High precision voltage calibrations are now regularly performed in industrial calibration laboratories with Josephson array voltage standard systems. A fully uncertainty characterization cannot guarantee that the lowest possible uncertainty has been achieved, although uncertainties of less than 10 parts in 10e9 have been quoted. Comparing systems by reference standard interchange can give greater assurance of low uncertainty capabilities, but additional uncertainty components must also be considered. With a realistic uncertainty statement as a desired goal, uncertainty characterizations of the NIST voltage standard systems along with analysis of Zener reference interchange data will be discussed.