Abstract Submitted for the DPP97 Meeting of The American Physical Society

Sorting Category: 9 (experimental)

Development and Testing of a Chemical Sputtering Model for the Monte Carlo Impurity (MCI) Code¹ Y.S. LOH, Harvard University, T.E. EVANS, W.P. WEST, General Atomics, D.F. FINKENTHAL, Palomar College, M.E. FENSTERMACHER, G.D. PORTER, Lawrence Livermore National Laboratory — Fluid code calculations indicate that chemical sputtering may be an important process in high density, radiatively detached, tokamak divertor operations. A chemical sputtering model has been designed and installed into the DIII–D Monte Carlo Impurity (MCI) transport code. We will discuss how the model was constructed and the sources of atomic data used. Comparisons between chemical and physical sputtering yields will be presented for differing plasma conditions. Preliminary comparisons with DIII–D experimental data and a discussion of the benchmarking process will be presented.

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Prefer Oral Session Prefer Poster Session T.E. Evans evans@gav.gat.com General Atomics

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