Electron Supplementary Information

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Engineering Geobacter sulfurreducens to Produce a Highly Cohesive Conductive Matrix

with Enhanced Capacity for Current Production

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ESI Figure 1

Figure 1: Cell growth of *Geobacter sulfurreducens* wild type (squares) and CL-1 (triangles) strains in medium containing acetate as the electron donor and fumarate as the electron acceptor (NBAF). Cell growth was monitored by cell turbidity (a) measured at 600 nm as well as total protein (b) measured using the bicinchoninic acid method with bovine serum albumin as a standard. Data are means \pm standard deviations of triplicates.



ESI Figure 2

Figure 2: Transmission electron micrographs of thin sections of CL-1 and wild type strains stained with osmium tetroxide only. Little or no extracellular polysaccharides were observed in these images. These are served as control images for Figure 4. Scale bars represent 500 nm.



ESI Figure 3

Figure 3: Confocal image of CL-1 anode biofilm on four-probe gold electrodes stained with the Live/Dead BacLight Bacterial Viability kit (Molecular Probes, Eugene, OR).

