

cies and cost reductions are obtained through the development of components, hardware systems, and operating processes? There are a number of specific examples where research and development have made very little reduction in cost while, at the same time that the R&D is continuing, the cost of materials, hardware and operating personnel costs have increased five to seven percent per year, negating the R&D contributions to lower costs.

Questions to be asked of the Department of the Interior's representatives:

1. How extensively is the ongoing work on waste water reuse processes and does there exist a mechanism by which this technology can make a contribution to the nation's water pollution problems and, further, does E.P.A. have a mechanism by which they can acquire such information and apply it?

2. What work is going on in the treatment of irrigation return flows? It seems to me that single-purpose water supply systems are no longer economically feasible and one must learn to reuse waters in a multipurpose manner. By providing the technology to permit the reuse of water we are, in fact, increasing the available supply while, at the same time, improving its quality, and the environment.

3. Would you please submit for the record—by processes—the elements of cost involved in design, construction and operation of the several ways of treatment of waters by desalting technology, such as distillation, reverse osmosis, etc. As an example, what is the hardware, current cost of money, and operating expenses—broken down into energy costs, chemical treatment, personnel costs and general operation expenses? The figures should be broken down into capital investment and the operating expenses.

4. How is process and hardware development by the Office of Saline Water made available for industrial applications and what has been the utilization to date?

5. Has any thought been given to the application of new financing techniques for the acquisition and operation of municipal water plants which utilize the several desalting and waste water treatment technologies? An example would be the scheme put into operation by the Italians in Bari and Sicily which consisted of establishing a revolving fund by the Italian government from which towns and municipalities can borrow to construct a desalting plant and repay it, with interest as an annual use charge.

6. In view of the fact that desalting is merely another process of providing additional usable water from both sea water and brackish water as well as waste water, has there been any improvement in the funding of plants through the normal government agency channels, such as HUD, EDA, etc.? In short, is desalting technology being accepted as a viable and competitive technology along with the conventional ways of providing water to cities and municipalities and, therefore, being funded under the same rules as construction of wells, pipelines, reservoirs and dams?

7. In view of the fact that the Department of the Interior, through the Bureau of Reclamation, for years has had the authority to construct water resource facilities, including municipal water supplies in special instances, where does the Department stand in applying the same financing logic to desalting processes which meet the requirements for additional water and for better quality water? The point of the question is that, if the Department exercises its authority to fund water programs with low interest loans and reasonable repayment schedules, why should not the same funding criteria be applied in providing desalting plants as an alternative water source, either by itself or as a part of a larger, overall program?

Sincerely yours,

CLINTON P. ANDERSON, *Chairman.*

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., April 16, 1971.

Hon. HENRY M. JACKSON,
Chairman, Interior and Insular Affairs Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: With reference to questions put forth by Senator Anderson in his letter to you of April 5, 1971, relative to the Department of the Interior, we are pleased to submit the following answers.

Question 1. How extensively is the ongoing work on waste water reuse processes and does there exist a mechanism by which this technology can make a