

IC 275. COS – Classify hydraulic storage Reference: John Wilson at p 12.

Please clarify the basis for assuming that hydroelectric plants are built only to meet the “base load”. Comment on the situations in Canada where storage facilities are utilized to ensure that water is made available when it can best serve winter peak system needs. Contrast this with run-of-river hydro facilities in Canada where no storage is available and river peak flows do not match system load peaks. If storage is used to meet system peak needs as well as to supply energy (by ensuring it is not spilled), confirm that the classification should reflect both functions – and explain how you would see this best being done under the examples noted here.

RESPONSE:

The term “base load,” as used in this statement refers to loads that are relatively stable over an extended time period, encompassing both peak and offpeak usage periods. Thus, base loads do contribute to peak loads, and all loads that occur at peak times should be charged equivalent peak period cost levels.

Capital intensive plants with relatively low running costs, such as storage hydro, are efficient construction choices if they can be run enough hours (i.e., “base load”) so that the money saved by virtue of their low running cost is enough to pay for their higher capital costs.