IPSTF Update

MRC
September 15, 2011

Concerns

Projects Changing Size/Parameters or Point of Interconnection

Un-real Projects

Impact of Project Suspensions

Drop-outs Occurring Randomly

Use of commercial probability in studies

Multiple Queue Positions For One Project

Interaction with Existing SPS

Too Many/Big Projects – Complex Upgrades – Can't Get To System Impact Study Results

Endless Retools – Can't Get From Impact Study To ISA

Cost Allocation Rules

Queue Positions For Project That Later Use Retiring CIRs

Treatment of Intermittent Resources in Analyses

New upgrades identified as project progresses through queue

Some Areas Maxed out Thermally or For Short Circuit

High Variability of Costs of Upgrades

Solution Options – Goals

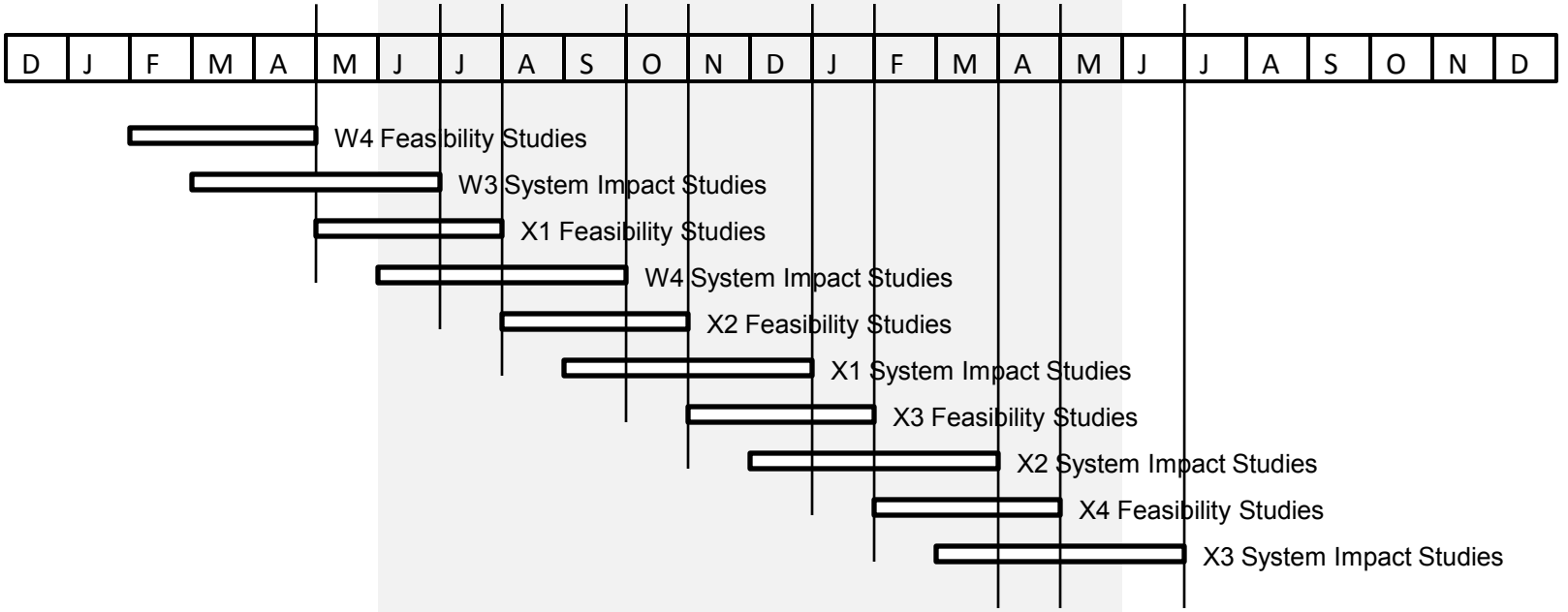
- Timely completion of studies
- Move projects to an ISA more quickly
- Reduce number of re-tools
- Provide greater certainty in results
- Manage changes associated with projects
- Manage process workload

- Main solution options have focused on three proposals
  - Move to a 6-month queue cycle from the existing 3-month cycle
  - Implement process changes to implement "sliding queue"
  - Process changes for 20 MW and below projects

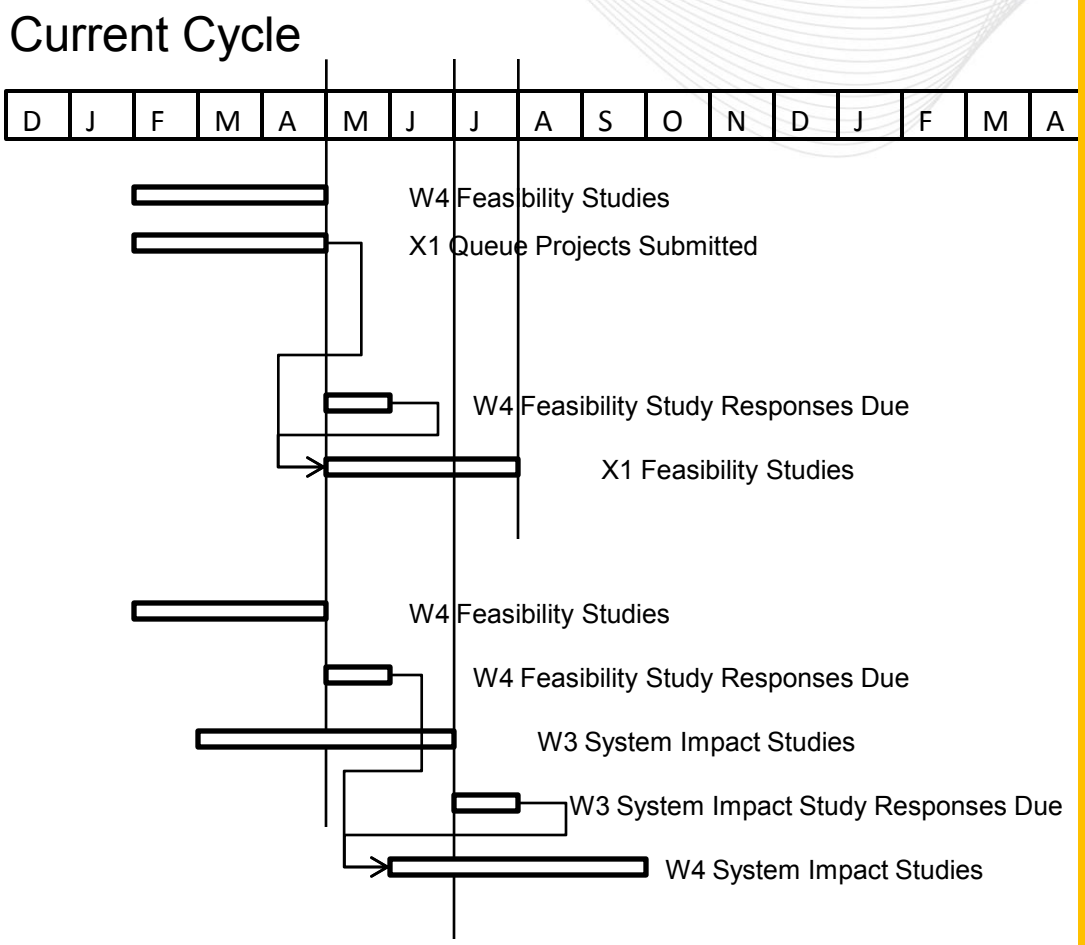
- Other process changes related to treatment of project suspensions and use capacity injection rights of existing units

Solution Options – Queue Cycle

- Current Cycle
  - 4 - 3 month Feasibility Study cycles (no delay between cycles for answers)
  - 4 - 4 month System Impact Study cycles (overlapping)
  - 8 of 12 months involve due dates for large volumes of studies



Solution Options – Queue Cycle



Problem:
No time to incorporate decisions of earlier queued projects before studies are started

X1 Feasibility Studies are started before the decisions from the W4 queue are made

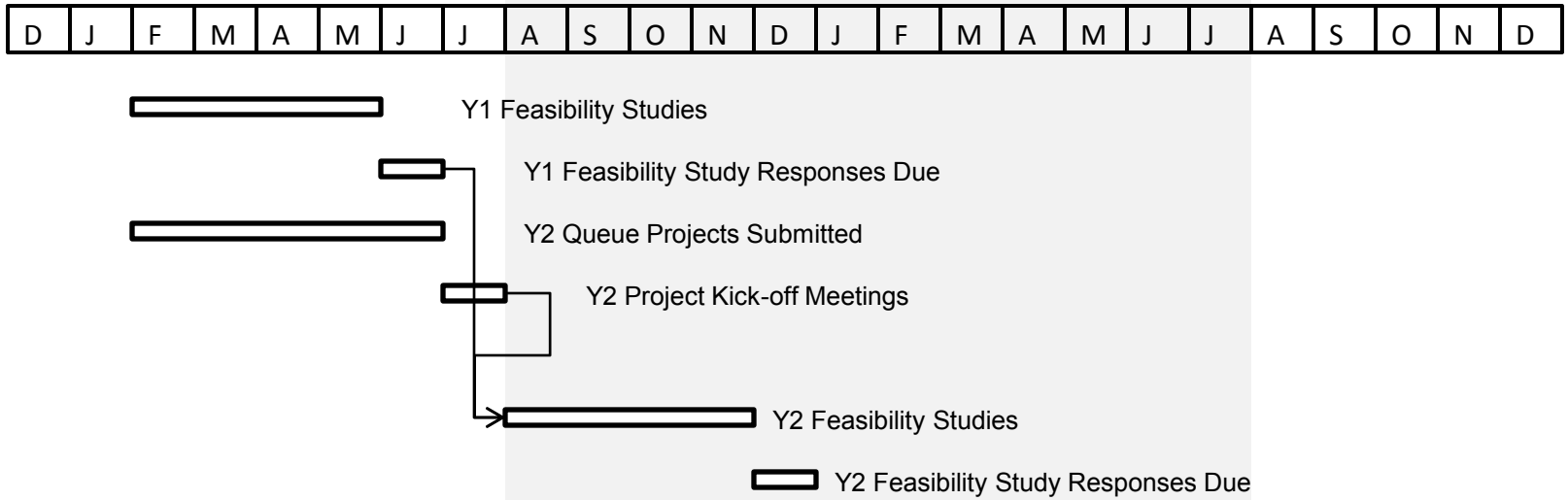
- Recall 87% of projects drop out after the Feasibility Study

W4 Impact Studies are started before decisions from W3 Impact Studies are made

- Recall 69% of projects drop out after the Impact Study

Solution Options – Queue Cycle

Proposed Cycle

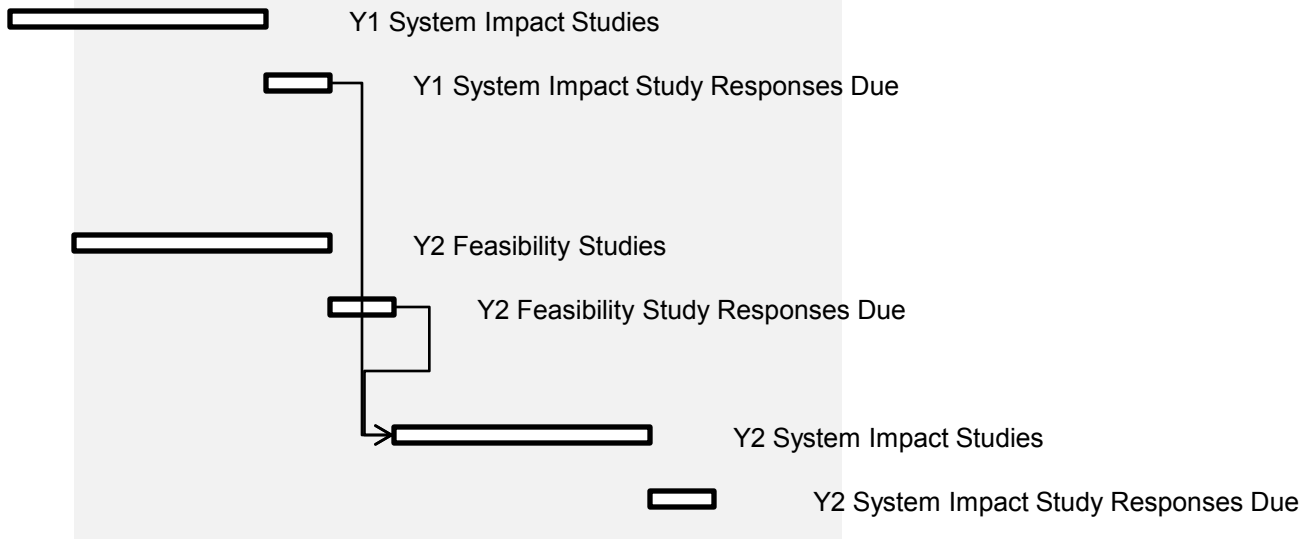


- **Feasibility Study Benefits**
  - Decisions of Y1 queue developers can be incorporated into the Y2 studies providing greater certainty in study results and reduces the need for retools
  - Enables the “sliding queue” process

Solution Options – Queue Cycle

Proposed Cycle

D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D

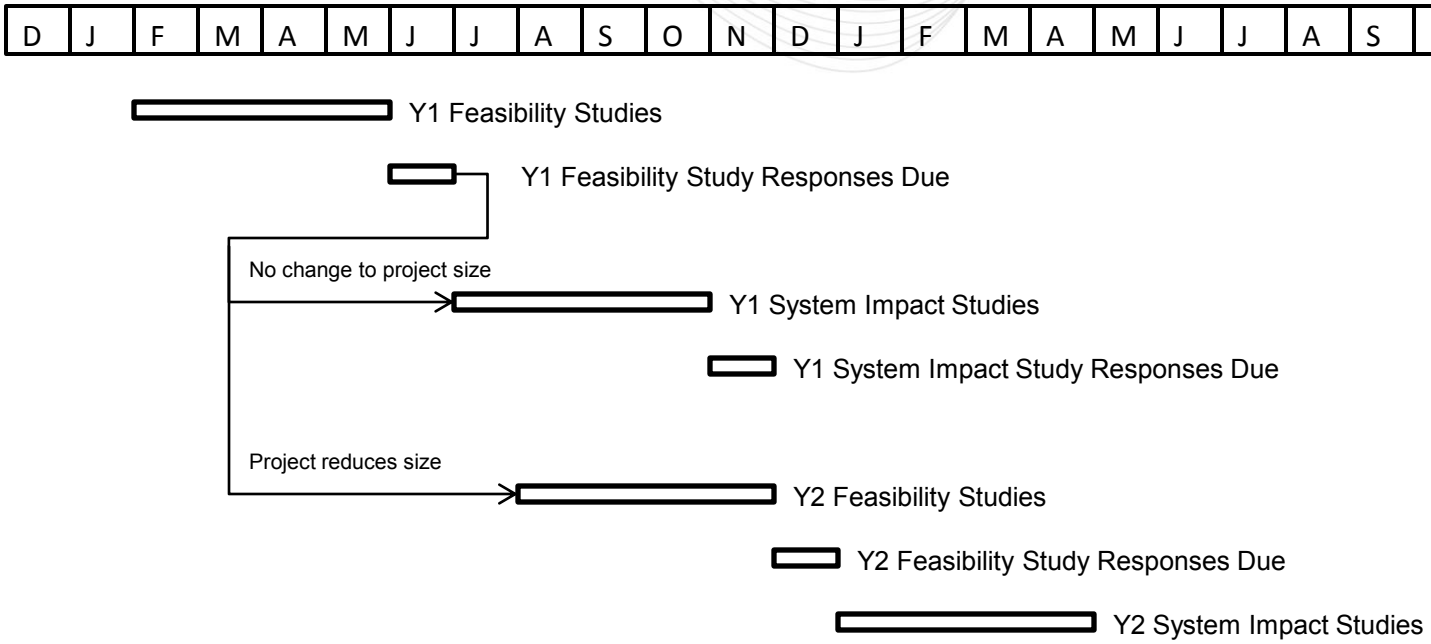


- Impact Study Benefits
  - Decisions of Y1 queue developers can be incorporated into the Y2 studies providing greater certainty in results and reducing the need for retool
  - Enables the “sliding queue” process

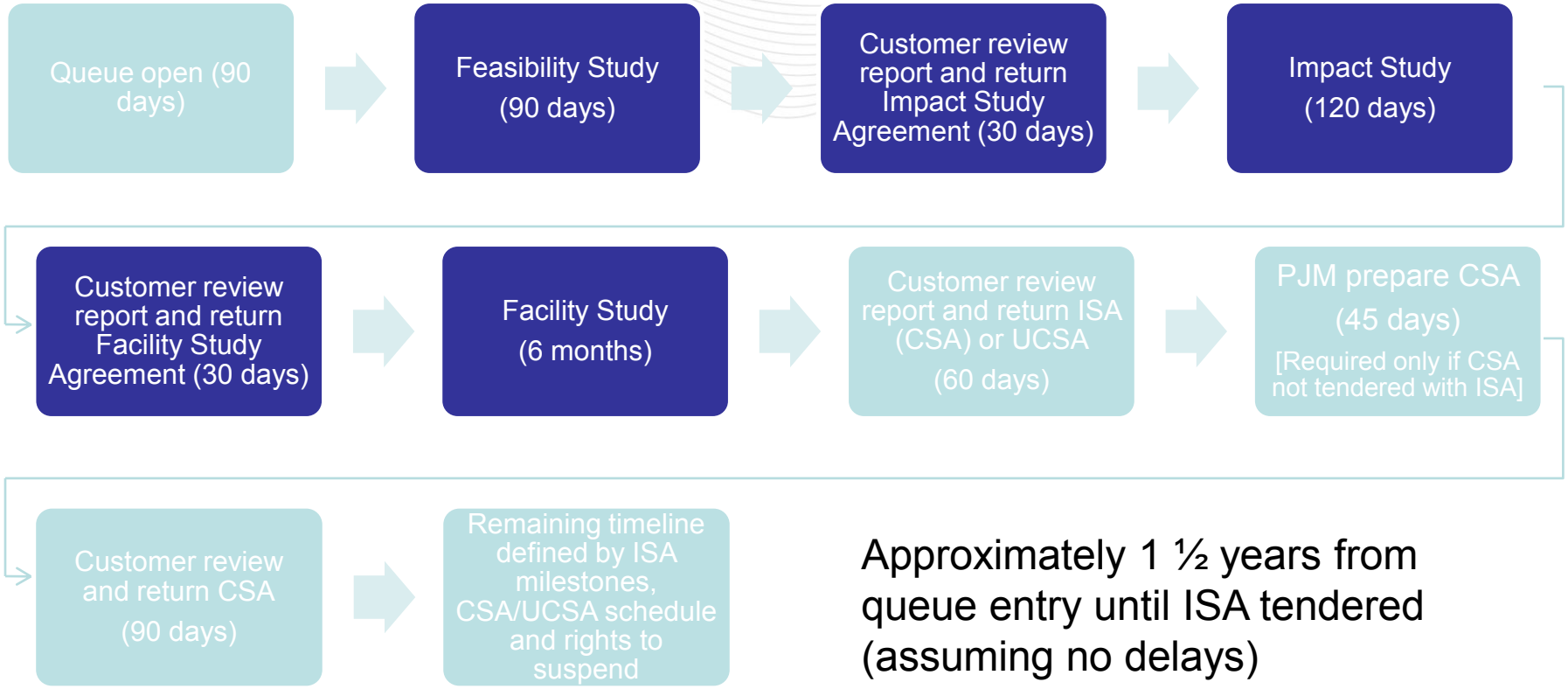
Solution Options – Sliding Queues

- Underlying philosophy is that some magnitude of change make the project fundamentally different from original request and, therefore, requires a new queue position
- Parameter changes requiring that project slide to next queue
  - Change of turbine type
  - Change in fuel type
  - Change in equipment manufacturer (turbine, transformer, converter)
  - Others?
- For projects that are not making changes:
  - Greater certainty in their study results
  - Reduces the need for retools and/or number of changes that need to be incorporated into subsequent retools
  - Allows the project to move through the process more quickly (no delay for higher queue projects to make up their mind on parameters)

Solution Options – Sliding Queues



Interconnection Request Time Line Overview



Approximately 1 ½ years from queue entry until ISA tendered (assuming no delays)

Is there a more efficient process for studying and identifying required upgrades for 20 MW and smaller requests?

≤ 20 MW Projects

- Streamline the study process
  - Develop screening process to determine what requests may not meet cost allocation thresholds
  - Eliminate deliverability, short circuit and stability testing for projects that are screened out above
  - Identify attachment facilities and any lower voltage impacts if applicable
  - Projects could be studied outside of the existing queue
- Simplified queue process
  - Establish priority amongst all 20 MW and smaller projects
- Increase deposit structure to align with what we have typically spent
  - Make unspent deposit monies refundable if development environment changes

Next Steps

- Continue to work through details of process changes
- Tariff language
- MRC and MC approval