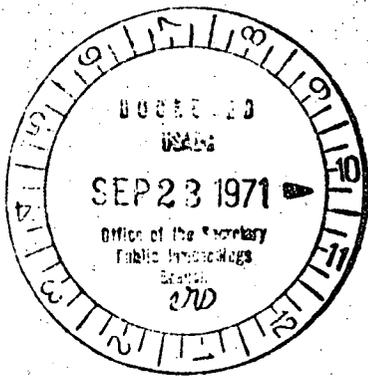


SUPPLEMENTARY TESTIMONY OF SHERWOOD DAVIES,
DIRECTOR, BUREAU OF RADIOLOGICAL HEALTH,
NEW YORK STATE DEPARTMENT OF HEALTH



Dated: September 15, 1971

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Q1. Is evacuation necessary to protect the residents of the low population zone from receiving doses in excess of 30 rem in base case situations?

A1. No. In the base case situation, the 2-hour, 8-hour, and 30-day doses at the house nearest to the facility are 21, 32 and 43 rem, respectively. Moving people indoors for the initial three to four hour period would effect an estimated dose savings of 50% during that time period. The projected thyroid exposures at the closest house would be reduced to approximately 11, 20 and 31 rem for the three time periods, and reduced to 6, 13 and 19 rem at the outer limit of the low population zone.

Q2. Would the residents of the low population zone be evacuated in any base case situation?

A2. Yes, but only if a substantial dose savings could be effected by evacuation, and evacuation could be carried out without resulting in greater risk than if the residents simply remained indoors. Moving indoors to reduce inhalation dose would be effective only for the first few hours after the accident. This time period is when the greatest dose savings are accomplished. For example, it is conceivable that evacuation might be ordered within the first few hours, to prevent exposure under favorable conditions, or after four hours to minimize further exposure, depending upon various factors including wind direction, time of day, weather, traffic and other conditions.

Q3. What instructions would you give the police in the event of evacuation of the residents of the low population zone and for how long a time would they be prevented from returning?

A3. The State Police would be instructed to evacuate the residents along an easterly route on Bleakley Avenue or a southerly route on Broadway, depending upon wind direction. Routes would be selected to minimize exposure. The period of time before residents would be permitted to return depends upon the duration of releases and the projected man-rem savings by their continued absence.

Q4. To what extent would the information supplied by the nuclear facility operator immediately following an accident be used in determining what responsive actions should be taken?

A4. The information to be supplied by the operator includes the location, type and time of the accident, weather conditions, wind direction and speed, the status of the facility and safeguards, and an estimate of the radioactivity that has been or may be released. Based upon this information, the Bureau of Radiological Health will determine the need for immediate protective actions. If the estimates of offsite doses are within the base case, the protective actions to be taken are pre-planned. Should the estimates exceed the base case, the general procedures of the emergency plan will be followed.

After the initial actions are taken, calculated dose estimates including the results of actual field measurements will be used as the basis for any necessary modification of response actions, and for all subsequent decisions.

Q5. In response to the request of Mr. Roisman on July 21, 1971, (transcript page 1764), have you located any records made of time for responses to radiation incidents?

A5. Yes. I have located the following reports and have forwarded copies to Mr. Roisman:

1. Radiation incident - Consolidated Freightways Trailer Truck Terminal, Colonie, New York
2. New York Central Train Derailment, Irving, New York, Erie County
3. Railroad Accident Involving Radioactive Material, Township of Grand Island, Erie County, June 3, 1965
4. Reported Incident - Railroad Car, Buffalo, Erie County, September 22, 1966
5. Lost Radium at Columbia Memorial Hospital, Hudson, New York
6. Radiation Incident - Patchogue, New York

Q6. In response to question "h. P. 8a" on page 6 of Mr. Roisman's proposed cross-examination with respect to supplemental direct testimony of the New York State Atomic Energy Council, is there a document that embodies the State's large scale general emergency response capacity?

A6. Yes. It is entitled "The Emergency Plan for the Civil Defense of the State of New York". A copy has been sent to Mr. Roisman.