

## Strawman Top-Level Requirements and Goals for Component Certification Facility (CCF), Materials Certification Facility (MCF), Demonstration Plant and Commercial Plant

Goal/Requirement	CCF	MCF	Demo	Commercial
Must use technologies to be employed in commercial power plant	No	No	Yes	NA
Net electric output must be greater than	NA	NA	75% commercial	NA
Cost of electricity (COE) must be competitive (in 1992 mill/kWh)	NA	NA	80 (Goal)	65 (Goal)
Availability	60%	60%	80%	90%
No evacuation plan required for any credible accident:	Yes	Yes	Yes	Yes
Total dose at site boundary	< 1rem	< 1rem	< 1rem	< 1rem
Generate no rad-waste greater than	Class C	Class C	Class C	Class C
Must demonstrate public day-to-day activity is not disturbed	Yes	Yes	Yes	Yes
Must not expose workers to a higher risk than other power plant	Yes	Yes	Yes	Yes
Must demonstrate robotic maintenance of power core	No	No	Yes	Yes
Must demonstrate routine operation with less than (x) unscheduled shutdowns per year including disruptions	10	10	1	1/10
Demonstrate a closed tritium fuel cycle	No	No	Yes	Yes
Must demonstrate operation at partial load conditions at	No	No	Startup - 50%	Startup-50%