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Santa Ana River Flood Work Included

Senate Allots $12 Billion to Finance Water Projects

By BOB SECTER, *Times Staff Writer*

WASHINGTON—The Senate Wednesday endorsed the construction of $12-billion worth of dams, harbors, levees and other water projects across the country, including a $1.2-billion plan to curb flooding along the Santa Ana River in Southern California.

The package, approved on a voice vote, would also authorize more than $353 million for flood and navigation projects in Northern California.

If reconciled with an already passed House bill and signed by President Reagan, the measure would be the first major legislation in a decade authorizing a broad range of federally financed water projects.

Separate Funding Vote

Funding for the federal share of the projects would have to be approved separately by Congress.

In addition to authorizing more than 180 water-related projects, the measure for the first time would require state and local governments to pick up a significant share of the costs. The federal government now pays about 95% of the costs of such projects, but the bill would cut Washington's contribution to between 65% and 75%.

The House last year passed a bill that also trimmed the federal share of financing, but it included so many more projects than the Senate version that its cost soared to $20 billion.

Santa Ana Project

The Santa Ana project, the most expensive of all those authorized in the Senate legislation, has been given top priority by the Army Corps of Engineers, which has concluded that the river poses one of the most serious flood threats in the West.

A major Santa Ana River flood could affect more than 2 million people and cause $12 billion in damage to 15 cities along a heavily developed corridor in Orange, Riverside and San Bernardino counties, the corps has estimated.

Key elements of the Santa Ana project include raising the Prado Dam near Chino by about 30 feet, building 23 miles of channels and levees on Santiago Creek and the lower Santa Ana River and constructing a new dam north of Prado Dam—about a mile north of the mouth of the Santa Ana River Canyon—to control flood flows in the upper river basin.

Other State Projects

Other California projects that would be authorized by the legislation:

—$125 million to deepen and widen the Sacramento River Deepwater Ship Channel from Avon to the port of Sacramento.

—$84 million to improve flood control along Redbank and Fancher creeks in Fresno County and $30.7 million to finance flood prevention work in the Cache Creek basin 90 miles north of San Francisco.

—Nearly $114 million to improve harbors in Oakland and Richmond along San Francisco Bay.

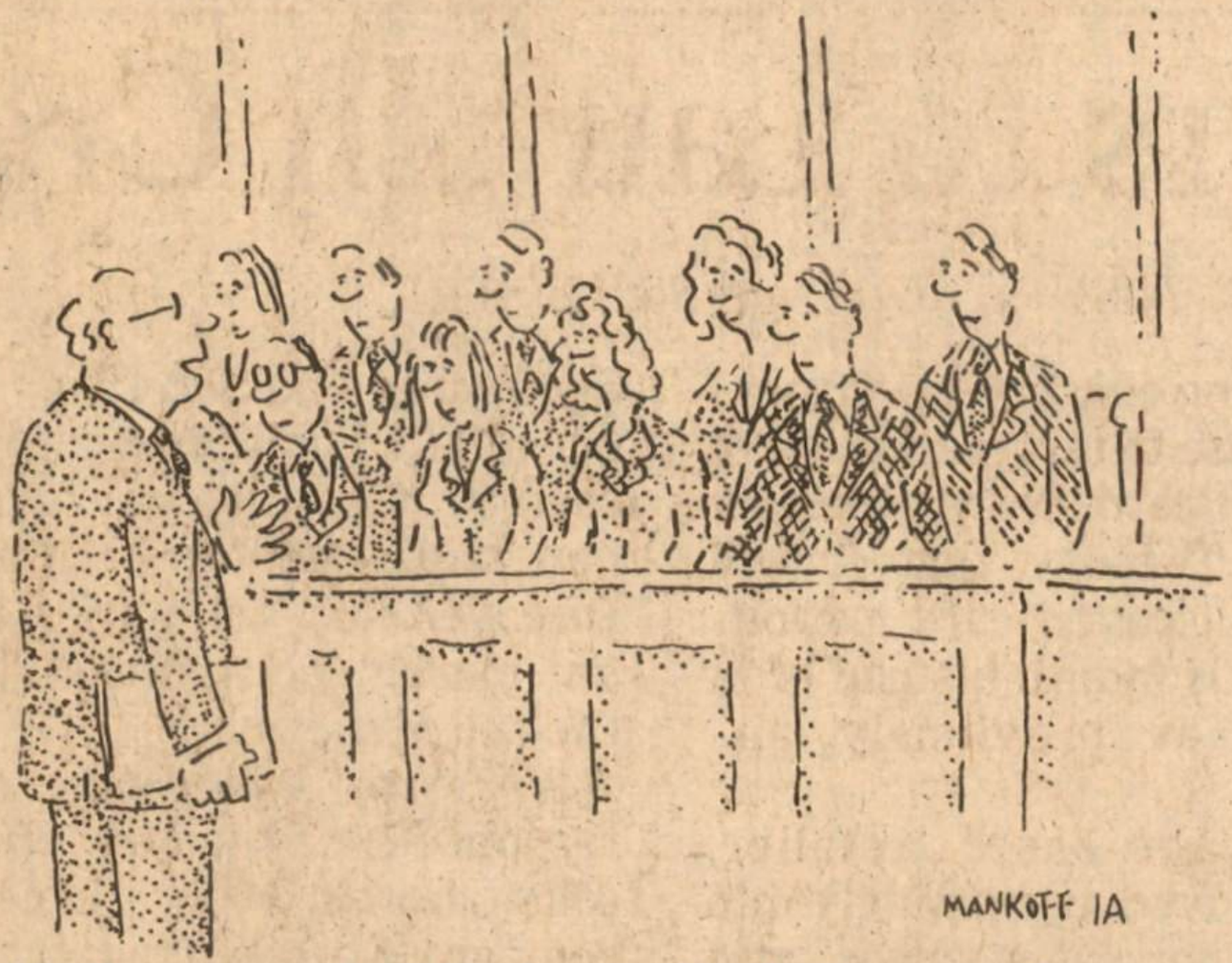
The measure would increase barge fuel taxes and port and harbor user fees to help raise money for the projects.

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SECTION
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Tuesday, January 14, 1986

Court lets stand rulings allowing bank expansion

By JAMES H. RUBIN
The Associated Press

WASHINGTON — The Supreme Court yesterday allowed the federal government to permit broad expansion of national banks into the discount securities brokerage business.

The justices, without comment, let stand rulings that allowing banks to buy and sell stocks and bonds for customers does not violate a 1933 federal banking law.

Last year, the Supreme Court ruled that the Federal Reserve Board acted properly in approving the purchase of the nation's largest discount brokerage by an affiliate of a bank holding company.

The appeal acted on yesterday presented a challenge to the authority of the U.S. Comptroller of the Currency to approve similar expansion by two national banks: Security Pacific Corp., with offices in California and elsewhere in the West; and Union Planters National Bank of Memphis, Tenn.

In 1982, then Comptroller of the Currency C.T. Conover permitted Security Pacific to set up its own discount brokerage and allowed Union Planters to purchase Brenner Steed and Associates Inc., a Memphis brokerage.

Discount brokers charge low commissions to securities customers without offering investment advice provided by the standard brokerage firms.

Bank expansion into the securities brokerage business is part of a growing trend blurring traditional lines separating various financial institutions.

The expansion was challenged by the Securities Industry Association representing more than 500 securities brokers, dealers and underwriters.

The trade association said the expansion violates a Depression-era law, the Glass-Steagall Act, that limited banking activities. The appeal said the actions by the Comptroller of the Currency cleared the way for more than 2,000 banks to offer discount brokerage services.

"If the established boundaries between the securities and banking industries are to be eradicated, that policy decision should be legislated by Congress, because only it can weigh all the considerations involved," the association's appeal said.

The U.S. Circuit Court of Appeals here upheld a lower court ruling permitting the expansion last April.

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Fed tightens its rules on takeovers via 'junk bonds'

By JANET STAIHAR
The Associated Press

WASHINGTON — The Federal Reserve Board voted 3-2 yesterday for an interpretive rule that could restrict efforts to finance hostile corporate takeovers by applying margin rules to the issuance of some debt securities.

Chairman Paul A. Volcker voted with the majority. The rule was aimed at so-called shell corporations, which have virtually no business operations other than to take over a target company, no substantial assets or cash flow to support the credit other than the margin stock that it has acquired or intends to acquire.

The federal regulation has been viewed as an attempt to restrict the relatively new tactic of using low-quality bonds — called "junk bonds" — in corporate takeover maneuvers by shell corporations.

Under the rule, effective upon publication in the Federal Register within the next few days, debt securities that are issued to finance the acquisiton of stock of target companies by a shell corporation would be subject to the 50 percent margin requirement now in effect for buyers of common stock.

The rule was called interpretive because it is designed to guide financial markets and courts when they look at cases involving when the margin rule should apply.

The Fed said margin rules would not apply if a shell corporation's parent company guarantees the debt securities, or if there is a merger agreement between the acquiring and target companies entered into at the time the commitment was made to purchase the debt securities.

The Reagan administration had lobbied against a similar rule which had been proposed by the Fed late last month. The Fed then delayed final action until it could got more opinion from the public and the financial marketplace.

The administration contended the rule would cripple the takeover market, reduce shareholder prices and cause a greater regulatory burden for the government.

In a related matter, the Securities and Exchange Commission will rule today on another merger and takeover policy, one successfully used last year to fend off T. Boone Pickens Jr. In that tactic, Unocal made a tender offer to purchase shares from its shareholders but excluded Pickens' investor group.

The commission will vote on a staff proposal that bidders be required to make a tender offer available to all shareholders of a class of securities.

In its ruling, the Fed said the margin ruling evolved from the Pickens-Unocal case as well as the attempt by Pantry Pride, Inc., to acquire Revlon. The Fed staff said the new interpretation would bring the shell corporation controlled by Pickens' Mesa Petroleum under the margin requirement, but not Pantry Pride, an operating company with substantial non-margin stock assets.

The first new issue corporate junk bonds were underwritten in 1977 and the market has grown substantially.

The Fed said it proposed the regulation out of a concern that the growing amount of corporate debt was putting severe strains on the country's financial system. For the past year, debt held by all economic sectors has been growing at about twice the rate of the economy itself — a disturbing development in the eyes of the Fed.

I/O

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Break With Past

Businesses Adapting to New Climate

By JOHN M. BRODER,
Times Staff Writer

CORNING, N.Y.—Just after dawn on a Sunday in September, 100 years of American industrial history crumbled to dust in six seconds.

On Sept. 22, Corning Glass Works dynamited its 135-foot silica mixing tower, the anchor of a century-old manufacturing complex built to mass produce the world's first incandescent light bulbs. The antiquated facility, which had produced hundreds of millions of light bulbs and tens of millions of dollars in profits for Corning, was being leveled as the company moved its bulb production to Brazil.

"The demolition out there is the site of where Corning Glass Works started in 1868," said Chairman James R. Houghton, great-great-grandson of Corning founder Amory Houghton, indicating the scene outside the window of his glass-walled office. "There's an awful lot of emotion over there, but we just had to get out of it."

Unprecedented Strains

The brief explosion was at once Corning's admission that it could no longer make money on light bulbs made here and a symbol of transformation in corporate America.

Corning and hundreds of other American firms are being compelled to make a radical break with the past to survive in a business world unlike any they have ever seen. Despite one of the most vigorous postwar economic recoveries, American business is showing signs of unprecedented strains.

Unemployment remains stubbornly high, and more than 1.6 million manufacturing jobs have disappeared since 1979. Firms, farms and banks are failing at Depression-era rates. Unrelenting foreign competition and low inflation are driving prices down, straining corporate treasuries and demanding drastic cost-cutting measures. Deregulation is forcing previously protected industries to compete in a global marketplace.

Dealing With Survival

Firms in nearly every industry are dealing with something even more basic than how to prosper: how to survive.

Managers are being forced to make critical corporate decisions with extraordinary speed. With the threat of takeovers, some companies' strategies are being developed in a matter of weeks and months rather than years.

As bewildered American execu-

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MAP FOUND HERE

CHANGE: Baffling New Climate for Businesses

Continued from Page 34

1984, a greater rate than at any time since World War II and more than 50% faster than the average of the preceding 25 years, according to the findings of a New York Stock Exchange study.

Corrigan said this trend is especially troubling because business generally repays debt during periods of economic expansion and relatively high interest rates. The current spate of borrowing foretells serious problems when conditions worsen.

"Since it does not seem at all prudent to assume that the business cycle is a thing of the past, servicing even existing levels of debt in a less favorable economic and interest rate environment could prove very difficult," Corrigan said.

Business failures, as measured by Dun & Bradstreet, already are running at a pace not seen since 1931-35, in part because of an inability of firms to handle their debts. The failure rate in 1983 and 1984 was 30% higher than during the recession years of 1981-82, a figure that perplexes and troubles Mel Colchamiro, senior economist for the New York Stock Exchange.

"Things aren't rebounding the way they typically do in a recovery. There are some disquieting undercurrents and we shouldn't ignore them," Colchamiro said.

He cited, in particular, the high proportion of bad bank loans, massive corporate borrowing and the retirement of equity in American businesses through stock buy-backs and the conversion of public firms to private through leveraged buy-outs.

Colchamiro predicted that because of these trends, the next recession will be unusually harsh.

"When it comes, you'll have more plant closings, more layoffs, more business failures and more unemployment. Quality of life will deteriorate for everyone."

Many of the firms call the changes they're undergoing "restructuring," but the term is misleading because it refers to everything from layoffs to fundamental corporate redefinition.

In some cases, restructurings are purely defensive moves, companies buying back stock or taking on heavy new debt to repel takeovers. In others, restructuring is a fancy way of describing a return to long-forgotten basics.

As Gerald Weiss, senior vice president for planning at Chase Manhattan Bank, put it: "It takes a calamity or threat of calamity for businesses to do what they ought to be doing naturally."

Some observers see the current wave of restructurings as a fad, an example of corporate "me-too-ism" similar to the conglomerate movement of the late 1960s and early 1970s. The urge to acquire unrelated businesses has abated greatly as corporate empire-builders have been shown to be less than the visionaries they once appeared. Today, divestiture is all the rage.

In 1984, about 900 units with a total value of $29.3 billion were sold, as companies emphasized efficiency, profitability and management control of individual operations, according to the Chicago merger specialist W. T. Grimm & Co.

Other observers consider the restructurings a long-overdue correction of past mismanagement of facilities, capital and personnel. They say that managers finally realized that profits, after adjusting for inflation, have been flat for nearly two decades, and that American productivity has lagged far behind that of the nation's chief competitors. Businessmen have come to understand the biological certainty that an organism evolves or it dies.

"Restructuring is a euphemism for struggling to adapt. This is business Darwinism—the dinosaurs didn't survive because they couldn't adapt," said Irwin Kellner, chief economist at Manufacturers Hanover Bank.

This period in American corporate history reminds Walter Seipp, chairman of Germany's Commerzbank, of a similar phase German industry went through in the late 1970s and early 1980s. Sales of German goods were depressed because of unfavorable exchange rates and a global recession. Profits were low because industrial facilities built just after World War II were outdated and inefficient.

German companies, however, rather than stressing immediate earnings to placate investors, spent heavily on automation and product development. And when international economic pressures eased and the deutschemark weakened in relation to other currencies, German business boomed. The profit break-even point had been reduced by new manufacturing efficiencies and new industrial and consumer products were ready for the export market just as foreign markets were ready to absorb them.

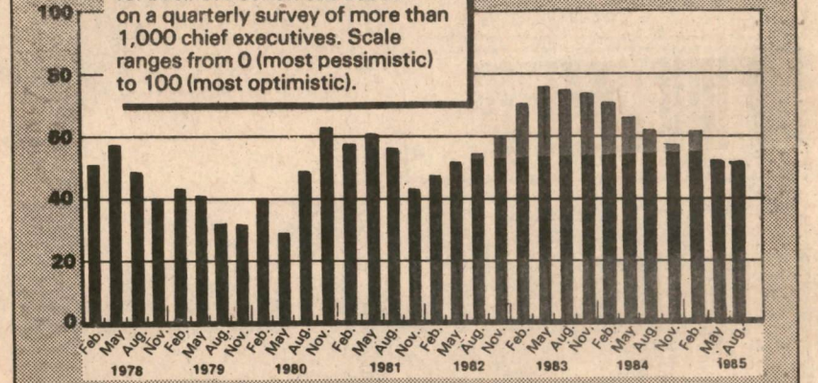
Seipp said he expects the same could happen to American industry if it heeds the lessons the Germans learned.

American observers agreed.

"The smart managers are redeploying assets and cutting their costs," said Carl Shrawder, a management consultant for the accounting firm Coopers & Lybrand. "They're taking advantage of emerging technologies. They're thinking in longer terms, because they realize if they don't plan and invest for the future, there won't be one."

BUSINESS CONFIDENCE DETERIORATES

An assessment of the outlook for business conditions based on a quarterly survey of more than 1,000 chief executives. Scale ranges from 0 (most pessimistic) to 100 (most optimistic).



Source: Conference Board

Negawatts—Rx for Megagoofs

by AMORY B. LOVINS

THE ELECTRIC UTILITY INDUSTRY—with about half a trillion dollars in net assets and an eighth of a trillion dollars in annual revenues—has begun its greatest transition in at least a half-century. Yet the same economic analyses which have correctly predicted the main elements of that transition for the past decade now suggest that changes far more profound have yet to occur in this most capital-intensive sector of the U.S. economy.

Why? Because:

- It is now cheaper to save electricity than to make it, even in *existing* plants.
- "Negawatts" (electricity saved and hence available for resale) can be procured more quickly and surely than megawatts.
- Proven hardware and implementation methods permit writing off abandoned plants while *lowering* the rates; turning rate-spiralling utilities into competitive declining-cost enterprises; virtually eliminating utility forecasting and planning risks; and abating acid rain at negative net cost.

Lovins is director of research at Rocky Mountain Institute, Drawer 248, Old Snowmass, Colo. 81654. Its technical reports provide backup for this article, which is condensed and adapted from his address at the annual conference of the National Association of Regulatory Utility Commissioners in New York last November.

These are the new economic realities which are already starting to reshape utility management.

It is now extremely cheap to save electricity through new end-use technologies which give the customer exactly the same service as before, often with even better convenience and reliability. Most of the best of these technologies were not available a year ago; the same was true a year ago. The best electricity-saving hardware now available collectively costs only about one-third as much, yet saves twice as much, as it did five years ago.

So rapid is this technical change that last spring I had to update a commercial-lighting analysis four times in six weeks. I recently found an airport extension where the lighting contractor, coming back to finish work on luminaires he had installed two months earlier, instead tore them out and replaced them with a newer model, because its capital and operating costs undercut the old units' operating costs alone.

How Cheap Is Saving?

To illustrate what I mean by "extremely cheap," the best electricity-saving hardware now in U.S. mass production typically permits, for example:

- saving more than 80 percent of commercial lighting energy on retrofit, via high-frequency tunable ballasts, tristimulus-phosphor lamps, and specular reflectors, at a societal cost of about 0.5 cents per kWh;
- saving more than 90 percent of commercial lighting energy in new construction, by those measures plus daylighting and tasklighting, at negative net marginal cost;
- saving more than 70 percent of typical commercial-building ventilation energy at less than 1 cent per kWh, principally by electronically adjusting fan speeds to actual ventilation needs;
- saving 15 percent to 30 percent of typical process-industry drivepower (nearer 50 percent for all industrial drivepower) by 11 measures costing less than 1 cent per kWh;
- saving at least 80 percent of the normal San Diego residential demand for a fully equipped all-electric house, via passive thermal design and advanced lights and appliances;
- saving 74 percent of summer peak and 90 percent of annual loads by simple redesign of a supposedly utility-optimized Las Vegas house, at roughly zero marginal cost; and
- enabling a building (like my home/indoor farm/research center at 7,100 feet in the Rockies) to use no heat and 5 to 10 percent of normal electric demand. (Our domestic bill for lights and appliances is about $5 a month. The heat and electrical savings repaid their net marginal cost in about 10 months.)

My latest analyses show, for example, how thorough retrofit with presently mass-produced technologies could save more than 44 percent of Commonwealth Edison Co.'s sales at a levelized 1984 cost of about 0.4 cents per kWh—less than a third of average operating costs for Com Ed's nuclear plants.

Implementation Changing

Even a few years ago, most utilities promoted electrical savings, if at all, only by information programs such as audits, which served mainly to make customers think of privation, discomfort, lifestyle changes, and the Internal Revenue Service. Lately, however, many alert utilities, big and small, investor- and publicly owned, have developed diverse, strikingly effective ways to save electricity—to elicit *negawatts* and thereby provide customers with desired energy services, such as comfort, light and shaftpower, at least cost.

The most creative and successful measures have generally been financial arrangements whereby utilities buy *negawatts* on their customers' premises more cheaply than the utilities could

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- The FIRST bond offering in the 1980's for a project to be fueled by an alternate "waste wood" energy source (Burlington Electric Department, Vermont).

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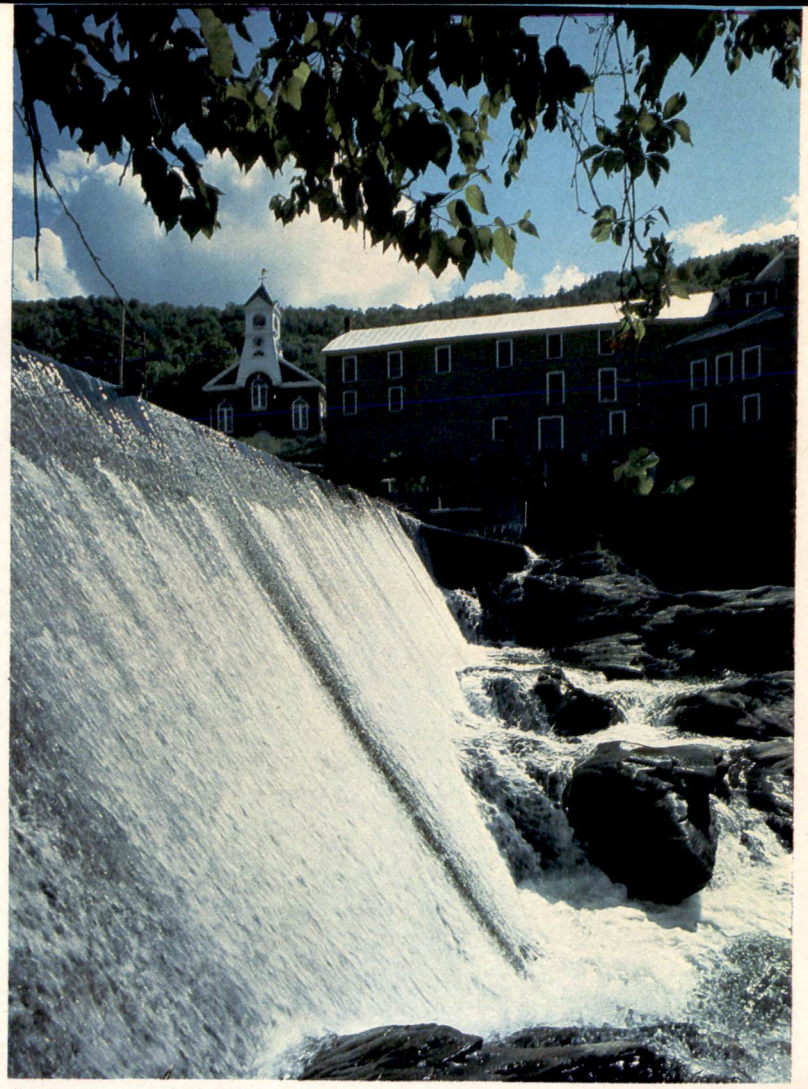
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make equivalent *megawatts* themselves.

More than half of U.S. utility customers can now get utility loans on favorable terms to weatherize their houses, or utility rebates for buying efficient appliances. Some utilities simply give away electricity-saving devices, especially to low-income customers. Southern California Edison Co., for example, gave away 109,000 quadrupled-efficiency lightbulbs to low-income households in 1985, because that is cheaper than operating existing power plants.

The programs traditionally used to enable and encourage customers to save electricity in all sectors were designed by engineers to deliver specific types of hardware to specific types of customers: weatherstripping, water-heater wraps, improved fluorescent lamps. Such programs are often effective, and are a desirable element of the electricity-saver's armory because they can deal with specific types of market failures. However, absent such failures (such as split incentives between landlords and tenants), these "first-generation" programs are far more cumbersome and less powerful than "second-generation" programs: *generic market incentives* which reward customers for saving electricity, no matter how, and the more the better.

The highest offered price appears to be Bonneville Power Administration (BPA)'s experimental Hood River



"More new generating capacity has been ordered in the United States since 1979 from small hydro and windpower than from coal and nuclear plants."



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County (Ore.) offer of $1.15 per kWh to be saved in the first year—equivalent to several cents per levelized kWh saved over decades from any durable weatherization improvement which displaces electric resistance heating. Similarly, several investor-owned utilities (IOUs) offer $250 to $300 per peak kW saved. The best such programs reward customers for saving electricity, not for spending money; use an open-ended sliding scale, so that the more customers save, the more they are rewarded; and even *pre*purchase the savings, so customers can use the payment to buy the device which produces the savings.

Furthermore, "third-generation" programs are now starting to receive serious consideration. They include:

- utility grants for modernizing inefficient factories: BPA's 20 percent grant for upgrading alumina smelters simultaneously frees up inefficiently used kilowatt-hours at low cost and helps secure the region's economic competitiveness and electric markets;
- transferable-saving arrangements whereby, say, an industrialist wanting cheap power can save it on a third party's premises and buy back the saved power from the utility at an intermediate price;
- marketable contracts to use less power, or not to exceed a given demand;
- shared-savings arrangements involving third parties;
- sliding-scale hookup fees which are positive or negative, depending on the efficiency of the building;
- auctions where utilities buy electric generation or savings options at a series of increasing prices until they have enough; and
- making spot and futures markets in saved electricity.

Even without such advanced implementation methods and technologies, in Southern California Edison Co.'s territory, long-run peak savings of nearly 1.1 gigawatts, or 8.6 percent of 1983 peak load, have recently been achieved *each year* (more than 80 percent of these savings in the commercial and industrial sector) at program costs of only a few mills per kWh, and tens of dollars per peak kW.

Small Commitments Add Up

More than 20 gigawatts of demand-side savings, plus the same amount on offer from diverse, decentralized generating sources, have transformed California's electrical prospects from scarcity to seemingly endless glut in only about two years. (Yet at least 24 other states and provinces, undeterred, still plan to sell California their surplus power, all at the same time.)

'Demand, within very wide limits, is not fate, but choice.'

Nor is California the only example of such behavior. Even New Hampshire, despite the specter of possible Public Service Company of New Hampshire (PSNH) bankruptcy, has small power commitments equal to one-seventh of its peak load. From East Texas to Maine, cogeneration (which in 1984 went from about 5 percent to about 7 percent of total U.S. electric output) and other independent power production are suddenly saturating the market at prices competitive with about everything except savings.

More new generating capacity has been ordered in the United States since 1979 from small hydro plants and windpower than from coal or nuclear plants or both, not even counting the latter's cancellations. During 1981-1984, new orders and firm letters of intent, minus cancellations, totalled *minus* 65 GW for central stations, but *plus* 25 GW for cogeneration and *plus* at least 20 GW for renewables such as small hydro and wind (not counting perhaps one-fifth of the cogeneration which was renewable).

Thus new small-power projects made up for more than two-thirds of the losses in central-station net orders—and electrical savings far more than made up for the rest. Since 1979, the United States has gotten more than a hundred times as much new energy from savings as from all net expansions of energy supply combined, and of those expansions, more new energy from sun, wind, water and wood—collectively now 10 percent of total U.S. primary energy supply—than from oil, gas, coal and uranium. But the electrical component of those savings and alternative supplies lags the nonelectrical component, leaving more displacement still to come.

Strategic Implications

It is all right for a utility's sales to fall *as long as its costs fall by even more than its revenues*. Savings which cost less than marginal operating cost will *always* achieve this. Demand shrinkage is nothing to be afraid of; a utility can make more money at less risk selling less electricity, simply by saving it cheaper than making it.

Official forecasts of demand shrinkage—so far confined, to my knowledge, to one variant of BPA's 1984-2004 sales forecast—should soon become commonplace in the electric business just as they did in the oil business. In both cases, pricing the product out of the market causes sales and revenues to fall. And in both cases, the way to regain lost markets is to cut costs and prices.

Indeed, if it is cheaper to save electricity than to make it, a utility should buy savings *regardless of how much overcapacity it has*. The overcapacity represents a sunk cost; only the marginal costs of operation are under the utility's control. No matter what its reserve margin, it should buy negawatts and dispatch negative loads whenever savings beat existing plants in the merit order, for exactly the same reason that a utility should accept a proferred contract to supply coal at $5 a ton or purchased power at four mills.

The power-marketing reflex is thus often exactly the wrong thing to do. Not only does it generally cost more to make the extra power than it would cost to save it, but the hoped-for net system benefits may not even be realized. A recent example from a Nevada Power Co. simulation shows that marketing offpeak power (via electric heating) can not only maximize system load factor, but also maximize revenue requirements and increase rates, whereas saving electricity in both winter and summer minimizes both revenue requirements and rates.

Forecasting load and building to meet it is an obsolete and dangerous doctrine, because it is financially too risky. Building decade-lead-time, multibillion dollar plants means playing You Bet Your Utility that the 10-year forecast will be about right. In fact, demand is highly uncertain, and two factors, especially in combination, make it even more uncertain: the efficiency revolution and costly new power plants, which raise rates and hence drive customers toward efficiency.

Efficiency also means, however, that utility managers can confidently *choose* future demand with enormous flexibility, and thus manage uncertainty so as to minimize regret. *Demand, within very wide limits, is not fate, but choice.*

Saving electricity is now so cheap that saved operating costs can rescue utilities from the cost of troubled construction projects. For example, I recently showed how, by abandoning the Braidwood project and buying end-use efficiency instead, Commonwealth Edison could save at least $6 billion to $8 billion net present value—enough to pay off the investors'



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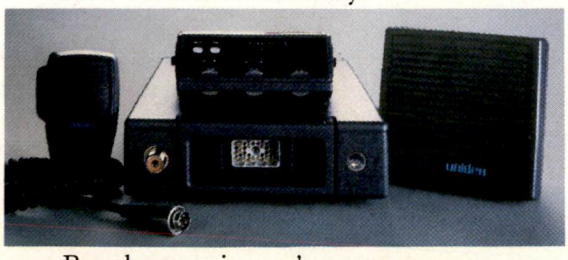
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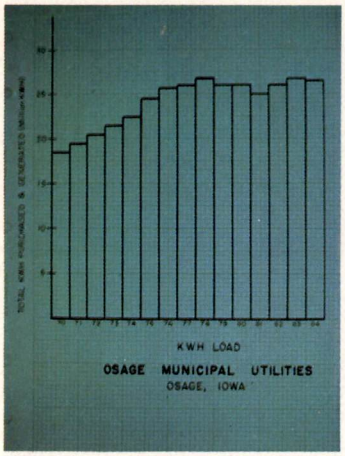
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$3 billion in sunk costs while lowering the rates by $3 billion to $5 billion. Nobody loses; everyone wins.

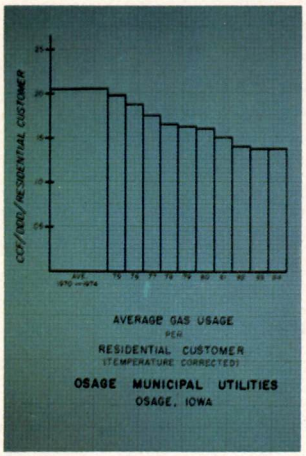
Savings Abate Acid Rain

To the extent that power plants cause acid rain, the savings from marketing negawatts can also be used to abate it. Rather than raising rates to pay for putting diapers on dirty coal plants, a utility could install or finance super-efficient lights, motors and appliances. Its customers would then need less electric-

If a durable recovery on Wall Street has to start on Main Street, Osage (Iowa) Municipal Utilities shows how to get the job done, writes Lovins, by following a "best-buys-first" policy. Osage charts and pictures show (see numbers by each): (1) Despite growth of the town's three major industries, the electrical load has not increased for eight years. (2) Residential heating customers use 36 percent less gas than they did 10 years ago. The aggressive Osage conservation program includes (3) free use of test meters to record water heater usage; (4) a hand-held infrared scanner which shows where heat is lost in homes and businesses and also (5) locates loose or corroded electrical connections in the distribution system; (6) aerial thermograms of residences and businesses; (7) conversion to high-pressure sodium streetlights; (8) energy fairs; (9) installation of load-management devices to cut off central air-conditioner compressors and electric water heaters at intervals; plus a broad information program by General Manager Weston D. Birdsall and his staff, which generated strong community support. Birdsall estimates (10) annual savings of $1,760,000 for the approximately 2,000 customers.



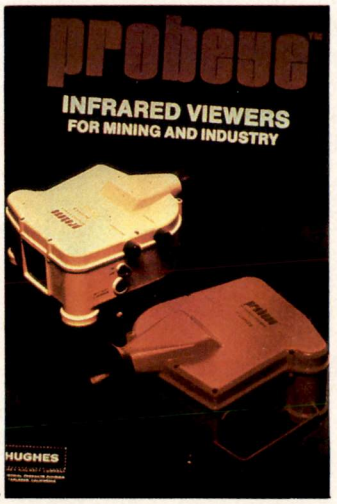
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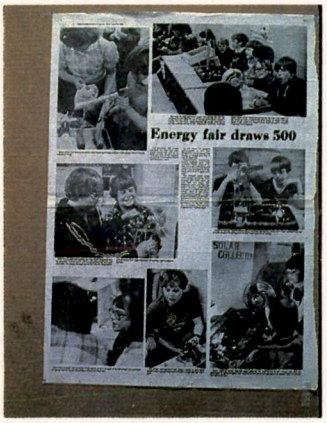
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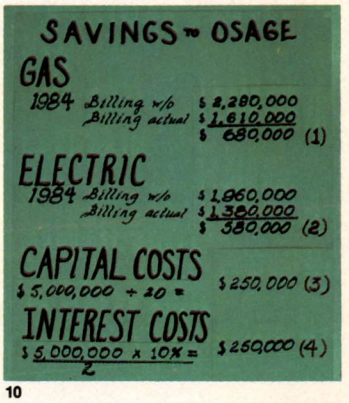

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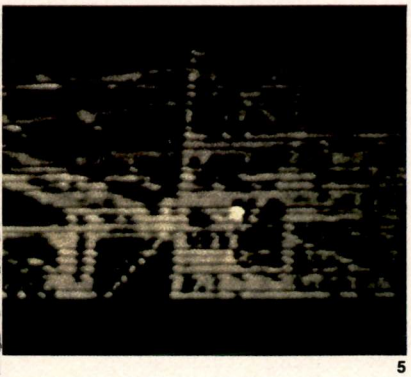
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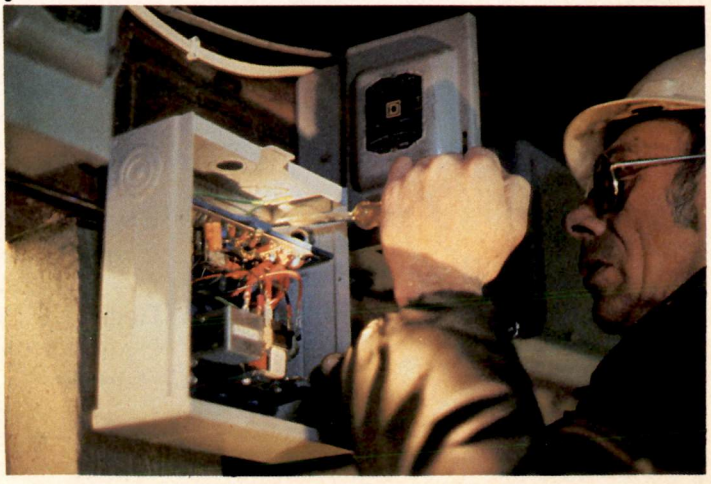
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9

ity to do the same tasks, so the utility would burn less coal and emit less sulfur.

Mainly, though, everyone would save a lot of money, because efficiency costs less than coal. Some of that saved money could then be used to clean up the dirty plants—saving about three times as much sulfur as the Waxman-Sikorsky bill proposed—while the rest of the saving lowered rates. Incidentally, the same technologies which can do this in, say, the Midwest are exactly the ones needed for no-loser rescues of the utilities mired in Zimmer, Marble Hill, Midland, Clinton and other nuclear swamps.

'If it is cheaper to save electricity than to make it, a utility should buy savings regardless of how much overcapacity it has.'

Today, the average U.S. private utility is still spending about a dollar per household per day to build power plants which it will not need, cannot afford, and may not be able to pay for. As we are treated to the spectacle of PSNH's petitioning the Federal Energy Regulatory Commission (unsuccessfully) to force municipal utilities to renew ruinous wholesale contracts, jurisdictions from Arkansas to New Orleans to Chicago are brandishing their ultimate sanctions—municipalization and franchise revocations—to avoid having to pay for plants they do not want or need.

Yet there *is* an attractive way out of the seemingly intractable pickles into which some utilities have gotten themselves, their investors, and their customers—a way out that leaves no losers. As an astute official of one utility, mired in building a plant he wishes he had never heard of, recently remarked:

"If we finish the plant, we'll have to pay for it; if we don't finish it, we'll still have to pay for it; but either way, we'd be dumb to pay for it by raising the rates, because then we'd price ourselves out of the market. All our customers would get more efficient, the big ones would leave, and we could well wind up making less money. What we need to do is figure out how to pay for the plant out of savings, so we can cut our costs, lower our rates, become more competitive and get our markets back."

The knowledge of how to do that, and empirical proof that it can work, *now exist*. Megagoofs, even gigagoofs, are no longer inescapable.

Economic Implications

U.S. energy bills—roughly $420 billion in 1984 including electricity and other energy—are about $150 billion per year lower than they would have been at 1973 levels of end-use efficiency. But if we were as efficient today as our competitors in western Europe are, we would save about an additional $200 billion per year—enough to balance the federal budget. And if we bought the cheapest options for the next 15 years, the cumulative net savings by the year 2000 would be several *trillion* 1984 dollars—enough to pay off the national debt.

'Jurisdictions from Arkansas to New Orleans to Chicago are brandishing their ultimate sanctions—municipalization and franchise revocations—to avoid having to pay for plants they do not want or need.'

Using electricity in a way that saves money is the most important single step we could take to achieve these savings, both because electricity is the costliest form of energy—8 cents per kWh is equivalent in heat value to oil at nearly $140 a barrel—and because the utility sector will otherwise continue to misallocate $25 billion to $40 billion of capital per year, starving all other sectors for dollars which they could invest more productively, and thus *losing* the economy thousands of net jobs per GW. For example, in 1982 the United States spent twice as much money building nuclear plants, many of which will never be finished, as it invested in the motor-vehicle, iron, and steel industries combined.

The contribution which electrical efficiency can make to this nation's prosperity and security can perhaps best be illustrated, not by incomprehensibly big numbers, but in microcosm. Osage, Iowa, has a population of about 3,800, and an innovative municipal utility which helps people weatherize their houses and implement basic load-management measures. These programs have given that little publicly owned utility three financial advantages:

- It has retired all its debt and has $2 million in reserves.
- It has cut its rates four times in the past two and a half years. (Not counting fuel-cost passthroughs, real rates have fallen by one-third since 1976.)
- Most important, more than $1.6 million per year which formerly left Osage to buy electricity, gas and generation equipment from out-of-town, generally out-of-state, now stays in the local economy. That is *more than $1,000 per household per year.* Most of this tax-free income is spent and respent locally, supporting local jobs.

If a durable recovery on Wall Street has to start on Main Street, Osage is one small example—one of a great many—of how even the simplest "best-buys-first" policy helps get that job done. ✹

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Public Power Bond Issues Totaled $23.2 Billion in '85

LOCAL PUBLICLY OWNED ELECTRIC utilities issued a record $23.2 billion worth of electric revenue bonds in 1985. This was more than double the previous record amount, $10.2 billion, in 1984, which had been a 3 percent increase over the $9.9 billion sold in 1983.

All tax-exempt revenue bond sales, according to preliminary calculations, increased by more than half, as compared with 1984, to a tentative total of $156.5 billion in 1985.

Public power revenue bonds amounted to 21 percent of all tax-exempt bonds sold in 1985, compared with 10.9 percent in 1984 and 12.2 percent in 1983, according to the annual Shearson Lehman Bros. compilation of tax-exempt bonds. Data came from THE BOND BUYER.

Twenty joint-action agencies accounted for 57.8 percent—$13.7 billion—of the $23.2 billion public power bond total, as compared with 57.9 percent in 1984.

The public power agency which issued the largest amount of bonds last year, $4.2 billion, was Intermountain Power Agency in Utah. Five other joint-action agencies issued more than $1 billion in bonds last year. They are North Carolina Eastern Municipal Power Agency, Northern California Power Agency, North Carolina Municipal Power Agency #1, Georgia Municipal Electric Authority and Piedmont Municipal Power Agency in South Carolina.

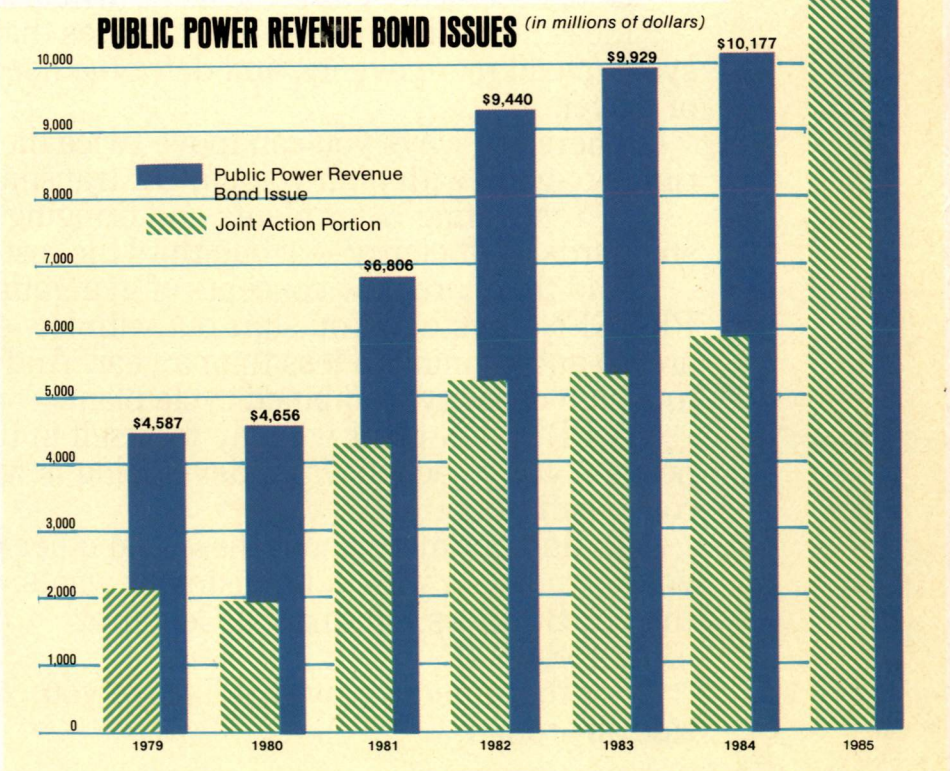
The 11-year total of electric bonds issued by 34 joint-action agencies is $44 billion, an increase of 47 percent in one year over the $30.2 billion they issued during the previous decade.

Public power revenue bond sales by quarter, in millions of dollars, were:

Quarter	1983	1984	1985
lst	$3,070	$3,778	$3,281
2nd	3.561	1,638	6,121
3rd	1,570	2,188	3,343
4th	1,747	2,576	10,460

Total Bonds Issued by Joint-Action Public Power Systems

Issuer	1975-1985 Total (000)
Alabama Municipal Electric Authority	$1,000
Connecticut Municipal Electric Energy Cooperative	133,210
Florida Municipal Power Agency	546,500
Heartland Consumers Power District (S.D.)	297,840
Indiana Municipal Power Agency	174,600
Intermountain Power Agency (Utah)	8,324,218
Kansas Municipal Energy Agency	26,639
Louisiana Energy and Power Authority	236,020
Massachusetts Municipal Electric System	26,100
Massachusetts Municipal Wholesale Electric Co.	1,327,570
Michigan Public Power Agency	634,370
Michigan South Central Power Agency	95,040
Mississippi Municipal Energy Agency	3,300
M-S-R Public Power Agency (Cal.)	935,045
Municipal Electric Authority of Georgia	3,500,000
Municipal Energy Agency of Nebraska	15,000
North Carolina Municipal Power Agency Number 1	3,370,450
North Carolina Eastern Municipal Power Agency	3,265,750
Northern California Power Agency	2,363,810
Northern Municipal Power Agency (Minn.)	487,650
Oklahoma Municipal Power Authority	163,020
Piedmont Municipal Power Agency (S.C.)	1,765,325
Platte River Power Authority (Colo.)	1,053,400
Sam Rayburn Municipal Power Agency (Texas)	499,085
City of Sikeston, Mo.	250,000
Southern California Public Power Authority	3,134,465
Southern Minnesota Municipal Power Agency	638,900
Texas Municipal Power Agency	1,812,260
United Minnesota Municipal Power Agency	64,500
Utah Associated Municipal Power Systems	143,028
Vermont Public Power Supply System	59,235
Washington Public Power Supply System	8,120,000
Western Minnesota Municipal Power Agency	511,475
Wyoming Municipal Power Agency	21,540
11-Year Total	**$44,000,345**



One agency, the Oklahoma Municipal Power Authority, issued bonds for the first time last year.

Of the 276 public power issues last year, 233, totalling $21.9 billion, were negotiated, and 43 issues, totalling $1.3 billion, were competitive, according to Securities Data Co.

Squeeze play.

It seems more than ever electric utilities are being caught in the middle.

On the one hand, people expect electricity will always be there when it's needed. At the same time, they want it at least cost.

But those conflicting goals are harder than ever to reconcile.

For example, how much power will be needed, and when?

How much will money itself cost?

General Electric has some ideas to help keep things in balance.

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Times

Los Angeles Times

BUSINESS

Wednesday, March 19, 1986

CC†/Part IV

Reagan Appointees Override Volcker on Cut in Discount Rate

By TOM REDBURN, *Times Staff Writer*

WASHINGTON—President Reagan's four appointees as governors of the Federal Reserve Board prodded Fed Chairman Paul A. Volcker toward a less restrictive monetary policy when they outvoted him last month on a cut in a key interest rate charged to financial institutions, sources said Tuesday.

Despite the setback, Volcker was able to delay implementation of the drop in the discount rate until West Germany was prepared to reduce its own lending rates, allowing the Fed on March 7 to announce a unanimous decision to approve a discount rate cut to 7% from 7.5% in coordination with other major industrial nations.

And, even though Volcker apparently was outvoted for the first time since becoming Fed chairman in 1979, most analysts remain convinced that he intends to serve out the rest of his term, which runs through August, 1987.

Fed spokesman Joseph Coyne, while refusing to comment on the discount rate decision, insisted that the chairman "is not about to resign." Volcker was unavailable for comment.

Fed officials would not discuss the initial meeting at which Volcker was opposed to a discount rate cut. It was first disclosed by syndicated columnists Rowland Evans and Robert Novak.

But other sources confirmed that four governors—Fed Vice Chairman Preston Martin, Martha Seger, Wayne Angell and Manuel Johnson—voted in late February for the half-point drop in the discount rate, while Volcker and governors Henry Wallich and Emmett Rice objected to the move at that time.

The unprecedented revolt against Volcker, according to sources who spoke only on condition that they not be identified, was led by Johnson and Angell, who joined the Fed's board just last month. Johnson was a top Treasury official in the Reagan Administration, and Angell was a Kansas banker pushed by Senate Majority Leader Bob Dole (R-Kan.).

Rather than press an immediate announcement of the decision, however, the four Reagan appointees agreed to delay the move until Volcker could arrange a joint rate cut with West Germany and Japan.

Volcker argued that the Fed should not cut its discount rate until foreign central banks moved. A unilateral cut by the Fed, he feared, might trigger a run on the U.S. dollar, which already had fallen about 25% against several major currencies since Sept. 22, when five leading industrial nations, including the United States, announced a coordinated effort to bring down the dollar's value.

"Volcker wasn't opposed to cutting the rate, but he was opposed to going first," said one source familiar with the thinking of the Reagan appointees. "The end result may be best for everyone—Volcker got a coordinated rate cut, and the 'Gang of Four' showed they are not going to be intimidated or cowed by the [Fed] bureaucracy."

Several Fed watchers had speculated in the past that Volcker might lose his grip on monetary policy once Reagan had appointed a majority of the seven board members, which is why his four appointees are sometimes referred to as the "Gang of Four."

But even as many analysts said that the discount rate decision suggests that the Fed may be slower in the future to boost interest rates, they also pointed out that Volcker still retains a working majority on the larger Federal Open Market Committee, which makes most important monetary policy decisions.

The committee includes, in addition to the seven Fed governors, the 12 Fed regional bank presidents, with five of the regional presidents voting at the monthly meetings on a rotating basis.

"Volcker may have been in the minority on this initial decision," said Irwin Kellner, chief economist at Manufacturers Hanover Trust in New York, "but I don't think it means he will be in the minority all the time."

One regional bank president declined to discuss the discount rate decision, but he suggested that the Fed stance remains basically unchanged. "I wouldn't read too much into the discount rate all by itself," said Gary Stern, president of the Minneapolis Fed. "The basic thrust of policy has not changed."

And Lyle Gramley, a former Fed governor who is now chief economist at the Mortgage Bankers Assn., insisted that any revolt against Volcker has been overblown. "I seriously doubt that Paul Volcker has been forced to do anything he doesn't want," said Gramley, who resigned from the Fed late last year. "He is one very tough guy."

Buy-Out Offer Boosted for Republic Health

By JUBE SHIVER Jr., *Times Staff Writer*

Reversing a recent trend of privately held health-care companies going public, a Dallas investor group led by a wealthy former professor is seeking to acquire Republic Health Corp. in a $404-million leveraged buy-out.

The bid by Pesch & Co.—through its REPH Acquisition Corp. unit—to acquire Republic would form the nation's largest privately held hospital management company.

The buy-out plan, which is contingent on securing financing and requires the approval of both companies' stockholders, would create a private health-care company with 85 hospitals in 24 states.

Prodded by Republic's board, a group led by LeRoy A. Pesch, a Republic director and former University of Chicago medical professor, sweetened its bid to acquire the Dallas health-care company this week.

McDonnell Douglas Out

The group offered $18.50 in cash [illegible] competitive $400-billion-a-year health-care industry.

However, the loss of McDonnell Douglas' financial muscle raises questions about whether the group can obtain enough funding for a leveraged buy-out, which is effected mostly by heavy borrowing. Ultimately the debt is paid with funds generated by the acquired company's operations or by the sale of its assets.

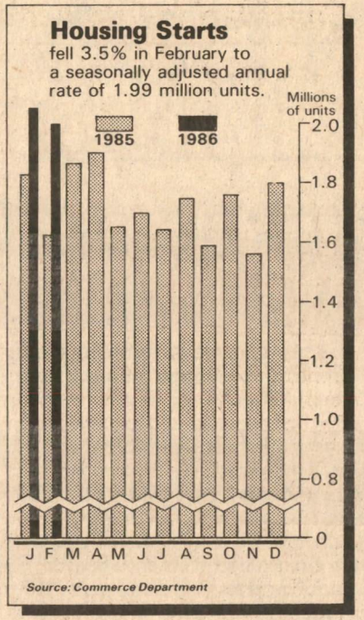
Pesch & Co.'s REPH unit was formed by Republic officials Pesch, Chief Executive James E. Buncher and James W. McAtee, executive vice president and chief financial officer.

'Good Offer'

"If I were a shareholder, I would certainly tender my stock; that's a good offer," said Barbara Santry, a health-care analyst for Alex. Brown & Sons in Baltimore.

Stockholder sentiment, however, is not the only test that the Pesch group faces.

Without the backing of McDonnell Douglas, which acquired 13%



Los Angeles Times

Home Building Down Slightly in February

WASHINGTON (AP)—Home con-

U.S. Trade Deficit Sets Mark in '85

Import Flood Cited for $117-Billion Payments Imbalance

By OSWALD JOHNSTON, *Times Staff Writer*

WASHINGTON—The United States paid out $117.7 billion more to the rest of the world than it took in last year, running up the largest deficit ever in the broadest measure of the nation's trade with the rest of the world, the Commerce Department reported Tuesday.

The huge deficit in the balance of payments was caused primarily by the flood of foreign goods into the country, which continued unabated at a record $160-billion-a-year pace during the last three months of the year despite the sharp drop in the value of the dollar that began last September. The 1985 deficit was 9.6% greater than the $107.4-billion payment deficit in 1984, the previous record.

At the same time, foreign investment in the United States exceeded U.S. investment abroad by $84.9 billion and the United States was in debt to the rest of the world by about $56.6 billion by the end of 1985, Commerce Department analysts said.

It was widely reported last September that last summer the coun[illegible] for the first

and insurance, the merchandise trade deficit for the year was $148.5 billion.

Thanks to a continuing, though dwindling, surplus income from U.S. assets abroad and services sold to foreigners, the 1985 deficit on trade in goods and services was somewhat smaller, but it was still a record $102.9 billion.

The current accounts balance, the broad measure reported Tuesday, consists of the net trade balance in goods and services coupled with U.S. transfer payments abroad in foreign aid and pensions and other remittances to individuals, which last year totaled $14.8 billion.

Declining Dollar

In general, economists believe that the still-declining value of the dollar eventually should help bring U.S. exports and imports more into balance as foreign goods begin to cost more and U.S. goods begin to be priced more competitively.

But this process takes from a year to 18 months even to begin to work, so there is wide consensus

"The fourth quarter last year was awfully bad," Bergsten said, noting a $39.5-billion merchandise trade deficit and a $36.6-billion balance-of-payments deficit in the last three months of the year. The figures indicate the likelihood of annual deficits of well over $150 billion in both categories.

Further, Bergsten said, the record during the first two months of this year is even worse. Trade deficits are running at what he estimated to be a $200-billion annual rate.

But he agreed with many economists in and out of the Administration that "things will get better in the second half of the year," even though he believes that the dollar needs to fall another 15% to 20% against the currencies of other major trading nations before trade deficits can fall dramatically.

Bergsten agreed that the fall in world oil prices, which should begin to expand economies in Western Europe and Japan and for the first time in nearly a decade expand domestic consumption there, "is manna from heaven."

Classics on pretentious ~~fate~~
scholasticism & intimidation

1. Homer & Humbug
2.

Homer and Humbug

THE following discussion is of course only of interest to scholars. But as the public schools returns show that in the United States there are now over a million coloured scholars alone, the appeal is wide enough.

I do not mind confessing that for a long time past I have been very sceptical about the classics. I was myself trained as a classical scholar. It seemed the only thing to do with me. I acquired such a singular facility in handling Latin and Greek that I could take a page of either of them, distinguish which it was by merely glancing at it, and with the help of a dictionary and a pair of compasses, whip off a translation of it in less than three hours.

But I never got any pleasure from it. I lied about it. At first perhaps I lied through vanity. Any coloured scholar will understand the feeling. Later on I lied through habit; later still because after all the classics were all that I had, and so I valued them. I have seen thus a deceived dog value a pup with a broken leg, and a pauper child nurse a dead doll with the sawdust out of it. So I nursed my dead Homer and my broken Demosthenes, though I knew in my heart that there was more sawdust in the

stomach of one modern author than in the whole lot of them. Observe, I am which it is that has it full of it.

So, as I say, I began to lie about the classics. I said to people who knew no Greek that there was a sublimity, a majesty about Homer which they could never hope to grasp. I said it was like the sound of the sea beating against the granite cliffs of the Ionian Esophagus, or words to that effect. As for the truth of it, I might as well have said that it was like the sound of a rum distillery running a night shift on half time. At any rate this is what I said about Homer, and when I spoke of Pindar – the dainty grace of his strophes – and Aristophanes – the delicious sallies of his wit, sally after sally, each sally explained in a note calling it a sally – I managed to suffuse my face with an animation which made it almost beautiful.

I admitted, of course, that Virgil, in spite of his genius, had a hardness and a cold glitter which resembled rather the brilliance of a cut diamond than the soft grace of a flower. Certainly, I admitted this: the mere admission of it would knock the breath out of anyone who was arguing.

From such talks my friends went away sad. The conclusion was too cruel. It has all the cold logic of a Syllogism (like that almost brutal form of argument so much admired in the Paraphernalia of Socrates). For if —

Virgil and Homer and Pindar had all this grace, and pith and these sallies,—
And if I read Virgil and Homer and Pindar,
And if they only read Mrs. Wharton and Mrs. Humphrey Ward,
Then where were they?

So continued lying brought its own reward in the sense of superiority, and I lied more.

When I reflect that I have openly expressed regret, as a personal matter, even in the presence of women, for the missing books of Tacitus, and the entire loss of the Abracadabra of Polyphemus of Syracuse, I can find no words in which to beg for pardon. In reality I was just as much worried over the loss of the ichthyosaurus. More, indeed: I'd like to have seen it; but if the books Tacitus lost were like those he didn't, I wouldn't.

I believe all scholars lie like this. An ancient friend of mine, a clergyman, tells me that in Hesiod he finds a peculiar grace that he doesn't find elsewhere. He's a liar. That's all. Another man, in politics and in the legislature, tells me that every night before going to bed he reads over a page or two of Thucydides to keep his mind fresh. Either he never goes to bed or he's a liar. Doubly so: no one could read Greek at that frantic rate: and anyway his mind isn't fresh. How could it be? he's in the legislature. I don't object to this man talking freely of the classics, but he ought to keep it for the voters. My own opinion is that before he goes to bed he takes whisky: why call it Thucydides?

I know there are solid arguments advanced in favour of the classics. I often hear them from my colleagues. My friend the professor of Greek tells me that he truly believes the classics have made him what he is. This is a very grave statement, if well founded. Indeed, I have heard the same argument from a great many Latin and Greek scholars. They all claim, with some heat, that Latin and Greek have practicallly made them what they are. This damaging charge against the classics should not be too readily accepted. In my opinion some of these men would have been what they are, no matter what they were.

Be this as it may, I for my part bitterly regret the lies I have told about my appreciation of Latin and Greek literature. I am anxious to do what I can to set things right. I am therefore engaged on, indeed have nearly complete, a work which will enable all readers to judge the matter for themselves. What I have done is a translation of all the great classics, not in the usual literal way but on a design that brings them into harmony with modern life. I will explain what I mean in a minute.

The translation in intended to be within reach of everybody. It is so designed that the entire set of volumes can go on a shelf twenty-seven feet long, or even longer. The first edition will be an édition de luxe, bound in vellum or perhaps in buckskin, and sold at five hundred dollars. It will be limited to five hundred copies, and, of course, sold only to the feeble-minded. The next edition will be the Literary Edition, sold to artists, authors, actors and contractors. After that will come the

Boarding House Edition, bound in board and paid for in the same way.

My plan is so to transpose the classical writers as to give, not the literal translation word for word, but what is really the modern equivalent. Let me give an odd sample or two to show what I mean. Take the passage in the *First Book of Homer* that describes Ajax the Greek dashing into the battle in front of Troy. Here is the way it runs (as nearly as I remember) in the usual word-for-word translation of the classroom, as done by the very best professor, his spectacles glittering with the literary rapture of it.

"Then he too Ajax on the one hand leaped (or possibly jumped) into the fight wearing on the other hand yes certainly a steel corslet (or possibly a bronze under tunic) and on his head of course yes, without doubt he had a helmet with a tossing plume taken from the mane (or perhaps extracted from the tail) of some horse which once fed along the banks of the Scamander (and it sees the herd and raises its head and paws the ground) and in his hand a shield worth a hundred oxen and on his knees too especially in particular greaves made by some cunning artificer (or perhaps blacksmith) and he blows the fire and it is hot. Thus Ajax leapt (or, better, was propelled from behind) into the fight."

Now, that's grand stuff. There is no doubt of it. There's a wonderful movement and force to it. You can almost see it move, it goes so fast. But the modern reader can't get it. It won't mean to him what it meant to the early Greek. The setting, the costume, the scene has all got to be changed in order to let the reader have a real equivalent to judge just how good the Greek verse is. In my translation I alter it just a little, not much, but just enough to give the passage a form that reproduces the proper literary value of the verses, without losing anything of the majesty. It describes, I may say, the Directors of the American Industrial Stocks rushing into the Balkan War cloud: —

"Then there came rushing to the shock of war
Mr. McNicoll of the C.P.R.
He wore suspenders and about his throat

High rose the collar of a sealskin coat,
He had on gaiters and he wore a tie
He had his trousers buttoned good and high,
About his waist a woollen undervest
Bought from a sad-eyes farmer of the West,
(And every time he clips a sheep he sees
Some bloated plutocrat who ought to freeze),
Thus in the Stock Exchange he burst to view,
Leaped to the post, and shouted, 'Ninety-two.' "

There! That's Homer, the real thing! Just as it sounded to the rude crowd of Greek peasants who sat in a ring and guffawed at the rhymes and watched the minstrel stamp it out into "feet" as he recited it!

Or let me take another example from the so-called *Catalogue of the Ships* that fills up nearly an entire book of Homer. This famous passage names all the ships, one by one, and names the chiefs who sailed on them, and names the particular town or hill or valley that they came from. It has been much admired. It has that same majesty of style that has been brought to an even loftier pitch in the *New York Business Directory* and the *City Telephone Book*. It runs along, as I recall it, something like this: —

"And first indeed Oh yes was the ship of Homistogetes the Spartan, long and swift, having both its masts covered with cowhide and two rows of oars. And he, Homistogetes, was born of Hermogenes and Ophthalmia and was at home in Syncope beside the fast flowing Paresis. And after him came the ship of Preposterus the Eurasian, son of Oasis and Hysteria" – and so on endlessly.

Instead of this I substitute, with the permission of the New York Central Railway, the official catalogue of their locomotives taken almost word for word from the list compiled by their superintendent of works. I admit that he wrote in hot weather. Part of it runs: —

Out in the yard and steaming in the sun
Stands locomotive engine number forty-one
Seated beside the windows of the cab
Are Pat McGaw and Peter James McNab

Pat comes from Troy and Peter from Cohoes
And when they pull the throttle off she goes,
And as she vanishes there comes to view
Steam locomotive engine number forty-two.
Observe her mighty wheels, her easy roll
With William J. Macarthy in control
They say her engineer some time ago
Lived on a farm outside of Buffalo
Whereas his fireman Henry Edward Foy
Attended school in Springfield, Illinois.
Thus does the race of man decay or rot
Some men can hold their jobs and some can not.

Please observe that if Homer had actually written that last line it would have been quoted for a thousand years as one of the deepest sayings ever said. Orators would have rounded out their speeches with the majestic phrase, quoted in sonorous and unintelligible Greek verse, "some men can hold their jobs and some can not": essayists would have begun their most scholarly dissertations with the words "It has been finely said by Homer that (in Greek) 'some men can hold their jobs' ": and the clergy in midpathos of a funeral sermon would have raised their eyes aloft and echoed "Some men can not"!

This is what I should like to do. I'd like to take a large stone and write on it in very plain writing —

"The classics are only primitive literature. They belong to the same class as primitive machinery and primitive music and primitive medicine," and then throw it through the windows of a University and hide behind a fence to see the professors buzz!

Macro; Urban

TUNNELS TO NOWHERE

by Harrison Rainie

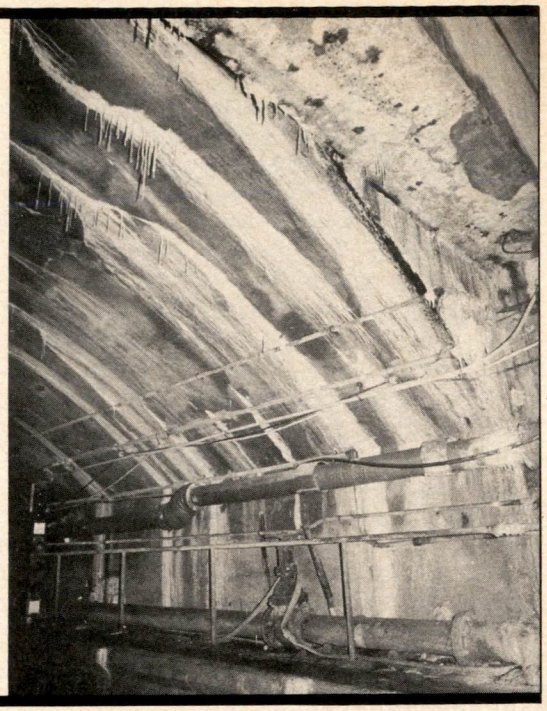


Photo: Daily News

In the fall of 1962 Robert Wagner Jr., mayor of New York, received a report from budget and transit experts on his staff that showed the subway trains in Queens were too crowded. The central portion of Queens County had experienced booming growth in the postwar decades, with the result that the E and F trains were being used beyond capacity. The report recommended that the subway be expanded in Queens. Wagner agreed with the findings and launched a project that was to become the biggest boondoggle in New York history, and a textbook case of government unaccountability.

Twenty-three years later, more than $1.23 billion of taxpayers' money—about two-thirds of it federal funds—has created two huge tunnels and a half-dozen holes in the ground stretching 6.5 miles across New York City. The tunnels are filled with rotting equipment. In some places they contain pools of water five-feet deep. Needless to say, they have not served a single rider, and it is entirely possible they never will.

What New Yorkers have taken to calling "Tunnels to Nowhere" began as a dream to build 52 miles of new subway tracks to carry more than 150,000 riders a day. Today, even under an extremely optimistic scenario—which assumes they will receive tens, maybe hundreds of millions of federal dollars from programs that are shrinking or nonexistent—subway service would be created for only 7,600 straphangers a day. The cost of providing this service would exceed fares by more than $15 million annually. To create a system serving even half as many riders as originally planned would cost another $200 million and perhaps as much as $1 billion, which is nowhere to be found. And to top it all off, many of the residents who would be served by a completed system don't want it anymore. For these and other reasons, it seems likelier that the tunnels will end up serving primarily as a direct route for rats and mice making their way across the East River. And because of the way this governmental misfire occurred, we won't even know who to blame.

Harrison Rainie is a Washington correspondent for the New York Daily News.

The 'Grand Design'

It was good politics, as well as decent public policy, to offer new mass transit service to the people of Queens in the mid-1960s. When Governor Nelson Rockefeller was looking for New York City votes to secure passage of a $2.5 billion transportation bond issue he wanted to float to redeem a 1966 campaign promise, he grabbed the only capital construction plan lying on the shelf of the New York City Transit Authority. Far from being a well-conceived program, it was a haphazard wish-list compiled by city transit planners who hadn't had anything to construct in more than 30 years. It not only included proposals for

much-needed service to Queens but also called for building new stations or even entirely new lines in all but one of the city's five boroughs.

These were the days when people considered the subways a relatively safe and thoroughly effective way of getting around. So the prospect of having a new subway stop on the corner delighted voters and politicians alike, and encouraged planners to think big.

That was fine with Rockefeller and city officials, to whom bigness and boldness were the keystones of any program. Their go-getter spirit is recalled by Robert Kiley, now the chairman of the Metropolitan Transportation Authority: "The country and the city were still in a 'can-do' mood. 'Guns and butter,' 'growth and expansion,' 'government and progress' were unquestioned bywords for most Americans." The bond issue carried overwhelmingly. Some $600 million became available to the newly constituted Metropolitan Transportation Authority, the regional mass transit system. The planners and engineers, not used to having so much money, let their imaginations run wild.

They saw tunnels that would stretch the entire length of Manhattan, all the way to the Bronx. Another set of routes would lie perpendicular to the Manhattan line, with a tunnel under the East River at 63rd Street and subway tracks sprawling across the entire length of Queens, the city's largest borough. Throughout central Queens, residents would have a new convenient way of getting around the borough and to Manhattan. They estimated that 150,000 New Yorkers would ride the new lines daily, and it would cost only $1.3 billion, a modest price considering the substantial improvements to the system.

But even for those pre-1970s-inflation days, the estimates in the appropriately named "Grand Design" document were laughably low. In part, this reflected a tradition that had been established by the city's master builder, Robert Moses, of low-balling construction estimates. Moses had a simple two-phase building formula: 1) coax your bosses and the public to support major initiatives by deliberately underestimating the cost; 2) get part way through the project and drop the bombshell that much more money is needed. Confronted with the choice of paying huge sums more to finish the work or seeing the original expenditures wasted, the public had always chosen to go ahead.

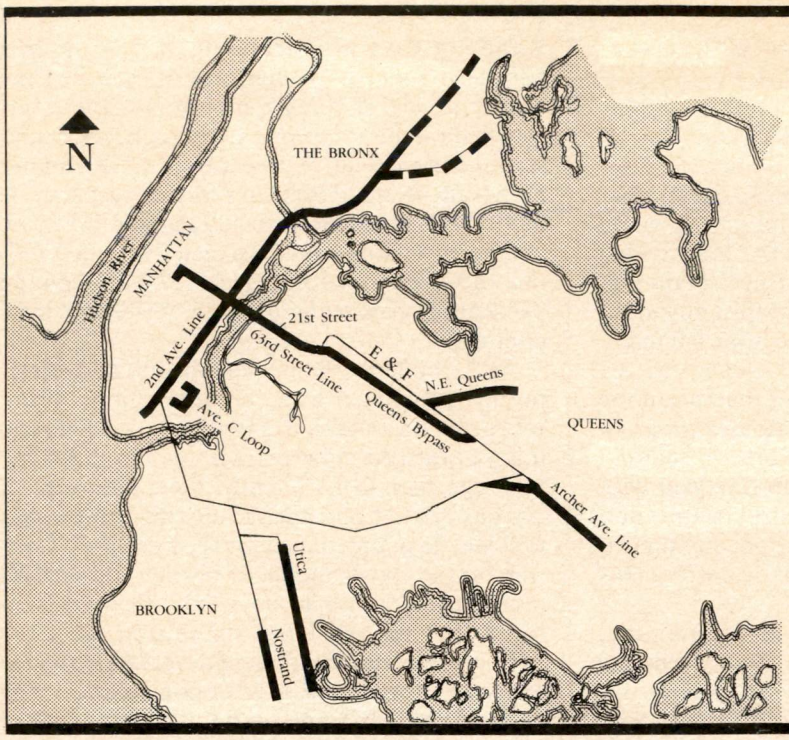
But the low estimates also reflected simple ignorance. The planners really had no idea how much a large-scale project would cost. Within three years the price tag ballooned from $1.3 billion to more than $3 billion, while the original plan for 13 routes and 52 miles of track was scaled back to 11 routes and 30 miles of track.

By late 1974 only four miles of subway were under construction, and, given the bureaucratic maze through which all plans had to travel, even that was a miracle. The program still needed preliminary design, final design, land acquisition, and construction and equipment contracts for each line section. For each portion the city had to get approval not only from divisions within the MTA but also from the Urban Mass Transportation Administration (which dispensed federal funds) and 17 other local, regional, and state agencies. Everyone from the city council to the state Department of Transportation was involved. In one case, a local community board representing a posh section near Central Park held up construction of a ventilation shaft for months because of fears that the construction work would ruin the neighborhood.

The $200 million drawing

Then came New York City's fiscal crisis. As late as July 1974, Mayor Abraham Beame and Governor Malcolm Wilson had donned hardhats and manned jackhammers to break ground for the fourth segment of the Second Avenue subway, a line that was supposed to provide north-south service on Manhattan's East Side and link up to Queens. But fewer than four months later, when the city realized the fiscal mess it was in, Beame pulled the plug on the Second Avenue subway, leaving abandoned tunnels all along eastern Manhattan. The mayor and MTA chief David Yunich decided that the city couldn't afford to squander precious capital dollars on a new subway while the existing system was crumbling. The total cost of the three holes that are the remains of the Second Avenue subway: $99.6 million. Total use: zero.

Although the decision to rein in the "New Routes" program was entirely rational, how they decided to do it was not. It did make sense to emphasize the Queens lines—63rd Street tunnel and Archer Avenue—over those of other boroughs. Those had already been started, the need in Queens was the greatest, and the city had taken care of much of the land acquisition and utility right-of-way problems. In addition, because they could be completed the fastest, the city could quickly start collecting those extra fares. But they made one fatal error. They assumed that the city would have several hundred million dollars left over after the other lines were completed to build the critical Queens Bypass. Without that connec-



1968 Grand Design

The thick black lines represent the Metropolitan Transportation Authority's proposed new subway routes, including what were then much-needed routes connecting Manhattan to Archer Avenue in Queens. The thin lines represent existing subway routes, including the crowded E and F trains. By 1985, all the new routes except the Archer Avenue and 63rd Street routes had been abandoned. The 63rd Street route, if it is finished, will end at 21st Street, which does not connect up to any subway trains. A "Local Connection" from 21st Street to the E and F trains would cost $222 million.

Map by Susan Stevens

tion between east Queens and the end of the 63rd Street line, there would be no express train by which those Archer Avenue travelers could cross the borough or get to Manhattan—the main point of having the new routes in the first place. Officials thought they had enough money in hand or enough coming in from the federal government to build the 63rd Street tunnel, the Archer Avenue line, *and* the line that was to connect them. But they so bungled the construction and planning of the New Routes program that there may not be enough to finish the first two, let alone the third. So the connecting line is still just a $200 million drawing in a planner's notebook.

That is doubly troublesome, because as the project dragged on, the MTA restricted the reach of the 63rd Street line, thereby making the nonexistent cross-Queens connection even more important. Originally the 63rd Street line was to reach all the way to Northern Boulevard, deep inside the most populous part of the borough. But in 1981 it was scaled back to 21st Street, a relatively desolate part of the city. The farther west the 63rd Street line's terminal moved, the fewer passengers it could pick up and the more isolated the Archer Avenue line became. Now, if and when the two lines operate, they will carry only 7,600 riders daily instead of the 70,000 it would if they were linked together.

Ironically, however, with the passage of time, leaving a huge chunk of Queens out of the system has come to be a popular idea in Queens. Over the past 20 years, Queens residents, like all New Yorkers, have come to hate their subways. Instead of bringing them closer to the rest of the city, the subways, they believe, bring the worst elements of the city to them: graffiti, crime, dirt, and undesirables. From 1965 to 1985 citywide daily ridership dropped by more than a million. By the early 1980s, the people of north and central Queens were in revolt against the MTA's plan to connect the 63rd Street line with Archer Avenue. The white middle-class residents, who were supposed to be the beneficiaries of this subway construction, flocked to meetings and protests because they feared the expanded service would bring, as one Rosedale mother put it, "black criminals into our neighborhoods."

The delays and cost overruns involved in building a subway connection that nobody wanted ultimately was a frustration to more than just New Yorkers, because the federal government was involved, too. The New Routes program soaked the federal treasury for hundreds of millions of dollars. Between 1975 and 1985, the federal government spent $400 million on top of the $350 million it had already spent for the two routes, which originally were supposed to cost a total of $283 million and be completed in 1978. The feds would have to spend at least $75 million more before the two lines could open. Why was New York unable to build those two routes quickly and on

budget? One answer can be found in the almost comic wrangling within the MTA.

The 'Beame shuffle'

Imagine three inefficient bureaucracies that refuse to talk to each other, and you've got a pretty accurate picture of the MTA. It is divided into three distinct functions: project planning, design, and construction. As a project advanced through each of these phases, the work fell under the responsibility of a different deputy to the chief engineer. For the contractors that meant the people who designed the New Routes program did not talk to the ones responsible for building it, who in turn did not communicate well with the folks who were supposed to operate and maintain the final product. This noncommunication resulted in interminable delays, costing tens of millions of dollars.

The chaos made it easy for contractors and their employees to manipulate the system for maximum delay, and, in most cases, extra profit. A March 4, 1985 memo from a Transit Authority engineer described how one contractor working on two lengthy sections of the 63rd Street tunnel asked for payment for 809 days' worth of extra work—at costs ranging from $2,000 to $10,000 per day—because it experienced 36 different kinds of delays during the four years it was on the job. Frequent labor strikes were a particular problem.

Another reason for the delays and cost overruns was what came to be called the "Beame shuffle." Beame decided there was another important use for federal construction dollars—as operations subsidies to save the city's 35-cent subway fare. The fiscal crisis was threatening a major fare hike, which is the top "thou shalt not" in the city's political religion. And 1975 was an election year. In fairly short order, Beame convinced members of the New York congressional delegation to push legislation allowing him to "borrow" federal capital funds and use them to offset the Transit Authority's operating deficit (and to hold the fare) as long as the city promised to spend its own funds to replace the federal funds.

It worked, some say, too well. The fare remained constant for a while, but $281 million was diverted to prop up an unrealistically low fare, and the spending of capital dollars to repair the decrepit system was reduced. The diversion of capital slowed the progress of the New Routes and allowed inflation to increase the costs.

No public works disaster would be complete without a dash of corruption. It now appears contractors may have siphoned off some of the money as well. Evidence of possible fraud has centered on the Schiavone Construction Co. and its onetime executive vice president Raymond Donovan—Ronald Reagan's former secretary of labor. A Bronx grand jury has charged Donovan and his former business associates with defrauding the Transit Authority of $7.4 million by overstating payments to a minority-run subcontractor.

As the building progressed, the job of overseeing the completed work became harder. There just weren't enough warm bodies to check all 250 miles of existing subway tracks *and* monitor the new segments. Consequently, there took place a curious kind of anti-turf battle over who would provide the maintenance for the new lines. Contrary to the classic model of bureaucratic warfare in the Pentagon, where services battle to see who can "win" responsibility for certain jobs, the MTA bureaucratic wars were devoted almost exclusively to *avoiding* new responsibilities. The engineers didn't want to do the maintenance work, nor did the operations and maintenance crews. Through the mid- to late seventies there was a war of memos on this issue that ended when the operations folks scored a knockout by declaring that they'd be happy to do the overtime work, but only at overtime pay rates. The cash-strapped MTA had no choice but to assign the work to the engineers, who were not up to the job. A large number were graduates of non-accredited engineering schools. Also, many were foreigners with so little grounding in English that they had difficulty communicating with contractors and others. "From top to bottom, the engineering department was staffed with people out of their league," said one New York transit expert. "They enjoyed the comfort and safety of the civil service and they were constitutionally incapable of making waves or asserting themselves, especially in cases of manifest trouble." In late 1983 the MTA decided to shift the responsibility to its own operating department, but after inspecting the tunnel, the operating department officials refused the assignment because it required too much work. That left the beleaguered engineers again in charge of the job.

With all this bickering, it's hardly surprising that the MTA managed to botch much of its construction work. Last year, for example, inspectors found that one of the major crossbeams in the 63rd Street tunnel had been placed too low to allow subways to pass, and the contractor, with the approval of only middle-level engineers, simp-

ly sliced off enough of the beam to create sufficient headway. The dispute continues about whether this compromised the tunnel's "structural integrity" (that's industry jargon for whether or not it's going to fall down). They also found stalactites hanging from the cavern-like ceilings and the aforementioned five-foot-deep puddles of water. A leaky ceiling in the tunnel's signal room, which contained the electrical lifeline to the system, left the floor covered with six inches of water and helped corrode and cripple important signal and switching equipment. Pumps and ventilation equipment had mysteriously disappeared.

A federal audit last summer revealed that concrete for the tunnel had been mixed and poured on hundreds of occasions with no inspection or testing. The investigation concluded that there is "no assurance" that 200,000 cubic yards of concrete in the tunnel is safe. Tests showed deficiencies in ten places, and there is no evidence the Transit Authority tried to correct them. A private consultant subsequently concluded that the tunnel is safe. But there is no ready explanation why the inspections were omitted, save that the engineering department was too overworked to do them.

UMTA Dumpta

The only thing more incredible than the status of the tunnels is the fact that nothing was done about it for so many years. David Gunn, president of the New York Transit Authority, the City portion of the mass transit system, recalls that he and and Metropolitan Transportation Authority Chairman Robert Kiley were briefed in April 1984, soon after they assumed their jobs, by the top engineers, who casually recited the history and current status of the program, citing no problems and confidently predicting that the system would go on line by the end of the following year. "In the months that followed, as the operating departments were preparing to take over the operations of [the tunnels], I began receiving a much different assessment than had been provided me by the engineering department," Gunn says. Finally he found himself reporting to MTA board members that "we have a disaster on our hands."

Why didn't the bad news reach the bosses earlier? Part of the reason is that no one really pressed to find out its status. Each time officials with the power to shut the project down sought an accounting, the engineers, more out of timidity than confidence, predicted the problems could be ironed out, and the planners insisted that the need for new subway service was still great. In those cases where conscientious officials warned about developing problems, their supervisors ignored the pleas. The MTA's files are filled with plaintive cries dating back to mid-1972 on problems with water leakage and the handling of concrete. Most of these problems were slated for consideration "at a future date."

More than $1.2 billion of taxpayer's money has created two huge tunnels and a half-dozen holes in the ground filled with rotting equipment and pools of water five feet deep. They have not served a single rider, and it is entirely possible they never will.

Beyond this unwillingness to pass along bad news, however, there were other, more novel reasons to forge ahead despite the problems. One was that federal law gave the Urban Mass Transportation Administration the authority to demand a full refund of the federal construction aid if the lines were not put into service. It is certainly reasonable to guarantee that federal tax dollars be used productively, but in this case, even though the provision had never been invoked, it produced a special lunacy that made it unthinkable for local officials to stop construction.

Unbelievable as it might seem, the entity that lost the most—the federal government—also thought it unnecessary to stop this flow of good money after bad. Only last summer did UMTA question how more than $800 million of its funds were spent. "I kept hearing how bad the situation was, so I got my staff together one day and asked, 'How did this happen?' " said UMTA administrator Ralph Stanley. "If you can believe it, they couldn't tell me. Their final answer was, basically, that in the seventies, UMTA grant managers didn't feel it was their business to question local priorities. 'If the locals want the subway and it meets our criteria for building, then we go ahead and pay for it,' they said. Our business was to shovel out money without any question about

'Public agencies need the discipline of the ballot box,' says New York state comptroller Edward Regan. 'What the passengers of our subway system need is somebody to vote against when things go wrong.'

whether it was the best use of transportation dollars."

It didn't help matters that UMTA had only two engineers for the entire New York-New Jersey region to oversee the tunnel construction. The few inspections they conducted often were hardly rigorous and often preannounced. It wasn't until last summer that UMTA finally suspended payments to New York for the tunnels.

New York also had one final powerful incentive to proceed. Most of the construction contracts were locked in by late 1975. When the MTA's chairman, Richard Ravitch, asked aides to analyze the future of the New Routes construction in 1979, they reported back that penalty clauses in the contracts and the cost of physically shutting off the tunnels would make stopping the project just as expensive as continuing it.

Ravitch did reform parts of the MTA's cost-accounting process and steered the system toward an emphasis on refurbishing the existing system, rather than adding to it. He left it to his successor, Robert Kiley, to figure out the ultimate fate of the tunnels. After five years of debate, the MTA decided to build a "Local Connection" for $222 million to hook up the 63rd Street tunnel to already existing local subway tracks. One problem: there is no longer any money to build the Local Connection. The MTA says it won't spend its own cash on it and hopes the funds will come from UMTA's "New Construction" kitty. But the Reagan administration budget cuts and the reluctance of UMTA's Ralph Stanley to toss more money New York's way have made that a hopeless option for now. Without the connection route, MTA officials may decide ultimately not to open the 63rd Street tunnel or Archer Avenue, even though much of the construction is completed. A consultant is expected to report within a few weeks on how much money it would take to get them running. MTA officials may decide that since they would continually lose money on the routes, they might be better off steering whatever capital money they can find toward the existing subway system and leave the new routes closed. Unfortunately, even then, the MTA's problems won't be over: it still may have to figure out a way to pay back UMTA.

The unstoppable buck

The overriding moral of this tunnel tale is the importance of accountability. At every stage someone was saying, "It's not my problem." From the maintenance crews to the federal officials, the buck didn't stop anywhere. The incentives to proceed were so strong they overwhelmed all common sense.

The new MTA bosses have taken a step towards imposing some internal accountability. They have created 28 subdivisions in which one person's job is on the line if the work is not done well. But that does not address a more fundamental problem of who's in charge. The MTA is insulated from the political world. Its governing board is made up of appointees designated by the governor, mayor, and suburban officials from areas covered by MTA services. No one appoints a majority of the board members, and when everybody has a piece of the action, no one is finally responsible to the voters or their representatives.

"When things go wrong, New Yorkers have no one to complain to, no one to hold publicly accountable for the failure of the transit system," says state comptroller Edward Regan. "If New Yorkers are unhappy with the way their transit system is operating, whom should they punish? More specifically, whom should they vote against? Public agencies need discipline, the discipline of the ballot box. What the passengers of our subway system need as much as anything is somebody to vote against when things go wrong and somebody to vote for when things go right."

One of the earliest acts of New York Governor Mario Cuomo in 1983 was to ask the state legislature for the power to appoint a majority of MTA board members. But every constituency with a say in MTA affairs objected on the ground that it would dilute their "authority." The city feared it would lose clout to the suburbs and vice versa. So Cuomo retreated. Perhaps he's quietly relieved. What politician would want his tombstone to read, "He created the tunnels to nowhere"? ■

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Newest Video Venture

Low-Power TV: It Plugs the Gaps

By MICHAEL WINES,
Times Staff Writer

WASHINGTON—For those of you flying to Milwaukee to watch Larry Kolb's "Auto Buyer TV Magazine" on Channel 55, billed as "the nation's first video classifieds," forget it.

"Larry went off the air because it was deer-hunting season—or that's what he told us, anyway," said Ken Shapiro, general manager of Milwaukee's Channel 55. "But he says he's coming back."

Shapiro hopes so. The rest of Channel 55's programming—"Beautiful Korea," "Chinese World of TV," "The Yugoslav-American Show" and similar features—may have even less drawing power than classified ads for used cars. Millions of Wisconsin residents drive cars but only 20,000 are Serbs or Croats, and there are only 6,700 Koreans and Chinese in the state.

Speculative Venture

But then, such is life in America's newest and most speculative video venture: low-power television, a sort of shoestring-budget TV that is springing up in big cities and small towns alike, showering rock 'n' roll on Lawrence, Kan., agribusiness reports on Sulphur Springs, Tex., and college football and high-school band concerts on Rolla, Mo.

Low-power television is exactly what its name implies: limited-range TV, with signals that travel only 15 to 30 miles, contrasted with the 70-mile range of regular full-power stations. It was created by the Federal Communications Commission to plug the yawning gaps in conventional TV coverage by providing local news and sports to towns that the big stations ignore or do not reach; offering special-interest programs to ethnic or minority neighborhoods; giving suburbanites and country folks alike the chance to see their youngsters' football game on the tube and advertise their yard sales during half time to boot.

Technological Advances

Because low-power TV is also low-budget and benefits from recent technological advances that have dramatically reduced the costs of some video equipment, it can survive with smaller audiences and advertisers than larger stations. And because it is low in power, there is room for thousands of new outlets virtually anywhere one wants to set one up.

At last count, 76 low-power stations were on the air in the lower 48 states, in such places as McComb, Miss., and Mountain Home, Ark., as well as in such metropolitan centers as Detroit, Chicago and Milwaukee. Alaska has a whopping 194 low-power stations; many of them are part of a state-run network designed to keep the capital, Juneau, in touch with Point Barrow and other remote communities. But some do strictly local programming—like a rock-music station in Anchorage.

By the year 2000, visionaries predict, up to 4,000 of the tiny outlets will beam everything from farm news to naughty movies into America's parlors.

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VIDEO: Newest Venture

Continued from Page 1

"It's going to reconfigure television in this country," said Robert G. Allen, a Washington attorney for a trade group for low-power broadcasters. "The stations going on the air now are going to be the local TV stations of the future."

Maybe so. But for the moment, low-power TV is the sort of business where programs like Kolb's cancel themselves, instead of the other way around. And the camera that telecasts the local news this morning may moonlight tonight by videotaping a wedding or high-school graduation.

"We don't know anybody who's making money on it," said Charles Souls, a Rockingham, N.C., newspaperman whose company is warily considering a low-power station of its own.

Such dire pronouncements have not prevented aspiring TV moguls from bombarding the Federal Communications Commission with applications for low-power construction licenses—28,000 in fact, so many that the FCC has been forced to award its permits by lottery.

The hopefuls vary from such corporate giants as Sears, Roebuck & Co. to mom-and-pop operators with no television background. Their competition has at times been frenzied: Some applicants have filed for licenses in as many as 1,000 cities and one Chicago operator this fall even paid his lottery competitors $750,000 to abandon the race for a choice license to beam programs from atop the Sears Tower, the world's tallest building.

What lures them is the prospect of getting in on the ground floor of a potential boom. Despite the struggles of outlets like Channel 55, some knowledgeable experts say, low-power TV could well enjoy a high-powered future.

Only Game in Town

The available frequencies for full-power television stations have been all but used up by the 1,500 or so outlets now on the air or in the planning stage. For growing small towns and ethnic neighborhoods without a big outlet of their own, low-power stations may be the only video game in town.

Typical among low-power's locales is Hopkinsville, Ky., which was but a farm burg in the southwestern corner of the Bluegrass state when the FCC handed out licenses for regular television stations in the 1950s and 1960s. Today, Hopkinsville is the center of a 200,000-person market that is all but ignored by the nearest big-city TV stations, all of them 60 or 70 miles distant.

Channel 43, the low-power station that went on the air in Hopkinsville last July, is drawing viewers and advertisers with its local news and farm shows. Manager D.J. Everett reports he was swamped with protests this fall when two high school football play-offs occurred simultaneously and the station's lone remote camera unit was forced to ignore one of them.

The station's undisputed star, Everett says, is an electronic graphics and weather-map generator—a gizmo that, at $30,000, cost twice as much as the annual rent and furnishings for Channel 43's offices.

"How many trucks the local Ford dealer sells depends on agriculture," he explained. "How many shoes the local shoe store sells depends on crop prices and that depends on the weather. I'm competing with three stations from Nashville on the cable, and our weather is as good as anybody's."

Enough similarly seductive success stories abound to make low-power television seem at least as promising a financial gamble as personal-computer stocks did in 1980—or the South Sea Bubble of 1720, a London financial scheme in which thousands of investors poured everything they had into a South Seas trading venture that looked like a sure thing but eventually crashed with ruinous effect.

Money-Losing Albatross

Many of the low-power industry's leaders came of age in the 1960s, when FM radio—for decades a money-losing albatross around broadcasters' necks—suddenly found a hugely profitable audience of rock-music listeners who preferred FM's clear signal. The same future, low-power advocates stoutly contend, awaits video stations in small towns, suburbs and big-city neighborhoods that ordinary television serves only sporadically, if at all.

"We want to be local as fast as we can. We view it as an unmet need," said Christopher Fager, vice president of Low Power Technology Inc., a Texas-based company that runs stations in Anchorage, Alaska, and Lawrence, Kan.

Fager argues that both advancing technology and the fragmentation of the old mass-television market work in low-power's favor. Big-city television outlets cost several million dollars to build anew and scores of millions to purchase. But a low-power station can go on the air for as little as $200,000, and operating costs are far below those of bigger stations.

With broadcasting costs dropping rapidly, he says, a small station need only grab a small share of a local audience to attract advertisers.

"The idea that a TV station has to cost millions is outmoded," he said. "We're using cameras in Lawrence—$8,000 cameras—that would have cost $30,000 or $40,000 as little as two or three years ago. . . . We've got a state-of-the-art station. The only thing different is the size of the transmitter."

But whether cottage-industry television portends the greening of the broadcasting business—or simply the spread of a vast television Sahara—is anything but clear.

While some stations, such as Hopkinsville's Channel 43, are prospering on a mix of local news and sports, the programming on many others resembles the bland fare offered in any big city.

Taped Music Videos

The Anchorage and Lawrence stations broadcast some local news and weather, but most of the programs consist of taped music videos from what Fager bills as "the world's largest music video library." Station W36AC, an outlet in McComb, Miss., halfway between Jackson and New Orleans, beams movies to subscribers who rent signal-decoder boxes for their sets.

And a few broadcasters who pride themselves on community service have had rough going. Some, finding viewers less than ravenous for the latest cattle prices and town council news, have dropped local programs and begun retransmitting the signals of big-city TV stations or satellite channels. Others are trying to sell their low-power licenses before losses overwhelm them, consultants report.

The video menu on Milwaukee's Channel 55 is virtually identical to that of Chicago's Channel 26, a full-power station whose owners also control the Milwaukee outlet. Most of Channel 55's local efforts, including "Auto Buyer TV Magazine" and the recently departed "Bob Lewandowski Show," a Polish program, have been less than enthusiastically received.

"There will be some spectacular failures in the next few years," said John Couzens, a San Francisco consultant who helped shepherd low-power television through the FCC bureaucracy in the late 1970s.

"I'd say if you want to get rich quick, this is not the way to go," added Barbara Kreisman, who heads the FCC's low-power office. "But that's not what it was intended for. The object was to get more television out there and that's what it has done."

Indeed, Couzens expects low-power stations to improve rapidly once enough are on the air to attract the attention of the companies that make television programs. Some foresee the day when the outlets will band together into new networks or link up with major networks that want to expand their coverage of rural areas.

Things may already be looking up in Milwaukee. The state's biggest bank and its biggest utility have signed up as advertisers on Channel 55, and Shapiro says the station hopes to get its signal on a local cable system whose viewers could provide an entire, new advertising market.

"The Germans," he sighed. "They're the largest group. But because we're low-power, most of them are out of our range right now."