

Site Control Through the Development Process and Implications on Decision Point 1

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PJM Interconnection Process Subcommittee

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Presentation Summary

1. Updated Guidance on Site Control for TC1 at DP1
2. Developer perspectives on Site Control in the development process
3. Suggested alternative interpretation of Tariff language to better align with development process

Updated Guidance on Site Control for Transition Cluster 1 at Decision Point 1

PJM provided guidance regarding Site Control for TC1 at DP1 on May 9

“Project Developers **can** reduce Site Control evidence for their Generating Facility at DP1 if the following conditions are met:

1. All provided Site Control meets requirements of Tariff Part VII Section 302 and Section 309, including acreage requirements for the MW size and technology of the project
2. Remaining Site Control matches what was provided at Transition
3. No additional/new Generating Facility Site Control is provided

Project Developers **can** add Site Control evidence for their Generating Facility at DP1 if the following conditions are met:

1. All provided Site Control meets requirements of Tariff Part VII Section 302 and Section 309
2. Site Control for the entire Generating Facility Site provided at Transition is provided at DP1 and meets tariff requirements
3. No Site Control is removed

Project Developers **cannot** both remove portions of their Site provided at Transition and add portions at DP1. This would represent a new project and the project would need to withdraw from TC1 and re-apply in Cycle #1.”

Although this new guidance is a welcome change from the April IPS, the guidance still does not align with real-world development.

We would like to take the opportunity with this presentation to provide education on how this language may inhibit us from developing successful projects.

Developer perspectives on Site Control in the development process

Project development is done in parallel to the Interconnection Process

- Developers must attain a certain level of due diligence before entering the queue to minimize risk, but projects are still years out from COD at DP1 and are still in development.
- Developers continue to optimize the site while the project moves through the queue, which includes multiple steps, many of which are outside of a Developer's control:
 - Permitting requirements
 - Local community feedback
 - Improvements/changes in equipment design
 - Size optimization to cost-effectively bring projects to the market
 - Geotechnical analysis
 - Environmental studies
- Any of these steps can change the parcels a Project Developer requires for a project without materially modifying the project, point of interconnection, or its interconnection timeline.

A modification in Site Control does not mean the project is not ready-to-go. It means the project is optimizing.

Permitting Requirements and Local Community Feedback

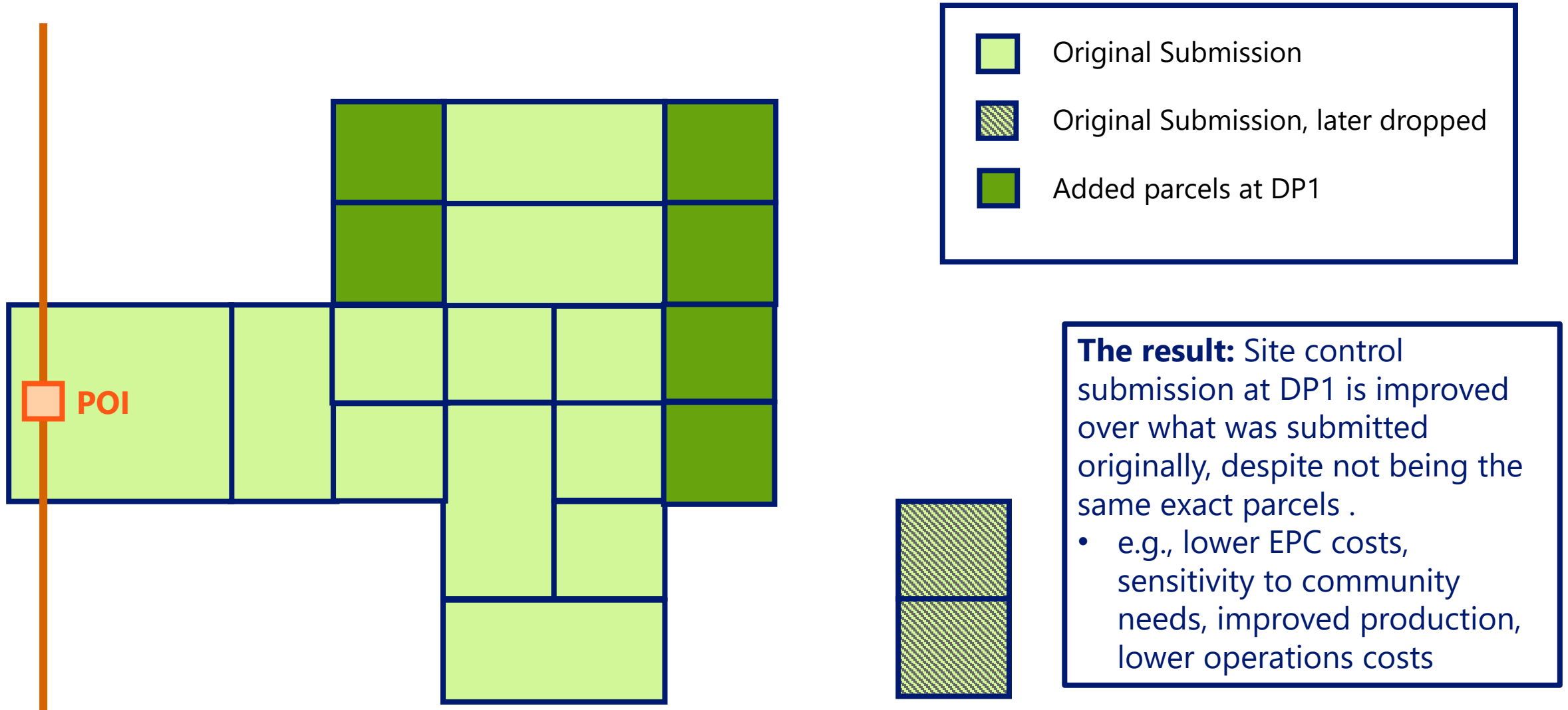
- From when a project enters the queue to when it starts construction, many elements can and often do change that are beyond a developer's control:
 - Permitting requirements and local community feedback impact what land is usable.
 - Often results in adding additional parcels that allow developers to optimize economics of project or develop in a more environmentally responsible manner.
 - In some cases, permitting and community feedback may drive a developer to downsize a project if certain lands are not permitted or expressly prohibited from being used for a project.
 - In some cases, shifting parcels completely while maintaining the POI is in the public interest based on permitting and community stakeholder feedback.
 - e.g., 500' setbacks implemented and original parcel no longer usable due to neighboring residences, requiring a shift to a new parcel.
 - If permits are secured too early, they may expire before the project leaves the queue.

Allowing a project to add and remove land parcels as it moves through the interconnection process results in a ready-to-go project that is in the public interest and more likely supported by the local community.

Improvements/changes in equipment design

- Technology advances faster than projects advance through the queue.
- Often, the technology a project ultimately uses (e.g., wind turbines, solar panels, inverters, battery modules, etc.) does not exist at the time of the Application Phase.
- Specific technology selection drives site design and can impact which parcels of land are utilized for the ultimate construction of the project. A developer typically optimizes site control around flexibility of industry available equipment.
 - e.g., Consider that a thin-film solar module has a higher land utilization than a crystalline module and the industry typically sees an approximate increase in module efficiency of 3% per year. Therefore, acquiring enough land for a thin film project at the Application phase and switching to a crystalline module 3-4 years later when construction starts would likely result in half of the site control no longer being necessary for the project to achieve MFO.

Size Optimization – Modifications to land parcels can make a project more efficient



Detailed Project Design: Engineering and Environmental Studies

Multiple studies are appropriately conducted after the Application Phase and can impact the size, shape, and location of the project:

- Changes in Flood Mapping
- Wetlands Delineation
- Threatened and Endangered Species
- Geotech
- Differential Settling
- LIDAR/GPR
- Karst Terrain
- Grading Limitations
- Drain Tiles
- Archeological Studies
- Soils and Phase 1

Additionally, one of the biggest threats to these projects outside of developer control are the ongoing changes to local Zoning Ordinances which can result in changes to Setbacks which might make whole parcels unusable.

These necessary studies can run into the millions of dollars – real costs which are borne by the project years ahead of actionable Interconnection Queue results.

Requiring a Project Developer to maintain original site control if any of the above renders a parcel unusable will either 1) increase project costs without providing a measurable benefit to PJM's ability to move projects through Transition Cluster 1, or; 2) subject otherwise ready-to-go projects to withdrawal even if the changes are an improvement in site design

Alternative interpretation of Tariff language to better align with development process

The Tariff is inconsistent in its treatment of Site Control at DP1

Tariff, Part VII, Subpart D, section 309 Decision Point I

(A)(1) b. Project Developers must provide evidence of Site Control that is in accordance with the Site Control rules set forth above in Tariff, Part VII, subpart A, section 302, and is also in accordance with the following additional specifications:

- i. Generating Facility or Merchant Transmission Facility Site Control evidence for an additional one-year term beginning from last day of the relevant Cycle, Phase I.
 - a) Such Site Control evidence shall be identical to the Generating Facility or Merchant Transmission Facility Site Control evidence submitted for a New Service Request in the Application Phase, and shall continue to cover 100 percent of the Generating Facility or Merchant Transmission Facility Site, including the location of the high-voltage side of the Generating Facility's main power transformer(s).

(B) 5. Generating Facility or Merchant Transmission Facility Site Changes

Project Developer may specify a change to the project Site only if:

- a) the Project Developer satisfied the requirements for Site Control for both the initial Site proposed in the New Service Request Application and the newly proposed Site; and
- b) the initial Site and the proposed Site are adjacent parcels.
- c) Such Site Control is subject to the verification procedures set forth in Tariff, Subpart D, section 309(A)(2)(c) (Decision Point I Site Control verification).

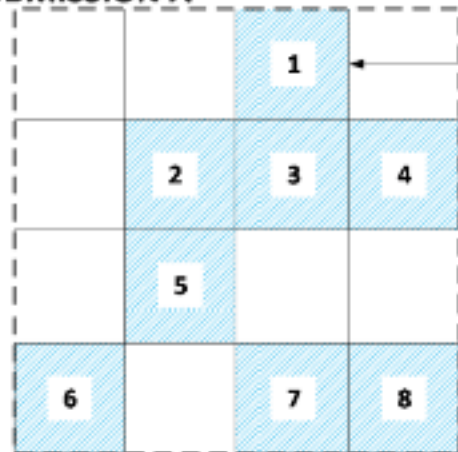
Manual 14H explains how a Project Developer may modify Site Control at DP1

The example from the Manual aligns with how Project Developers understood the intent of the changes in the Interconnection Process Reform filing and comports with how projects move through the development process.

Manual 14H: 7.2.2 Decision Point I

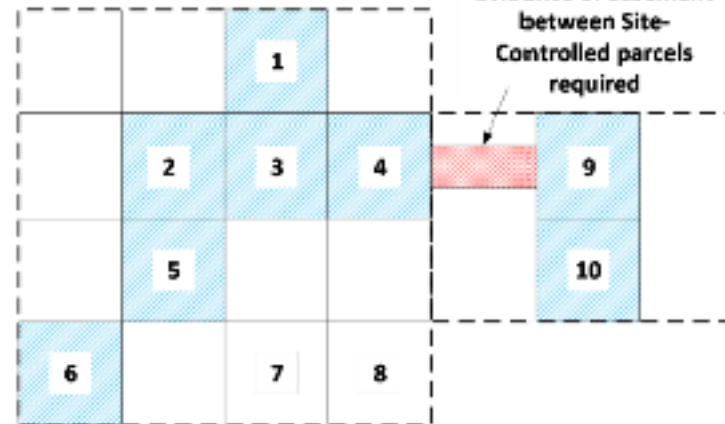
Exhibit below depicts this requirement. Submission A and B represent the initial and updated Site Control evidence.

SUBMISSION A



Evidence of Site Control required for each parcel

SUBMISSION B



Evidence of easement between Site-Controlled parcels required

Parcels #7 and #8 are no longer used



Exhibit 23: Easements for Non-Contiguous Parcels

The May 9 guidance prohibits this example.

Alternative Interpretation of “Identical”

Site Control should be considered “identical” if the Project Developer:

1. Satisfies the minimum acreage requirements outlined in Manual 14H, and;
2. Provides evidence of contiguous Site Control and any easements between non-adjacent parcels.*

This interpretation will:

- Resolve the inconsistency between the two sections in Tariff, Part VII, Subpart D, section 309.
- Align with the guidance provided in Manual 14H.
- Allow Project Developers to continue optimizing their ready-to-go projects in a cost-effective manner without impacting the interconnection timeline.
- Ensures that all projects that move through Decision Points remain ready.
- Not impact any other projects in the cluster.
- Provide a consistent interpretation with other ISO/RTO site control requirements.

* This presentation does not address issues related to offshore wind.