1067-Z1-2245TseChing Lien* (lien@math.wisc.edu), Department of Mathematics, 480 Lincoln Drive,
Madison, WI 53715. K-energy on hypersurfaces.

In his 1994 paper, Tian provides a sufficient condition for a degree d hypersurface to be semistable in the sense of Mumford's geometric invariant theory. Specifically, he shows that when the Mabuchi energy functional on the space of Kahler potentials is bounded below, the hypersurface is semistable. In his proof, he introduces a (1,1) current on the space of degree d hypersurface. We provide an explicit bound on this (1,1) current in terms of the natural Fubini-Study form. (Received September 22, 2010)