

PUBLIC SECTOR FINANCING OF ELECTRICITY TRANSMISSION LINES IN CALIFORNIA

Produced in Cooperation with the Clean Air Task Force (CATF); NetZero California; and UC Berkeley's Center for Law, Energy, and the Environment (CLEE)

Mario DePillis, Jr.
Poulette Faraon

Denzel Hankinson

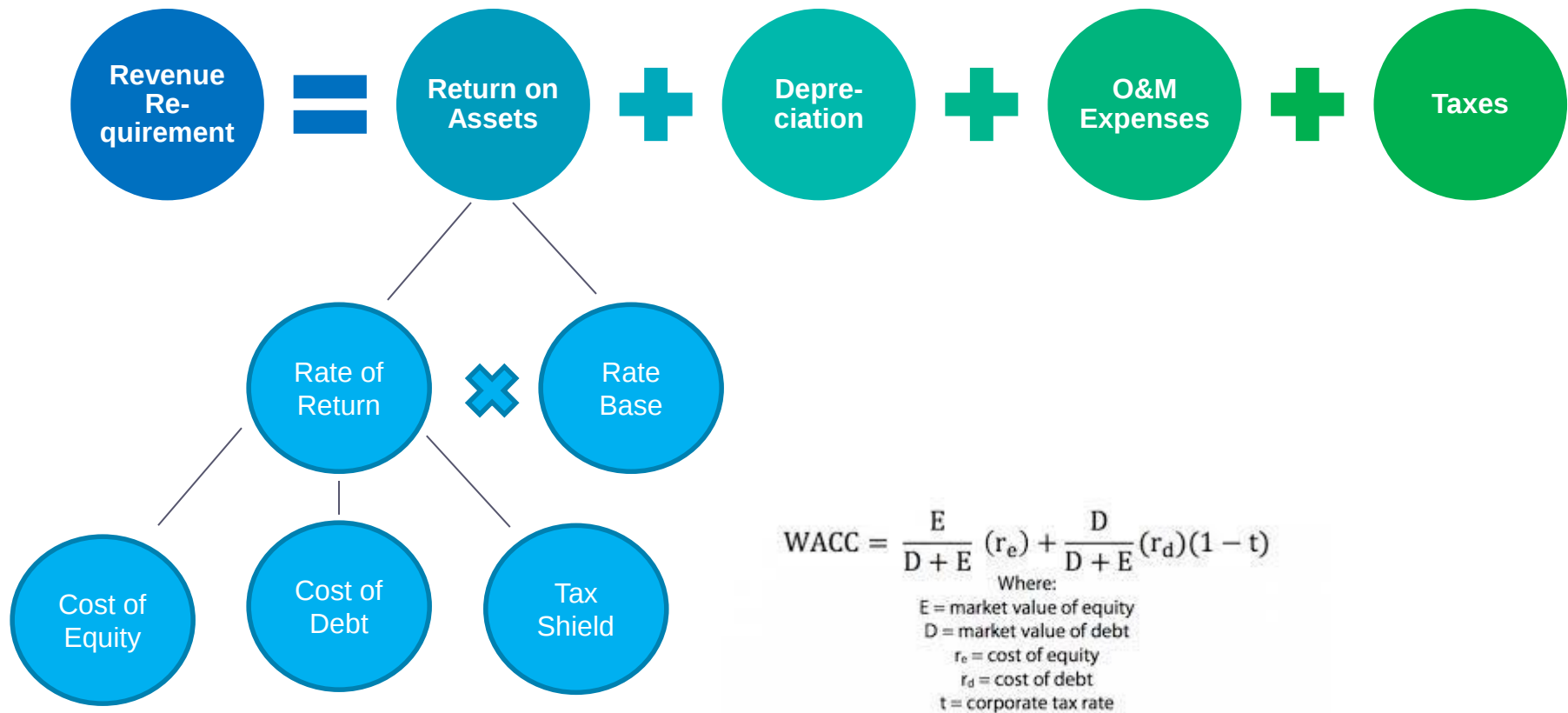
© *Economic and Energy Analysis*

Central Questions

Huge transmission investment is required for uptake of renewable energy and climate goals

- Could public sector financing and participation help reduce the cost of electricity transmission in California and/or expedite the completion of certain projects?
- If so, how, and by how much?
- What are the institutional options and how could they be implemented?
- What are the potential costs and benefits of such options?

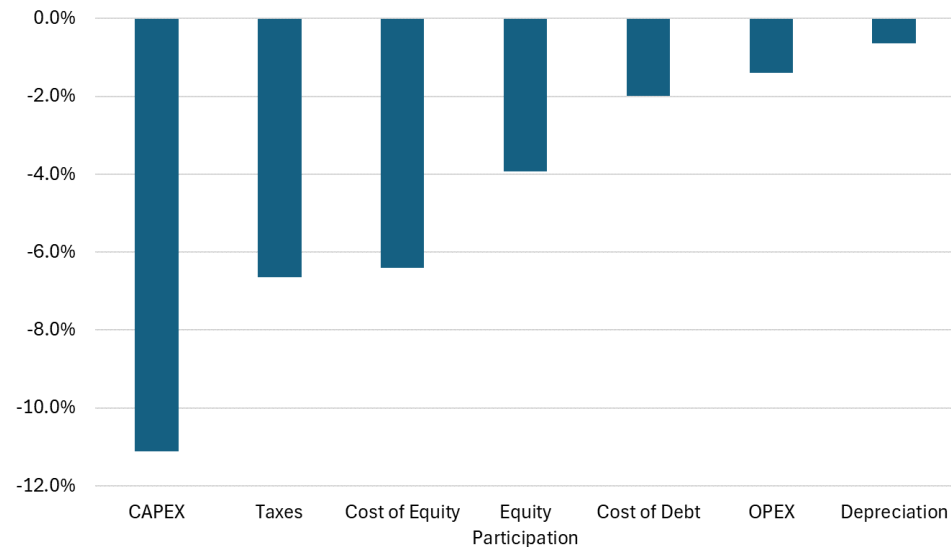
Possible Levers for Cost of Service



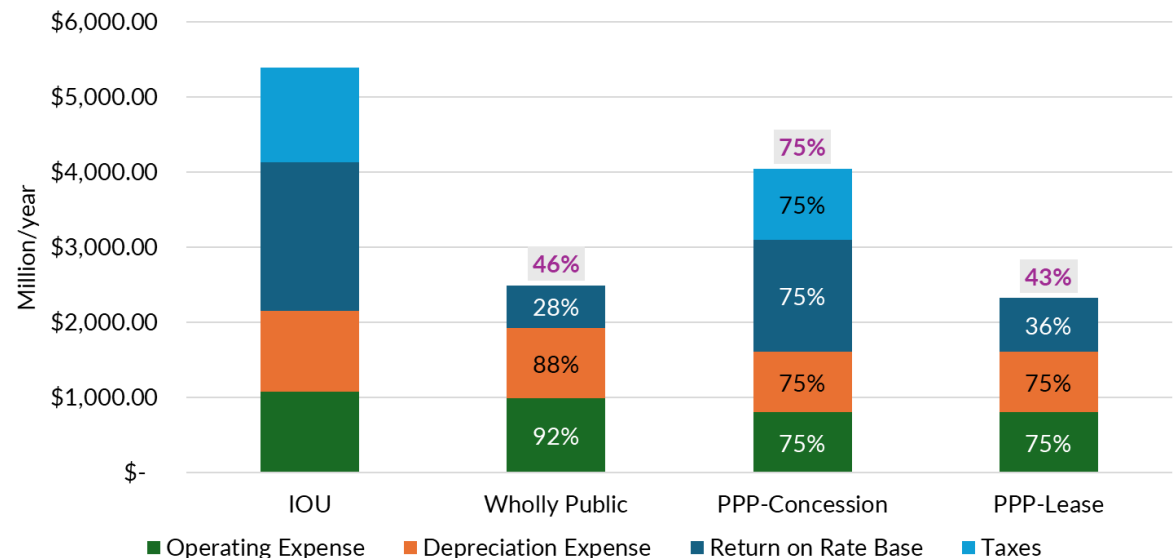
How could public sector financing reduce the cost of transmission?

- Lower cost of capital because of higher leverage and lower cost debt; may also avoid some tax costs
- Lower CAPEX because of competitive procurement
- Savings versus IOU case of as much as 57%
- Could save ratepayers **\$123 billion over 40 years**; much more if fire hardening is considered (8-10x)

Impact on Revenue Requirement of 10% reduction in input variables



Annual Customer Savings under Alternative Institutional Models



What are the institutional options?

Functions	Public	Public Private Partnerships			Private
	Corporatized Public Entity	Management Contract	Lease or Affermage Contract	Concession Contract	Divestiture (Privatization)
Who owns the assets?	Public entity	Public entity	Public entity	Public entity	Private Company
What is the private operator's responsibility?	Managing the operating area	Managing the operating area	Providing utility service	Providing utility service	Providing utility service
Who receives the tariff revenue?	Public entity	Public entity	Private company receives part of tariff to cover O&M; Public entity receives part of tariff to cover capital costs	Private Company	Private Company
How is the private operator remunerated?	N/A	Fixed monthly or annual fee + incentive payments	Operating profit	Total profit	Total profit
Which risk does the private operator bear?	N/A	Loss of remuneration	Risk related to operations and/or demand [†]	Most risk of service provision (operations and investment)	All risk of service provision (operations and investment)
Who employs the staff?	Public entity	Public entity	Private Company	Private Company	Private Company
Who is responsible for capital expenditure?	Public entity	Public entity [†]	Public entity [†]	Private Company	Private Company
What is the typical term?	Perpetual	2-5 years	10-15 years	15-30 years	Perpetual

How might it be structured?

Lease Contract Example

