

U.S. electric power supply in doubt

Financial warfare is destroying the electric utility industry, reports Steve Parsons of the EIR Economics staff. Part I of II.

For the first time since man harnessed the power of electricity, the United States is on the verge of suffering crippling shortages in electric power capacity. Utilities simply are not building—nor planning to build—new capacity anywhere near sufficient to meet an even modest growth in demand.

But like the savings and loan industry, the utilities are not the source of the problem. They are the victims of vicious financial and political warfare conducted by a powerful faction of Establishment individuals and institutions, operating through Wall Street and governmental regulatory and enforcement agencies. Their objective is the destruction of American economic development, and with it, the ability of the population to expand at an ever-higher standard of living.

Capital construction crucial

Ever-cheapening and plentiful electric power has been a bedrock for the expansion of population and productive output. Now, after nearly 20 years of increasingly insane financial and regulatory actions, the electric utility industry and its contractors simply cannot engage in large-scale construction projects of baseload power plants.

This is because each such project would tie up at least a billion dollars, with no return for more than a decade, under conditions where environmental and other regulations are constantly shifting and where public utility commissions are rendering increasingly punitive rate actions precluding cost recovery, let alone a profit. Many utilities have reached a point where it is difficult even to maintain current operations and nearly impossible to expand capacity significantly.

To begin to understand how the industry was forced into this condition, it is essential to focus on the central role of capital expenditures, especially for power plant construction and transmission infrastructure.

As of 1989, although the 206 investor-owned electric utilities comprised less than 7% of all U.S. electric utilities, they produced the vast majority of the nation's power. These investor-owned utilities are the most capital-intensive sector in the nation, having the highest ratio of capital assets per dollar of revenue among all the major U.S. industries.

As of 1988, this ratio was \$3.15. The closest competitor was mining, at \$1.90 of capital assets per dollar revenue—60% of the ratio for utilities. For the manufacturing industry as a whole, the capital assets-to-revenue ratio is \$0.86, or only 27.3% that of the utilities. The ratios for the retail and wholesale trades are a meager \$0.53 and \$0.37, respectively.

Since 1973, however, this foundation of the U.S. electric utilities has sustained a withering attack, to the point where the industry has been forced into absurd and costly economic and financial initiatives in a scramble merely to stay afloat.

Crippling the industry

From 1964-73, the growth in summer peak load demand averaged 7.8% per year. This impressive growth spurred ambitious construction projects. Billions of dollars were poured into these plants and related infrastructure.

But then the industry was hit with the 1973 oil crisis, which saw the price of oil quadruple in a matter of months. The ensuing recession, aggravated by the developing monetary crisis and incompetent financial decisions in Washington and New York, cut the growth rate in peak-load demand for power in half. From 1973 to 1980, the peak-load growth rate fell to 3.19%; and during the vaunted Reagan-Bush "recovery" from 1980 to 1989, the rate fell to an even lower 2.34%.

Due to the drop in growth rates and the coming on line of the previously planned new capacity, summer peak-load capacity margins suddenly jumped from the barely adequate level of under 17% in 1972-73, to 21.41% in 1974, peaking at nearly 30% in the recession of 1982. But increasingly squeezed residential and industrial customers screamed about rising utility rates, which were caused mostly by the enormous hikes in fuel costs and inflation.

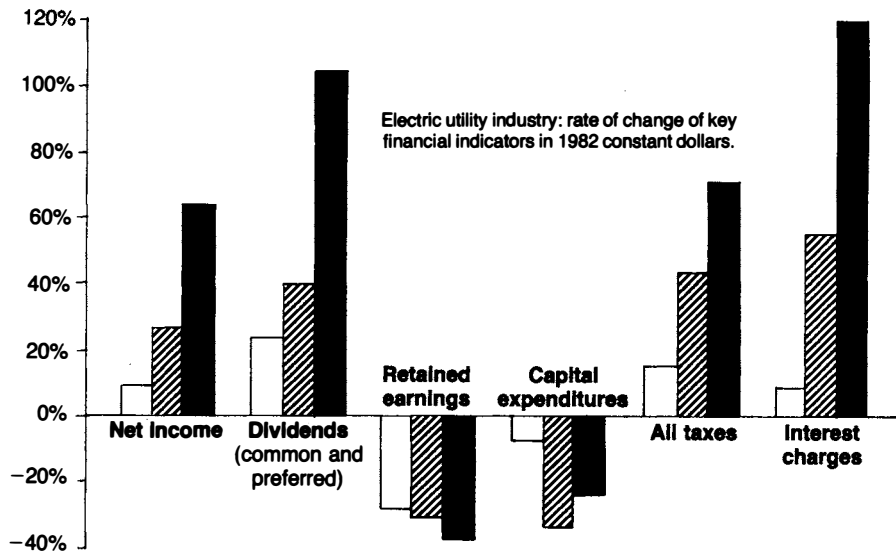
At the same time, the environmentalist onslaught against nuclear power intersected the industry's massive construction program and newly operating nuclear plants. Operation of many completed plants was interrupted or prevented from beginning. The financial condition of utilities nosedived.

At first glance, some of the key financial categories in the industry appear to have risen impressively. Comparing the year 1970 to 1989, for example, net income quintupled, from \$3.3 billion to \$16.6 billion, and dividends (both preferred and common) increased by more than six times, from \$2.4 billion to \$14.8 billion. Retained earnings (defined as net income minus dividend payments on both common and preferred stock) nearly doubled, from \$950 million to \$1.8 billion. Construction and capital expenditures more than doubled, rising 132%, from \$10.3 billion to \$23.8 billion.

But when these figures are deflated into constant dollars, the picture is very different (see **Figure 1**). In 1982 dollars, retained earnings actually fell 38%, from \$2.6 billion to \$1.6 billion, and construction and capital expenditures plummeted

FIGURE 1
Industry disintegration accelerates under Reagan-Bush

□ 1973-80
 ▨ 1980-89
 ■ 1970-89



Source: *Financial Deskbook Tables*, April 27, 1990, Edison Electric Institute.

24%, from \$27.8 to \$21.3 billion.

During the 1970-89 period, the increase in net income was outstripped by rising taxes and interest charges on debt. In 1982 constant dollars, taxes rose 72%, while interest charges soared 122%.

The prevailing view is that while the industry was particularly hurt after the 1973 oil crisis, and suffered through the miasma of the Carter administration, it has fared better under the Republican administrations of the 1980s. And from 1973 to 1980, in 1982 constant dollars, retained earnings and capital expenditures declined by 27.7% and 7.1%, respectively.

But the situation has become even worse under the Reagan-Bush tenure. Comparing 1980 to 1989, while net income and dividends improved somewhat, increasing by 26% and 40% respectively, the key indicators of retained earnings and capital expenditures fell further and faster, by 30% and 33%. Meanwhile, taxes and interest charges, which increased by 15.7% and 8.2% during the "energy crisis" years 1973-80, soared under Reagan-Bush, by 44% and 56%, respectively. So much for the "Reagan recovery."

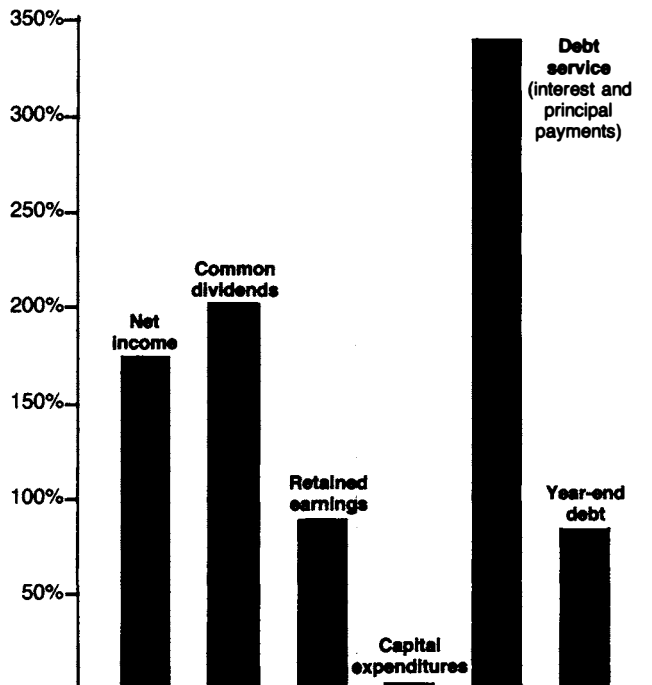
The killers: debt and debt service

The financial fates of individual utilities vary greatly during the past 20 years. Some were more severely crunched during the 1970s and the Carter years, while others were walloped even harder in the 1980s, especially with the recent plethora of adverse regulatory rate decisions. What analysts both within the industry and on Wall Street never really focus upon, however, is the role of debt in crippling the industry.

For the investor-owned electric utility industry as a whole, long-term bonded debt, in current dollar terms, nearly quadrupled, from \$42.2 billion in 1970 to approximately \$165 billion in 1989. Combined with the usurious double-digit interest rate hikes of the Federal Reserve under its chairman Paul Volcker, that increase in debt has resulted in soar-

ing annual payments of *debt service*—that is, of interest and principal on the debt. The acceleration in debt service

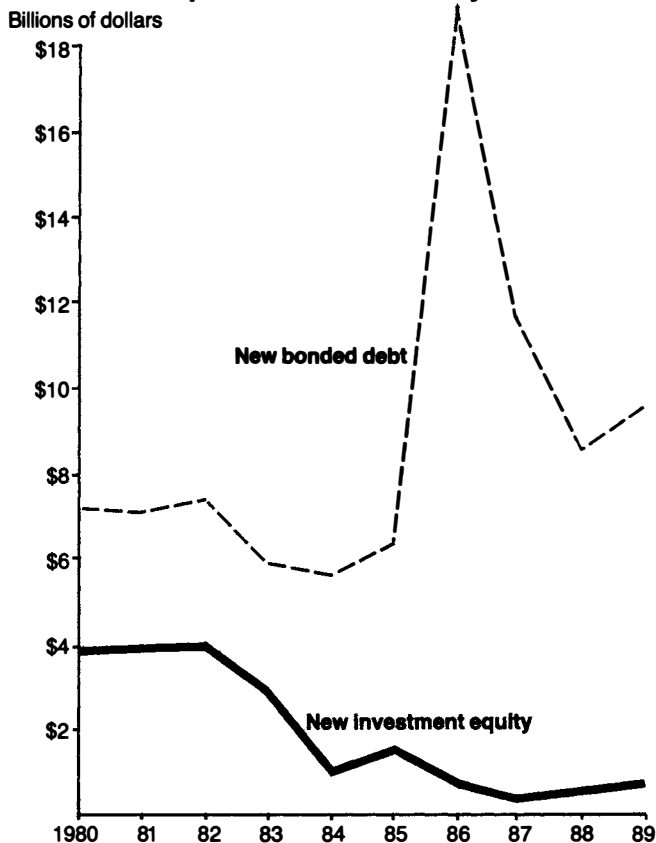
FIGURE 2
Debt service buries capital expenditures
 Percent change, Philadelphia Electric Co., 1989 versus 1970



Source: Philadelphia Electric Co.

FIGURE 3

Bonded debt puts utilities at mercy of Wall St.



Source: Edison Electric Institute.

payments have far outstripped such key categories as net income and dividend payouts (see Figure 1), ripping funds out of retained earnings that would have been available for vital expenditures, including operating expenses and maintenance, and capital for construction. And the situation has worsened during the Reagan-Bush years in the 1980s.

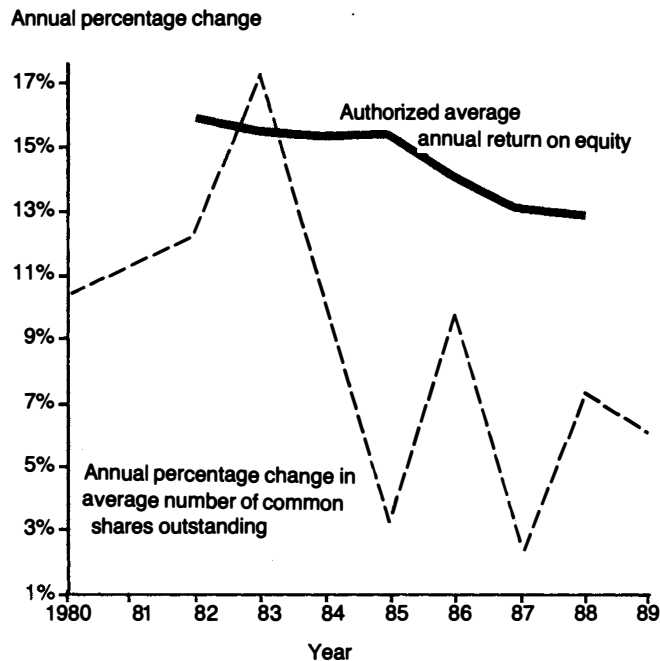
Many individual utilities have been hit hard by the triple-whammy of increasing debt amid rising interest rates, in a period of sharply constricted capital construction. One such example is Philadelphia Electric, which in the 1960s and early 1970s began building several nuclear plants for future needed capacity but were forced into such extended delays that the last one was completed only in 1989.

For Philadelphia Electric, annual debt service in 1989 was \$1.005 billion versus only \$75 million in 1970—an incredible 1,240% increase (see Figure 2). In 1982 constant dollars, debt service has risen 342%, against a virtually flat level of capital expenditures.

Another example is Illinois Power. Capital expenditures in 1970 and 1989 were identical in *current* dollars: \$97 million. But in constant dollars, this is a huge 67% drop. Total

FIGURE 4

Drop in return on equity dries up investor capital



Source: Edison Electric Institute.

debt, however, had soared from only \$385 million in 1970 to \$2.352 billion last year—more than a sixfold increase.

The furor over “pollution” has aggravated the ravages of debt and debt service, while sucking funds out of operating and maintenance budgets. From 1974-89, the industry has taken out \$28.1 billion in debt to finance pollution control measures, plus untold billions more from operating budgets, paid for through higher customer rates.

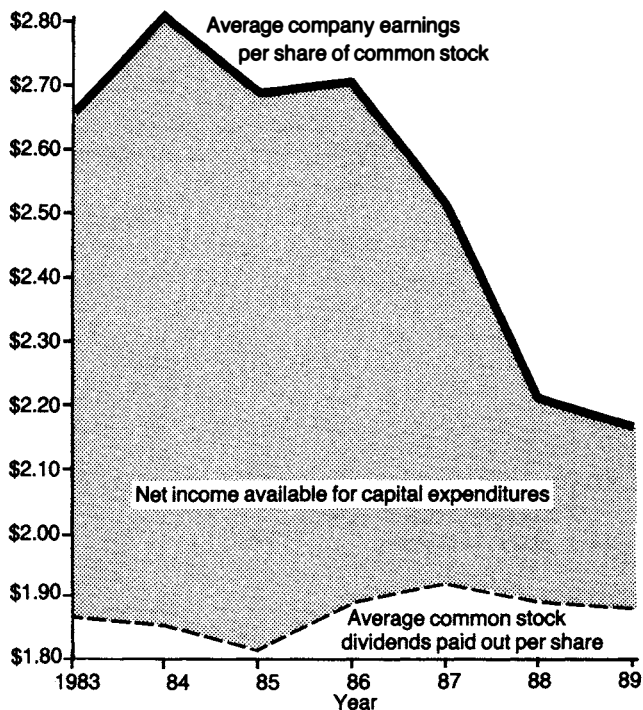
Put at the mercy of Wall Street

The confluence of environmental attacks, anti-nuclear hysteria, increasing debt, and deteriorating overall financial conditions has fed into waning investor confidence in the utility industry. Prior to 1973, investment in utilities was one of the safest and surest ways to guarantee a decent return on one’s money. The industry was always growing, and a substantial profit margin was ensured through adequate levels of return via the rate structure. In this climate, investors saw increasing, even if modest, returns on their investment.

Such returns are now history. New investment capital is increasingly hard to come by, and the industry, regardless of whether it can afford to do so, has had to maintain a given level of dividend payouts simply to retain the investment capital it already has. This means that it must increasingly rely on bonded debt—that is, on Wall Street—for both short- and longer-term financing.

FIGURE 5

Funds available for capital expenditure shrink



Source: Edison Electric Institute.

Exacerbated by changes in the tax laws, new equity investments in utilities have plummeted, while bonded debt issues have increased (see Figure 3). For 1989, new capital from equity amounted to just \$772 million, only 19% of the \$4.063 billion raised in 1980.

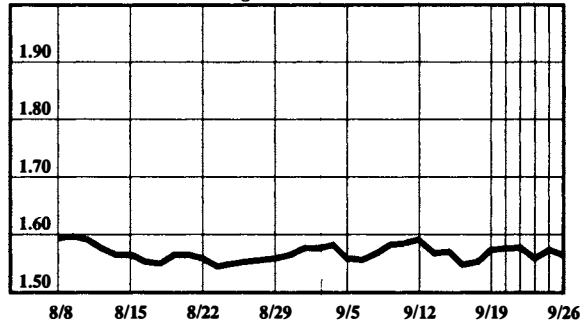
One main factor in this precipitous decline is that the various public utilities commissions (PUCs) have been authorizing *decreasing* returns on equity, by slashing rate requests from utilities. Since 1982, authorized return on equity has decreased almost every year, from 15.84% to only 12.72% in 1988—a cut of one-fifth (see Figure 4). At the same time, while the average utility earnings per share had eroded to \$2.16 by 1989, down from \$2.83 in 1984, the average dividend payment per share of common stock has been maintained at between \$1.79 to \$1.90 (see Figure 5). This has meant substantial cuts in retained earnings as the percentage of net income paid out in dividends has risen from under 70% to nearly 90%.

Not surprisingly, the rate of increase in the average number of common shares outstanding has been falling. From 1980-83, the increase in equity shares was accelerating, from 10.31% in 1980 to 17.11% in 1983 (see Figure 4). Since then, the rate has been far lower, and is estimated to have been just under 6% for last year.

Currency Rates

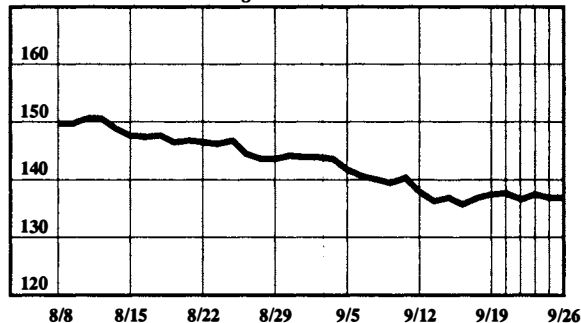
The dollar in deutschemarks

New York late afternoon fixing



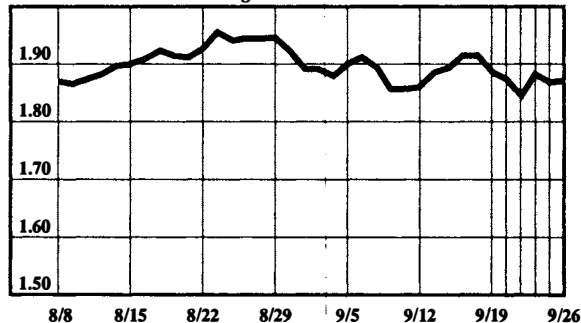
The dollar in yen

New York late afternoon fixing



The British pound in dollars

New York late afternoon fixing



The dollar in Swiss francs

New York late afternoon fixing

