Energy and Minerals

Energy Overview

During 2004, energy production in Utah was generally on the decline, while consumption and prices were on the rise. Despite recent declines, production of coal and natural gas has satisfied increasing demand, unlike crude oil production, which is only a third of what it was 20 years ago. Increasing energy prices in Utah are related to national events and have been driven up by high demand, low stocks and foreign conflicts.

Crude oil production in Utah rose slightly in 2004, but in order to keep up with increasing demand Utah had to import significant amounts of crude oil, including record-high imports from Canada. Production of both natural gas and coal was down for the third straight year, while electricity net generation hit an all-time high. All categories of energy consumption in Utah increased in 2004, with petroleum and electricity hitting all-time highs and natural gas and coal consumption continuing recent upward trends.

Energy prices for Utah rose across the board in 2004. Wellhead prices for crude oil and natural gas increased significantly. As a consequence, the energy products most heavily used by consumers - motor gasoline, diesel and home-heating natural gas - also rose to record highs. The average cost of electricity in Utah continued to remain below the national average due to the abundance of low-cost Utah coal.

2004 Summary

Petroleum

Production. Utah crude oil production rose 5.3% in 2004 to 13.8 million barrels. However, this is still less than one-third of peak year production in 1985. Total crude oil imports reached near record highs with 7.6 million barrels coming from Colorado, 23.8 million barrels from Wyoming, and a record-high of 13.3 million barrels from Canada. Refinery receipts increased 11.0% during 2004, mostly due to the high demand for motor gasoline, diesel and other petroleum products. Crude oil exports for 2004 reached 5.3 million barrels, up from 4.9 million barrels in 2003.

Prices. Utah's relative independence from overseas crude oil will probably assure steady supplies, but prices will be increasingly dependent upon world conditions. Military conflict in Iraq; supply problems in Nigeria, Venezuela, Norway and Russia; surging demand in China and pipeline damage caused by Hurricane Ivan, have all caused crude oil prices to reach record highs in nominal dollars. The price of Utah crude oil rose commensurately, averaging about $39 per barrel for 2004. This is 35.0% higher than in 2003 and more than triple the average price in 1998. As a result, Utah consumers paid 20 to 60 cents more per gallon for motor gasoline in 2004.

Consumption. In order to keep up with an increase in petroleum product demand, refinery production and product imports were both at record highs in 2004. Jet fuel consumption rose 7.5% in 2004 to 7.7 million barrels, the second highest level in history. Motor gasoline demand increased by 3.2% in 2004 to an all-time high of 25.0 million barrels. This suggests that the significant increase in prices was not enough to dampen enthusiasm for driving. In contrast, distillate fuel consumption declined by 3.9% to 11.8 million barrels, suggesting that high fuel prices did have an effect on commercial businesses. Despite this high in-state demand, Utah was still able to export 26.6 million barrels of petroleum products to other states.

Natural Gas

Production. Conventional natural gas production in Utah continues to decline as fields are depleted. Meanwhile, the rise in natural gas production from coal bed methane fields in Emery and Carbon Counties will help make up that loss for about the next 10 years. Overall, Utah produced 285.6 billion cubic feet of natural gas in 2004, roughly 30% of which was coal bed methane. Production sales of natural gas in 2004 were 244.2 billion cubic feet.

Prices. Natural gas prices in the United States remained high in 2004 due to national concerns about adequacy of supplies. Meanwhile, the 2003 capacity expansion of the Kern River gas pipeline from 900 million to 1.7 billion cubic feet per day signaled the end of comparatively low natural gas prices in Utah. Natural gas that was once captive to the Intermountain West due to the lack of pipeline capacity is now able to flow more freely to California consumers. As a result, the wellhead price of natural gas in Utah has increased several dollars in the last few years and was $4.82 in 2004, an all-time record in nominal dollars. Utah natural gas prices are now only about 30 cents lower than the national benchmark Henry Hub price.

Consumption. Total natural gas consumption in Utah increased slightly in 2004 to 153.3 billion cubic feet, but is still 9.7% lower than peak consumption in 1998. Consumption increased the most in the residential sector, where Utah households consumed an all-time high of 59.5 billion cubic feet in 2004. Electric utilities in 2004 consumed 15.8 billion cubic feet of natural gas. Industrial use of natural gas declined by 45.8% during the last decade, this illustrates the loss of Utah's industrial base. However, natural gas for power generation has nearly doubled over the last 10 years. This occurred as concerns over air quality prompted construction of gas-fired power plants to provide quick-start peaking capacity, as well as supplying more base load. Furthermore, additional natural gas-fired power plants are in the planning or construction stages, which will keep Utah's demand for natural gas high. Use of natural gas in motor vehicles has more than doubled over the past five years, but still remains a tiny part of Utah's overall demand. Utah consumes only 53.7% of in-state production, making Utah a net exporter of natural gas.

Coal

Production. Utah coal production declined 5.0% from 23.1 million tons in 2003 to 21.9 million tons in 2004, the lowest since 1993. Most of this production loss can be attributed to the May 2004 closure of the Skyline mine, which was one of Utah's largest. However, company reports suggest that Skyline might reopen in the winter of 2005. The reopening of Skyline, along with the completion of development work at other Utah mines, should help stabilize or even increase production for 2005 and beyond. Utah imported 2.4 million tons of coal in 2004, the vast majority of which was Colorado coal shipped to the Bonanza power plant in eastern Utah. Utah exported 9.3 million tons of coal in 2004, most of which went to power plants in Nevada and cogeneration plants in California.

Prices. The mine sale price for Utah coal increased slightly from $16.64 in 2003 to $16.72 in 2004, but is still significantly lower than the early 1990s. Low coal prices on multi-year contracts account for this current low average price. Data on multi-year contracts are incomplete, but suggest prices as low as $10 per ton in 2004. Conversely, data on spot prices for Utah coal range above $25 per ton and could be a better

indicator of the outlook for Utah coal prices in coming years. Furthermore, the end-use price of coal at electric utilities increased to $26.31 in 2004, a 13.4% increase over 2003.

Consumption. Utah consumed 16.9 million tons of coal in 2004, 95.5% of which was burned as electric utilities. Planned expansion at Utah's Intermountain Power Project and PacifiCorp will keep demand for Utah coal high. Coke consumption in Utah ended in 2002 when Geneva Steel went out of business, and coal sales for business, industry and home use have declined through the years as consumers opt for the convenience of natural gas.

Electricity

Production. Electricity generation in Utah reached an all-time high in 2004 of 38,625 gigawatthours (GWh), 95.1% of which came from burning coal. Natural gas accounted for 3.0% of electricity generation, more than double its share from just six years ago. Petroleum accounted for 0.1%, while renewable resources, primarily hydroelectric and geothermal, accounted for 1.8% of total electricity generation.

Prices. Electricity prices for all sectors in Utah increased by roughly 4.3% in 2004, based on an increase in natural gas and end-use coal prices. Utah's 2004 average rate of 5.6 cents per kilowatthour (kWh) for all sectors of the economy is much lower than the national average of 7.5 cents. This is due in part to Utah's relatively cheap and abundant coal, which supplies over 95% of electric generation in the state.

Consumption. Electricity consumption in Utah increased 1.6% in 2004 to 24,541 GWh, a new record high. Residential and industrial demand increased 2.8% and 4.6%, respectively, while commercial consumption decreased 1.9%, its first decrease since 1981.

Conclusion and Outlook for Utah Energy

The abundance of low-cost Utah coal will assure affordable, reliable electric power in Utah for the foreseeable future. Utah also produces more natural gas than it consumes; however, the natural gas prices will probably increase due to long-term market changes. Utah will become increasingly dependent on other states and Canada for crude oil and petroleum products as Utah's crude oil production only meets one-third of in-state demand. Also, prices for petroleum products are expected to remain high while world crude oil prices react to increasing demand, supply disruptions and military conflicts. Utah's renewable energy capacity will continue to grow slowly as technology improves.

Minerals Overview

The Utah Geological Survey (UGS) estimated that the value of mineral production in Utah in 2004 was $2.2 billion, approximately $480 million higher than the 2003 value of $1.8 billion. This is due to substantial increases in both base- and precious-metal prices, and increases in the production and prices of most industrial mineral commodities. However, with the exception of magnesium metal, all base- and precious-metal production was lower than in 2003. Coal production was modestly lower in 2004 (1.2 million tons) due to the temporary closure of two operating mines; coal prices were slightly higher. Contributions from the major industry segments were: base metals, industrial minerals, coal, and precious metals. In mid-November 2004, the Utah Division of Oil, Gas and Mining (DOGM) listed 89 active Large Mine permits (five acres and larger disturbance) and 149 active Small Mine permits (less than five acres disturbance), compared to 82 active Large Mine and 113 Small Mine permits in 2003. Through mid-November 2004, DOGM received nine new Large Mine permit applications and 13 new Small Mine permit applications. Six of the Large Mine applications were made to change from Small Mine to Large Mine permit status, three were for new mines. Nationally, The U.S. Geological Survey (USGS) ranked Utah ninth in the value of nonfuel mineral production for 2003. Based on tonnage reported by the Energy Information Agency, Utah ranked 13th in coal production in 2003. Utah contributed about 3.4% of the U.S. total value of nonfuel minerals production in 2003, up slightly from 2002.

Operator surveys indicate that, with the exception of molybdenum, both precious-metal and base-metal production for 2005 will increase modestly. Industrial-mineral production was at an all-time high and is projected to increase slightly, if at all. Industrial-mineral production is closely linked to regional and local construction and population growth. It will be affected primarily by the level of construction activity along the Wasatch Front and in adjacent states. Coal production was forecast to increase modestly in 2005 and coal prices are also expected to increase. Higher metal prices over the past two years have led to the announcement of plans to open several small base- and precious-metal mines within the next two to three years. From all indications, metal prices will remain high in 2005.

The decreased availability of public lands, state and federal regulations, and the negative public perception of the mining industry are all significant issues that will continue to impact the minerals industry in Utah.

2004 Summary

The value of Utah's mineral production in 2004 was estimated to be $2.2 billion, an increase of about $480 million (27%) from 2003. Estimated contributions from each of the major industry segments were:

- Base metals, $1.2 billion (47% of total)
- Industrial minerals, $663 million (30% of total)
- Coal, $366 million (16% of total)
- Precious metals, $153 million (7% of total)

Compared to 2003, the 2004 values changed as follows: (1) base metals increased $372 million, (2) industrial minerals increased $108 million, (3) coal decreased $18 million, and (4) precious metals increased $17 million.

Base Metals
Base-metal production, valued at approximately $1.1 billion, was the largest contributor to the value of minerals produced in 2004. The value of base metals increased approximately $372 million (54%) since 2003, due primarily to a substantial increase in copper and molybdenum metal prices, despite lower production of both metals. In descending order of value, base metals produced were: copper, molybdenum, magnesium, and beryllium. These metals were produced by Kennecott Utah Copper Company (copper and molybdenum) from one mine in Salt Lake County; by Brush Resources, Inc. (beryllium) from two mines in Juab County; and by U.S. Magnesium LLC (magnesium) from its electrolytic facility using brines from the Great Salt Lake.

Industrial Minerals
Industrial-minerals production (including sand and gravel) was valued at approximately $663 million and was the second-largest contributor to the value of minerals produced in 2004. It accounted for approximately 30% of the total value of minerals produced. In comparison to the relatively few (five) Large Mines and facilities that produce base and precious metals, there were about 68 active Large Mines and brine-processing facilities and 96 Small Mines that produced a myriad of industrial-mineral commodities and products. These mines do not include the approximately 112 sand and gravel operations that are spread throughout the state. The estimated value of industrial minerals increased approximately $108 million (19%) in 2004, due primarily to increased values of sand, gravel and crushed stone, lime and quicklime, and salines. Overall, most commodity prices increased during the year.

The five most important commodities or groups of commodities produced, in descending order of value, were: (1) salines, including salt, potash (potassium chloride), sulfate of potash (potassium sulfate), and magnesium chloride; (2) construction sand and gravel, crushed stone, and silica; (3) Portland cement; (4) lime, including quicklime and hydrated lime; and (5) phosphate. Together, these commodities contributed 90% of the total value of industrial minerals produced in 2004.

Coal
Approximately 21.9 million tons of high-Btu, low-sulfur coal valued at $366 million was produced from 12 mines operated by eight companies in 2004. The mines are located in Carbon, Emery, and Sevier counties. Coal was the third-largest contributor to the value of minerals produced in 2004, and accounted for 16% of the total value of minerals produced. Despite slightly higher coal prices, the value of coal decreased about $18 million (5%) in 2004, due to a 1.1 million ton decrease in production, despite marginally higher coal prices. The drop in production was primarily due to the suspension of mining operations of two mines. No dates have been announced for the resumption of activity at either mine.

Precious Metals
Precious metals, valued at $153.0 million, accounted for approximately 7% of the total value of nonfuel minerals produced in 2004. The value of precious-metal production was attributed to gold (85%) and silver (15%). Precious-metal values increased by approximately $17 million (13%) in 2004; due to substantial increases in the market price of both gold and silver even though both gold and silver production was lower than 2003. The two primary producers of precious metals were Kennecott's Bingham Canyon mine, which recovers both silver and gold as by-products, and Kennecott's Barneys Canyon mine, which is a primary gold producer. Chief Consolidated Mining Company's Trixie mine, which produced a small amount of gold and silver in 2002, was idle in 2003 and 2004. The Bingham Canyon and Barneys Canyon mines are located in western Salt Lake County, and the Trixie mine is located in southwestern Utah County near the town of Eureka. The Barneys Canyon mine is in its final stage of heap-leach operation and is expected to end gold production in 2006.

Active Mines and New Mine Permits
As many as 89 active Large Mines (excluding sand and gravel) and 149 active Small Mines could report production in 2004. In 2003 there were 80 Large Mines and 80 Small Mines reporting production, and 81 Large Mines and 94 Small Mines in 2002. The Large Mines reporting production in 2003, grouped by industry segment, were industrial minerals (61), base metals (4), precious metals (3), and coal (12). The Small Mines reporting production were grouped as industrial minerals (55), base metals (1), precious metals (6), and gemstones, fossils, geodes, and other (18).

Through mid-November 2004, DOGM received nine new Large Mine permit applications and 16 new Small Mine permit applications. Six of the Large Mine applications were made to change from Small Mine to Large Mine permit status, three permit applications were for new mines. This was an increase of four Large Mine permit applications and a decrease of three Small Mine permit applications compared to 2003. Seven of the Large Mine applications were for industrial mineral operations, one application was for an oil shale recovery facility, and one was for a gemstone mine. New Small Mine applications included 11 for industrial minerals, one for precious metals, and four for gems, fossils, geodes, and other. The trend during the past ten years shows that the number of Small Mine permit applications has decreased significantly while Large Mine permit applications have remained relatively stable.

The number of exploration permits issued was estimated to decrease in 2004, despite two years of increased metal and industrial mineral prices. Only 13 Notices of Intent (NOI) to explore on public lands were filed with DOGM through mid-November 2004, compared to 21 for all of 2003, and 11 for 2002. The 2004 NOIs included eight for precious metals, three for industrial minerals, and two for base metals.

Nonfuel Mineral Production Trends
Increasing metal and mineral commodity prices over the past two years and increased industrial mineral production have led to increasingly high nonfuel mineral values. This trend is projected to continue for the next several years as the national and regional economy grow. According to preliminary data from the USGS, the value of Utah's nonfuel mineral production in 2003 was $1.3 billion, an increase of about 2% from that of 2002. This follows a nearly 9% decrease from 2001 to 2002. Nationally, Utah ranked ninth in 2003 (10th in 2002) in the value of nonfuel mineral production and accounted for approximately 3.4% of the U.S. total in 2003. USGS data show that during the period from 1992 through 2003, the value of nonfuel mineral production in Utah ranged from a low of $1.2 billion (2002), to a high of $1.9 billion (1995). The UGS estimated the value of nonfuel mineral production in 2004 was $1.9 billion, 36% higher than its revised nonfuel minerals production estimate of $1.4 billion for 2003.

Significant Issues Affecting Utah's Mining Industry
The decreased availability of public lands open for mineral exploration and development, and state and federal regulations that cause difficulties and delays in obtaining required permits are significant issues

that may affect the long-term viability of Utah's mineral industry. The negative public perception of the mining industry also dampens industry's willingness to develop new resources.

2005 Outlook

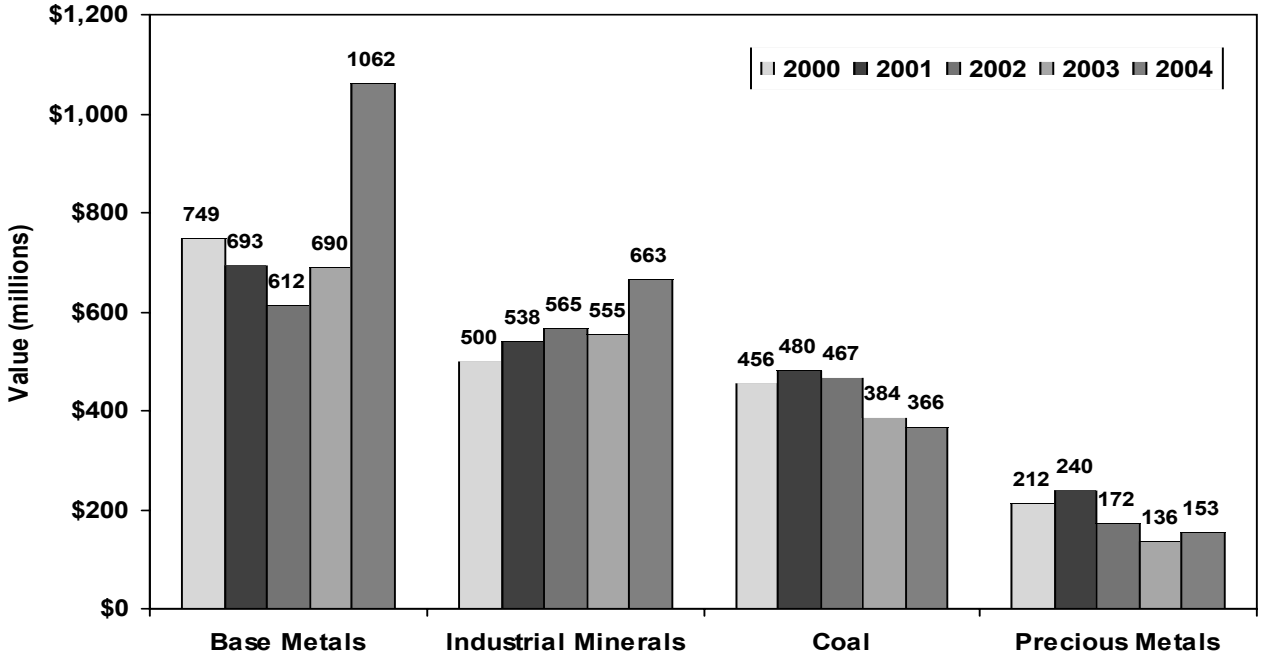
The overall value of mineral production in Utah is expected to increase in 2005 due to increased base- and precious-metal production and sustained metal and mineral commodity prices. Precious-metal production will be higher in 2005 due to increased gold and silver production from Kennecott's Bingham Canyon mine, partially offset by lower gold production from Kennecott's Barneys Canyon mine. Barneys Canyon will produce less gold each year until its leach pads are depleted in 2006. Industrial-mineral values are projected to be higher in 2005, as the production of sand and gravel and crushed stone, salines, cement, lime, and phosphate ore is projected to increase. Industrial mineral prices are expected to remain at their currently high levels. Coal production is expected to increase, as one currently idle mine will resume production in 2005. Coal prices are also expected to increase slightly in 2005.

The number of NOIs approved for exploration is still low, but it is anticipated that the continued increase in metal prices will have a positive effect on metals exploration within the next several years.

Conclusions

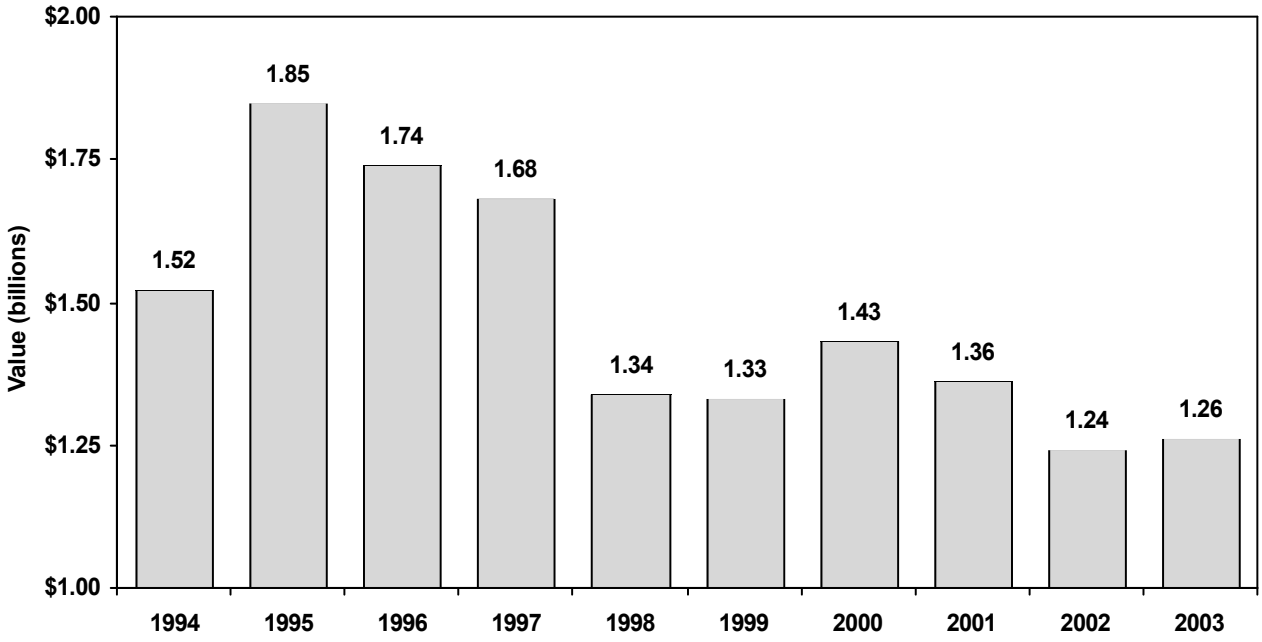
The value of Utah's mineral production increased substantially in 2004, due to increases in both base- and precious-metal prices and the increased production of most industrial minerals. This increased value was partially offset by the lower production of most base metals, gold and silver, and coal. In addition, the number of producing mines statewide and the overall level of mineral exploration declined during the year. All metals and most industrial-mineral prices were higher in 2004, coal, however, was slightly lower. It is anticipated that Utah's mineral valuation will increase again in 2005, due to projected increases in the production of copper, gold, silver, magnesium metal, coal, and several major industrial-mineral commodities. Metal and mineral commodity prices are expected to remain at or near their current high levels. Utah ranked ninth in the nation in the value of nonfuel mineral production and 13th in coal production in 2003. The nonfuel ranking is expected to improve as metal production increases and prices remain high, but Utah's coal ranking is unlikely to improve as coal production is at a 12-year low and is projected to increase only slightly in 2005.

Figure 59
Mineral Valuation – Gross Value Estimates



Source: Utah Geological Survey

Figure 60
Value of Nonfuel Minerals



Source: U.S. Geological Survey

Table 71
Supply and Disposition of Crude Oil in Utah (Thousand Barrels)

	Supply				Disposition			
Year	Utah Field Production	Colorado Imports	Wyoming Imports	Canadian Imports	Utah Crude Exports	Refinery Receipts	Refinery Inputs	Refinery Beginning Stocks
1980	24,979	15,846	12,233	0	8,232	44,291	44,421	665
1981	24,309	14,931	11,724	0	7,866	42,876	43,007	762
1982	23,595	13,911	12,033	0	7,826	40,372	40,368	593
1983	31,045	14,696	7,283	0	8,316	43,901	43,844	632
1984	38,054	13,045	6,195	0	13,616	43,745	43,544	606
1985	41,080	13,107	6,827	0	14,597	45,224	45,357	695
1986	39,243	12,567	7,574	0	15,721	45,086	45,034	559
1987	35,829	13,246	7,454	0	12,137	45,654	45,668	613
1988	33,365	12,783	14,739	0	8,411	48,690	48,604	599
1989	28,504	13,861	18,380	0	6,179	47,989	47,948	626
1990	27,705	14,494	18,844	0	7,725	49,104	48,977	656
1991	25,928	14,423	20,113	0	8,961	48,647	48,852	749
1992	24,074	13,262	21,949	0	6,901	50,079	49,776	513
1993	21,826	11,575	22,279	0	7,417	48,554	48,307	645
1994	20,668	10,480	26,227	0	7,195	48,802	48,486	691
1995	19,976	9,929	24,923	60	7,020	46,641	46,634	806
1996	19,529	9,857	24,297	783	7,117	46,126	46,265	767
1997	19,593	8,565	28,162	2,858	7,349	48,492	48,477	633
1998	19,218	8,161	28,779	6,097	7,670	50,017	49,476	613
1999	16,362	7,335	28,461	8,067	7,128	52,271	50,556	703
2000	15,609	7,163	26,367	11,528	6,565	49,716	49,999	786
2001	15,274	7,208	25,100	12,188	5,835	50,310	50,143	457
2002	13,771	7,141	25,455	10,966	5,526	49,962	49,987	591
2003	13,100	6,964	24,152	9,966	4,867	48,267	48,284	549
2004 (e)	13,791	7,582	23,775	13,262	5,252	53,575	53,511	532

e = estimate

Source: Utah Energy Office

Table 72
Supply and Disposition of Petroleum Products in Utah (Thousand Barrels)

	Supply			Consumption by Product					
Year	Refined in Utah	Refinery Beginning Stocks	Imports	Motor Gasoline	Jet Fuel	Distillate Fuel	All Other	Total	Exports - Other States
1980	45,340	3,202	7,070	15,534	2,637	8,401	9,412	35,983	24,350
1981	49,622	3,376	8,141	15,548	2,424	7,098	5,742	30,812	25,993
1982	44,011	2,979	9,826	15,793	2,801	6,438	5,531	30,563	24,331
1983	47,663	3,153	7,637	15,954	3,284	6,387	6,691	32,316	27,828
1984	48,493	2,842	9,037	16,151	3,413	6,107	6,458	32,129	26,533
1985	50,188	2,989	8,833	16,240	3,808	5,715	6,046	31,809	25,702
1986	51,822	2,803	9,643	17,541	4,335	6,978	5,552	34,406	22,030
1987	51,519	2,661	9,565	17,623	4,969	6,507	6,074	35,172	22,394
1988	57,354	2,306	9,819	18,148	4,977	7,060	5,787	35,971	24,234
1989	55,184	2,685	10,505	17,311	5,095	5,917	6,372	34,694	23,550
1990	57,349	3,000	11,712	16,724	5,281	7,162	5,915	35,082	23,561
1991	57,446	2,758	12,605	17,395	5,917	7,038	6,583	36,933	24,110
1992	57,786	2,746	11,587	17,905	5,607	7,286	5,726	36,524	23,196
1993	57,503	2,840	11,778	18,837	5,518	7,422	5,645	37,422	21,493
1994	59,458	3,173	12,711	19,433	5,270	7,653	5,919	38,275	23,458
1995	57,974	2,907	13,518	20,771	5,658	8,469	6,820	41,718	22,563
1996	58,852	3,253	13,961	21,170	6,303	8,746	8,410	44,628	22,563
1997	58,677	2,640	14,244	22,024	6,277	9,976	6,249	44,526	24,689
1998	62,012	2,908	14,126	22,735	6,373	10,398	5,940	45,446	24,722
1999	58,201	2,780	15,960	23,141	7,443	9,793	6,429	46,806	25,176
2000	59,125	2,426	16,025	23,895	7,701	10,629	6,954	49,179	25,092
2001	59,084	2,306	17,340	22,993	6,880	11,236	6,831	47,939	26,330
2002	59,510	2,739	18,533	23,544	7,039	11,767	6,622	48,972	26,490
2003	57,516	2,846	18,167	24,207	7,150	12,276	6,805	50,438	25,002
2004 (e)	62,883	2,566	19,931	24,988	7,687	11,803	7,137	51,615	26,589

e = estimate

Source: Utah Energy Office

Table 73
Supply and Disposition of Natural Gas in Utah (Million Cubic Feet)

	Supply			Consumption by End Use						
Year	Gross Production	Marketed Production	Actual Sales	Residential	Commercial	Industrial	Electric Utilities	Lease & Plant	Pipeline	Total
1980	87,766	47,857	na	45,735	12,234	43,545	5,133	7,594	851	115,092
1981	90,936	58,865	na	43,497	11,635	42,779	3,097	511	721	102,240
1982	100,628	56,368	na	53,482	14,306	39,804	3,023	5,965	1,126	117,706
1983	96,933	54,700	na	49,645	13,279	40,246	1,259	4,538	1,218	110,185
1984	183,062	73,154	na	49,869	13,339	42,709	271	8,375	1,015	115,578
1985	210,267	80,370	na	53,043	14,189	37,448	235	9,001	1,201	115,117
1986	239,259	90,884	na	49,144	13,146	28,264	230	13,289	1,102	105,175
1987	262,084	87,331	na	41,536	14,811	23,884	263	17,671	822	98,987
1988	278,578	102,040	na	42,241	17,911	30,354	196	16,889	1,362	108,953
1989	278,321	120,329	na	45,168	16,522	33,963	636	16,211	1,037	113,537
1990	323,028	149,271	63,336	43,424	16,221	35,502	907	19,719	875	116,648
1991	329,464	150,621	65,288	50,572	19,282	43,120	5,190	13,738	864	132,766
1992	317,763	174,781	94,725	44,701	16,734	40,878	6,576	12,611	1,284	122,784
1993	338,276	227,494	137,864	51,779	22,776	42,301	6,305	12,526	2,513	138,200
1994	348,140	271,979	160,967	48,922	26,702	36,618	8,900	13,273	2,807	137,222
1995	308,695	246,752	164,059	48,975	27,111	42,373	8,707	27,012	2,831	157,009
1996	280,439	249,998	179,943	54,344	29,921	42,213	4,087	27,119	3,601	161,284
1997	272,554	254,922	183,427	58,108	31,402	44,162	4,079	24,619	2,935	165,305
1998	297,503	277,625	201,416	56,843	31,233	45,501	5,945	27,466	2,788	169,776
1999	277,494	263,140	205,036	55,474	30,708	40,859	6,478	23,810	2,561	159,890
2000	281,170	269,337	225,958	55,626	31,664	39,378	10,544	24,670	2,674	164,556
2001	300,967	283,459	247,056	55,008	31,350	33,585	15,141	20,014	4,161	159,259
2002	293,099	274,775	247,561	59,398	33,983	26,879	15,439	21,697	5,998	163,394
2003	287,147	270,847	242,266	54,635	31,420	25,208	15,164	18,700	7,100	152,227
2004 (e)	285,570	271,989	244,175	59,515	32,202	19,861	15,835	20,088	5,768	153,269

e = estimate
na = not available

Source: Utah Energy Office

Table 74
Supply and Disposition of Coal in Utah (Thousand Short Tons)

	Supply		Consumption by End Use					Exports	
Year	Production	Imports	Residential & Commercial	Coke Plants	Other Industrial	Electric Utilities	Total	Other States	Overseas
1980	13,236	1,214	237	1,528	446	4,895	7,106	na	na
1981	13,808	1,136	196	1,567	714	4,956	7,432	5,292	3,472
1982	16,912	798	177	841	822	4,947	6,787	6,084	2,177
1983	11,829	937	191	829	629	5,223	6,873	4,787	1,346
1984	12,259	1,539	259	1,386	548	5,712	7,905	5,583	849
1985	12,831	1,580	252	1,254	472	6,325	8,303	5,924	625
1986	14,269	1,145	191	785	380	6,756	8,112	4,815	551
1987	16,521	1,358	124	231	276	11,175	11,807	5,078	555
1988	18,164	2,191	196	1,184	589	12,544	14,513	4,881	1,044
1989	20,517	2,344	231	1,179	686	12,949	15,044	5,108	2,175
1990	22,012	2,121	267	1,231	676	13,563	15,738	5,759	1,708
1991	21,875	2,014	305	1,192	508	12,829	14,834	5,842	2,112
1992	21,015	2,672	223	1,114	525	13,857	15,719	6,087	2,245
1993	21,723	2,076	121	1,005	727	13,995	15,848	6,194	2,567
1994	24,422	2,427	105	1,007	835	14,269	16,216	7,471	2,717
1995	25,051	1,847	77	990	915	13,325	15,307	9,037	3,811
1996	27,071	1,785	94	1,047	512	13,585	15,237	9,648	5,468
1997	26,428	2,840	123	1,020	709	14,252	16,105	7,862	3,513
1998	26,600	2,543	113	971	1,304	14,664	17,052	10,535	2,735
1999	26,491	1,938	114	741	745	14,590	16,190	9,514	2,567
2000	26,920	2,535	59	985	1,166	14,688	16,897	9,672	2,960
2001	27,024	3,062	60	873	1,235	14,403	16,571	10,728	2,404
2002	25,299	2,251	198	0	592	15,644	16,434	9,387	875
2003	23,069	2,039	61	0	611	16,217	16,889	9,673	222
2004 (e)	21,907	2,436	128	0	641	16,152	16,921	8,904	390

e = estimate
na = not available

Source: Utah Energy Office

Table 75
Supply and Disposition of Electricity in Utah (Gigawatthours)

	Net Generation by Fuel Type						Consumption by End Use			
Year	Coal	Petroleum	Natural Gas	Hydro	Other	Total	Residential	Commercial	Industrial	Total
1980	10,870	63	358	821	0	12,112	3,116	3,141	4,448	10,705
1981	10,869	40	230	623	0	11,762	3,436	2,999	5,451	11,886
1982	10,635	29	203	1,024	0	11,891	3,785	3,207	5,399	12,391
1983	10,921	40	69	1,394	0	12,424	3,804	3,350	6,040	13,194
1984	12,321	30	8	1,391	38	13,788	3,856	4,269	4,592	12,717
1985	14,229	40	14	1,019	109	15,411	3,985	4,596	4,458	13,039
1986	15,155	74	6	1,413	171	16,819	3,989	4,682	4,318	12,989
1987	25,221	92	13	893	127	26,346	3,980	4,863	4,555	13,398
1988	28,806	59	5	593	174	29,637	4,151	5,035	5,321	14,507
1989	29,676	48	37	562	173	30,496	4,163	5,173	5,629	14,965
1990	31,523	52	146	508	334	32,563	4,246	5,389	5,766	15,402
1991	28,888	51	550	627	390	30,506	4,460	5,571	5,876	15,907
1992	31,553	34	631	602	463	33,050	4,505	5,850	6,212	16,567
1993	32,125	37	606	860	468	34,096	4,726	5,920	6,221	16,867
1994	33,131	33	807	750	514	35,235	5,009	6,340	6,498	17,847
1995	30,611	36	791	969	429	32,836	5,041	6,462	6,957	18,460
1996	31,101	47	324	1,049	462	32,983	5,481	6,717	7,660	19,858
1997	32,544	47	328	1,344	485	34,748	5,661	7,285	7,430	20,376
1998	33,588	35	528	1,315	480	35,946	5,756	7,433	7,511	20,700
1999	34,534	31	610	1,255	385	36,815	6,236	8,075	7,568	21,879
2000	34,491	58	890	751	454	36,644	6,514	8,754	7,917	23,185
2001	33,679	58	1,446	508	195	35,886	6,693	9,113	7,411	23,217
2002	34,488	54	1,380	458	229	36,608	6,938	9,309	7,019	23,267
2003	36,016	116	1,568	487	209	38,396	7,221	9,385	7,561	24,167
2004 (e)	36,713	56	1,162	468	226	38,625	7,420	9,210	7,910	24,541

e = estimate

Source: Utah Energy Office

Table 76
Energy Prices in Utah (Current Dollars)

	Field Price			Average End-Use Price									
Year	Coal ($/ton)	Crude Oil ($/barrel)	Natural Gas ($/mcf)	Coal - Electric Utilities ($/ton)	No. 2 Distillate ($/gallons)	Motor Fuel (all grades) ($/gallons)	Natural Gas Residential ($/mcf)	Natural Gas Commercial ($/mcf)	Natural Gas Industrial ($/mcf)	Electric Power Residential (c/kWh)	Electric Power Commercial (c/kWh)	Electric Power Industrial (c/kWh)	Electric Power All Sectors (c/kWh)
1980	25.63	19.79	1.12	26.06	0.91	1.23	2.74	5.59	2.26	5.5	4.3	3.3	4.3
1981	26.87	34.14	1.10	28.99	1.04	1.37	3.23	5.35	2.58	6.0	5.0	3.7	4.7
1982	29.42	30.50	3.06	32.59	1.01	1.35	3.41	3.43	2.45	6.3	5.7	4.2	5.2
1983	28.32	28.12	3.40	30.96	0.96	1.13	4.26	4.32	3.15	6.9	6.3	4.4	5.6
1984	29.20	27.21	4.08	30.65	0.96	1.12	5.68	4.96	3.52	7.4	6.5	4.6	6.0
1985	27.69	23.98	3.52	32.34	0.93	1.14	4.86	4.91	3.23	7.8	6.9	5.0	6.4
1986	27.64	13.33	2.90	32.33	0.78	0.85	4.64	4.73	3.00	8.0	7.1	5.2	6.6
1987	25.67	17.22	1.88	29.09	0.84	0.93	4.97	4.98	3.20	8.0	7.1	4.9	6.5
1988	22.85	14.24	2.39	29.07	0.85	0.96	5.11	4.08	3.10	7.8	7.0	4.6	6.2
1989	22.01	18.63	1.58	28.06	0.94	1.03	5.14	4.16	3.30	7.4	6.7	4.1	5.8
1990	21.78	22.61	1.70	26.80	1.11	1.14	5.28	4.30	3.62	7.1	6.3	3.9	5.5
1991	21.56	19.99	1.54	27.39	1.03	1.10	5.44	4.50	3.69	7.1	6.1	4.0	5.4
1992	21.83	19.39	1.63	27.53	1.02	1.12	5.44	4.40	3.91	7.0	6.0	3.7	5.3
1993	21.17	17.48	1.77	27.76	1.01	1.10	5.13	4.06	3.67	6.9	6.0	3.8	5.3
1994	20.07	16.38	1.54	26.82	0.99	1.12	4.96	3.84	2.74	6.9	5.9	3.8	5.4
1995	19.11	17.71	1.15	25.97	1.05	1.16	4.74	3.64	2.34	6.9	5.9	3.7	5.3
1996	18.50	21.10	1.39	25.35	1.19	1.26	4.47	3.38	2.10	7.0	5.9	3.7	5.3
1997	18.34	18.57	1.86	25.93	1.17	1.31	5.13	3.92	2.55	6.9	5.7	3.5	5.2
1998	17.83	12.52	1.73	26.74	1.04	1.14	5.57	4.35	3.00	6.8	5.7	3.5	5.2
1999	17.36	17.69	1.93	24.65	1.14	1.26	5.37	4.13	2.94	6.3	5.3	3.4	4.9
2000	16.93	28.53	3.28	24.38	1.49	1.53	6.20	4.92	3.93	6.3	5.2	3.4	4.8
2001	17.76	24.09	3.52	26.87	1.37	1.45	8.09	6.78	5.29	6.7	5.6	3.5	5.2
2002	18.47	23.87	1.99	21.88	1.30	1.37	6.39	5.20	3.91	6.8	5.6	3.8	5.4
2003	16.64	28.88	4.38	23.21	1.48	1.60	7.33	5.95	5.03	6.8	5.6	3.8	5.3
2004 (e)	16.72	38.98	4.82	26.31	1.73	1.82	8.31	6.63	5.72	7.1	5.8	4.0	5.6

e = estimate

Source: Utah Energy Office