



# Rates, Incentives and Demand Response

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# Rates: System Integration Issues



## Integrating Efficiency, Demand Response, and Renewables

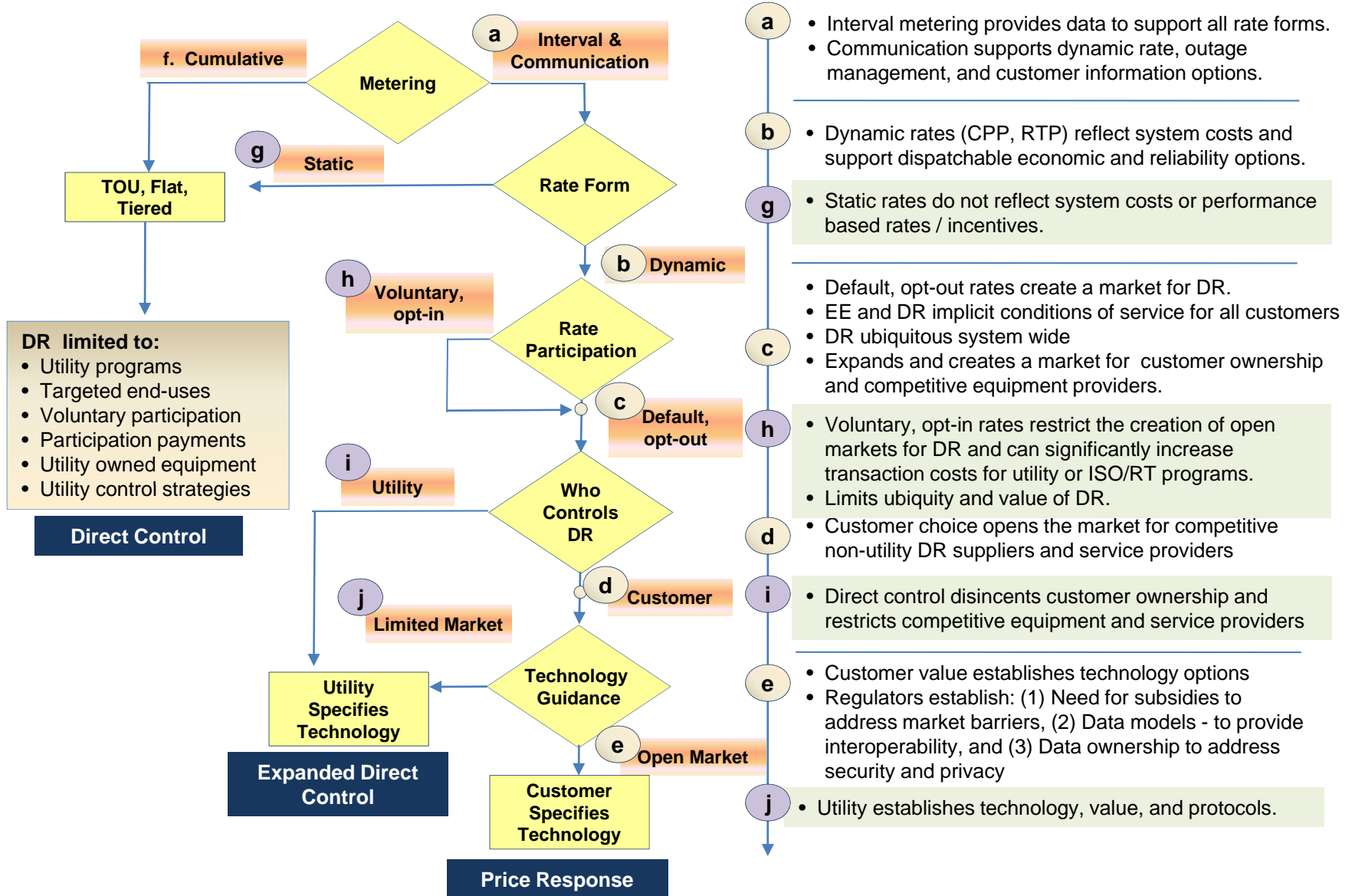
		Requirements and Objectives – Key Questions	
Rates Design	1	Should incentives for efficiency (EE), demand response (DR), and renewables be integrated into the customer rate or administered separately ?	<b>Integrated Efficiency, Demand Response and Renewable Incentives</b>
	2	Should customers be rewarded or penalized based on their actual performance or should customers be paid to participate ?	<b>Performance-Based Incentives</b>
	3	Should retail rates provide capability to integrate and reflect wholesale nodal prices ?	<b>Retail-Wholesale Integration</b>
Operations	4	Should demand response [DR] be automated and dispatchable ? .	<b>Dispatchability</b>
	5	• Should DR be available on all circuits throughout the utility system or be dependent upon sporadic and fluctuating participation ?	<b>Ubiquitous Availability, DR Valuation</b>
	6	• Should DR, like efficiency [EE] , be a condition of service for all customers ?	
	7	Who should determine what, when and how to control customer loads, the customer or the utility ?	<b>Customer Choice</b>
Costs	8	Should customers be allowed to maximize the value of their investments in EE, DR and renewables by simultaneously participating in day-ahead economic as well as real-time reliability options ?	<b>Simultaneous Participation in Economic and Reliability Options</b>
	9	Should customers be able to acquire automated systems and DR equipment and services through open market providers or should these devices be provided by the utility ?	<b>Market-based Technology</b>



## Rate Design Issues

<b>1. Rate simplification to improve customer understanding</b>	<ul style="list-style-type: none"><li>• Most or nearly all rate designs are too complex</li><li>• Conventional rate designs are oriented toward “monthly or periodic” billing</li><li>• Rate designs need to consider the need for clear price signals<ul style="list-style-type: none"><li>a) Balance fixed vs. variable charges to provide meaningful price signals</li><li>b) Address social welfare and other subsidies as adjustments to the total bill rather than an element of the rate design.</li></ul></li></ul>
<b>2. Rate simplification to facilitate Automated Dispatchable demand response</b>	<ul style="list-style-type: none"><li>• Dispatchable prices facilitate the automation of demand response.</li><li>• Automating demand response increases its value and reduces costs to the customer, utility, and ISO/RTO.</li><li>• Rate designs should provide operational capability to interface with customer energy management systems and control devices.</li></ul>
<b>3. Wholesale-retail rate integration</b>	<ul style="list-style-type: none"><li>• Rate designs should consider the need to reflect wholesale (e.g.hourly commodity costs)and retail costs into “operational” price signals to customers.</li></ul>

# Rates: Decision Choice Issues and Implications





# Demand Response

