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A299. 40 CFR Part 98 defines cogeneration to mean a unit that produces electrical energy and useful thermal energy for industrial, commercial, or heating or cooling purposes, through the sequential or simultaneous use of the original fuel energy. Co-generation systems may be "sequential or simultaneous" but in all cases cogeneration involves onsite generation of electricity and useful thermal energy and some form of waste heat recovery. For example, a gas turbine or reciprocating engine generates electricity by burning fuel (natural gas or biogas) and then uses a heat recovery unit to capture useful heat from the prime mover's exhaust stream. Alternatively, steam turbines generate electricity as a byproduct of steam generation through a fired boiler. There are also cogeneration systems in which the fuel input is first applied to a thermal process such as a furnace and at least some of the heat rejected from the process is then used for power production.

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