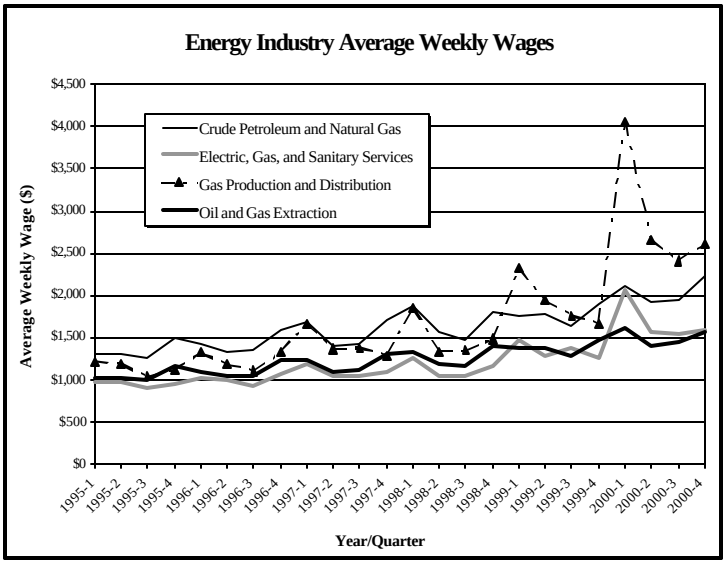
Oil Wages No Longer the Highest

by Phil Arnold

For much of the twentieth century, oil was king of the Texas economy, much as "King Cotton" reigned over the South's economy during the nineteenth century. Because of this fact, if someone wanted to make "good" money, they often sought employment in the oil industry in Texas. Until recently, even though the Texas economy has become much more diversified and the oil business is not nearly as dominant as it has been in the past, wages in this industry remained the highest in Texas. But over the last few years, another private industry has arisen and surpassed the oil industry as the top wage-paying industry in Texas. That industry is also related to energy.

The Electric, Gas and Sanitary Services [Standard Industrial Classification (SIC) 49] industry, which we will refer to simply as utilities in this article, has surpassed the Oil and Gas Extraction (SIC 13) industry for highest average wages paid to employees. In the first quarter of 1995, Oil and Gas Extraction paid an average weekly wage of $1,026.89, compared to a utilities average weekly wage of $969.76. This margin of difference was maintained until the first quarter of 1999, when wages paid in the utility industry shot up. This noticeable rise likely resulted from the payment of bonuses[1], which are often paid out to employees in the utility as well as other industries in late fourth quarter or first quarter as reward for meeting performance or production goals during the previous year. The payout of these bonuses allowed the utilities industry to temporarily surpass the oil industry in average weekly wages paid ($1464.97 to $1364.06). These two industries continued to trade places as the highest paying industry during 1999. However, in the first quarter of 2000, large bonuses were again paid in the utility industry driving the average weekly wages for Electric, Gas, and Sanitary Services up to $2,055.69 — compared to Oil and Gas Extraction's $1,622.62. Since that time, utilities has remained ahead of Oil and Gas Extraction as the highest paying industry[2] according to Covered Employment and Wage data collected by the Texas Workforce Commission.



Within each of these industries, one industry has typically been responsible for the high wage payments to employees. The Oil and Gas Extraction industry has been led by high wages paid in Crude Petroleum and Natural Gas (SIC 131), while utilities has been led by high wages in Gas Production and Distribution (SIC 492). As an example, while Oil and Gas Extraction had an average weekly wage of $1,095.57 in the first quarter of 1996, Crude Petroleum and Natural Gas paid average weekly wages of $1,415.12. The slightly over $300 difference in average weekly wage between Oil and Gas Extraction and Crude Petroleum and Natural Gas has fluctuated up into the $500 range between the two related industries. However, utilities has been led by an even larger difference, at times, between it and the Gas Production and Distribution industry. The large bonuses paid in utilities ($1464.97) in the first quarter of 1999 were led by even higher wages paid in Gas Production and Distribution with average weekly wages of $2,318.99 during the time period. Again, large bonuses were awarded in utilities and Gas Production and Distribution in the first quarter of 2000, driving average weekly wages up to $4,051.92 and nearly doubling the overall utility average weekly wages of $2,055.69. While many companies traditionally award bonuses during the fourth quarter, the spikes in wages paid in the first quarter by Gas Production and Distribution is observable starting in 1997. Although a time series break exists between fourth quarter 2000 and first quarter 2001 (due to the conversion from the SIC system of coding industries to the NAICS, or North American Classification Industry System), and industries are not officially comparable over the span of the break, the Natural Gas Distribution industry (NAICS code 2212) paid bonuses driving up the average weekly wage to $4,072.75 during the first quarter of 2001.

Some economists speculate that the utility industry paid large bonuses following a period of substantial profit growth. Some factors contributing to this growth were the exceptionally cold winters in 1999 and 2000, and an energy shortage in California — the most populous state in the nation. However, these large bonuses may diminish in the wake of recent bankruptcy announcements and investigations of accounting practices within the industry.

Another statistic that is useful in the analysis of wages is data obtained from the Occupational Employment Statistics (OES) program. The OES program, which is administered by the Texas Workforce Commission's Labor Market Information Department for the U.S. Bureau of Labor Statistics, has recently released data from its 2001 wage survey of employers. According to survey results, there are a number of very high paying occupations in the Oil and Gas Extraction (SIC 13) industry. For instance, Engineering Managers and Natural Science Managers had a median annual wage of well over $100,000. Petroleum Engineers had a median annual wage of $80,583. However, even with these high paying occupations within the Oil and Gas Extraction industry, overall wages for the industry are still lower than those in the utilities industry. Overall, the OES survey indicates that the total median annual wage

Oil and Gas Industry Median Wages			
Occupations	**SOC***	**Annual**	**Hourly**
Petroleum Engineers	17-2171	$80,583	$38.74
Accountants and Auditors	13-2011	$51,096	$24.57
General and Operations Managers	11-1021	$84,638	$40.69
Geoscientists, Except Hydrologers and Geographers	19-2042	$99,534	$47.85
Geological and Petrolium Technicians	19-4041	$36,841	$17.71
Petroleum Pump System Ops, Refinery Ops & Gaugers	51-8093	$45,415	$21.83
Derrick Operators, Oil and Gas	47-5011	$25,736	$12.37
First Line Supers/Mgrs of Construction Trades	47-1011	$44,826	$21.55
Roustabouts, Oil and Gas	47-5081	$16,892	$8.12
Computer Systems Analysts	15-1051	$67,452	$32.43
Financial Managers	11-3031	$89,731	$43.14
Engineering Managers	11-9041	$111,696	$53.70
Natural Science Managers	11-9121	$119,667	$57.53
Mechanical Engineers	17-2141	$69,858	$33.59
Gas Compressor & Gas Pumping Station Opers	53-7071	$39,927	$19.20
Total all occupations (Oil & Gas Extraction)	00-0000	$34,615	$16.64

*SOC - Standard Occupational Code

for the oil industry is $34,615, compared to a utility total annual median wage of $40,559, a nearly $6,000 difference.

While some occupations may be paid more in the oil industry than the utility industry, comparable occupations are often either equally or higher paid in the utility industry. General Operations Managers make more in the oil industry than in the utility industry ($84,638 compared to $75,883), as do Mechanical Engineers ($69,858 to $67,693). On the other hand, Computer Systems Analysts are paid approximately $9,000 more annually in the utility industry compared to the oil industry. Financial Managers and Accountants and Auditors make between $1,300 and $1,800 more working in the Electric, Gas and Sanitary Services industry. But the big difference may be in the large number of high skill jobs such as Power Plant Operators in utilities. While not necessarily requiring a four-year engineering degree, still many such jobs require at least an Associate's Degree and often a large amount of job experience. The same situation occurs in such utility occupations as Electrical and Electronics Repairers: Powerhouse, Substation, and Relay, and Electrical Power-Line Installers and Repairers, where professional degrees may not be required but Associate's Degrees and considerable job experience may be necessary.

And while both the utility and the oil industry may employ many highly paid, specialized workers, each industry also pays higher wages in almost all commonly occurring, cross-industry occupations such as clerical positions. Generally, in office type occupations, the Oil and Gas Extraction and utilities industries run 10% to 30% ahead of the median hourly wage statewide for these combined industry occupations. The oil industry pays an hourly median wage of $22.63 to Production, Planning and Expediting Clerks, some 64.6% ahead of the state median hourly wage of $13.75. The Electric, Gas and Sanitary Services industry pays $16.46 an hour to Secretaries which is 53% higher than the state median hourly wage of $10.76. Both industries pay considerably higher than the state median hourly wage of $8.77 paid to Stock Clerks and Order Fillers with utilities paying $16.12 an hour (83.8% higher than state median) and the oil industry paying $12.96 (47.8% higher than the state median). The utility industry pays an average of 29.1% higher than the state median wage to its Office and Administrative Support Occupations while Oil and Gas Extraction pays an average of 24.7% higher than the state median wage for those occupations.

Utility Industry Median Wages			
Occupations	**SOC***	**Annual**	**Hourly**
Power Plant Operators	51-8013	$49,408	$23.75
Accountants and Auditors	13-2011	$52,800	$25.38
Control & Valve Installers and Repairers, Exc Mechanical Door	49-9012	$33,474	$16.09
Transportation, Storage, and Distribution Managers	11-3071	$67,673	$32.54
General and Operations Managers	11-1021	$75,883	$36.48
First-Line Suprs/Mgrs of Mechanics, Installers, and Repairers	49-1011	$54,059	$25.99
Computer Systems Analysts	15-1051	$76,464	$36.76
Electrical and Electncs Reprs, Powerhouse, Substn & Relay	49-2095	$46,361	$22.29
Financial Managers	11-3031	$91,125	$43.81
Electrical Power-Line Installers and Repairers	49-9051	$39,961	$19.21
Management Analysts	13-1111	$59,311	$28.51
First-Line Suprs/Mgrs of Production and Operating Workers	51-1011	$56,080	$26.96
Computer Programmers	15-1021	$62,379	$29.99
Gas Compressor and Gas Pumping Station Operators	53-7071	$45,556	$21.90
Mechanical Engineers	17-2141	$67,693	$32.54
Total all occupations (Utilities)	00-0000	$40,559	$19.50

*SOC - Standard Occupational Code

It is easily observed that both the utility industry and the oil industry pay the highest wages in the state. The latest data, including average weekly wages and the most recent OES wage survey results, indicate that the Oil & Gas Extraction industry has been surpassed in wages paid to workers by the utility industry. It is difficult to say whether this trend will continue. Recent job losses in the utility industry have led to an estimated 2.2% annual employment decline in the industry. That may indicate a surplus of available qualified workers. In contrast, the Oil and Gas Extraction industry continues to grow, with an estimated 3.3% annual job growth rate in February 2002. It would not be surprising if wages in the oil industry again caught up to, or even surpassed, the utilities industry. However, the utilities industry is not likely decline for very long because as the population continues to grow, the demand for power is expected to grow accordingly. Also, over the long term, the supply of fossil fuels is likely to decline, causing fuel prices to rise. With sustained demand and rising prices, it would not be surprising if these two industries continue as the highest paying industries in Texas — with each industry periodically taking the lead as the top paying industry in the state.

Footnotes:

[1] While information regarding the payment of bonuses is not directly collected from Covered Employment and Wage records, the marked increases in wages reported during the first and fourth quarters has historically been attributed to the payment of bonuses.

[2] Of the two-digit level industries in the SIC coding structure.

The above article is reprinted here from the March 2002 issue of the Texas Labor Market Review newsletter published monthly by the Labor Market Information Department of the Texas Workforce Commission. For comments or questions regarding this article, please contact the LMI Department at (512) 491-4922 or e-mail at lmi@twc.state.tx.us.