



# Letters

ordered, it can become more modular.

If a larger plant would result in a lower cost per unit of electricity generated, and if modular construction really can hold down construction costs and give certainty to costs and time frames, then perhaps the optimal size for a reactor isn't the smallest. To meet customers' needs, maybe it would be best to have a medium or large modular reactor. A study should be conducted on what the optimal size would be to hold down the costs of deployment and of electricity generated—perhaps that study has been done, but I suspect the result would be to build bigger-than-300-MWe power plants. Most of the decarbonization needs are to power cities.

If a city needs 6.4 GWe of added power, it would be a bit over 21 BWRX-300s or AP300s, but only four EPRs or six AP1000s. Would it really be cheaper to build 20 AP300s than six AP1000s to produce the same amount of power? Would modularity help that much? Where is the right balance between lower

cost of electricity from larger reactors, lower upfront cost for small reactors, and the benefits of modularity?

I wish all these companies well. Some will fill important needs, such as providing high-temperature process heat or steam to industry in ways that will help lead to decarbonizing hard-to-decarbonize sectors. There will be ups and downs with contracts that don't pan out and companies or efforts that don't make it, but some will make it with commercial successes that will be very helpful to the world. There is much room to be cautiously optimistic, but we shouldn't count out the large nuclear power plant.

*Anonymous ANS member*

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