Figure I4.6 depicts a dispersed generation site, with multiple owners, and substation design with unknown collector system configuration.

Note: This is a new diagram developed by the BEPWG to provide clarification in the application of the BES definition.

Typical dispersed generation site and substation design (single transformation of voltage level) with multiple owners utilizing a common collector system. With a gross aggregate nameplate rating of 80 MVA (Individual Photovoltaic Bank Rating: 20 MVA). By application of Inclusion I4 the Photovoltaic Cells & Inverters (generators) are included in the BES. Green indicates the portions of the Collector System that are not included in the BES. Blue identifies BES dispersed power producing resources (Photovoltaic Cells & Inverters) and BES Elements between the point where those resources aggregate to greater than 75 MVA to a common point of connection at a voltage of 100 kV or above.

The point of aggregation is where the individual generator nameplate ratings of the dispersed generation total > 75 MVA (actual 20 MVA + 20 MVA + 20 MVA + 20 MVA = 80 MVA) and a failure would result in loss of 75 MVA capacity or greater to the BES. Collector system may contain multiple points of aggregation depending on design and/or configuration.

The common point of connection is where the individual transmission Element(s) of the collector system is connected to the 100 kV or higher Transmission system. (Note: This point is typically specified in the respective Transmission Owner and Generator Operator Interconnection Agreements.)

Figure I4.6: Dispersed Generation Site with Multiple Owners (Unknown Collector System Configuration)—Solar Array