

Research Department Federal Reserve Bank of San Francisco

May 24, 1974

After Con Ed

The nation's largest utility (Consolidated Edison) skipped a dividend last month for the first time since 1885, and the shock waves have been reverberating throughout the utility industry and the investment community ever since. Many investors who had long valued utility stocks for both safety and income now decided on the basis of this company's performance that utility stocks lacked both qualities, and they sold off their holdings in a market which had already been beset by worries about the energy crisis and the monetary situation. Utility stock prices dropped 15 percent or more, after declining 25 percent last year, and market technicians (ever watchful of that particular bellwether) saw the weakness in utilities as a signal for a general market decline.

Aside from the market implications, the Con Ed development highlighted some very real industry problems, especially among the big-city utilities. They have had to contend with soaring costs of low-sulfur fuel oil, and in many cases have been held back by environmental regulations from shifting to cheaper substitutes such as coal. In addition, they have been faced with other sharply rising costs—for labor and equipment, and also for money with which to finance new capacity. Meanwhile, revenues have risen at a much slower rate, partly because of a reduction in electricity usage by consumers who are beset by the rising prices of all budget items, but also because of the rela-

tively slow pace with which regulatory agencies have been granting requests for general rate increases.

Investment analysts, in weighing these factors, have arrived at some rather gloomy estimates of industry earnings, which have been translated into sharply declining prices for utility stocks and bonds. In this difficult financial situation, many observers have questioned the ability of the industry to finance the massive expansion of facilities—totalling perhaps \$400 billion over the 1970-85 period—necessary to meet the nation's future industrial requirements.

Rising consumption

During the past two decades, U.S. consumption of electricity has risen at an annual rate of almost 7½ percent, from 329 billion kilowatt-hours in 1950 to 1,703 billion kilowatt-hours in 1973. For most periods, except during the boom of the 1960's, electricity usage has grown more than twice as fast as the economy as a whole. Yet, if the record of recent months provides any guide, the ratio may fall somewhat below this 2-1 figure in coming years. While manufacturing production has fallen at a 4-percent annual rate since last fall's peak, utility production has dropped at a steep 14-percent rate. This decline in usage obviously reflects the elimination of non-essential uses, but in addition, a sharp upsurge in electric-power prices, which followed several decades of price stability. Prices did not start rising

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in this industry until the late 1960's, but now, within the past six months, they have soared at a 35-percent annual rate at the wholesale level.

The price rise of recent years—especially the last half-year—reflects the sharp increase in the cost of generating electricity. The cost of residual fuel oil has doubled within several months' time, so that fuel now accounts for half of all operating expenses of electric-power companies. The cost of borrowed funds has also soared, partly because of the general rise of interest rates and partly because of the extra borrowing costs incurred by those utilities which have been downgraded by rating agencies. (The utilities are large and constant borrowers, accounting for almost half of all funds raised in the capital markets.) Labor, construction and other costs have risen almost as rapidly as the costs of fuel and money.

Yet with electricity usage dropping in the face of rising costs, utilities have been subject to a severe profits squeeze, leading them to beat a path to the doors of the regulatory commissions. In 1973, regulators granted \$1.1 billion in rate increases, and further boosts of about \$1.7 billion are pending. The commissions generally permit fuel price increases to be passed along automatically to consumers via "fuel adjustment" clauses, but they fre-

quently move slowly in ruling upon rate increases designed to meet cost hikes on non-fuel items. Consequently, even after rate increases, the utilities find their profit margins eroding, their debt-coverage ratios shrinking, and their capital spending plans in some disarray.

Soaring expansion plans

Ever mindful of the record of blackouts and brownouts of the past decade, the utilities have pressed ahead with substantial expansion plans designed to keep up with historical trends in energy consumption. The industry's plant-equipment spending has risen sharply over the past decade, from \$5.5 billion in 1964 to an estimated \$22.2 billion in 1974—twice as fast as new investment in manufacturing. On top of this, utilities expect electrical-energy capacity by 1985 to reach at least 775,000 megawatts—more than double the capacity of the early 1970's. Total capital outlays in the 1970-85 period thus could approximate \$400 billion (1974 prices), or several times greater even than the recent pace of capital spending.

Half or more of the total increase in capacity could be in the form of nuclear power, spurred along by the escalating costs and occasional unavailability of fossil fuels. (Nuclear plants could increase their share from 2 to more than 20 percent of total electrical-generating capacity over this period.) But the initial capital outlay required for a nuclear facility is perhaps twice that required for conventional fossil-

fueled plants. Over the life of such a facility, the cost per kilowatt balances out, but in the present context, the more important consideration is the sharp rise in initial capital costs as the industry increases its reliance on the atom at the expense of fossil fuels. Extra costs would also be involved in bringing nuclear plants on stream; most of the nuclear plants due to be operating by 1978 are behind schedule by 25 months on the average, compared with an 8-months average delay for fossil-fuel plants.

Excessive expansion?

The utilities assume that the demand for electricity will double over the next decade, in line with past trends, and their capital-spending plans reflect this expectation. However, that assumption overlooks price behavior. Until recently, the price of electricity has fallen relative to other prices, and thereby stimulated consumption, but the recent (and future?) price upsurge should cut into what had once seemed an insatiable demand for kilowatts.

Studies of demand elasticity have shown little consumer response in the short-run to price changes, but they have shown far different results in the long run. Some studies indicate a long-run elasticity of 1.0 for residential consumers—a 1-percent decline in consumption for a 1-percent rise in prices—and an even higher elasticity for commercial and industrial users. This suggests that the energy-reduction

phenomenon that has become evident over the past six months, similar to the shift seen in the auto industry, will continue into the distant future.

A change in the industry's price practices—as well as a rise in its prices—could help reduce both the demand for electricity and the need for excessive expansion of new capacity. Critics argue that the utilities' rate structure stimulates excessive consumption by permitting lower rates as consumption rises and by permitting the same charges at peak hours and peak seasons than at off-peak times. These practices are based upon the premise that rising output brings about a drop in average production costs—an increasingly questionable assumption.

Some regulatory authorities are now basing their rate decisions on the more likely premise that utilities no longer represent a declining-cost industry. Thus, they are pushing the utilities to charge equal rates to different classes of consumers and equal rates for all levels of power consumed by individual customers—along with higher rates at full-capacity operation. If this approach becomes more widely accepted throughout the industry, the price system could play a wider role in reducing excessive demand for power and for power-generating facilities.

William Burke

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT
(Dollar amounts in millions)

| Selected Assets and Liabilities Large Commercial Banks | Amount Outstanding 5/8/74 | Change from 5/1/74 | Change from year ago | |
|---|---------------------------------|------------------------------|---------------------------------------|---------|
| | | | Dollar | Percent |
| Loans (gross) adjusted and investments* | 82,909 | + 100 | +9,484 | + 12.92 |
| Loans gross adjusted— | 64,201 | — 39 | +8,820 | + 15.93 |
| Securities loans | 1,179 | + 49 | — 93 | — 7.31 |
| Commercial and industrial | 23,309 | + 240 | +3,138 | + 15.56 |
| Real estate | 18,993 | + 54 | +2,998 | + 18.74 |
| Consumer instalment | 9,227 | + 3 | + 967 | + 11.71 |
| U.S. Treasury securities | 5,569 | + 147 | — 727 | — 11.55 |
| Other Securities | 13,139 | — 8 | +1,391 | + 11.84 |
| Deposits (less cash items)—total* | 78,790 | + 258 | +7,344 | + 10.28 |
| Demand deposits adjusted | 22,107 | + 651 | +1,570 | + 7.64 |
| U.S. Government deposits | 1,036 | — 359 | — 130 | — 11.15 |
| Time deposits—total* | 54,502 | + 58 | +6,003 | + 12.38 |
| Savings | 17,880 | + 22 | — 278 | — 1.53 |
| Other time I.P.C. | 26,719 | + 292 | +6,820 | + 34.27 |
| State and political subdivisions | 7,343 | — 133 | — 483 | — 6.17 |
| (Large negotiable CD's) | 13,766 | + 150 | +4,713 | + 52.06 |
| Weekly Averages of Daily Figures | Week ended 5/8/74 | Week ended 5/1/74 | Comparable year-ago period | |
| Member Bank Reserve Position | | | | |
| Excess Reserves | 45 | 37 | | 11 |
| Borrowings | 196 | 134 | | 74 |
| Net free (+) / Net borrowed (—) | — 151 | — 97 | | — 63 |
| Federal Funds—Seven Large Banks | | | | |
| Interbank Federal funds transactions | | | | |
| Net purchases (+) / Net sales (—) | + 886 | +1,341 | | +206 |
| Transactions: U.S. securities dealers | | | | |
| Net loans (+) / Net borrowings (—) | + 308 | + 207 | | + 79 |

*Includes items not shown separately.

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