Strawman Problem Statement, Issue Charge and Next Steps

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Interconnection Workshop – Session 4

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Problem Statement - Strawman

- Stakeholders identified 69 unique concerns & 135 unique suggestions covering 12 categories of issues
- Queue volume has more than tripled over the past three years
  - On time rate of feasibility and system impact studies has continually improved, but overall throughput has declined
  - Increased studies → Increased backlog
- Cost responsibility process is iterative
  - compounded with the volume, produces an unwieldy process and provides customers with less actionable cost information.

Issue Charge - Strawman

- PJM drafted a strawman issue charge for discussion based on:
  - PJM's review of all of the comments during and after Session 2
  - the poll results
  - PJM's own experience with the Interconnection Process
- Key Work Activities (KWA) cover:
  - Interconnection studies
  - Cost responsibility
  - Interim operation and agreements
  - Requirements for New Service Requests and to proceed through the interconnection process, as well as rules around project modifications
  - Opportunities that can positively impact the interconnection queue backlog.

Status Quo:

- Three phase process with some phases optional if certain criteria are met:
  - PJM OATT allows PJM to determine if Facilities study is necessary.
  - Small projects may be allowed to combine Feasibility and System Impact
- TOs use the Facilities study phase to perform preliminary engineering for all required work
- Interconnection facilities and network upgrade estimates & engineering performed at the same time by the same TO staff

Considerations

- FERC pro forma LGIP
  - Requires the Facilities Study to list all engineering that will be required along with estimates. No actual engineering is performed.
  - Allows customers to use contractors to perform Facilities Studies
- Base case synergy with queue case and model differences
- Study scope at each phase

Cost Responsibility – Proposed KWA 2

Status Quo:

- Transmission Owners estimate costs based on their internal methods.
- No standard accuracy range between TOs
- First-to-cause responsible for 100% of the cost
- Contributors responsible for an allocated portion which is refunded to the first-to-cause

Considerations

TOs

- Reimbursed for actual costs when the generator funds
- Rate of return available when the TO funds

Customers

- First-to-cause method creates high burden for a single customer
- Cluster allocation links study schedules for projects within cluster

Interim Operation & Agreements – Proposed KWA 3

Status Quo:

- Customers can request an interim deliverability study at any point in the process
  - No study cost or deposit required
  - No proof of readiness required
- Interim ISA can be requested at any time and allows advancement of engineering and procurement but does not permit operation
- Issuance of Facilities study is coupled with tendering of an executable final agreement
- ISA and ICSA are separate agreements with different timelines for execution which creates additional burden for signatories

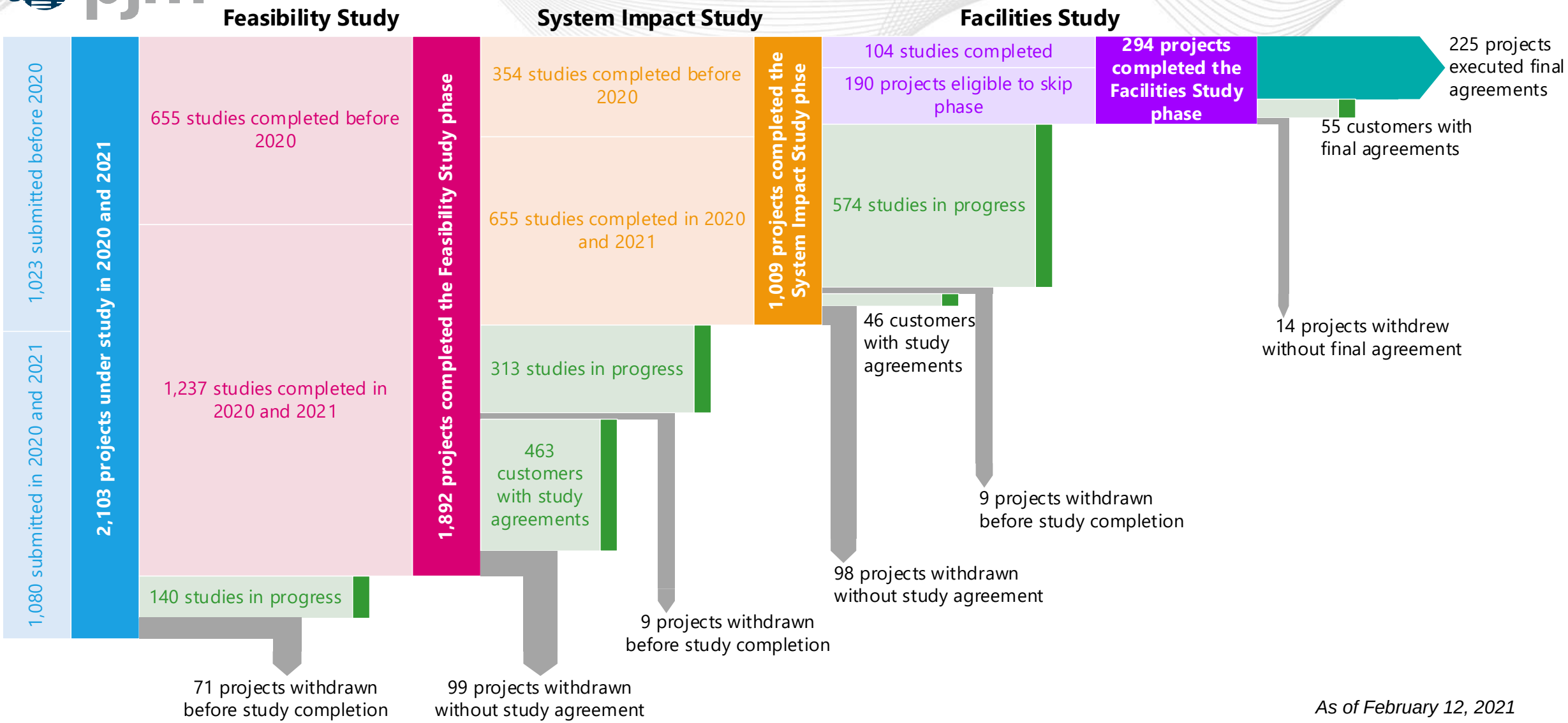
Considerations

- Risk to the transmission system if connected ahead of transmission upgrades
- Uncertainty for customers if connecting before studies are complete
- Delays to commercial operation could jeopardize the viability of the project
- Provisional Interconnection service may offer an “off ramp” for projects that are ready to move forward before completion of the study phase
- FERC LGIA uses a single ISA/CSA style agreement

Status Quo:

- Large volume of projects in the queue
- Little dropout between subsequent study phases
- Majority of study deposit money is refundable. In certain phases, it is fully refundable.
- Project modifications can be requested at any time and require a study
  - Reductions and changes during the study phases
  - Additional changes permitted after final agreement is executed including project suspension

Interconnection Queue Throughput: 2020-2021



As of February 12, 2021

Opportunities to Address the Backlog – KWA 5

Status Quo:

- Roughly 1,600 active projects in the queue
- Average completion time for large projects (> 20 MW) is increasing
- Projects currently ready to more forward are “stuck” due to labor, time, or process constraints

Proposed Stakeholder Process & Timing

- Use Consensus Based Issue Resolution process
- Problem Statement and Issue Charge to be reviewed and endorsed by the Planning Committee
  - First read - April PC
  - Endorse Issue Charge - May PC
- Venue – Options:
  - Task Force reporting to the PC
  - Special Sessions of the PC
- Meeting periodicity – monthly

Contact

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Interconnection Process