

## Appendix A

# State-to-State Natural Gas Pipeline Capacity and Usage Levels

This appendix presents data on State-to-State capacity and usage levels for major interstate pipeline companies in 1996 and the percentage change between 1990 and 1996. The appendix consists of six maps and six tables, which correspond to the six U.S. geographic regions used throughout the report (Alaska, the District of Columbia, and Hawaii are not included). The six regions are defined and ordered as follows:

- **Central Region** - Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming.
- **Midwest Region** - Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
- **Northeast Region** - Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.
- **Southeast Region** - Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
- **Southwest Region** - Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
- **Western Region** - Arizona, California, Idaho, Nevada, Oregon, and Washington.

Each regional map portrays the States included in the region and the approximate routes of the major interstate pipelines operating in the region. Routes of some of the smaller pipeline systems are not displayed because they are difficult to distinguish from the major systems. Underground storage site locations are included in the maps to give the reader a perspective on the proximity and accessibility of storage to pipelines within a region. Although the maps do not include capacity levels, the reader can find a mapped regional State-to-State capacity summary representation in Chapters 3 and 5 of the report.

Each table represents one region, with the States within the region presented in alphabetical order. For each State, a line item is listed for each interstate pipeline company capable of transporting gas from an adjoining State. It should be noted that in a number of instances a pipeline company may have

more than one branch or mainline segment crossing to another State. In such cases, data for the several points are combined and summed rather than being separately identified in the table. Data regarding any of these individuals points, if wanted, are available within the supporting database.

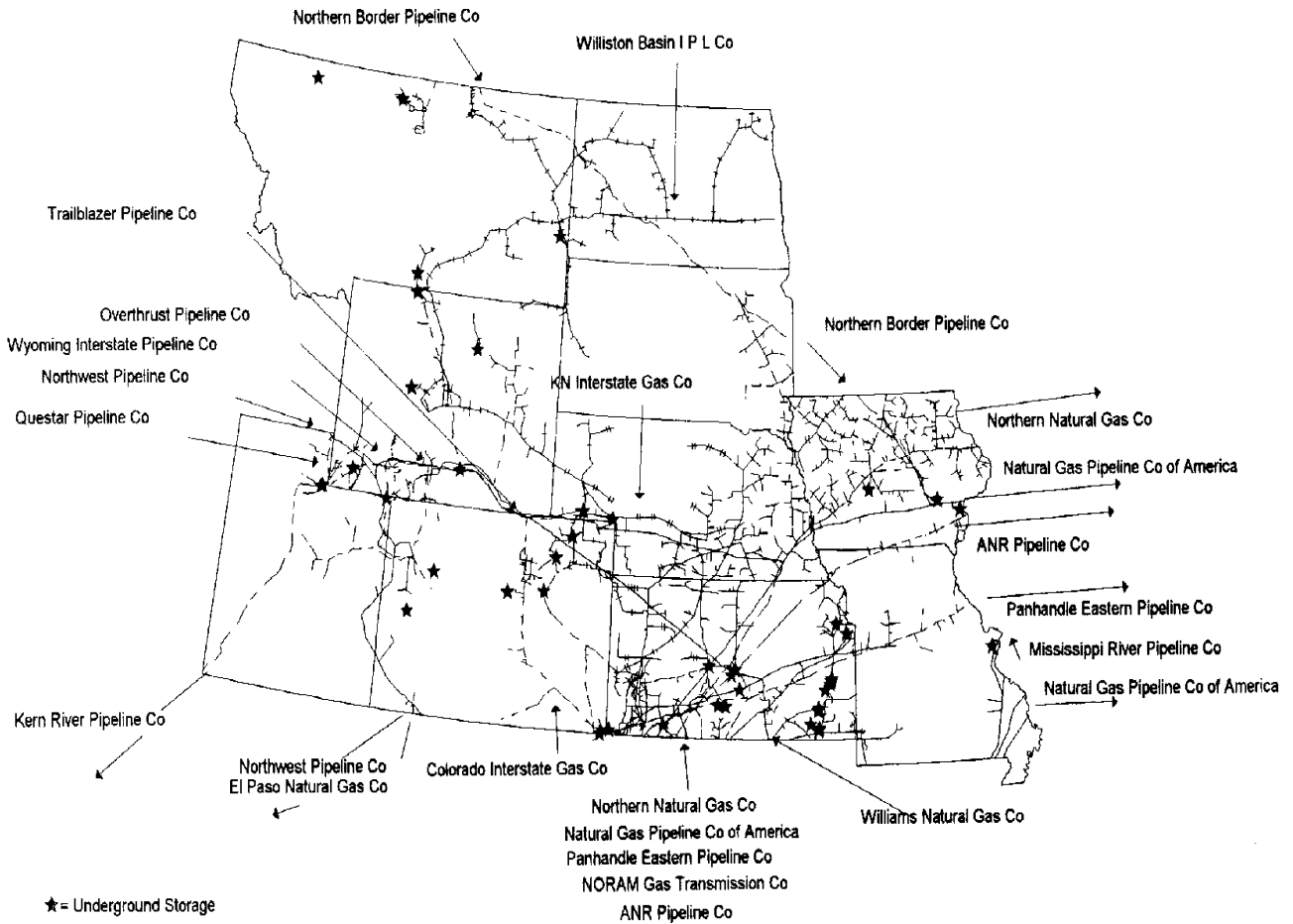
(The data contained in the tables may be downloaded from the Energy Information Administration's (EIA) Internet site in either a spreadsheet or database format, or from EIA's FTP site at [ftp://ftp.eia.doe.gov/pub/oil\\_gas/natural\\_gas/analysis\\_publications/deliverability/data](ftp://ftp.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/deliverability/data). The format and data element definitions for the STBORDER database and spreadsheet can be found in the EIAGIS-NG (see Appendix C) data dictionary DATADICT. DBF, also available from these sites.)

For each adjoining State, a summary line displaying the combined total capacity, 1996 average daily flows, and the weighted average usage rate of all pipelines exiting the State is listed. Similarly, a summary of all pipeline routes entering the receiving State is presented for each of these values. In some cases, no flow data were reported in 1996 for a known State-to-State pipeline combination. In these cases, the capacity value for the route is not included as part of the denominator (weighting factor) when average utilization rates at the State and regional summary levels were calculated.

The measure of capacity that is shown represents an estimate of the maximum throughput capability of the interstate natural gas pipeline network at a regional or State boundary. Specifically, it is an estimate of how much gas can be transported under normal operating conditions for a sustained period of time. Information on capacity levels for the interstate pipeline systems was compiled by using data available from filings at the Federal Energy Regulatory Commission (FERC) and through contacts with the companies themselves.

The average daily flow volumes presented in Tables A1 through A6 are based upon 1996 data extracted from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." They are the sum of data that can be identified as volumes brought across a border. The data on Form EIA-176 are annual; average daily levels were computed on a 366-day basis (1996 was a leap year). More information on how Form EIA-176 data were compiled and included in this report can be found in Appendix D.

**Figure A1. Major Interstate Natural Gas Pipelines in the Central Region**



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, as of December 1997.

**Table A1. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Central Region, by State, 1990 and 1996**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Colorado</b>									
Colorado Interstate Gas	Kansas	<sup>c</sup> 340	0	0	--	--	--	Kansas	244
Panhandle Eastern P L Co		45	0	0	--	--	--	None	
	<b>Total</b>	<b>385</b>	<b>0</b>	<b>0</b>	<b>--</b>	<b>--</b>	<b>--</b>		
KN Interstate Gas Co	Nebraska	<sup>c</sup> 97	144	2	-90	2	-96	Kansas/NE	60
Trailblazer Pipeline Co		500	0	490	141	98	141	Nebraska	500
	<b>Total</b>	<b>597</b>	<b>11</b>	<b>492</b>	<b>123</b>	<b>82</b>	<b>102</b>		
Transwestern Pipeline Co	New Mexico	<sup>c</sup> 276	84	0	--	--	--	New Mexico	500
Colorado Interstate Gas	Oklahoma	<sup>c</sup> 200	0	71	--	35	--	Oklahoma	250
Colorado Interstate Gas	Utah	165	<sup>d</sup>	104	--	63	--	Wyoming	180
Northwest Pipeline Corp		<sup>c</sup> 337	60	84	100	25	25	Utah	587
Questar P L Co		<sup>c</sup> 23	0	2	-93	10	-93	None	
	<b>Total</b>	<b>525</b>	<b>125</b>	<b>190</b>	<b>164</b>	<b>36</b>	<b>17</b>		
Colorado Interstate Gas	Wyoming	625	0	554	12	89	12	Oklahoma	250
Questar P L Co		<sup>c</sup> 313	6	0	--	--	--	None	
Williams Natural Gas Co		178	24	146	15	82	-7	Kansas	186
Wyoming Interstate Co		499	0	480	123	96	123	None	
	<b>Total</b>	<b>1,615</b>	<b>3</b>	<b>1,180</b>	<b>35</b>	<b>91</b>	<b>62</b>		
<b>Total</b>		<b>3,597</b>	<b>17</b>	<b>1,934</b>	<b>46</b>	<b>74</b>	<b>49</b>		
<b>Iowa</b>									
Northern Border Pipeline Co	Minnesota	1,575	42	1,541	61	98	13	None	
ANR Pipeline Co	Missouri	680	13	669	17	99	4	Illinois	603
Nat Gas P L Co of America	Nebraska	1,330	0	1,067	14	80	14	Illinois	1,665
Northern Natural Gas Co		1,295	0	740	33	57	20	Minnesota/IL/SD	2,035
	<b>Total</b>	<b>2,625</b>	<b>0</b>	<b>1,801</b>	<b>21</b>	<b>69</b>	<b>15</b>		
<b>Total</b>		<b>4,880</b>	<b>13</b>	<b>4,019</b>	<b>33</b>	<b>82</b>	<b>15</b>		
<b>Kansas</b>									
Colorado Interstate Gas	Colorado	<sup>c</sup> 244	0	83	15	34	15	Colorado	340
KN Interstate Gas Co		20	0	13	63	66	63	Nebraska	81
Williams Natural Gas Co		186	19	164	15	88	-4	Nebraska	6
	<b>Total</b>	<b>450</b>	<b>7</b>	<b>261</b>	<b>16</b>	<b>58</b>	<b>9</b>		
KN Interstate Gas Co	Nebraska	<sup>c</sup> 40	0	4	17	9	-12	None	
ANR Pipeline Co	Oklahoma	853	0	697	16	82	16	Nebraska	693
Nat Gas P L Co of America		<sup>c</sup> 1,153	0	689	-8	60	-8	Nebraska	1,175
Noram Gas Transmission Co		40	-20	18	-13	45	8	None	
Northern Natural Gas Co		1,330	0	546	38	41	5	Nebraska	2,050
Panhandle Eastern P L Co		1,395	-5	834	62	60	71	Missouri	1,559
Transwestern Pipeline Co		5	0	2	-20	32	-20	None	
Williams Natural Gas Co		496	0	280	-17	56	-17	Missouri/OK	1,231
	<b>Total</b>	<b>5,272</b>	<b>-2</b>	<b>3,067</b>	<b>17</b>	<b>58</b>	<b>18</b>		
<b>Total</b>		<b>5,762</b>	<b>-1</b>	<b>3,331</b>	<b>17</b>	<b>58</b>	<b>17</b>		
<b>Missouri</b>									
Associated Natural Gas Co	Arkansas	10	0	9	50	88	54	Arkansas	30
Mississippi River Trans Corp		730	0	339	29	46	29	Illinois	590
Nat Gas P L Co of America		1,650	4	1,184	30	72	25	Illinois	1,650
Noram Gas Transmission Co		100	-33	15	-21	15	18	None	
Texas Eastern Trans Corp		324	0	264	100	81	100	Illinois	300
	<b>Total</b>	<b>2,814</b>	<b>1</b>	<b>1,811</b>	<b>37</b>	<b>64</b>	<b>36</b>		
Mississippi River Trans Corp	Illinois	695	10	0	--	--	--	None	

**Table A1. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Central Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
Panhandle Eastern P L Co Williams Natural Gas Co	Kansas	1,559	-2	1,447	18	93	21	Illinois	1,361
		972	0	262	11	27	11	None	
	<b>Total</b>	<b>2,531</b>	<b>-1</b>	<b>1,710</b>	<b>17</b>	<b>68</b>	<b>18</b>		
ANR Pipeline Co Williams Natural Gas Co	Nebraska	693	14	679	17	98	3	Iowa	680
	Oklahoma	47	0	45	22	96	22		None
	<b>Total</b>	<b>6,780</b>	<b>2</b>	<b>4,244</b>	<b>25</b>	<b>70</b>	<b>23</b>		
<b>Montana</b>									
Montana Power Co Northern Border Pipeline Co Northern Natural Gas Co	Canada	64	25	64	144	97	89	Canada	6
		1,489	39	1,475	79	99	26	North Dakota	1,480
		10	-92	5	-100	--	--	Canada	60
<b>Total</b>	<b>1,563</b>	<b>25</b>	<b>1,542</b>	<b>67</b>	<b>98</b>	<b>31</b>			
Williston Basin I P L Co Colorado Interstate Gas Montana Power Co Williston Basin I P L Co	North Dakota	<sup>c</sup> 268	17	28	-48	10	-56	North Dakota	304
	Wyoming	<sup>c</sup> 60	--	--	--	--	--	None	
		2	0	0	-53	12	-53	None	
<b>Total</b>	<b>188</b>	<b>43</b>	<b>47</b>	<b>90</b>	<b>25</b>	<b>16</b>	Wyoming	162	
<b>Total</b>	<b>2,081</b>	<b>29</b>	<b>1,617</b>	<b>58</b>	<b>80</b>	<b>25</b>			
<b>Nebraska</b>									
KN Interstate Gas Co Trailblazer Pipeline Co	Colorado	<sup>c</sup> 40	0	3	-44	8	-44		None
		500	0	491	137	98	137	Colorado	500
	<b>Total</b>	<b>540</b>	<b>0</b>	<b>494</b>	<b>132</b>	<b>91</b>	<b>132</b>		
ANR Pipeline Co KN Interstate Gas Co Nat Gas P L Co of America Northern Natural Gas Co Williams Natural Gas Co	Kansas	693	14	679	17	98	3	Missouri	693
		<sup>c</sup> 81	0	12	-52	15	-52	Colorado	96
		1,176	-30	712	-10	61	30	Iowa	1,330
	2,050	0	974	26	47	26	Iowa/SD	1,365	
	6	0	2	-10	36	-10	None		
<b>Total</b>	<b>4,005</b>	<b>-10</b>	<b>2,379</b>	<b>10</b>	<b>59</b>	<b>22</b>			
KN Interstate Gas Co Trailblazer Pipeline Co	Wyoming	120	-12	109	42	90	63	None	
		500	0	490	141	98	141	Colorado	500
	<b>Total</b>	<b>620</b>	<b>-3</b>	<b>599</b>	<b>114</b>	<b>97</b>	<b>119</b>		
<b>Total</b>	<b>5,165</b>	<b>-8</b>	<b>3,472</b>	<b>31</b>	<b>67</b>	<b>42</b>			
<b>North Dakota</b>									
Viking Gas Transmission Co Northern Border Pipeline Co Williston Basin I P L Co	Minnesota	84	223	22	21	26	-62	None	
	Montana	1,480	38	1,472	59	99	20	South Dakota	1,685
		<sup>c</sup> 5	139	87	290	29	63	Montana	268
<b>Total</b>	<b>1,785</b>	<b>48</b>	<b>1,559</b>	<b>70</b>	<b>90</b>	<b>15</b>			
Williston Basin I P L Co	South Dakota	53	166	--	--	--	--	None	
<b>Total</b>	<b>1,922</b>	<b>54</b>	<b>1,581</b>	<b>64</b>	<b>85</b>	<b>97</b>			
<b>South Dakota</b>									
Northern Natural Gas Co Northern Natural Gas Co Northern Border Pipeline Co Williston Basin I P L Co	Iowa	30	0	2	-58	5	-58	None	
	Nebraska	70	0	34	26	48	26	None	
	North Dakota	1,675	38	1,656	52	99	10	Minnesota	1,655
	<sup>c</sup> 4	3	22	-16	40	-19	None		
<b>Total</b>	<b>1,729</b>	<b>37</b>	<b>1,677</b>	<b>51</b>	<b>97</b>	<b>16</b>			
Williston Basin I P L Co	Wyoming	<sup>c</sup> 27	3	0	0	--	--	None	
<b>Total</b>	<b>1,856</b>	<b>33</b>	<b>1,793</b>	<b>57</b>	<b>97</b>	<b>155</b>			

**Table A1. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Central Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Utah</b>									
Northwest Pipeline Corp	Colorado	<sup>c</sup> 337	105	0	--	--	--	Colorado	366
Questar P L Co		<sup>c</sup> 51	0	42	39	83	39	Wyoming	269
	<b>Total</b>	<b>388</b>	<b>81</b>	<b>42</b>	<b>-60</b>	<b>83</b>	<b>39</b>		
Northwest Pipeline Corp	Idaho	<sup>c</sup> 298	19	0	-100	--	--	Wyoming	360
Kern River Gas Trans Co	Wyoming	831	--	739	--	89	--	Nevada	750
Northwest Pipeline Corp		<sup>c</sup> 430	0	72	9	17	9	Colorado	310
Questar P L Co		<sup>c</sup> 704	3	233	-10	33	-13	Colorado	23
	<b>Total</b>	<b>1,965</b>	<b>76</b>	<b>1,044</b>	<b>220</b>	<b>53</b>	<b>82</b>		
	<b>Total</b>	<b>2,651</b>	<b>68</b>	<b>1,086</b>	<b>73</b>	<b>54</b>	<b>35</b>		
<b>Wyoming</b>									
Colorado Interstate Gas	Colorado	180	--	146	--	81	--	Colorado	625
Questar P L Co		<sup>c</sup> 165	175	46	27	28	-54	Utah	703
Trailblazer Pipeline Co		500	0	490	141	98	80	Nebraska	500
	<b>Total</b>	<b>845</b>	<b>51</b>	<b>682</b>	<b>184</b>	<b>81</b>	<b>74</b>		
Colorado Interstate Gas	Montana	<sup>c</sup> 60	--	0	0	--	--	None	
Williston Basin I P L Co		<sup>c</sup> 163	0	0	--	--	--	Montana	188
	<b>Total</b>	<b>223</b>	<b>37</b>	<b>0</b>	<b>--</b>	<b>--</b>	<b>--</b>		
Williston Basin I P L Co	South Dakota	<sup>c</sup> 26	13	0	--	--	--	None	
Northwest Pipeline Corp	Utah	<sup>c</sup> 360	44	0	--	--	--	Utah	310
Questar P L Co		<sup>c</sup> 269	0	46	113	94	113	Colorado	312
	<b>Total</b>	<b>629</b>	<b>21</b>	<b>46</b>	<b>-68</b>	<b>94</b>	<b>248</b>		
	<b>Total</b>	<b>1,723</b>	<b>36</b>	<b>728</b>	<b>71</b>	<b>79</b>	<b>135</b>		

<sup>a</sup>Average daily flow based upon annual volumes (reported as delivered from one State to another) divided by days in the year.

<sup>b</sup>Average usage rate is equal to the average daily flow derived by estimated capacity. Utilization computation does not include capacity against which no flow was reported.

<sup>c</sup>Bidirection flow occur on some or all of the pipeline company lines that cross the State border. The value shown represents the capacity, or sum of capacity, for only the flow in the direction indicated.

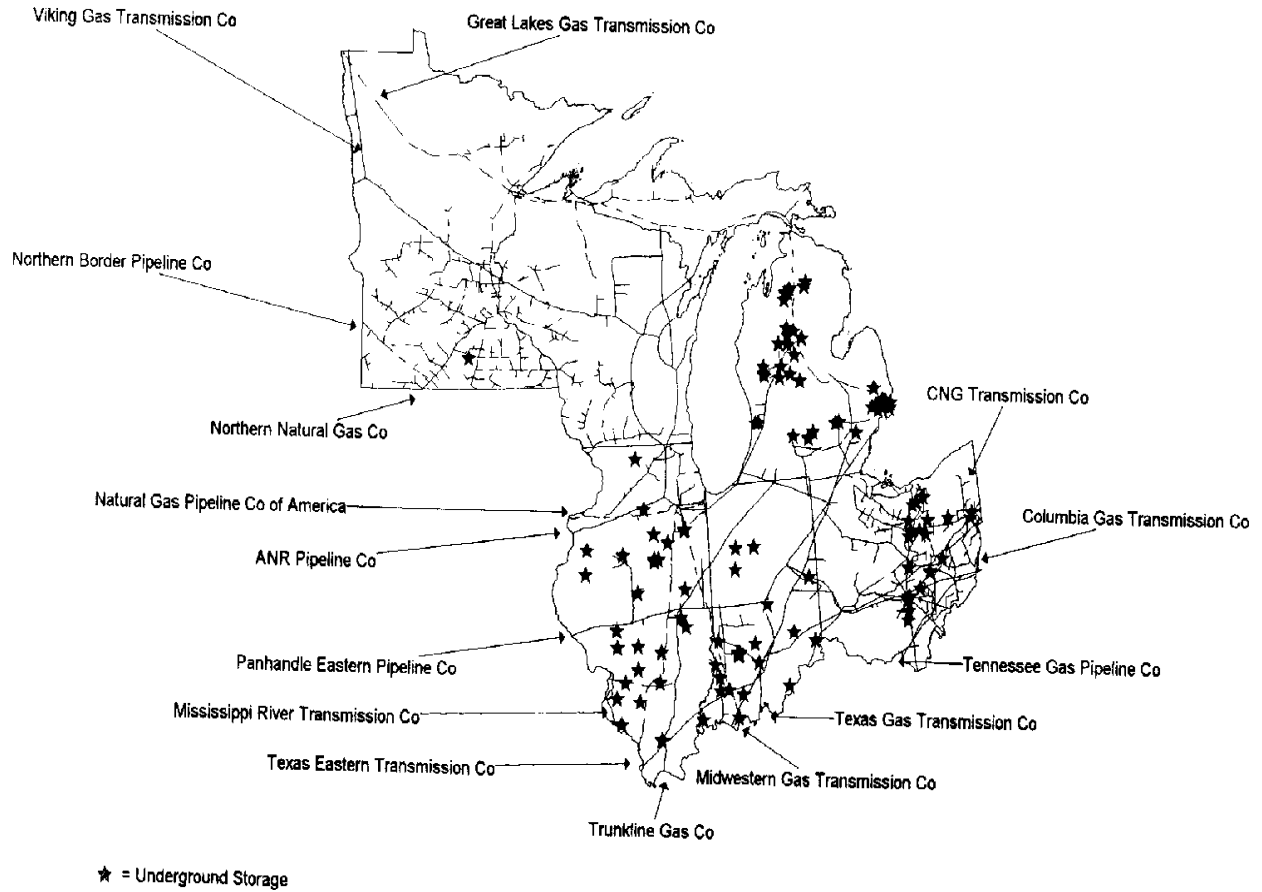
<sup>d</sup>Less than 0.5 percent and greater than -0.5 percent.

-- = Not applicable, pipeline not in service in 1990 and/or no flow reported in 1990 or 1996.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.

**Figure A2. Major Interstate Natural Gas Pipelines Serving the Midwest Region**



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, as of December 1997.

**Table A2. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Midwest Region, by State, 1990 and 1996**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Illinois</b>									
ANR Pipeline Co	Indiana	<sup>c</sup> 1,250	0	0	-100	--	--	Indiana	1,249
Midwestern Gas Trans Co		650		356	1	55	1	None	
Texas Gas Trans Corp		44	5	24	16	55	10	None	
<b>Total</b>		<b>1,944</b>	<b>0</b>	<b>380</b>	<b>-27</b>	<b>54</b>	<b>-1</b>		
ANR Pipeline Co	Iowa	653	27	617	45	94	14	Wisconsin	581
Natural Gas PL Co of America		1,665	0	1,428	31	86	30	Wisconsin	55
Northern Natural Gas Co		635	20	506	66	80	38	Wisconsin	385
<b>Total</b>		<b>2,953</b>	<b>9</b>	<b>2,552</b>	<b>40</b>	<b>86</b>	<b>28</b>		
Trunkline Gas Co	Kentucky	1,799	0	1,241	22	69	22	Indiana	745
Mississippi River Trans Corp	Missouri	590	0	50	-60	8	-60	Missouri	695
Natural Gas P L Co of America		1,650	6	1,175	31	71	23	None	
Panhandle Eastern P L Co		1,361	0	1,304	17	96	17	Indiana	1,573
Texas Eastern Trans Corp		300	24	246	115	82	73	Indiana	400
<b>Total</b>		<b>3,901</b>	<b>4</b>	<b>2,775</b>	<b>23</b>	<b>71</b>	<b>18</b>		
ANR Pipeline Co	Wisconsin	<sup>c</sup> 550	0	177	--	32	--	None	
<b>Total</b>		<b>11,147</b>	<b>4</b>	<b>7,124</b>	<b>27</b>	<b>72</b>	<b>31</b>		
<b>Indiana</b>									
ANR Pipeline Co	Illinois	<sup>c</sup> 1,250	0	587	--	47	--	None	
Natural Gas P L of America		600	0	560	2	93	2	None	
Panhandle Eastern P L Co		1,573	1	1,378	21	88	20	Ohio	1,313
Texas Eastern Trans Corp		400	133	293	155	73	10	Ohio	671
Trunkline Gas Co		745	0	705	47	95	47	None	
<b>Total</b>		<b>4,568</b>	<b>5</b>	<b>3,523</b>	<b>54</b>	<b>77</b>	<b>4</b>		
ANR Pipeline Co	Kentucky	1,386	5	1,198	23	86	16	Ohio/IL	2,997
Midwestern Gas Trans Co		664	0	426	20	64	20	Illinois	649
Texas Gas Trans Corp		1,510	0	1,076	33	71	33	Illinois/OH	1,051
<b>Total</b>		<b>3,560</b>	<b>2</b>	<b>2,700</b>	<b>26</b>	<b>76</b>	<b>24</b>		
ANR Pipeline Co	Michigan	<sup>c</sup> 1,417	11	0	0	--	--	None	
ANR Pipeline Co	Ohio	<sup>c</sup> 318	0	75	--	24	--	Michigan	1,470
Panhandle Eastern P L Co		150	0	0	0	--	--	None	
<b>Total</b>		<b>468</b>	<b>0</b>	<b>75</b>	<b>--</b>	<b>24</b>	<b>--</b>		
<b>Total</b>		<b>10,012</b>	<b>5</b>	<b>6,299</b>	<b>42</b>	<b>75</b>	<b>11</b>		
<b>Michigan</b>									
Bluewater Pipeline Co	Canada	<sup>c</sup> 250	--	0	--	0	--	Canada	250
ANR Pipeline Co	Indiana	<sup>c</sup> 1,470	20	617	--	42	--	Indiana	1,417
Trunkline Gas Co		739	0	573	38	78	38	None	
<b>Total</b>		<b>2,209</b>	<b>12</b>	<b>1,190</b>	<b>186</b>	<b>54</b>	<b>4</b>		
ANR Pipeline Co	Ohio	932	0	449	-16	48	-16	Indiana/OH	
Panhandle Eastern P L Co		860	-22	509	15	59	47	Canada	100
<b>Total</b>		<b>1,792</b>	<b>-12</b>	<b>958</b>	<b>-2</b>	<b>53</b>	<b>11</b>		
Great Lakes Gas Trans Ltd	Wisconsin	2,100	42	1,913	50	91	6	Canada	1,980
Northern Natural Gas Co		125	0	83	61	66	61	None	
<b>Total</b>		<b>2,225</b>	<b>39</b>	<b>1,996</b>	<b>50</b>	<b>90</b>	<b>8</b>		
<b>Total</b>		<b>6,476</b>	<b>16</b>	<b>4,144</b>	<b>52</b>	<b>64</b>	<b>3</b>		
<b>Minnesota</b>									
Central Pipeline Co	Canada	88	0	39	--	44	--	Canada	63
Great Lakes Gas Trans Ltd		2,286	37	2,143	48	94	8	Wisconsin	2,100
Viking Gas Transmission Co		425	5	399	41	94	35	Wisconsin/ND	431
<b>Total</b>		<b>2,799</b>	<b>30</b>	<b>2,581</b>	<b>49</b>	<b>92</b>	<b>10</b>		

**Table A2. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Midwest Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
Northern Natural Gas Co	Iowa	1,370	4	742	38	54	33	Wisconsin	232
Northern Border Pipeline Co	South Dakota	1,655	36	1,645	54	99	13	Iowa	1,575
Northern Natural Gas Co	Wisconsin	70	600	4	--	5	--	None	
<b>Total</b>		<b>5,894</b>	<b>25</b>	<b>4,972</b>	<b>49</b>	<b>84</b>	<b>16</b>		
<b>Ohio</b>									
ANR Pipeline Co	Indiana	<sup>c</sup> 1,748	0	1,151	111	70	111	Michigan/IN	1,250
Crossroads Pipeline Co		250	--	92	--	37	--	None	
Panhandle Eastern P L Co		1,314	0	793	-1	60	-1	Michigan	860
Texas Eastern Trans Corp		671	27	287	8	43	-15	None	
Texas Gas Trans Corp		1,007	0	796	38	79	38	None	
<b>Total</b>		<b>4,990</b>	<b>9</b>	<b>3,119</b>	<b>43</b>	<b>64</b>	<b>31</b>		
Columbia Gas Trans Corp	Kentucky	574	0	450	--	78	--	None	
Tennessee Gas Pipeline Co		1,777	6	1,667	59	94	23	Pennsylvania	1,575
Texas Eastern Trans Corp		2,066	0	1,919	32	93	17	West Virginia	2,740
Union Light Heat & Power Co		45	13	43	34	96	7		
<b>Total</b>		<b>4,462</b>	<b>2</b>	<b>4,080</b>	<b>43</b>	<b>91</b>	<b>34</b>		
CNG Trans Corp	Pennsylvania	435	0	4	--	1	--	None	
Columbia Gas Trans Corp		30	88	3	-82	10	-90	None	
<b>Total</b>		<b>465</b>	<b>3</b>	<b>7</b>	<b>-55</b>	<b>2</b>	<b>-56</b>		
CNG Trans Corp	West Virginia	709	0	135	-28	19	-28	Pennsylvania	560
Columbia Gas Trans Corp		<sup>c</sup> 864	0	767	50	89	50	West Virginia	11
<b>Total</b>		<b>1,573</b>	<b>0</b>	<b>902</b>	<b>29</b>	<b>57</b>	<b>29</b>		
<b>Total</b>		<b>11,489</b>	<b>5</b>	<b>8,108</b>	<b>38</b>	<b>71</b>	<b>27</b>		
<b>Wisconsin</b>									
ANR Pipeline Co	Illinois	<sup>c</sup> 1,268	0	172	-46	14	-46	Illinois	550
Natural Gas PL Co of America		55	0	70	42	93	4	None	
Northern Natural Gas Co		385	40	276	122	72	59	Michigan	125
<b>Total</b>		<b>1,708</b>	<b>7</b>	<b>500</b>	<b>1</b>	<b>29</b>	<b>-6</b>		
ANR Pipeline Co	Michigan	735	0	382	--	52	--	None	
Great Lakes Gas Trans Ltd	Minnesota	2,100	42	1,921	50	91	5	Michigan	2,100
Northern Natural Gas Co		232	0	133	30	57	30	None	
Viking Gas Transmission Co		347	2	327	30	94	27	None	
<b>Total</b>		<b>2,679</b>	<b>31</b>	<b>2,381</b>	<b>46</b>	<b>89</b>	<b>9</b>		
<b>Total</b>		<b>5,122</b>	<b>17</b>	<b>3,263</b>	<b>53</b>	<b>64</b>	<b>8</b>		

<sup>a</sup>Average daily flow based upon annual volumes (reported as delivered from one State to another) divided by days in the year.

<sup>b</sup>Average usage rate is equal to the average daily flow derived by estimated capacity. Utilization computation does not include capacity against which no flow was reported.

<sup>c</sup>Bidirection flow occur on some or all of the pipeline company lines that cross the State border. The value shown represents the capacity, or sum of capacity, for only the flow in the direction indicated.

<sup>d</sup>Less than 0.5 percent and greater than -0.5 percent.

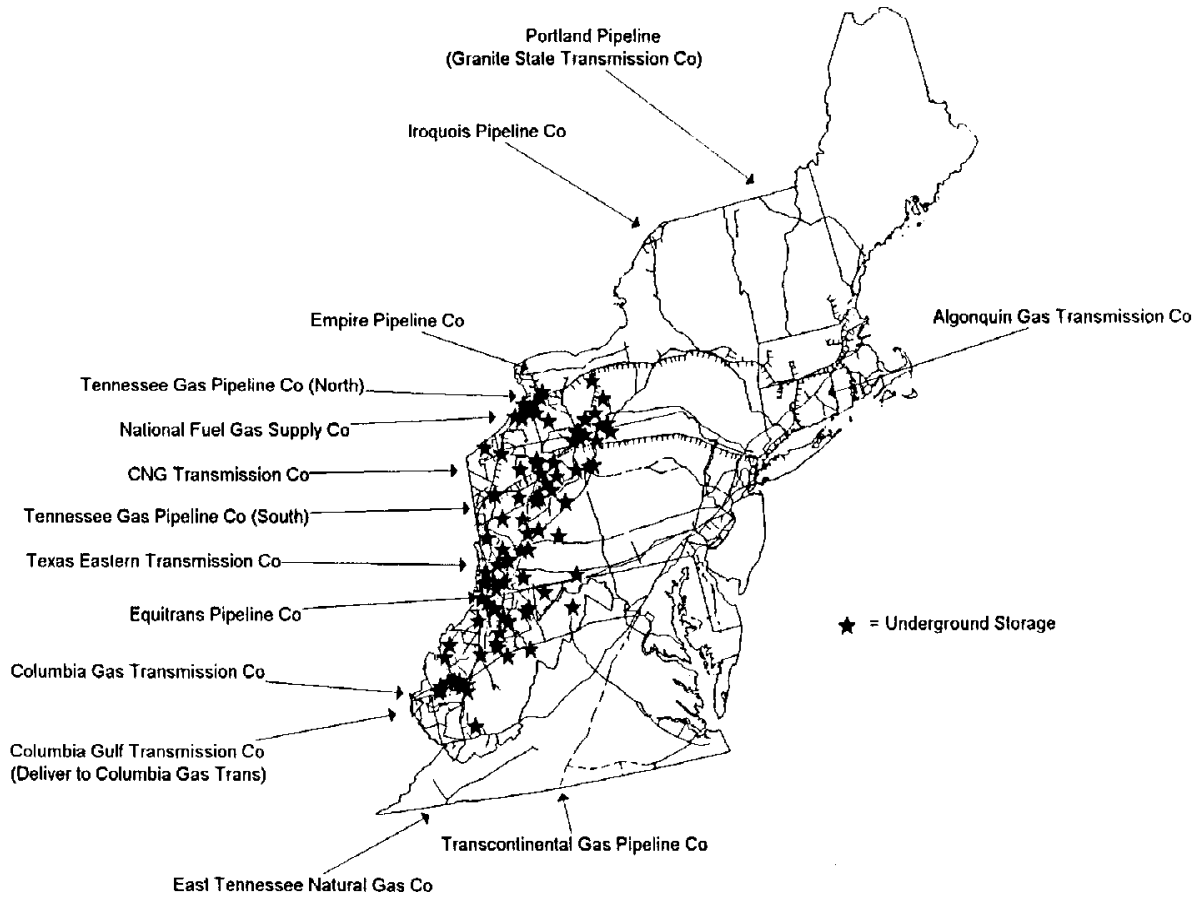
-- = Not applicable, pipeline not in service in 1990 and/or no flow reported in 1990 or 1996.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.



**Figure A3. Major Interstate Natural Gas Pipelines Serving the Northeast Region**



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, as of December 1997.

**Table A3. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Northeast Region, by State, 1990 and 1996**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Connecticut</b>									
Tennessee Gas Pipeline Co	Massachusetts	<sup>c</sup> 81	0	7	-5	8	-5	Massachusetts	80
Algonquin Gas Trans Co	New York	1,030	10	565	12	55	2	Rhode Island	665
Iroquois Pipeline Co		420	--	389	--	93	--	New York	260
Tennessee Gas Pipeline Co		121	4	101	-8	84	-12	None	
<b>Total</b>	<b>Total</b>	<b>1,571</b>	<b>50</b>	<b>1,056</b>	<b>72</b>	<b>67</b>	<b>15</b>		
<b>Total</b>		<b>1,652</b>	<b>46</b>	<b>1,063</b>	<b>71</b>	<b>64</b>	<b>17</b>		
<b>Delaware</b>									
Eastern Shore Nat Gas Co	Maryland	28	0	0	--	--	--	None	
Columbia Gas Trans Corp	Pennsylvania	172	48	34	42	20	-4	New Jersey	141
Eastern Shore Nat Gas Co		60	171	43	516	72	127	Maryland	10
Transcontinental Gas P L Co		76	27	50	31	65	3	None	
<b>Total</b>	<b>Total</b>	<b>308</b>	<b>55</b>	<b>126</b>	<b>84</b>	<b>41</b>	<b>19</b>		
<b>Total</b>		<b>336</b>	<b>48</b>	<b>126</b>	<b>35</b>	<b>41</b>	<b>-1</b>		
<b>Maine</b>									
Granite State Gas Trans Inc	New Hampshire	31	50	16	46	52	-43	New Hampshire	31
<b>Total</b>		<b>31</b>	<b>50</b>	<b>16</b>	<b>46</b>	<b>52</b>	<b>-43</b>		
<b>Maryland</b>									
Eastern Shore Nat Gas Co	Delaware	10	0	9	21	85	21	Delaware	28
CNG Trans Corp	Pennsylvania	533	29	117	95	22	51	Virginia	350
Columbia Gas Trans Corp		42	0	0	0	--	--	None	
Eastern Shore Nat Gas Co		28	0 <sup>d</sup>	0	--	--	--	None	
Texas Eastern Trans Corp		<sup>c</sup> 163		--	--	--	--	Pennsylvania	163
<b>Total</b>	<b>Total</b>	<b>953</b>	<b>25</b>	<b>117</b>	<b>43</b>	<b>22</b>	<b>19</b>		
Columbia Gas Trans Corp	Virginia	1,113	18 <sup>d</sup>	448	-1	40	-16	Pennsylvania	146
Transcontinental Gas P L Co		2,100		1,835	-5	87	-5	Pennsylvania	2,050
<b>Total</b>	<b>Total</b>	<b>3,213</b>	<b>6</b>	<b>2,283</b>	<b>-4</b>	<b>71</b>	<b>-9</b>		
Columbia Gas Trans Corp	West Virginia	4	0	0	--	--	--	None	
<b>Total</b>	<b>Total</b>	<b>4,170</b>	<b>8</b>	<b>2,409</b>	<b>-2</b>	<b>64</b>	<b>-9</b>		
<b>Massachusetts</b>									
Tennessee Gas Pipeline Co	Connecticut	80	0	0	--	--	--	None	None
Tennessee Gas Pipeline Co	New York	1,059	41	891	152	84	79	NH/RI/CT	329
Algonquin Gas Trans Co	Rhode Island	560	5	296	4	53	-1	Rhode Island	145
<b>Total</b>	<b>Total</b>	<b>1,699</b>	<b>25</b>	<b>1,187</b>	<b>86</b>	<b>73</b>	<b>48</b>		
<b>New Hampshire</b>									
Granite State Gas Trans Inc	Maine	<sup>c</sup> 31	50	11	919	36	294	None	
Granite State Gas Trans Inc	Massachusetts	31	19	10	-62	31	-68	Maine	31
Tennessee Gas Pipeline Co		75	10	45	82	61	65	None	
<b>Total</b>	<b>Total</b>	<b>106</b>	<b>13</b>	<b>55</b>	<b>10</b>	<b>52</b>	<b>-2</b>		
Granite State Gas Trans Inc	Vermont	31	29	22	-1	70	-24	None	
<b>Total</b>	<b>Total</b>	<b>168</b>	<b>29</b>	<b>88</b>	<b>20</b>	<b>52</b>	<b>-7</b>		
<b>New Jersey</b>									
Columbia Gas Trans Corp	Delaware	141	--	0	--	--	--	None	
Columbia Gas Trans Corp	Pennsylvania	245	47	219	216	89	114	None	
Tennessee Gas Pipeline Co		499	3	263	27	53	24	New York	377
Texas Eastern Trans Corp		2,850	24	1,271	11	45	-10	New York	562
Transcontinental Gas P L Co		2,387	0	1,573	11	66	11	New York	885
<b>Total</b>	<b>Total</b>	<b>5,981</b>	<b>12</b>	<b>3,325</b>	<b>17</b>	<b>56</b>	<b>5</b>		
<b>Total</b>		<b>6,122</b>	<b>15</b>	<b>3,325</b>	<b>17</b>	<b>56</b>	<b>6</b>		

**Table A3. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Northeast Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>New York</b>									
Empire Pipeline Co	Canada	503	--	124	--	25	--	None	
Iroquois Pipeline Co		858	--	782	--	91	--	Connecticut	420
North Country P L Co		56	--	44	--	79	--		
St Lawrence Gas		62	44	37	69	60	18	None	
Tennessee Gas Pipeline Co		843	129	796	222	94	40	None	
<b>Total</b>		<b>2,322</b>	<b>466</b>	<b>1,783</b>	<b>563</b>	<b>77</b>	<b>17</b>		
Iroquois Pipeline Co	Connecticut	250	--	200	--	80	--	New York	250
Algonquin Gas Trans Co	New Jersey	1,150	13	629	8	55	-5	Connecticut	1,030
Tennessee Gas Pipeline Co		377	0	120	66	32	66	Connecticut	121
Texas Eastern Trans Corp		562	4	250	-4	45	-8	None	
Transcontinental Gas P L Co		886	0	742	-9	84	-9	None	
<b>Total</b>		<b>2,975</b>	<b>5</b>	<b>1,741</b>	<b>1</b>	<b>59</b>	<b>-5</b>		
CNG Trans Corp	Pennsylvania	<sup>c</sup> 1,565	8	446	26	29	-10	None	
Columbia Gas Trans Corp		131	33	73	-14	56	-35	Pennsylvania	1
National Fuel Gas Supply Co		<sup>c</sup> 116	0	97	160	83	160	Pennsylvania	321
Penn York Energy Corp		<sup>c</sup> 95	0	45	32	47	32	Pennsylvania	60
Tennessee Gas Pipeline Co		823	21	684	58	83	1	Massachusetts	1,059
<b>Total</b>		<b>2,730</b>	<b>12</b>	<b>1,348</b>	<b>26</b>	<b>9</b>	<b>9</b>		
<b>Total</b>		<b>8,277</b>	<b>46</b>	<b>5,072</b>	<b>65</b>	<b>61</b>	<b>12</b>		
<b>Pennsylvania</b>									
Columbia Gas Trans Corp	Maryland	206	41	0	--	--	--	Delaware/NY/NJ	547
Transcontinental Gas P L Co		2,050	0	1,748	-8	85	-8	Maryland/DE/NJ	2,463
<b>Total</b>		<b>2,256</b>	<b>3</b>	<b>1,748</b>	<b>-11</b>	<b>85</b>	<b>-4</b>		
Transcontinental Gas P L Co	New Jersey	1,900	9	0	--	--	--	None	
Columbia Gas Trans Corp	New York	1	0	0	-47	40	-47	None	
National Fuel Gas Supply Co		<sup>c</sup> 321	23	234	--	73	--	None	
Penn York Energy Corp		<sup>c</sup> 60	0	0	--	--	--	None	
<b>Total</b>		<b>382</b>	<b>19</b>	<b>235</b>	<b>1,017</b>	<b>73</b>	<b>111</b>		
CNG Trans Corp	Ohio	560	0	0	--	--	--	New York/MD	2,098
Tennessee Gas Pipeline Co		1,575	0	1,433	13	91	11	New York/NJ	1,322
<b>Total</b>		<b>2,135</b>	<b>0</b>	<b>1,433</b>	<b>13</b>	<b>91</b>	<b>11</b>		
Carnegie Natural Gas Co	West Virginia	30	0	20	100	84	23	None	
CNG Trans Corp		500	0	507	316	67	100	Ohio	435
Columbia Gas Trans Corp		1,179	0	479	0	81	234	Ohio/MD/WV	651
Equitrans Inc		<sup>c</sup> 255	7	51	-19	49	21	West Virginia	70
Texas Eastern Trans Corp		2,625	4	2,400	20	91	16	New Jersey	2,850
<b>Total</b>		<b>4,589</b>	<b>3</b>	<b>3,458</b>	<b>30</b>	<b>75</b>	<b>26</b>		
<b>Total</b>		<b>11,262</b>	<b>4</b>	<b>7,241</b>	<b>-4</b>	<b>80</b>	<b>12</b>		
<b>Rhode Island</b>									
Algonquin Gas Trans Co	Connecticut	760	14	495	38	65	21	Massachusetts	705
Algonquin Gas Trans Co	Massachusetts	145	9	72	-29	50	-35	None	
Tennessee Gas Pipeline Co		173	518	146	597	85	13	None	
<b>Total</b>		<b>318</b>	<b>98</b>	<b>218</b>	<b>78</b>	<b>69</b>	<b>-10</b>		
<b>Total</b>		<b>1,078</b>	<b>31</b>	<b>714</b>	<b>48</b>	<b>66</b>	<b>13</b>		
<b>Vermont</b>									
Granite State Gas Trans Inc	Canada	31	24	30	37	97	10	New Hampshire	31
Vermont Gas Sys Inc		40	25	21	17	53	-6	None	
<b>Total</b>		<b>71</b>	<b>25</b>	<b>51</b>	<b>28</b>	<b>72</b>	<b>3</b>		
<b>Total</b>		<b>71</b>	<b>25</b>	<b>51</b>	<b>28</b>	<b>72</b>	<b>0</b>		

**Table A3. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Northeast Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Virginia</b>									
CNG Trans Corp	Maryland	350	10	73	317	21	281	West Virginia	21
Transcontinental Gas P L Co	North Carolina	2,587	7	2,033	-3	79	-9	Maryland/NC	2,520
East Tennessee Nat Gas Co	Tennessee	26	102	0	-97	1	-98	None	
Columbia Gas Trans Corp	West Virginia	1,943	15	829	5	43	-8	Maryland/NC	1,137
<b>Total</b>		<b>4,906</b>	<b>10</b>	<b>2,935</b>	<b>1</b>	<b>60</b>	<b>-8</b>		
<b>West Virginia</b>									
Columbia Gas Trans Corp	Kentucky	1,855	0	1,829	17	98	16	Virginia/PA	3,121
Tennessee Gas Pipeline Co		681	0	569	36	84	36	None	
<b>Total</b>		<b>2,536</b>	<b>0</b>	<b>2,398</b>	<b>21</b>	<b>95</b>	<b>21</b>		
Columbia Gas Trans Corp	Maryland	5	0	0	--	--	--		
Columbia Gas Trans Corp	Ohio	12	0	0	-99	1	-96	None	
Texas Eastern Trans Corp		2,740	12	2,421	21	88	8	Pennsylvania	2,625
<b>Total</b>		<b>2,752</b>	<b>12</b>	<b>2,421</b>	<b>21</b>	<b>88</b>	<b>8</b>		
Columbia Gas Trans Corp	Pennsylvania	579	0	0	--	--	--	OH/KY	938
Equitrans Inc		70	0	29	32	41	32	Pennsylvania	255
<b>Total</b>		<b>649</b>	<b>0</b>	<b>29</b>	<b>-33</b>	<b>40</b>	<b>-33</b>		
CNG Trans Corp	Virginia	21	-34	7	271	31	465	Ohio/PA	1,209
<b>Total</b>		<b>5,962</b>	<b>5</b>	<b>4,855</b>	<b>20</b>	<b>90</b>	<b>27</b>		

<sup>a</sup>Average daily flow based upon annual volumes (reported as delivered from one State to another) divided by days in the year.

<sup>b</sup>Average usage rate is equal to the average daily flow derived by estimated capacity. Utilization computation does not include capacity against which no flow was reported.

<sup>c</sup>Bidirection flow occur on some or all of the pipeline company lines that cross the State border. The value shown represents the capacity, or sum of capacity, for only the flow in the direction indicated.

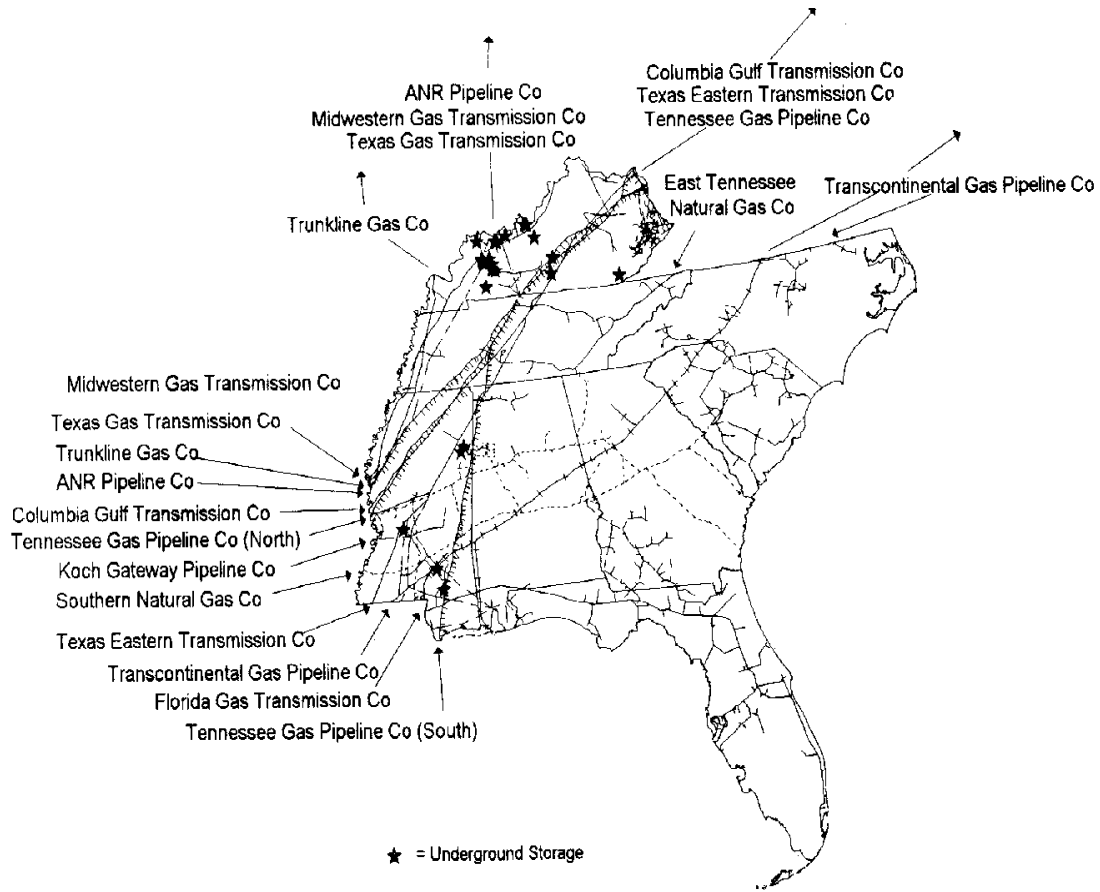
<sup>d</sup>Less than 0.5 percent and greater than -0.5 percent.

-- = Not applicable, pipeline not in service in 1990 and/or no flow reported in 1990 or 1996.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.

**Figure A4. Major Interstate Natural Gas Pipelines in the Southeast Region**



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, as of December 1997.

**Table A4. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Southeast Region, by State, 1990 and 1996**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Alabama</b>									
Koch Gateway Pipeline Co	Florida	<sup>c</sup> 20	0	0	--	--	--	None	
Mobile Bay Pipeline Co	Gulf of Mexico	600	--	161	--	27	--	None	
Alabama-TN Nat Gas Co	Mississippi	35	17	27	0	77	-14	None	
Florida Gas Trans Co		1,375	70	900	18	65	-30	Florida	1,475
Koch Gateway Pipeline Co		<sup>c</sup> 300	-45 <sub>g</sub>	6	-97	2	-94	Florida	145
Southern Natural Gas Co		2,250		1,376	27	61	27	Georgia	1,530
Tennessee Gas Pipeline Co		1,899	20	1,818	55	96	30	Tennessee	1,732
Texas Eastern Trans Corp		2,108	0	2,010	22	96	21	Tennessee	2,151
Transcontinental Gas P L Co		3,302	0	2,694	-5	82	-5	Georgia	3,467
<b>Total</b>	<b>Total</b>	<b>11,269</b>	<b>6</b>	<b>8,839</b>	<b>14</b>	<b>78</b>	<b>8</b>		
<b>Total</b>		<b>11,889</b>	<b>12</b>	<b>8,840</b>	<b>14</b>	<b>78</b>	<b>8</b>		
<b>Florida</b>									
Florida Gas Trans Co	Alabama	1,475	8 <sub>g</sub>	1,166	50	79	-17	None	
Koch Gateway Pipeline Co		145		115	19	79	19	Alabama	20
<b>Total</b>	<b>Total</b>	<b>1,620</b>	<b>68</b>	<b>1,281</b>	<b>47</b>	<b>79</b>	<b>-13</b>		
South Georgia Nat Gas Co	Georgia	56	30	38	92	69	48	None	
<b>Total</b>	<b>Total</b>	<b>1,676</b>	<b>66</b>	<b>1,320</b>	<b>48</b>	<b>79</b>	<b>11</b>		
<b>Georgia</b>									
South Georgia Nat Gas Co	Alabama	132	39	103	54	78	11	Florida	56
Southern Natural Gas Co		1,530	0	1,034	21	68	21	South Carolina/TN	332
Transcontinental Gas P L Co		3,467	7	2,969	5	86	-2	South Carolina	3,195
<b>Total</b>	<b>Total</b>	<b>5,129</b>	<b>5</b>	<b>4,106</b>	<b>9</b>	<b>80</b>	<b>4</b>		
Southern Natural Gas Co	South Carolina	50	0	0	--	--	--	None	
East Tennessee Nat Gas Co	Tennessee	62	0	0	--	--	--	None	
<b>Total</b>	<b>Total</b>	<b>5,241</b>	<b>5</b>	<b>4,106</b>	<b>9</b>	<b>78</b>	<b>83</b>		
<b>Kentucky</b>									
ANR Pipeline Co	Tennessee	1,398	7	1,291	31	92	23	Indiana	1,386
Columbia Gulf Trans Co		2,010	0	1,801	7	90	7	West Virginia	1,680
Midwestern Gas Trans Co		665	0	478	34	72	34	Indiana	663
Tennessee Gas Pipeline Co		2,671	10	2,531	15	95	5	Ohio/WV	2,458
Texas Eastern Trans Corp		2,104	0	2,015	22	96	22	Ohio	2,066
Texas Gas Trans Corp		<sup>c</sup> 1,669	0	1,519	32	91	32	Indiana/TN	1,534
Trunkline Gas Co		1,825	0	1,444	41	79	41	Illinois	1,799
<b>Total</b>	<b>Total</b>	<b>12,343</b>	<b>3</b>	<b>11,080</b>	<b>23</b>	<b>90</b>	<b>19</b>		
Columbia Gas Trans Corp	West Virginia	76	0	0	--	--	--	Ohio/WV	2,254
<b>Total</b>	<b>Total</b>	<b>12,418</b>	<b>3</b>	<b>11,080</b>	<b>22</b>	<b>90</b>	<b>19</b>		
<b>Mississippi</b>									
Koch Gateway Pipeline Co	Alabama	200	33	0	--	--	--	None	
ANR Pipeline Co	Arkansas	1,430	6	1,213	21	85	15	Tennessee	1,480
Tennessee Gas Pipeline Co		1,580	1	900	-15	57	-16	Tennessee	2,132
Texas Gas Trans Corp		2,163	0	1,647	21	76	21	Tennessee	1,880
Trunkline Gas Co		1,853	0	1,356	24	73	24	Tennessee	1,836
<b>Total</b>	<b>Total</b>	<b>7,026</b>	<b>1</b>	<b>5,116</b>	<b>13</b>	<b>73</b>	<b>12</b>		
Chandeleur Pipeline Co	Gulf of Mexico	275	0	85	-43	31	-43		
Columbia Gulf Trans Co	Louisiana	1,982	-7	1,756	1	89	8	Tennessee	1,961
Florida Gas Trans Co		1,300	58	870	20	67	-24	Alabama	1,375
Koch Gateway Pipeline Co		<sup>c</sup> 1,030	8	474	-34	46	-39	Alabama/LA	610
Mid-Louisiana Gas Co		70	0	60	0	86	0	Louisiana	70

**Table A4. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Southeast Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
Southern Natural Gas Co		1,661	0	1,319	20	79	20	Alabama	2,250
Tennessee Gas Pipeline Co		2,520	5	1,975	4	78	0	Alabama	1,899
Texas Eastern Trans Corp		2,202	25	1,965	40	89	12	Alabama	2,108
Transcontinental Gas P L Co		3,056	0	2,528	3	83	3	Alabama	3,302
<b>Total</b>		<b>13,821</b>	<b>7</b>	<b>10,947</b>	<b>8</b>	<b>79</b>	<b>1</b>		
<b>Total</b>		<b>21,321</b>	<b>5</b>	<b>16,148</b>	<b>9</b>	<b>77</b>	<b>4</b>		
<b>North Carolina</b>									
Transcontinental Gas P L Co	South Carolina	3,002	8	2,638	4	88	-4	Virginia	2,587
Columbia Gas Trans Corp	Virginia	25	0	15	14	60	14	None	
Transcontinental Gas P L Co		420	--	0	--	--	--	None	
<b>Total</b>		<b>445</b>	<b>1,680</b>	<b>15</b>	<b>14</b>	<b>60</b>	<b>14</b>		
<b>Total</b>		<b>3,447</b>	<b>23</b>	<b>2,653</b>	<b>4</b>	<b>88</b>	<b>-4</b>		
<b>South Carolina</b>									
Southern Natural Gas Co	Georgia	276	0	216	8	78	8	Georgia	50
Transcontinental Gas P L Co		3,195	7	2,797	5	88	-2	North Carolina	3,002
<b>Total</b>		<b>3,471</b>	<b>7</b>	<b>3,013</b>	<b>6</b>	<b>87</b>	<b>7</b>		
<b>Tennessee</b>									
Tennessee Gas Pipeline Co	Alabama	1,732	16	1,678	53	97	33	Kentucky	2,671
Texas Eastern Trans Corp		2,151	0	2,010	21	93	21	Kentucky	2,104
<b>Total</b>		<b>3,883</b>	<b>6</b>	<b>3,688</b>	<b>34</b>	<b>95</b>	<b>25</b>		
Southern Natural Gas Co	Georgia	56	25	22	0	39	-20	None	
Texas Gas Trans Corp	Kentucky	<sup>c</sup> 25	--	0	--	--	--	None	
Alabama-TN Nat Gas Co	Mississippi	91	1,031	7	0	8	-91	None	
ANR Pipeline Co		1,418	7	1,205	21	85	14	Kentucky	1,398
Columbia Gulf Trans Co		1,961	-5	1,731	1	88	6	Kentucky	2,010
Noram Gas Transmission Co		25	0	0	--	--	--	Arkansas	25
Tennessee Gas Pipeline Co		2,132	1	1,896	32	89	30	None	
Texas Gas Trans Corp		1,880	0	1,579	23	84	23	Kentucky	1,669
Trunkline Gas Co		1,836	0	1,346	24	73	24	Kentucky	1,825
<b>Total</b>		<b>9,342</b>	<b>1</b>	<b>7,764</b>	<b>19</b>	<b>83</b>	<b>18</b>		
<b>Total</b>		<b>13,306</b>	<b>3</b>	<b>11,475</b>	<b>23</b>	<b>87</b>	<b>20</b>		

<sup>a</sup>Average daily flow based upon annual volumes (reported as delivered from one State to another) divided by days in the year.

<sup>b</sup>Average usage rate is equal to the average daily flow derived by estimated capacity. Utilization computation does not include capacity against which no flow was reported.

<sup>c</sup>Bidirection flow occur on some or all of the pipeline company lines that cross the State border. The value shown represents the capacity, or sum of capacity, for only the flow in the direction indicated.

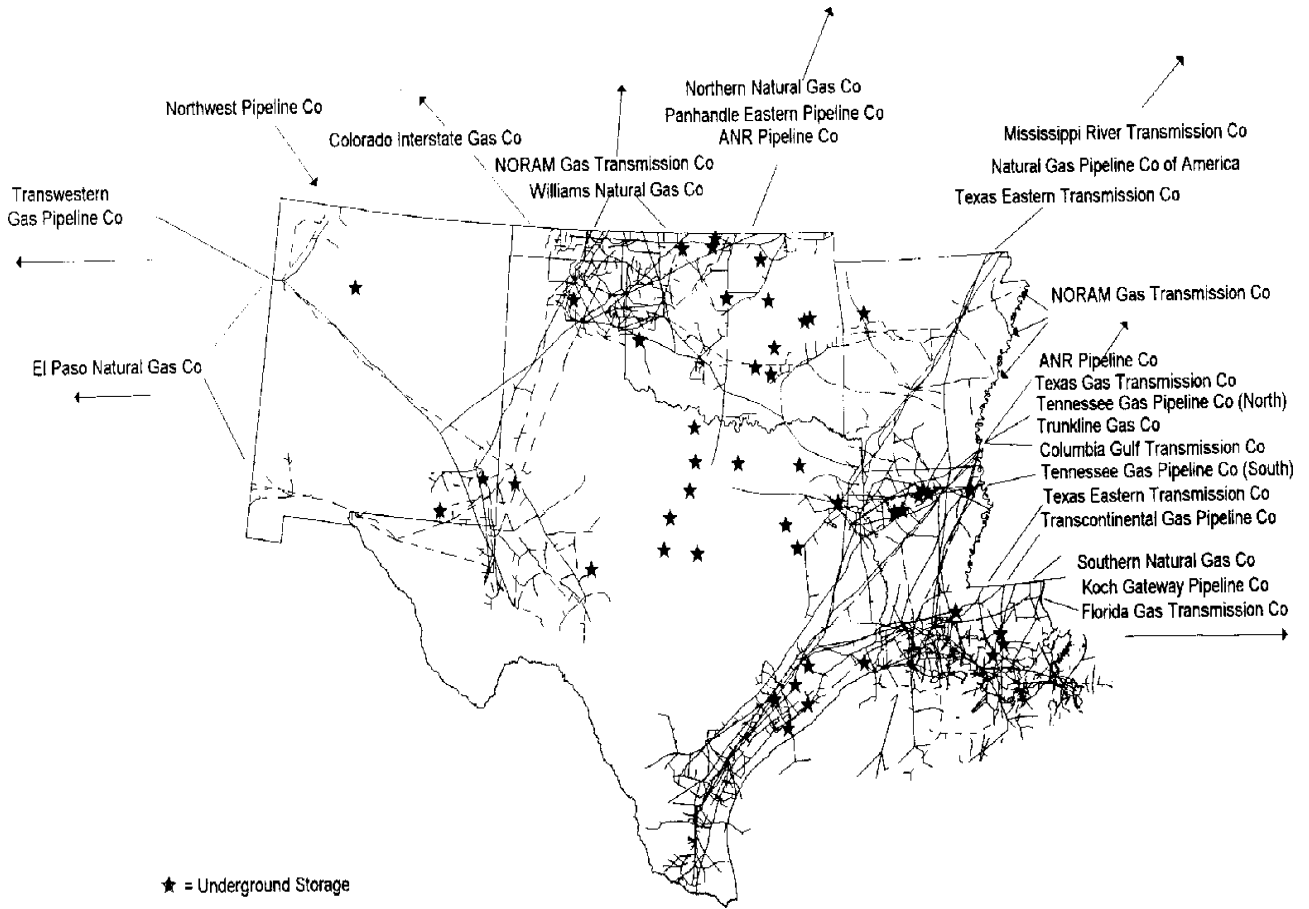
<sup>d</sup>Less than 0.5 percent and greater than -0.5 percent.

-- = Not applicable, pipeline not in service in 1990 and/or no flow reported in 1990 or 1996.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.

**Figure A5. Major Interstate Natural Gas Pipelines Exporting from the Southwest Region**



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, as of December 1997.



**Table A5. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Southwest Region, by State, 1990 and 1996**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Arkansas</b>									
ANR Pipeline Co	Louisiana	1,430	7	1,213	21	85	14	Mississippi	1,430
Mississippi River Trans Corp		<sup>c</sup> 730	35	111	-57	15	-68	Missouri/LA	1,280
Noram Gas Transmission Co		<sup>c</sup> 120	0	44	--	37	--	Missouri	100
Tennessee Gas Pipeline Co		1,581	0	901	-14	57	-14	Mississippi	1,580
Texas Gas Trans Corp		2,002	0	1,592	24	80	24	Mississippi	2,163
Trunkline Gas Co		1,853	0	1,356	24	73	24	Mississippi	1,852
<b>Total</b>		<b>7,716</b>	<b>4</b>	<b>5,218</b>	<b>11</b>	<b>68</b>	<b>6</b>		
Associated Natural Gas Co	Missouri	<sup>c</sup> 30	0	26	250	88	250	Missouri	10
Noram Gas Transmission Co	Oklahoma	1,654	<sup>d</sup>	1,010	47	61	47	Louisiana/TX	206
Ozark Gas Trans Sys		170	0	81	353	48	353	None	
<b>Total</b>		<b>1,824</b>	<b>0</b>	<b>1,091</b>	<b>55</b>	<b>60</b>	<b>55</b>		
Noram Gas Transmission Co	Tennessee	25	0	0	--	--	--	None	
Natural Gas P L Co of America	Texas	<sup>c</sup> 1,893	19	1,167	32	62	11	Missouri	2,250
Texas Eastern Trans Corp		267	5	179	257	67	241	Missouri	300
<b>Total</b>		<b>2,160</b>	<b>17</b>	<b>1,345</b>	<b>44</b>	<b>62</b>	<b>23</b>		
<b>Total</b>		<b>11,755</b>	<b>5</b>	<b>7,680</b>	<b>21</b>	<b>65</b>	<b>13</b>		
<b>Louisiana</b>									
Mississippi River Trans Corp	Arkansas	<sup>c</sup> 550	0	539	10	98	10	None	
Noram Gas Transmission Co		156	-31	0	--	--	--	Texas	25
<b>Total</b>		<b>706</b>	<b>-9</b>	<b>539</b>	<b>10</b>	<b>98</b>	<b>10</b>		
ANR Pipeline Co	Gulf of Mexico <sup>d</sup>	1,919	NA	NA	--	NA	--	--	
Columbia Gulf Trans Co		1,210	NA	NA	--	NA	--	--	
High Island Offshore Co		1,800	NA	NA	--	NA	--	--	
Koch Gateway Pipeline Co		530	NA	NA	--	NA	--	--	
Quivira Gas Co		120	NA	NA	--	NA	--	--	
Sea Robin Pipeline Co		1,595	NA	NA	--	NA	--	--	
Shell Gas Pipeline Co		600	NA	NA	--	NA	--	--	
Southern Natural Gas Co		2,012	NA	NA	--	NA	--	--	
Stingray Pipeline Co		1,170	NA	NA	--	NA	--	--	
Tennessee Gas Pipeline Co		2,755	NA	NA	--	NA	--	--	
Texas Eastern Texas Trans Co		990	NA	NA	--	NA	--	--	
		1,700	NA	NA	--	NA	--	--	
		1,226	NA	NA	--	NA	--	--	
<b>Total</b>		<b>17,627</b>	<b>NA</b>	<b>NA</b>	<b>--</b>	<b>NA</b>	<b>--</b>		
Koch Gateway Pipeline Co	Mississippi	<sup>c</sup> 310	0	0	--	--	--	None	
Mid-Louisiana Gas Co		70	0	60	--	86	--	None	
<b>Total</b>		<b>380</b>	<b>0</b>	<b>60</b>	<b>--</b>	<b>16</b>	<b>--</b>		
Florida Gas Trans Co	Texas	320	7	253	23	79	16	Mississippi	1,340
Gulf States Transmission Corp		75	<sup>q</sup>	9	17	13	17	None	
Koch Gateway Pipeline Co		825		731	39	89	40	Mississippi	1,030
Mississippi River Trans Corp		85	0	58	97	68	97	Arkansas	1,340
Natural Gas P L Co of America		<sup>c</sup> 725	0	663	357	91	357	None	
Noram Gas Transmission Co		140	87	93	44	67	-23	Arkansas	825
Sabine Pipe Line Company		270	0	98	--	36	--	None	
Southern Natural Gas Co		110	18	48	81	44	54	Mississippi	1,661
Tennessee Gas Pipeline Co		1,307	13	1,231	23	94	9	Mississippi/AR	4,101
Texas Eastern Trans Corp		<sup>c</sup> 743	10	602	-1	81	-9	Mississippi	2,201
Texas Gas Trans Corp		179	30	161	38	90	6	Arkansas	2,002
Transcontinental Gas P L Co		725	0	702	12	97	12	Mississippi	3,056
Trunkline Gas Co		334	0	307	21	92	21	Arkansas	1,852
<b>Total</b>		<b>5,838</b>	<b>6</b>	<b>4,958</b>	<b>38</b>	<b>85</b>	<b>23</b>		
ANR Pipeline Co	Louisiana	<sup>e</sup>	--	--	--	--	--	Arkansas	1,338
Columbia Gulf Transmission Co		<sup>e</sup>	--	--	--	--	--	Mississippi	2,133
Natural Gas PL Co of America		<sup>e</sup>	--	--	--	--	--	Texas	509
Transwestern Pipeline Corp		<sup>e</sup>	--	--	--	--	--	Texas	199
<b>Total</b>		<b>24,560</b>	<b>4</b>	<b>8,093</b>	<b>50</b>	<b>78</b>	<b>11</b>		

**Table A5. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Southwest Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>New Mexico</b>									
El Paso Natural Gas Co	Colorado	650	50	573	47	88	-2	Arizona	650
Transcolorado Gas Trans Co		120	--	100	--	83	--	None	
Transwestern Pipeline Co		500	233	277	--	55	--	Arizona	500
<b>Total</b>		<b>1,270</b>	<b>118</b>	<b>949</b>	<b>143</b>	<b>75</b>	<b>17</b>		
El Paso Natural Gas Co	Texas	<sup>c</sup> 2,750	7	7	-99	0	-99	Arizona	4,261
Natural Gas P L Co of America		<sup>c</sup> 550	91	4	-95	1	-97	Texas	720
Transwestern Pipeline Co		<sup>c</sup> 950	21	0	--	--	--	Arizona	1,090
<b>Total</b>		<b>4,250</b>	<b>17</b>	<b>11</b>	<b>-99</b>	<b>1</b>	<b>-98</b>		
<b>Total</b>		<b>5,520</b>	<b>30</b>	<b>960</b>	<b>-53</b>	<b>52</b>	<b>4</b>		
<b>Oklahoma</b>									
Colorado Interstate Gas	Colorado	<sup>c</sup> 250	25	201	37	80	10	Texas	200
KN Interstate Gas Co	Kansas	5	0	4	--	80	--	Texas	35
Natural Gas P L Co of America		<sup>c</sup> 300	0	0	--	--	--	Texas	750
Williams Natural Gas Co		259	48	87	212	34	111	Missouri	496
<b>Total</b>		<b>564</b>	<b>18</b>	<b>91</b>	<b>227</b>	<b>36</b>	<b>117</b>		
ANR Pipeline Co	Texas	580	21	319	457	55	362	Kansas	853
Colorado Interstate Gas		<sup>c</sup> 200	0	100	--	50	--	None	
El Paso Natural Gas Co		<sup>c</sup> 152	0	51	--	33	--	None	
KN Interstate Gas Co		<sup>c</sup> 135	0	70	--	52	--	None	
Natural Gas P L Co of America		<sup>c</sup> 1,765	16	617	52	35	22	Kansas/TX	1,903
Northern Natural Gas Co		<sup>c</sup> 2,500	0	451	74	18	25	Kansas	1,330
Panhandle Eastern P L Co		<sup>c</sup> 389	-4	289	82	74	89	Kansas/TX	1,451
Transok Inc		30	--	24	--	80	--	None	
Transwestern Pipeline Co		75	0	40	-36	53	-36	Kansas	5
Williams Natural Gas Co		100	0	66	-3	66	-3	Kansas	496
<b>Total</b>		<b>5,926</b>	<b>6</b>	<b>2,027</b>	<b>100</b>	<b>34</b>	<b>45</b>		
<b>Total</b>		<b>6,740</b>	<b>8</b>	<b>2,318</b>	<b>95</b>	<b>36</b>	<b>41</b>		
<b>Texas</b>									
Natural Gas P L Co of America	Arkansas	<sup>c</sup> 600	0	0	0	--	--	None	
Noram Gas Transmission Co		50	43	12	-55	23	-68	Louisiana	140
<b>Total</b>		<b>650</b>	<b>2</b>	<b>12</b>	<b>-55</b>	<b>23</b>	<b>-68</b>		
Black Marlin Pipeline Co	Gulf of Mexico <sup>d</sup>	384	NA	NA	--	NA	--	--	
Natural Gas PL Co of America		115	NA	NA	--	NA	--	--	
Sea Rim Pipeline Co		176	NA	NA	--	NA	--	--	
Seagulf Interstate Corp		95	NA	NA	--	NA	--	--	
Superior Offshore Pipeline Co		360	NA	NA	--	NA	--	--	
Transcontinental Gas PL Co		400	NA	NA	--	NA	--	--	
<b>Total</b>		<b>1,530</b>							
Koch Gateway Pipeline Co	Louisiana	20	0	4	--	19	--	None	
Natural Gas P L Co of America		<sup>c</sup> 140	-90	0	--	--	--	Arkansas	1,873
Noram Gas Transmission Co		25	0	14	138	58	138	None	
Texas Eastern Trans Corp		<sup>c</sup> 199	0	0	--	--	--	Louisiana	743
<b>Total</b>		<b>384</b>	<b>-77</b>	<b>18</b>	<b>-43</b>	<b>41</b>	<b>45</b>		
Texas Eastern Trans Corp	Mexico	<sup>c</sup> 350	0	37	--	11	--	None	
El Paso Natural Gas Co	New Mexico	<sup>c</sup> 1,546	0	601	--	39	--	None	
Natural Gas P L Co of America		<sup>c</sup> 720	41	282	56	39	81	Oklahoma	1,765
Northern Natural Gas Co		<sup>c</sup> 200	0	141	23	70	23	Oklahoma	2,500
Transwestern Pipeline Co		<sup>c</sup> 800	2	523	62	65	40	Oklahoma	75
<b>Total</b>		<b>3,266</b>	<b>7</b>	<b>1,548</b>	<b>43</b>	<b>47</b>	<b>78</b>		
ANR Pipeline Co	Oklahoma	150	0	119	332	79	332	None	None
Colorado Interstate Gas		<sup>c</sup> 200	0	24	-56	12	-56	None	
El Paso Natural Gas Co		<sup>c</sup> 250	0	12	-95	5	-95	New Mexico	2,750
KN Interstate Gas Co		<sup>c</sup> 35	0	3	-81	8	-81	None	
Natural Gas P L Co of America		<sup>c</sup> 750	22	572	18	76	-4	New Mexico	550

**Table A5. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Southwest Region, by State, 1990 and 1996 (Continued)**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
Noram Gas Transmission Co		139	0	13	141	9	141	None	
Northern Natural Gas Co		<sup>c</sup> 1,050	75	175	41	17	-19	None	
Panhandle Eastern P L Co		<sup>c</sup> 56	0	34	7	60	7	Oklahoma	389
Transok Inc		50	--	11	--	22	--	None	
Transwestern Pipeline Co		115	35	26	-58	23	-69	New Mexico	950
<b>Total</b>	<b>Total</b>	<b>2,795</b>	<b>31</b>	<b>988</b>	<b>-5</b>	<b>38</b>	<b>-22</b>		
<b>Total</b>		<b>8,575</b>	<b>-4</b>	<b>2,759</b>	<b>95</b>	<b>41</b>	<b>73</b>		
ANR Pipeline Co	Texas	<sup>e</sup>	--	--	--	--	--	Oklahoma	250
Florida Gas Transmission Co		<sup>e</sup>	--	--	--	--	--	Louisiana	300
Mississippi River Transm Co		<sup>e</sup>	--	--	--	--	--	Louisiana	85
Southern Natural Gas Co		<sup>e</sup>	--	--	--	--	--	Louisiana	93
Tennessee Gas Pipeline Co		<sup>e</sup>	--	--	--	--	--	Louisiana	1,153
Texas Eastern Trans Corp		<sup>e</sup>	--	--	--	--	--	Arkansas/LA	937
Texas Gas Transmission Corp		<sup>e</sup>	--	--	--	--	--	Louisiana	138
Transcontinental Gas Pipeline Co		<sup>e</sup>	--	--	--	--	--	Louisiana	725
Trunkline Gas Co		<sup>e</sup>	--	--	--	--	--	Louisiana	334
United Gas Pipeline Co		<sup>e</sup>	--	--	--	--	--	Louisiana	830
Williams Natural Gas Co		<sup>e</sup>	--	--	--	--	--	Oklahoma	50

<sup>a</sup>Average daily flow based upon annual volumes (reported as delivered from one State to another) divided by days in the year.

<sup>b</sup>Average usage rate is equal to the average daily flow derived by estimated capacity. Utilization computation does not include capacity against which no flow was reported.

<sup>c</sup>Bidirection flow occur on some or all of the pipeline company lines that cross the State border. The value shown represents the capacity, or sum of capacity, for only the flow in the direction indicated.

<sup>d</sup>List of Offshore-to-Onshore capacity levels is not all inclusive. In some cases capacity levels may be understated.

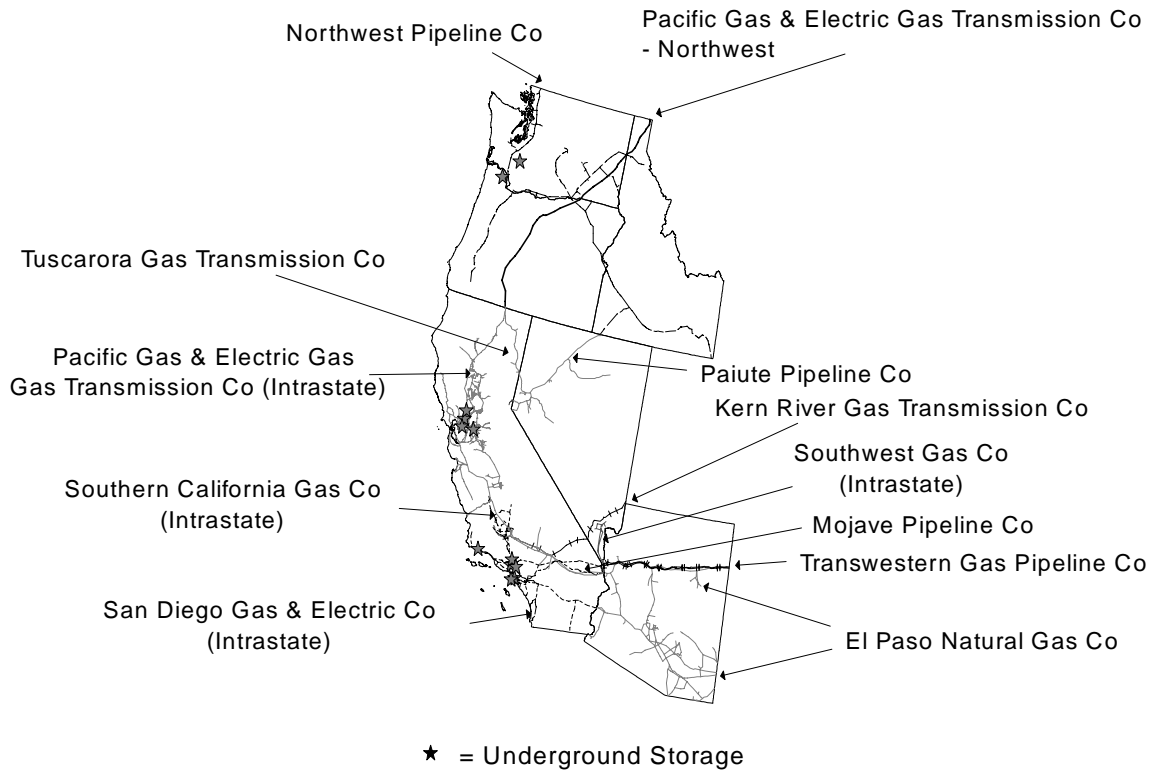
<sup>e</sup>The pipeline, or a portion of the pipeline system, begins service in the "Receiving State." Pipeline is shown here for purposes of showing capacity exiting the State.

-- = Not applicable, pipeline not in service in 1990 and/or no flow reported in 1990 or 1996. NA = Not available.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.

**Figure A6. Major Interstate Natural Gas Pipelines Serving the Western Region**



Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, as of December 1997.

**Table A6. State Border Capacity, Flows, and Utilization Rates of Interstate Natural Gas Pipelines Operating in the Western Region, by State, 1990 and 1996**  
(Volumes in Million Cubic Feet per Day)

Receiving State/ Via Pipeline Company	Transmission Throughput Capabilities and Flows								
	Estimated Entering Capacity			Average Daily Flow <sup>a</sup>		Average Usage Rate <sup>b</sup>		Exiting Capacity	
	Upstream State	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	1996	Percent Change 1990-1996	Downstream State	1996
<b>Arizona</b>									
El Paso Nat Gas Co	New Mexico	4,261	19	2,285	-29	54	-41	California/NV/MX	3,679
Transwestern Pipeline Co		1,090	41	130	-81	12	-87	California	1,225
<b>Total</b>		<b>5,351</b>	<b>23</b>	<b>2,415</b>	<b>-38</b>	<b>45</b>	<b>-50</b>		
<b>California</b>									
El Paso Nat Gas Co	Arizona	3,443	21	1,607	-40	47	-50	None	
Mojave Pipeline Co		450	--	295	--	66	--	None	
Transwestern Pipeline Co		1,225	61	430	-38	35	-61	None	
<b>Total</b>		<b>5,118</b>	<b>42</b>	<b>2,332</b>	<b>-31</b>	<b>46</b>	<b>-51</b>		
Pacific Interstate Offshore Co	Offshore Calif.	60	0	14	-53	23	-53	None	
Kern River Gas Trans Co	Nevada	750	--	658	--	89	--	None	
Paiute Pipeline Co		30	39	8	-49	27	-63	None	
<b>Total</b>		<b>780</b>	<b>3,530</b>	<b>666</b>	<b>-49</b>	<b>85</b>	<b>14</b>		
Pacific Gas Transmission Co	Oregon	1,950	62	1,594	54	82	-10	None	
Tuscarora Pipeline Co		113	--	53	-24	48	--	Nevada	95
<b>Total</b>		<b>2,063</b>	<b>72</b>	<b>1,647</b>	<b>49</b>	<b>80</b>	<b>-18</b>		
<b>Total</b>		<b>7,961</b>	<b>65</b>	<b>4,646</b>	<b>-3</b>	<b>59</b>	<b>-37</b>		
<b>Idaho</b>									
Pacific Gas Transmission Co	Canada	2,660	55	2,301	63	87	-2	Washington	2,632
Northwest Pipeline Corp	Oregon	<sup>c</sup> 481	9	344	1,250	72	1,138	Nevada	158
Northwest Pipeline Corp	Utah	<sup>c</sup> 444	22	0	-100	--	--	Utah	298
Northwest Pipeline Corp	Washington	122	0	0	0	--	--	None	
<b>Total</b>		<b>3,707</b>	<b>39</b>	<b>2,645</b>	<b>62</b>	<b>90</b>	<b>5</b>		
<b>Nevada</b>									
El Paso Nat Gas Co	Arizona	191	14	109	27	57	11	None	
Tuscarora Pipeline Co	California	95	--	53	-12	56	--	None	
Northwest Pipeline Corp	Idaho	158	32	132	28	84	-3	None	
Kern River Gas Trans Co	Utah	750	--	712	--	95	--	California	750
<b>Total</b>		<b>1,194</b>	<b>310</b>	<b>1,006</b>	<b>304</b>	<b>84</b>	<b>-3</b>		
<b>Oregon</b>									
Northwest Pipeline Corp	Idaho	<sup>c</sup> 254	6	0	--	--	--	Washington	941
Northwest Pipeline Corp	Washington	<sup>c</sup> 739	77	228	277	31	113	Idaho	481
Pacific Gas Transmission Co		2,378	57	2,095	60	88	-3	California	2,063
<b>Total</b>		<b>3,117</b>	<b>61</b>	<b>2,323</b>	<b>69</b>	<b>75</b>	<b>3</b>		
<b>Total</b>		<b>3,371</b>	<b>55</b>	<b>2,323</b>	<b>69</b>	<b>75</b>	<b>3</b>		
<b>Washington</b>									
Ferndale P L Co	Canada	45	--	2	--	4	--	None	
Northwest Pipeline Corp		1,066	29	969	110	91	62	Oregon	1,289
Sumas International PI Co		15	0	4	40	28	40	None	
<b>Total</b>		<b>1,126</b>	<b>34</b>	<b>975</b>	<b>110</b>	<b>87</b>	<b>57</b>		
Pacific Gas Transmission Co	Idaho	2,632	66	2,251	62	86	-10	Oregon	2,378
Northwest Pipeline Corp	Oregon	<sup>c</sup> 941	24	0	--	--	--	Idaho	122
<b>Total</b>		<b>4,699</b>	<b>47</b>	<b>3,226</b>	<b>70</b>	<b>91</b>	<b>20</b>		

<sup>a</sup>Average daily flow based upon annual volumes (reported as delivered from one State to another) divided by days in the year.

<sup>b</sup>Average usage rate is equal to the average daily flow derived by estimated capacity. Utilization computation does not include capacity against which no flow was reported.

<sup>c</sup>Bidirection flow occur on some or all of the pipeline company lines that cross the State border. The value shown represents the capacity, or sum of capacity, for only the flow in the direction indicated.

-- = Not applicable, pipeline not in service in 1990 and/or no flow reported in 1990 or 1996.

Note: Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.