

Snavely King Majoros O'Connor & Lee National Study of Other Production Unit Lives 2006 Update

I. Introduction

Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King") performed a study of U.S. Steam Generating Units Lives, 50 MW and Greater using analytical techniques generally accepted in the utility industry and a database maintained by the U.S. Department of Energy ("DOE"). Snavely King concludes that the lives of the U.S. Steam Generating Units (50 MW and Greater) are experiencing average life spans of approximately 60 years and these spans are lengthening almost on a year-to-year basis.

II. Database

The DOE's Energy Information Administration ("EIA") requires every owner of an electric utility generating plant to file a Form 860 describing the status of its generating facilities. From these reports, EIA maintains data on the installation and retirements of generating units around the country.

The data utilized in this study is available on the EIA's web site. The primary data used in Snavely King's study is located in the Form 860 database files¹. The data was downloaded in several steps into a single Microsoft Access file and developed into inputs for Snavely King's actuarial analysis program.

Various sorts were made to refine the data and to remove bad data. For instance, some units listed as retired had no retirement dates indicated, etc.

III. Analysis

Snavely King initially study ("1996 Study") conducted a full band (1899-1996) resulting in a 52 L2 life and Iowa curve indication. Snavely King's initial ten-year band resulted in a 47.5 L1.5 indication and its initial rolling and shrinking band analysis showed trends toward longer lives – as long as 70 years.

Snavely King's 2006 update ("2006 Update") consisted of an analysis of the full band (1915-2006) and the most recent ten-year band (1997-2006) of data. The full band analysis had a best fit result of 50 S0.5, which indicates a 59 year life. The ten-year band best fit was a 58 R4, which indicates a 58 year life.

¹ Prior to 2001, the EIA Form-860 Database was split two parts, Form-860A (Annual Electric Generator Report – Utility) and Form-860B (Annual Electric Generator Report – Nonutility). After 2001 the EIA combined Form-860A and Form-860B in a single Form-860 database.

Finally, Snavely King performed a "shrinking band" analysis, in which the final year was held constant and the bands were continually shrunk. The results are shown below

Shrinking Band Analysis

Band	Width	Life	Curve Type
2002-2006	5	43	L0
1997-2006	10	50	R0.5
1992-2006	15	51	R1
1987-2006	20	50	R1
1982-2006	25	47	S0