

1 Q. **Reference: Marginal Cost Study Update – 2018 – Summary Report, Nov. 15, 2018,**
2 **Appendix A (Christensen Associates Energy Consulting, Cost Estimates and Methodology**
3 **for Generation and Transmission Services, 2021-2029, page 9 (31 pdf)**

4
5 Citation:

6 The process of sizing facilities often favors oversizing beyond that which is needed
7 during the early years of capacity life, as doing so reduces total facility costs in the
8 long run over extended future years.

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10 Does oversizing beyond that which is needed during the early years of capacity life reduce
11 total facility costs in the long run in a context where load growth is flat, almost flat or
12 declining, based for instance on expectation of dramatic rate increases?

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15 A. This response has been provided by Christensen Associates Energy Consulting.

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17 The sentence preceding the citation is: “However, resource indivisibility is often present.”
18 When faced with a choice between project alternatives where the smaller may be
19 temporarily inadequate or risky, a planner might well choose to “oversize”. Note also the
20 remarks in footnote 21 regarding risk elements of the decision. More generally, the answer
21 to the question is highly specific to condition and context. Especially in cases where the
22 difference in costs between two equipment sizes may be a comparatively small share of
23 total installed costs of new equipment, expected loads can assume a declining path, yet it
24 will still be least cost to somewhat oversize facilities where doing so obtains improved
25 reliability or reduced line losses, or forestalls/delays costly replacement of other equipment
26 within the equipment bundle that constitutes a facility such as a primary distribution
27 feeder.