PJM Planning Process Strawman

RPPTF
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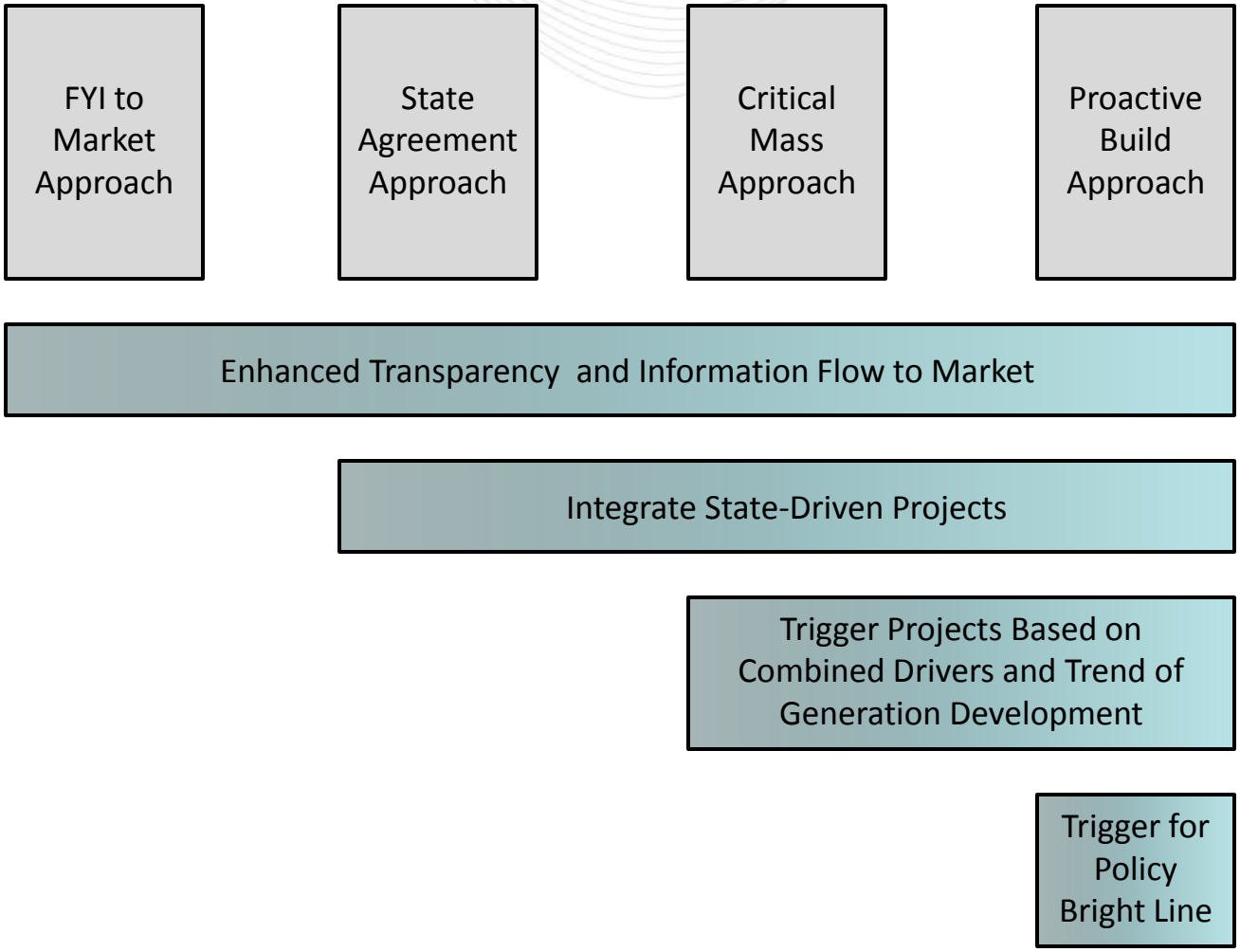
Decision Framework



Decision Framework Elements

- FYI to Market Approach
  - Perform extensive scenario planning analysis
  - Provide wide range of results to market – allow market to decide what resources and associated transmission should proceed to meet goals other than reliability
  - Results could include performance of various solution options, but no action would be taken by PJM
  - Provide for greater stakeholder interaction on front and back end

Decision Framework Elements

- FYI to Market Approach
  - More extensive stakeholder discussion of input assumptions and scenarios for analysis
  - Discuss desired information with TEAC before each RTEP cycle
  - Produce text documents to support TEAC slides
  - More documentation of deliverability margins & limiting facilities
  - Discussion of assumption impacts

State Agreement Approach

- State Agreement Approach
  - Allows one or more states to decide how to meet goals
  - Integrate state selected projects into RTEP
  - Need to define manner of commitment to project to insure on-going integrity of RTEP

- Cost Allocation Issues
  - Upgrades to be paid for by states sponsoring project – allocation to be determined by those states
  - Safe harbor for sponsoring states from costs to meet similar policy goals by other states
  - Allocation could be based on a blend of needs – see Critical Mass Approach

- State Agreement Approach
  - Stakeholder discussion of input assumptions and scenarios will provide for analysis of specific state policy initiatives
  - Analysis would identify all related upgrades to support chosen driver (e.g. satisfaction of RPS requirements)
  - Subsequent analyses would have to protect capability associated with state sponsored project
  - Projects do not need to be discrete – state needs could be met by some portion of capability of more robust projects
    - Allocation would consider sharing of capability across multiple needs

- Critical Mass Approach
  - Can be used to consolidate baseline reliability, market efficiency, and interconnection needs
  - Commits to a project larger than needed for “bright line” drivers based on expectation that sufficient additional drivers exist and are likely to move forward
  - Allows transmission projects for renewables, or other generation, to be included in RTEP when some percentage of associated generating capacity commits through an executed ISA or other trigger

Critical Mass Approach

- Drivers
  - Critical Mass projects can be based on:
    - Reliability drivers coupled with pending interconnection projects
    - At-risk generation drivers (through Proactive Build) coupled with pending interconnection projects
    - Pending interconnection projects, alone
    - Any of the above coupled with State Agreement project drivers
    - Any of the above coupled with Market Efficiency project drivers
  - Would also integrate drivers from neighboring systems
    - Reliability criteria violations
    - Generation interconnection requests

Critical Mass Approach

- Critical Mass Options
  - Identify Critical Mass projects only when some portion of capability is associated with “bright line” drivers, such as reliability criteria violations
  - Identify Critical Mass projects even if 100% of capability is associated with interconnection projects

- Questions
  - How much capability should already be accounted for through “bright line” drivers?
  - How many other potential drivers must exist related to excess capability above “bright line” drivers to provide reasonable certainty that Critical Mass project will be needed?
  - How do we integrate interconnection analysis with RTEP analysis for a Critical Mass project?
  - How do we establish cost responsibility for generators related to a Critical Mass project?

Critical Mass Approach

- Integration With Interconnection Queue
  - Cannot perform System Impact Studies with and without Critical Mass project – would double the workload and make backlog issues worse
  - Impact Studies will identify incremental upgrades – Critical Mass will identify comprehensive upgrades for multiple projects
    - Incremental upgrades may be cheaper or more expensive than share of comprehensive upgrades
    - Incremental upgrades may be faster to build
    - Incremental upgrades are often obsolete and replaced by bigger upgrades as subsequent Impact Studies are completed

- Integration With Interconnection Queue
  - Need to identify cost allocation/assignment approach for interconnections (access fee vs. but-for vs. pro rata cost assignment)
    - Will not have identified a but-for cost via a System Impact Studies without Critical Mass project – again, would double the workload and make backlog issues worse
  - Attachment facilities would be identified separately and be a separate charge to the generator

- Critical Mass Options – Capability for Interconnection Projects
  - Offer capability through some form of solicitation
    - Give priority based on queue position (?)
    - Would need to segregate interconnection projects and Critical Mass project from other Impact Study analyses – can't allow capability to be taken for free
  - Will have to complete solicitation quickly and move projects to execution of ISA – can't carry projects in traditional System Impact Studies and Critical Mass projects as same time
  - Solicitation allows later queued projects to jump ahead if others are not willing to subscribe to Critical Mass project

- Critical Mass Options – Capability for Interconnection Projects
  - Lock into Critical Mass project and move “next” group of interconnection customers onto that capability
    - What constitutes “next” group of customers?
    - Critical Mass project cost shares may be higher or lower than Impact Study upgrades depending on how they are determined
    - Customers with System Impact Study in hand may not want to face potential delays or uncertainty of moving to Critical Mass project
  - If we allow customers to opt out of Critical Mass project we still have the issue of segregating the capability from those Impact Study analyses

- Critical Mass Options – Capability for Interconnection Projects
  - Lock into Critical Mass project and retool any interconnection customer that doesn't have an executed ISA
    - Simple to implement
    - Creates potential delays for projects that are close to execution of ISA
    - Could create big cost swings for some interconnection customers – would depend on what changes are made to cost allocation process for interconnection customers

- Cost Allocation Issues
  - Allocations for projects will likely be unique based on drivers
  - Develop guidelines based on drivers, but not specific formulaic approach
    - Would likely need to identify percentage of capability attributed to various need drivers and then allocate within those drivers, e.g. 50% required for reliability criteria violations
    - Same capability can provide multiple values, e.g. reliability and market efficiency
  - File specific project allocation for each project at FERC
  - Need to address identification of cost responsibility for generators using capability of Critical Mass projects

- Critical Mass Approach
  - Access fee is simple to implement
    - Could be higher or lower than but-for cost for individual projects
    - Could leave some portion of project cost to be borne by network service customers
    - Could create different treatment for different projects in queue
      - Do we apply access fee to all generators?
      - Do we apply access fee only to renewable resources?
      - Do we apply access fee only to resources associated with Critical Mass projects?

- Critical Mass Approach
  - Pro-rata cost assignment is less simple to implement
    - Could be higher or lower than but-for cost for individual projects
    - Use of Critical Mass project may not be best indicator of contribution to multiple violations driving need to transmission upgrades
    - Use of portion of capability by other drivers may not be readily calculated to the MW
    - Should ensure that all project costs (portion not associated with other drivers) are borne by generators
    - Could create different treatment for different projects in queue

- Proactive Build Approach
  - Design “Bright Line” triggers related to various policy initiatives
  - Triggers will represent fairly high hurdles for proactive action

- Cost Allocation Issues
  - Depending on nature of trigger, cost allocation could follow current rules or be project specific (similar to Critical Mass)

- Proactive Build Approach
  - At-risk generation triggers will be defined for scenario analyses to coordinate with amounts removed in baseline
    - Lower levels of retirement of at-risk generation will require transmission upgrades in the RTEP
    - Trigger level to be determined
    - Criteria tests to be determined – load deliverability, NERC Category C?
    - Target regional, rather than local violations (may exclude NERC Category C)
    - Higher levels of retirement of at-risk generation will provide results for FYI and State Agreement Approaches
  - Other triggers can be identified in the future, but none are contemplated at this time

- Include Some Treatment of At-Risk Generation
  - Remove generation not cleared in two RPM BRA from baseline analysis
    - Issue with identifying generators that do not clear in RPM
  - Perform specific proactive retirement analyses for critical at-risk generation units
    - Identify required transmission upgrades to facilitate retirement
    - Maintain analysis confidentially, to be better prepared for retirement announcements
    - What criteria for selection of generators to study?

- Include Some Treatment of At-Risk Generation
  - Remove some portion of generation subject to environmental regulations from baseline
    - Increase CETO based on percentage of at-risk generation – leave individual generators in CETL analysis cases
  - Will identify more regional issues rather than local issues
  - May only utilize with respect to scenario analysis and decision framework (possibly Proactive Build)
  - Need to choose percentage of at-risk generation to evaluate
  - Study larger LDAs (global LDAs)
  - No issue of publicly identifying generators

Next Steps

- Work with stakeholders to develop recommendations regarding strawman framework
- FERC filing must be made in December in order to implement changes in 2012 RTEP cycle
- Review by the MRC and MC would have to be in the September – November timeframe
- Provide recommendations to Board in September – November timeframe coincident with MRC and MC review
  - Decide on independent action if no consensus is achieved with stakeholders