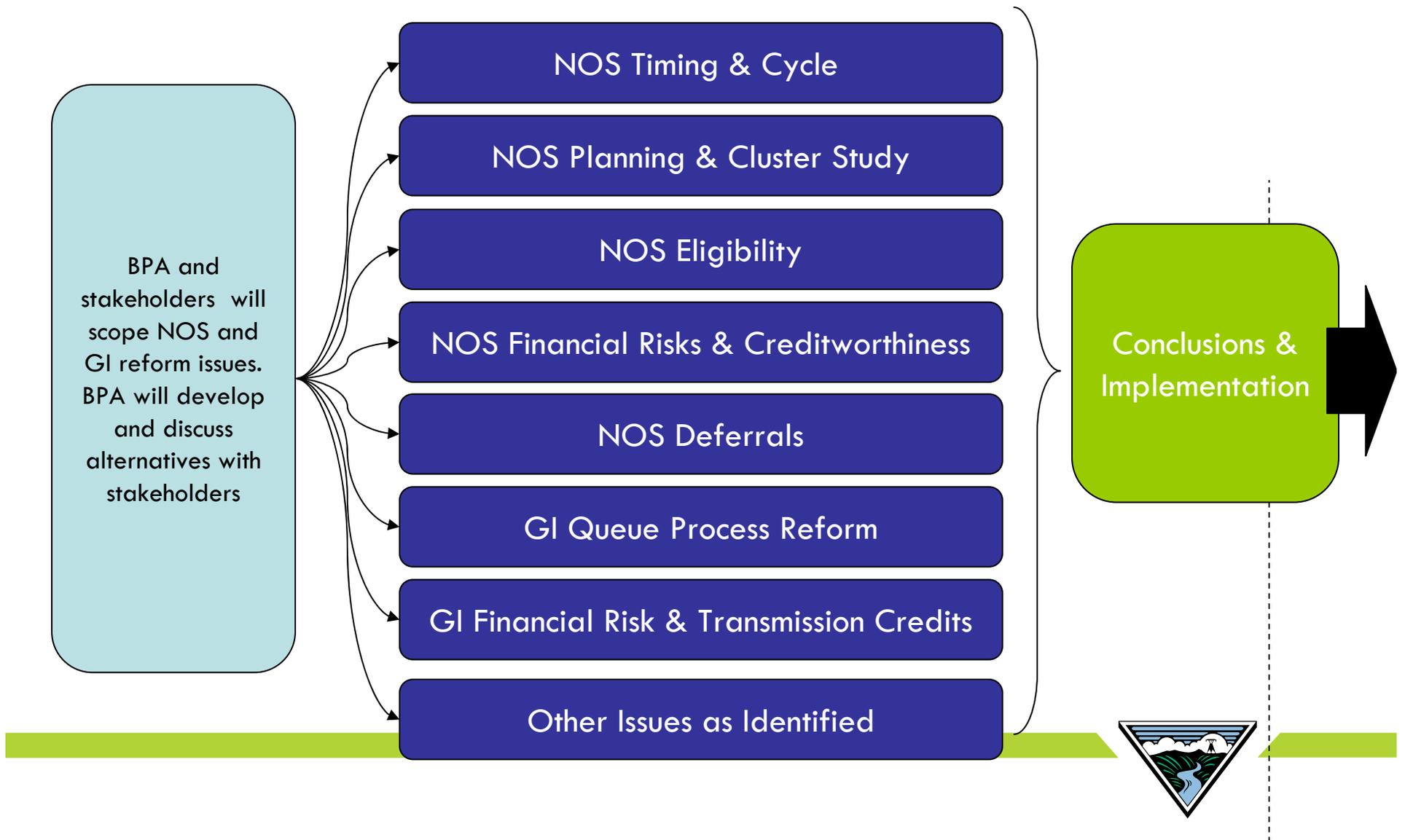


Generator Interconnection Procedural Reform

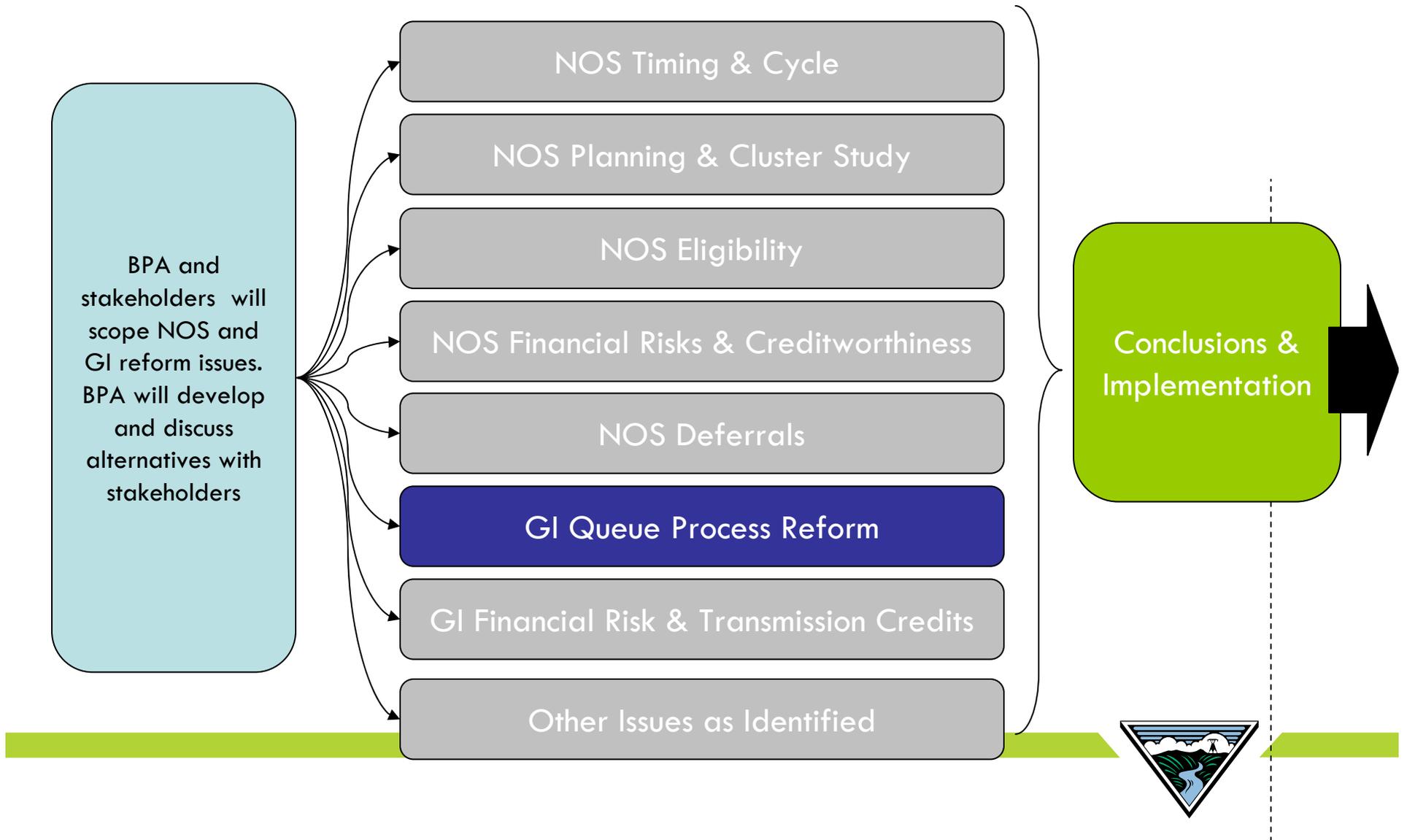
December 6, 2011



Processes & Initiatives



Processes & Initiatives



Generator Interconnection Procedural Reform

December 6, 2011

Straw-Man Proposals



Generator Interconnection Procedural Reform

Status Update

- BPA has been reviewing potential reforms to its Interconnection Procedures
- We met with customers for a Workshop in December, 2010, with participation from MISO and CAISO
- On July 20, 2011, BPA shared with stakeholders a high level view of how reformed GI Procedures might incorporate some concepts adopted by other utilities
- Reactions to these concepts varied between cautious support and a cautious preference for the status quo
- BPA has further developed these concepts and comments into a more-detailed “Straw Man” construction

Generator Interconnection Procedural Reform

GI Straw Man

- BPA's GI Straw Man for a possible reform of its Generation Interconnection Procedures is **NOT**.....
 - a definitive proposal
 - a preferred alternative
 - a staff-recommended policy

- BPA's GI Straw Man **IS**....
 - A model for discussion and debate
 - A starting-point that might lead to continued development, a radical change in course, or a decision to think again completely from the beginning

- ***There are no foregone conclusions today – we have made no decisions***

Generator Interconnection Procedural Reform

Current Interconnection Procedures:

LGIP: Attachment L to OATT

Applies to generators > 20 MW

FERC Order 2003, adapted to NEPA

SGIP: Attachment N to OATT

Covers generators \leq 20 MW

FERC Order 2006, adapted to NEPA

Generator Interconnection Procedural Reform

Background

- FERC Order 2003 did not contemplate having to contend with the surge of generation project requests experienced by any utility with a significant wind resource between 2003 and 2010
- The structure of Order 2003 requires a utility to consider all requests serially, with priority to capacity encumbered in queue order
- In the case of shared facilities, the burden for their funding falls upon the first-queued request, creating challenges to its viability
- BPA's compliance filing incorporated our NEPA obligations into the LGIP and SGIP, rendering moot our ability to tender Interconnection Agreements in the timeline contemplated by FERC
- BPA is now facing an increasing backlog of interconnection projects that are completing their interconnection studies but are unable to move forward, either because of their lack of financing or because the facilities they need are unlikely to be built

Generator Interconnection Procedural Reform

Strawman Principles

- Promote flexibility, transparency and efficiency in interconnection
- Provide greater certainty to interconnection plans of service for both BPA and customers
- Achieve greater equity in the funding of shared facilities
- Promote certainty in the schedules for the construction of interconnection and network facilities
- Support the continued participation of small generating facilities in the interconnection process

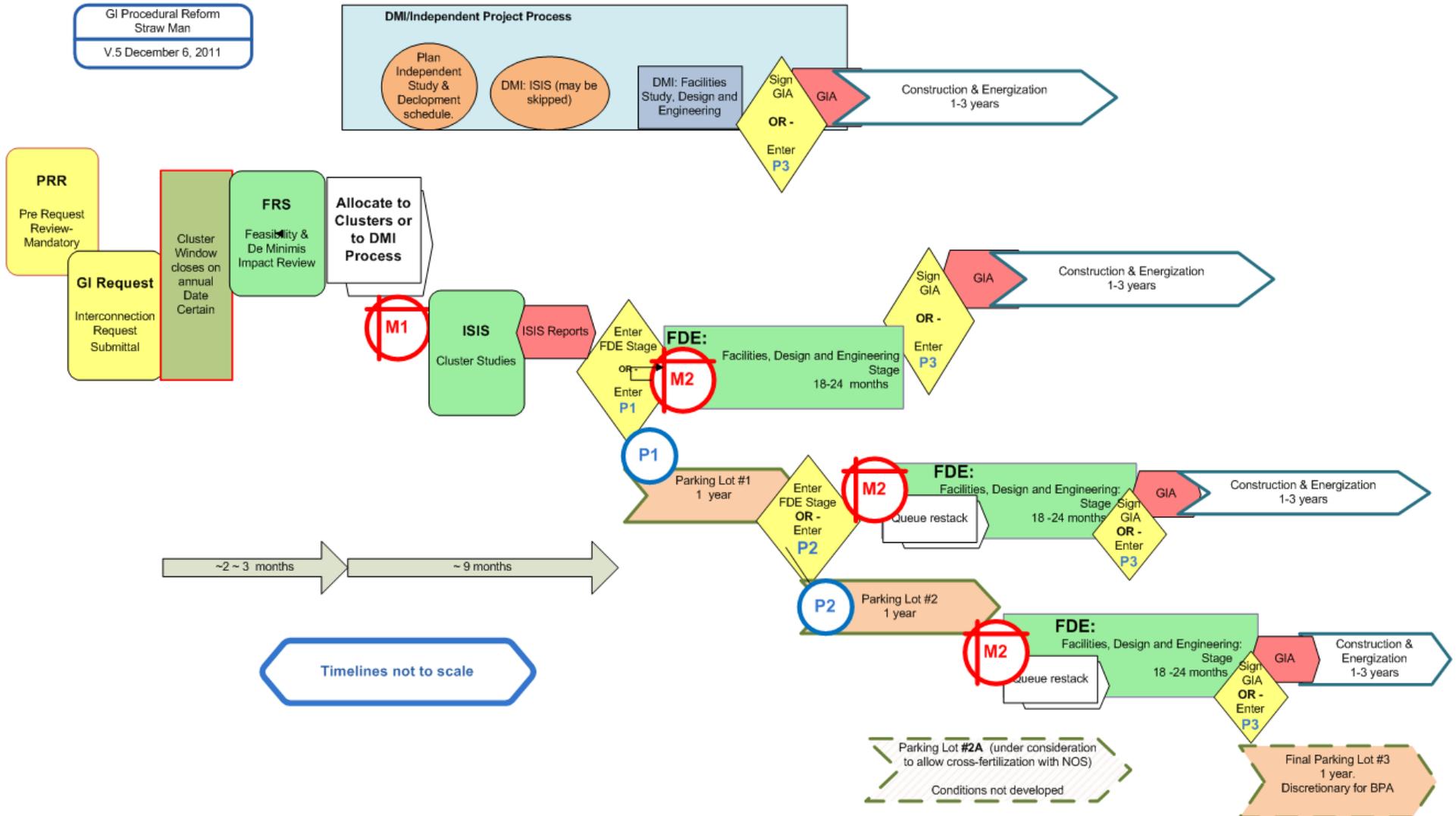
Generator Interconnection Procedural Reform

Strawman

- The Straw Man:
 - Unifies the LGIP and SGIP
 - Provides a separate process for small-scale or stand-alone projects
 - Adopts a clustering process for electro-geographically related requests
 - Allows projects to 'park' in a controlled space
 - Establishes 'milestones' to create mutual commitments between project and BPA
 - Opens the door for first-ready projects to move ahead
 - Replaces 'first come/first pay' with 'pro-rata cost allocation' for multi-user facilities

Generator Interconnection Procedural Reform

GI Procedural Reform
Straw Man
V.5 December 6, 2011



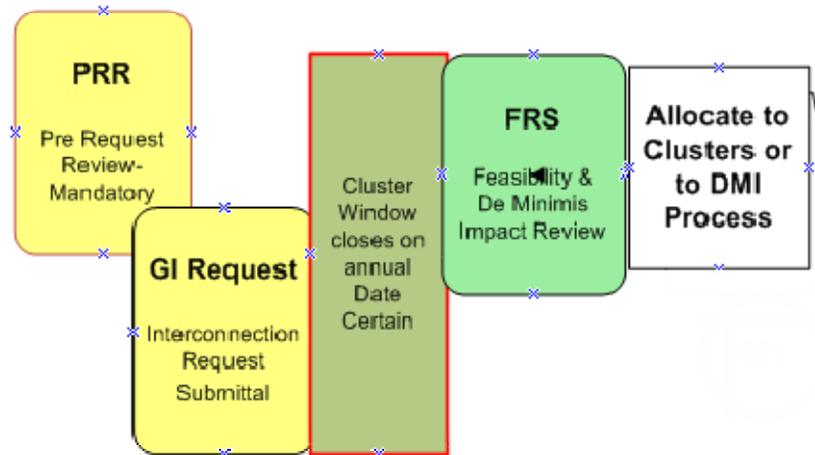
Generator Interconnection Procedural Reform

Strawman

Glossary:

- PRR: Pre- Request Review
- DMI: De Minimis Impact
- FRS: Feasibility Review Stage
- ISIS: Interconnection System Impact Study Stage
- FDE: Facilities Design and Engineering Stage

Generator Interconnection Procedural Reform



Generator Interconnection Procedural Reform

Strawman

- PRR:
 - A formal ‘laugh test’ reality check: requiring a Pre-Request Review (PRR) to establish the bookend parameters of a potential request
 - A confidential two-way communication between BPA and developer
 - Create a set of realistic expectations before creating binding commitments
 - Allow unrealistic projects the opportunity to rethink
 - Reduce BPA’s commitment to studying non-viable projects
 - Does not establish queue priority
 - If the developer disputes the proposed BPA study parameters, the PRR decision can be reviewed

Generator Interconnection Procedural Reform

Strawman

- **PRR:**
 - Question: Should there be a deposit or fee for the PRR?
 - Question: If the developer still wishes to proceed with what BPA deems to be an unrealistic project- should BPA require higher levels of deposit or other safeguards, or simply refuse the request?

Generator Interconnection Procedural Reform

Strawman

- Interconnection Request Submittal
 - The process will not change noticeably
 - The Request will look very similar to the current Appendix 1 of the LGIP

Generator Interconnection Procedural Reform

Strawman

- Request submittal (continued):
 - Require Site Control for all requests on submittal
 - No “deposit-in-lieu” option
 - Site Control to provide greater proof of commitment from both developer and site owner
 - Site to be verifiably adequate for the size of the project
 - Establish exceptions for 0.2 MW – 2.9 MW ‘behind the meter’ integrations.

Generator Interconnection Procedural Reform

Strawman

- Request submittal (continued):
 - Deposit refundability may be subject to detailed provisions or restrictions
 - Initial Deposits are refundable (less costs incurred), with possible exceptions depending on when Withdrawal takes place
 - All deposits will be rolled forward into subsequent study stages;

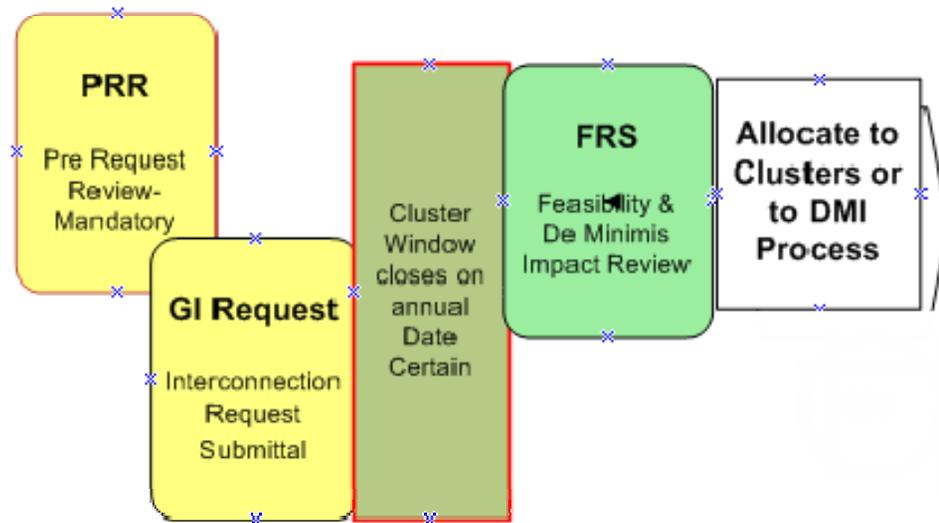
Generator Interconnection Procedural Reform

Strawman

Once the formal request is received:

- Feasibility & De Minimis Impact review:
 - Implement a universal “Feasibility Review”
 - To establish requests with ‘de minimis’ impacts (DMI)
 - Allocate requests to ‘Clusters’

Generator Interconnection Procedural Reform



Generator Interconnection Procedural Reform

Strawman

- Feasibility Review Stage (FRS):
 - Windows for determining clusters will close at specific dates annually (which may be staggered to better manage workflow)
 - FRS will include any necessary thermal/powerflow studies
 - Will establish which requests form electrically and geographically separable Clusters for the purposes of system impact study (ISIS) and development
 - Clusters will identify requests included and will be posted publicly

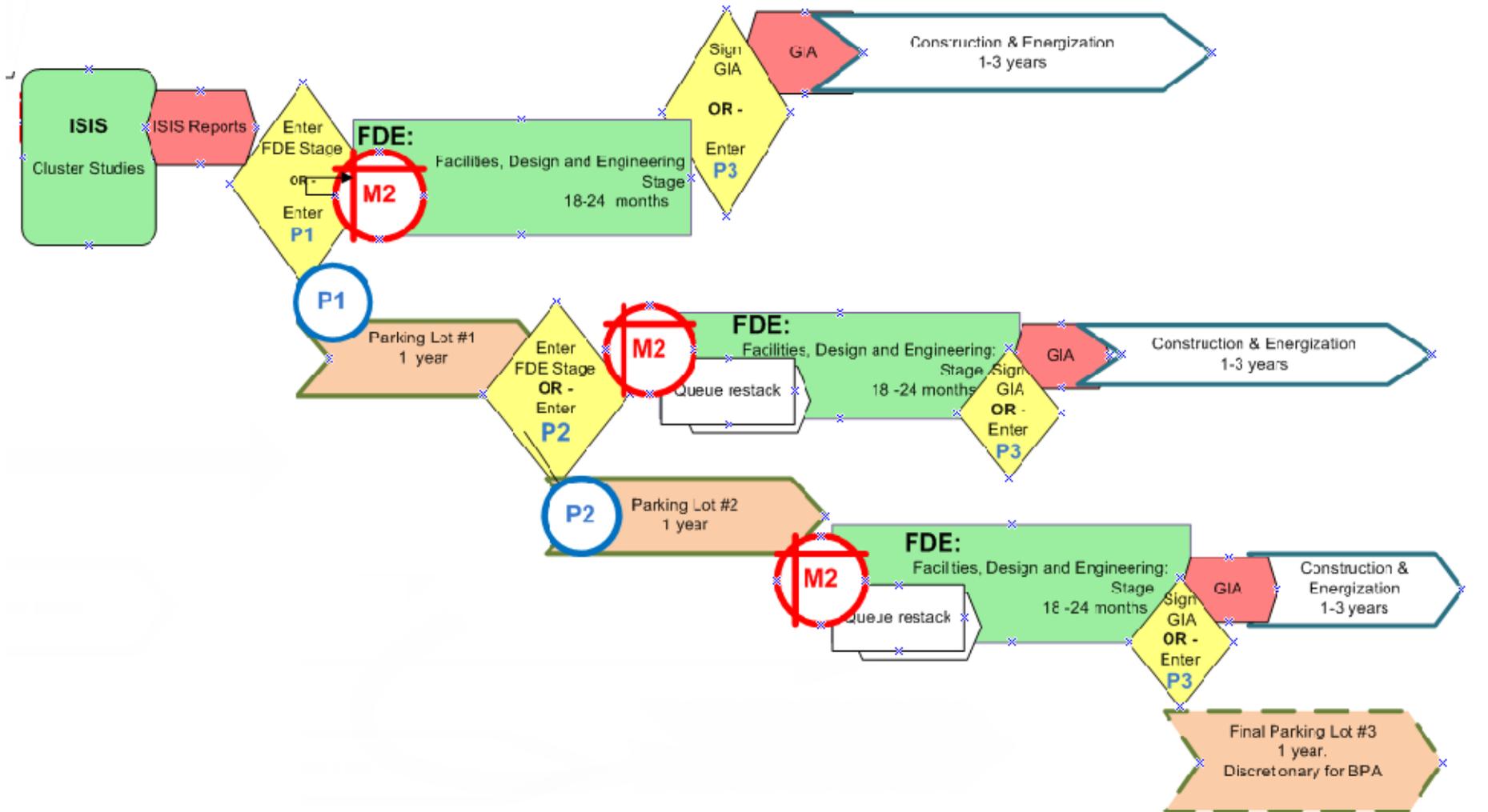
Generator Interconnection Procedural Reform

Strawman



- **Clusters – ISIS: - Milestone 1:**
 - Deposit for entry into ISIS cluster \$50,000
 - Declared Clusters will be defined and posted publicly 30 days after window close (net of any withdrawals)
 - ISIS Cluster studies will be completed in 180 days
 - Cluster reports will be reviewed with customers within 45 days
 - Estimates for facilities costs will be good-quality ‘Typicals’ based on recent experience
 - If the request is Withdrawn before the delivery of the ISIS Cluster Study Report, \$25,000 of deposits will be retained for restudy costs and the remaining balance refunded less an estimate of costs incurred to date
 - If the Request is Withdrawn after delivery of the ISIS Cluster Study Report and before the next Milestone requirement deadline, deposits will be refunded less pro-rata (per request) costs incurred to date

Generator Interconnection Procedural Reform



Generator Interconnection Procedural Reform

Strawman

- Parking Lot: Gate 1:
 - A request that has completed ISIS may request entry to the Parking Lot for one year initially

 - Must demonstrate: either
 - Active pursuit (submittal) of a County-level CUP, including demonstration of its environmental compliance activities to the satisfaction of BPA environmental specialists; OR
 - A completed Site Certificate application (not NOI) submitted to the appropriate State authority (e.g. WA EFSEC or OR EFSC)

AND

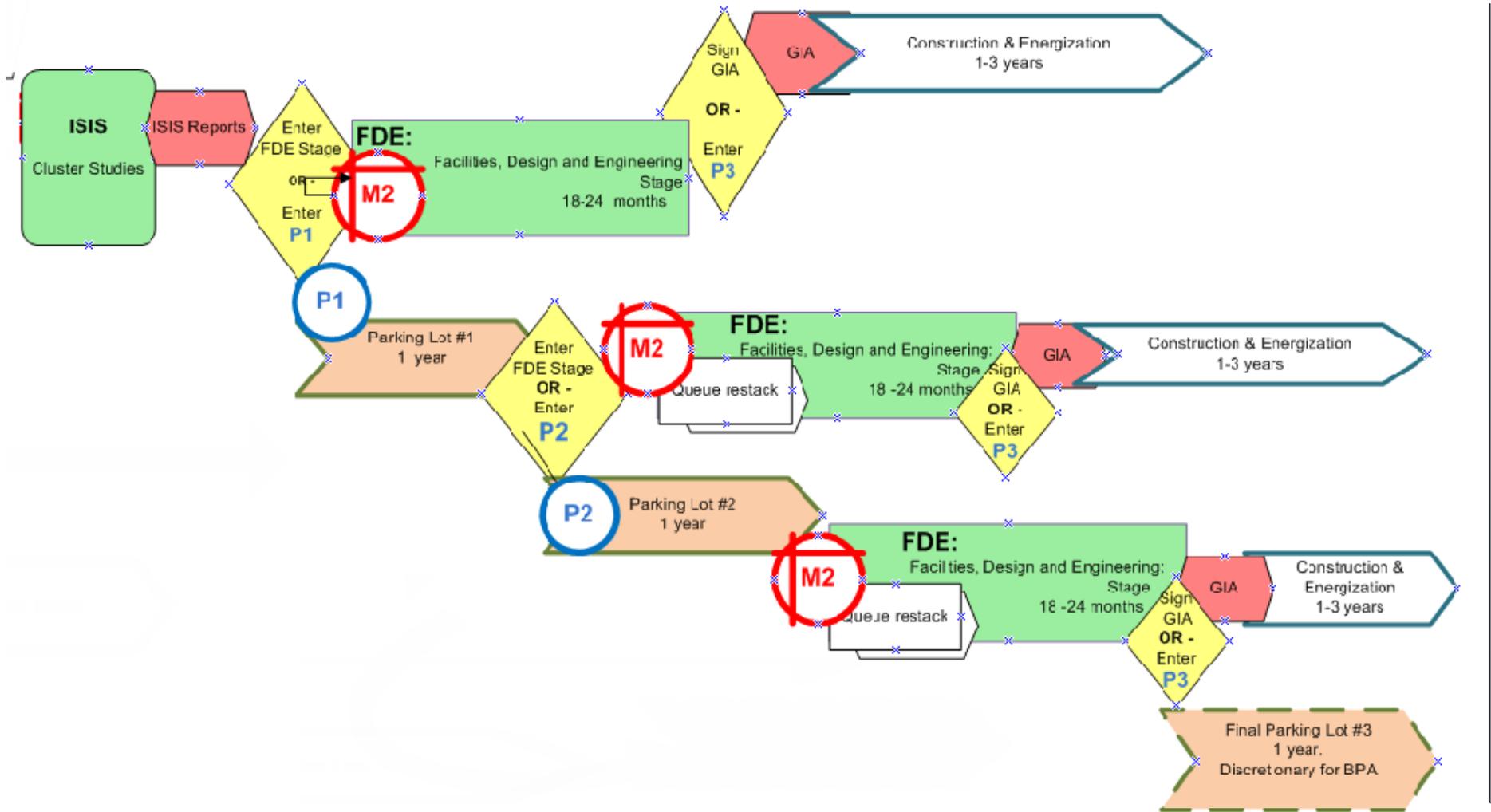
- Provide a non-refundable deposit of 15% of the estimated pro-rata costs of the shared interconnection facilities and upgrades for the Cluster calculated on the basis that all requests in the Cluster proceeded.

Generator Interconnection Procedural Reform

Strawman

- Parking Lot: Gate 1 (cont.):
 - A parked request will not retain its queue priority in the Cluster when it enters the next FDE Cluster Cycle, but will be placed lower than those that moved ahead of it, and ahead of those entering direct from ISIS
 - If the request does not enter EITHER Parking Lot Gate 2 OR the next available FDE Cluster Cycle it will be deemed to have been Withdrawn. \$25,000 of deposit will be retained for restudy costs and the remaining balance refunded less an estimate of costs incurred to date

Generator Interconnection Procedural Reform



Generator Interconnection Procedural Reform

Strawman

- **Facilities Design and Engineering Study (FDE):**
Milestone 2:
 - The Facilities Design and Engineering Study combines the current Interconnection Facilities Study with elements of the Engineering & Procurement agreement
 - The FDE is a commitment to proceed with the proposed interconnection
 - Once committed to FDE, request withdrawals are not anticipated or facilitated
 - Commitment to FDE triggers BPA NEPA review

Generator Interconnection Procedural Reform

Strawman

- Facilities Design and Engineering (FDE) Cluster Cycle: Milestone 2:
 - To proceed into FDE, the request must be committed to the Cluster Design Plan of Service, *contingent construction schedule and costs.

*Contingent schedule: A schedule for the design and construction of the interconnection facilities predicated on completion of site permit and NEPA ROD.

Generator Interconnection Procedural Reform

Strawman

■ FDE Cluster Cycle: Milestone 2:

- Commitment will be proven by some combination of the following:
 - An executed Power Purchase Agreement for over 5 years of MW commensurate with the scope and nature of the project;
 - Proof of firm transmission from the POI to a load or sink for over 5 years of MW commensurate with the scope and nature of the project;
 - Designation as a Network Resource by a BPA Network Integration Customer for 30% or more of nameplate generating capacity;
 - A deposit of 50% of the estimated pro-rata costs of the shared interconnection facilities and network upgrades described in the ISIS Cluster Report; AND
 - A deposit of 50% of the estimated costs of those facilities and upgrades directly-assigned to the project;

(continued.....)

Generator Interconnection Procedural Reform

Strawman

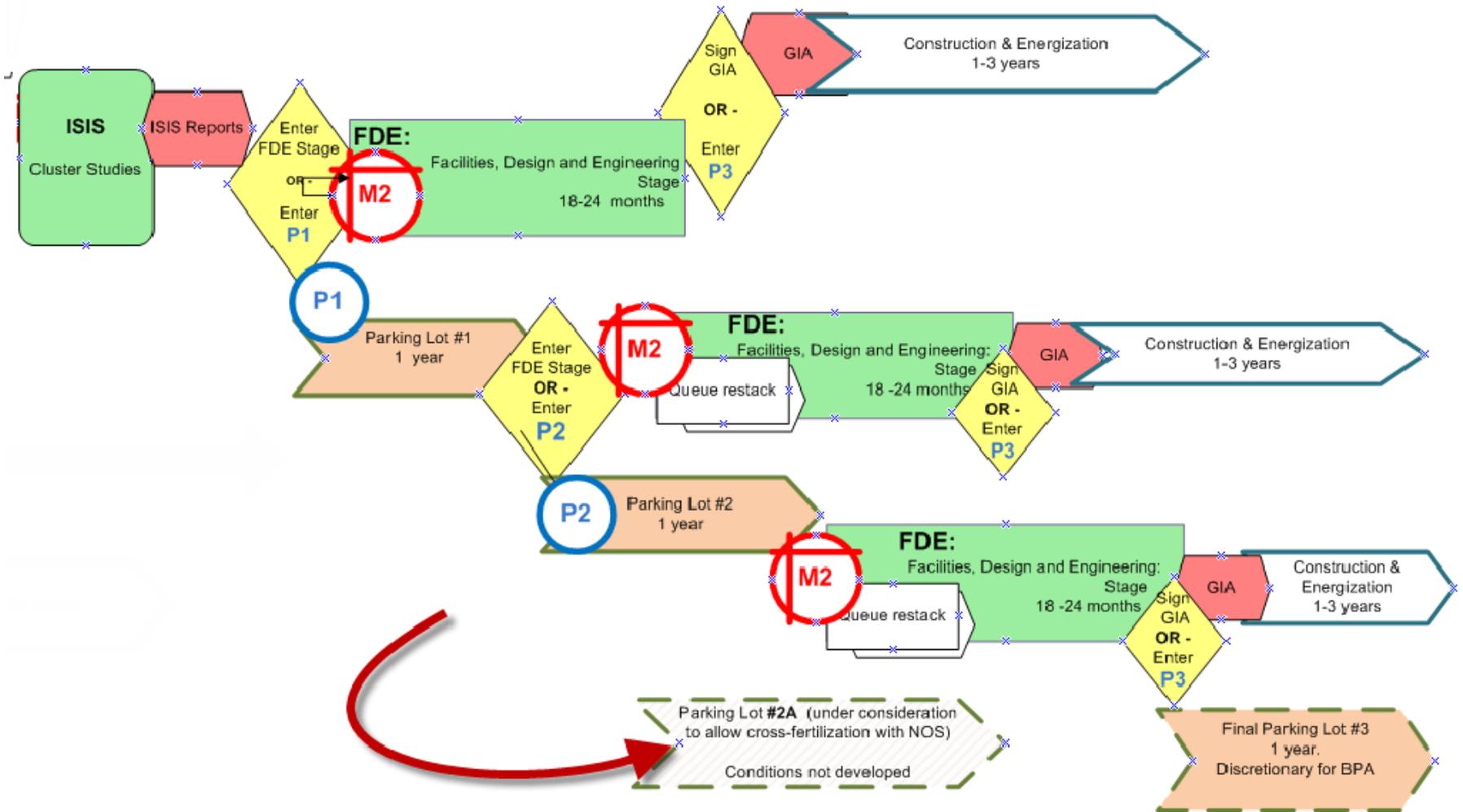
- Facilities Design and Engineering (FDE) Cluster Cycle
 - Proof of Site Control in the form of: direct ownership of the land underlying the project; or an executed lease for at least 25 years; or a binding executed contract between the Interconnection Customer and the owner of the property
 - Proof of fuel adequacy
 - Either:
 - A county, state or Federal Site Certificate or CUP for the entire project; or
 - A current completed application before the State or FERC being actively pursued (note: County level CUP application is not acceptable – unappealed CUP is required); or
 - BPA Record of Decision.

Generator Interconnection Procedural Reform

Strawman

- Facilities Design and Engineering (FDE) Cluster Cycle
 - FDE Cycle will last at least one calendar year; likely 18-24 months
 - Key stage accomplishments will include BPA's Capital Approval process
 - Enabling deliverable will be the negotiation of, and tender within 3 months of the completion of the FDE studies and designs, an Interconnection Agreement with commitment to its schedule.

Generator Interconnection Procedural Reform

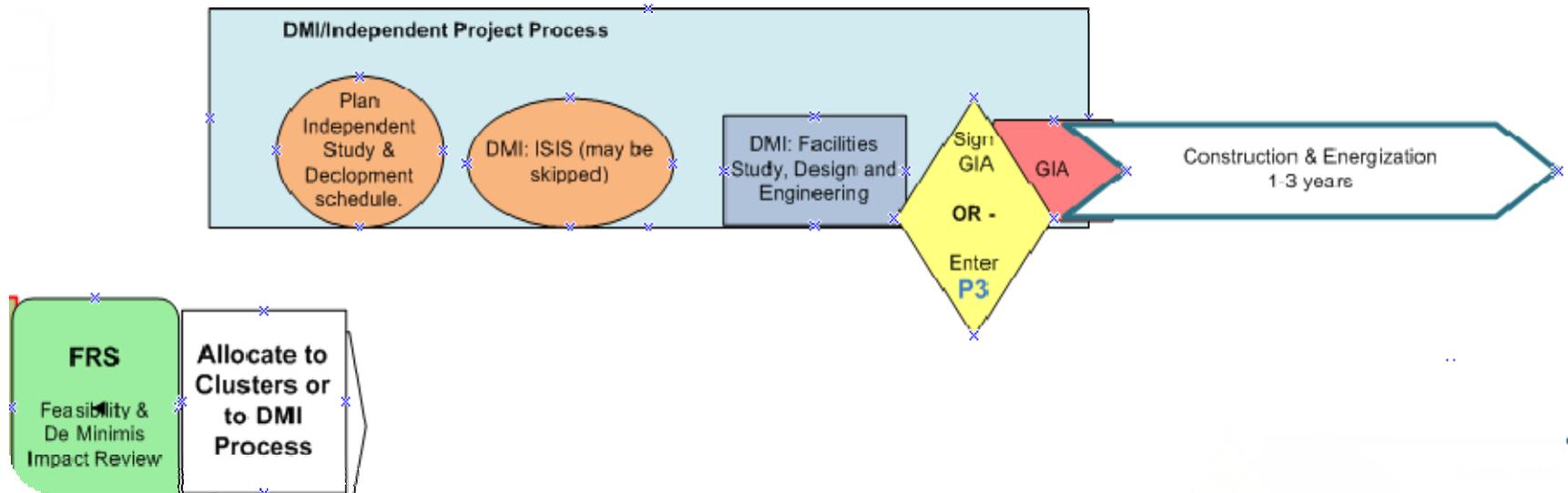


Generator Interconnection Procedural Reform

Strawman

- De Minimis Impact and Independent Requests (DMI-I):
 - Create Independent (unclustered) study processes for DMI-I requests (regardless of size)
 - DMI-I Projects – independent study:
 - Request is studied outside any clusters
 - Provide study schedule commitment to customer
 - Engage project manager from the start
 - Establish desired COD

Generator Interconnection Procedural Reform



Generator Interconnection Procedural Reform

Strawman

- DMI & Independent Projects:
 - Study will include:
 - Feasibility Study (provides first approximation of costs, used to establish later deposits; may be abbreviated)
 - ISIS: Will require substantial deposit
 - Facilities, Design and Engineering: Require balance of estimated costs before proceeding with Final Design Study, E&P and IA
 - Deposits will reflect developer commitment to project costs

Generator Interconnection Procedural Reform

Strawman

- DMI & Independent Projects:
 - DMI and Independent Projects will have effective levels of Milestone and Deposit Performance that reflect those for Clustered requests
 - Milestone and Deposit Performance would be scaled to smaller projects so as not to be prohibitive or proscriptive
- BPA may consider ‘self-build’ options subject to BPA standards, on a case-by-case basis if BPA schedule will not meet Federal or State incentive timeline

Generator Interconnection Procedural Reform

Strawman

- Interconnection Agreement:
 - Substantially in the form of the standard LGIA currently in use, the Unified Generator Interconnection Procedures Interconnection Agreement (UGIP-IA) would not provide for any 'suspension' capability as exists in the present Article 5.16
 - If the Site Certificate or permit process described above is not complete within the 3 month negotiation and tender period, or the BPA ROD is not published, the UGIP-IA could contain language rendering it contingent upon completion of the permitting or certification process within an agreed-upon time not to exceed one calendar year from the date of tender, and the issuance of the BPA ROD
 - Priority for limited interconnection capacity will be apportioned based on queue order within the cluster
 - Costs and deposits will be apportioned pro-rata based on the total MW of the interconnection facilities required to interconnect the members of the Cluster
- 'Latecomers' interconnecting within five years of the energization of facilities financed by the Cluster members will reimburse the original cluster members in an amount that creates a proportional distribution of financing as if the latecomer(s) had been original cluster members

Generator Interconnection Procedural Reform

Transition from BPA's current to future state:

- Proposals for the transition will focus on:
 - Equity for existing requests that are near or past study completion
 - Establishing ground rules for transitioning existing 'comprehensive' study groups into 'Clusters'
 - Establishing a transition cut-off date in the future (perhaps 2 years?) at which entry into a Transition FDE Stage would be mandatory
 - Transition FDE terms and conditions would be evolved in a subsequent round of GI Reform Proposals

Generator Interconnection Procedural Reform

In summary:

BPA believes that application of some mix of these ideas will provide:

- Greater efficiencies in interconnection queue management
- Greater transparency in the study process
- Greater flexibility for developers and BPA in managing construction schedules for shovel-ready generation projects
- Better interaction between Transmission Network Open Season and the Generator Interconnection process
- Appropriate levels of expectations during project development and maturation
- Greater equity in interconnecting multiple projects at shared facilities

Generator Interconnection Procedural Reform

Next Steps:

- BPA invites questions, comments and suggestions

Techforum@bpa.gov

Please label your comments 'GI Reform'

- We anticipate a follow-up meeting with stakeholders once we have heard from all interested parties
- If we choose to take these ideas further, we would expect to hold a further workshop in the Spring of 2012