

1 Q. **B-79, Replace Battery Banks and Chargers, \$978, 400**

2 Please provide the criteria used by NLH to determine whether batteries will be
3 replaced with flooded or VRLA type batteries.

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6 A. By default, Hydro replaces batteries with flooded-cell batteries as they have a lower
7 total cost of ownership. However, there are two circumstances when a VRLA
8 battery is installed – when floor space is limited, since VRLA batteries take up less
9 space and when the battery must be installed in a room that is incapable of
10 exchanging air in sufficient volumes to allow the installation of flooded-cell
11 batteries, as in the case of some smaller buildings. Flooded-cell batteries produce
12 explosive hydrogen gas as a by-product of the battery charging process, so they are
13 normally installed in a separate room with adequate ventilation to keep ambient
14 hydrogen levels to a minimum.