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Using Explicit PIC Results in Transport Codes<sup>1</sup> B.F. LASINSKI, A.B. LANGDON, B.C. MCCANDLESS, C.H. STILL, M. TABAK, R.P.J. TOWN, Lawrence Livermore National Laboratory — The generation of hot electrons in short pulse high intensity laser plasma interactions is most completely studied in explicit Particle-in- Cell (PIC) codes such as our Z3. However the transport of these hot electrons through dense matter is most amenable to implicit PIC simulations with a code such as LSP. <sup>2</sup> Here we report on the direct transfer of the Z3 generated hot electrons into LSP simulations. The procedure involved are outlined. Results are compared to other methods for including these essential hot electrons in LSP simulations appropriate for current and future short pulse laser plasma experiments.

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<sup>2</sup>D. R. Welch, et al, Nucl. Inst. Meth. Phys. Res. A 242, 134 (2001).

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