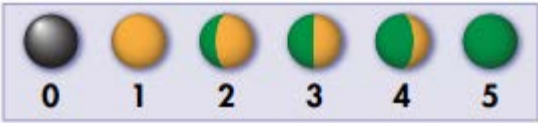




WARNING: Relative rankings in table based on specific assumptions and disclaimers documented in white paper—do not use in isolation. Relative scores are based on "typical" capabilities of resources presently being installed.

		SYNCHRONOUS INTERCONNECTION					INVERTER-BASED INTERCONNECTION				DEMAND RESPONSE	
		Coal	Natural Gas Simple Cycle	Natural Gas Combined Cycle	Nuclear	Hydro	Grid Scale Wind	Grid Scale PV	Distributed PV	Distributed Battery Storage	Large (Industrial/Commercial)	Small (Aggregated)
Volt/Var Control		5	5	5	5	5	5	5	3	3	0	0
Short Circuit Contribution		5	5	5	5	5	3	3	3	3	0	0
Frequency Control	Inertial Response	5	3	5	5	5	3	0	0	0	3	0
	Primary Frequency Response (droop)	3	3	3	0	5	3	3	0	3	3	0
	Regulation	3	5	5	0	5	3	3	0	3	3	3
	Load Following/Ramping	3	5	5	0	3	3	3	0	3	3	3
	Spinning Reserve	3	5	5	0	5	3	3	3	3	5	5
Short-term Availability (fuel)		5	3	3	5	3	3	3	3	3	3	3
Long-term Availability (plant)		3	3	3	5	5	3	3	3	3	3	3
Black Start		3	3	3	0	5	0	0	0	0	0	0



Source: EPRI

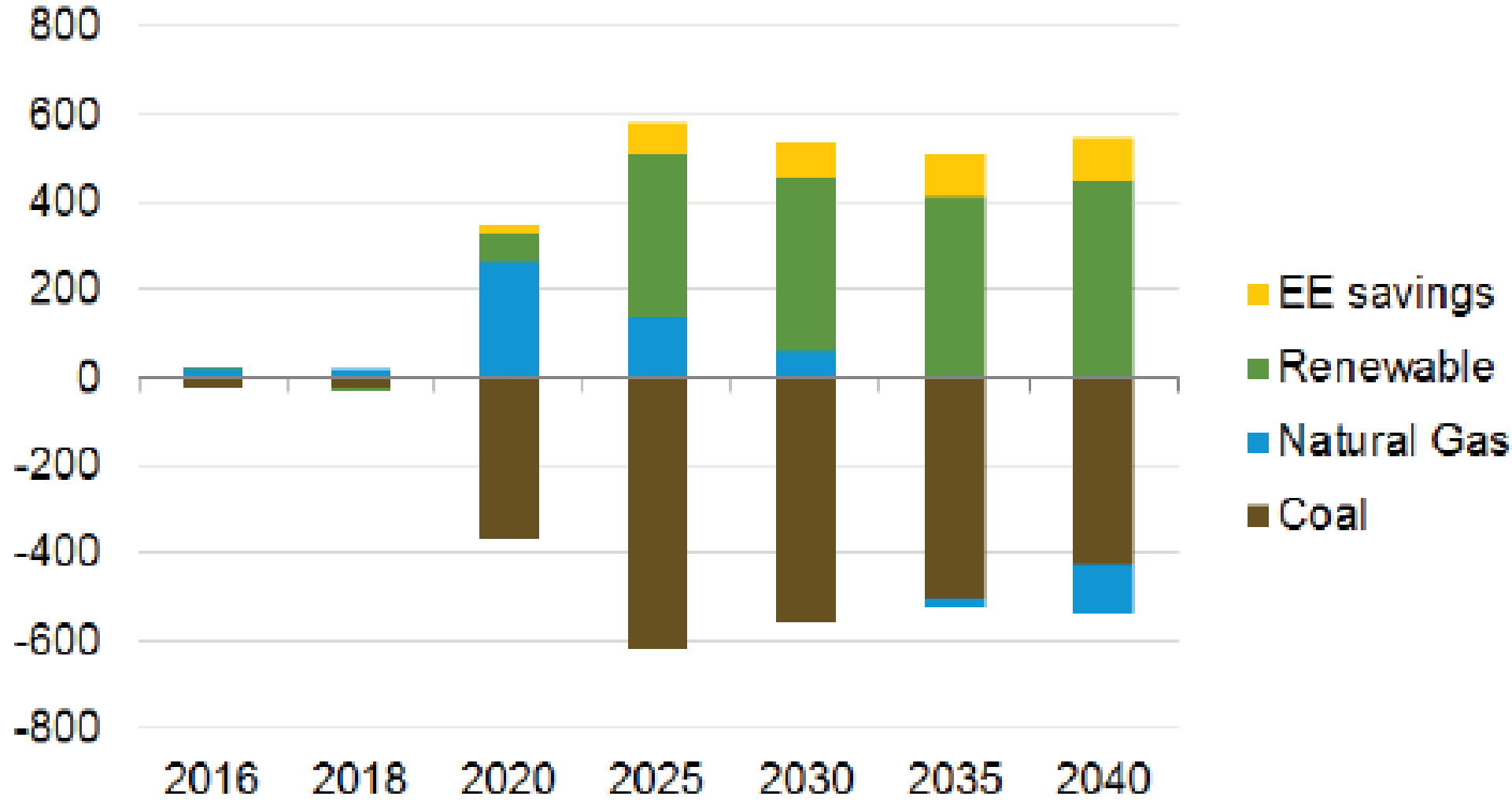
Reliable system operation requires online resources aggregately capable of providing the full range of required reliability services. Synchronous Interconnection resources provide the highest contribution across the broadest range of reliability services.

Spectra Access NE Services vs. Kinder Morgan NE Energy Direct

Service	Spectra Access Northeast	Tennessee NED
No-Notice Service	Yes	No
Ability to take market deliveries in advance of initiating supply receipts	Yes – for up to 2 hours	No
Advance reservation of capacity without requirement of flow	Yes	No
Non-ratable takes/Deliveries (i.e., takes of gas in excess of 1/24 of Daily Qty per hours)	Yes – Non-ratable deliveries, on a firm, Tariff-permitted, basis are supported by the Energy Reliability Service	No – Tariff applicable to NED is existing Tennessee Tariff with 1/24 hourly flow requirement and no firm non-ratable delivery rights.
More than NAESB standard Nomination/Scheduling cycles per day	Yes, hourly nomination/ scheduling opportunities across all Spectra pipelines	Tennessee supports NAESB standard cycles plus hourly nominations from 10:00 PM to 8:00 AM on a best efforts basis

Change in generation, energy efficiency savings under Clean Power Plan base policy case relative to AEO2015 reference case

Billion kilowatthours



Source: U.S. Energy Information Administration