

State Level Estimates

Addendum to:

Strengthening Our Economy: The Untapped U.S. Oil and Gas Resources

March 13, 2009

Prepared for:
American Petroleum Institute
1220 L Street, NW
Washington, DC 20005



Submitted by:
ICF International
9300 Lee Highway
Fairfax, VA 22031
703.218.2745

Authors:
Harry Vidas
Bob Hugman

This page intentionally blank

Table of Contents

1	Executive Summary	7
2	Resource Allocation.....	15
2.1	Gulf of Mexico.....	18
2.2	Atlantic OCS.....	23
2.3	Pacific OCS.....	31
2.4	Rocky Mountain Region	35
3	Economic Impacts by State	39
3.1	Introduction.....	39
3.2	Allocation of Production.....	39
3.3	Allocation of Private Sector Economic Impacts Among States	45
3.4	Allocation of Government Revenues Among States.....	78

List of Tables

Table 1 2006 MMS Gulf of Mexico Oil and Gas Assessment	19
Table 2 State Allocation of Off-Limits Eastern Gulf of Mexico Resources	22
Table 3 Eastern Gulf of Mexico Moratoria Allocation on BOE Basis	23
Table 4 2006 MMS Atlantic OCS Oil and Gas Assessment.....	24
Table 5 Details of ICF Area Analysis of Atlantic OCS Region	27
Table 6 Summary of Atlantic Oil and Gas Resources by State	29
Table 7 Atlantic OCS Resource Allocation on BOE Basis	30
Table 8 2006 MMS Pacific OCS Oil and Gas Assessment.....	32
Table 9 Play Level Resource Allocation to Washington and Oregon	34
Table 10 Summary of Pacific OCS Oil and Gas Resources by State	34
Table 11 Allocation of Pacific OCS Resources by State on BOE Basis	35
Table 12 Allocation of New Access Basin Resources to Rocky Mountain States	36
Table 13 Allocation of Rockies Resources by State on a BOE Basis	37
Table 14 Oil Production by State - Middle Resource	41
Table 15 Natural Gas Production by State - Middle Resource.....	42
Table 16 Oil Production by State - Alternative Resource	43
Table 17 Natural Gas Production by State - Alternative Resource.....	44
Table 18 Method of Allocation for Economic Activity Among States.....	46
Table 19 Middle Resource Case 2010: Output by State.....	48
Table 20 Middle Resource Case 2010: Total Employment by State	49
Table 21 Middle Resource Case 2010: Direct Employment by State	50
Table 22 Middle Resource Case 2010: Value Added by State	51
Table 23 Middle Resource Case 2010: Dollars Value Added per Job by State	52
Table 24 Middle Resource Case 2020: Output by State.....	53
Table 25 Middle Resource Case 2020: Total Employment by State	54
Table 26 Middle Resource Case 2020: Direct Employment by State.....	55
Table 27 Middle Resource Case 2020: Value Added by State	56
Table 28 Middle Resource Case 2020: Dollars Value Added per Job by State	57
Table 29 Middle Resource Case 2030: Output by State.....	58
Table 30 Middle Resource Case 2030: Total Employment by State	59
Table 31 Middle Resource Case 2030: Direct Employment by State	60
Table 32 Middle Resource Case 2030: Value Added by State	61
Table 33 Middle Resource Case 2030: Dollars Value Added per Job by State	62
Table 34 Alternative Resource Case 2010: Output by State.....	63
Table 35 Alternative Resource Case 2010: Total Employment by State	64
Table 36 Alternative Resource Case 2010: Direct Employment by State	65
Table 37 Alternative Resource Case 2010: Value Added by State	66
Table 38 Alternative Resource Case 2010: Dollars Value Added per Job by State	67
Table 39 Alternative Resource Case 2020: Output by State.....	68
Table 40 Alternative Resource Case 2020: Total Employment by State	69
Table 41 Alternative Resource Case 2020: Direct Employment by State	70
Table 42 Alternative Resource Case 2020: Value Added by State	71
Table 43 Alternative Resource Case 2020: Dollars Value Added per Job by State	72
Table 44 Alternative Resource Case 2030: Output by State.....	73
Table 45 Alternative Resource Case 2030: Total Employment by State	74
Table 46 Alternative Resource Case 2030: Direct Employment by State	75
Table 47 Alternative Resource Case 2030: Value Added by State	76

Table 48 Alternative Resource Case 2030: Dollars Value Added per Job by State77
Table 49 Government Revenues by State - Middle Resource (million 2006 dollars).....79
Table 50 Government Revenues by State - Alternative Resource (million 2006 dollars).....80

List of Figures

Figure 1 Oil and Gas Production Impact by State - 2030 Middle and Alternative Resource Cases (Million Barrels of Oil Equivalent per Year)	8
Figure 2 Private Sector Employment Impact by State – 2030 Middle Resource	10
Figure 3 Private Sector Employment Impact by State - 2030 Alternative Resource	11
Figure 4 All-Time Government Revenues – Middle and Alternative Resource Cases (Billion 2006 dollars).....	13
Figure 5 Map Showing 2006 MMS Oil and Gas Assessment.....	17
Figure 6 Map of Gulf of Mexico Showing “Equidistant” State Offshore Boundaries	20
Figure 7 2006 MMS Map Showing No-Access Area of Eastern Gulf of Mexico.....	21
Figure 8 Map of Atlantic OCS Showing State Boundaries.....	26
Figure 9 Mid-Atlantic Map Showing State Boundaries and MMS Aggregate Play Outline	28
Figure 10 Map of Pacific OCS Showing State Boundaries.....	33

1 EXECUTIVE SUMMARY

This report is an addendum to the December, 2008 API report titled “Strengthening Our Economy: The Untapped U.S. Oil and Gas Resources.”¹ The original report documented the potential oil and gas production and economic and government revenue impacts from opening off-limits OCS areas (Atlantic, Pacific, and Eastern Gulf of Mexico), ANWR in Alaska, and a portion of the Rockies. This addendum presents an analysis of these forecasts at the state level.

The state level analysis includes the following:

- Oil and gas production impacts by state
- Private sector economic impacts by state
- Government revenues by state

Figure 1 shows oil and gas production impacts by state in the year 2030. The data are presented in units of million barrels of oil equivalent. (One Bcf of gas equals 0.177 million barrels of oil equivalent or MMBOE). Both the Middle and Alternative Resource Case impacts are shown. The production data are presented in tabular form in **Section 3.2**. For the Middle case, the U.S. oil production impact in 2030 is 414 million barrels per year or 1.13 million barrels per day. For gas, the 2030 impact is 925 Bcf per year or 2.53 bcf per day. In the Alternative Resource Case, the oil impact is 739 million barrels per year or 2.02 million barrels per day and the gas impact is 1.95 Tcf per year or 5.34 Bcf per day.. In terms of oil equivalent, 2030 production in the Middle case is 578 MMBOE and in the Alternative Case is 1,084 MMBOE.

Note that in the case of ANWR and the Rockies, the oil and gas production shown is that which is forecast to occur within the boundaries of those states. For OCS areas, the production shown is the OCS production attributed to each state. The methodology for production allocation is described in a subsequent section.

¹ API, 2008, “Strengthening our Economy: The Untapped U.S. Oil and Gas Resources,” report prepared by ICF International, December, 2008. www.energytomorrow.org

Figure 1 Oil and Gas Production Impact by State - 2030 Middle and Alternative Resource Cases (Million Barrels of Oil Equivalent per Year)

(Middle Resource Case in Blue and Alternative Case in Red)



Figure 2 shows private sector employment impacts by state in 2030 for the Middle Resource Case and **Figure 3** presents the data for the Alternative Case. Direct employment for each state is shown in blue (the short bar) and total 2030 employment is shown in red. Total employment is the sum of direct, indirect and induced employment. An estimated 114,000 jobs are forecast in 2030 in the Middle Resource Case and 161,000 jobs with the Alternative Resource.

These data are presented in tabular form in **Section 3.3**.

Figure 2 Private Sector Employment Impact by State – 2030 Middle Resource

(Direct employment in blue and total in red)

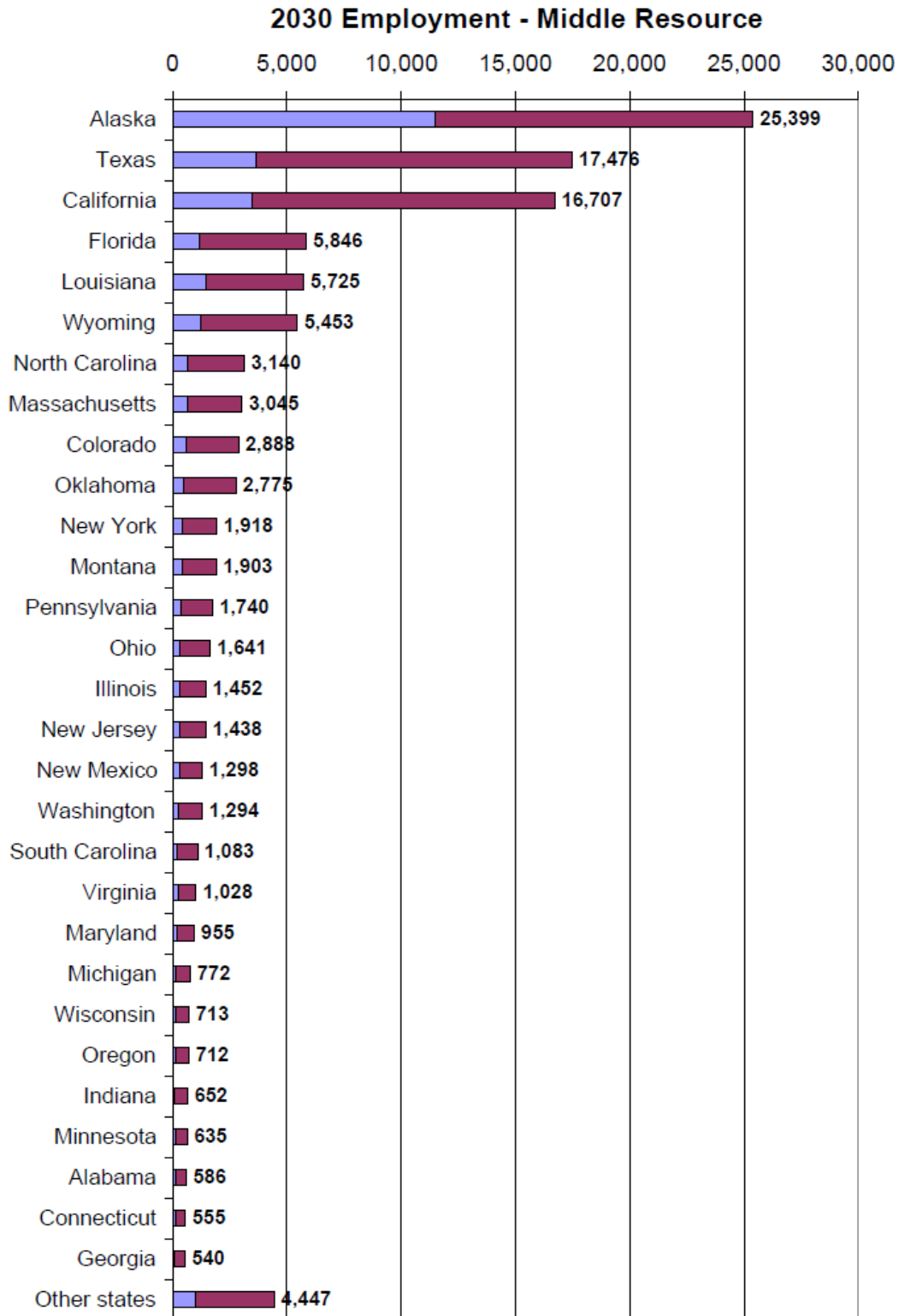


Figure 3 Private Sector Employment Impact by State - 2030 Alternative Resource

(Direct employment in blue and total in red)

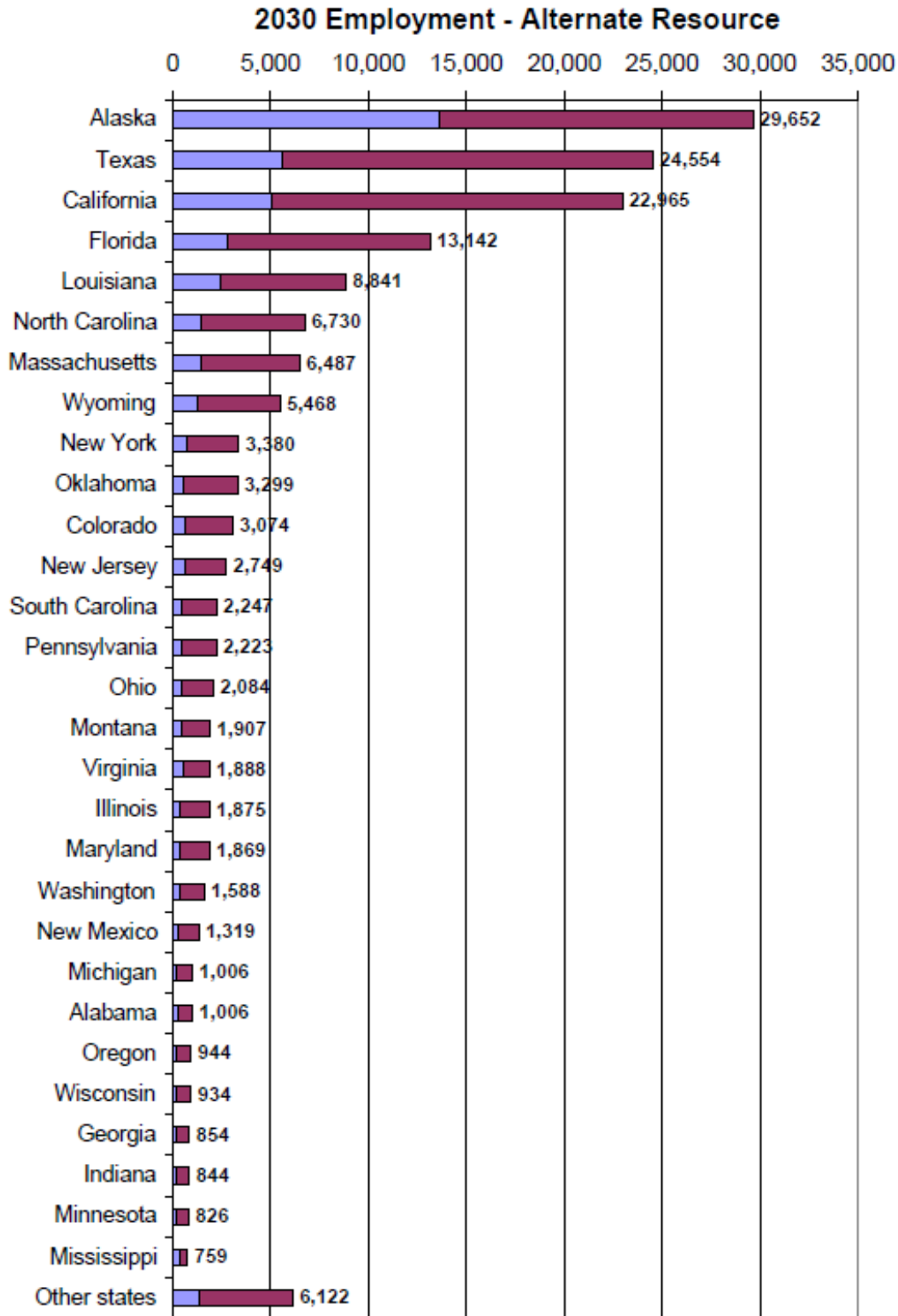
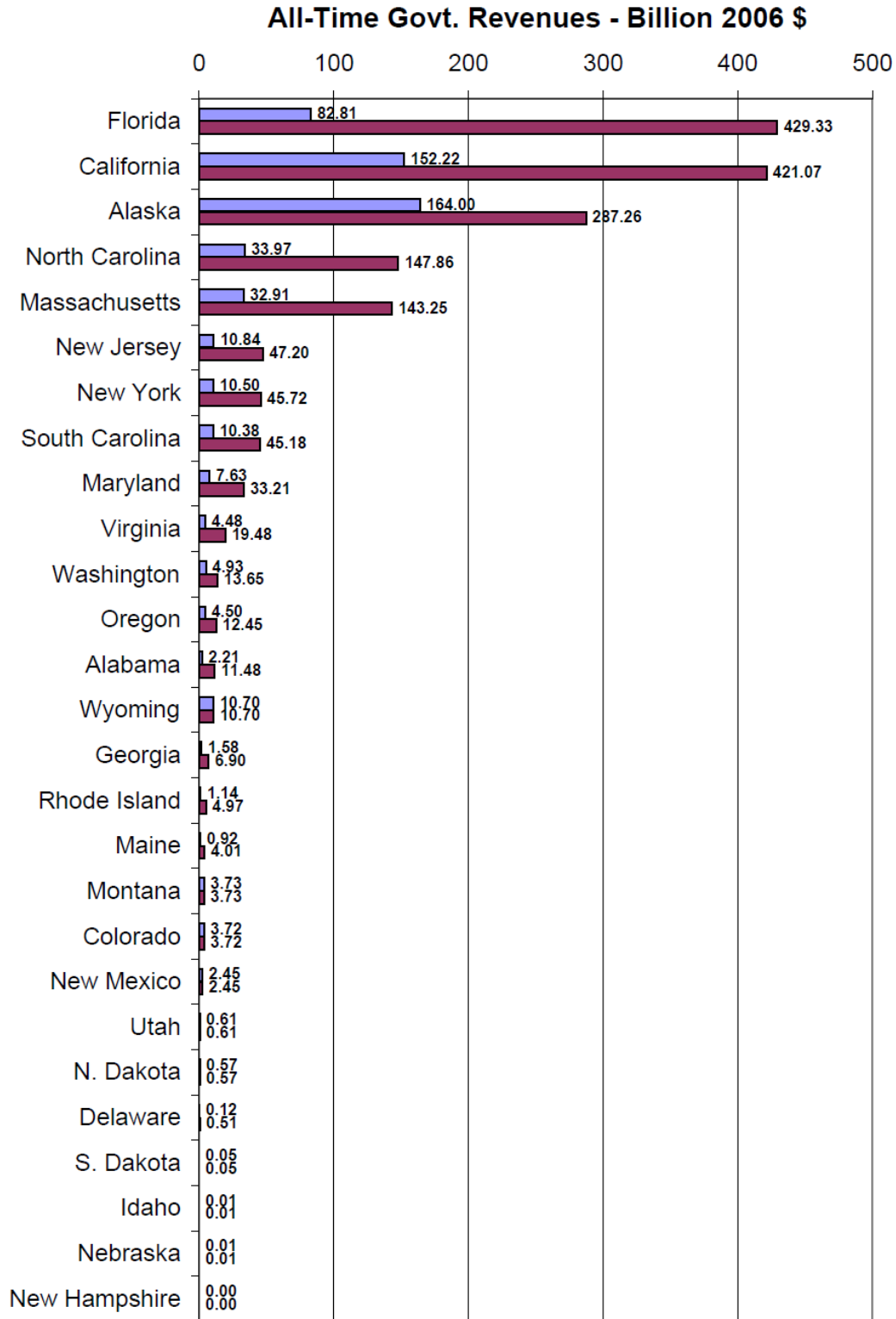


Figure 4 presents the all-time government revenues by state for the Middle and Alternative Resource Cases. All-time government revenues for the Middle Resource Case are \$527 billion and all-time revenues for the Alternative Resource Case are \$1,695 billion. These data are presented in tabular form in **Section 3.4**. Government revenue as shown is the sum of federal, state, and local government revenue.

Figure 4 All-Time Government Revenues – Middle and Alternative Resource Cases (Billion 2006 dollars)

(Middle Resource Case in Blue and Alternative Case in Red)



This page intentionally blank.

2 RESOURCE ALLOCATION

This chapter presents an analysis at the state level of the undiscovered oil and gas resources associated with opening to exploration the areas of the Lower-48 Outer Continental Shelf (OCS) that are under leasing moratoria and a portion of the Rocky Mountain resources that are currently categorized as off-limits to exploration. ANWR is located entirely within Alaska and so that resource needs no state allocation for the current study.

MMS and USGS oil and gas resource assessments have been allocated to individual states using available data sources and various assumptions. These state level resource allocations are used in subsequent chapters to estimate the distribution of future production and economic impacts.

OCS Allocation Approach

The approach used for the OCS was to allocate the resource base descriptions developed in the ICF national study to individual coastal states. A 2008 MMS publication documented the state level assessment for the Gulf of Mexico, but for the Atlantic and Pacific regions, it was necessary to develop estimates.² In the December, 2008 API study, a “mean” assessment of undiscovered oil and gas was developed for each OCS region, based upon the MMS assessment. In addition, an alternative higher resource was developed, representing a more optimistic case. The basis for the more optimistic case was described in the ICF report.

The offshore state boundaries used for the OCS allocations are those used by the MMS as documented in the 2006 Federal Register.³ These boundaries are based upon the “equidistant” calculation method as discussed in that paper. In the equidistant method, each point along the boundary between each two states is equidistant to the closest point to the shoreline of each of those two states. Depending upon the shape of the shoreline, the area assigned to a state by the equidistant method may appear unusual. This is

² MMS, 2008, “Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters off the coasts of Louisiana, Texas, Alabama, and Mississippi,” August, 2008. <http://www.mms.gov/revaldiv/PDFs/EPActSection965cReportFINAL8-10-07.pdf>

³ Federal Register, January 3, 2006 <http://edocket.access.gpo.gov/2006/pdf/05-24659.pdf>

especially true for the Atlantic OCS. In the Atlantic, for example, the states of Massachusetts and North Carolina tend to have large equidistant offshore areas because of the shape of their shorelines. It is uncertain whether the equidistant boundary method will ultimately be the boundary system used to determine state revenues.

Rockies Allocation Approach

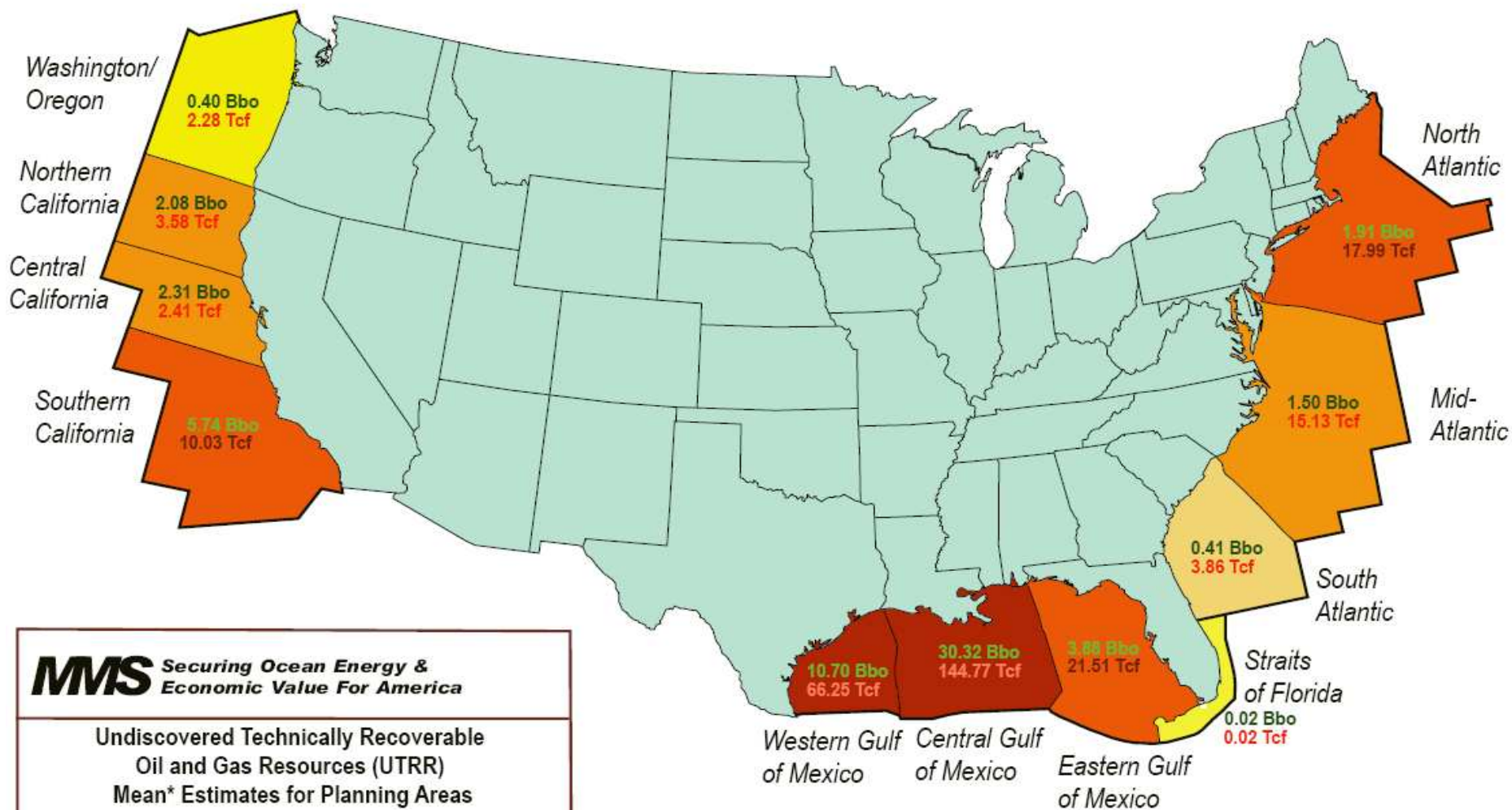
The USGS Rocky Mountain resource base assessment was conducted at the geologic basin level. Some of these basins are confined to one state, while other basins overlap state lines. An approximation method was used to estimate the portion of each basin's resources to be assigned to specific states.

Allocation of MMS OCS Resources to States

The latest assessment of the remaining potential of the OCS was published by MMS in 2006.⁴ This assessment was described in the ICF December, 2008 report. A map summarizing the resource base is presented as **Figure 5**. MMS assessments are developed at the individual "play" level. A play is a geologic formation or feature that controls the distribution of oil or gas fields in an area. It is the basic unit of analysis for resource assessment because the discoveries within a play tend to have similar characteristics and field size distribution. A prior (2000) MMS assessment report included documentation and maps at the play level.

⁴ U.S. Minerals Management Service, 2006, "Report to Congress: Comprehensive Inventory of U.S. Oil and Natural Gas Resources – Energy Policy Act of 2005 Section 357," [no report number], February, 2006. <http://www.mms.gov/revaldiv/RedNatAssessment.htm>

Figure 5 Map Showing 2006 MMS Oil and Gas Assessment



2.1 Gulf of Mexico

As shown in **Table 1**, the Gulf of Mexico was assessed by MMS as having 44.9 billion barrels of undiscovered oil potential and 232.5 Tcf of undiscovered natural gas potential. Of that amount, 3.9 billion barrels of oil and 21.5 Tcf of gas were assessed in the Eastern Gulf planning area.

The MMS assessed the Eastern Gulf moratoria area potential at 3.98 billion barrels and 22.16 Tcf of gas.⁵ This resource base was used in the current study for increased access modeling. In addition, an Alternative Resource Case of 19 billion barrels and 53 Tcf of gas was evaluated.

The table shows the water depth distribution of the resource and the probability range of resources within each water depth interval. In the Eastern Gulf, most of the assessed resource is in deep water. For example, 3 billion barrels of oil and 13.5 Tcf of gas is present in water depths of greater than 2,400 meters (approximately 7,900 feet).

Figure 6 shows the MMS offshore “equidistant” state boundaries for the Gulf of Mexico. The boundary between Florida and Alabama represents the western margin of the Eastern Planning Area. The OCS area assigned to Alabama is shown as a roughly triangular area south of the Alabama coastline.

Figure 7 shows the boundaries of the Eastern Gulf moratoria area, shown in red. Existing leases are in green. This map was published by MMS in September, 2008.⁶ Most of the off-limits area is in the MMS Eastern Gulf Planning Area, while a small part (the Alabama portion) is in the Central Gulf.

⁵ MMS, 2006 “Report to Congress: Comprehensive Inventory of U.S. Oil and Natural Gas Resources – Energy Policy Act of 2005 Section 357,” [no report number], February, 2006.
<http://www.mms.gov/revaldiv/RedNatAssessment.htm>

⁶ MMS, 2008, MMS website <http://www.mms.gov/5-Year/PDFs/StatusMap1008.pdf>

Table 1 2006 MMS Gulf of Mexico Oil and Gas Assessment

Water Depth Range	Prob.	Western Gulf of Mexico			Central Gulf of Mexico			Eastern Gulf of Mexico			Straits of Florida			Total		
		OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)
0 to 200 Meters	95%	0.41	29.15	5.60	2.69	47.75	11.19	0.47	4.82	1.32	0.00	0.00	0.01	3.82	87.11	19.32
	Mean	0.42	29.80	5.72	2.75	52.09	12.02	0.64	5.21	1.57	0.01	0.01	0.01			
	5%	0.43	30.47	5.86	2.76	64.70	14.27	0.84	5.78	1.87	0.02	0.01	0.02			
200 to 800 Meters	95%	0.51	4.23	1.27	1.40	11.53	3.46	0.15	1.86	0.48	0.00	0.00	0.00	2.31	20.26	5.93
	Mean	0.57	4.86	1.44	1.55	13.28	3.92	0.18	2.11	0.56	0.01	0.01	0.01			
	5%	0.67	5.68	1.68	1.81	15.57	4.58	0.23	2.42	0.67	0.01	0.01	0.01			
800 to 1600 Meters	95%	2.79	15.26	5.50	8.30	29.84	13.61	0.04	0.50	0.12	n.a.			11.77	48.40	20.38
	Mean	2.98	16.17	5.86	8.74	31.66	14.37	0.05	0.57	0.15						
	5%	3.26	17.12	6.30	9.43	33.60	15.41	0.06	0.69	0.19						
1600 to 2400 Meters	95%	4.59	10.86	6.52	10.52	28.26	15.55	0.01	0.14	0.04	n.a.			16.25	42.24	23.76
	Mean	5.09	11.81	7.19	11.14	30.26	16.52	0.02	0.17	0.05						
	5%	5.64	12.97	7.95	12.05	31.82	17.72	0.04	0.21	0.07						
> 2400 Meters	95%	1.47	3.31	2.06	5.02	14.19	7.55	1.85	10.23	3.67	n.a.			10.76	34.54	16.91
	Mean	1.63	3.61	2.28	6.14	17.48	9.25	2.99	13.45	5.38						
	5%	1.82	3.95	2.52	7.51	21.65	11.36	4.61	17.73	7.76						
Total	95%	9.80	62.65	20.95	28.41	134.49	52.33	2.76	18.06	5.97	0.01	0.01	0.01	41.21	218.83	80.15
	Mean	10.70	66.25	22.49	30.32	144.77	56.08	3.88	21.51	7.71	0.02	0.02	0.02	44.92	232.54	86.30
	5%	11.80	70.17	24.28	32.77	156.56	60.62	5.51	25.98	10.13	0.03	0.02	0.04	49.11	249.08	93.43

Notes:

- 1.) Resource values are in billion barrels of oil (Bbo) and trillion cubic feet of gas (Tcfg).
- 2.) 95% indicates a 95 percent chance of at least the amount listed, 5% indicates a 5% chance of at least the amount listed.
- 3.) Only mean values are additive. Some total mean values may not equal the sum of the component values due to independent rounding.
- 4.) Planning areas are based on 2006 Federal Outer Continental Shelf Administrative Boundaries. (Federal Register vol. 71, no. 1, pages 127-131)

Figure 6 Map of Gulf of Mexico Showing "Equidistant" State Offshore Boundaries

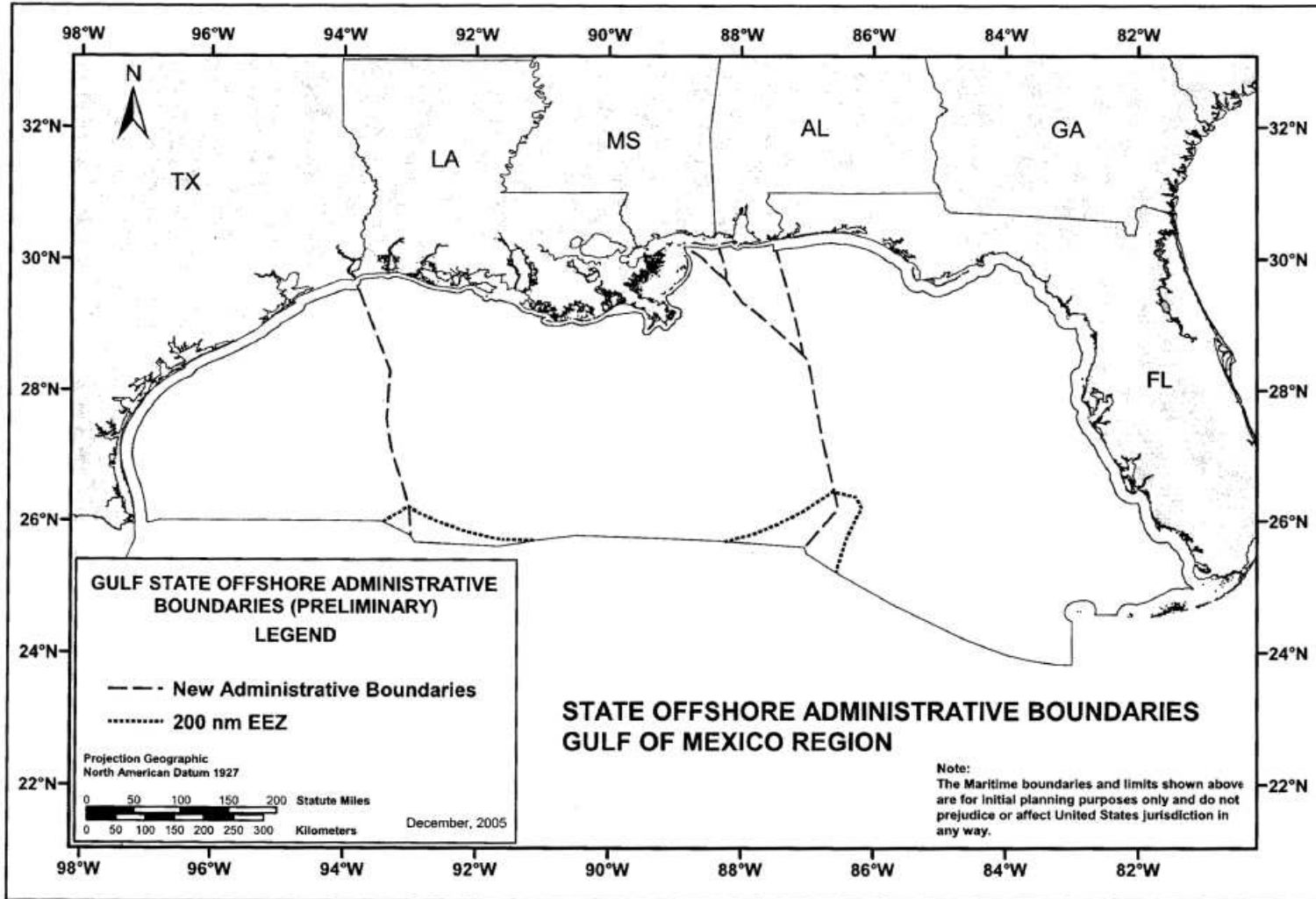
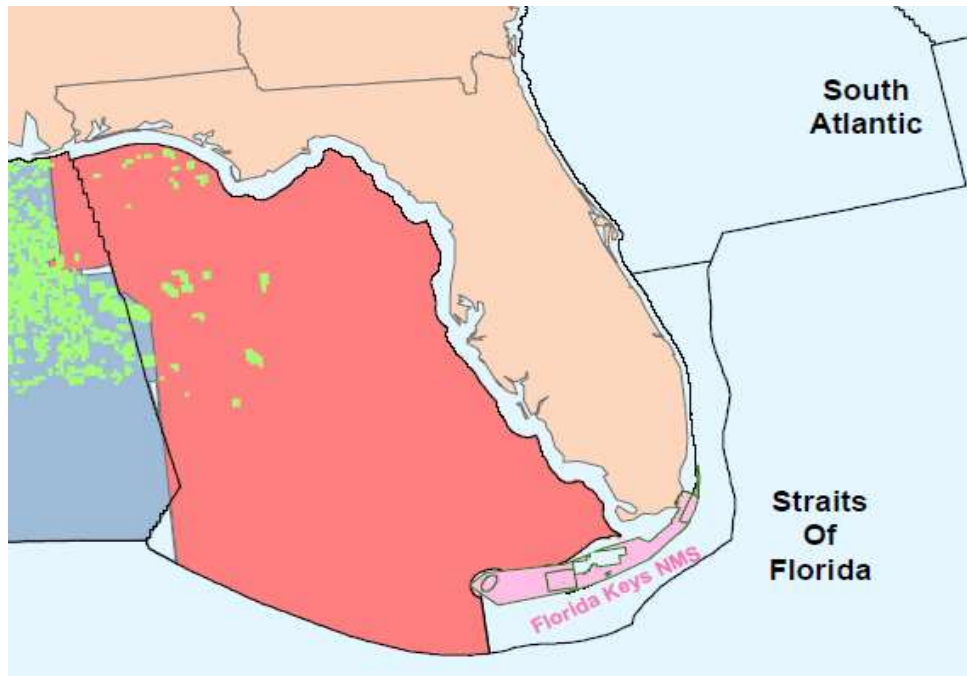


Figure 7 2006 MMS Map Showing No-Access Area of Eastern Gulf of Mexico

Area in red is the moratoria area. Source: <http://www.mms.gov/5-Year/PDFs/StatusMap1008.pdf>



In 2008, the MMS published an assessment of the state level distribution of oil and gas resources in the Gulf of Mexico OCS.⁷ This analysis is summarized in the upper portion of **Table 2**. The MMS study included estimates for both state and federal waters and included resource estimates for Louisiana, Texas, Alabama, and Mississippi, but did not include Florida. However, the offshore Florida OCS resources can be determined as the difference between the total Gulf of Mexico OCS resource and the resource attributed to the other four states. The table shows the published MMS OCS assessments for Louisiana, Texas, Alabama, and Mississippi and the calculated assessment for Florida. The Florida undiscovered resource base is 3.9 billion barrels of oil and 21.5 Tcf of gas.

The middle portion of **Table 2** shows the ICF allocation of the off-limits Gulf of Mexico resources by state. The table shows that the Florida portion is 3.9 billion barrels of oil and 21.53 Tcf of gas, while the Alabama portion is 0.08 billion barrels of oil and 0.63 Tcf of gas. The lower portion of the table shows the Mean and Alternative Resource Bases by state for modeling purposes.

⁷ MMS, 2008, "Report to Congress: Estimates of Oil and Gas Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters Off the Coasts of Louisiana, Texas, Alabama and Mississippi," August, 2008. <http://www.mms.gov/revaldiv/PDFs/EPActSection965cReportFINAL8-10-07.pdf>

Table 2 State Allocation of Off-Limits Eastern Gulf of Mexico Resources

Part 1. Determination of Florida and Alabama Totals

State		Mean Oil mmb	Mean Gas bcf
Texas	as assessed by MMS	10,700	66,250
Louisiana	as assessed by MMS	29,860	138,760
Mississippi	as assessed by MMS	60	820
Alabama	as assessed by MMS	400	5,180
Total		41,020	211,010
Florida	Same as Eastern GoM total	3,900	21,530
Total OCS		44,920	232,540

Part 2. Allocation of Moratoria Resource between Florida and Alabama

		Mean Oil Billion bbls	Mean Gas Tcf
Total MMS EGoM moratoria resource *		3.98	22.16
Florida portion	Total from above table	3.90	21.53
Alabama portion	Difference with moratoria total	0.08	0.63

* As published in MMS, 2006, "Report to Congress: Comprehensive Inventory of U.S. OCS Oil and Natural Gas Resources," February, 2006.

Part 3. EGoM Off-Limits Resources for Modeling

	Mean Oil Billion bbls	Mean Gas Tcf	Alternative Oil billion bbls	Alternative Gas Tcf
Florida	3.9	21.5	18.7	51.6
Alabama	0.1	0.6	0.5	1.4
Total	4.0	22.1	19.2	53.0

Table 3 summarizes the allocation for the Eastern Gulf of Mexico moratoria resource by state on a “barrels of oil equivalent” (boe) basis for economic modeling.

Table 3 Eastern Gulf of Mexico Moratoria Allocation on BOE Basis

State	MMBOE	Percent of Atlantic Resource
Florida	7.71	97.4%
Alabama	0.21	2.6%
Total	7.91	100.0%

2.2 Atlantic OCS

In 2006, the MMS assessed the Atlantic OCS area as having 3.8 billion barrels of oil potential and 37 Tcf of natural gas potential. **Table 4** shows that most of the undiscovered gas potential for the Atlantic is in the North Atlantic (18 Tcf) and Mid-Atlantic (15 Tcf), while the South Atlantic was assessed at about 4 Tcf. The water depth distribution of resources is also shown. The right-hand columns show the total distribution by water depth. Almost one half of the assessed potential lies in waters of less than 200 meters.

MMS assessments are aggregations of “play” level assessments. While the MMS did not publish the 2006 assessment at the individual play level, a prior assessment was published with all the details at the play level. In that assessment,⁸ five plays were assessed quantitatively, and eleven total plays were described. The six plays that were not assessed were conceptual plays for which there was insufficient information or analogs to develop a quantitative assessment.

⁸ U.S. Minerals Management Service, 2000, “2000 Assessment of Conventionally Recoverable Hydrocarbon Resources of the Gulf of Mexico and Atlantic Outer Continental Shelf as of January 1, 1999,” MMS 2001-087, October, 2001.

Table 4 2006 MMS Atlantic OCS Oil and Gas Assessment

Water Depth Range	Prob.	North Atlantic			Mid Atlantic			South Atlantic			Total		
		OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)
0 to 200 Meters	95%	0.33	4.20	1.08	0.11	1.43	0.36	0.03	0.39	0.10	1.51	13.98	4.00
	Mean	1.08	9.82	2.83	0.34	3.28	0.93	0.09	0.88	0.24			
	5%	2.17	17.28	5.24	0.67	5.73	1.69	0.17	1.55	0.44			
200 to 800 Meters	95%	0.05	0.51	0.14	0.10	1.20	0.31	0.09	1.18	0.30	0.79	6.85	2.01
	Mean	0.16	1.25	0.38	0.34	2.87	0.85	0.29	2.73	0.78			
	5%	0.32	2.27	0.72	0.69	5.09	1.59	0.59	4.76	1.43			
800 to 1600 Meters	95%	0.04	0.42	0.11	0.05	0.65	0.17	0.01	0.07	0.02	0.34	3.20	0.92
	Mean	0.12	1.03	0.31	0.20	2.00	0.56	0.02	0.17	0.05			
	5%	0.25	1.84	0.58	0.41	3.73	1.07	0.04	0.31	0.10			
1600 to 2400 Meters	95%	0.06	0.73	0.19	0.07	0.95	0.24	0.00	0.02	0.01	0.50	5.36	1.46
	Mean	0.21	2.22	0.61	0.28	3.09	0.83	0.01	0.05	0.02			
	5%	0.42	4.12	1.15	0.54	5.76	1.57	0.01	0.09	0.03			
> 2400 Meters	95%	0.10	1.32	0.33	0.09	1.22	0.31	0.00	0.01	0.00	0.66	7.59	2.03
	Mean	0.33	3.66	0.99	0.33	3.90	1.03	0.00	0.03	0.01			
	5%	0.64	6.66	1.83	0.64	7.23	1.93	0.01	0.04	0.01			
Total	95%	0.57	7.18	1.85	0.43	5.44	1.39	0.13	1.67	0.43	1.12	14.30	3.67
	Mean	1.91	17.99	5.12	1.50	15.13	4.19	0.41	3.86	1.10			
	5%	3.80	32.17	9.52	2.96	27.53	7.85	0.81	6.76	2.01			

Notes:

- 1.) Resource values are in billion barrels of oil (Bbo) and trillion cubic feet of gas (Tcfg).
- 2.) 95% indicates a 95 percent chance of at least the amount listed, 5% indicates a 5% chance of at least the amount listed.
- 3.) Only mean values are additive. Some total mean values may not equal the sum of the component values due to independent rounding.
- 4.) Planning areas are based on 2006 Federal Outer Continental Shelf Administrative Boundaries. [\(Federal Register vol. 71, no. 1, pages 127-131\)](#)

In order to estimate the undiscovered Atlantic OCS resource by state, it was necessary to use several sources of MMS assessment data and maps. Sources of information were as follows:

- 2006 MMS oil and gas resource estimates for North, Mid-, and South Atlantic ⁹
- MMS map of aggregate geologic plays published in the 2000 assessment report ¹⁰
- MMS equidistant state offshore boundaries ¹¹
- MMS maps showing resource assessments by water depth interval. ¹²

Figure 8 is a map of the Atlantic offshore showing the offshore “equidistant” state boundaries and the aggregate MMS geologic play outline. The aggregate play outline represents the area with assessed oil and gas potential from at least one play. There may be potential outside of this boundary as well, but such areas were not specifically assessed.

Table 5 summarizes the ICF area analysis of the Atlantic OCS by state. For each state, three area measurements were made. These are designated as “a,” “b,” or “c” in the table.

- The “a” area is the area in square miles for each state between the western OCS boundary and the western boundary of the aggregate MMS play outline.
- The “b” area is the area for each state within the aggregate MMS play boundary. (This is the area considered to have oil and gas potential in the mean resource case).
- The “c” area is the area for each state between the eastern boundary of the MMS aggregate play area and the 200 nautical mile limit.

⁹ U.S. Minerals Management Service, 2006, “Report to Congress: Comprehensive Inventory of U.S. Oil and Natural Gas Resources – Energy Policy Act of 2005 Section 357,” [no report number], February, 2006. <http://www.mms.gov/revaldiv/RedNatAssessment.htm>

¹⁰ U.S. Minerals Management Service, 2000, “2000 Assessment of Conventionally Recoverable Hydrocarbon Resources of the Gulf of Mexico and Atlantic Outer Continental Shelf as of January 1, 1999,” MMS 2001-087, October, 2001.

¹¹ Federal Register, January 3, 2006 <http://edocket.access.gpo.gov/2006/pdf/05-24659.pdf>

¹² U.S. Minerals Management Service website <http://www.mms.gov/revaldiv/NatAssessmentMap.htm>

Figure 8 Map of Atlantic OCS Showing State Boundaries



Table 5 Details of ICF Area Analysis of Atlantic OCS Region

MMS Planning Area	State	Map Area	Area - Million Acres	Area - Th. Square Miles	MMS Planning Area	State	Map Area	Area - Million Acres	Area - Th. Square Miles
Northern Atlantic	Maine	1a	9.001	14.06	South Atlantic	South Carolina	11a	4.602	7.19
		1b	0.888	1.39			11b	7.626	11.92
		total	9.890	15.45			11c	5.690	8.89
	New Hampshire	2 total	0.060	0.09		total	17.918	27.996	
		Massachusetts	3a	5.059		7.91	Georgia	12a	1.957
	3b		28.196	44.06		12b		1.598	2.50
	3c		14.645	22.88		12c		0.604	0.94
	total		47.900	74.84		total		4.159	6.499
	Rhode Island	4a	0.419	0.66		Florida	13a	24.234	37.87
		4b	0.807	1.26			13b	0.059	0.09
		total	1.226	1.92			total	24.293	37.958
	New York	5a	1.258	1.97		South Total	46.370	72.45	
		5b	8.355	13.05		Area within play boundary (b)	9.283	14.51	
		5c	0.924	1.44					
		total	10.537	16.46		Straits of FL Straits of FL total	7.94	12.41	
New Jersey	6a	1.369	2.14	Total	218.59	341.55			
	6b	9.278	14.50						
	6c	3.141	4.91						
	total	13.787	21.54						
Northern total		83.400	130.31						
Area within play boundary (b)		47.523	74.26						
Mid-Atlantic	Delaware	7a	0.205	0.32					
		7b	0.074	0.12					
		total	0.279	0.435					
	Maryland	8a	0.490	0.77					
		8b	4.957	7.75					
		8c	4.139	6.47					
		total	9.586	14.978					
	Virginia	9a	2.434	3.80					
		9b	2.930	4.58					
		9c	0.417	0.65					
		total	5.782	9.034					
	North Carolina	9a	3.626	5.67					
		9b	23.450	36.64					
		9c	38.157	59.62					
		total	65.234	101.928					
Mid total		80.880	126.38						
Area within play boundary (b)		31.412	49.08						

Figure 9 is a detailed map showing the Mid-Atlantic region with the aggregate MMS play boundary and various water depth intervals. The water depth intervals are shaded on the map. Also shown on the map are distance-from-shoreline contours. The allocation of oil and gas resources in the Mid-Atlantic for the mean assessment was done in the following manner:

- All of the mean resources were assumed to be within the bold MMS play outline
- A surface area analysis was conducted to assign resources to the individual states based upon the square mile area within the intersection of each state offshore area, the geologic play boundary, and the assessed water depth interval.
- For the Alternative Resource, a different area analysis was carried out that assumed that the geologic potential extends out to the 200 mile limit – a much larger geographic area.

Table 6 summarizes Atlantic OCS oil and gas resource allocation by state. Shown in the table are both the Mean Resource and the Alternative Resource used for modeling.

Figure 9 Mid-Atlantic Map Showing State Boundaries and MMS Aggregate Play Outline

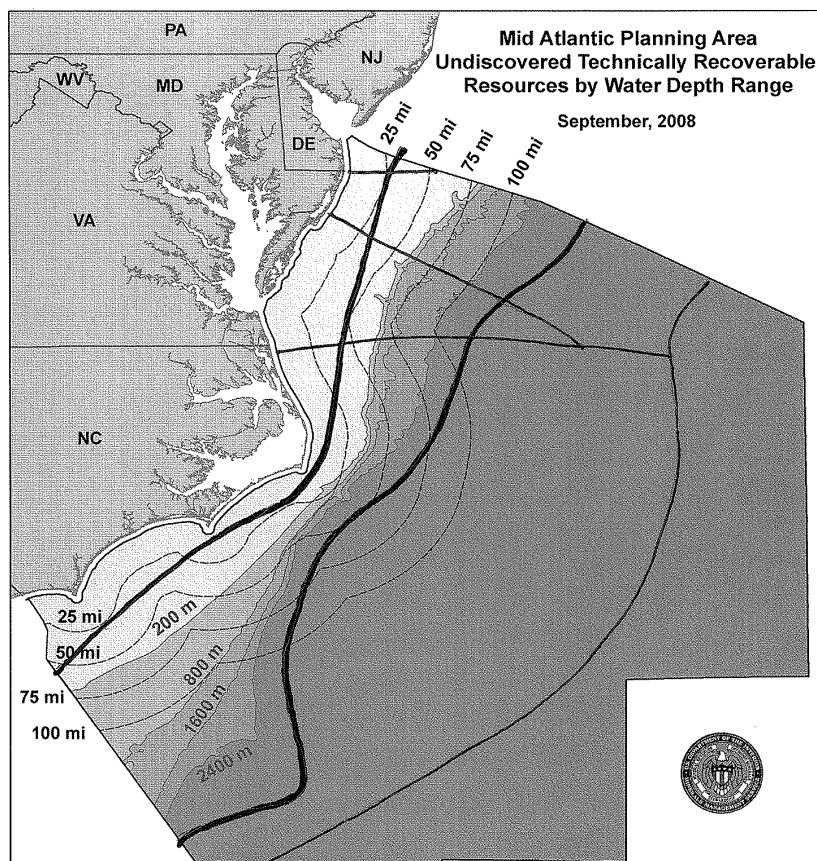


Table 6 Summary of Atlantic Oil and Gas Resources by State

Based on 2006 MMS Mean Resource, and ICF State Allocations Using MMS Area Controls, Water Depth Assessments Within Areas, and Aggregate MMS Play Boundary

		Mid Undiscovered Resources		Alternative Undiscovered Resources	
Allocation:		Area Within MMS Play Boundary by Wat. Depth		Total Area to 200 Mile Limit	
Area	State	Oil mmb	Gas bcf	Oil mmb	Gas bcf
Northern	Maine	32	290	1,087	5,119
	New Hampshire	0	0	7	31
	Massachusetts	1,117	10,507	5,265	24,795
	Rhode Island	40	358	135	637
	New York	356	3,356	1,159	5,456
	New Jersey	365	3,479	1,516	7,138
	total	1,910	17,990	9,168	43,176
Middle	Delaware	4	37	25	126
	Maryland	242	2,532	854	4,306
	Virginia	143	1,479	515	2,595
	North Carolina	1,111	11,082	5,807	29,286
	total	1,500	15,130	7,200	36,312
South	South Carolina	353	3,310	761	3,580
	Georgia	53	510	177	831
	Florida	4	40	1,031	4,853
	total	410	3,860	1,968	9,264
Atlantic OCS Total		3,820	36,990	18,336	88,752

Table 7 summarizes the Atlantic OCS state level resource allocation by state on a BOE basis.

Table 7 Atlantic OCS Resource Allocation on BOE Basis

Area	State	MMBOE	Percent of Atlantic Resource
Northern	Maine	83	0.8%
	New Hampshire	0	0.0%
	Massachusetts	2,977	28.7%
	Rhode Island	103	1.0%
	New York	950	9.2%
	New Jersey	981	9.5%
	total	5,094	
Middle	Delaware	11	0.1%
	Maryland	690	6.7%
	Virginia	405	3.9%
	North Carolina	3,072	29.6%
	total	4,178	
South	South Carolina	939	9.1%
	Georgia	143	1.4%
	Florida	11	0.1%
	total	1,093	
Atlantic OCS Total		10,365	100.0%

2.3 Pacific OCS

The MMS in 2006 assessed the mean undiscovered oil and gas potential of the Pacific OCS at 10.5 billion barrels of oil and 18.3 Tcf of natural gas. There are four planning areas in the Pacific OCS: Northern, Central, and Southern California, and Washington/Oregon. Therefore, the California component is known and does not require allocation. It was necessary, however, to estimate the share of oil and gas resources for Washington and Oregon.

Table 8 presents the details of the MMS assessment by area and water depth interval, and **Figure 10** shows the offshore equidistant state boundaries. Of the four planning areas, Southern California has the greatest remaining potential, at 5.7 billion barrels of oil and 10 Tcf of gas. Central and Southern California are roughly equivalent in resource potential, with Northern California having slightly more gas potential. The Washington/Oregon OCS area has significant natural gas potential.

The Pacific OCS area has a much narrower shelf than the Atlantic OCS, and the band of potential oil and gas production tends to be relatively narrow. In all three California regions, no potential was assessed in water depths greater than 2,400 meters, and in Washington/Oregon, all of the assessed potential occurs in water depths of less than 800 meters.

ICF estimated the remaining oil and gas resources to be attributed to Washington and Oregon by using play boundary maps and play level assessments from an MMS Pacific region assessment publication.¹³

Table 9 shows the ICF play level oil and gas resource allocation to Washington and Oregon. **Table 10** summarizes the ICF Pacific oil and gas allocation by state. The table shows the resource base for the Middle and Alternative Cases.

¹³ U.S. Minerals Management Service, "1995 Assessment of United States Oil and Gas Resources: Assessment of the Pacific Outer Continental Shelf Region," 1997, OCS Report MMS 97-0019. <http://www.mms.gov/itd/pubs/1997/97-0019.pdf>

Table 8 2006 MMS Pacific OCS Oil and Gas Assessment

Water Depth Range	Prob.	Washington/Oregon			Northern California			Central California			Southern California			Total		
		OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)	OIL (Bbo)	GAS (Tcfg)	BOE (Bbo)
0 to 200 Meters	95%	0.00	0.00	0.00	0.20	0.20	0.24	0.66	0.66	0.78	0.86	1.77	1.17	3.17	5.70	4.19
	Mean	0.30	1.67	0.60	0.40	0.42	0.48	1.48	1.59	1.76	0.99	2.02	1.35			
	5%	0.70	3.65	1.35	0.69	0.77	0.83	2.56	2.82	3.06	1.13	2.40	1.56			
200 to 800 Meters	95%	0.00	0.03	0.01	0.31	1.14	0.51	0.34	0.32	0.40	1.85	3.76	2.52	4.08	7.88	5.49
	Mean	0.10	0.60	0.21	0.56	1.70	0.86	0.64	0.66	0.76	2.78	4.92	3.66			
	5%	0.24	1.25	0.46	0.91	2.26	1.31	1.02	1.11	1.22	4.07	6.60	5.25			
800 to 1600 Meters	95%	n.a.			0.32	0.59	0.42	0.14	0.10	0.16	0.45	0.54	0.55	2.32	3.32	2.91
	Mean	n.a.			0.62	0.93	0.78	0.19	0.16	0.22	1.51	2.23	1.91			
	5%	n.a.			1.05	1.43	1.31	0.27	0.25	0.31	2.83	4.81	3.69			
1600 to 2400 Meters	95%	n.a.			0.25	0.25	0.29	n.a.			0.01	0.01	0.01	0.96	1.37	1.21
	Mean	n.a.			0.50	0.52	0.60	n.a.			0.46	0.85	0.61			
	5%	n.a.			0.86	0.96	1.04	n.a.			1.16	2.23	1.55			
> 2400 Meters	95%	n.a.			n.a.			n.a.			n.a.			0.00	0.00	0.00
	Mean	n.a.			n.a.			n.a.			n.a.					
	5%	n.a.			n.a.			n.a.			n.a.					
Total	95%	0.00	0.03	0.01	1.08	2.30	1.49	1.17	1.10	1.37	3.51	6.41	4.65	7.55	13.28	9.91
	Mean	0.40	2.28	0.81	2.08	3.58	2.71	2.31	2.41	2.74	5.74	10.03	7.52	10.53	18.29	13.79
	5%	0.94	4.89	1.81	3.55	5.17	4.47	3.76	4.06	4.49	8.53	14.69	11.14	13.94	24.12	18.24

Notes:

- 1.) Resource values are in billion barrels of oil (Bbo) and trillion cubic feet of gas (Tcfg).
- 2.) 95% indicates a 95 percent chance of at least the amount listed, 5% indicates a 5% chance of at least the amount listed.
- 3.) Only mean values are additive. Some total mean values may not equal the sum of the component values due to independent rounding.
- 4.) Planning areas are based on 2006 Federal Outer Continental Shelf Administrative Boundari ([Federal Register vol. 71, no. 1, pages 127-131](#))

Figure 10 Map of Pacific OCS Showing State Boundaries

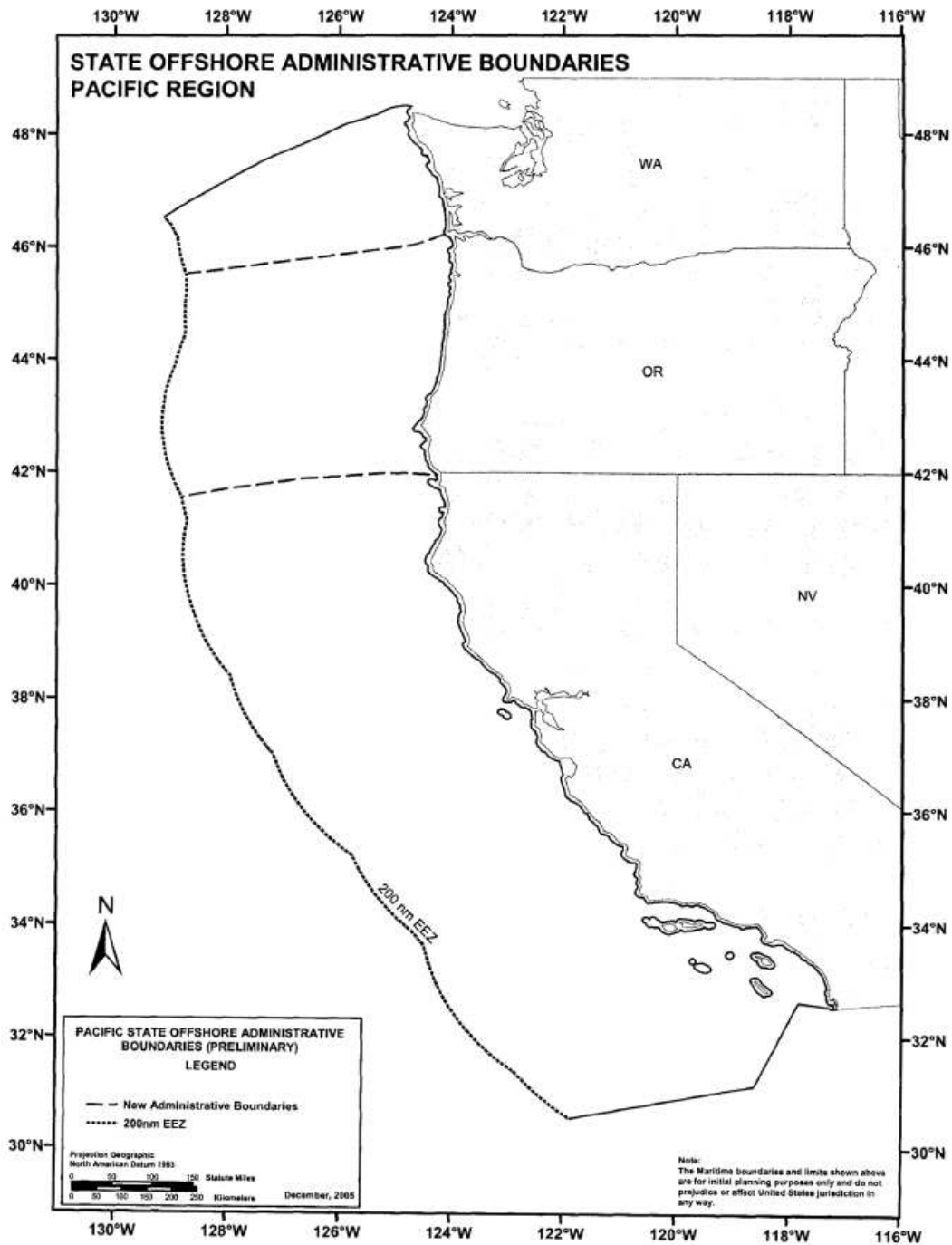


Table 9 Play Level Resource Allocation to Washington and Oregon

MMS Play No.	Scaled Play Assessment		WA %	OR %	WA	WA	OR	OR
	Oil MMB	Gas Bcf			Oil MMB	Gas Bcf	Oil MMB	Gas Bcf
1	124	446	100%	0%	124	446	0	0
2	110	874	40%	60%	44	350	66	525
3	155	591	40%	60%	62	236	93	354
4	10	369	10%	90%	1	37	9	332
5			30%	70%				
	400	2,280			231	1,069	169	1,211

Table 10 Summary of Pacific OCS Oil and Gas Resources by State

MMS Area	State	Mid Undiscovered Resources (MMS mean for all areas; ICF WA-OR allocation)		Alternative Undisc. (2.4 factor for oil and gas)	
		Oil mmb	Gas bcf	Oil mmb	Gas bcf
WA-OR					
	WA	231	1,069	554	2,566
	OR	169	1,211	406	2,906
total		400	2,280	960	5,472
Northern CA	CA	2,080	3,580	4,992	8,592
Central CA	CA	2,310	2,410	5,544	5,784
Southern CA	CA	5,740	10,030	13,776	24,072
CA Total		10,130	16,020	24,312	38,448
Pacific Total		10,530	18,300	25,272	43,920

Table 11 presents the final allocation of Pacific OCS resources by state on a barrels- of- oil equivalent (boe) basis.

Table 11 Allocation of Pacific OCS Resources by State on BOE Basis

State	MMBOE	Percent of Pacific Resource
Washington	420	3.1%
Oregon	383	2.8%
California	12,965	94.2%
total	13,769	100.0%

2.4 Rocky Mountain Region

The USGS Lower-48 and Rocky Mountain oil and gas undiscovered resource base assessment is at the individual geologic basin level. As discussed previously, ICF evaluated the 2008 Department of Interior land access study to develop a scenario of increased access to Rockies oil and gas resources.¹⁴ These resources were modeled for potential future oil and gas production and economic impacts.

Some of these basins are confined to one state, while other basins overlap state lines. An approximation method was used to estimate the portion of “new access” resources in each state. In developing these estimates, various maps from the 2008 BLM report were used. These included maps showing the areas of assessed remaining oil and gas potential, and maps showing land access restrictions. **Table 12** presents the results of the analysis on an oil and gas basis and **Table 13** shows the state resource allocation.

¹⁴ U.S. Departments of Interior, Agriculture, and Energy, 2008, “Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development - 2008,” Report BLM/WO/GI-03/002+3100REV08, www.blm.gov

Table 12 Allocation of New Access Basin Resources to Rocky Mountain States

Improved Access Resources			Percentage Allocation									
Basin	Gas Bcf	Oil MMB	Colorado	Wyoming	Utah	New Mex.	Montana	Nebraska	N. Dakota	S. Dakota	Idaho	Total
Denver Basin	16	2	60%	30%	0%	0%	0%	10%	0%	0%	0%	100%
Montana Thrust Belt	1,278	36	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
Paradox Basin	100	31	40%	0%	60%	0%	0%	0%	0%	0%	0%	100%
Powder River Basin	408	24	0%	80%	0%	0%	20%	0%	0%	0%	0%	100%
San Juan Basin	1,387	9	20%	0%	0%	80%	0%	0%	0%	0%	0%	100%
Southwestern Wyoming	4,337	142	18%	80%	2%	0%	0%	0%	0%	0%	0%	100%
Uinta-Piceance Basin	742	13	50%	50%	0%	0%	0%	0%	0%	0%	0%	100%
Williston Basin	103	60	0%	0%	0%	0%	35%	0%	60%	5%	0%	100%
Wyoming Thrust Belt	36	6	0%	70%	25%	0%	0%	0%	0%	0%	5%	100%
All Rockies	8,405	321										

Improved Access Gas Resource - Bcf												
	Colorado	Wyoming	Utah	New Mex.	Montana	Nebraska	N. Dakota	S. Dakota	Idaho	Total	%	
Denver Basin	9	5	0	0	0	2	0	0	0	16	0.2%	
Montana Thrust Belt	0	0	0	0	1,278	0	0	0	0	1,278	15.2%	
Paradox Basin	40	0	60	0	0	0	0	0	0	100	1.2%	
Powder River Basin	0	326	0	0	82	0	0	0	0	408	4.8%	
San Juan Basin	277	0	0	1,110	0	0	0	0	0	1,387	16.5%	
Southwestern Wyoming	781	3,469	87	0	0	0	0	0	0	4,337	51.6%	
Uinta-Piceance Basin	371	371	0	0	0	0	0	0	0	742	8.8%	
Williston Basin	0	0	0	0	36	0	62	5	0	103	1.2%	
Wyoming Thrust Belt	0	25	9	0	0	0	0	0	2	36	0.4%	
All Rockies	1,478	4,196	156	1,110	1,396	2	62	5	2	8,405	100.0%	

Improved Access Oil Resource - MMB												
	Colorado	Wyoming	Utah	New Mex.	Montana	Nebraska	N. Dakota	S. Dakota	Idaho	Total	%	
Denver Basin	1	0	0	0	0	0	0	0	0	2	0.5%	
Montana Thrust Belt	0	0	0	0	36	0	0	0	0	36	11.2%	
Paradox Basin	12	0	18	0	0	0	0	0	0	31	9.5%	
Powder River Basin	0	19	0	0	5	0	0	0	0	24	7.3%	
San Juan Basin	2	0	0	7	0	0	0	0	0	9	2.7%	
Southwestern Wyoming	25	113	3	0	0	0	0	0	0	142	44.1%	
Uinta-Piceance Basin	7	7	0	0	0	0	0	0	0	13	4.1%	
Williston Basin	0	0	0	0	21	0	36	3	0	60	18.7%	
Wyoming Thrust Belt	0	4	2	0	0	0	0	0	0	6	1.9%	
All Rockies	47	143	23	7	62	0	36	3	0	321	100.0%	

Table 13 Allocation of Rockies Resources by State on a BOE Basis

State	Oil mmb	Gas bcf	MMBOE	Percent of Rockies Resource
Colorado	47	1,478	308	17.1%
Wyoming	143	4,196	886	49.0%
Utah	23	156	50	2.8%
New Mex.	7	1,110	203	11.2%
Montana	62	1,396	309	17.1%
Nebraska	0	2	0	0.0%
N. Dakota	36	62	47	2.6%
S. Dakota	3	5	4	0.2%
Idaho	0	2	1	0.0%
Total	321	8,405	1,808	100.0%

This page intentionally blank

3 ECONOMIC IMPACTS BY STATE

3.1 Introduction

This chapter presents results for the amount of oil and gas production that would be expected for each relevant producing state and the economic impacts in those same producing states and in other states that would be expected to supply goods and services directly and indirectly to the oil and gas industry. Major economic impacts in the private sector are presented in terms of million dollars of **Output**, million dollars of **Total Value Added**, and **Number of Jobs** by state. Economic impacts are the sum of direct, indirect, and induced effects. The number of **Direct Jobs** is also presented.

The government sector impacts are presented in terms of government revenue that would be expected by state of production. As in the original report, estimated future government revenues are the sum of bonuses, severance tax, property tax, and income tax at the federal, state, and local levels. The revenue going to each level of government is combined and no attempt is made to break out state *versus* Federal revenues.

The reader is cautioned that there is considerable uncertainty surrounding these state allocations of annual and total impacts. These uncertainties stem from the 1) the inherent uncertainty in how much resource there is under any given area of land, 2) the unknown sequential order in which leasing, drilling and production will take place in the large OCS areas, 3) the manner in which OCS boundaries between states might be redrawn and/or revenue sharing algorithms among states developed and 4) how industries that directly and indirectly support oil and gas activity will be spread out among the states in the future.

3.2 Allocation of Production

Total area-wide production was computed in the original report by using Monte Carlo discovery process modeling for the OCS areas. For the smaller and geologically better understood ANWR area, it was assumed that fields would be found and developed based on rank order size from the largest to the smallest size. In all cases, the economics of exploration and development were computed and only economic resources were assumed

to be developed. The published results represent average or “expected value” results for production volumes and economic impacts.

In this addendum, production among the states is computed as the total expected production within each modeled area (e.g., Atlantic OCS) times the portion of the resource base that is assumed to exist within the borders of each state. For the Federal OCS areas, “borders” are the administrative boundaries the MMS uses for apportionment to each state. These allocation fractions among states are those shown in the prior section as **Tables 3** (Eastern GOM), **7** (Atlantic OCS), **11** (Pacific OCS) and **13** (Rockies). All of the potential production in ANWR is within the state of Alaska.

The production volumes estimated by applying the allocation fractions are presented in four tables below. Oil production for the Middle Resource Base is presented in **Table 14** and the corresponding values for gas production are in **Table 15**. The production values for the Alternative Resource Base are presented in **Table 16** for oil and in **Table 17** for natural gas. The values should be understood as being expected values or the average of several potential outcomes in terms of which states the resource is found in (given the assumed boundaries between states) and the order in which leasing, drilling and production take place among hundreds of potential OCS lease blocks. In other words, the actual future production will be “lumpy” in that only one field (associated with one state) would come onto production first, followed by another and then another. Therefore, actual production, particularly in the early years, is likely to be associated with fewer states than is indicated by the expected values presented here.

It should be remembered also that these expected values in **Tables 14 to 17** are based on the “equidistant” state boundary maps shown in the prior chapter for the Atlantic and other OCS areas. Some states have indicated a displeasure regarding how these borders are drawn and, so it is possible that these borders could be redrawn in the future. It is also possible that revenue sharing between the Federal government and the states could be done by a formula that, for example, allocates money from any given lease to several states based on their inverse distance to any one lease block. Of course, any such changes to the borders for sharing formulae would change how states are “credited” with production or revenues.

Table 14 Oil Production by State - Middle Resource

	Thousand Bbls per Year				Thousand Bbls per Day		
	Middle Resource				Middle Resource		
	2010	2020	2030	Cumulative	2010	2020	2030
ANWR - Alaska	0	168,489	296,439	3,181,000	0	462	812
Atlantic Offshore							
Maine	0	113	194	2,020	0	0	1
New Hampshire	0	0	0	0	0	0	0
Massachusetts	0	4,020	6,946	72,153	0	11	19
Rhode Island	0	140	241	2,505	0	0	1
New York	0	1,283	2,217	23,027	0	4	6
New Jersey	0	1,324	2,289	23,773	0	4	6
Delaware	0	14	25	256	0	0	0
Maryland	0	932	1,610	16,729	0	3	4
Virginia	0	547	945	9,811	0	1	3
North Carolina	0	4,149	7,169	74,474	0	11	20
South Carolina	0	1,268	2,191	22,757	0	3	6
Georgia	0	193	334	3,473	0	1	1
Florida	0	15	26	269	0	0	0
Total	0	13,997	24,187	251,247	0	38	66
Pacific Offshore							
Washington	0	907	1,734	17,066	0	2	5
Oregon	0	828	1,582	15,569	0	2	4
California	0	27,990	53,495	526,584	0	77	147
Total	0	29,725	56,810	559,219	0	81	156
EGOM Offshore							
Florida	0	15,965	22,851	278,186	0	44	63
Alabama	0	427	611	7,444	0	1	2
Total	0	16,392	23,462	285,630	0	45	64
OCS Total	0	60,114	104,459	1,096,096	0	165	286
Rockies							
Colorado	20	1,558	2,201	28,315	0	4	6
Wyoming	58	4,475	6,320	81,320	0	12	17
Utah	3	253	358	4,606	0	1	1
New Mex.	13	1,027	1,450	18,655	0	3	4
Montana	20	1,560	2,203	28,341	0	4	6
Nebraska	0	2	3	39	0	0	0
N. Dakota	3	237	335	4,309	0	1	1
S. Dakota	0	20	28	359	0	0	0
Idaho	0	3	4	56	0	0	0
Total	118	9,135	12,901	166,000	0	25	35
Sum of five areas	118	237,738	413,799	4,443,096	0	651	1,134

Table 15 Natural Gas Production by State - Middle Resource

	Bcf per Year				MMcf per Day		
	Middle Resource				Middle Resource		
	2010	2020	2030	Cumulative	2010	2020	2030
ANWR - Alaska	0	0	229	1,342	0	0	627
Atlantic Offshore							
Maine	0	1	2	18	0	3	5
New Hampshire	0	0	0	0	0	0	0
Massachusetts	0	33	67	649	0	90	183
Rhode Island	0	1	2	23	0	3	6
New York	0	11	21	207	0	29	58
New Jersey	0	11	22	214	0	30	60
Delaware	0	0	0	2	0	0	1
Maryland	0	8	15	150	0	21	42
Virginia	0	4	9	88	0	12	25
North Carolina	0	34	69	670	0	93	188
South Carolina	0	10	21	205	0	29	58
Georgia	0	2	3	31	0	4	9
Florida	0	0	0	2	0	0	1
Total	0	115	232	2,260	0	315	636
Pacific Offshore							
Washington	0	1	3	28	0	4	8
Oregon	0	1	3	25	0	4	7
California	0	44	87	849	0	121	237
Total	0	47	92	902	0	129	252
EGOM Offshore							
Florida	0	78	122	1,373	0	213	334
Alabama	0	2	3	37	0	6	9
Total	0	80	125	1,410	0	219	342
OCS Total	0	242	449	4,572	0	663	1,230
Rockies							
Colorado	1	31	42	557	2	86	115
Wyoming	2	90	121	1,601	5	247	332
Utah	0	5	7	91	0	14	19
New Mex.	0	21	28	367	1	57	76
Montana	1	31	42	558	2	86	116
Nebraska	0	0	0	1	0	0	0
N. Dakota	0	5	6	85	0	13	18
S. Dakota	0	0	1	7	0	1	1
Idaho	0	0	0	1	0	0	0
Total	4	184	247	3,268	11	504	677
Sum of five areas	4	426	925	9,182	11	1,167	2,534

Table 16 Oil Production by State - Alternative Resource

	Thousand Bbls per Year				Thousand Bbls per Day		
	Alternative Resource				Alternative Resource		
	2010	2020	2030	Cumulative	2010	2020	2030
ANWR - Alaska	0	252,325	397,912	4,629,000	0	691	1,090
Atlantic Offshore							
Maine	0	353	876	7,773	0	1	2
New Hampshire	0	0	0	0	0	0	0
Massachusetts	0	12,594	31,292	277,676	0	35	86
Rhode Island	0	437	1,087	9,642	0	1	3
New York	0	4,019	9,987	88,619	0	11	27
New Jersey	0	4,150	10,310	91,489	0	11	28
Delaware	0	45	111	984	0	0	0
Maryland	0	2,920	7,255	64,380	0	8	20
Virginia	0	1,713	4,255	37,759	0	5	12
North Carolina	0	12,999	32,299	286,610	0	36	88
South Carolina	0	3,972	9,870	87,580	0	11	27
Georgia	0	606	1,506	13,365	0	2	4
Florida	0	47	116	1,034	0	0	0
Total	0	43,855	108,965	966,911	0	120	299
Pacific Offshore							
Washington	0	1,422	3,426	31,106	0	4	9
Oregon	0	1,297	3,125	28,377	0	4	9
California	0	43,868	105,701	959,771	0	120	290
Total	0	46,587	112,252	1,019,253	0	128	308
EGOM Offshore							
Florida	0	59,330	104,458	1,101,272	0	163	286
Alabama	0	1,588	2,795	29,470	0	4	8
Total	0	60,918	107,253	1,130,742	0	167	294
OCS Total	0	151,360	328,470	3,116,906	0	415	900
Rockies							
Colorado	20	1,558	2,201	28,315	0	4	6
Wyoming	58	4,475	6,320	81,320	0	12	17
Utah	3	253	358	4,606	0	1	1
New Mex.	13	1,027	1,450	18,655	0	3	4
Montana	20	1,560	2,203	28,341	0	4	6
Nebraska	0	2	3	39	0	0	0
N. Dakota	3	237	335	4,309	0	1	1
S. Dakota	0	20	28	359	0	0	0
Idaho	0	3	4	56	0	0	0
Total	118	9,135	12,901	166,000	0	25	35
Sum of five areas	118	412,820	739,283	7,911,906	0	1,131	2,025

Table 17 Natural Gas Production by State - Alternative Resource

	Bcf per Year				MMcf per Day		
	Alternative Resource				Alternative Resource		
	2010	2020	2030	Cumulative	2010	2020	2030
ANWR - Alaska	0	0	630	2,941	0	0	1,726
Atlantic Offshore							
Maine	0	2	4	39	0	5	12
New Hampshire	0	0	0	0	0	0	0
Massachusetts	0	62	157	1,397	0	171	430
Rhode Island	0	2	5	48	0	6	15
New York	0	20	50	446	0	54	137
New Jersey	0	21	52	460	0	56	142
Delaware	0	0	1	5	0	1	2
Maryland	0	14	36	324	0	40	100
Virginia	0	8	21	190	0	23	59
North Carolina	0	64	162	1,441	0	176	444
South Carolina	0	20	50	440	0	54	136
Georgia	0	3	8	67	0	8	21
Florida	0	0	1	5	0	1	2
Total	0	217	547	4,863	0	595	1,499
Pacific Offshore							
Washington	0	2	6	52	0	7	16
Oregon	0	2	5	47	0	6	15
California	0	76	184	1,604	0	209	503
Total	0	81	195	1,703	0	222	534
EGOM Offshore							
Florida	0	166	322	3,282	0	454	883
Alabama	0	4	9	88	0	12	24
Total	0	170	331	3,370	0	466	907
OCS Total	0	468	1,073	9,936	0	1,282	2,940
Rockies							
Colorado	1	31	42	557	2	86	115
Wyoming	2	90	121	1,601	5	247	332
Utah	0	5	7	91	0	14	19
New Mex.	0	21	28	367	1	57	76
Montana	1	31	42	558	2	86	116
Nebraska	0	0	0	1	0	0	0
N. Dakota	0	5	6	85	0	13	18
S. Dakota	0	0	1	7	0	1	1
Idaho	0	0	0	1	0	0	0
Total	4	184	247	3,268	11	504	677
Sum of five areas	4	652	1,950	16,145	11	1,786	5,342

3.3 Allocation of Private Sector Economic Impacts Among States

To evaluate the economic impact on the U.S., the commercially available IMPLAN model was used to estimate how direct expenditures by the oil and gas sector would impact other sectors and total employment. Private sector economic impacts were evaluated for each area in terms of economic output, employment, and total value added. Government sector impacts are summarized in terms of tax and royalty revenue from the oil and gas sector in each geographic area.

Estimates were provided for direct, indirect, and induced activity. **“Direct output”** represents the value of the domestic goods and services purchased by the direct capital and operating expenditures for oil and gas industry operations. **“Indirect output”** represents the value of goods and services needed to support the creation of the goods and services purchased by those direct expenditures. **“Induced output”** is the amount of economic output coming from the spending of employee compensation and other household earnings of people involved in the direct and indirect activity. **“Value Added”** is the amount of economic value added by each industry and is the difference between each industry’s output and the cost of goods and services which that industry purchases. The sum of all value added by all industries is the contribution to **Gross Domestic Product**.

The EIA 2008 Annual Energy Outlook oil and gas price forecasts were used in the analysis. For drilling costs, the 2006 API Joint Association Survey was the primary data source. Another source of cost data was the 2003 NPC study, and assumptions used in that study were adjusted to 2006 costs.

Several different methods were used to estimate in which states economic activity would take place. The method depended on the region of production and which industry was being modeled. A summary of the allocation methods among states is presented in **Table 18** for the major IMPLAN industry groupings wherein substantial direct economic activity is expected. Industry groups are shown in rank order of estimated dollars output in 2030.

Table 18 Method of Allocation for Economic Activity Among States

Industry/ Commodity Code	Description	Allocation Rule Onshore	Allocation Rule Offshore
19	Oil and gas extraction	Allocated to state-of-production	Shifts over time away from Gulf Coast
28	Support activities for oil and gas operations	Allocated to state-of-production	Shifts over time away from Gulf Coast
27	Drilling oil and gas wells	Allocated to state-of-production	Shifts over time away from Gulf Coast
393	Water transportation	NA	Allocated to state-of-production
427	Insurance carriers	Based on current state production in NAICS code 5241	Based on current state production in NAICS code 5241
205	Iron- steel pipe and tube from purchased steel	Based on current state production in NAICS code 33121	Based on current state production in NAICS code 33121
261	Oil and gas field machinery and equipment	Based on current state production in NAICS code 333132	Based on current state production in NAICS code 333132
357	Ship building and repairing	NA	Shifts over time: ship building logic
191	Cement manufacturing	Allocated to state-of-production, but only if cement production already exists.	Allocated to state-of-production, but only if cement production already exists.
31	Natural gas distribution	Allocated to state-of-production	Allocated to state-of-production
40	Water- sewer- and pipeline construction	Allocated to state-of-production	Allocated to state-of-production
481	Food services and drinking places	Allocated to state-of-production	Allocated to state-of-production
439	Architectural and engineering services	Allocated to state-of-production	Shifts over time away from Gulf Coast
394	Truck transportation	Calculate weights using sum of direct activity by state	Calculate weights using sum of direct activity by state
391	Air transportation	Calculate weights using sum of direct activity by state	Calculate weights using sum of direct activity by state
142	Petroleum refineries	By refinery capacity in region	By refinery capacity in region
37	Manufacturing and industrial buildings	Allocated to state-of-production	Allocated to state-of-production
39	Highway- street- bridge- and tunnel construct	Allocated to state-of-production	Allocated to state-of-production
316	Industrial process variable instruments	Based on current state production in NAICS code 334513	Based on current state production in NAICS code 334513
399	Couriers and messengers	Allocated to state-of-production	Allocated to state-of-production
437	Legal services	Allocated to state-of-production	Allocated to state-of-production
288	Pump and pumping equipment manufacturing	Based on current state production in NAICS code 333911	Based on current state production in NAICS code 333911
321	Watch- clock- and other measuring and control	Based on current state production in NAICS code 334519	Based on current state production in NAICS code 334519
317	Totalizing fluid meters and counting devices	Based on current state production in NAICS code 334514	Based on current state production in NAICS code 334514
43	Maintenance and repair of nonresidential buil	Allocated to state-of-production	Allocated to state-of-production
422	Telecommunications	Allocated to state-of-production	Allocated to state-of-production
289	Air and gas compressor manufacturing	Based on current state production in NAICS code 333912	Based on current state production in NAICS code 333912
434	Machinery and equipment rental and leasing	Allocated to state-of-production	Shifts over time away from Gulf Coast
45	Other maintenance and repair construction	Allocated to state-of-production	Allocated to state-of-production
459	Other support services	Allocated to state-of-production	Allocated to state-of-production
30	Power generation and supply	Allocated to state-of-production	Allocated to state-of-production

For onshore drilling and production activity in Alaska and the Rockies, the direct and indirect economic activity related to oil and gas drilling, construction and production services was assumed to take place in the state containing the resource. On the other hand, materials and equipment (e.g., oil country tubular goods, pumps, compressors, wellheads, and pipelines) were assumed to come from whatever states now produce those items and in the proportion that now exists among the states. Data for these allocations among states came from the Bureau of Census statistics on number of employees and revenue for each industry (NAICS code) by state.¹⁵ The induced economic activity was calculated based on how the value added for the direct and indirect expenditures was spread among the states.

The calculations for the offshore regions were similar except that the economic activity related to oil and gas drilling, construction and production services was assumed to take place initially in the Gulf Coast states (chiefly Texas and Louisiana) rather than in the state containing the resource. The reasoning behind this is that the offshore support industry is now small or non-existent in the OCS moratoria states and so the initial drilling and production services would have to come from the Gulf Coast. However, it is assumed that as the offshore oil and gas industry matures in the OCS moratoria states, more of these services will originate in the state of production. For modeling purposes it was assumed that such activity would move from originating 100 percent from the Gulf Coast in 2010 to 50 percent Gulf Coast and 50 percent state of production in 2030.

The same logic for gradually shifting away from the Gulf Coast was used for U.S. construction of offshore production platforms in the OCS moratoria areas.¹⁶ However, it was assumed that such construction would only occur in states that now have substantial ship building capacity.

The estimated economic activity among states is shown in **Table 19** to **Table 33** for the Middle Resource Case. Data are the sum of direct, indirect and induced activity in all industry groups. The columns indicate which geographic areas of oil and gas activity are contributing to output, jobs and value added. **Tables 34 to 48** present the same data for the Alternative Resource Case.

¹⁵ http://www.census.gov/econ/census02/data/pa/PA000_48.HTM

¹⁶ The original report assumed that half of the value added for offshore production platforms would take place in the US and the other half would be imports from other countries. Therefore, the discussion here about allocations among states refers only to the U.S. economic activity.

Table 19 Middle Resource Case 2010: Output by State

2010 Middle Resource
Total Output (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	8	-	1	9
Alaska	-	-	0	-	0	0
Arizona	-	-	1	-	1	1
Arkansas	-	-	1	-	1	2
California	-	-	4	-	3	7
Colorado	-	-	0	-	41	41
Connecticut	-	-	1	-	0	1
Delaware	-	-	0	-	0	0
Florida	-	-	115	-	1	116
Georgia	-	-	1	-	0	1
Hawaii	-	-	0	-	0	0
Idaho	-	-	0	-	0	0
Illinois	-	-	3	-	2	5
Indiana	-	-	2	-	2	4
Iowa	-	-	0	-	0	1
Kansas	-	-	0	-	0	0
Kentucky	-	-	1	-	1	1
Louisiana	-	-	93	-	1	95
Maine	-	-	0	-	0	0
Maryland	-	-	0	-	0	1
Massachusetts	-	-	1	-	1	2
Michigan	-	-	3	-	2	4
Minnesota	-	-	1	-	1	2
Mississippi	-	-	6	-	0	6
Missouri	-	-	1	-	1	1
Montana	-	-	0	-	42	42
Nebraska	-	-	0	-	0	1
Nevada	-	-	0	-	0	0
New Hampshire	-	-	0	-	0	0
New Jersey	-	-	1	-	1	2
New Mexico	-	-	0	-	25	25
New York	-	-	1	-	1	2
North Carolina	-	-	1	-	1	2
North Dakota	-	-	0	-	7	7
Ohio	-	-	4	-	3	7
Oklahoma	-	-	1	-	1	2
Oregon	-	-	1	-	0	1
Pennsylvania	-	-	4	-	3	7
Rhode Island	-	-	0	-	0	0
South Carolina	-	-	1	-	0	1
South Dakota	-	-	0	-	1	1
Tennessee	-	-	1	-	1	2
Texas	-	-	237	-	6	244
Utah	-	-	0	-	10	10
Vermont	-	-	0	-	0	0
Virginia	-	-	1	-	1	2
Washington	-	-	0	-	0	1
West Virginia	-	-	0	-	0	1
Wisconsin	-	-	1	-	1	2
Wyoming	-	-	0	-	111	112
TOTAL	-	-	498	-	275	773

Table 20 Middle Resource Case 2010: Total Employment by State

2010 Middle Resource
Total Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	37	-	2	39
Alaska	-	-	0	-	0	0
Arizona	-	-	2	-	2	4
Arkansas	-	-	3	-	3	6
California	-	-	12	-	11	23
Colorado	-	-	2	-	197	198
Connecticut	-	-	3	-	2	4
Delaware	-	-	0	-	0	1
Florida	-	-	756	-	3	759
Georgia	-	-	2	-	2	4
Hawaii	-	-	0	-	0	0
Idaho	-	-	0	-	1	1
Illinois	-	-	8	-	8	16
Indiana	-	-	5	-	5	10
Iowa	-	-	1	-	1	3
Kansas	-	-	1	-	1	1
Kentucky	-	-	2	-	2	4
Louisiana	-	-	354	-	3	356
Maine	-	-	0	-	0	1
Maryland	-	-	2	-	1	3
Massachusetts	-	-	3	-	3	6
Michigan	-	-	7	-	5	12
Minnesota	-	-	4	-	3	7
Mississippi	-	-	20	-	0	21
Missouri	-	-	2	-	2	4
Montana	-	-	0	-	196	196
Nebraska	-	-	1	-	1	2
Nevada	-	-	0	-	0	0
New Hampshire	-	-	1	-	0	1
New Jersey	-	-	3	-	2	5
New Mexico	-	-	0	-	129	129
New York	-	-	4	-	3	8
North Carolina	-	-	2	-	2	4
North Dakota	-	-	0	-	29	29
Ohio	-	-	11	-	11	22
Oklahoma	-	-	2	-	4	6
Oregon	-	-	1	-	1	2
Pennsylvania	-	-	11	-	10	21
Rhode Island	-	-	0	-	0	1
South Carolina	-	-	1	-	1	2
South Dakota	-	-	0	-	3	3
Tennessee	-	-	3	-	3	6
Texas	-	-	820	-	17	837
Utah	-	-	1	-	33	34
Vermont	-	-	0	-	0	1
Virginia	-	-	3	-	2	5
Washington	-	-	1	-	1	2
West Virginia	-	-	1	-	1	2
Wisconsin	-	-	4	-	4	7
Wyoming	-	-	0	-	561	561
TOTAL	-	-	2,099	-	1,270	3,369

Table 21 Middle Resource Case 2010: Direct Employment by State

2010 Middle Resource
Direct Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	7	-	0	7
Alaska	-	-	-	-	0	0
Arizona	-	-	1	-	0	1
Arkansas	-	-	1	-	1	2
California	-	-	4	-	3	6
Colorado	-	-	0	-	40	41
Connecticut	-	-	1	-	0	1
Delaware	-	-	0	-	0	0
Florida	-	-	56	-	1	56
Georgia	-	-	0	-	0	1
Hawaii	-	-	-	-	0	0
Idaho	-	-	0	-	0	0
Illinois	-	-	2	-	2	4
Indiana	-	-	1	-	1	2
Iowa	-	-	0	-	0	0
Kansas	-	-	0	-	0	0
Kentucky	-	-	0	-	0	1
Louisiana	-	-	125	-	1	126
Maine	-	-	0	-	0	0
Maryland	-	-	0	-	0	0
Massachusetts	-	-	2	-	1	2
Michigan	-	-	2	-	1	3
Minnesota	-	-	1	-	1	2
Mississippi	-	-	6	-	0	6
Missouri	-	-	0	-	0	1
Montana	-	-	-	-	40	40
Nebraska	-	-	0	-	0	1
Nevada	-	-	0	-	0	0
New Hampshire	-	-	0	-	0	0
New Jersey	-	-	0	-	0	1
New Mexico	-	-	0	-	26	26
New York	-	-	1	-	1	2
North Carolina	-	-	0	-	0	0
North Dakota	-	-	-	-	6	6
Ohio	-	-	3	-	3	6
Oklahoma	-	-	1	-	1	2
Oregon	-	-	0	-	0	0
Pennsylvania	-	-	4	-	3	7
Rhode Island	-	-	0	-	0	0
South Carolina	-	-	0	-	0	0
South Dakota	-	-	0	-	1	1
Tennessee	-	-	1	-	1	1
Texas	-	-	269	-	6	274
Utah	-	-	0	-	7	7
Vermont	-	-	0	-	0	0
Virginia	-	-	0	-	0	1
Washington	-	-	0	-	0	0
West Virginia	-	-	0	-	0	0
Wisconsin	-	-	1	-	1	2
Wyoming	-	-	-	-	115	115
TOTAL	-	-	492	-	264	756

Table 22 Middle Resource Case 2010: Value Added by State

2010 Middle Resource
Total Value Added (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	5	-	0	5
Alaska	-	-	0	-	0	0
Arizona	-	-	0	-	0	0
Arkansas	-	-	0	-	0	1
California	-	-	1	-	1	3
Colorado	-	-	0	-	21	21
Connecticut	-	-	0	-	0	0
Delaware	-	-	0	-	0	0
Florida	-	-	63	-	0	64
Georgia	-	-	0	-	0	0
Hawaii	-	-	0	-	0	0
Idaho	-	-	0	-	0	0
Illinois	-	-	1	-	1	2
Indiana	-	-	1	-	1	1
Iowa	-	-	0	-	0	0
Kansas	-	-	0	-	0	0
Kentucky	-	-	0	-	0	0
Louisiana	-	-	59	-	0	59
Maine	-	-	0	-	0	0
Maryland	-	-	0	-	0	0
Massachusetts	-	-	0	-	0	1
Michigan	-	-	1	-	1	1
Minnesota	-	-	0	-	0	1
Mississippi	-	-	3	-	0	3
Missouri	-	-	0	-	0	0
Montana	-	-	0	-	21	21
Nebraska	-	-	0	-	0	0
Nevada	-	-	0	-	0	0
New Hampshire	-	-	0	-	0	0
New Jersey	-	-	0	-	0	1
New Mexico	-	-	0	-	13	14
New York	-	-	0	-	0	1
North Carolina	-	-	0	-	0	1
North Dakota	-	-	0	-	3	3
Ohio	-	-	1	-	1	2
Oklahoma	-	-	0	-	0	1
Oregon	-	-	0	-	0	0
Pennsylvania	-	-	1	-	1	3
Rhode Island	-	-	0	-	0	0
South Carolina	-	-	0	-	0	0
South Dakota	-	-	0	-	0	0
Tennessee	-	-	0	-	0	1
Texas	-	-	144	-	2	146
Utah	-	-	0	-	4	4
Vermont	-	-	0	-	0	0
Virginia	-	-	0	-	0	1
Washington	-	-	0	-	0	0
West Virginia	-	-	0	-	0	0
Wisconsin	-	-	0	-	0	1
Wyoming	-	-	0	-	59	59
TOTAL	-	-	287	-	135	422

Table 23 Middle Resource Case 2010: Dollars Value Added per Job by State

2010 Middle Resource
Total Value Added/Employment (2006\$/Job)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	122,647	-	112,186	122,129
Alaska	-	-	121,728	-	121,026	121,455
Arizona	-	-	107,290	-	101,939	104,923
Arkansas	-	-	117,926	-	106,302	111,934
California	-	-	112,680	-	103,981	108,621
Colorado	-	-	103,083	-	105,671	105,651
Connecticut	-	-	100,756	-	96,069	98,843
Delaware	-	-	128,969	-	122,740	126,486
Florida	-	-	83,821	-	102,413	83,891
Georgia	-	-	106,330	-	102,677	104,823
Hawaii	-	-	102,867	-	100,588	102,014
Idaho	-	-	126,918	-	111,589	116,659
Illinois	-	-	122,063	-	110,977	116,583
Indiana	-	-	131,440	-	123,474	127,604
Iowa	-	-	100,190	-	106,537	103,070
Kansas	-	-	94,745	-	98,486	96,359
Kentucky	-	-	128,555	-	120,695	124,968
Louisiana	-	-	165,735	-	127,767	165,433
Maine	-	-	120,839	-	115,652	118,743
Maryland	-	-	110,401	-	111,283	110,766
Massachusetts	-	-	94,752	-	90,331	92,862
Michigan	-	-	106,151	-	102,296	104,426
Minnesota	-	-	101,229	-	96,420	99,049
Mississippi	-	-	163,353	-	90,560	162,184
Missouri	-	-	112,927	-	102,802	107,905
Montana	-	-	142,124	-	106,180	106,194
Nebraska	-	-	88,358	-	93,384	90,719
Nevada	-	-	98,310	-	96,005	97,313
New Hampshire	-	-	97,897	-	94,950	96,611
New Jersey	-	-	123,207	-	112,525	118,471
New Mexico	-	-	118,170	-	104,796	104,822
New York	-	-	112,257	-	104,807	108,961
North Carolina	-	-	159,764	-	143,585	152,761
North Dakota	-	-	128,280	-	106,978	107,091
Ohio	-	-	120,860	-	109,581	115,234
Oklahoma	-	-	121,281	-	98,866	106,099
Oregon	-	-	126,935	-	117,400	122,474
Pennsylvania	-	-	124,506	-	112,648	118,724
Rhode Island	-	-	93,315	-	91,792	92,599
South Carolina	-	-	126,950	-	124,869	126,034
South Dakota	-	-	95,486	-	104,440	103,770
Tennessee	-	-	119,665	-	108,685	114,322
Texas	-	-	176,040	-	105,758	174,613
Utah	-	-	112,081	-	112,363	112,358
Vermont	-	-	97,876	-	93,893	96,167
Virginia	-	-	132,596	-	120,461	127,343
Washington	-	-	134,582	-	126,172	131,238
West Virginia	-	-	151,160	-	150,200	150,747
Wisconsin	-	-	113,906	-	106,217	110,189
Wyoming	-	-	163,192	-	105,186	105,215
TOTAL	-	-	136,871	-	105,920	125,203

Table 24 Middle Resource Case 2020: Output by State

2020 Middle Resource
Total Output (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	46	25	37	20	7	136
Alaska	5,617	0	0	0	0	5,617
Arizona	46	6	4	6	6	69
Arkansas	65	9	6	8	8	95
California	1,453	34	22	1,233	33	2,775
Colorado	150	3	2	3	439	598
Connecticut	53	5	4	5	5	73
Delaware	7	18	1	1	1	28
Florida	92	18	642	12	9	772
Georgia	46	22	4	5	6	84
Hawaii	2	0	0	0	0	3
Idaho	6	2	1	1	2	13
Illinois	213	26	17	23	27	306
Indiana	124	19	12	17	20	191
Iowa	35	4	3	4	5	51
Kansas	17	2	1	2	2	24
Kentucky	42	6	4	5	6	63
Louisiana	521	332	284	259	16	1,412
Maine	7	16	1	1	1	25
Maryland	29	86	3	4	4	124
Massachusetts	53	307	4	5	7	375
Michigan	127	18	12	17	20	194
Minnesota	81	8	6	8	9	112
Mississippi	7	40	33	29	1	110
Missouri	67	6	4	6	6	89
Montana	1	0	0	0	450	452
Nebraska	23	3	2	3	4	34
Nevada	4	0	0	0	0	5
New Hampshire	11	1	1	1	1	15
New Jersey	63	154	5	7	7	237
New Mexico	9	1	1	1	271	281
New York	116	125	9	12	12	274
North Carolina	58	319	6	8	9	400
North Dakota	4	1	0	0	72	78
Ohio	266	36	23	32	35	392
Oklahoma	473	11	7	9	12	512
Oregon	82	5	3	39	4	134
Pennsylvania	268	34	22	31	34	389
Rhode Island	9	12	1	1	1	23
South Carolina	25	117	4	5	4	155
South Dakota	6	1	0	1	6	14
Tennessee	74	9	6	8	9	107
Texas	2,148	735	624	589	70	4,166
Utah	13	1	1	1	106	123
Vermont	6	1	1	1	1	9
Virginia	54	80	5	7	8	155
Washington	249	3	2	66	3	323
West Virginia	15	3	2	2	3	24
Wisconsin	99	11	7	10	12	140
Wyoming	10	1	1	1	1,209	1,221
TOTAL	12,992	2,675	1,838	2,512	2,983	23,000

Table 25 Middle Resource Case 2020: Total Employment by State

2020 Middle Resource
Total Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	223	109	191	85	21	629
Alaska	24,953	0	0	0	0	24,954
Arizona	240	20	14	19	21	314
Arkansas	352	28	18	25	30	453
California	7,525	114	75	6,857	121	14,692
Colorado	908	12	8	11	2,159	3,098
Connecticut	303	22	15	21	23	384
Delaware	28	14	2	2	3	49
Florida	519	81	4,058	52	34	4,744
Georgia	227	118	13	18	20	397
Hawaii	11	1	1	1	1	14
Idaho	17	3	2	3	6	32
Illinois	1,099	84	55	76	89	1,403
Indiana	508	46	30	42	51	677
Iowa	155	13	9	12	15	203
Kansas	74	8	5	7	7	101
Kentucky	183	16	10	14	18	242
Louisiana	2,989	1,560	1,250	1,198	31	7,029
Maine	34	92	2	3	3	134
Maryland	143	490	9	13	14	670
Massachusetts	284	1,903	15	20	27	2,250
Michigan	560	53	35	49	59	755
Minnesota	454	31	21	29	36	572
Mississippi	30	206	161	149	4	549
Missouri	348	20	13	18	22	422
Montana	6	1	0	1	2,153	2,161
Nebraska	111	9	6	9	13	148
Nevada	23	2	1	2	2	29
New Hampshire	61	5	3	4	5	78
New Jersey	324	665	18	24	26	1,056
New Mexico	45	3	2	2	1,410	1,463
New York	622	700	31	43	43	1,440
North Carolina	209	1,961	14	19	20	2,223
North Dakota	14	2	1	1	319	337
Ohio	1,352	109	70	97	115	1,744
Oklahoma	2,843	36	23	32	45	2,980
Oregon	442	14	9	215	12	692
Pennsylvania	1,383	105	68	95	114	1,765
Rhode Island	48	72	2	3	4	129
South Carolina	93	662	9	13	10	787
South Dakota	25	2	1	2	29	59
Tennessee	364	27	18	25	29	463
Texas	12,400	3,021	2,439	2,385	191	20,436
Utah	64	5	3	4	366	442
Vermont	26	2	2	2	3	35
Virginia	260	421	17	24	26	748
Washington	1,140	10	7	295	10	1,462
West Virginia	49	6	4	6	7	72
Wisconsin	520	39	25	35	41	660
Wyoming	49	3	2	2	6,150	6,206
TOTAL	64,642	12,925	8,789	12,066	13,961	112,382

Table 26 Middle Resource Case 2020: Direct Employment by State

2020 Middle Resource
Direct Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	26	44	52	33	4	158
Alaska	11,318	0	0	0	0	11,318
Arizona	34	6	4	6	6	56
Arkansas	43	10	6	8	9	76
California	854	35	23	1,422	32	2,367
Colorado	110	3	2	3	461	579
Connecticut	47	7	5	7	7	72
Delaware	4	2	0	0	1	7
Florida	76	33	699	20	9	837
Georgia	30	23	3	4	4	64
Hawaii	1	0	0	0	0	2
Idaho	1	1	0	1	1	4
Illinois	143	28	18	25	23	237
Indiana	56	10	6	9	9	90
Iowa	19	3	2	3	2	29
Kansas	8	1	1	1	1	13
Kentucky	21	4	2	3	3	33
Louisiana	384	581	464	440	10	1,879
Maine	4	33	1	1	1	39
Maryland	16	95	2	2	2	116
Massachusetts	47	350	5	7	9	419
Michigan	73	14	9	13	14	123
Minnesota	69	11	7	10	11	109
Mississippi	2	105	81	74	0	262
Missouri	51	5	4	5	5	70
Montana	1	0	0	0	459	460
Nebraska	16	2	2	2	3	25
Nevada	3	0	0	0	0	5
New Hampshire	9	2	1	1	1	14
New Jersey	42	124	5	7	6	183
New Mexico	7	1	0	1	302	311
New York	90	140	9	13	10	262
North Carolina	23	356	3	4	2	387
North Dakota	1	0	0	0	67	69
Ohio	172	35	23	31	31	291
Oklahoma	385	16	10	14	16	441
Oregon	50	4	3	46	2	105
Pennsylvania	188	34	22	31	32	307
Rhode Island	7	15	1	1	1	25
South Carolina	8	128	2	2	1	141
South Dakota	4	0	0	0	6	11
Tennessee	46	8	5	8	7	75
Texas	1,717	943	762	744	68	4,235
Utah	9	1	1	1	77	88
Vermont	4	1	1	1	1	7
Virginia	29	130	3	5	4	171
Washington	119	2	1	85	1	209
West Virginia	3	0	0	0	1	5
Wisconsin	69	12	8	11	10	110
Wyoming	7	1	0	0	1,315	1,323
TOTAL	16,447	3,358	2,261	3,108	3,049	28,222

Table 27 Middle Resource Case 2020: Value Added by State

2020 Middle Resource
Total Value Added (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	21	13	20	10	2	66
Alaska	3,031	0	0	0	0	3,031
Arizona	21	2	1	2	2	29
Arkansas	31	3	2	3	3	43
California	693	13	8	686	13	1,413
Colorado	82	1	1	1	228	314
Connecticut	26	2	2	2	2	34
Delaware	3	3	0	0	0	6
Florida	45	8	360	6	3	423
Georgia	21	12	1	2	2	38
Hawaii	1	0	0	0	0	1
Idaho	2	0	0	0	1	4
Illinois	100	10	6	9	10	135
Indiana	51	6	4	5	6	72
Iowa	14	1	1	1	2	19
Kansas	7	1	0	1	1	9
Kentucky	18	2	1	2	2	25
Louisiana	269	205	168	160	4	806
Maine	3	8	0	0	0	12
Maryland	14	48	1	1	1	65
Massachusetts	25	176	1	2	2	207
Michigan	51	6	4	5	6	72
Minnesota	39	3	2	3	3	51
Mississippi	3	20	16	15	0	55
Missouri	31	2	1	2	2	38
Montana	1	0	0	0	229	230
Nebraska	10	1	1	1	1	13
Nevada	2	0	0	0	0	3
New Hampshire	5	0	0	0	0	7
New Jersey	30	66	2	3	3	103
New Mexico	4	0	0	0	148	153
New York	55	69	3	5	4	137
North Carolina	23	183	2	3	3	213
North Dakota	2	0	0	0	34	36
Ohio	123	13	8	11	13	168
Oklahoma	251	4	2	3	4	265
Oregon	41	2	1	22	1	66
Pennsylvania	127	13	8	11	13	172
Rhode Island	4	7	0	0	0	12
South Carolina	10	65	1	2	1	78
South Dakota	2	0	0	0	3	6
Tennessee	33	3	2	3	3	44
Texas	1,097	443	366	354	20	2,280
Utah	6	1	0	0	41	48
Vermont	2	0	0	0	0	3
Virginia	26	39	2	3	3	73
Washington	109	1	1	29	1	141
West Virginia	6	1	1	1	1	10
Wisconsin	47	4	3	4	4	62
Wyoming	5	0	0	0	648	654
TOTAL	6,619	1,460	1,009	1,376	1,479	11,944

Table 28 Middle Resource Case 2020: Dollars Value Added per Job by State

2020 Middle Resource
Total Value Added/Employment (2006\$/Job)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	93,663	118,558	102,954	121,271	111,339	105,119
Alaska	121,449	113,365	113,001	112,608	113,889	121,449
Arizona	89,401	110,467	109,826	109,772	101,202	93,683
Arkansas	88,343	117,207	117,196	116,951	106,320	94,029
California	92,128	111,804	111,580	99,993	103,412	96,144
Colorado	90,270	105,857	105,278	105,250	105,784	101,234
Connecticut	87,003	101,002	100,939	100,904	95,644	89,615
Delaware	99,104	187,082	124,288	124,037	119,254	127,085
Florida	87,203	100,531	88,796	108,049	101,236	89,124
Georgia	90,885	98,366	104,265	104,166	101,425	94,704
Hawaii	87,178	100,460	100,575	100,454	97,747	89,885
Idaho	108,354	123,237	123,251	122,986	110,890	112,772
Illinois	90,714	116,740	116,839	116,520	110,110	95,919
Indiana	100,043	130,002	129,751	129,532	122,604	106,921
Iowa	92,506	100,739	100,581	100,538	104,214	94,671
Kansas	90,289	95,181	95,304	95,280	97,318	91,752
Kentucky	97,925	125,313	125,261	124,993	119,711	104,134
Louisiana	90,051	131,145	134,405	133,596	126,724	114,649
Maine	94,977	86,935	119,892	119,754	112,241	90,917
Maryland	94,722	97,454	109,610	109,448	107,970	97,495
Massachusetts	86,400	92,668	97,540	97,651	90,740	91,929
Michigan	91,685	108,260	107,983	107,921	102,088	95,463
Minnesota	86,497	104,306	103,875	103,830	96,236	89,615
Mississippi	88,999	98,485	101,092	101,108	90,038	99,373
Missouri	87,712	107,494	107,574	107,367	101,908	90,881
Montana	107,394	130,529	130,079	129,523	106,280	106,301
Nebraska	85,790	93,037	92,715	92,829	93,222	87,604
Nevada	88,649	99,147	99,094	99,085	95,516	90,784
New Hampshire	87,742	95,606	99,438	99,455	94,804	89,769
New Jersey	92,344	98,660	114,928	114,593	110,486	97,653
New Mexico	89,171	112,172	112,035	111,814	104,957	104,502
New York	89,040	97,970	109,234	109,062	103,220	94,845
North Carolina	108,978	93,114	139,392	138,738	139,145	95,710
North Dakota	107,288	120,061	119,937	119,600	107,032	107,201
Ohio	90,943	118,084	118,127	117,873	109,278	96,449
Oklahoma	88,120	106,907	107,250	106,978	98,533	88,858
Oregon	92,144	120,264	120,374	100,201	115,536	95,998
Pennsylvania	91,598	121,613	121,515	121,263	112,102	97,457
Rhode Island	86,936	91,984	97,368	97,459	91,946	90,341
South Carolina	104,298	97,714	125,664	125,467	121,413	99,572
South Dakota	89,089	98,896	98,574	98,646	104,518	97,429
Tennessee	90,541	116,044	116,093	115,836	108,176	95,512
Texas	88,444	146,738	150,119	148,337	104,999	111,567
Utah	91,708	109,511	109,393	109,245	112,173	109,114
Vermont	88,780	106,714	105,680	105,892	94,178	92,339
Virginia	99,428	93,569	122,981	122,601	118,537	98,080
Washington	95,429	122,573	122,617	98,885	121,355	96,629
West Virginia	127,403	152,973	152,156	152,025	148,482	135,048
Wisconsin	89,553	111,141	111,091	110,859	105,312	93,767
Wyoming	97,347	137,227	138,634	138,022	105,332	105,306
TOTAL	102,397	112,999	114,853	114,059	105,946	106,283

Table 29 Middle Resource Case 2030: Output by State

2030 Middle Resource
Total Output (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	44	20	41	13	6	124
Alaska	5,631	0	0	0	0	5,632
Arizona	54	7	5	7	5	79
Arkansas	51	9	6	8	7	80
California	1,058	38	24	2,054	29	3,202
Colorado	155	4	3	4	378	544
Connecticut	76	7	4	7	6	100
Delaware	9	21	1	1	1	32
Florida	105	19	836	12	8	981
Georgia	59	32	4	7	6	108
Hawaii	3	0	0	0	0	4
Idaho	7	2	1	2	2	13
Illinois	211	28	18	28	23	307
Indiana	112	20	13	19	16	180
Iowa	43	5	3	5	5	61
Kansas	20	3	2	3	2	29
Kentucky	39	6	4	6	5	61
Louisiana	493	241	260	126	14	1,135
Maine	10	25	1	1	1	38
Maryland	40	124	3	5	4	176
Massachusetts	47	469	4	6	6	533
Michigan	124	20	13	20	17	194
Minnesota	87	10	6	10	8	121
Mississippi	9	27	31	13	1	81
Missouri	69	7	5	7	6	93
Montana	2	0	0	0	387	389
Nebraska	28	3	2	3	3	41
Nevada	6	1	0	1	0	7
New Hampshire	14	2	1	1	1	19
New Jersey	76	215	6	9	7	313
New Mexico	9	1	1	1	234	246
New York	142	180	10	16	11	359
North Carolina	65	487	6	10	8	577
North Dakota	5	1	0	1	62	68
Ohio	240	37	24	36	29	367
Oklahoma	433	12	7	11	11	474
Oregon	63	6	4	64	4	140
Pennsylvania	253	36	23	36	29	377
Rhode Island	10	18	1	1	1	31
South Carolina	29	168	4	6	4	210
South Dakota	6	1	0	1	5	14
Tennessee	71	10	6	10	8	105
Texas	1,989	553	570	307	63	3,482
Utah	14	2	1	2	89	107
Vermont	6	1	1	1	1	9
Virginia	63	120	6	9	7	205
Washington	173	4	2	107	3	290
West Virginia	14	3	2	3	2	23
Wisconsin	103	13	8	13	10	147
Wyoming	8	1	1	1	1,043	1,053
TOTAL	12,379	3,017	1,972	3,015	2,579	22,964

Table 30 Middle Resource Case 2030: Total Employment by State

2030 Middle Resource
Total Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	221	82	213	51	18	586
Alaska	25,398	0	0	0	0	25,399
Arizona	297	25	15	25	20	382
Arkansas	276	28	18	27	24	374
California	5,432	132	83	10,949	111	16,707
Colorado	951	15	9	15	1,898	2,888
Connecticut	451	30	18	30	25	555
Delaware	41	18	2	3	3	67
Florida	612	89	5,060	50	34	5,846
Georgia	316	163	16	25	21	540
Hawaii	21	1	1	1	1	25
Idaho	24	4	2	4	6	40
Illinois	1,127	94	59	93	79	1,452
Indiana	478	50	32	49	43	652
Iowa	219	16	10	17	15	277
Kansas	101	9	6	9	7	133
Kentucky	179	18	11	17	15	240
Louisiana	2,870	1,121	1,141	566	27	5,725
Maine	51	145	3	5	3	206
Maryland	224	686	11	19	15	955
Massachusetts	255	2,727	16	24	23	3,045
Michigan	566	59	38	58	51	772
Minnesota	503	38	24	38	33	635
Mississippi	42	136	150	67	4	398
Missouri	368	24	15	24	21	454
Montana	10	1	1	1	1,891	1,903
Nebraska	147	12	7	12	13	190
Nevada	34	2	1	2	2	42
New Hampshire	79	7	3	6	5	100
New Jersey	413	947	20	33	26	1,438
New Mexico	49	3	2	3	1,240	1,298
New York	804	974	36	59	45	1,918
North Carolina	268	2,812	16	25	20	3,140
North Dakota	20	2	1	2	282	307
Ohio	1,241	116	73	114	98	1,641
Oklahoma	2,631	40	25	39	40	2,775
Oregon	334	16	10	341	11	712
Pennsylvania	1,340	115	73	114	98	1,740
Rhode Island	60	104	3	4	4	175
South Carolina	124	924	10	16	10	1,083
South Dakota	29	2	1	2	26	60
Tennessee	355	30	19	30	26	461
Texas	11,627	2,254	2,218	1,203	174	17,476
Utah	71	6	3	6	320	406
Vermont	28	3	2	3	2	38
Virginia	322	631	19	31	25	1,028
Washington	766	14	8	496	11	1,294
West Virginia	49	7	4	7	6	73
Wisconsin	559	45	28	44	37	713
Wyoming	40	3	2	3	5,405	5,453
TOTAL	62,420	14,779	9,539	14,762	12,318	113,817

Table 31 Middle Resource Case 2030: Direct Employment by State

2030 Middle Resource
Direct Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	32	30	57	17	4	141
Alaska	11,515	0	0	0	0	11,515
Arizona	51	8	5	8	6	78
Arkansas	39	9	6	9	7	71
California	759	42	26	2,602	32	3,461
Colorado	134	4	3	4	437	583
Connecticut	82	10	6	10	9	117
Delaware	7	3	0	1	1	12
Florida	107	36	985	18	11	1,156
Georgia	52	36	4	6	5	103
Hawaii	4	0	0	0	0	5
Idaho	3	1	0	1	1	6
Illinois	180	31	20	31	23	284
Indiana	65	11	7	11	8	102
Iowa	35	4	3	4	3	49
Kansas	15	2	1	2	1	22
Kentucky	25	4	3	4	3	39
Louisiana	422	404	420	203	9	1,457
Maine	9	56	1	1	1	67
Maryland	35	151	2	4	3	195
Massachusetts	47	582	6	9	8	652
Michigan	87	16	10	16	13	142
Minnesota	89	13	8	13	11	136
Mississippi	5	64	74	31	0	175
Missouri	63	7	4	7	6	87
Montana	1	0	0	0	434	436
Nebraska	25	3	2	3	3	37
Nevada	6	1	0	1	1	8
New Hampshire	14	3	1	2	1	21
New Jersey	67	205	6	9	7	294
New Mexico	9	1	1	1	286	297
New York	140	218	11	19	13	401
North Carolina	39	595	3	5	3	646
North Dakota	3	0	0	0	64	68
Ohio	190	37	23	36	28	314
Oklahoma	401	18	11	17	15	461
Oregon	47	5	3	84	3	141
Pennsylvania	218	38	24	37	30	347
Rhode Island	11	25	1	1	1	39
South Carolina	17	203	2	3	1	226
South Dakota	5	1	0	1	6	12
Tennessee	55	9	6	9	7	86
Texas	1,816	701	692	382	67	3,656
Utah	12	1	1	1	72	88
Vermont	5	1	1	1	1	9
Virginia	47	216	4	7	5	279
Washington	99	3	2	162	2	268
West Virginia	5	1	0	1	1	7
Wisconsin	91	14	9	14	10	138
Wyoming	7	1	0	1	1,243	1,251
TOTAL	17,188	3,825	2,454	3,810	2,906	30,184

Table 32 Middle Resource Case 2030: Value Added by State

2030 Middle Resource
Total Value Added (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	20	10	22	6	2	60
Alaska	3,224	0	0	0	0	3,225
Arizona	26	3	2	3	2	35
Arkansas	24	3	2	3	3	35
California	503	14	9	1,177	11	1,715
Colorado	86	2	1	2	201	292
Connecticut	39	3	2	3	2	49
Delaware	4	3	0	0	0	8
Florida	53	9	477	5	3	547
Georgia	28	17	2	3	2	51
Hawaii	2	0	0	0	0	2
Idaho	2	0	0	0	1	4
Illinois	101	11	7	11	9	138
Indiana	47	6	4	6	5	69
Iowa	19	2	1	2	2	25
Kansas	9	1	1	1	1	12
Kentucky	17	2	1	2	2	25
Louisiana	261	148	152	75	3	640
Maine	5	13	0	1	0	19
Maryland	20	71	1	2	2	96
Massachusetts	22	275	2	2	2	303
Michigan	51	6	4	6	5	73
Minnesota	43	4	2	4	3	57
Mississippi	4	14	15	7	0	40
Missouri	32	3	2	3	2	41
Montana	1	0	0	0	201	202
Nebraska	12	1	1	1	1	17
Nevada	3	0	0	0	0	4
New Hampshire	7	1	0	1	0	9
New Jersey	37	99	2	4	3	145
New Mexico	4	0	0	0	131	136
New York	71	101	4	6	5	186
North Carolina	27	284	2	3	3	320
North Dakota	2	0	0	0	30	33
Ohio	112	13	9	13	11	158
Oklahoma	235	4	3	4	4	250
Oregon	31	2	1	36	1	72
Pennsylvania	122	14	9	13	11	169
Rhode Island	5	10	0	0	0	17
South Carolina	12	96	1	2	1	112
South Dakota	3	0	0	0	3	6
Tennessee	32	3	2	3	3	44
Texas	1,041	327	330	172	18	1,889
Utah	6	1	0	1	36	44
Vermont	2	0	0	0	0	3
Virginia	31	60	2	4	3	100
Washington	74	2	1	50	1	128
West Virginia	6	1	1	1	1	9
Wisconsin	49	5	3	5	4	66
Wyoming	4	0	0	0	571	576
TOTAL	6,575	1,646	1,081	1,646	1,306	12,254

Table 33 Middle Resource Case 2030: Dollars Value Added per Job by State

2030 Middle Resource
Total Value Added/Employment (2006\$/Job)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	92,132	119,984	103,599	119,810	109,878	103,183
Alaska	126,955	109,252	110,175	108,786	107,310	126,954
Arizona	87,954	107,918	108,183	107,488	100,234	91,967
Arkansas	88,378	115,136	115,703	114,770	106,157	94,791
California	92,602	109,624	110,091	107,480	102,565	102,640
Colorado	90,870	103,906	104,071	103,584	105,969	100,969
Connecticut	86,038	100,420	100,591	100,359	95,340	88,504
Delaware	93,794	178,756	121,255	119,812	115,055	119,375
Florida	86,570	97,345	94,193	106,250	99,798	93,579
Georgia	88,640	103,471	103,549	103,110	100,000	94,657
Hawaii	85,681	99,758	100,081	99,717	95,905	87,994
Idaho	99,336	120,699	121,420	120,333	109,882	106,011
Illinois	89,654	114,324	115,101	113,989	108,685	94,883
Indiana	98,338	127,244	127,845	126,774	121,050	105,637
Iowa	88,866	99,795	99,981	99,670	101,374	91,242
Kansas	87,828	95,313	95,393	95,354	95,939	89,651
Kentucky	96,095	122,828	123,523	122,453	118,030	102,644
Louisiana	91,095	132,146	133,437	133,008	124,972	111,873
Maine	90,839	89,748	117,168	115,975	108,472	91,250
Maryland	89,986	103,416	107,602	106,706	104,282	100,393
Massachusetts	86,810	100,747	97,405	97,490	91,464	99,466
Michigan	90,781	107,025	107,173	106,788	101,744	94,764
Minnesota	86,089	102,713	102,862	102,428	96,003	89,184
Mississippi	86,540	101,086	100,199	101,941	89,374	99,264
Missouri	87,343	105,771	106,347	105,579	100,735	90,587
Montana	96,908	124,492	125,915	123,725	106,440	106,412
Nebraska	85,094	93,042	92,829	92,989	93,072	86,910
Nevada	86,862	98,826	98,924	98,791	95,072	89,073
New Hampshire	86,689	94,094	99,296	99,205	94,748	88,752
New Jersey	90,141	104,940	113,157	112,047	107,933	101,025
New Mexico	88,255	109,451	110,148	109,110	105,224	104,611
New York	87,738	103,666	107,809	107,040	101,454	97,121
North Carolina	102,118	101,111	136,574	134,577	133,334	101,847
North Dakota	97,125	116,620	117,512	116,160	107,129	106,627
Ohio	90,469	116,060	116,679	115,748	108,663	96,282
Oklahoma	89,330	105,086	105,883	104,901	97,957	90,049
Oregon	92,148	117,626	118,461	107,004	112,836	100,516
Pennsylvania	90,815	119,050	119,723	118,655	111,125	96,862
Rhode Island	86,082	99,067	97,292	97,327	92,263	94,406
South Carolina	97,082	103,654	123,114	121,871	116,790	103,462
South Dakota	87,812	98,338	98,291	98,231	104,655	95,969
Tennessee	89,943	113,971	114,615	113,676	107,309	95,075
Texas	89,539	145,267	148,763	143,402	103,858	108,093
Utah	90,107	107,737	108,186	107,501	111,832	107,862
Vermont	88,163	105,040	104,738	104,640	94,683	91,794
Virginia	95,648	95,491	121,052	119,780	115,905	97,248
Washington	96,768	118,845	119,979	101,840	115,980	99,253
West Virginia	119,453	149,247	149,721	148,539	145,528	128,849
Wisconsin	88,525	109,057	109,622	108,756	103,953	92,710
Wyoming	97,393	135,130	136,931	135,138	105,572	105,554
TOTAL	105,333	111,376	113,362	111,524	105,990	107,665

Table 34 Alternative Resource Case 2010: Output by State

2010 Alternative Resource (High Resource for ANWR)
Total Output (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	8	-	1	9
Alaska	-	-	0	-	0	0
Arizona	-	-	1	-	1	1
Arkansas	-	-	1	-	1	2
California	-	-	4	-	3	7
Colorado	-	-	0	-	41	41
Connecticut	-	-	1	-	0	1
Delaware	-	-	0	-	0	0
Florida	-	-	115	-	1	116
Georgia	-	-	1	-	0	1
Hawaii	-	-	0	-	0	0
Idaho	-	-	0	-	0	0
Illinois	-	-	3	-	2	5
Indiana	-	-	2	-	2	4
Iowa	-	-	0	-	0	1
Kansas	-	-	0	-	0	0
Kentucky	-	-	1	-	1	1
Louisiana	-	-	93	-	1	95
Maine	-	-	0	-	0	0
Maryland	-	-	0	-	0	1
Massachusetts	-	-	1	-	1	2
Michigan	-	-	3	-	2	4
Minnesota	-	-	1	-	1	2
Mississippi	-	-	6	-	0	6
Missouri	-	-	1	-	1	1
Montana	-	-	0	-	42	42
Nebraska	-	-	0	-	0	1
Nevada	-	-	0	-	0	0
New Hampshire	-	-	0	-	0	0
New Jersey	-	-	1	-	1	2
New Mexico	-	-	0	-	25	25
New York	-	-	1	-	1	2
North Carolina	-	-	1	-	1	2
North Dakota	-	-	0	-	7	7
Ohio	-	-	4	-	3	7
Oklahoma	-	-	1	-	1	2
Oregon	-	-	1	-	0	1
Pennsylvania	-	-	4	-	3	7
Rhode Island	-	-	0	-	0	0
South Carolina	-	-	1	-	0	1
South Dakota	-	-	0	-	1	1
Tennessee	-	-	1	-	1	2
Texas	-	-	237	-	6	244
Utah	-	-	0	-	10	10
Vermont	-	-	0	-	0	0
Virginia	-	-	1	-	1	2
Washington	-	-	0	-	0	1
West Virginia	-	-	0	-	0	1
Wisconsin	-	-	1	-	1	2
Wyoming	-	-	0	-	111	112
TOTAL	-	-	498	-	275	773

Table 35 Alternative Resource Case 2010: Total Employment by State

2010 Alternative Resource (High Resource for ANWR)
Total Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	37	-	2	39
Alaska	-	-	0	-	0	0
Arizona	-	-	2	-	2	4
Arkansas	-	-	3	-	3	6
California	-	-	12	-	11	23
Colorado	-	-	2	-	197	198
Connecticut	-	-	3	-	2	4
Delaware	-	-	0	-	0	1
Florida	-	-	756	-	3	759
Georgia	-	-	2	-	2	4
Hawaii	-	-	0	-	0	0
Idaho	-	-	0	-	1	1
Illinois	-	-	8	-	8	16
Indiana	-	-	5	-	5	10
Iowa	-	-	1	-	1	3
Kansas	-	-	1	-	1	1
Kentucky	-	-	2	-	2	4
Louisiana	-	-	354	-	3	356
Maine	-	-	0	-	0	1
Maryland	-	-	2	-	1	3
Massachusetts	-	-	3	-	3	6
Michigan	-	-	7	-	5	12
Minnesota	-	-	4	-	3	7
Mississippi	-	-	20	-	0	21
Missouri	-	-	2	-	2	4
Montana	-	-	0	-	196	196
Nebraska	-	-	1	-	1	2
Nevada	-	-	0	-	0	0
New Hampshire	-	-	1	-	0	1
New Jersey	-	-	3	-	2	5
New Mexico	-	-	0	-	129	129
New York	-	-	4	-	3	8
North Carolina	-	-	2	-	2	4
North Dakota	-	-	0	-	29	29
Ohio	-	-	11	-	11	22
Oklahoma	-	-	2	-	4	6
Oregon	-	-	1	-	1	2
Pennsylvania	-	-	11	-	10	21
Rhode Island	-	-	0	-	0	1
South Carolina	-	-	1	-	1	2
South Dakota	-	-	0	-	3	3
Tennessee	-	-	3	-	3	6
Texas	-	-	820	-	17	837
Utah	-	-	1	-	33	34
Vermont	-	-	0	-	0	1
Virginia	-	-	3	-	2	5
Washington	-	-	1	-	1	2
West Virginia	-	-	1	-	1	2
Wisconsin	-	-	4	-	4	7
Wyoming	-	-	0	-	561	561
TOTAL	-	-	2,099	-	1,270	3,369

Table 36 Alternative Resource Case 2010: Direct Employment by State

2010 Alternative Resource (High Resource for ANWR)
Direct Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	7	-	0	7
Alaska	-	-	-	-	0	0
Arizona	-	-	1	-	0	1
Arkansas	-	-	1	-	1	2
California	-	-	4	-	3	6
Colorado	-	-	0	-	40	41
Connecticut	-	-	1	-	0	1
Delaware	-	-	0	-	0	0
Florida	-	-	56	-	1	56
Georgia	-	-	0	-	0	1
Hawaii	-	-	-	-	0	0
Idaho	-	-	0	-	0	0
Illinois	-	-	2	-	2	4
Indiana	-	-	1	-	1	2
Iowa	-	-	0	-	0	0
Kansas	-	-	0	-	0	0
Kentucky	-	-	0	-	0	1
Louisiana	-	-	125	-	1	126
Maine	-	-	0	-	0	0
Maryland	-	-	0	-	0	0
Massachusetts	-	-	2	-	1	2
Michigan	-	-	2	-	1	3
Minnesota	-	-	1	-	1	2
Mississippi	-	-	6	-	0	6
Missouri	-	-	0	-	0	1
Montana	-	-	-	-	40	40
Nebraska	-	-	0	-	0	1
Nevada	-	-	0	-	0	0
New Hampshire	-	-	0	-	0	0
New Jersey	-	-	0	-	0	1
New Mexico	-	-	0	-	26	26
New York	-	-	1	-	1	2
North Carolina	-	-	0	-	0	0
North Dakota	-	-	-	-	6	6
Ohio	-	-	3	-	3	6
Oklahoma	-	-	1	-	1	2
Oregon	-	-	0	-	0	0
Pennsylvania	-	-	4	-	3	7
Rhode Island	-	-	0	-	0	0
South Carolina	-	-	0	-	0	0
South Dakota	-	-	0	-	1	1
Tennessee	-	-	1	-	1	1
Texas	-	-	269	-	6	274
Utah	-	-	0	-	7	7
Vermont	-	-	0	-	0	0
Virginia	-	-	0	-	0	1
Washington	-	-	0	-	0	0
West Virginia	-	-	0	-	0	0
Wisconsin	-	-	1	-	1	2
Wyoming	-	-	-	-	115	115
TOTAL	-	-	492	-	264	756

Table 37 Alternative Resource Case 2010: Value Added by State

2010 Alternative Resource (High Resource for ANWR)
Total Value Added (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	5	-	0	5
Alaska	-	-	0	-	0	0
Arizona	-	-	0	-	0	0
Arkansas	-	-	0	-	0	1
California	-	-	1	-	1	3
Colorado	-	-	0	-	21	21
Connecticut	-	-	0	-	0	0
Delaware	-	-	0	-	0	0
Florida	-	-	63	-	0	64
Georgia	-	-	0	-	0	0
Hawaii	-	-	0	-	0	0
Idaho	-	-	0	-	0	0
Illinois	-	-	1	-	1	2
Indiana	-	-	1	-	1	1
Iowa	-	-	0	-	0	0
Kansas	-	-	0	-	0	0
Kentucky	-	-	0	-	0	0
Louisiana	-	-	59	-	0	59
Maine	-	-	0	-	0	0
Maryland	-	-	0	-	0	0
Massachusetts	-	-	0	-	0	1
Michigan	-	-	1	-	1	1
Minnesota	-	-	0	-	0	1
Mississippi	-	-	3	-	0	3
Missouri	-	-	0	-	0	0
Montana	-	-	0	-	21	21
Nebraska	-	-	0	-	0	0
Nevada	-	-	0	-	0	0
New Hampshire	-	-	0	-	0	0
New Jersey	-	-	0	-	0	1
New Mexico	-	-	0	-	13	14
New York	-	-	0	-	0	1
North Carolina	-	-	0	-	0	1
North Dakota	-	-	0	-	3	3
Ohio	-	-	1	-	1	2
Oklahoma	-	-	0	-	0	1
Oregon	-	-	0	-	0	0
Pennsylvania	-	-	1	-	1	3
Rhode Island	-	-	0	-	0	0
South Carolina	-	-	0	-	0	0
South Dakota	-	-	0	-	0	0
Tennessee	-	-	0	-	0	1
Texas	-	-	144	-	2	146
Utah	-	-	0	-	4	4
Vermont	-	-	0	-	0	0
Virginia	-	-	0	-	0	1
Washington	-	-	0	-	0	0
West Virginia	-	-	0	-	0	0
Wisconsin	-	-	0	-	0	1
Wyoming	-	-	0	-	59	59
TOTAL	-	-	287	-	135	422

Table 38 Alternative Resource Case 2010: Dollars Value Added per Job by State

2010 Alternative Resource (High Resource for ANWR)
Total Value Added/Employment (2006\$/Job)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	-	-	122,647	-	112,186	122,129
Alaska	-	-	121,728	-	121,026	121,455
Arizona	-	-	107,290	-	101,939	104,923
Arkansas	-	-	117,926	-	106,302	111,934
California	-	-	112,680	-	103,981	108,621
Colorado	-	-	103,083	-	105,671	105,651
Connecticut	-	-	100,756	-	96,069	98,843
Delaware	-	-	128,969	-	122,740	126,486
Florida	-	-	83,821	-	102,413	83,891
Georgia	-	-	106,330	-	102,677	104,823
Hawaii	-	-	102,867	-	100,588	102,014
Idaho	-	-	126,918	-	111,589	116,659
Illinois	-	-	122,063	-	110,977	116,583
Indiana	-	-	131,440	-	123,474	127,604
Iowa	-	-	100,190	-	106,537	103,070
Kansas	-	-	94,745	-	98,486	96,359
Kentucky	-	-	128,555	-	120,695	124,968
Louisiana	-	-	165,735	-	127,767	165,433
Maine	-	-	120,839	-	115,652	118,743
Maryland	-	-	110,401	-	111,283	110,766
Massachusetts	-	-	94,752	-	90,331	92,862
Michigan	-	-	106,151	-	102,296	104,426
Minnesota	-	-	101,229	-	96,420	99,049
Mississippi	-	-	163,353	-	90,560	162,184
Missouri	-	-	112,927	-	102,802	107,905
Montana	-	-	142,124	-	106,180	106,194
Nebraska	-	-	88,358	-	93,384	90,719
Nevada	-	-	98,310	-	96,005	97,313
New Hampshire	-	-	97,897	-	94,950	96,611
New Jersey	-	-	123,207	-	112,525	118,471
New Mexico	-	-	118,170	-	104,796	104,822
New York	-	-	112,257	-	104,807	108,961
North Carolina	-	-	159,764	-	143,585	152,761
North Dakota	-	-	128,280	-	106,978	107,091
Ohio	-	-	120,860	-	109,581	115,234
Oklahoma	-	-	121,281	-	98,866	106,099
Oregon	-	-	126,935	-	117,400	122,474
Pennsylvania	-	-	124,506	-	112,648	118,724
Rhode Island	-	-	93,315	-	91,792	92,599
South Carolina	-	-	126,950	-	124,869	126,034
South Dakota	-	-	95,486	-	104,440	103,770
Tennessee	-	-	119,665	-	108,685	114,322
Texas	-	-	176,040	-	105,758	174,613
Utah	-	-	112,081	-	112,363	112,358
Vermont	-	-	97,876	-	93,893	96,167
Virginia	-	-	132,596	-	120,461	127,343
Washington	-	-	134,582	-	126,172	131,238
West Virginia	-	-	151,160	-	150,200	150,747
Wisconsin	-	-	113,906	-	106,217	110,189
Wyoming	-	-	163,192	-	105,186	105,215
TOTAL	-	-	136,871	-	105,920	125,203

Table 39 Alternative Resource Case 2020: Output by State

2020 Alternative Resource (High Resource for ANWR)
Total Output (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	66	47	70	28	7	217
Alaska	7,940	0	0	0	0	7,940
Arizona	65	12	8	8	6	100
Arkansas	91	17	10	11	8	137
California	2,040	65	44	1,682	33	3,864
Colorado	211	6	5	4	439	665
Connecticut	75	11	8	7	5	106
Delaware	10	32	1	1	1	45
Florida	134	34	1,270	18	9	1,464
Georgia	66	41	8	7	6	129
Hawaii	3	0	0	0	0	4
Idaho	9	3	2	2	2	18
Illinois	302	50	33	33	27	445
Indiana	177	36	24	24	20	280
Iowa	50	7	5	5	5	73
Kansas	24	4	3	3	2	36
Kentucky	59	11	7	7	6	91
Louisiana	746	581	502	346	16	2,192
Maine	10	31	2	2	1	45
Maryland	41	156	6	5	4	211
Massachusetts	75	567	7	7	7	664
Michigan	180	35	23	24	20	282
Minnesota	115	16	11	11	9	163
Mississippi	10	76	62	42	1	191
Missouri	98	12	8	8	6	133
Montana	2	0	0	0	450	453
Nebraska	33	5	4	4	4	49
Nevada	6	1	1	1	0	8
New Hampshire	16	2	2	1	1	22
New Jersey	90	281	11	10	7	399
New Mexico	13	2	1	1	271	287
New York	168	229	18	18	12	444
North Carolina	83	590	11	11	9	706
North Dakota	6	1	1	1	72	80
Ohio	378	68	44	45	35	571
Oklahoma	686	21	14	14	12	747
Oregon	115	10	7	54	4	191
Pennsylvania	381	66	43	44	34	567
Rhode Island	13	22	1	1	1	38
South Carolina	36	212	7	7	4	266
South Dakota	9	1	1	1	6	18
Tennessee	106	18	12	12	9	156
Texas	3,124	1,239	1,074	771	70	6,279
Utah	20	3	2	2	106	132
Vermont	8	2	1	1	1	13
Virginia	78	151	10	10	8	256
Washington	348	6	4	92	3	453
West Virginia	21	5	3	3	3	35
Wisconsin	142	22	15	15	12	206
Wyoming	15	2	1	1	1,209	1,227
TOTAL	18,490	4,811	3,411	3,406	2,983	33,101

Table 40 Alternative Resource Case 2020: Total Employment by State

2020 Alternative Resource (High Resource for ANWR)
Total Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	316	206	372	119	21	1,034
Alaska	35,926	0	0	0	0	35,927
Arizona	337	40	28	27	21	454
Arkansas	496	55	34	35	30	650
California	10,563	225	154	9,499	121	20,563
Colorado	1,277	23	17	16	2,159	3,491
Connecticut	427	44	34	30	23	558
Delaware	40	25	4	3	3	75
Florida	754	161	8,131	76	34	9,156
Georgia	324	221	29	26	20	620
Hawaii	15	2	1	1	1	21
Idaho	24	7	4	4	6	46
Illinois	1,559	167	112	110	89	2,036
Indiana	727	90	59	59	51	986
Iowa	221	25	19	17	15	297
Kansas	107	15	11	10	7	150
Kentucky	262	31	21	21	18	352
Louisiana	4,285	2,825	2,276	1,635	31	11,052
Maine	47	181	5	5	3	242
Maryland	203	913	21	19	14	1,170
Massachusetts	405	3,581	28	28	27	4,069
Michigan	793	102	69	69	59	1,091
Minnesota	645	61	43	42	36	828
Mississippi	43	405	308	215	4	976
Missouri	515	40	28	27	22	633
Montana	9	1	1	1	2,153	2,165
Nebraska	157	18	13	12	13	213
Nevada	32	3	3	2	2	43
New Hampshire	87	10	6	6	5	114
New Jersey	462	1,253	38	35	26	1,814
New Mexico	68	5	4	4	1,410	1,491
New York	902	1,309	68	63	43	2,385
North Carolina	303	3,692	29	28	20	4,072
North Dakota	20	3	2	2	319	346
Ohio	1,918	213	139	140	115	2,526
Oklahoma	4,121	75	49	48	45	4,338
Oregon	621	29	19	299	12	979
Pennsylvania	1,963	206	137	136	114	2,555
Rhode Island	68	137	5	4	4	218
South Carolina	133	1,232	19	19	10	1,413
South Dakota	37	3	2	2	29	74
Tennessee	520	54	36	36	29	675
Texas	18,057	5,260	4,322	3,179	191	31,010
Utah	95	9	6	6	366	482
Vermont	37	5	3	3	3	51
Virginia	370	810	36	34	26	1,276
Washington	1,593	21	16	416	10	2,056
West Virginia	70	11	8	8	7	104
Wisconsin	743	77	53	51	41	965
Wyoming	74	5	3	3	6,150	6,237
TOTAL	92,772	23,887	16,826	16,633	13,961	164,079

Table 41 Alternative Resource Case 2020: Direct Employment by State

2020 Alternative Resource (High Resource for ANWR)
Direct Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	36	84	103	46	4	274
Alaska	16,493	0	0	0	0	16,494
Arizona	48	12	9	8	6	84
Arkansas	61	18	11	12	9	112
California	1,216	69	49	2,012	32	3,378
Colorado	156	6	5	4	461	633
Connecticut	66	14	11	10	7	108
Delaware	5	4	1	1	1	11
Florida	112	67	1,533	29	9	1,751
Georgia	42	45	7	6	4	105
Hawaii	2	0	0	0	0	3
Idaho	2	2	1	1	1	6
Illinois	204	55	37	36	23	355
Indiana	81	19	13	13	9	135
Iowa	27	6	5	4	2	44
Kansas	12	3	2	2	1	20
Kentucky	31	7	5	5	3	50
Louisiana	560	1,057	835	603	10	3,065
Maine	6	66	1	1	1	76
Maryland	23	183	4	3	2	215
Massachusetts	67	692	10	10	9	788
Michigan	103	27	19	18	14	181
Minnesota	98	21	15	15	11	161
Mississippi	3	207	153	108	0	471
Missouri	76	11	8	8	5	109
Montana	1	0	0	0	459	460
Nebraska	23	4	3	3	3	37
Nevada	4	1	1	1	0	7
New Hampshire	13	4	2	2	1	21
New Jersey	60	246	11	10	6	332
New Mexico	11	2	1	1	302	316
New York	131	271	21	19	10	453
North Carolina	34	706	6	6	2	753
North Dakota	2	1	0	0	67	70
Ohio	246	67	44	44	31	432
Oklahoma	570	32	21	21	16	661
Oregon	70	8	6	66	2	153
Pennsylvania	268	66	44	44	32	454
Rhode Island	10	30	2	1	1	44
South Carolina	12	247	4	3	1	267
South Dakota	5	1	1	1	6	14
Tennessee	67	16	11	11	7	112
Texas	2,553	1,639	1,334	990	68	6,585
Utah	13	2	2	1	77	95
Vermont	6	2	1	1	1	11
Virginia	42	259	8	7	4	320
Washington	168	5	4	124	1	302
West Virginia	5	1	1	1	1	7
Wisconsin	100	24	17	16	10	166
Wyoming	11	1	1	1	1,315	1,329
TOTAL	23,957	6,309	4,382	4,330	3,049	42,028

Table 42 Alternative Resource Case 2020: Value Added by State

2020 Alternative Resource (High Resource for ANWR)
Total Value Added (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	30	23	37	14	2	106
Alaska	4,294	0	0	0	0	4,294
Arizona	30	4	3	3	2	43
Arkansas	44	6	4	4	3	61
California	972	25	17	932	13	1,959
Colorado	115	2	2	2	228	349
Connecticut	37	4	3	3	2	50
Delaware	4	5	0	0	0	10
Florida	66	16	707	8	3	800
Georgia	29	21	3	3	2	58
Hawaii	1	0	0	0	0	2
Idaho	3	1	1	1	1	5
Illinois	141	19	13	13	10	196
Indiana	73	12	8	8	6	106
Iowa	20	3	2	2	2	28
Kansas	10	1	1	1	1	14
Kentucky	26	4	3	3	2	37
Louisiana	385	355	295	213	4	1,251
Maine	5	15	1	1	0	21
Maryland	19	86	2	2	1	111
Massachusetts	35	324	3	3	2	367
Michigan	73	11	7	7	6	105
Minnesota	56	6	4	4	3	74
Mississippi	4	38	30	21	0	94
Missouri	45	4	3	3	2	57
Montana	1	0	0	0	229	230
Nebraska	13	2	1	1	1	19
Nevada	3	0	0	0	0	4
New Hampshire	8	1	1	1	0	10
New Jersey	43	120	4	4	3	174
New Mexico	6	1	0	0	148	155
New York	80	125	7	7	4	223
North Carolina	33	336	4	4	3	379
North Dakota	2	0	0	0	34	37
Ohio	174	25	16	16	13	244
Oklahoma	362	8	5	5	4	385
Oregon	57	3	2	29	1	94
Pennsylvania	180	25	16	16	13	250
Rhode Island	6	12	0	0	0	20
South Carolina	14	117	2	2	1	137
South Dakota	3	0	0	0	3	7
Tennessee	47	6	4	4	3	65
Texas	1,592	743	625	460	20	3,440
Utah	9	1	1	1	41	52
Vermont	3	1	0	0	0	5
Virginia	37	74	4	4	3	122
Washington	152	3	2	40	1	198
West Virginia	9	2	1	1	1	14
Wisconsin	66	8	6	6	4	91
Wyoming	7	1	0	0	648	657
TOTAL	9,423	2,600	1,853	1,854	1,479	17,210

Table 43 Alternative Resource Case 2020: Dollars Value Added per Job by State

2020 Alternative Resource (High Resource for ANWR)
Total Value Added/Employment (2006\$/Job)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	93,683	113,152	99,274	117,640	111,339	102,694
Alaska	119,525	111,144	109,405	111,471	113,889	119,525
Arizona	89,486	109,785	108,221	109,528	101,202	94,215
Arkansas	88,280	116,057	115,313	116,375	106,320	94,411
California	92,033	110,791	109,766	98,119	103,412	95,250
Colorado	90,182	105,504	104,189	105,164	105,784	100,067
Connecticut	87,064	100,629	100,349	100,714	95,644	90,021
Delaware	99,334	181,641	120,669	123,102	119,254	129,826
Florida	87,059	97,797	86,942	105,979	101,236	87,353
Georgia	90,912	95,878	103,149	103,773	101,425	94,135
Hawaii	87,196	99,738	99,630	100,050	97,747	90,291
Idaho	108,472	121,595	120,695	122,105	110,890	113,151
Illinois	90,662	115,145	114,348	115,651	110,110	96,160
Indiana	99,930	128,786	127,482	128,927	122,604	107,124
Iowa	92,459	100,317	99,824	100,342	104,214	94,624
Kansas	90,194	95,032	95,219	95,192	97,318	91,721
Kentucky	97,783	123,933	122,941	124,267	119,711	104,184
Louisiana	89,794	125,729	129,515	130,052	126,724	113,219
Maine	95,105	85,245	116,885	119,052	112,241	88,888
Maryland	94,794	94,606	107,477	109,001	107,970	95,261
Massachusetts	86,480	90,486	97,700	97,876	90,740	90,189
Michigan	91,769	107,982	107,241	107,843	102,088	95,829
Minnesota	86,488	103,984	102,969	103,755	96,236	89,945
Mississippi	89,030	94,411	97,715	98,047	90,038	96,000
Missouri	87,490	106,203	105,658	106,642	101,908	90,817
Montana	107,479	127,409	124,774	127,883	106,280	106,313
Nebraska	85,820	93,545	93,194	93,168	93,222	87,796
Nevada	88,751	98,960	98,776	98,995	95,516	91,135
New Hampshire	87,783	95,344	99,202	99,411	94,804	90,007
New Jersey	92,336	96,150	112,208	113,573	110,486	96,056
New Mexico	88,818	110,530	109,410	110,921	104,957	104,271
New York	88,937	95,232	107,314	108,450	103,220	93,692
North Carolina	108,642	90,916	134,412	136,644	139,145	93,097
North Dakota	107,320	118,127	116,705	118,548	107,032	107,286
Ohio	90,909	116,831	116,126	117,209	109,278	96,780
Oklahoma	87,853	105,174	104,804	105,926	98,533	88,654
Oregon	92,093	118,486	117,613	98,431	115,536	95,577
Pennsylvania	91,557	120,199	119,139	120,525	112,102	97,796
Rhode Island	86,958	89,927	97,464	97,631	91,946	89,357
South Carolina	104,202	94,862	122,837	124,768	121,413	96,700
South Dakota	88,973	98,929	98,405	98,724	104,518	96,098
Tennessee	90,477	114,706	113,991	115,118	108,176	95,742
Texas	88,141	141,162	144,637	144,834	104,999	110,926
Utah	91,445	108,534	107,750	108,728	112,173	107,934
Vermont	88,960	107,151	105,481	106,313	94,178	93,085
Virginia	99,485	90,987	119,896	121,419	118,537	95,641
Washington	95,411	120,013	118,710	96,864	121,355	96,259
West Virginia	127,303	152,228	149,888	151,745	148,482	135,065
Wisconsin	89,490	109,959	109,147	110,244	105,312	93,969
Wyoming	96,185	133,561	134,077	135,671	105,332	105,280
TOTAL	101,572	108,865	110,134	111,467	105,946	104,887

Table 44 Alternative Resource Case 2030: Output by State

2030 Alternative Resource (High Resource for ANWR)
Total Output (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	50	41	91	19	6	207
Alaska	6,423	0	0	0	0	6,423
Arizona	63	16	11	11	5	107
Arkansas	54	18	12	12	7	102
California	1,096	85	56	3,061	29	4,328
Colorado	177	9	6	6	378	577
Connecticut	92	18	12	12	6	140
Delaware	11	42	2	2	1	57
Florida	126	43	1,955	20	8	2,152
Georgia	71	69	11	11	6	168
Hawaii	4	1	1	1	0	6
Idaho	8	4	2	3	2	19
Illinois	239	62	41	42	23	408
Indiana	126	42	28	29	16	241
Iowa	52	11	8	8	5	83
Kansas	24	6	4	4	2	41
Kentucky	45	13	9	9	5	82
Louisiana	564	478	531	181	14	1,768
Maine	11	55	2	2	1	72
Maryland	49	265	8	8	4	333
Massachusetts	53	1,024	9	9	6	1,101
Michigan	141	44	29	30	17	260
Minnesota	101	22	15	15	8	162
Mississippi	10	55	65	20	1	152
Missouri	82	17	11	11	6	128
Montana	2	1	0	0	387	390
Nebraska	33	8	5	6	3	56
Nevada	7	1	1	1	0	10
New Hampshire	16	4	2	2	1	26
New Jersey	90	462	14	15	7	588
New Mexico	11	2	2	2	234	250
New York	172	386	25	26	11	620
North Carolina	77	1,064	15	15	8	1,180
North Dakota	5	1	1	1	62	71
Ohio	268	80	52	54	29	483
Oklahoma	499	27	17	18	11	571
Oregon	66	12	8	96	4	187
Pennsylvania	285	79	52	54	29	499
Rhode Island	12	40	2	2	1	57
South Carolina	34	358	8	9	4	413
South Dakota	8	2	1	1	5	17
Tennessee	81	22	15	15	8	140
Texas	2,305	1,077	1,140	438	63	5,022
Utah	17	4	3	3	89	115
Vermont	7	2	1	1	1	12
Virginia	74	256	14	14	7	365
Washington	175	9	6	160	3	353
West Virginia	15	6	4	4	2	31
Wisconsin	119	29	19	20	10	197
Wyoming	9	2	1	1	1,043	1,057
TOTAL	14,059	6,375	4,327	4,487	2,579	31,827

Table 45 Alternative Resource Case 2030: Total Employment by State

2030 Alternative Resource (High Resource for ANWR)
Total Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	251	172	488	76	18	1,006
Alaska	29,651	1	0	0	0	29,652
Arizona	349	59	39	40	20	507
Arkansas	293	60	39	41	24	456
California	5,617	308	203	16,726	111	22,965
Colorado	1,090	37	24	25	1,898	3,074
Connecticut	547	77	51	52	25	753
Delaware	49	38	5	6	3	101
Florida	735	204	12,086	82	34	13,142
Georgia	383	366	42	42	21	854
Hawaii	26	4	2	2	1	35
Idaho	29	8	5	6	6	55
Illinois	1,290	217	142	147	79	1,875
Indiana	543	110	72	75	43	844
Iowa	265	41	27	28	15	377
Kansas	124	23	15	15	7	184
Kentucky	205	39	26	27	15	312
Louisiana	3,299	2,295	2,392	827	27	8,841
Maine	62	319	7	8	3	399
Maryland	274	1,518	31	31	15	1,869
Massachusetts	286	6,108	35	36	23	6,487
Michigan	646	132	87	90	51	1,006
Minnesota	586	88	59	60	33	826
Mississippi	50	285	319	100	4	759
Missouri	443	60	39	40	21	604
Montana	12	2	1	1	1,891	1,907
Nebraska	175	28	19	19	13	255
Nevada	41	6	4	4	2	57
New Hampshire	95	17	9	9	5	136
New Jersey	494	2,122	53	54	26	2,749
New Mexico	60	8	5	5	1,240	1,319
New York	976	2,164	96	99	45	3,380
North Carolina	325	6,304	40	41	20	6,730
North Dakota	25	5	3	3	282	318
Ohio	1,387	257	168	174	98	2,084
Oklahoma	3,038	96	62	64	40	3,299
Oregon	350	37	24	521	11	944
Pennsylvania	1,517	260	171	176	98	2,223
Rhode Island	72	234	7	7	4	323
South Carolina	150	2,038	24	25	10	2,247
South Dakota	35	5	3	3	26	72
Tennessee	407	69	45	47	26	594
Texas	13,528	4,527	4,575	1,750	174	24,554
Utah	86	13	9	9	320	437
Vermont	32	6	4	4	2	49
Virginia	383	1,381	49	50	25	1,888
Washington	765	34	23	755	11	1,588
West Virginia	56	14	10	10	6	96
Wisconsin	651	105	69	71	37	934
Wyoming	48	6	4	4	5,405	5,468
TOTAL	71,801	32,311	21,715	22,490	12,318	160,636

Table 46 Alternative Resource Case 2030: Direct Employment by State

2030 Alternative Resource (High Resource for ANWR)
Direct Employment (Number of Jobs)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	37	62	131	26	4	260
Alaska	13,656	0	0	0	0	13,657
Arizona	62	19	13	13	6	113
Arkansas	43	19	13	13	7	95
California	827	98	65	4,036	32	5,058
Colorado	160	11	7	8	437	623
Connecticut	103	27	18	18	9	175
Delaware	8	7	1	1	1	19
Florida	134	82	2,540	29	11	2,795
Georgia	65	85	11	11	5	178
Hawaii	5	1	1	1	0	8
Idaho	4	2	1	1	1	10
Illinois	214	72	47	49	23	405
Indiana	77	25	16	17	8	143
Iowa	45	12	8	8	3	75
Kansas	19	6	4	4	1	33
Kentucky	30	9	6	6	3	55
Louisiana	505	812	856	293	9	2,475
Maine	11	120	2	2	1	136
Maryland	45	346	8	8	3	408
Massachusetts	54	1,363	12	13	8	1,450
Michigan	103	36	24	24	13	199
Minnesota	107	31	21	21	11	193
Mississippi	6	132	151	45	0	334
Missouri	79	18	12	12	6	128
Montana	2	0	0	0	434	437
Nebraska	31	8	5	6	3	54
Nevada	7	2	1	1	1	12
New Hampshire	17	6	3	3	1	31
New Jersey	84	481	16	16	7	603
New Mexico	11	3	2	2	286	302
New York	176	503	32	32	13	756
North Carolina	50	1,399	9	9	3	1,471
North Dakota	4	1	1	1	64	70
Ohio	220	81	53	55	28	436
Oklahoma	482	42	27	28	15	594
Oregon	52	11	7	130	3	203
Pennsylvania	256	85	56	58	30	485
Rhode Island	13	58	2	2	1	77
South Carolina	21	462	5	5	1	495
South Dakota	6	1	1	1	6	15
Tennessee	65	21	14	14	7	121
Texas	2,201	1,399	1,403	555	67	5,625
Utah	15	4	2	2	72	96
Vermont	6	2	1	1	1	12
Virginia	59	467	11	12	5	553
Washington	104	9	6	245	2	366
West Virginia	6	2	1	1	1	10
Wisconsin	110	34	22	23	10	199
Wyoming	8	2	1	1	1,243	1,255
TOTAL	20,404	8,478	5,651	5,863	2,906	43,302

Table 47 Alternative Resource Case 2030: Value Added by State

2030 Alternative Resource (High Resource for ANWR)
Total Value Added (Million 2006\$)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	23	20	49	9	2	102
Alaska	3,734	0	0	0	0	3,734
Arizona	31	6	4	4	2	47
Arkansas	26	7	4	5	3	44
California	520	33	22	1,743	11	2,329
Colorado	99	4	3	3	201	309
Connecticut	47	8	5	5	2	67
Delaware	5	7	1	1	0	13
Florida	63	20	1,100	9	3	1,195
Georgia	34	36	4	4	2	81
Hawaii	2	0	0	0	0	3
Idaho	3	1	1	1	1	6
Illinois	115	24	16	16	9	180
Indiana	53	14	9	9	5	90
Iowa	23	4	3	3	2	35
Kansas	11	2	1	1	1	17
Kentucky	20	5	3	3	2	32
Louisiana	300	292	308	107	3	1,012
Maine	6	28	1	1	0	36
Maryland	25	150	3	3	2	183
Massachusetts	25	592	3	3	2	626
Michigan	59	14	9	10	5	97
Minnesota	50	9	6	6	3	75
Mississippi	4	28	31	10	0	74
Missouri	39	6	4	4	2	55
Montana	1	0	0	0	201	203
Nebraska	15	3	2	2	1	22
Nevada	4	1	0	0	0	5
New Hampshire	8	2	1	1	0	12
New Jersey	44	214	6	6	3	273
New Mexico	5	1	1	1	131	138
New York	85	215	10	10	5	325
North Carolina	33	613	5	5	3	659
North Dakota	2	1	0	0	30	34
Ohio	125	29	19	20	11	204
Oklahoma	271	10	6	7	4	298
Oregon	32	4	3	54	1	95
Pennsylvania	137	30	20	21	11	219
Rhode Island	6	22	1	1	0	30
South Carolina	14	202	3	3	1	223
South Dakota	3	0	0	0	3	7
Tennessee	36	8	5	5	3	57
Texas	1,209	631	653	243	18	2,755
Utah	8	1	1	1	36	47
Vermont	3	1	0	0	0	5
Virginia	36	128	6	6	3	179
Washington	74	4	3	75	1	157
West Virginia	7	2	1	1	1	12
Wisconsin	57	11	7	8	4	88
Wyoming	5	1	1	1	571	577
TOTAL	7,539	3,443	2,346	2,433	1,306	17,066

Table 48 Alternative Resource Case 2030: Dollars Value Added per Job by State

2030 Alternative Resource (High Resource for ANWR)
Total Value Added/Employment (2006\$/Job)

State	ANWR	Atlantic Offshore	Eastern GOM	Pacific Offshore	Rockies	Sum of Five Areas
Alabama	91,806	115,628	99,421	117,000	109,878	101,815
Alaska	125,927	105,965	106,280	106,541	107,310	125,926
Arizona	87,766	105,979	105,876	106,191	100,234	93,216
Arkansas	88,249	112,699	112,859	113,079	106,157	96,706
California	92,525	107,503	107,596	104,230	102,565	101,433
Colorado	90,879	102,535	102,463	102,675	105,969	100,522
Connecticut	85,945	99,675	99,774	99,874	95,340	89,571
Delaware	93,214	171,216	116,790	117,266	115,055	125,957
Florida	86,348	95,713	91,037	104,452	99,798	90,954
Georgia	88,355	99,416	102,149	102,287	100,000	94,744
Hawaii	85,528	98,768	98,986	99,051	95,905	88,996
Idaho	98,205	117,768	117,981	118,320	109,882	106,502
Illinois	89,369	111,482	111,788	112,030	108,685	96,216
Indiana	97,820	124,359	124,444	124,787	121,050	107,167
Iowa	88,330	98,867	98,943	99,054	101,374	91,565
Kansas	87,440	95,106	95,231	95,225	95,939	90,011
Kentucky	95,546	119,978	120,227	120,493	118,030	103,908
Louisiana	91,001	127,408	128,884	129,729	124,972	114,432
Maine	90,381	87,873	113,266	113,783	108,472	89,380
Maryland	89,431	98,906	104,906	105,162	104,282	97,763
Massachusetts	87,007	96,891	97,452	97,598	91,464	96,443
Michigan	90,672	105,996	105,952	106,096	101,744	95,945
Minnesota	85,996	101,521	101,459	101,636	96,003	90,300
Mississippi	86,216	98,233	97,936	99,964	89,374	97,493
Missouri	87,075	103,758	104,009	104,202	100,735	91,466
Montana	95,597	119,092	119,552	120,012	106,440	106,406
Nebraska	85,003	93,278	93,140	93,179	93,072	87,562
Nevada	86,684	98,325	98,398	98,470	95,072	89,927
New Hampshire	86,575	94,317	98,858	98,947	94,748	89,538
New Jersey	89,805	100,844	109,898	110,136	107,933	99,283
New Mexico	87,794	106,693	106,907	107,223	105,224	104,459
New York	87,484	99,255	105,429	105,668	101,454	96,248
North Carolina	100,937	97,226	130,674	131,095	133,334	97,916
North Dakota	95,746	113,153	113,418	113,772	107,129	106,467
Ohio	90,295	113,633	113,850	114,076	108,663	97,918
Oklahoma	89,250	102,481	102,829	103,087	97,957	90,260
Oregon	92,000	114,532	114,826	103,882	112,836	100,276
Pennsylvania	90,580	116,215	116,390	116,709	111,125	98,544
Rhode Island	85,965	95,615	97,174	97,273	92,263	93,510
South Carolina	96,009	99,099	119,048	119,550	116,790	99,410
South Dakota	87,534	97,961	97,878	98,005	104,655	95,307
Tennessee	89,742	111,525	111,770	111,997	107,309	96,488
Texas	89,392	139,299	142,823	139,108	103,858	112,195
Utah	89,626	105,878	106,027	106,237	111,832	107,054
Vermont	88,208	104,473	103,940	104,300	94,683	93,285
Virginia	95,107	92,625	117,259	117,548	115,905	94,731
Washington	97,131	115,043	115,491	99,439	115,980	99,005
West Virginia	117,640	145,909	145,790	146,238	145,528	129,412
Wisconsin	88,267	106,839	107,033	107,235	103,953	93,820
Wyoming	95,845	130,111	131,327	131,643	105,572	105,557
TOTAL	104,996	106,552	108,027	108,193	105,990	106,243

3.4 Allocation of Government Revenues Among States

The government sector impacts are presented in **Table 49** (Middle Resource Case) and **Table 50** (Alternative Resource Case) in terms of government revenue that would be expected by State of production. The estimated future government revenues are the sum of bonuses, severance tax, property tax, and income tax paid by oil and gas producers at the federal, state, and local levels. The revenues going to each level of government is combined and no attempt is made to break out State *versus* Federal revenues.

The data presented for government revenue by state are subject to the same caveats mentioned earlier for data on production by state. The revenue values should be understood as being expected values or the average of several potential outcomes based on which states the resources are located and the order in which leasing, drilling and production take place. Also, it should be remembered also that these expected values for revenues are based on the "equidistant" state boundary maps for the OCS areas which could be redrawn in the future. It is also possible that revenue sharing between the Federal government and the states could be done by a formula that allocates money from any given lease to several states.

Table 49 Government Revenues by State - Middle Resource (million 2006 dollars)

	2010	2015	2020	2025	2030	Sum 2008 to 2030	Sum post- 2030	All Time Sum
ANWR	\$0	-\$482	\$2,235	\$5,623	\$7,273	\$60,614	\$103,390	\$164,004
Atlantic Offshore								
Maine	\$0	-\$1	\$3	\$6	\$9	\$65	\$856	\$921
New Hampshire	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Massachusetts	\$0	-\$51	\$103	\$220	\$309	\$2,338	\$30,571	\$32,909
Rhode Island	\$0	-\$2	\$4	\$8	\$11	\$81	\$1,062	\$1,143
New York	\$0	-\$16	\$33	\$70	\$99	\$746	\$9,757	\$10,503
New Jersey	\$0	-\$17	\$34	\$72	\$102	\$770	\$10,073	\$10,843
Delaware	\$0	\$0	\$0	\$1	\$1	\$8	\$108	\$117
Maryland	\$0	-\$12	\$24	\$51	\$72	\$542	\$7,088	\$7,630
Virginia	\$0	-\$7	\$14	\$30	\$42	\$318	\$4,157	\$4,475
North Carolina	\$0	-\$52	\$106	\$227	\$319	\$2,413	\$31,555	\$33,968
South Carolina	\$0	-\$16	\$32	\$69	\$97	\$737	\$9,642	\$10,380
Georgia	\$0	-\$2	\$5	\$11	\$15	\$113	\$1,471	\$1,584
Florida	\$0	\$0	\$0	\$1	\$1	\$9	\$114	\$122
Total	\$0	-\$177	\$358	\$766	\$1,076	\$8,141	\$106,453	\$114,594
Pacific Offshore								
Washington	\$0	-\$5	\$15	\$31	\$49	\$356	\$4,578	\$4,933
Oregon	\$0	-\$5	\$14	\$28	\$44	\$324	\$4,176	\$4,500
California	\$0	-\$163	\$466	\$948	\$1,502	\$10,975	\$141,242	\$152,217
Total	\$0	-\$174	\$495	\$1,006	\$1,595	\$11,655	\$149,996	\$161,651
EGOM Offshore								
Florida	-\$18	\$35	\$415	\$667	\$842	\$7,868	\$74,817	\$82,685
Alabama	\$0	\$1	\$11	\$18	\$23	\$211	\$2,002	\$2,213
Total	-\$19	\$36	\$426	\$685	\$864	\$8,078	\$76,819	\$84,898
OCS Total	-\$19	-\$314	\$1,279	\$2,457	\$3,535	\$27,874	\$333,268	\$361,142
Rockies								
Colorado	\$1	\$13	\$40	\$75	\$105	\$944	\$2,781	\$3,724
Wyoming	\$1	\$38	\$114	\$214	\$301	\$2,711	\$7,986	\$10,697
Utah	\$0	\$2	\$6	\$12	\$17	\$154	\$452	\$606
New Mex.	\$0	\$9	\$26	\$49	\$69	\$622	\$1,832	\$2,454
Montana	\$1	\$13	\$40	\$75	\$105	\$945	\$2,783	\$3,728
Nebraska	\$0	\$0	\$0	\$0	\$0	\$1	\$4	\$5
N. Dakota	\$0	\$2	\$6	\$11	\$16	\$144	\$423	\$567
S. Dakota	\$0	\$0	\$1	\$1	\$1	\$12	\$35	\$47
Idaho	\$0	\$0	\$0	\$0	\$0	\$2	\$6	\$7
Total	\$3	\$78	\$233	\$437	\$615	\$5,534	\$16,302	\$21,835
Sum of five areas	-\$16	-\$718	\$3,747	\$8,517	\$11,423	\$94,022	\$452,960	\$546,981

**Table 50 Government Revenues by State - Alternative Resource
(million 2006 dollars)**

	2010	2015	2020	2025	2030	Sum 2008 to 2030	post - 2030	All Time Sum
ANWR	\$0	-\$686	\$3,768	\$9,730	\$10,845	\$96,352	\$190,902	\$287,255
Atlantic Offshore								
Maine	\$0	-\$2	\$10	\$23	\$35	\$263	\$3,748	\$4,010
New Hampshire	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Massachusetts	\$0	-\$66	\$351	\$831	\$1,258	\$9,378	\$133,876	\$143,254
Rhode Island	\$0	-\$2	\$12	\$29	\$44	\$326	\$4,649	\$4,974
New York	\$0	-\$21	\$112	\$265	\$401	\$2,993	\$42,726	\$45,719
New Jersey	\$0	-\$22	\$116	\$274	\$414	\$3,090	\$44,110	\$47,200
Delaware	\$0	\$0	\$1	\$3	\$4	\$33	\$474	\$508
Maryland	\$0	-\$15	\$81	\$193	\$292	\$2,174	\$31,039	\$33,214
Virginia	\$0	-\$9	\$48	\$113	\$171	\$1,275	\$18,205	\$19,480
North Carolina	\$0	-\$68	\$363	\$858	\$1,298	\$9,680	\$138,183	\$147,863
South Carolina	\$0	-\$21	\$111	\$262	\$397	\$2,958	\$42,225	\$45,183
Georgia	\$0	-\$3	\$17	\$40	\$61	\$451	\$6,443	\$6,895
Florida	\$0	\$0	\$1	\$3	\$5	\$35	\$498	\$533
Total	\$0	-\$231	\$1,223	\$2,893	\$4,381	\$32,657	\$466,176	\$498,833
Pacific Offshore								
Washington	\$0	-\$6	\$27	\$63	\$105	\$746	\$12,901	\$13,647
Oregon	\$0	-\$5	\$25	\$58	\$96	\$680	\$11,769	\$12,449
California	\$0	-\$182	\$831	\$1,956	\$3,231	\$23,010	\$398,056	\$421,066
Total	\$0	-\$194	\$883	\$2,077	\$3,431	\$24,436	\$422,726	\$447,162
EGOM Offshore								
Florida	-\$18	\$273	\$1,658	\$2,767	\$3,829	\$34,289	\$394,512	\$428,801
Alabama	\$0	\$7	\$44	\$74	\$102	\$918	\$10,557	\$11,475
Total	-\$19	\$280	\$1,702	\$2,841	\$3,931	\$35,206	\$405,069	\$440,276
OCS Total	-\$19	-\$144	\$3,808	\$7,812	\$11,743	\$92,299	\$1,293,971	\$1,386,271
Rockies								
Colorado	\$1	\$13	\$40	\$75	\$105	\$944	\$2,781	\$3,724
Wyoming	\$1	\$38	\$114	\$214	\$301	\$2,711	\$7,986	\$10,697
Utah	\$0	\$2	\$6	\$12	\$17	\$154	\$452	\$606
New Mex.	\$0	\$9	\$26	\$49	\$69	\$622	\$1,832	\$2,454
Montana	\$1	\$13	\$40	\$75	\$105	\$945	\$2,783	\$3,728
Nebraska	\$0	\$0	\$0	\$0	\$0	\$1	\$4	\$5
N. Dakota	\$0	\$2	\$6	\$11	\$16	\$144	\$423	\$567
S. Dakota	\$0	\$0	\$1	\$1	\$1	\$12	\$35	\$47
Idaho	\$0	\$0	\$0	\$0	\$0	\$2	\$6	\$7
Total	\$3	\$78	\$233	\$437	\$615	\$5,534	\$16,302	\$21,835
Sum of five areas	-\$16	-\$751	\$7,808	\$17,980	\$23,204	\$194,185	\$1,501,176	\$1,695,361