NIPPC comments on GI Queue Reform By e-mail to: techforum@bpa.gov

Thank you for the opportunity to submit comments.

General Comments

General support for interconnection queue reform

NIPPC generally supports the proposal to transition the generator interconnection process away from a serial study process to a cluster study process. As BPA staff has noted, the serial process has led to backlogs and delays, creating uncertainty around the cost and timing of the interconnection process. NIPPC members agree that the delays in processing interconnection queues, and the additional delays and costs associated with restudies required when earlier queued projects withdraw, severely limit competition in the Pacific Northwest. NIPPC notes, however, that shifting to a cluster study process for interconnections, without other reforms, will not eliminate delays and backlogs in the interconnection process.

Bonneville staff has noted that the volume of interconnection requests on its system has increased dramatically over the past five years. BPA is not alone in this; interconnection queues across the country are increasingly overwhelming a serial queue processing mechanism that was developed when the industry anticipated interconnecting small numbers of very large generation plants to serve predictable load growth. FERC's serial queue processing process was simply never designed to cope with public policy driven demands to rapidly retire existing carbon emitting resources and replace them with many smaller and more widely distributed renewable generation projects. To address the growth of serial queues, several OATT transmission providers have already obtained FERC's approval to adopt a cluster study approach to processing interconnection requests. In each case, these utilities were successful in convincing FERC that their cluster study mechanism would be superior to the serial queue process under the *pro forma* OATT.

California experience with interconnection cluster studies

But cluster studies alone have not solved the problems of clogged interconnection queues. For example, as early as 2008, the CAISO has used a cluster study mechanism to manage interconnection requests on its system.¹ As the closest example to the Northwest of an independent system operator's interconnection management, NIPPC describes here in some detail how this neighboring transmission provider of BPA has addressed its interconnection queue.

¹ California Independent System Operator Corp., 124 FERC ¶ 61,292 (2008) at P33 (approving revisions to move from a serial to a cluster process, and to establish project viability and developer commitment as soon as interconnection customers have an estimate of the costs of their projects)

FERC determined that because of the interconnection queue backlog and a recurring need to perform re-studies when projects dropped out of the queue, CAISO's cluster study proposal was just and reasonable and not unduly discriminatory.² CAISO made additional reforms to its generator interconnection processes in 2010³, 2012⁴, 2014⁵, 2015⁶, 2018⁷, and 2019.⁸ But despite near constant refinements to its interconnection process, the CAISO's interconnection queue is still unmanageable. Facing a 141% increase in interconnection requests in 2021, CAISO began yet another process to find near-term and long-term solutions to managing its interconnection queue. FERC approved the near term reforms in 2022.⁹ The CAISO filed its long term solutions for FERC approval in January 2023.¹⁰

Even while that filing is pending, however, CAISO has started yet another public process to reform its interconnection process again.¹¹ One reason CAISO initiated its 2023 Interconnection Process Enhancements was as part of a larger effort to coordinate and tighten linkages between resource planning, transmission planning, interconnection processes, and resource procurement as laid out in a Memorandum of Understanding between the California Public Utility Commission, the California Energy Commission and the CAISO.¹² A second reason was that CAISO's cluster study queue contains 205 separate requests for interconnection totaling over 94 GW of total capacity.¹³ The CAISO's straw proposal to address these ongoing issues proposes to allow customers to submit interconnection requests for the next cluster study (Cluster 15) during an April

⁷ California Independent System Operator Corp., 162 FERC ¶ 61,207 (2018) (extending the

² Id.

³ California Independent System Operator Corp., 133 FERC ¶ 61,223 (2010) (approving revisions to harmonize the CAISO's Large Generator Interconnection Procedures ("LGIP") with its Small Generator Interconnection Procedures ("SGIP") by establishing integrated cluster study processes for small and large generators, and to expedite study processes for independent or otherwise adroit generators by implementing new independent study and fast track processes).

⁴ California Independent System Operator Corp., 140 FERC ¶ 61,070 (2012) (approving revisions to integrate the transmission planning and generator interconnection processes).

⁵See, e.g., *California Independent System Operator Corp.*, 149 FERC ¶ 61,231 (2014); California Independent System Operator Corp., 145 FERC ¶ 61,172 (2013).

⁶ California Independent System Operator Corp., 153 FERC ¶ 61,242 (2015); 154 FERC ¶ 61,169 (2016)

deliverability parking period and reconfiguring the interconnection request window to allow more time for corrections).

⁸ California Independent System Operator Corp., 168 FERC ¶ 61,003 (2019); California Independent System California Independent System Operator Corp., 166 FERC ¶ 61,113 (2019); California Operator Corp., Letter Order, Docket No. ER19-1013-000 (April 1, 2019); California Independent System Operator Corp., Letter Order, ER19-2679-000 (Oct. 18, 2019)

⁹ California Independent System Operator Corp., 180 FERC ¶ 61,243 (2022).

¹⁰ CAISO submitted tariff filing letter in .FERC ER23-941

¹¹ Emmert, Robert and Billinton, Jeff, 2023 Interconnection Process Enhancements Issue Paper and Straw Proposal, March 6, 2023 available at http://www.caiso.com/InitiativeDocuments/Issue=Paper-and-Straw-Proposal-Interconnecton-Process-Enhancements-2023-Mar132023.pdf.

¹² The MOU (http://www.caiso.com/Documents/ISO-CEC-and-CPUC-Memorandum-of-Understanding- Dec-2022.pdf) is an updated version of a 2010 MOU between the parties.

¹³ Support and Billinten et a. 5

¹³Emmert and Billinton at p. 5

2023 window, as usual, but will not begin processing Cluster 15 until 2024 in order to allow more time to complete processing Cluster 14. Furthermore, CAISO has proposed a suite of reforms to govern Cluster 15 that will include:

- Giving interconnection priority to projects that seek to use available transmission capacity and are in zones where transmission capacity additions are already planned;
- Exploring mechanisms to limit the number of MW studied in the interconnection process to reasonable amounts that are consistent with California resource planning.
- Considering whether the interconnection cluster study results are meeting the needs of the resource procurement functions within load-serving entities.

NIPPC presents this lengthy and detailed discussion of the challenges the CAISO has faced with its interconnection queue merely as one nearby example of the challenges that all transmission providers are dealing with in managing their interconnection process. That these interconnection queue challenges are so pervasive is the very reason FERC opened a generic rulemaking ("Notice of Proposed Rulemaking" (NOPR)) in 2022 on improvements to Generator Interconnection Procedures and Agreements.¹⁴ In that NOPR, FERC identified that, as of 2021,

there were over 8,100 active interconnection requests. . . representing 1,000 GW of generation and 420 GW of electric storage. . . more than triple the total volume . . . of generation and electric storage in the interconnection queues nationwide just five years earlier.

NIPPC also hopes to underscore that even though CAISO continues to struggle with interconnection processes, it operates in a single state, so CAISO can formally and directly coordinate with the California Public Utilities Commission and the California Energy Commission more easily than BPA could coordinate with state policymakers in its regional footprint. NIPPC also hopes to highlight that despite early adoption of a cluster study mechanism and almost annual updates and revisions to its interconnection process, CAISO's interconnection queue challenges persist. As BPA staff continues to compare its interconnection processes to those of other transmission providers, NIPPC encourages BPA to consider not only how those alternative queue processes are supposed to work, but whether they have actually been effective in streamlining the interconnection process for both the transmission provider and its interconnection customers.

Individual reforms must meet the overall needs of BPA's customers

BPA has identified the topics that are in scope for this process. At the last workshop, for each topic BPA laid out several alternatives to the status quo for customers to consider. NIPPC's initial reactions to the alternatives are set forth below. NIPPC hopes that staff

¹⁴ 179 FERC ¶ 61,194

realizes that the topics – and their solutions – are interdependent. Some combinations of alternatives will work to meet the needs of BPA and its customers better than others; and some combinations will not work at all. For example, if BPA provides only vague guidance on interconnection costs at a specific location but sets a high bar for a customer to demonstrate readiness in order to enter the interconnection queue, then this reform process will likely fail. An interconnection customer will not be able to execute a contract with its own customer – the offtaker – to demonstrate readiness until they have some level of certainty on a project's interconnection costs. Accordingly, NIPPC's comments below on specific alternatives in each topic are informed by our thoughts on how each alternative might work as part of an overall package of reforms. If BPA settles on a preferred alternative in one topic, NIPPC may have to adapt its initial recommendations, described below, in order to ensure that the package of reforms meets the region's needs.

First-Ready/First-Serve Cluster Study Process

Need for Reforms

NIPPC has long been committed to open-access transmission service, cost-effective power sales, consumer choice in energy supply, and fair, competitive power markets in the Northwest. The competitive market for energy began when FERC issued Order No. 888 in 1996 to:

remove impediments to competition in the wholesale bulk power marketplace and to bring more efficient, lower cost power to the Nation's electricity consumers.¹⁵

FERC later established standard interconnection procedures, noting that:

Interconnection plays a crucial role in bringing much-needed generation into the market to meet the growing needs of electricity customers. Further, relatively unencumbered entry into the market is necessary for competitive markets. However, requests for interconnection frequently result in complex, time consuming technical disputes about the interconnection feasibility, cost and cost responsibility. This delay undermines the ability of generators to compete in the market . . . ¹⁶

Most recently, FERC issued a NOPR in June 2022¹⁷ noting that transformation in the industry, the growth of new resources seeking interconnection, and the serial first-come, first-served interconnection process together had created a large backlog in interconnection queues and brought uncertainty to the cost and timing of interconnection. In that NOPR, FERC proposed to eliminate the serial queue process in favor of a first-ready, first-served cluster study process. NIPPC agrees that BPA's

¹⁵ FERC Order No. 888, 75 FERC P 61,080 (1996) p.1

¹⁶ FERC Order No. 2003 104 FERC P 61,103 (2003) p. 4

¹⁷ FERC NOPR on Improvements to Generator Interconnection Procedures and Agreements (RM22-14) (2022).

existing interconnection process of managing a serial queue is no longer successfully providing "unencumbered entry" into the market and that the existing interconnection process suffers from "delay that undermines the ability of generators to compete in the market". Accordingly, NIPPC supports BPA staff's determination that BPA should adopt a first-ready, first-serve model for processing interconnections to better serve the needs of BPA's interconnection customers.

NIPPC supports BPA's Alternative #1

NIPPC suggests that BPA focus on Alternative One (adopting the FERC interconnection NOPR reforms with necessary modifications to reflect BPA's statutes and stakeholder feedback) and Alternative 2 (NOPR with deviations similar to the TSEP process). NIPPC is concerned that Alternative 3 (FERC approved FR/FS tariffs) would have unforeseen consequences. Most of the FR/FS processes that FERC has approved are in RTO/ISOs. RTO/ISOs and their tariffs differ from BPA and its OATT in significant respects. An RTO/ISO's interconnection process does not exist independently from the other elements that make it differ from an OATT transmission provider like BPA. RTO/ISOs have unique governance characteristics to oversee decisions, as well as different approaches to transmission planning, cost allocation, resource procurement, and organized energy markets that are designed to complement each other as well as the generator interconnection process. NIPPC is concerned that cherry-picking elements of FERC approved FR/FS interconnection processes from RTO/ISOs without considering how each of those elements works as one part of the larger RTO/ISO construct may result in unforeseen consequences. For example, NIPPC is specifically concerned that the timing of the three-phase cluster studies conducted by SPP, PJM, and MISO may not be consistent with the needs of BPA's customers as they attempt to participate in utility procurement processes in the region. Any phased process that BPA adopts must ultimately be consistent with and facilitate an interconnection customer's ability to participate in resource procurement processes.

Consistency of interconnection process with procurement processes

NIPPC, however, also cautions BPA that its interconnection process must be consistent with resource procurement in the region. For example, the timing of customer engagement windows to enter an interconnection cluster study must be consistent and predictable, because utilities might conform the timing of their procurement processes around those windows. Resource procurement processes will also likely rely on BPA's timely completion of cluster studies on schedule. The timing of the deadlines for customers to elect to enter subsequent phases should also be consistent with resource procurement in the region and provide customers with sufficient information and time to incorporate BPA's study results when making resource procurement decisions. However, Oregon, Washington and Idaho all have well established resource procurement practices can evolve – and could eventually evolve in direct response to BPA's choices on interconnection reform. At this stage, NIPPC simply urges BPA to investigate and understand state procurement rules and processes, and,

in particular to consider the timelines and requirements of resource procurement as part of this package of reforms. NIPPC believes that BPA's reforms to its interconnection process must facilitate – not impede – the regulatory requirements for resource procurement processes that load serving entities and developers must follow.

Readiness Deposit Requirements

In its presentation, BPA suggests that study deposits are simply too low to discourage speculative requests which are later withdrawn. NIPPC suggests that the real problem is that the only way for a customer to discover the cost of interconnection at a location on BPA's system is to submit a request and obtain a study. In the absence of accurate information regarding the costs to connect to the grid, all interconnection requests are speculative. No matter how good a potential generation resource is or how much interest it gets from load serving entities, if the interconnection costs prove prohibitive then the project would have to withdraw from the queue. While NIPPC recognizes that higher deposits may be appropriate. NIPPC also suggests that higher deposits will not solve the price discovery issue interconnection customers have. A primary focus for BPA should be how to provide better information earlier in the process, which will ensure that there are fewer study requests overall, reduce speculation, and reduce the need for re-studies, all of which will ultimately result in a more expedited interconnection process. As BPA considers adopting higher deposits, BPA should look into whether those higher deposit requirements by other transmission providers have actually resulted in less need for re-studies when customers drop out of the queue or if restudies continue to be necessary in spite of higher study deposits.

Site Control

NIPPC recommends that BPA focus on Alternative #1 which would conform site control requirements to the model FERC proposed in the NOPR. Under this alternative, where regulatory limitations preclude a customer from obtaining site control (usually because a project is proposed for construction on federal lands), then a customer could submit a deposit in lieu of site control. NIPPC encourages BPA to define more clearly the regulatory limitations that would allow a customer to provide a deposit in lieu of site control.

Commercial Readiness

One of the major elements of a FR/FS approach to interconnection processes is to identify which interconnection customers are "ready". Alternative #2 would require customers to submit an additional deposit without any showing of readiness. Alternative #1 would require a customer to demonstrate readiness by (1) providing evidence such as an executed term sheet or other evidence that a resource has been selected in resource plan or solicitation along with staged deposits based on multiples of the expected study costs at phase of the study; or (2) providing a deposit in lieu of meeting the readiness criteria. Alternative #3 is similar to Alternative #1 except that there would be no option to submit a deposit in lieu of providing evidence of commercial readiness.

NIPPC recommends that BPA provide customers with the option to provide a deposit in lieu of readiness evidence (either Alternative #1 or #2). One of the challenges NIPPC has in addressing this issue is the uncertainty around when interconnection customers will have reliable information regarding interconnection costs for their project. Load serving entities are reluctant to execute term sheets or select resources in a solicitation if the project does not have certainty on the interconnection costs associated with any given project. If BPA is not prepared to provide potential interconnection customers with accurate information on interconnection costs until the studies are fully complete, then BPA must provide a customer with the option to provide a deposit in lieu of readiness evidence (either Alternative #1 or #2).

The topic "Interconnection Information Access" explores how BPA will provide customers with indicative interconnection costs. Unless BPA can commit to providing customers with binding interconnection cost information that they and their offtaker can rely upon in negotiating a term sheet or offtake agreement, then BPA should abandon Alternative #3 which does not contain the option of making a deposit in lieu of commercial readiness evidence.

NIPPC also notes that the commercial readiness evidence assumes that there is only a bilateral market for energy. NIPPC notes that BPA and the rest of the West are well into exploring two competing proposals to set up a day-ahead market for energy. In the event that BPA joins one (or both) of those markets in the coming years, developers may decide to develop merchant projects with the intent to simply sell energy into the day-ahead market, or to use that market as a short-term hedge while exploring long-term bilateral arrangements. This organized energy market option should not be foreclosed by an interconnection process that requires a long-term off-take agreement.

Transmission Service

In its NOPR on interconnection queue reform, FERC focused on establishing readiness through evidence that a project had a buyer for its energy. NIPPC suggests evidence of transmission service arrangements would be a more accurate gauge of whether a generation project is likely to be "ready" on time. BPA is well aware that transmission expansion upgrades take more time and cost more than interconnection upgrades. NIPPC suggests that customers who have a confirmed transmission service reservation or have committed to the TSEP process (as reflected not just by entering into a TSEP cluster study, but by executing a preliminary engineering or subsequent phase agreement), should have priority in the interconnection process over customers that have not made transmission service arrangements. As noted above, California is exploring reforms that would give interconnection study priority to projects where transmission is available or upgrades are already planned. NIPPC urges BPA to consider how a customer's participation in TSEP should be considered in the interconnection process.

Allocation of Study Costs

NIPPC understands the equitable balance struck between project size and volume of interconnection requests that is the basis for potentially allocating total study costs by allocating 50% of the study costs pro rata based on MW of request and the remaining 50% pro rata by number of interconnection requests. BPA's presentation indicates that all of those transmission providers in the WECC which have received FERC approval to conduct a cluster study under their OATT allocate study costs use the 50/50 methodology. Considering that FERC has approved this mechanism for other transmission providers in the WECC, NIPPC suggests that BPA should also continue considering the 50/50 methodology for the sake of consistency in the region and solicit additional feedback from interconnection customers about this approach.

Network Cost Allocation

NIPPC notes that unlike the allocation of study costs, there does not seem to be a strong consensus among Western transmission providers for how to allocate the costs of network upgrades. FERC has approved all of the listed alternatives. Within WECC, FERC has approved Tri-State to allocate costs based on the specific factor requiring the upgrade and allowed PSCo to allocate costs based on the proportional impact method. In considering among these alternatives, NIPPC encourages BPA to consider the complexity of each of the alternatives. One element to consider is the impact to BPA staff workload to accurately prepare the cost allocations. Equally important is the impact to BPA staff of explaining the results of the cost allocation when customers question the allocations.

NIPPC notes that under the TSEP:

The Customer's pro rata share (of the total costs of the Plan of Service) will be calculated as the ratio of Customer's requested MW out of the total requested MW identified to require the same Plan of Service, multiplied by the estimated total costs of the Plan of Service.¹⁸

Because the TSEP methodology seems to be working with respect to allocating the costs of transmission expansion, NIPPC would appreciate a more detailed explanation of how TSEP calculates a customer's pro rata share of a Plan of Service so that stakeholders can consider applying the same methodology to allocation of interconnection costs.

Shared Network Upgrades

NIPPC agrees that customers in subsequent interconnection clusters who use facilities funded by other interconnection customers should contribute to the costs of those shared upgrades. Customers in subsequent interconnection clusters should not get a

¹⁸BPA Transmission Business Practice, *TSR Study and and Expansion Process (TSEP)*, Version 8, March 24,2023 Section H.2.

competitive advantage simply because other customers took on financial obligations as the result of an earlier interconnection process.

NIPPC recommends BPA pursue Alternative #2 which would apply a distribution factor to determine whether a later request benefited from upgrades energized within the past 5 years. If so, the interconnection customer would contribute funds based on its share of the upgrade funded by the initial customer.

NIPPC slightly prefers Alternative #2 because it seems easier to implement than Alternative #3. Alternative #3 would require BPA to base a customer's contribution to shared network upgrades on the original customer's remaining LGIA credits and require BPA to determine the depreciated or amortized value of the upgrades in order to calculate the subsequent customers contribution to the shared upgrades. NIPPC would appreciate more explanation of the relative complexity of the calculations under Alternatives #2 and #3.

Transition Process

NIPPC members have made development decisions and committed capital and resources based on BPA's existing serial interconnection gueue. NIPPC members are also generally frustrated by the delays, costs, and uncertainty associated with BPA's existing serial interconnection queue and support BPA tariff changes to improve the process. NIPPC members also recognize that they participate in a regulated industry that operates under a tariff model. It may be convenient to think of a service agreement - including an interconnection agreement - under a tariff as a contract; but service agreements differ from bilateral contracts in important ways. Parties to a bilateral contract can modify their agreement only by mutual agreement (or through mechanisms specified in the contract). Under the tariff model, however, the terms and conditions of service can be – and frequently are – modified by going through a regulatory process. BPA clearly intends to implement its interconnection queue reforms through the regulatory approval process specified in its tariff. Customers - including NIPPC members - will have projects in development that are negatively or positively impacted by these reforms. But simply by choosing to participate in this industry, all of BPA's interconnection customers have knowingly accepted the risks associated with regulatory changes - even if they do their best to minimize impacts to their projects by participating in the regulatory process.

NIPPC agrees that BPA must develop a transition plan. NIPPC would not support a proposal that eliminated the existing queue and replaced it entirely with a cluster study process – no matter how well designed. NIPPC also would not support a proposal that processed the current interconnection queue under the serial study model and opened an initial cluster study only after all of the serial studies were complete, because that would take an unreasonable amount of time to process requests submitted in 2022 and 2023.

Both of the alternatives BPA has proposed for the transition process provide for late stage customers to continue through the serial process, while providing for an initial transition cluster for "non-late stage" interconnection customers who meet specific criteria (i.e. demonstrations of site control, commercial readiness, etc.).

BPA's Alternative #1 would adopt FERC's proposed eligibility requirements for customers to pursue either the transitional serial process or participate in the transition cluster study. FERC's proposal for the transitional serial process includes significant deposits (100% of the network upgrade costs), evidence of exclusive site control and evidence of commercial readiness. Participation in the transitional cluster would require a customer to make a \$5 million deposit, provide evidence of exclusive site control, and provide evidence of commercial readiness.

Alternative #2 – BPA's hybrid approach – appears preferable to Alternative #1. Under Alternative #2, BPA would not require late-stage customers to make additional deposits or provide evidence of readiness. Rather, BPA would continue to process the serial queue up until the time where continuing to process the serial queue would delay the transitional cluster. At that point, the remaining serial queue would be studied as part of the transitional cluster. The transitional cluster would have its own requirements for readiness and site control. If the transitional cluster suffered delays, BPA would roll those transitional cluster queue projects into the new cluster study process.

At this point, NIPPC is not able to express support for either alternative. Alternative #1 appears to set an unnecessarily high hurdle for customers to continue in the serial queue or participate in the transition cluster. Alternative #2 on the other hand, seems to contemplate a scenario where BPA might not actually perform a transition cluster study (i.e., if the delay in completing the transition cluster is "too significant"). Alternative #2 also currently lacks any timeframes to guide customers on when they can expect their requests to be studied, which is needed to inform the other tasks associated with project development.

While not able to support either alternative as currently proposed by BPA, NIPPC offers the following principles it believes should govern the transition process. First, BPA should continue to process requests in the serial queue for as long as it can – with no new requirements – without delaying the transition cluster. Second, BPA should conduct a transition cluster study beginning on a specific date for all customers in the serial queue who choose to participate (including those late-stage customers who have not yet completed the serial process). NIPPC looks forward to working with BPA to define the eligibility requirements for the transition cluster which could include deposits, commercial readiness, site control, and transmission arrangements as discussed above. The transition cluster studies should not delay the start time of the first cluster study under the fully reformed tariff. NIPPC believes that BPA should commit to annual interconnection cluster studies, just as it commits to annual TSEP studies. In future workshops on this topic, NIPPC encourages BPA to provide more detail on the timing and deadlines associated with each alternative under consideration.

Interconnection Information Access

As noted above, accurate information regarding interconnection costs is a pre-requisite for BPA's customers to participate in resource procurement processes in order to obtain an executed term-sheet or other evidence of commercial readiness. No developer will be able to get a contract with its customer so long as interconnection costs are unknown. BPA's Alternative #1 would be akin to the informational interconnection study and public interconnection information FERC proposed in its NOPR. Under Alternative #2, BPA would provide public information regarding estimated injection capacity and estimated costs. Alternative #3 would be a multi-phased cluster study approach with the first phase providing analysis similar to BPA's current Feasibility Study.

NIPPC supports Alternative #1. The informational studies must be sufficiently accurate and reliable and delivered on a timeline that would allow customers to participate in utility resource procurement processes in order to secure evidence of commercial readiness. If informational studies are accurate and reliable, then many interconnection customers will choose not to participate in the cluster study process in the first place. It will also mean that the projects participating in the cluster study will be less "speculative" because they will have been able to obtain contracts with load serving entities. A cluster with fewer and more certain interconnecting projects will reduce the number of customers that withdraw once they receive their cluster study results thereby reducing the need for re-studies. In order to meet the needs of developers, an informational study must provide binding cost estimates with a confidence interval; the informational study must be provided before a cluster application window closes, so the customer can decide whether or not it should file for interconnection. Ideally, the informational study would also advise the customer on costs at alternative points of interconnection

Alternative #2 seems to be more generic information that lacks the certainty and accuracy of the informational study that FERC contemplated in its NOPR. NIPPC is concerned that the level of detail and certainty might not be sufficient to allow developers to rely on the information in negotiating a term sheet or to participate in a resource procurement process. There also seems to be a significant risk that multiple generation projects might use the same information in multiple different resource procurement processes. Consider an example where a substation has an injection capacity of 100 MW. Five different developers each use this information to support their bid into five different utility procurement processes and each of them wins. There are now 500 MW of generation projects that have secured evidence of commercial readiness based on injection availability that does not really exist; when the actual study shows that interconnection costs are much higher than the forecast, all of those projects may now drop out of the interconnection process. If BPA seriously considers pursuing Alternative #2, it will need some mechanism to allow customers to validate that the publicly available information is not being oversubscribed prior to the start of the cluster study.

NIPPC's concern with Alternative #3 relates to the timing of when BPA can deliver study results from each phase (and require customers to commit to subsequent phases) and whether those timelines will align with utility resource procurement processes in the region. This alternative would require close coordination and timing of the interconnection cluster study and separate resource procurement processes in order to ensure that the windows and deadlines for each process are aligned well enough to allow BPA sufficient time to complete each phase of its study as well as allow the load serving entities sufficient time to evaluate bids and make resource procurement decisions, before the interconnection customer must commit to the next phase of the study.

Affected System Studies

NIPPC recommends that BPA remove its obligation to complete Affected System Studies from this process. BPA should not adopt Alternative #2 which would allow BPA to delay completing any affected system study until its next cluster study window. As more transmission providers transition to a cluster study process for interconnections (PacifiCorp already has FERC approval to perform annual interconnection cluster studies; PGE has begun a stakeholder process to do the same), the result of BPA performing affected system studies once per year would mean that it would likely take two years before a customer had a clear idea of its interconnection costs (one year for the cluster study on BPA's neighboring system and one more year for BPA's cluster study). Accordingly, NIPPC recommends that BPA adopt Alternative #1 (the timelines for completing affected system studies from FERC's NOPR). But NIPPC suggests that a better alternative would be for BPA to work with its neighboring transmission providers to develop a regional model for all transmission providers to coordinate the timing and resources needed to complete affected system studies. This regional cooperation model to perform affected system studies could be expanded to include any area where the region would benefit from the coordination of interconnection processes (such as the timing for interconnection cluster windows, the deadlines to complete interconnection cluster studies, and the deadlines to complete affected system studies).

Modeling Requirements

No comments.

Study Flexibility

NIPPC generally favors more flexibility for customers to modify existing requests so long as that flexibility does not delay study timelines. However, NIPPC suggests that customer requests to add additional resources to an existing interconnection request at a single point of interconnection will occur less frequently once BPA moves to a FR/FS cluster study. NIPPC suggests that customer interest in modifying existing interconnection requests is likely a by-product of delays associated with serial queue processing. If BPA adopts a process where interconnection requests are submitted and

studies are completed on an annual cycle, the need to revise interconnection requests mid-study should be more limited.