STATEMENT OF DR. WALTER R. HIBBARD, JR., DIRECTOR, BUREAU OF MINES, DEPARTMENT OF THE INTERIOR; ACCOMPANIED BY CHARLES M. MOTTLEY, OPERATIONS RESEARCH SCIENTIST; AND PAUL ZINNER, ASSISTANT DIRECTOR FOR PLANNING

Dr. Hibbard. Mr. Chairman, may I present my two colleagues, Paul Zinner, Assistant Director for Planning, and Charles Mottley. Senator Gruening. We are very happy to have them here.

Dr. Hibbard. I have here a biographical sketch if you would like to have it for the record.

Senator Gruening. It will be included in the record at this point. (The material referred to follows:)

BIOGRAPHICAL SKETCH OF DR. WALTER R. HIBBARD, JR., DIRECTOR, BUREAU OF MINES, U.S. DEPARTMENT OF THE INTERIOR

Dr. Walter R. Hibbard, Jr., has been Director of the Bureau of Mines since December 1, 1965, following his appointment by President Lyndon B. Johnson

Born in Bridgeport, Conn., on January 20, 1918, Dr. Hibbard was graduated from Wesleyan University, Middletown, Conn., in 1939, and received a Doctor Fagineering degree from Yale University in 1942.

Following his military service in World War II as a naval officer attached to the Bureau of Ships, he joined the faculty at Yale as an Assistant Professor and later become Associate Professor.

In 1951 he was recruited by the General Electric Company for its Research and Development Center in Schenectady, N.Y. There he progressed to the position of Manager of Metallurgy and Ceramics Research, directing a broad range of fundamental and applied research projects, a position he held when selected

Dr. Hibbard's achievements in such fields as the plastic deformation of metals and the metallurgy of copper and its alloys have won him wide recognition from many professional societies. In 1950 he received the Raymond Award of the American Institute of Mining, Metallurgical, and Petroleum Engineers. From 1957 to 1961 he served as Director of the Institute, and in 1967 he served as its President. He was named by AIME to receive the Institute's James Douglas Gold Medal, awarded for his notable career. For many years a registered professional engineer, Dr. Hibbard has served as President of the Metallurgical Society of the AIME, and is a past chairman of the Society's committees on the metallurgical profession and on engineering management. In January 1963, he was one of ten eminent metallurgists elected to the newly created grade of Fellow of the Metallurgical Society. In addition, Dr. Hibbard belongs to the British Institute of Metals and the New York Academy of Sciences, and is a fellow of both the American Academy of Arts and Sciences and the American Association for the American Academy of Arts and Sciences and the American Association for the Advancement of Science. He also is a member of the Materials Advisory Board of the National Academy of Science, and was recently its Chairman. In 1966 he was elected to the newly organized National Academy of Engineering.

Dr. Hibbard is the author of more than 70 scientific papers and has been widely recognized as a major contributor to the science of metallurgy. In 1957 he was a member of the exchange delegation of United States metallurgists visiting the

He has been elected to many honorary and professional fraternities including Phi Beta Kappa, Sigma Xi, Alpha Chi Sigma, and Gamma Alpha. He also holds an honorary Doctor of Laws degree from the Michigan Technological University,

Dr. Hibbard. Mr. Chairman and members of the subcommittee, one of the responsibilities of the Director of the Bureau of Mines is to keep both the executive and legislative branches of the Federal Government advised as to the adequacy and dependability of the supply of mineral materials required by our economy. I appear before you today as your minerals adviser. My purpose is to invite your attention to a