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Utility Accounting Issues Related to Alternative Energy

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Regulatory Commission Considerations

What Are the Roles of the State Commissions

- Determination of policy with respect to the use of green energy within the state
  - Renewable portfolio standards
- Establish rates and recovery mechanisms for utilities to recover costs associated projects and investments
  - Cost-based
  - Incentive-based

Renewable Portfolio Standards

- Facts
  - 29 states plus Washington D.C. have mandated RPS and 8 states currently have voluntary targets
  - State specific requirements for rate regulated utilities to meet certain energy targets using renewable sources
  - No federal mandate yet

Manage the Revenue Requirement

Manage the Revenue Requirement

- Ratemaking formula
  - (Rate Base X Rate of Return) + Operating Expenses
- Potential rate increases
  - Capital costs
  - PPAs
  - Transmission
  - Costs of compliance
- Disposition of benefits
  - RECs
  - Grant proceeds

Impact on Rates

- Rate increases may come in the form of
  - Base rate increases
  - Fuel clause trackers
  - Incentive provisions allowing for return adders
- Consideration of rate design and allocation to customer class
- Impactful to the customer and may adopt ratemaking techniques that require specific accounting consideration

Net Metering

- Almost all states have net metering policies now
- Customers reduce consumption which avoids costs starting with the more expensive usage tiers and potentially avoid infrastructure costs of grid support while still using those services
- Hot topic in implementing rates right now is related to generation credit and fixed grid support charges

Economics of Net Metering – A Simple Example

Annual Revenue Requirement = $1,000,000

Divided by: Annual kwh = 10,000,000

Rate per kwh = $0.10

Annual Revenue Requirement = $1,000,000

Less: Fixed Charge Revenue of $40,000

Volume Based Revenue = $960,000

Divided by: Annual kwh = 10,000,000

Rate per kwh = $0.096

Economics of Net Metering – A Simple Example

Assume 10% of customers have solar, covering 80% of their usage

Sales to Non-Solar customers = 9,000,000

Sales to Solar Customers = 200,000

Total Sales Volume = 9,200,000

Volume Based Revenue = $960,000

Divided by: Annual kwh = 9,200,000

Rate = $0.104 / kwh (9% increase)

Net Metering Issues

- Ratemaking considerations (as demonstrated on previous example)
  - Fixed
  - Variable
  - Caps on net metering
- Social debate
  - Cost transfer

Special Accounting Considerations

- Application of ASC 980, *Regulated Operations*
  - Base rate increases
- Alternative Revenue Programs (ASC 980-605-25)
  - Recording an equity return is subject to the provisions of this section
- Application of a Phase-In
  - Deferral of costs associated with a new generation facility
  - Other coincident deferrals

Special Accounting Considerations

- Cost of removal
  - Ratemaking and legal obligation
- Application of the FERC Uniform System of Accounts
  - Consolidation of a variable interest entity resulting from a power purchase agreement with a counterparty

Impact of Renewable Energy Investments on Rates

- Long-term power purchase agreements (PPAs)
- Leasing a facility
- Owning a generation facility

Impact of Renewable Energy Investments on Rates

	Long-term PPA	Plant Ownership
Amounts included in operating costs	Purchase price for power	Depreciation, repairs, taxes, etc.
Impact of PTC, ITC or Treasury grants on regulatory tax expense	None	Could reduce recoverable income tax or depreciation expense on a grossed-up basis
Amounts included in rate base	None	Undepreciated book value of plant. Could reduce rate base by unamortized ITC/grant.
Impact on equity return, book income, EPS	None	Typically increase

Issues in Evaluating Whether to Buy or Build

- Impact to shareholders
- Impact to ratepayers
- RFP and regulatory approval process
- Construction risk
- Site selection

Impact of Renewable Energy Investments on Rates

	ITC – Normalized	Treasury Grants – Not Normalized
Impact on regulatory tax expense or depreciation expense	Option 1 ITC – no impact on regulatory tax expense Option 2 ITC – amortization no more rapidly than ratably over the book life Deferred tax benefit on net basis adjustment should be recognized over the regulatory life of the plant	May reduce depreciation expense • No normalization restrictions as to time period Recognition of the deferred tax benefit on net basis adjustment is not subject
Amounts included in rate base	Reduction restored no less rapidly than ratably for Option 1 ITC No reduction for Option 2 ITC	May immediately reduce rate base by unamortized grant
Cost of Capital	May be treated less favorably than the weighted-average cost of capital	May reduce the weighted average cost of capital

Normalization Requirements

- Regulated taxpayers are mandated to share the benefit of ITC over the life of the property with
- Ratepayers
  - Option 1 – Rate base offset for balance unamortized ITC
  - Option 2 – Reduction to cost of service
- Similar rules were enacted and then repealed for Treasury grants
- Policy must be applied consistently

Challenges Ahead

- Gas Prices
- Mergers and acquisitions
- Alternative energy companies as REITs and YieldCos
- Feed-In tariffs
- Acceptance of distributed generation
- REC markets

Questions?

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