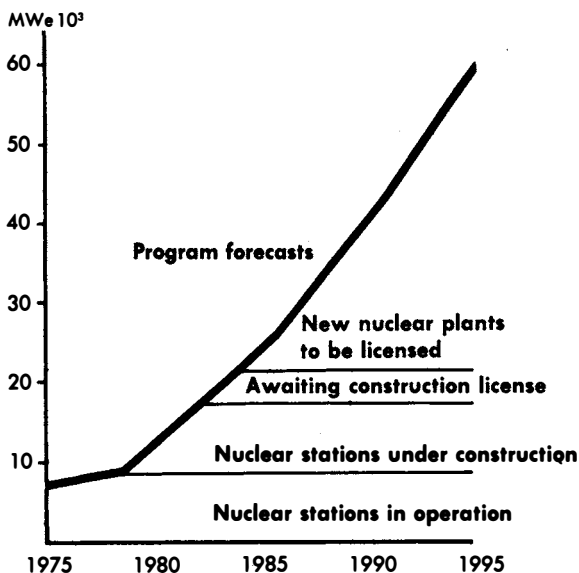
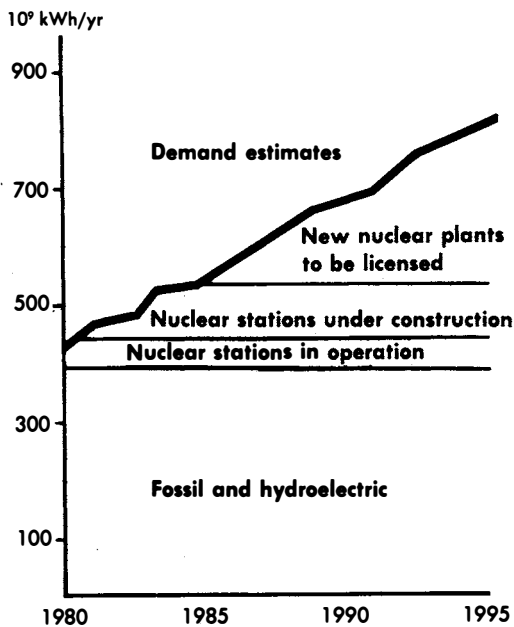


A nuclear future for West Germany?

Government, industry and labor begin to speak out against 'greenies'

Expected shortfall in capacity due to nuclear licensing delays



Source: Nuclear Engineering International December 1978

After months of near-total silence from the government and industry, signs of a fight are emerging in West Germany on the issue of nuclear power. The government of Chancellor Helmut Schmidt launched one of the world's most aggressive nuclear programs as both a way of reducing the country's dependence upon foreign oil and securing its energy supplies for the future. Now, because of pressure from environmentalists and the Carter administration, West German nuclear development is almost ground to a halt.

Bonn planned to have 45,000-50,000 megawatts of nuclear power generating capacity by 1985. The forecast has now been lowered to 24,000 megawatts, and even that may not be achieved. There is a de facto freeze on six out of 12 total plants now under construction. Kraftwerk Union (KWU), one of the country's major nuclear manufacturers, has not had a domestic order since June 1975, and five of the company's previous reactor orders are blocked by licensing delays or court orders.

West German plans to become a major exporter of nuclear technology—signified by its multibillion dollar deals with Iran and Brazil—are also stalled. The Carter administration's policy on "nuclear nonproliferation" has helped to constrict the Federal Republic's potentials in the nuclear export market.

Now faced with the threat of a cut-off of oil from Iran, the West German government is making signs that it is ready for the political battle to get its nuclear program moving again.

Social Democratic parliamentary fraction leader and party machine powerbroker, Herbert Wehner, granted an interview to the *Esslinger Zeitung* Nov. 9 demanding an end to "arguing with the greenies who don't want to listen to any arguments." The party's defensiveness toward the "green cabbage" (as Wehner calls the environmentalists) has only helped the election campaign of Franz Joseph Strauss, the chancellor candidate of the opposition Christian Democratic Union-Christian Social Union, Wehner said. Strauss hopes to weaken the ruling coalition's chances for re-election next year by drawing "greenie" votes away from the SPD.

The environmentalists, however, are officially constituting themselves as the "Green Party," which will hold their founding congress in January.

Wehner's demand to end the compromise with the greens is greeted with relief by many of West Germany's industrialists. The influential Chambers of Commerce of Duisberg and Düsseldorf in the industrial Ruhr region called Nov. 8 for all parties to stop their squabbling over nuclear energy and move ahead with stalled projects. Representatives from electrical firms and utility companies have made similar statements.

Why Germany needs nuclear energy

West Germany is poor in energy resources and relies almost exclusively on imported fuels, apart from coal and nuclear energy (the latter at present supplies about 11 percent of total electricity requirements). This situ-

ation makes the country acutely vulnerable to contrived "oil shortages" like the 1973-1974 oil hoax, and to market manipulations of the oil price. This is one major incentive to "go nuclear."

Another is West Germany's heavy reliance on high-technology exports. The nuclear industry is so capital-intensive that its output capacities greatly exceed the requirements of a rather narrow domestic market. "It is in the interest of the nation's economy to remain internationally competitive in this important sector of highly sophisticated technology," stressed a government policy statement issued in June 1977. "West Germany, a highly industrialized country, cannot renounce further development of nuclear technology."

But more fundamentally, Chancellor Schmidt and more far-sighted industrialists see the further development of nuclear energy as urgent to preserving world peace. On May 7, just one month after the Three Mile Island nuclear incident near Harrisburg, Pa., Chancellor Schmidt delivered a speech to the European Nuclear Conference tossing out his originally prepared statement that toned down his nuclear commitment. Instead, Schmidt insisted that "it will come to a worldwide fight over shrinking energy supplies if the industrial countries do not develop nuclear energy. An unjustifiable situation would result, in which worldwide conflicts cannot be excluded, including conflicts between major powers, if the industrial countries give up the part which nuclear energy has to play in meeting their energy requirements.

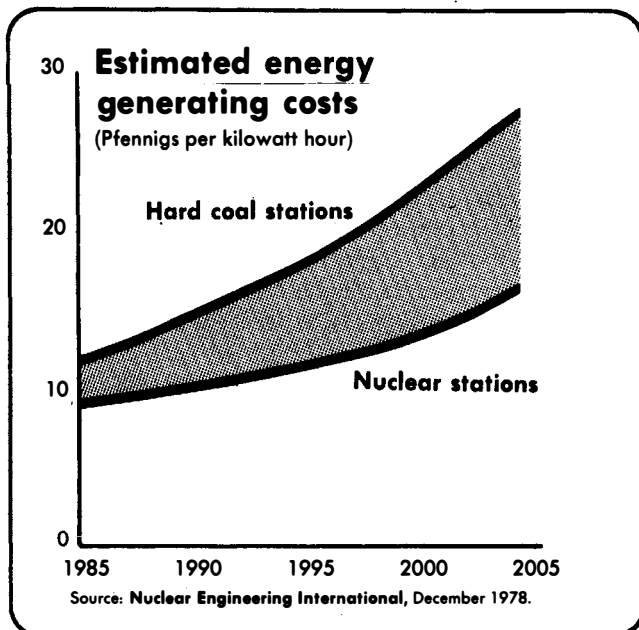
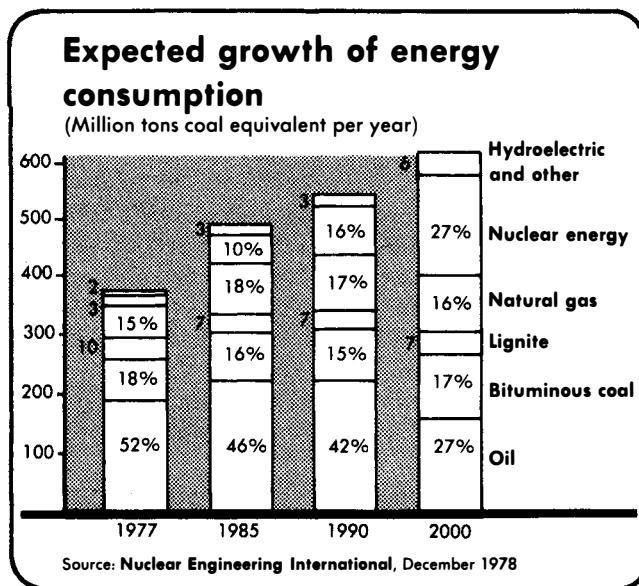
"No retreat from prosperity can solve our problems or those of anyone else. No industrial country, East or West, can afford to do without nuclear energy. A general ban on nuclear energy would not only endanger technological progress and many of the preconditions for development, but also seriously jeopardize the possibilities for increasing development aid."

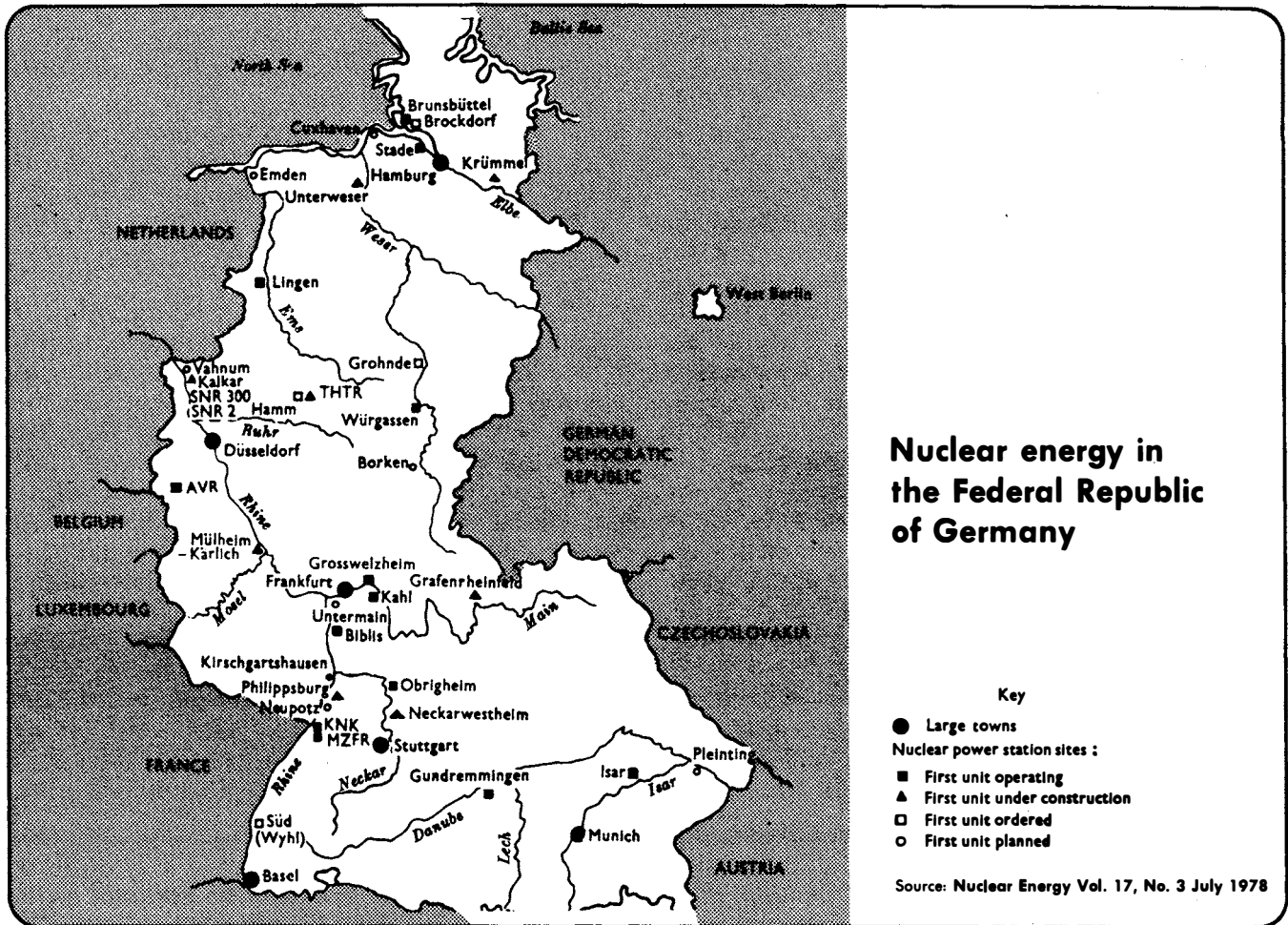
Schmidt called for an international conference on the security of nuclear reactors, to include the East bloc nations and to "also work out the guidelines for training Third World nuclear power technicians."

The state of the nuclear industry

The key factor blocking the Federal Republic's nuclear development is radioactive waste disposal. Under the Atomic Energy Act's legislation, no nuclear plant may be built without satisfactory provision for the disposal of wastes—a point which has been used by antinuclear groups to secure injunctions against the construction of new plants.

The government's proposed solution to this problem was the construction of an ultra-modern nuclear waste storage and reprocessing facility at Gorleben, in Lower Saxony near the border with the German Democratic Republic. Environmentalist pressure forced the Minister President of Lower Saxony, Ernest Albrecht, to reject the Gorleben plan in May of this year—admittedly for





political and not technical or scientific reasons. His decision placed the entire West German nuclear program in jeopardy. Since that time Schmidt's government has been seeking a compromise to salvage at least some of the crucial elements of the proposed Gerleben facility.

There is no time to lose. Already, the RWE electric utility which operates the nuclear plant at Biblis, cannot run the plant's twin 1,300 megawatt reactors at full capacity because it has no adequate way to dispose of the waste. France has agreed to store and reprocess some of West Germany's spent nuclear fuel, but will not be ready to receive it in large quantities until 1981.

A similar situation exists with the construction of the Kalkar prototype fast breeder reactor in North Rhein Westphalia, near the border with the Netherlands. The plant was due to receive permission last year to begin the third stage of construction, but a political battle within the state government has caused endless delays. The Free Democratic Party, which rules in a coalition with the SPD, demanded that the reactor be redesigned so as not to breed excess plutonium—a concept for a "nonbreeding breeder" which nuclear industry experts regard with dismay.

The SPD has been reluctant to force the issue, fearing a split in the coalition which would bring the opposition parties into power.

In 1975 West Germany hoped to become one of the world's leading nuclear exporters, particularly to the developing sector. Major deals were negotiated with Iran and the largest nuclear export contract ever signed was concluded with Brazil (but only after a bitter fight between Chancellor Schmidt and the antinuclear Carter administration). The Brazil deal provided for the construction of a ready-made nuclear industry, including options for up to eight plants. In 1976, several joint companies were formed to handle purchases and technology transfer.

But in Iran, the Ayatollah Khomeini canceled two big contracts negotiated with Kraftwerk Union. Brazil has pursued an on-again-off-again policy since the new Industry Minister announced in February that his country no longer intends to pursue such a dynamic nuclear program. KWU had hoped to receive four more orders for plants from Brazil, above the four that had been signed, but these are now expected not to materialize, or to do so only after long delays.

After the signing of the Brazil deal in 1976,—which included the enrichment and reprocessing facilities—U.S. pressure forced Bonn to agree to ban the further sale of “sensitive technology” abroad until further notice.

The only success of recent years was the award last month of a contract for a second heavy water reactor for Argentina.

The depressed situation of the nuclear industry has hit the major suppliers, like KWU, very hard. KWU and AEG Telefunken anticipate layoffs in the near future (between 12,000 and 20,000 in the case of AEG), and KWU officials have noted that if things do not change it will soon become impossible to hold together an experienced team of nuclear engineers and scientists. There is nothing for them to do.

But the many small and medium-sized high-technology firms involved in different aspects of the production of nuclear plants are the most seriously affected. It takes approximately 700 firms, most of them employing 200 or fewer people, to build one nuclear plant. Many of these companies will simply go bankrupt.

What will it take to win?

The biggest obstacle to cleaning up the environmentalist menace to West Germany's economic development is the extensive “greenie” penetration of the trade unions

and of Schmidt's own Social Democratic Party, whose base is in the unions.

Since the highly successful pronuclear demonstration by trade unions at Dortmund in November 1977, where 50-70,000 trade unionists defied their union's leadership, extensive purges of pronuclear unionists were conducted. One West German observer who helped organize the Dortmund demonstration has stated that a “coup” took place in many of the unions afterwards, bringing them under a 40-50 percent control of the Maoists.

The nation's largest trade union, IG Metall, under the leadership of Eugene Loderer (regarded as the “Lane Kirkland” of the Federal Republic), formed an “Energy Workshop” on Oct. 17, that was mandated to reach a policy position on nuclear energy for the union. At its founding press conference in Frankfurt, the group stated that “after Harrisburg, the security issue has gained more attention. ... If it turns out that security problems cannot be overcome in the near future, we would advise the trade unions not to give their approval to nuclear construction.”

Loderer, while still hesitating to oppose nuclear energy outright, addressed the International Metalworkers Federation meeting on technology Oct. 22 in Vienna, declaring that the unions must live up to their responsibility of speaking out against the dangers of technology. The function of the metalworkers in the

Industrialists, labor warn of catastrophe

West Germany's environmentalists are looking for a permanent moratorium on nuclear plant construction. It's too dangerous, they say. Solar and other soft technologies are much preferred. German industry and labor don't agree, as the following grid makes clear.

Feb. 9 press conference by Dr. Bernard Plettner, chairman of Siemens electrical firm: West Germany is “driving on toward catastrophe” due to the failure to authorize new power stations.

Sept. 3 press conference of leading West German industrialists: A group of industrialists warned that the country was losing key skilled personnel and expertise, according to the *Financial Times* Sept. 4. Manfred

Lennings, chairman of the GHH engineering group, said the nuclear industry faced a new situation characterized not simply by a lack of new orders, but by an inability to hold onto trained staff. The jobs of about 1,000 personnel, some whose training took as long as 10 years, are now threatened at the company's Oberhausen works.

Klaus Barthelt, chairman of Kraftwerk Union (KWU) confirmed that his company too was reducing its trained personnel, and stressed that German industry was losing its export market due to the delays of construction at home.

Franz Joseph Spalthoff of the RWE utility said that West Germany would soon be 10 years behind France in the development of fast breeder reactors. Franco-German accords for scientific and technological cooperation would soon become meaningless, he said, since France would discover it had nothing to learn from its West German partners.

Nov. 8 forum sponsored by the RWE (Rheinisch-Westfälische Elektrizitätswerke) utility in St. Englmar, Bavaria: Franz Joseph Spalthoff, a board member of RWE, declared, “I am simply fed up with defending myself out of a corner.” He attacked leading Social Democratic environmentalist Erhard Eppler, who claims that through conservation it is possible to reduce energy needs by 25 percent. Industrialists, Spalthoff said, will no longer let such outrageous statements go unchallenged.

Spalthoff called on the federal government to come out clearly for nuclear energy and stop “debating superficial energy scenarios which are in any case based on wishful thinking.” For industry, he said, there can be no talk of nuclear energy as a “transitional solution” or a “stop-gap,” since it is a major component of future energy supplies. Without the development of fission power, he said, there can be no future of fusion power. Spalthoff demanded the nuclear energy goals be raised

state, he said, must include opposition to new technologies like microprocessors which allegedly threaten unemployment.

"Jusos"—the youth wing of the SPD—boasted Oct. 2 that of all the unions, only IG Bergbau und Energie (mining and energy industry workers) is solidly in favor

A spokesman for the pro-environmentalist of nuclear energy. In fact, the situation is not quite so sewn up, as there is still significant pronuclear sentiment among the building trades, chemical workers, and others.

The "greenie" faction in the SPD is led Erhard Eppler, with the more covert support of former Chancellor Willy Brandt. While a proposal by Eppler for an official moratorium on nuclear power plant construction was defeated in the SPD executive last month, the environmentalists still have a strong hold over the party. The Jusos have prepared a resolution for the party congress in December which calls for the total abandonment of nuclear energy. That resolution is expected to be defeated (the Jusos estimate they will get 35-40 percent of the vote), but nevertheless is seen as a significant challenge to Schmidt, particularly in view of next year's federal elections.

Schmidt won a grudging vote of support Oct. 3 from the SPD presidium, which voted 24 to 4 that all nuclear plants presently under construction should at least be continued and, in a few cases, construction of new

reactors should be permitted. But spokesmen from the SPD executive told this news service that the general interpretation of this resolution is that through conservation and "energy alternatives" nuclear construction could actually be avoided altogether. Although the executive has not called for a ban on construction, still "the safety issues and the waste disposal problem suffice for us to forbid the operation of power stations completed during the next two decades," the official said. In other words, no nuclear power till the year 2000!

Given this antinuclear bias in his own party, Schmidt has sometimes acceded to arguments that it would be politically dangerous to "alienate" the environmentalist wing of the Social Democracy, and has gone so far as to refer to nuclear energy as a "stop-gap" measure, a transition to eventual reliance on coal, solar, and other inferior sources of energy.

But the fact that Herbert Wehner, the "king-maker" in the SPD, has now announced that the time for debate with the greenies is over, suggests that the Chancellor too has had enough. The weekly *Der Spiegel* reported in its Nov. 12 issue that Schmidt stormed out of a meeting of the SPD leadership the previous week when proenvironmentalist Egon Bahr began retailing the oft-repeated litany about how many voters will "abandon" the party if it takes a strong pronuclear stand at the party congress in December.

—Susan Welsh

to 75 gigawatts, rather than the 40 gigawatts the government hopes to attain and the 25 gigawatts actually realizable under present circumstances.

Nov. 10 interview in *Die Welt* with Klaus Knizia, president of the VEW electrical works and chairman of the West German Committee of the World Energy Conference: "What kind of technological development is feasible if mankind is to avoid those catastrophes—from starvation to war—which are so numerous in human history, and which we in the Federal Republic of Germany seem to have particularly forgotten in an extraordinary failure of memory?..."

"The fear of the possibilities of technology and science sometimes takes on suicidal forms, as can be seen in the opposition to nuclear power and other large-scale industrial technology. It is extraordinary that this opposition is only found in the wealthy countries of the West

and not in the East bloc, and certainly not in the poor countries....

"How can it look from the standpoint of many African, Asian and South American peoples, when they see the arrogant assertion coming from us that we have enough power stations now, and we don't need any more? How should nations react which are just at the beginning of their own industrialization, an industrialization whose progress will decide whether hunger, poverty, lack of medicine and illiteracy can be reduced or indeed eliminated—above all by the products which we must deliver to them."

Knizia called for the construction of 4,000 nuclear power plants in 30 years, mostly in the Third World, adding that:

"The only important thing is whether the implementation of such a minimal program will succeed in providing the energy needed to keep peace in the world, or whether wars over the distribution of resources will get out of hand, which under the

present level of military technology would leave mankind in the most extreme poverty."

Press conference last week by the factory councils of the trade unions of seven nuclear-related industries in Hessen: The factory councils announced that they will be leafletting all politicians and the general public to stress that nuclear power is "safe, necessary, and economically profitable, as well as favorable towards our environment." They emphasized that the best fission technology is the fast breeder.

Peter Michael Presser, deputy chairman of the Economics Department of IG Chemie, the chemical workers union, speaking recently in Hanover: Presser endorsed the proposed Gorleben fully integrated waste reprocessing plan and called fast breeder technology "the logical and necessary consequence of the portion of the nuclear program which has so far been carried out."

The battle for Gorleben

The proposal to build a fully integrated nuclear waste disposal facility and reprocessing center at Gorleben in Lower Saxony is the crucial issue in the fight for nuclear power in the Federal Republic of Germany. Under federal law, no nuclear power plant can be authorized unless facilities are available to handle the plant's radioactive wastes; the Gorleben facility was the government's answer to this pressing problem.

After a long political fight and a mobilization by the environmentalist lobby (including demonstrations at the proposed site, and a March 26 protest by 2,000 farmers and peasants who rode to the capital city of Hanover on horseback to denounce the "dangers" of modern civilization), the Christian Democratic Minister President of Lower Saxony Ernst Albrecht decided last spring to refuse to allow the construction of the facility in his state.

Albrecht's decision was supported on political grounds by Franz Josef Strauss. Strauss had heretofore proclaimed that he is for nuclear power, and has criticized Chancellor Schmidt for being unable to control the environmentalists.

That decision has now been only partially reversed by a compromise worked out in September between the federal government of Chancellor Helmut Schmidt and Albrecht. The compromise calls for separating the waste dump from the reprocessing facility, and allowing only the former to be constructed at Gorleben. The single 1,500-tons-a-year reprocessing plant will now be replaced by several smaller units about 400 tons, at separate sites. New sites will now have to be found for each of these, adding millions of dollars to the cost of the project. In fact, federal Interior Minister Gerhard Baum stated Sept. 30 that the compromise really decides nothing, since it is not legally binding, and the states will now have to shape actual legislation to be approved by parliament. The youth wing of Schmidt's Social Democratic Party, the "Jusos," announced Oct. 2 that they consider the compromise "irrelevant," and pledged to fight for the total abandonment of nuclear energy at the party's congress in December.

Why Gorleben?

The Gorleben project was to be one of the most sophisticated "nuclear parks" in the world. The site was chosen since only Lower Saxony has the thick salt strata in which radioactive wastes could be buried safely; tunnels were to

The nuclear industry: two case studies

What is the state of the nuclear industry in West Germany? The following two case studies on the country's biggest nuclear plant manufacturers are a good indicator that the industry may not survive unless a major commitment is made for nuclear energy.

Kraftwerk Union (KWU)

According to a draft report prepared for the London Royal Institute of International Affairs, the major West German nuclear power plant manufacturer, Kraftwerk Union, will probably be forced to withdraw from the nuclear industry altogether if substantial political and economic changes have not occurred by 1988. "The necessary condition for restoration of KWU's fortunes appears to be a change in social

attitudes toward nuclear power in Germany," the report states.

The study places General Electric, Babcock & Wilcox and Asea-Atom in the same category as KWU, according to a summary in the Sept. 27 issue of *Nucleonics Week*.

KWU was founded in 1969 as a joint enterprise of the electrical firms Siemens and AEG Telefunken. AEG sold out its share to Siemens in 1977, after a two-year period of no new domestic orders for the firm. KWU has now had no new domestic orders since 1975, and its export market has virtually collapsed. Iran's Ayatollah Khomeini cancelled two previously negotiated contracts, and it is now uncertain whether four out of eight hoped-for deals with Brazil will materialize.

AEG Telefunken

AEG has been forced out of the nuclear field, following accumulated losses of 1.7 billion deutschemarks

be dug deep into the salt domes for this purpose.

The project was to be built by the DWK company (Deutsche Gesellschaft für Wiederaufarbeitung von Kernbrennstoffen, a firm owned by 12 utility companies), which planned in addition to put up 200 million deutschemarks over ten years to finance infrastructure projects such as roadbuilding in the area around the site.

The facility was to include:

- * A reprocessing plant capable of treating 1,500 tons of light-water reactor fuel a year.
- * Storage capacity for 3,000 tons of spent fuel.
- * Fuel fabrication facilities for about 14 tons of plutonium a year.
- * Underground storage facilities for 30-40 tons of high-active waste a year.
- * Underground storage capacity for 1,600 drums of medium-active waste and 50,000 drums of low-active waste a year.

If construction started in 1982, experts estimate that the entire project would be finished only by 1995—a three to four year delay over original plans. Cost estimates were about \$5.5 billion before the September “compromise” was reached.

from nuclear power station and reactor contracts of KWU, in which AEG held 50 percent ownership with Siemens. Only export contracts with such countries as Saudi Arabia have kept AEG's nonnuclear power station divisions operating. The firm is now anticipating layoffs of between 13,000 and 20,000 personnel.

AEG was directed by Jürgen Ponto until his assassination in 1977. Ponto was one of the principal architects of the European “Grand Design” policy for a new gold-backed monetary system to be channeled toward Third World Development projects and East-West detente. A close collaborator of Chancellor Helmut Schmidt, Ponto's plan became partly realized after his death as the European Monetary System.

AEG may now be bought up by the largest French electrical and electronics firm Thompson & Brandt. This move is supported by Ponto's successor at the head of the Dresdner Bank, Dr. Hans Friedrichs, who has just been named to head up the AEG supervisory board and oversee the restructuring of the ailing firm.

How aristocrats created Europe's greenies

Ever since Social Democrat Willy Brandt came to power in that country in the late 1960s, politics in the West German industrial republic has been under attack from a well-financed terrorist movement, and an equally well-financed environmentalist movement. Outright terrorists such as the late Baader-Meinhof gang have assassinated a Federal Attorney General, Siegfried Buback, banker Juergen Ponto, and Employers Association president Hanns-Martin Schleyer. The environmentalist movement has killed construction permits for almost every nuclear construction site in the country, destroyed thousands of nuclear-related jobs, and organized a series of anti-nuclear riots across the country that have left at least one person dead.

A pamphlet recently issued by the European Labor Party, “The Green Danger,” denies that there is any difference between these two movements. They are complimentary branches of the same drug-infested counterculture in West Germany, a counterculture that is guided from Great Britain and that relies on Willy Brandt's network inside the Social Democracy to protect it from serious investigation.

A history of German environmentalism

The pamphlet asserts that environmentalism is, quite literally, feudalism. The political struggle in Germany between environmentalists and advocates of industrial progress is a continuation of the historic war between feudal lords and the city building Emperor Friedrich II Hohenstaufen in the 12th and 13th centuries, the pamphlet says. A modern expression of the same fight is the polemic 19th century German economist Friedrich List delivered against Parson Thomas Malthus's ideology of “overpopulation.” List, the father of the European railroad system, an industrial feat that in its day was attacked in the same way that nuclear energy is attacked today, wrote in his *National Economy*:

... although it appears to us that the tendency of the Malthusian theory is limited, it presents itself in its means as one contrary to nature, as one that kills morality and strength, as something horrible. ... what can be expected ... other than the entire collapse of all morality, and with this the collapse of all productive forces and of all the wealth and civilization and power of a nation.