

Mr. VIVIAN. For which ones?

Dr. GARTRELL. It is more for the nuclear stations.

Mr. WAGNER. The point is that for virtually all of our plants we have our large reservoirs available for cooling. This nuclear plant will be located on the Wheeler Reservoir at a point where it averages a mile or more in width, the depth of the water at the plant site is perhaps 30 feet, so that we will have no problem with heat dissipation. We have one plant where there was not this volume of water available and we are installing cooling towers there. I think Dr. Gartrell's point is that we would design a plant so that the heat dissipation does not constitute a problem. Just as an interesting—

Mr. VIVIAN. You are transferring all the heat to the air somewhere in the vicinity of the plant.

Mr. WAGNER. That is right. The water temperature at any significant distance downstream from our plant is not increased much.

Mr. DADDARIO. I hope that the confidence you have in being able to take care of this problem is going to be evidenced by the complete acceptance by the local community to the idea of putting nuclear heat into the stream, even though you say it is not going to do any harm.

Mr. WAGNER. The local community—and I was there yesterday and spoke to a group—is most enthusiastic about this plant. And, as a matter of fact, the discharges from some of our existing plants are helpful at times. In the wintertime the water in the lakes is quite cold. The fish prefer warmer temperatures than naturally occur so they concentrate around the discharge areas. Fishing there is exceptionally good and the fishermen don't regard that as pollution, I assure you.

Mr. DADDARIO. So, you satisfy the fish population.

Mr. WAGNER. We have, in many instances. As I say, if the dissipation of heat into the stream would be a problem as it will be with the coming unit at our Paradise plant, we would build cooling towers.

Mr. DADDARIO. We have a whole series of questions that we would like to send to you, but I would like to ask Dr. Gartrell a question concerning the connection between meteorology and the emission process in your stacks. You touched on the necessity of improving this technique. How successful have you been in solving the emission problem with present weather information available to you? How would you theorize that such an improved weather reading technique could help in an area such as Los Angeles?

Dr. GARTRELL. Well, of course, in studying any air pollution problem, meteorology is a basic source of information that you have to go to, and for large powerplants you deal principally with what is referred to as micrometeorology, that is, meteorology in the immediate plant area as it affects normal dispersion processes. So, we established at each of our power stations a meteorological station with a tower instrumented to provide continuous records of wind velocity and direction, temperature, et cetera. We routinely analyze collected data along with our SO<sub>2</sub> monitoring data to determine the meteorological regimes under which significant ground level concentrations of SO<sub>2</sub> occur. The fixed station monitoring is supplemented with mobile sampling. We have a specially instrumented helicopter and automobile for this purpose, so for any special meteorological model that