

much in sympathy with the president of Dow Chemical Company, who called for the resignation of Schlesinger on April 5.

Debate is now raging among these industrial and other union forces over combining a drive to fire Schlesinger and stop austerity with support for the only spokesman for an American program of industrial expansion and link-up with the European Monetary System, Lyndon H. LaRouche, Jr. Unless this course is adopted, the hoked-up emergencies that hit the U.S. this week will lead rapidly to destruction far beyond what its architects are dreaming.

— Nancy Spannaus

I. The nuclear hoax

All nuclear safety experts except those contaminated by either a connection to the environmentalist movement or employment by James Schlesinger's Department of Energy agreed that the sequence of in-plant mechanical mishaps leading to the shutdown of the Three-Mile Island nuclear plant near Harrisburg, Pa. was so improbable as to constitute powerful evidence of human intervention — sabotage. In fact, the probability of sabotage is so high that the burden of proof lies with those officials and others who call it an "accident."

A detailed study published years ago, the Rasmussen Report, dealt with a hypothetical nuclear plant accident involving exactly the chain of events which took place at Three-Mile Island. The report concluded that the possibility of such a sequence of valve and system failures occurring "naturally" was .000006 — that is, one chance in 166,666. Dr. Rasmussen, when queried by phone, stuck by his report's conclusion.

What happened at Three-Mile Island could only have been sabotage.

The failure of a valve in a backup cooling system to open immediately after a valve in the primary cooling system also stuck closed, by itself, has a probability of .0001. Or: one time out of 10,000. Any such occurrence would have been possible only by deliberate human action. Furthermore, there is no explanation of why automatic safety backup systems relating to both primary and backup cooling lines were switched off, and why, given normal inspection routine, these extraordinary conditions were not detected — none of them, at any point in the sequence!

Add it all up and any investigation of the incident which does not take sabotage as its premise is suspect and intrinsically incompetent.

The security precautions of a nuclear plant are extraordinary. It must have been an "inside job," but one proceeding on orders from a very high level. How high?

The media extravaganza which ensued was of a type so distant from both general scientific fact and the immediate facts of developments that it suggests a high-level deployment to use the Three-Mile Island incident as the prearranged centerpiece of a campaign to permanently discredit nuclear power in general. The coincidence of the nuclear accident in time with release of a major motion picture, "The China Syndrome," depicting precisely that "meltdown" disaster which press claimed was about to happen at Three-Mile Island, and the coincidence of the accident in time with James Schlesinger's attempt to shut off U.S. oil supplies by creating an "oil shortage," where there is none, more strongly suggest the broader implications of discovering sabotage.

staffs of the U.S. Labor Party were joined by specialists from the Fusion Energy Foundation to develop the following statement of facts concerning the Three-Mile Island "nuclear accident."

What happened at the Three-Mile Island plant?

The reported sequence of misfunctions of cooling systems at the Three-Mile Island nuclear power plant, misfunctions that led to the sharp rise in the pressure and temperature of the reactor core cooling system, could have occurred only as the result of a high-level deployment of a coordinated sabotage team in the plant.

From the beginning of the incident, there have been conflicting stories of what happened from all the parties involved. Although these stories involved variations in the actual sequence of events (for example, which plant components went out at various points), it is clear that the various scenarios put forward by the experts involved equally improbable coincidences of a series of malfunctions.

Especially suspicious are reports that the components involved in the March 28 incident had not functioned properly on several earlier occasions in the first four months of the plant operation. If so, these would have been the most likely components for constant surveillance and prearranged backup procedures. All these scenarios not only cover up the overwhelming evidence of sabotage, but prepare the psychological climate for activating the full evacuation and militarization procedures accompanying a core meltdown scenario.

The best available reconstruction of the events at the plant, and some of the key unanswered questions concerning those events follow.

The steam turbine was automatically tripped when the main valve in the secondary flow system malfunctioned and closed, shutting off water to both of the plant's steam generators. At the same time, the emergency feed-water flow to the steam generators

failed to come on when another valve didn't open. These failures caused the primary system pressure to increase, causing a complete shutdown of the reactor.

Question No. 1: Why was the onset of the condition leading to the feed-water valve closing not detected and acted on earlier, and how could the failure of one valve be permitted to knock out two steam generators?

Failure of this main valve apparently cut off flow to both steam generators, an operating condition that should never have been allowed. However, cooling of the reactor could still have been easily maintained with the turning on of the emergency feed-water coolant flow pump. The valve on this back-up system failed to open and, therefore, left the steam generators with no water flow.

Following this, the steam generators boiled away most of the contained water and the primary reactor coolant system began heating up. This combination of failures of both the main feed-water flow valve and the

Congressional and other antinuclear spokesmen say shut the reactors

In the wake of the Three-Mile Island incident, congressional and other leading opponents of nuclear power have proposed a series of watchdog and regulatory measures which could spell doom for the U.S. nuclear industry. Amid an atmosphere fueled by headlines on nuclear catastrophe, radiation sickness, and evacuation, the threat of nuclear plant shutdowns — and energy shortages — looms large.

Here is a sampling of what some of the antinuclear spokesmen have had to say.

Rep. Morris K. Udall (D-Az.) said "The accident at Three-Mile Island is one of those triggering events that brings on a nationwide debate... I want the Congress to play a leading role in this debate and I want to hold hearings to find out what happened at Three-Mile Island and how it impacts the future role of nuclear energy in America."

After saying that he would seek an explanation from the Energy Department on the planned construction of 500 more nuclear plants by 1990, Udall continued: "Do we put these plants in the future in remote areas, do we build them underground? Should these additional nuclear plants be encouraged or discouraged? These are the questions, I want answers to." Mr. Udall said that he would hold hearings into the possibility of a repeal of the Price-Anderson act, which limits insurance claims to \$560 million.

Sen. George McGovern (D-SD) has told the press that he

will introduce legislation April 9 that will halt all licensing of nuclear power facilities until there is an independent review of all possible safety defects in nuclear reactors. He is backed by the antinuclear Union of Concerned Scientists.

Sen. Richard Schweiker (R-Pa.) said "We have seriously underestimated both the safety problems associated with nuclear power generation and our ability to cope with a nuclear emergency," in a letter to President Carter April 3.

Schweiker called on the President to create an investigatory commission to review the situation in Pennsylvania. He also asked that the 71 other nuclear reactors in the U.S. be assessed while "what role nuclear power generation should play in our energy future" is weighed.

Sen. Edward Kennedy (D-Ma.) also called for a review of nuclear power, but added the request that risks of nuclear weapons proliferation stemming from atomic energy also be evaluated. "The contribution of nuclear power is not insignificant, but let us take the time to re-examine whether it is centrally important.

... The events at Harrisburg will inevitably slow the momentum of nuclear power development. We should use this pause constructively to analyze key issues for the future."

Senator Gary Hart (D-Col.) has proposed that the

back-up feed-water flow valve, located in separate flow systems, is an almost impossible natural occurrence.

As a result of the inadequacy of this intermediate-stage cooling, the standard back-up procedure of periodically venting radioactive steam from the primary loop into a secure container was activated.

However, a relief valve that is supposed to close after short-term venting stayed open. There is a hydraulic valve available for an operator manually to reshut the valve, but this open valve was not detected or shut until sometime later.

Question No. 2: First, why did the back-up flow valve in the secondary line malfunction? Second, why was the open valve in the primary line not detected or closed?

The primary loop, already overloaded because of the breakdown

continued to drain into a holding tank in the closed containment building. This lowered the pressure in the primary loop and also eventually caused overflow from the

down

government be empowered to take over nuclear facilities in case of an emergency such as that which happened at Three-Mile Island.

Illinois Gov. James R. Thompson ordered the state Commission on Atomic Energy to immediately review the seven nuclear power reactors housed in Illinois. Echoing his cohorts, Gov. Brown of California, Gov. Grasso of Connecticut and Gov. Carey of New York, Thompson admitted his reactions were the result of the problems at the Three-Mile Island power plant. He said it was a precautionary move, not a result of any problems at state nuclear facilities.

Rep. Ted Weiss (D-N.Y.) introduced legislation, HR789 to repeal the Price-Anderson act on Jan. 15 and is currently seeking Senate sponsors.

Rep. Hamilton Fish (R-N.Y.) has already introduced legislation that will adversely affect the nuclear industry, known as HR336. The Nuclear Energy Appraisal Act of 1979 proposes a five-year moratorium on licensing of new nuclear plants. While Fish is still searching for a Senate sponsor, the bill has 16 cosponsors in the House and is supported by the environmentalist group Critical Mass. Rep. Jeffords (R-Vt.) has called for a two-year moratorium on nuclear power until a major study or safety is completed.

holding tank onto the containment building floor.

As cold water was injected into the primary loop through the high-pressure emergency injection system which turned on when the pressure decreased to 1,600 pounds per square inch, it encountered the hot water already in the line. A vapor bubble probably formed. Therefore, some of the fuel rods were not properly accessed and cooled by water flow. Some rods partially melted, releasing iodine, xenon, and other radioactive materials into the primary coolant.

Then, despite the fact that there was leakage from the primary loop containing radioactive materials, pumping was initiated to transfer the overflow water from the completely radiation-tight and air-tight main building into storage tanks in the auxiliary building, which is outside the containment area. After the first tank in the auxiliary building filled up, flow was diverted to two other tanks. In that process, water spilled onto the auxiliary building floor.

At that point, radioactive gases came out of solution and began to vent out of the auxiliary building. When radiation was finally detected outside the plant, the full press scare went into motion.

Question No. 3: Was it known that the floor water in the containment building was radioactive? Were there any alternatives to pumping into the auxiliary building, such as restoring the steam line and closing the mainline valve?

Any competent investigation must answer all these questions and determine how the Three-Mile Island incident fits into Schlesinger's geopolitical war on the U.S. economy.

Why a meltdown can't happen

A U.S. Labor Party investigating team has concluded that the Three-Mile Island nuclear plant incident was — and still is — a coordinated attempt to deliberately play this event as a live version of the Columbia Pictures movie, "The China Syndrome."

A Labor Party spokesman said April 3 that the movie was designed and timed for release to maximally terrorize the American public against nuclear power by depicting the scenario for a fraudulent core meltdown accident scenario. "The media warned of a core meltdown straight to China. The facts are that no meltdown was about to take place and that any meltdown would have been contained within the reactor building."

The core meltdown scenario was hoaxed up following Nuclear Regulatory Commission spokesman Dudley Thompson's announcement that a gas bubble was detected near the top of the reactor vessel and that it had not yet been determined how it was going to be removed. Thompson said that *if* the gas bubble was large, it might be possible, *though highly improbable*, that upon depressurizing the primary coolant system below the current 1000 psi operating condition, the bub-

ble would expand downward and deny cooling water to some of the fuel. This, he implied, might cause further fuel damage or melting. From this, the press immediately extrapolated a core meltdown and a melt-through to China!

The facts

The facts are that a complete core meltdown could not happen in the Three-Mile Island case and that the "China Syndrome" can't happen in any case! The gas bubble at the top of the reactor vessel was simply broken up gradually by the primary coolant flows as the pressure was reduced in the vessel. This bubble was composed of hydrogen and the noncondensable fission gases Xenon and Krypton released during the fuel failures of the morning of the accident and was swept away from the area in which it was lodged, broken up by the turbulence of the primary coolant flow and then released from the coolant through the free surface in the pressurizers. The gas was broken up into bubbles much too small to cause any problems in the pump or in the reactor core.

The hypothetical scenario of a single big bubble expanding downward during depressurization in the face of an upward high velocity water flow is preposterous, incompetent, and purely propagandistic. However, even if such a hypothetical event could somehow occur it couldn't possibly result in the proposed core meltdown scenario. The reactor core has now been shut down for one week, with the power level down to a few tenths of a percent full power. Coolant temperature is being held constant at a low 280°F with the maximum fuel temperatures only a few hundred degrees higher. (The uranium fuel rods must reach a temperature of nearly 5000°F before they melt.)

If the primary coolant flow had been reduced or stopped by this hypothetical expanding big bubble, all the emergency core cooling systems would have automatically come on, forcing water back into the core and maintaining the cooling and the low fuel temperatures. Even if the fuel became uncovered with water for a short period of time during this transition from primary to emergency coolant flow, the temperature would reach nowhere near melting. Thus, there is absolutely no credibility to the assertion that the Three-Mile Island's plant core could have melted through the reactor floor buried itself in the ground, and begun to spill radiation into the Susquehanna River.

The radiation question

The radiation question has been used as a second bogeyman throughout the past week of this event. Although headlines raved about "Nuke Steam Clouds," "Nuke Plant Leak Continues" and "Radioactive Cloud Spreads," etc., the fact is that all releases of radioactivity to the atmosphere were preplanned, released through the normal waste gas stack, and were far below

permissible levels. All venting of fission gas has been through normal processes from the Auxiliary Building Radiation Waste System to the stack and then to the atmosphere. These facts are completely opposite to the media lies of uncontrolled releases at high radiation levels.

Maximum release rates for short time periods of 30 millirems per hour (mrems/hr) at the plant boundaries were measured with 3 mrems/hr and 0.3 mrems/hr at distances of 3 miles and 20 miles respectively. To put this into perspective, it should be noted that the amount of radiation in a two-second dental x-ray is 20 mrems, and that the Environmental Protection Agency requires evacuation of a site where outside radiation levels exceed 1000 mrems/hr or well over 30 times the levels experienced at the Three-Mile Island plant boundary.

Another way to look at the actual release rates is to compare them to those allowed for a worker at the nuclear plant. A plant worker is allowed a maximum of 3000 mrems/quarter year or 5000 mrems/year. This means that at the plant boundary a person would have to be exposed to the 30 mrems/hr rate for over 165 hours to reach the maximum permissible dose rate. At a distance of 3 miles it would take over 1665 hours to reach the limit.

The release of this radiation at the Three-Mile Island plant occurred only two to three times and for periods of less than an hour each time. Therefore, the *very maximum* dosage any person could conceivably have received at the site boundary, if he happened to be standing there during these releases, would be less than 100 mrems total! A person 3 miles from the plant might have received a maximum of only 10 mrems, less than the common dental x-ray.

Obviously all of this is far below the allowable dosages and presents no hazards whatsoever to the public. Metropolitan Edison officials reported that they planned one or two more fission gas releases from the plant but at even lower activity rates and time durations.

The latest reports from sources at the Three-Mile Island plant are that the reactor cooling system is completely stable, as it has been since the morning of the accident. It is operating in a shutdown condition at 280°F with one primary coolant loop and one secondary coolant loop/steam generator dumping the low decay heat load through the cooling towers. The gas bubble in the reactor vessel has been broken up and removed by slowly reducing primary system pressure and circulating the small gas bubbles through the primary coolant system and eventually taking them out through the pressurizer.

Plant officials intend to proceed to complete shutdown to atmospheric pressure and 280°F where they will switch over to the shutdown cooling system. They will then begin plans for entering the containment building and eventual inspection of the fuel rods.

The effect of nuclear shutdown

Should the Carter Administration, and most prominently Energy Secretary Schlesinger, succeed in shutting down the present nuclear capacity in the United States, it will have succeeded in shutting down 13 percent of total U.S. electric power production. It will also have succeeded in raising the cost of electric power generation. Nuclear generated electricity costs some 1.5 cents per kilowatt hour. If utility companies are forced to convert to oil, the cost will rise to 3.5 cents per kilowatt hour — more than double the cost and before the Administration effects its oil price hiking measures.

What is the present role of nuclear power in the nation's electric grid?

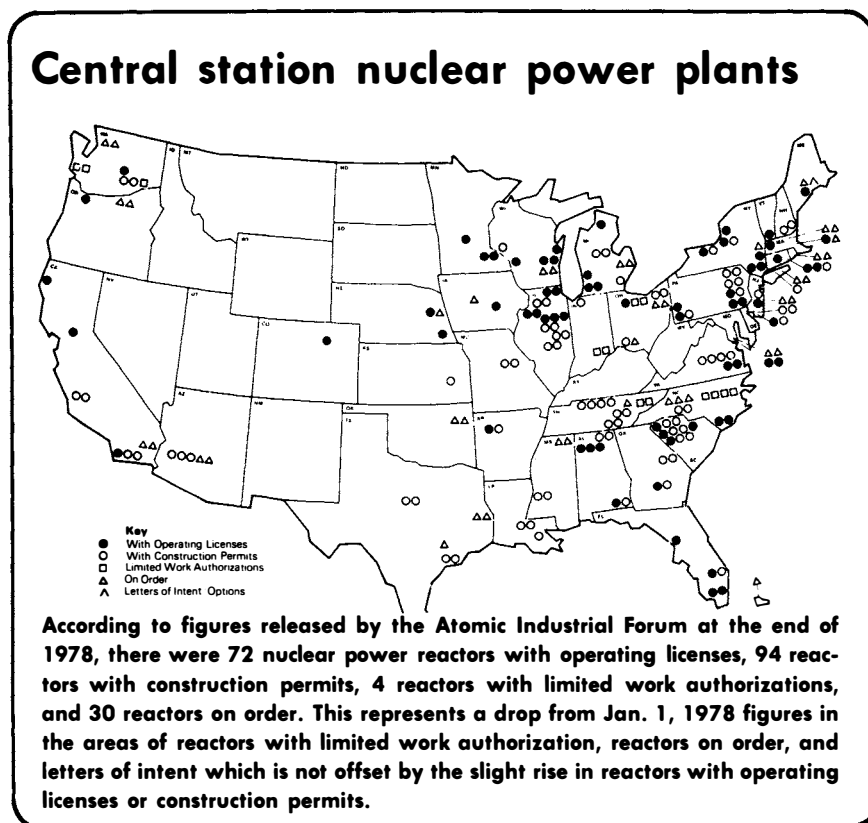
At the time when the manipulated shortages of oil make nuclear energy development even more urgent for the population, the state of nuclear development needs a sharp evaluation. There are, as of this writing, 72 operating nuclear power plants throughout the United States. This is by far the largest concentration of any country in the world. These 72 plants provide electric power to more than 25 million people and industry in the nation, largely clustered around the most heavily industrialized areas of the country, primarily the densely populated Northeast, which relies on nuclear to offset its dependence on costly oil imports.

New York State, which is already experiencing periodic power blackouts and brownouts, relies on nuclear power for 24 percent of its electric power. New Jersey, one of the nation's most densely industrialized states, gets 31 percent from nuclear sources. Illinois, which has the largest number of nuclear plants of any state — seven — relies on nuclear sources for 28 percent of electric power generation in that crucial industrial region. All of these plants are operated by Commonwealth Electric which services the northern third of Illinois, including Chicago. This region produces the bulk of the state's manufactured goods. Illinois leads the nation in agricultural exports and is the third largest in manufacturing exports, totaling

\$6.66 billion (in 1976) of which the Chicago region produces \$3.41 billion. Shut down Commonwealth Electric's nuclear power plants and up to 50 percent of the total electric power to the northern third of the state would be eliminated.

Similarly, Wisconsin gets 32 percent of its electricity from nuclear sources, South Carolina, 47 percent, and Vermont, nearly all. To shut down or even reduce nuclear development is a blueprint for economic disaster and social chaos.

It is useful to look at the consequences of a forced conversion of nuclear plants to the far-higher-priced oil generation of power. One average sized 1,000 Mega-Watt nuclear reactor, large enough to serve the total electric power needs of a city of some 600,000, generates the equivalent of 10 million barrels a year of oil. The total of the nation's more than 52,000 MegaWatts of nuclear power generation produces the equivalent of almost 500 million barrels of oil per year — \$8 billion in imports at present OPEC prices. In addition, the comparative cost of turning to oil from nuclear fuel is now



more than twice as great as uranium.

A spokesman for Consolidated Edison, which provides nuclear power from its Indian Point reactor to New York City stated that if that reactor, which is of the same Babcock and Wilcox design as the Three-Mile Island plant, is shut down and they run into supply shortages of oil, "then we've got nothing left." It was a temporary disruption of power from Indian Point in 1977 which led to a major power blackout for New York City because load sharing capacities were stretched to the limit during the peak summer season.

The gameplan

The immediate target of groups such as Ralph Nader's Critical Mass and their collaborators in Congress such as Sen. McGovern is to force the shutdown of all eight Babcock and Wilcox designed reactors now in service. This would come on top of the Nuclear Regulatory Commission ordered shutdown last month of five reactors in the industrial Northeast because of alleged computer error in earthquake resistance from the Stone and Webster built components. A spokesman for Critical Mass in an interview gloated that these 13 reactors would "be a good start" in shutting down the nation's nuclear capacity.

Let's examine what this impact would be. First, the Rancho Secol reactor of Stone and Webster design, which the antinuclear California Gov. Jerry Brown has called for closing, supplies energy to central California and the entire Imperial Valley agroindustry region. Their Davis-Bessie 1 unit near Cleveland has come under attack from Mayor Kucinich. In addition, the Indian point 1 plant mentioned, the two Three-Mile Island plants, and Oconee 1, 2 and 3 plants at Seneca, South Carolina provide a major share of their respective state's electric generating capacity. If the latter were knocked out, even temporarily, it would spell economic disaster for a major portion of the industrially booming sunbelt region.

The NRC shutdown of five Stone and Webster reactors including two in Virginia, one in Maine, one in New York and another in Western Pennsylvania may last for months. These plant closings, occurring right at the peak of the oil shortage scenario, stemming from the Iran crisis, forced those utilities to burn more than 200,000 barrels of oil daily. Schlesinger was at the time claiming a 500,000 barrel a day shortfall to justify massive conservation and rationing measures. The impact if all 13 reactors can be shutdown in the present period — will be more than 120 million barrels annually of added oil imports.

Another aspect is the impact on industry and agriculture of the loss of any of this nuclear capacity. Already the nation's power grid is stretched to the point of

blackouts in major sections of the country, especially the Northeast. During the nationwide 1977-78 coal strike, it was the ability of nuclear utility load-sharing that kept economic disaster from hitting the entire Midwest. Nuclear capacity gives electric utilities the margin to avert catastrophe by switching from coal or oil to nuclear, allowing them to sell excess during emergency periods, such as the recent one, to utilities with no nuclear capacity and unable to get adequate supplies of oil or coal.

Moratorium on developments

But consider the future perspective. Legislation is being introduced which attempts to impose a "moratorium" of from 2-5 years on all construction of new nuclear reactors. What would this mean?

The cost of one reactor is at least \$1 billion. Antinuclear advocates are talking about scrapping some \$100 billion of the most advanced capital goods productive investment in existence. In terms of only those jobs directly affected, at least 250,000 high-skill jobs in construction, engineering, and related areas would be scrapped. Given the present financial precariousness of the nuclear industry, a 2-5 year "moratorium" on nuclear construction or licensing will sound the final death knell for the world's largest and most experienced nuclear industry.

Last year, there was a total of only two new orders placed on Commonwealth Edison for nuclear reactors and these two were subsequently postponed. By comparison, in 1973, there were 41 reactors ordered. Before the Harrisburg event, Westinghouse, General Electric, and other leading reactor manufacturers stated privately that with the Carter Administration's policies toward nuclear energy they were 1-2 years away from closing down their nuclear plant production. This translates directly into 400,000 jobs lost in the nuclear power industry.

Far more damaging is the fact that once concentrations of such high-technology development, including contractors and thousands of highly specialized subcontractors, begin getting out of the nuclear industry, it is no simple matter to regroup and restart production of nuclear power plants. It is not a simple matter of turning on or off a light switch.

Chicago Bridge and Iron Co. built a \$30 million plant in Cordova, Ala. in 1974 to supply parts for nuclear plants at a time when industry growth projections were substantial. It closed in 1978 for lack of orders. "If this trend away from nuclear continues," said a company spokesman, "these subcontractors who are vital to the industry will be less able to respond if business ever comes back."

— by William Engdahl