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(54) **SOLAR-ENERGY ELECTRICITY
GENERATION SYSTEM WITH INTEGRATED
LOAD MANAGEMENT**

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(57) **ABSTRACT**

An integrated load management controller for directing electrical current generated by a plurality of solar photovoltaic modules exposed to ambient light selectively through a diverter to a battery bank for storage and to a current conditioner for supply of electrical current into an electrical grid, based on a supply demand communicated by an electrical grid demand controller, for managing the generation, storage, and supply of electrical current from the solar photovoltaic modules. A method of supplying supplemental electrical current to an electrical grid servicing load center using a solar-energy electricity generation system is disclosed.

