

## Water Use Rates of Different Power Generation Methods

(Source: National Renewable Energy Laboratory)

Power Technology	Cooling Technology	Withdrawal Rate (gal/MWh)	Consumption Rate (gal/MWh)	Withdrawal Rate (gal/kWh)	Consumption Rate (gal/kWh)
Hydro	none	1	1	0.001	0.001
Gas-CT	none	1	1	0.001	0.001
Gas-CT-NSP	none	1	1	0.001	0.001
Gas-CC	once	11380	100	11.380	0.100
Gas-CC	recirc	255	205	0.255	0.205
Gas-CC	dry	2	2	0.002	0.002
Gas-CC	pond	5950	240	5.950	0.240
Gas-CC-NSP	once	11380	100	11.380	0.100
Gas-CC-NSP	recirc	255	205	0.255	0.205
Gas-CC-NSP	dry	2	2	0.002	0.002
Gas-CC-NSP	pond	5950	240	5.950	0.240
Gas-CC-CCS	recirc	506	378	0.506	0.378
Gas-CC-CCS	dry	0	0	0.000	0.000
CoalOldScr	once	36350	250	36.350	0.250
CoalOldScr	recirc	1005	687	1.005	0.687
CoalOldScr	dry	0	0	0.000	0.000
CoalOldScr	pond	12225	545	12.225	0.545
CoalOldUns	once	36350	250	36.350	0.250
CoalOldUns	recirc	1005	687	1.005	0.687
CoalOldUns	dry	0	0	0.000	0.000
CoalOldUns	pond	12225	545	12.225	0.545
Coal-new	once	27088	113	27.088	0.113
Coal-new	recirc	587	479	0.587	0.479
Coal-new	dry	0	0	0.000	0.000
Coal-new	pond	17914	545	17.914	0.545
Coal-IGCC	once	18136	90	18.136	0.090
Coal-IGCC	recirc	393	380	0.393	0.380
Coal-IGCC	dry	0	0	0.000	0.000
Coal-IGCC	pond	9635	32	9.635	0.032
coal-CCS	once	56483	217	56.483	0.217
coal-CCS	recirc	1224	921	1.224	0.921
Coal-CCS-NSP	once	56483	217	56.483	0.217
Coal-CCS-NSP	recirc	1224	921	1.224	0.921
o-g-s	once	35000	240	35.000	0.240
o-g-s	recirc	1203	826	1.203	0.826
o-g-s	dry	0	0	0.000	0.000
o-g-s	pond	5950	240	5.950	0.240
nuclear	once	44350	269	44.350	0.269
nuclear	recirc	1101	672	1.101	0.672

nuclear	dry	0	0	0.000	0.000
nuclear	pond	7050	610	7.050	0.610
<b>Nuclear-NSP</b>	once	44350	269	44.350	0.269
<b>Nuclear-NSP</b>	recirc	1101	672	1.101	0.672
<b>Nuclear-NSP</b>	dry	0	0	0.000	0.000
<b>Nuclear-NSP</b>	pond	7050	610	7.050	0.610
<b>geothermal</b>	none	40	40	0.040	0.040
<b>biopower</b>	once	35000	300	35.000	0.300
<b>biopower</b>	recirc	878	553	0.878	0.553
<b>biopower</b>	dry	0	0	0.000	0.000
<b>biopower</b>	pond	450	390	0.450	0.390
<b>CofireOld</b>	once	35000	300	35.000	0.300
<b>CofireOld</b>	recirc	878	553	0.878	0.553
<b>CofireOld</b>	dry	0	0	0.000	0.000
<b>CofireOld</b>	pond	450	390	0.450	0.390
<b>CofireNew</b>	once	35000	300	35.000	0.300
<b>CofireNew</b>	recirc	878	553	0.878	0.553
<b>CofireNew</b>	dry	0	0	0.000	0.000
<b>CofireNew</b>	pond	450	390	0.450	0.390
<b>Ifill-gas</b>	none	1	1	0.001	0.001
<b>ocean</b>	none	1	1	0.001	0.001
<b>distPV</b>	none	1	1	0.001	0.001
<b>CSP</b>	once	1000	1000	1.000	1.000
<b>CSP</b>	recirc	786	786	0.786	0.786
<b>CSP</b>	dry	26	26	0.026	0.026

[Hope, D., B.L. Ruddell, R.R. Rushforth, and S. Ryan, Crucial FEWSION Episode 4: The Last Mile & the Role of Citizen Scientists, https://soundcloud.com/diane-hope/crucial-fewsiion-episode-4-the-last-mile-the-role-of-citizen-scientists/s-6y8vL.](https://soundcloud.com/diane-hope/crucial-fewsiion-episode-4-the-last-mile-the-role-of-citizen-scientists/s-6y8vL)