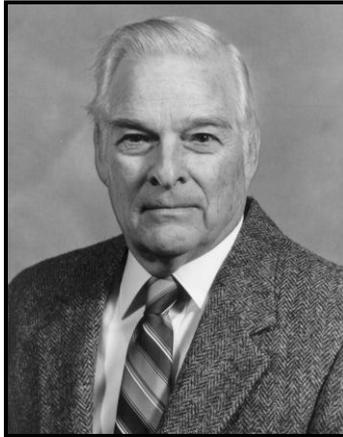


## 1986 Engineer of Distinction



**Roy H. Dunham**

B.S. Mechanical Engineering, University of Missouri-Rolla, 1947

Principal Engineer  
Bechtel Power Corporation  
Gaithersburg, Maryland

### Citation

Roy H. Dunham received his bachelor's degree in mechanical engineering from the University of Missouri-Rolla in 1947. After graduation, he worked with Allis-Chalmers in Milwaukee, Wisconsin, and then was an instructor of mechanical engineering at the University of Alabama-Tuscaloosa before joining the Tennessee Valley Authority in 1950.

Mr. Dunham spent 30 years with TVA working in the Division of Engineering Design. The last seven years were as Director of the Division. The early part of that experience was principally concerned with the design and construction of coal-fired power generating plants. The period was one of rapid TVA system load growth which created the need to add a great amount of new generating capacity. This need, in consideration of economic factors, forced the consideration of increasing unit size and other advances in related technology. For a number of years, Mr. Dunham was responsible for the study of mechanical applications for these new plants and was instrumental in the introduction of many innovative features.

During this period, he was also in charge of the thermal design of new plants, including Bull Run, a 900,000 KW prototype, which for several years of its operating history has been the most efficient coal-fired power generation facility in the United States.

As an authority on the American Society of Mechanical Engineers code testing of power plant mechanical equipment, he directed an extensive series of tests on steam condensers. These tests provided valuable technical information to the industry and demonstrated the need for code revisions.

The latter part of Mr. Dunham's association with TVA was largely devoted to the introduction of nuclear power generating units into the system. As Director of the Division of Engineering Design, with overall responsibility for the engineering design for all TVA power generation facilities, he reorganized the Division in 1973 to better handle the commitment to nuclear power. During this period, TVA had 17 central station

nuclear units in various stages of design, construction and operation—the largest nuclear power commitment of any utility in the U.S.

In 1980, Mr. Dunham joined Bechtel as the Manager of Engineering for its office in Memphis, Tennessee. There, he had responsibility for providing engineering services to Rural Electric cooperatives. These services were in the areas of power generation, environmental studies and licensing and operating plant betterment.

In 1985, Mr. Dunham was transferred to Bechtel Power Corporation's-Eastern Power Division in Gaithersburg, Maryland. As a Principal Engineer in that organization, he provides technical input to thermal power projects, serves as project manager for engineering services to operating power plants, and performs power generation consulting.

Since joining the American Society of Mechanical Engineers upon graduation in 1947, he has had continuing activity in that professional society. He served as Chairman of the East Tennessee (Knoxville) Section in 1979 and as Chairman of the Mid-South (Memphis) Section in 1983. He was elected a Fellow in 1982. He also has been a member of the Fluid Machinery Committee and contributed to Power Test Code activities.

In 1984, he was named Featured Engineer of the year by the Memphis Joint Engineers Council. He is a member of Ta Beta Pi, Phi Kappa Phi, the Board of Engineering Advisors for the College of Engineering at Tennessee Technological University, listed in *Who's Who in Engineering*, a registered professional engineer in Tennessee and three other states, and the recipient of an Alumni Merit Award by the University of Missouri—Rolla.

He is a member of the covenant United Methodist Church in Gaithersburg, Maryland.



Roy Dunham receives his Engineer of Distinction citation from Dean Leighton Sissom