota	32.21
	Nebraska	32.59
	Nevada	47.30
	New Mexico	40.21
	New York	8.58
	Ohio	12.16
	Oklahoma	30.77
	Oregon	50.04
	Pacific Offshore	52.11
	Pennsylvania	9.37
	South Carolina	17.16

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
-	South Dakota	31.93
	Tennessee	17.84
	Texas Onshore	33.71
	Texas Offshore	31.88
	Utah	40.15
	Virginia	12.11
	West Virginia	12.91
	Wyoming	35.40
	Alabama	27.91
	Arizona	9.77
	Arkansas	20.78
	Atlantic Offshore	35.44
	California Onshore	14.70
	Colorado	5.96
	Florida	36.36
	Georgia	32.67
	Illinois	21.61
	Indiana	23.58
	Kansas	11.09
	Kentucky	27.62
	Louisiana Onshore	25.29
	Louisiana Offshore	26.89
	Michigan	25.00
	Mississippi	25.18
	Montana	10.32
NWPE	North Dakota	10.93
14441 =	Nebraska	7.21
	Nevada	10.98
	New Mexico	9.06
	New York	30.95
	Ohio	28.06
	Oklahoma	13.98
	Oregon	15.84
	Pacific Offshore	16.89
	Pennsylvania	30.80
	South Carolina	32.53
	South Dakota	8.96
	Tennessee	26.57
	Texas Onshore	20.66
	Texas Offshore	25.42
	Utah	3.71
	Virginia	31.39
	West Virginia	29.15
	Wyoming	5.44
NYC	Alabama	20.30
	Arizona	39.63
	Arkansas	23.21

CO ₂ Production Region	CO₂ Storage Region	Cost (2007\$/Ton)
	Atlantic Offshore	12.36
	California Onshore	48.61
	Colorado	32.22
	Florida	21.44
	Georgia	15.67
	Illinois	16.43
	Indiana	14.47
	Kansas	28.82
	Kentucky	11.72
	Louisiana Onshore	24.35
	Louisiana Offshore	27.05
	Michigan	12.18
	Mississippi	22.27
	Montana	31.39
	North Dakota	30.36
	Nebraska	30.08
	Nevada	44.72
	New Mexico	37.42
	New York	6.46
	Ohio	9.29
	Oklahoma	27.83
	Oregon	48.09
	Pacific Offshore	49.37
	Pennsylvania	6.46
	South Carolina	14.22
	South Dakota	29.83
	Tennessee	14.69
	Texas Onshore	30.58
	Texas Offshore	28.72
	Utah	37.65
	Virginia	9.02
	West Virginia	9.77
	Wyoming	33.13
PNW	Alabama	42.14
	Arizona	20.11
	Arkansas	35.04
	Atlantic Offshore	48.98
	California Onshore	13.81
	Colorado	20.04
	Florida	50.59
	Georgia	46.59
	Illinois	34.78
	Indiana	36.61
	Kansas	25.36
	Kentucky	40.75
	Louisiana Onshore	39.59
	Louisiana Offshore	41.10
	Michigan	36.69
	Iviichigan	30.09

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Mississippi	39.46
	Montana	17.43
	North Dakota	18.47
	Nebraska	21.01
	Nevada	14.85
	New Mexico	21.07
	New York	42.34
	Ohio	40.36
	Oklahoma	28.28
	Oregon	3.25
	Pacific Offshore	19.55
	Pennsylvania	42.86
	South Carolina	46.30
	South Dakota	19.07
	Tennessee	40.20
	Tennessee Texas Onshore	
	Texas Onsnore Texas Offshore	34.51
		39.51
	Utah	15.41
	Virginia	44.36
	West Virginia	42.03
	Wyoming	16.74
RFCO	Alabama	13.04
	Arizona	28.50
	Arkansas	12.94
	Atlantic Offshore	13.05
	California Onshore	37.78
	Colorado	21.38
	Florida	18.74
	Georgia	12.54
	Illinois	5.27
	Indiana	3.35
	Kansas	17.68
	Kentucky	4.66
	Louisiana Onshore	15.63
	Louisiana Offshore	18.73
	Michigan	5.43
	Mississippi	13.56
	Montana	22.47
	North Dakota	21.53
	Nebraska	19.37
	Nevada	33.79
	New Mexico	26.28
	New York	8.87
	Ohio	4.60
	Oklahoma	16.70
	Oregon	38.47
	Pacific Offshore	38.25
	Pennsylvania	7.40

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	South Carolina	11.52
	South Dakota	20.26
	Tennessee	6.58
	Texas Onshore	20.46
	Texas Offshore	19.79
	Utah	26.91
	Virginia	7.97
	West Virginia	5.45
	Wyoming	23.00
	Alabama	13.89
	Arizona	32.04
	Arkansas	15.58
	Atlantic Offshore	10.62
	California Onshore	41.38
	Colorado	24.98
	Florida	17.85
	Georgia	11.42
	Illinois	8.80
	Indiana	6.79
	Kansas	21.22
	Kentucky	4.32
	Louisiana Onshore	17.34
	Louisiana Offshore	20.29
	Michigan	6.87
	Mississippi	15.22
	Montana	25.71
	North Dakota	24.74
RFCP	Nebraska	22.97
	Nevada	37.39
	New Mexico	29.81
	New York	6.63
	Ohio	3.25
	Oklahoma	20.08
	Oregon	41.93
	Pacific Offshore	41.80
	Pennsylvania	4.25
	South Carolina	10.11
	South Dakota	23.65
	Tennessee	7.49
	Texas Onshore	23.05
	Texas Offshore	21.68
	Utah	30.52
	Virginia	50.52 5.46
	- -	
	West Virginia	3.25
DMDA	Wyoming	26.52
RMPA	Alabama	23.85
	Arizona	9.55

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Arkansas	16.71
	Atlantic Offshore	31.63
	California Onshore	17.46
	Colorado	3.49
	Florida	32.29
	Georgia	28.72
	Illinois	18.09
	Indiana	20.10
	Kansas	7.05
	Kentucky	24.03
	Louisiana Onshore	21.22
	Louisiana Offshore	22.89
	Michigan	22.12
	Mississippi	21.10
	Montana	11.42
	North Dakota	11.64
	Nebraska	4.18
	Nevada	13.38
	New Mexico	7.86
	New York	28.07
	Ohio	24.84
	Oklahoma	9.92
	Oregon	19.92
	Pacific Offshore	18.51
	Pennsylvania	27.64
	South Carolina	28.64
	South Dakota	8.93
	Tennessee	22.77
	Texas Onshore	16.93
	Texas Offshore	21.49
	Utah	6.49
	Virginia	27.84
	West Virginia	25.67
	Wyoming	6.65
SNV	Alabama	32.28
	Arizona	6.22
	Arkansas	25.26
	Atlantic Offshore	41.46
	California Onshore	7.58
	Colorado	13.07
	Florida	40.30
	Georgia	38.00
	Illinois	28.82
	Indiana	30.84
	Kansas	16.51
	Kentucky	34.55
	Louisiana Onshore	28.58

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Louisiana Offshore	29.13
	Michigan	33.30
	Mississippi	29.20
	Montana	19.63
	North Dakota	20.35
	Nebraska	15.37
	Nevada	3.47
	New Mexico	8.34
	New York	39.22
	Ohio	35.81
	Oklahoma	18.42
	Oregon	16.35
	Pacific Offshore	7.40
	Pennsylvania	38.63
	South Carolina	38.20
	South Dakota	18.48
	Tennessee	32.81
	Texas Onshore	21.87
	Texas Offshore	27.10
	Utah	8.50
	Virginia	38.36
	West Virginia	36.31
	Wyoming	14.43
SOU	Alabama	4.18
	Arizona	27.42
	Arkansas	8.43
	Atlantic Offshore	10.90
	California Onshore	37.87
	Colorado	22.64
	Florida	11.34
	Georgia	7.18
	Illinois	9.70
	Indiana	9.30
	Kansas	17.56
	Kentucky	8.20
	Louisiana Onshore	7.81
	Louisiana Offshore	10.55
	Michigan	14.28
	Mississippi	5.77
	Montana	27.31
	North Dakota	26.58
	Nebraska	21.36
	Nevada	33.74
	New Mexico	25.23
	New York	16.41
	Ohio	12.17
	Oklahoma	15.13

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Oregon	41.36
	Pacific Offshore	36.88
	Pennsylvania	13.91
	South Carolina	7.47
	South Dakota	24.49
	Tennessee	5.17
	Texas Onshore	14.74
	Texas Offshore	12.18
	Utah	28.01
	Virginia	10.43
	West Virginia	9.83
	Wyoming	25.93
SPPN	Alabama	13.64
	Arizona	18.28
	Arkansas	7.41
	Atlantic Offshore	20.61
	California Onshore	28.02
	Colorado	11.97
	Florida	22.01
	Georgia	17.82
	Illinois	7.70
	Indiana	9.68
	Kansas	7.49
	Kentucky	13.26
	Louisiana Onshore	12.47
	Louisiana Offshore	15.15
	Michigan	13.35
	Mississippi	11.49
	Montana	16.91
	North Dakota	16.32
	Nebraska	10.49
	Nevada	23.89
	New Mexico	16.05
	New York	18.80
	Ohio	14.87
	Oklahoma	6.58
	Oregon	30.49
	Pacific Offshore	28.03
	Pennsylvania	17.68
	South Carolina	17.65
	South Dakota	13.92
	Tennessee	11.76
	Texas Onshore	12.94
	Texas Offshore	14.83
	Utah	17.50
	Virginia	17.08
	West Virginia	15.04

CO ₂ Production Region	CO₂ Storage Region	Cost (2007\$/Ton)
-	Wyoming	15.10
	Alabama	11.20
	Arizona	17.67
	Arkansas	4.43
	Atlantic Offshore	20.65
	California Onshore	28.28
	Colorado	14.16
	Florida	19.48
	Georgia	16.93
	Illinois	11.33
	Indiana	12.87
	Kansas	8.86
	Kentucky	15.21
	Louisiana Onshore	8.21
	Louisiana Offshore	10.25
	Michigan	17.63
	Mississippi	8.21
	Montana	21.41
SPPS	North Dakota	20.99
3113	Nebraska	13.59
	Nevada	24.13
	New Mexico	15.52
	New York	22.34
	Ohio	18.01
	Oklahoma	5.82
	Oregon	32.92
	Pacific Offshore	27.08
	Pennsylvania	20.64
	South Carolina	17.26
	South Dakota	18.31
	Tennessee	12.63
	Texas Onshore	7.79
	Texas Offshore	9.48
	Utah	19.01
	Virginia	18.71
	West Virginia	17.18
	Wyoming	18.39
TVA	Alabama	8.35
	Arizona	27.00
	Arkansas	9.27
	Atlantic Offshore	11.57
	California Onshore	37.00
	Colorado	21.01
	Florida	14.92
	Georgia	9.38
	Illinois	5.89

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Indiana	5.11
	Kansas	16.43
	Kentucky	4.98
	Louisiana Onshore	11.03
	Louisiana Offshore	14.09
	Michigan	10.09
	Mississippi	8.93
	Montana	24.27
	North Dakota	23.45
	Nebraska	19.38
	Nevada	32.90
	New Mexico	24.77
	New York	12.91
	Ohio	8.49
	Oklahoma	14.64
	Oregon	39.25
	Pacific Offshore	36.71
	Pennsylvania	10.73
	South Carolina	8.86
	South Dakota	21.65
	Tennessee	3.25
	Texas Onshore	16.66
	Texas Offshore	15.30
	Utah	26.56
	Virginia	8.43
	West Virginia	6.94
	Wyoming	23.64
TVAK	Alabama	10.73
	Arizona	27.75
	Arkansas	11.08
	Atlantic Offshore	12.03
	California Onshore	37.41
	Colorado	21.13
	Florida	16.77
	Georgia	10.78
	Illinois	4.94
	Indiana	3.25
	Kansas	16.98
	Kentucky	3.82
	Louisiana Onshore	13.38
	Louisiana Offshore	16.47
	Michigan	7.71
	Mississippi	11.30
	Montana	23.31
	North Dakota	22.43
	Nebraska	19.30
	Nevada	33.35

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	New Mexico	25.51
	New York	10.73
	Ohio	6.29
	Oklahoma	15.60
	Oregon	38.86
	Pacific Offshore	37.51
	Pennsylvania	8.79
	South Carolina	9.94
	South Dakota	20.88
	Tennessee	4.40
	Texas Onshore	18.59
	Texas Offshore	17.60
	Utah	26.71
	Virginia	7.66
	West Virginia	5.56
	Wyoming	23.27
UPNY	Alabama	20.03
OFINI	Arizona	36.09
	Arkansas	21.28
	Atlantic Offshore	14.72
	California Onshore	44.58
	Colorado	28.28
	Florida	23.17
	Georgia	16.86
	Illinois	13.43
	Indiana	11.72
	Kansas	25.39
	Kentucky	10.47
	Louisiana Onshore	23.46
	Louisiana Offshore	26.43
	Michigan	7.98
	Mississippi	21.34
	Montana	26.70
	North Dakota	25.66
	Nebraska	26.05
	Nevada	40.78
	New Mexico	33.92
	New York	3.25
	Ohio	6.70
	Oklahoma	24.84
	Oregon	43.46
	Pacific Offshore	45.73
	Pennsylvania	4.90
	South Carolina	15.43
	South Dakota	25.31
	Tennessee	13.63
	Texas Onshore	28.78
	Texas Offshore	27.77

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Utah	33.58
	Virginia	9.76
	West Virginia	8.90
	Wyoming	28.77
	Alabama	10.50
	Arizona	34.30
	Arkansas	15.62
	Atlantic Offshore	4.12
	California Onshore	44.44
	Colorado	28.53
	Florida	11.33
	Georgia	5.19
	Illinois	12.80
	Indiana	11.12
	Kansas	23.89
	Kentucky	7.14
	Louisiana Onshore	14.99
	Louisiana Offshore	17.26
	Michigan	13.65
	Mississippi	13.12
	Montana	31.22
VACA	North Dakota	30.33
VACA	Nebraska	26.88
	Nevada	40.35
	New Mexico	32.07
	New York	12.49
	Ohio	9.80
	Oklahoma	21.89
	Oregon	46.66
	Pacific Offshore	43.93
	Pennsylvania	9.72
	South Carolina	3.74
	South Dakota	28.79
	Tennessee	7.53
	Texas Onshore	22.16
	Texas Offshore	19.21
	Utah	34.09
	Virginia	5.81
	West Virginia	6.77
	Wyoming	31.03
VAPW	Alabama	14.71
	Arizona	36.20
	Arkansas	18.50
	Atlantic Offshore	7.13
	California Onshore	45.84
	Colorado	29.54
	Florida	15.91

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Georgia	9.93
	Illinois	13.24
	Indiana	11.24
	Kansas	25.45
	Kentucky	7.42
	Louisiana Onshore	18.94
	Louisiana Offshore	21.50
	Michigan	11.51
	Mississippi	16.92
	Montana	30.58
	North Dakota	29.61
	Nebraska	27.61
	Nevada	41.82
	New Mexico	33.96
	New York	8.42
	Ohio	7.43
	Oklahoma	23.95
	Oregon	46.77
	Pacific Offshore	45.95
	Pennsylvania	5.91
	South Carolina	8.48
	South Dakota	28.52
	Tennessee	9.77
	Texas Onshore	25.61
	Texas Offshore	23.29
	Utah	35.10
	Virginia	4.65
	West Virginia	5.67
	Wyoming	31.30
WUMS	Alabama	18.36
	Arizona	26.16
	Arkansas	15.53
	Atlantic Offshore	19.56
	California Onshore	34.18
	Colorado	18.00
	Florida	25.05
	Georgia	19.02
	Illinois	7.54
	Indiana	7.86
	Kansas	15.92
	Kentucky	11.21
	Louisiana Onshore	19.69
	Louisiana Offshore	22.81
	Michigan	5.49
	Mississippi	17.89
	Montana	16.61
	North Dakota	15.61

CO ₂ Production Region	CO ₂ Storage Region	Cost (2007\$/Ton)
	Nebraska	15.69
	Nevada	30.42
	New Mexico	24.08
	New York	11.28
	Ohio	9.37
	Oklahoma	16.23
	Oregon	33.18
	Pacific Offshore	35.61
	Pennsylvania	11.68
	South Carolina	18.07
	South Dakota	14.90
	Tennessee	12.58
	Texas Onshore	22.36
	Texas Offshore	23.26
	Utah	23.14
	Virginia	14.13
	West Virginia	11.73
	Wyoming	18.28

Note:
Production Regions are equal to IPM model regions