Abstract Submitted for the MAR08 Meeting of The American Physical Society

Spatial and Temporal Resolution of Three Sites Characterizing Lattice-Assisted Nuclear Reactions (LANR) MITCHELL SWARTZ, JET Energy, Inc. Wellesley, MA 02481 — We present developing evidence that three different sites (physical locations in the solid state) are involved in lattice-assisted nuclear reactions (LANR). By expanding the equation first developed by Prof. David Nagel at ICCF-13<sup>1</sup>, we correlate observations of excess heat and de novo helium-4 production to three different physical locations and to the optimal operating points (OOPs) which are now known to characterize LANR systems<sup>2</sup>. This observation will be shown to be consistent with our previous reports of distinct time constants which characterize the tardive thermal power regime<sup>3</sup> ('heat after death'), which results after all input electrical power is terminated to an active LANR device.

<sup>1</sup>Nagel, D., "Rates for LENRs at Surfaces", ICCF-13

<sup>2</sup>Swartz. M., G. Verner, "Excess Heat from Low Electrical Conductivity Heavy Water Spiral-Wound Pd/D2O/Pt and Pd/D2O-PdCl2/Pt Devices", ICCF-10 (Camb. MA), Proceedings of ICCF-10, (2003).

<sup>3</sup>Swartz. M., G. Verner, "Dual Ohmic Controls Improve Understanding of 'Heat after Death'", Transactions American Nuclear Society, vol. 93, ISSN:0003-018X, 891-892 (2005)

Scott Chubb Naval Research Laboratory

Date submitted: 30 Nov 2007

Electronic form version 1.4