Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0 25X1

Talking Points for ADDI
Presentation to HPSCI, 7 October 1986

Soviet Nuclear Power Developments Since
The Chernobyl' Accident

Progress At Chernobyl'

Five months after the nuclear accident that destroyed unit 4 and forced the shutdown of the other three reactors, the Soviets are beginning to restore the power generating capacity of the facility.

- They claim the unit 1 reactor was restarted on 29 September,

- Moscow claims unit 2 will be restarted within two weeks and unit 3 in the second quarter of 1987. 25X1

25X1

- The entombment of the destroyed unit 4 is progressing rapidly. The concrete and steel sarcophagus is nearly complete, and work has begun on the massive girders that will support the hermetically sealed roof.

The Soviets have moved much more rapidly than we thought practical to restore power production and entomb the destroyed reactor at Chernobyl'.

- Moscow was probably driven largely by the international furor over the accident. Soviet failure to warn immediately of the event and of its potential danger gave General Secretary Gorbachev a black eye he was anxious to rectify.

- In addition, the loss of electric power generating capacity facing the economy this winter threatened his economic revitalization program and could raise domestic consumption of fossil fuels (oil, gas, coal).

The USSR's actions to contain the damage and to restore at least part of the lost production capacity illustrate the regime's ability to marshal whatever resources are necessary to cope quickly with a single problem or event. The Soviets have committed an estimated 80,000 military and civilian personnel to the effort at one time or another over the past five months, and have spent over 2 billion rubles--roughly equal to the USSR's annual investment in the nuclear power program.

25X1

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0

25X1

Safety Modifications

The Soviets probably have completed initial modifications of their Chernobyl'-type reactors.

- Special railcars to carry the additional nuclear fuel needed for the modifications have been seen at some of the facilities.

- In our view, the modifications will enhance safety, but the risk of operator error coupled with an unforgiving design remains.

Status of Other Reactors

25X1

the Chernobyl' nuclear accident has not led to prolonged shutdowns of the remaining nuclear plants in the USSR and Eastern Europe.

- Of the 11 other Soviet RBMK or Chernobyl' type reactors, nine were operating when last seen. 25X1 25X1

- Of the 34 Soviet VVER's or pressurized water reactors, 28 were operational when last seen. Four of the non-operational reactors were at stations with other operating reactors.

- The two VVER reactors at the Soviet Armenian station have not been in operation since early June and work is in process to uncover piping in the reactor area. Problems at this site probably are not related to the accident at Chernobyl'.

Construction of additional nuclear reactors in the USSR, Eastern Europe, and Cuba is continuing although significantly behind plan.

- one RBMK reactor and three VVER reactors are nearing completion and undergoing testing in the USSR. Two VVER's seen in final testing in Eastern Europe have become operational in September according to press reports. 25X1

- Progress is also continuing on two Soviet supplied VVER reactors in Cuba, but the first reactor won't be complete until at least 1989 or 1990. Both reactors are to be housed in containment structures, and we are monitoring the construction progress closely to identify any potential problems which could affect the US or Latin America.

25X1

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0
25X1

Impact on Electricity Supply

Restoring the 1,000-megawatt capacity of unit 1 and the subsequent restart of unit 2 will only partially alleviate the tight power supply facing the USSR as winter approaches. Even under normal circumstances, the Soviet power system has little reserve generating capacity relative to peak winter demand.

- The power supply in the Ukraine will still be down about 5 percent and, for the country as a whole, nearly one percent from levels expected before the Chernobyl' accident.

- The Soviet press has complained that delays in commissioning new nuclear facilities and low water levels in many rivers were contributing to shortfalls in electricity output.

- The Soviets have indicated that the drain of manpower and other resources for recovery of units 1 and 2 at Chernobyl' has delayed startup of one power reactor elsewhere in the Ukraine and may have contributed to delays on three others.

25X1

Impact on Agriculture

We continue to believe the effect of the accident on Soviet agricultural production will be limited. The area contaminated and the consequent loss of crops is largely restricted to about 1,000 square kilometers, implying a radius of 18 kilometers, and a few outlying pockets.

- Over half of the contaminated area consists of forested and swamp areas. Thus farm land taken out of production represents a miniscule portion of the USSR's 230 million hectares of arable land.

- Soviet authorities continue to monitor food products in the Ukraine, Belorussia, the Baltic Republics, and parts of the RSFSR for radioactive contamination and report that levels generally are safe for human consumption. (At the IAEA meetings on the accident, Soviet speakers, when asked, replied with specifics that indicated Soviet standards are roughly the same as "international" standards.)

25X1

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0

25X1

Health Effects

Soviet First Deputy Minister of Public Health stated last month that, after having checked several hundred thousand people, medical officials are certain that no new cases of radiation sickness will be found. Medical technicians in the Ukraine and in Belorussia are continuing to monitor the population.

25X1

Fact Sheet

Soviet & East European Nuclear Power Program

- The installed nuclear capacity of the USSR prior to Chernobyl' was approximately 28,300 megawatts.
- The installed nuclear capacity of Eastern Europe is 6600 megawatts in VVER 440 type reactors, and 600 megawatts in a US supplied reactor in Yugoslavia.
- In 1985 the Soviets produced 167 billion kilowatt hours of electricity from nuclear energy, about 11 percent of total electricity output.
- In 1985 Eastern Europe produced 26.2 billion kilowatt hours of electricity from their nuclear plants.
- Prior to Chernobyl' plans called for both the USSR and Eastern Europe to about double their installed nuclear power capacity by 1990.

25X1

Sanitized Copy Approved for Release 2011/07/21 : CIA-RDP91B00874R000100290001-0