CLAIMS:

1. A power system for a parade float, the power system comprising:

a first power source;

a second power source;

an interlocked contactor comprising a pair of contactors interlocked via a mechanical interlock and an electrical interlock, wherein the interlocked contactor is in a configuration of a reversing contactor but lacks a crossover bridge for crossing over alternating current (AC) phases;

a selector switch coupled to the interlocked contactor, wherein the interlocked contactor is configured, in response to selection of a power source from among the first power source and the second power source with the selector switch, to switch between the first power source and the second power source for outputting power to the parade float with the selected power source;

one or more direct current (DC)/DC converters coupled to both the first power source and the interlocked contactor and configured to provide power at proper output voltages to the parade float when the first power source is selected;

one or more AC/DC converters coupled to the interlocked contactor and configured to couple to the second power source and to provide power at the proper output voltages to the parade float when the second power source is selected; and

an additional interlocked contactor coupled to at least one DC/DC converter of the one or more DC/DC converters, to at least one AC/DC converter of the one or more AC/DC converters, and to the selector switch.

2. The power system of claim 1, wherein the first power source comprises a first battery bank and the second power source comprises a second battery bank.

3. The power system of claim 1, wherein the first power source comprises a battery bank and the second power source comprises an AC power source from a building.

4. The power system of claim 1, wherein one or more of the proper output voltages are different.

5. The power system of claim 1, wherein the power system is configured to power the parade float with only one power source at a time from among the first power source and the second power source.

6. A parade float, comprising:

a power system, comprising:

a battery bank;

a plurality of direct current (DC)/DC converters coupled to the battery bank and configured to provide power at proper output voltages to the parade float;

a plurality of alternating current (AC)/DC converters configured to couple to an AC power source and to provide power at the proper output voltages to the parade float;

an interlocked contactor coupled to at least one DC/DC converter of the plurality of DC/DC converters and to at least one AC/DC converter of the plurality of AC/DC converters;

a selector switch coupled to the interlocked contactor, wherein the interlocked contactor is configured, in response to selection of a power source from among the battery bank and the AC power source with the selector switch, to switch between the battery bank and the AC power source for outputting power to the parade float with the selected power source; and

an additional interlocked contactor coupled to at least one DC/DC converter of the plurality of DC/DC converters, to at least one AC/DC converter of the plurality of AC/DC converters, and to the selector switch.

7. The parade float of claim 6, wherein the interlocked contactor lacks a crossover bridge for crossing over AC phases.

8. The parade float of claim 6, wherein one or more of the proper output voltages are different.

9. The parade float of claim 6, wherein the power system is configured to power the parade float with only one power source at a time from among the battery bank and the AC power source.

10. The parade float of claim 6, the parade float comprising an additional battery bank coupled to the plurality of DC/DC converters.

11. The parade float of claim 6, comprising a plurality of light features, wherein the power system is configured to power the plurality of light features.

12. A method for controlling a power system for a parade float, the method comprising:

receiving, via a selector switch coupled to an interlocked contactor, a selection of a power mode for a primary power system of the parade float from among alternating current (AC) mode and direct current (DC) mode, wherein the interlocked contactor is coupled to a plurality of DC/DC converters and a plurality of AC/DC converters, and the plurality of the DC/DC converters and the plurality of AC/DC converters are configured to provide power at proper output voltages to the parade float, wherein the interlocked contactor comprises a pair of contactors interlocked via a mechanical

interlock and an electrical interlock, and the interlocked contactor is in a configuration of a reversing contactor but lacks a crossover bridge for crossing over alternating current phases;

in response to the DC mode being selected, outputting power to the parade float via the plurality DC/DC converters coupled to a battery bank located on the parade float;

in response to the AC mode being selected, outputting power to the parade float via the plurality of AC/DC converters coupled to an AC power source, wherein the interlocked contactor enables only a single power source at a time from among the battery bank and the AC power source to power the parade float;

receiving, via an additional selector switch coupled to an additional interlocked contactor, an additional selection of an additional power mode for a secondary power system of the parade float from among the battery bank and the AC power source, wherein the additional interlocked contactor is coupled to the battery bank and is configured to couple to the AC power source; and

in response to selecting from among the battery bank and the AC power source, switching between the battery bank and the AC power source for receiving power to the secondary power source with the selected power source.

13. A parade float, comprising:

a power system, comprising:

a battery bank;

a plurality of direct current (DC)/DC converters coupled to the battery bank and configured to provide power at proper output voltages to the parade float;

a plurality of alternating current (AC)/DC converters configured to couple to an AC power source and to provide power at the proper output voltages to the parade float;

an interlocked contactor coupled to at least one DC/DC converter of the plurality of DC/DC converters and to at least one AC/DC converter of the plurality of AC/DC converters; and

a selector switch coupled to the interlocked contactor, wherein the interlocked contactor is configured, in response to selection of a power source from among the battery bank and the AC power source with the selector switch, to switch between the battery bank and the AC power source for outputting power to the parade float with the selected power source; and

wherein the power system comprises a primary power system, and the parade float comprises a secondary power system, the secondary power system comprising:

an additional interlocked contactor coupled to the battery bank and configured to couple to the AC power source; and

an additional selector switch; and

wherein the additional interlocked contactor is configured, in response to selection of the power source from among the battery bank and the AC power source with the additional selector

switch, to switch between the battery bank and the AC power source for receiving power to the secondary power system with the selected power source.