In this presentation we will investigate the connections between membership sets generated by bounded error parameter identification and confidence ellipsoids. The assumptions and computational time necessary to generate confidence ellipsoids are modest but they can conceal information about the estimated parameter that can be seen by using bounded error parameter identification. We will determine what types of problems are most appropriate for each type of parameter validation technique and the implications of parameters that are not contained in both sets. (Received September 06, 2011)