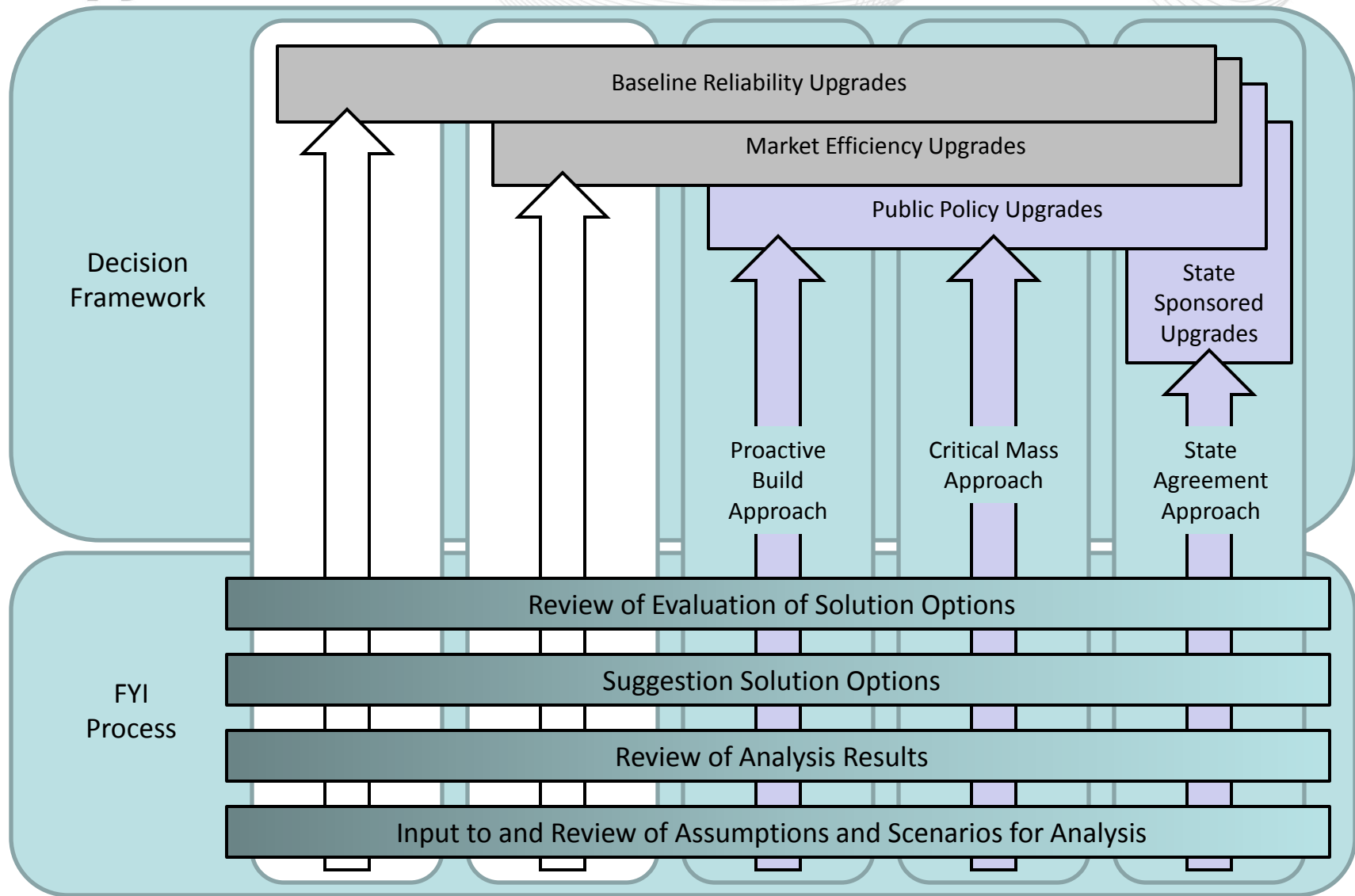


# Planning Process Drivers

RPPTF  
June 8, 2012



- **Reliability**
  - Operational performance
  - At-risk generation & retirements
  - Aging infrastructure
- **Market Efficiency**
- **Public Policy – Renewable Portfolio Standards**
- **ARR Insufficiency**

- Timing across different drivers
- Certainty regarding need
- Cost allocation

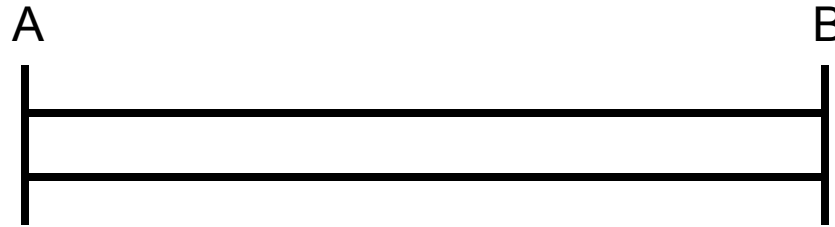
- Timing across different drivers
  - Different need dates (reliability criteria violations versus desired generator in-service dates)
    - Generators may want to be in service before multi-driver project could possibly be built
  - Reliability criteria violations identify hard in-service dates – public policy and market efficiency value may vary based on in-service date (no hard date)

- **Certainty regarding need**
  - Reliability criteria violations establish hard in-service dates
  - When should generator needs be included? (after execution of ISA?)
    - What do you do with capability if generator drops out of queue after multi-driver project is approved
  - Public policy drivers may require state buy-in based on cost of transmission and other factors
  - Public policy drivers may involve hypothetical generation that may not materialize

- **Cost allocation**
  - Different cost allocation for different drivers
  - Weighting of benefits associated with different drivers
  - Current approach is hierarchical (cost of reliability solution is identified first)
  - Should costs associated with public policy generators be assigned to the generators or to load?
    - If public policy costs are assigned to load, what should be the basis for allocation?
    - If public policy costs are assigned to load, should capability be reserved only for renewable resources?



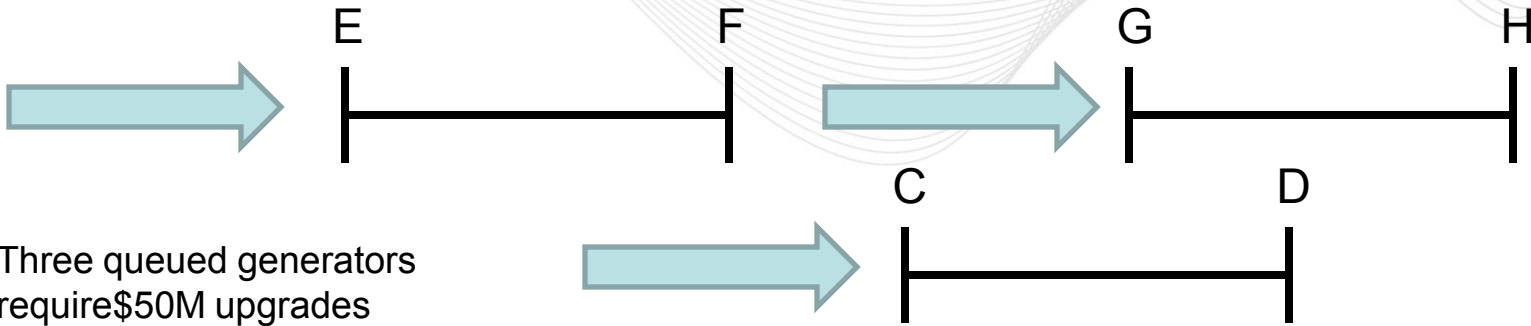
Queued generator deliverability issue resolved by \$10M upgrade between C and D



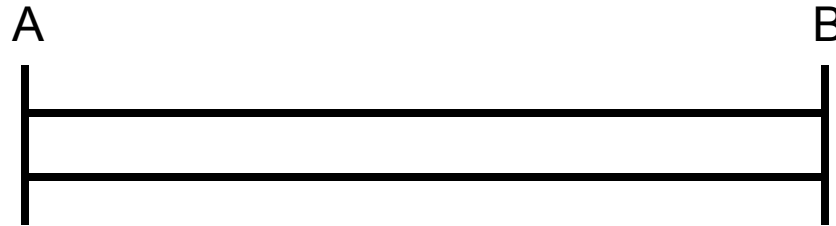
Reliability criteria violation resolved by \$100M upgrade between A and B

- Upgrade A – B obviates the need for Upgrade C – D
- Upgrade A – B is best solution to the criteria violation regardless of any decision by generator
- Generator pays \$10M toward Upgrade A – B
- If generator withdraws from queue, cost of Upgrade A – B is allocated fully to load





Three queued generators require \$50M upgrades between C and D, E and F, and G and H, respectively



Reliability criteria violation resolved by \$100M upgrade between A and B



All issues, collectively, resolved by \$200M upgrade between A and B

- Larger Upgrade A – B obviates the need for Upgrades C – D, E – F, and G – H
- Smaller Upgrade A – B is best solution to the criteria violation if generators are not considered
- Generators pay \$50M, each, toward Larger Upgrade A – B, or  
Generators pay \$33.33M, each, based on share of increment above cost of Smaller Upgrade A – B, or  
Total cost is pro-rated down for load and generators
- If two generators withdraws from queue, what do you do with excess cost?
  - Roll it over to subsequently queue generators, if any?
  - Allocate it to load?
- If generators need to be in service sooner than Larger Upgrade A – B, it would seem that some accommodation should be made to provide incentive to agree to participate in larger upgrade

- More aggressive planning for reliability coupled with market efficiency
  - Current construct provides for reliability upgrades to be accelerated or made more robust if benefit/cost ratio is satisfied for incremental cost
  - What would allow for a more aggressive approach to such upgrades?
    - 24-month cycle provides for market efficiency analysis and reliability analysis to be done in parallel
    - Change to benefit/cost test?
    - Change to cost allocation for market efficiency component?

- Integration of generator requirements into reliability (or other) projects
  - Current construct doesn't specifically provide or prohibit
  - Write specific language to provide for case where reliability upgrade doesn't change (Example 1)
    - Deal with impact to generator if desired in-service date precedes completion of reliability upgrade
  - How do you deal with clusters of generation that require larger upgrades than required for reliability (Example 2)?

- Integration of public policy with reliability (or other) drivers
  - Solicit public policies to be evaluated in planning cycle
  - Develop transmission upgrades with and without policy drivers
  - Parties identifying policy drivers sign off on incremental cost to satisfy policy
  - Incremental costs allocated consistent with policy-driven needs
  - Similar to State Agreement
    - Examines policy drivers as incremental over baseline
    - State Agreement looks at policy (and specific solutions) first

- Develop Operating Agreement (or Tariff) language
  - Need specific input on approaches
  - Any other examples or approaches to multi-driver projects?