

What are the best ways to interconnect greater amounts of Distributed Energy Resources (DER) and compensate them for the values they provide to the grid without compromising fairness for all customers and reliability?

DERs are: non-central power plant resources that do not have Automated Generation Control; may be distribution or transmission interconnected; can be in front of or behind a meter; can be generators or loads; can be passive or active; are either interconnected by the relevant utility process (in the case of generators) or enrolled in the serving utility’s DR program (in the case of DSM measures); and can be owned by either the utility, the meter owner, or a third party.

Policy Options	Design Considerations	Benefits	Drawbacks
Third-Party PPAs	Eligible customers, system size limit, net metering eligibility	Provides additional financing and ownership options to customers. Allows third parties contracting with tax-exempt entities to claim the federal ITC.	
Virtual or Group Net Metering	System size limit, aggregate cap, REC ownership, eligible customers, eligible technologies, number of customers that may have a stake in a single project	Subscriber rate is tied to the net metering rate (can be benefit or drawback), provides an option for renters and customers without suitable sites for solar	
Community Solar or Community Renewable Energy Policy	Credit rate for subscribers, system size limit, aggregate cap, REC ownership, eligible subscribers, eligible technologies, subscription limits, carve-outs, project ownership (third parties only, utilities only, third parties and utilities) low-income provisions	Provides an option for renters and customers without suitable sites for solar. Program design is very important - can make a program successful or unsuccessful.	Program design is very important - can make a program successful or unsuccessful.
Bring Your Own Device Program (Batteries or Thermostats)	Compensation rate or incentive for participation, rules for participants (ex. Allowing utility to control the system at certain times)		
Optional Energy Storage/DER Rate	Energy rate structure (typically time-varying), demand charges (whether to include and what design - coincident peak, non-coincident, how many, rates, etc.), eligible technologies, eligible customers	Utilities can send price signals to DER owners	Tariff could shift system peak
Non-Wires Alternative Tariff and Procurement (credits for certain DERs in locations where aggregated they can potentially defer/mitigate distribution system investments)	Eligible circuits, eligible customers, eligible technologies, credit rate, interaction with other programs (like net metering)		
Performance-Based Demand-Side Management Compensation (credit for providing capacity during certain events or specified hours)	Eligible technologies (demand response, energy storage), eligible customers, time periods for compensation, notification procedures, compensation rate		
Microgrid Services Tariff	If a standby charge were included, how much would that detract from the tariff		Standby rate likely
Leasing	Aggregate cap, eligible customers, system size limit, net metering eligibility, whether utilities allowed to be lessors or not	Provides additional financing and ownership options to customers	Lessors leasing to tax-exempt entities may not claim the federal ITC.
Utility-Owned BTM Program	Aggregate cap, eligible customers, product, customer compensation or incentive, impact on third party market		
Optional Smart Home Rate	Energy rate structure, demand charges, eligible customers	Price signals	Privacy concerns