Timing for Generation Projects

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If a generation project is not needed to meet resource adequacy, energy or renewable energy mandate requirements, then: under what conditions should a project be built before it is needed? Generally, the answer is: *when building the project before it is needed results in lowering long-run cost to ratepayers*. This can occur in a number of ways:

- <u>Comparisons of Life-Time Revenue Requirements for Alternative</u> <u>Timings¹</u>: Cost over time are increasing at a high enough level to cause the levelized cost of revenue requirements to be lower with an earlier start-up for the project. For example:
 - Tax benefits from implementing renewable energy projects are expected to decline significantly over time;
 - o Construction costs are expected to increase significantly over time; or
 - Revenues from the sale of output from the facility are expected to fall significantly over time.
- <u>Cost-Benefit Analysis of Potential Cost Reductions for Future</u> <u>Implementation of Similar Projects</u>: The costs incurred by an early implementation are less than the benefits received from the experience received from that project when applied to a future implementation of a similar project. For example:
 - Operating and maintenance experience from a before needed startup reduces the operating and maintenance for the future implementation of a similar project.

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¹ Levelized cost comparisons are the typical analysis performed to determine the timing of a project that is being implemented before it is needed to meet non-economic requirements.