

Impact of Weather Changes on TVA Nuclear Plant Chi/Q
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The TVA nuclear plants, like most others in the United States, were designed based on 2-3 years of meteorological data collected in the 1970s. Since then, changes in meteorological conditions and operating experience have raised concerns that the chi/Q (χ/Q) assumptions based on the original data are no longer valid. This presentation examines the original meteorological data, determines how the meteorological conditions have changed, and estimates how χ/Q assumptions are impacted.

As a consequence of the issue of RG-1.23 (revision 1), TVA changed the stability class layers used for evaluating elevated release. A case study will also examine the impact of these changes on χ/Q .