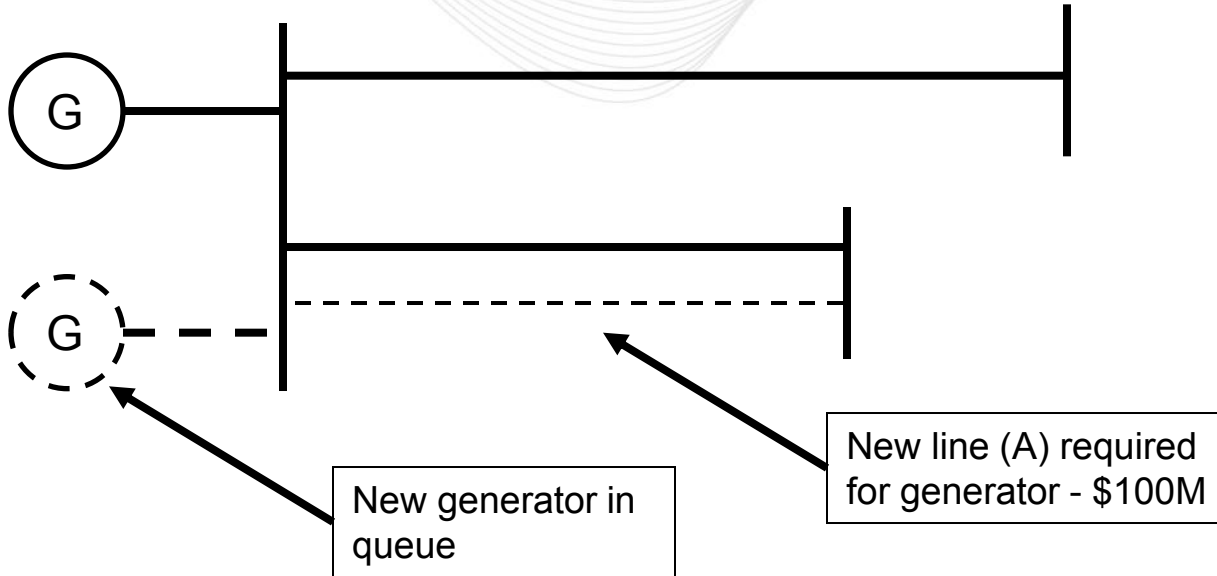


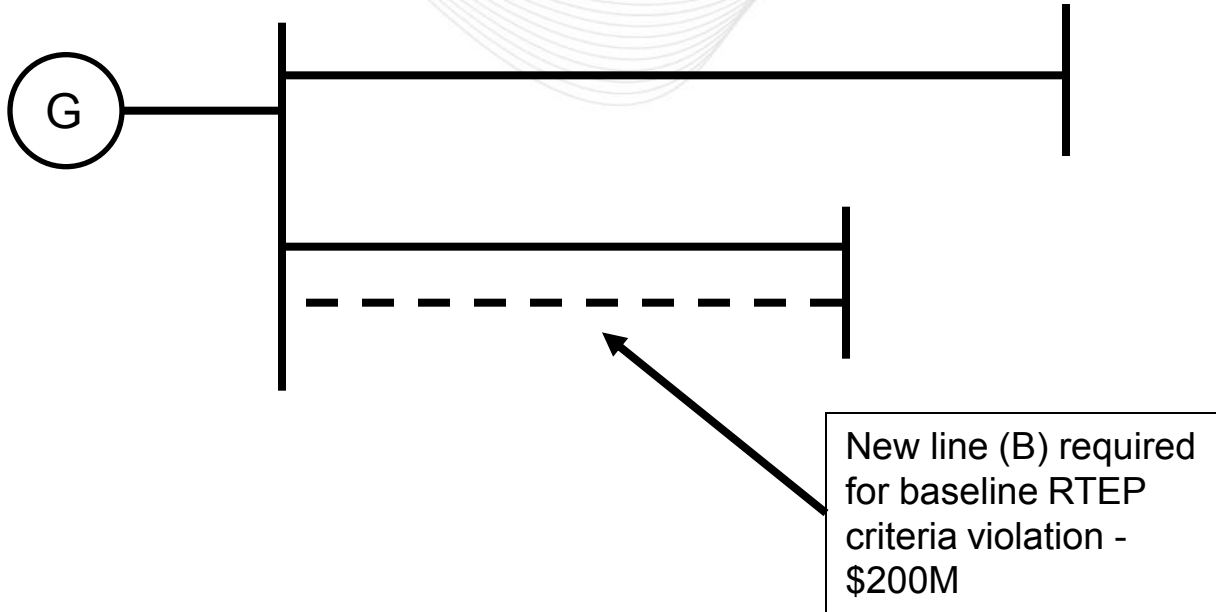
# Generation Interconnection (GI) as an Input to Multi-Driver Approach

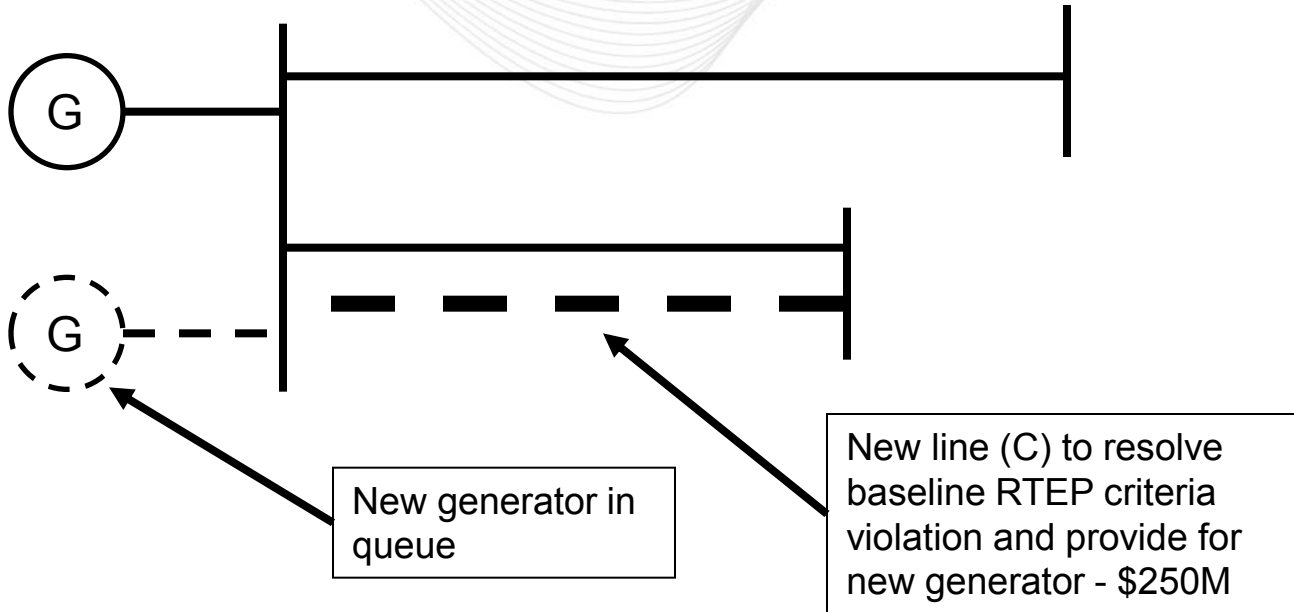
August 26, 2014

- Generator requires upgrade that will be completely replaced by baseline RTEP upgrade
  - *Generator enters queue before RTEP violation is identified*
  - *Generator enters queue after RTEP violation is identified*
  - *Generator in-service date is before date of RTEP violation*
  - *Generator in-service date is after date of RTEP violation*
- Baseline upgrade would be smaller (and less expensive) without generator

May be timing issues, but may not change integration of drivers

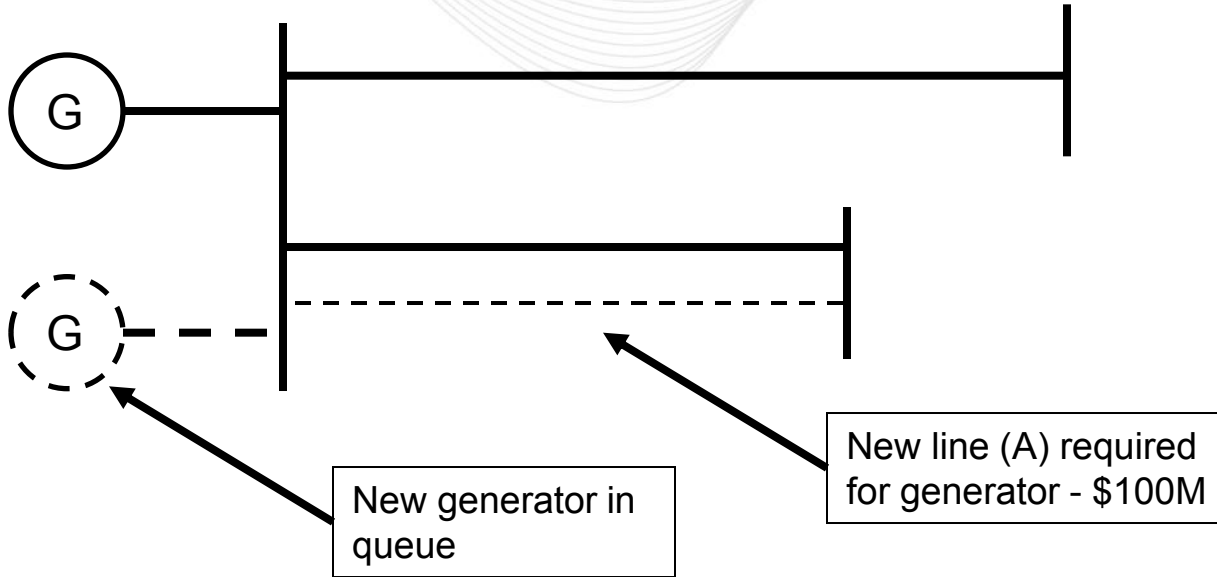




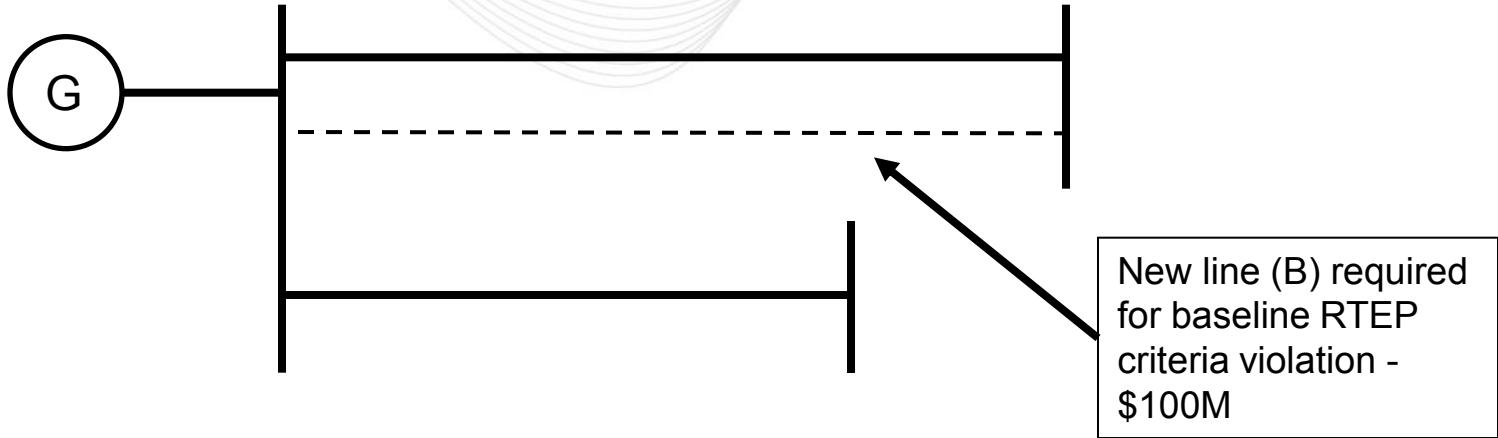


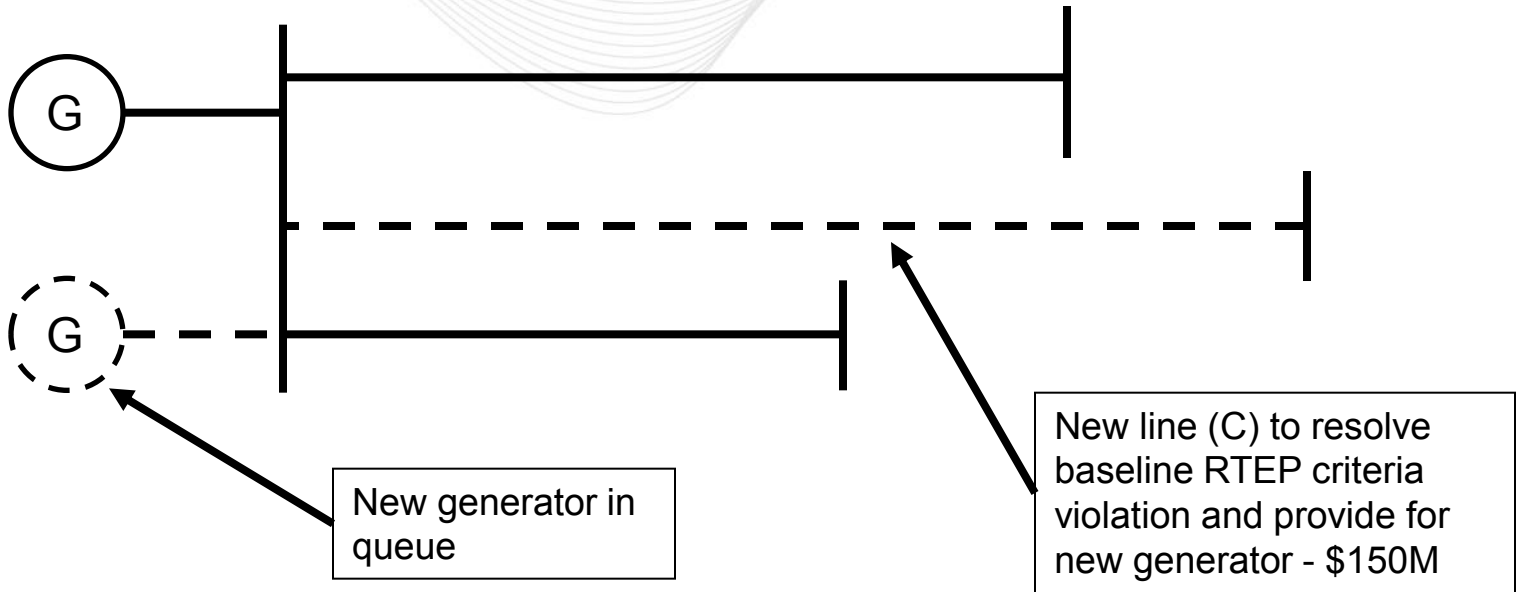
- Timing
  - *Is generator ready to commit (execute ISA) when decision would need to be made so that line C can be completed before onset of criteria violation?*
    - *If not, what level of certainty would be acceptable to move forward with line C?*
  - *Can line C be completed before onset of criteria violation, even if generator is ready?*
    - *If not, are acceptable operational measures available?*
  - *How do we manage generator rights if commercial date is after line B would have been in service, but before line C can be placed in service?*
  - *Other?*

- Generator requires upgrade and baseline RTEP upgrade is required, separately, but both could be replaced by a third upgrade
  - *Similar to proportional MDA*
- Resulting MDA would be less expensive than sum of generator upgrade and originally identified RTEP upgrade
- Assume, for this example, that only one queued generator is involved and that generator has no interactions with other generators in queue





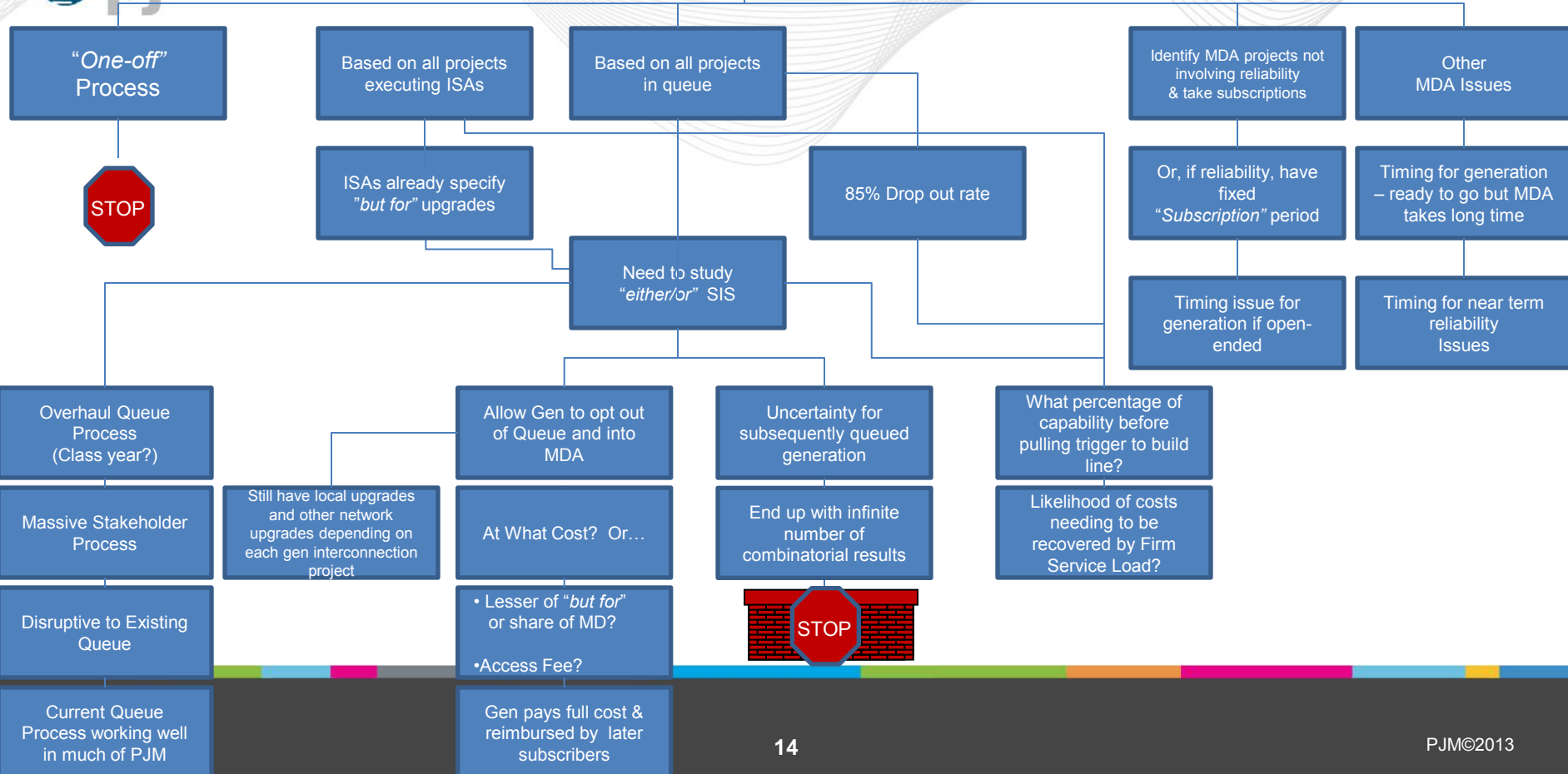




- Timing – same as for Example 1
  - *Is generator ready to commit (execute ISA) when decision would need to be made so that line C can be completed before onset of criteria violation?*
    - *If not, what level of certainty would be acceptable to move forward with line C?*
  - *Can line C be completed before onset of criteria violation, even if generator is ready?*
    - *If not, are acceptable operational measures available?*
  - *How do we manage generator rights if commercial date is after line B would have been in service, but before line C can be placed in service?*
  - *Other?*

- What if multiple queued generators are involved?
  - *Issues related to timing of commitment versus need to make a decision when generators are at different points in interconnection queue*
  - *Issues related to queue priorities among generators interested versus not interested in MDA project.*
  - *Other?*

# Slides from last meeting



- Opportunity to capture stakeholder ideas
- Intent – Continue GI in parallel to MDA Business rules / consideration by MRC / MC
- “*Either/or*” Studies compound by number of generation projects
- Impact to existing (*or alternate?*) Queues
- Aligning timing of GI with RTEP/MDA cycles

- What does generator pay?
  - But-for cost based on SIS without MD project
  - Some reduced amount based on incremental or parallel apportionment (similar to discussion for public policy MD projects)



- Will require triggers or guidelines for when to apply
- Still have to deal with uncertainties for later queued projects
- Timing and risk issues for generator waiting for larger scope project
- Have to deal with cost apportionment
- Have to deal with issue of how much capability needs to be signed up before pulling the trigger
  - Issue of risk to load of paying for unused capability

- Subscription process
  - Should we do periodic analyses to identify potential MD projects targeted to delivering clusters of generation?
  - Need rules to address
    - how a generator moves from SIS upgrades to MD project
    - cost to generator
    - impact to later queued generators
  - Need to address when to fold MD project into other baseline and interconnection analyses (this issue probably applies to MD projects in all cases related to interconnection)

- Who proposes MD projects?
  - Answer: Anyone can
    - Transmission owners may see linkage to other drivers when developing solutions
    - May surface in proposal windows related to other drivers
    - Generation developer may see linkage to other drivers
    - PJM staff may see linkage to other drivers in evaluation analyses

- When do you consider MD project for generator?
  - At Feasibility or SIS stage
    - will make it very difficult to complete studies on time and will delay later queued projects
    - could work if MD project has already been identified for other drivers
  - At Facilities Study stage
    - have to manage timing with pending issuance of ISA
    - still have delay and uncertainty issues for later queued projects