

CHEYENNE AGUILERA Direct (503) 290-3627 cheyenne@mrg-law.com

July 24, 2020

### **VIA ELECTRONIC FILING**

Attention: Filing Center Public Utility Commission of Oregon 201 High Street SE, Suite 100 P.O. Box 1088 Salem, Oregon 97308-1088

## Re: Docket UM 2108 – In the Matter of PacifiCorp's Application for an Order Approving Queue Reform Proposal

Attention Filing Center:

Attached for filing in the above-captioned docket are PacifiCorp's Reply Comments.

Please contact this office with any questions.

Sincerely, C

Cheyenne Aguilera Office Manager

Attachment

## BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

## UM 2108

In the Matter of

PACIFICORP d/b/a PACIFIC POWER

Application for an Order Approving Queue Reform Proposal.

## PACIFICORP'S REPLY COMMENTS

July 24, 2020

## **TABLE OF CONTENTS**

I. II	INTR DISC	ODUC' USSIOI	TION N	1 4
	A.	Consi	stency between the FERC and Oregon study processes is critical	4
		1.	Continuing serial queue processing will disadvantage Oregon QFs	4
		2.	PacifiCorp's proposed reforms reasonably allow late-stage projects to conclude their serial study process	8
		3.	The Company's proposal reasonably exempts small generators that are able to interconnect under the Tiers 1, 2, or 3 interconnection processes.	10
		4.	The Community Solar Program interconnection process is irrelevant.	11
	B.	Pacifi	Corp's proposed reforms have been subject to extensive process	12
	C.	Queue interce	e reform will provide greater certainty on the timing of onnection studies	15
	D.	Pacifi	Corp's proposed cost allocation methodology is fair	17
		1.	Per capita allocation of station equipment network upgrade costs is reasonable	17
		2.	PacifiCorp's proposed one percent floor reasonably protects small generators.	19
		3.	PacifiCorp's proposed methodology for allocating study costs is reasonable.	22
	Е.	Pacifi	Corp's proposed transition process is reasonable	22
		1.	PacifiCorp's proposed January 31, 2020, cutoff for entering the transition process is reasonable	22
		2.	QFs entering the transition process will not pay any additional study deposit.	24
		3.	Delaying approval of queue reform will prohibit Oregon QFs from participating in the transition process.	25
	F.	Pacifi Cluste	Corp's proposal provides sufficient time for QFs to review er Study reports	25
	G.	Pacifi reasor	Corp's proposed requirements for large generators strike a nable balance.	28
		1.	Posting security for network upgrade obligations is reasonable	28
		2.	The proposed withdrawal penalties for large generators are reasonable.	29
		3.	The proposed study deposits for large generators are lower than current requirements.	31
		4.	PacifiCorp's heightened site control requirements for large generators should deter withdrawals and restudies	32

H.	PacifiCorp clarifies the small generator rules subject to its waiver request.	. 34
I.	PacifiCorp's proposed reforms reasonably fill the existing gap for Oregon QFs between 10 and 20 MW.	. 35
J.	PaciCorp agrees to modify and clarify its proposal in response to stakeholder feedback	. 36
	1. QFs can downsize their project consistent with the provisions under the current QF-LGIP	. 36
	2. PacifiCorp is not proposing a commercial readiness requirement for Oregon QFs	. 37
	3. PacifiCorp's proposal does not change how it addressed existing QFs needing to replace an expiring interconnection agreement.	. 37
	4. Clarifications on performance of Informational Interconnection Studies.	. 38
	5. PacifiCorp will file a report within two years to review the efficacy of queue reform.	. 39
	6. PacifiCorp agrees to accept Oregon interconnection requests at any time.	. 40
	7. Consistent with current practice, changes between state and FERC-jurisdiction are studied as a Material Modification	. 41
К.	The Cluster Study process is reasonable	. 41
	1. Clusters will be established based on electrical relevance	. 41
	2. Allowing changes to points of interconnection after the Cluster Study harms other customers.	. 42
	3. Shortening the timeline for cluster restudies is unworkable	. 43
L.	PacifiCorp's proposal to limit post-study and post-interconnection agreement modifications reasonably balances interests among interconnection customers	. 44
	1. PacifiCorp's proposal reasonably protects other interconnection customers from the impact of suspended interconnection agreements.	. 44
	2. Customers should not have expanded rights to extend their commercial operation date.	. 44
М.	Queue reform does not require any changes to standard QF PPAs or contracting practices.	. 46
N.	PacifiCorp does not oppose making additional changes to the QF- LGIP to conform to the OATT but those changes should occur in another proceeding	. 48
О.	PacifiCorp's interconnection study modeling is reasonable and consistent with industry standards.	. 48
CON	CLUSION	. 52

III.

1

## I. INTRODUCTION

2	In accordance with the procedural schedule presented by Public Utility
3	Commission of Oregon Staff (Staff) on July 10, 2020, PacifiCorp d/b/a Pacific Power
4	submits these Reply Comments to the Public Utility Commission of Oregon
5	(Commission). These comments respond to comments filed on July 17, 2020, by the
6	Northwest and Intermountain Power Producers Coalition (NIPPC), the Community
7	Renewable Energy Coalition (CREA), the Renewable Energy Coalition (REC), the
8	Oregon Solar Energy Industries Association (OSEIA), (collectively, REC, CREA, OSEIA
9	are referred to as the Interconnection Customer Coalition), and NewSun Energy LLC
10	(NewSun). PacifiCorp appreciates the opportunity to file these reply comments and the
11	parties' thoughtful engagement in the queue reform process, first during the six-month
12	stakeholder process leading up to PacifiCorp's January 2020 Federal Energy Regulatory
13	Commission (FERC) filing, then throughout the ongoing formal proceeding before
14	FERC, and finally during the more recent informal stakeholder process here in Oregon.
15	PacifiCorp has proposed reforms to the interconnection study process for both
16	large and small Qualifying Facilities (QF). The lynchpin of PacifiCorp's reform proposal
17	is a shift from the current serial queue process which all parties agree has become
18	lengthy and burdensome to the Cluster Study process, which PacifiCorp at its discretion
19	can use for large generators and which is not expressly prohibited for small generators.
20	PacifiCorp's reforms are designed to create a fair and efficient interconnection process for
21	all developers—both large and small and state- or FERC-jurisdictional. Using Cluster
22	Studies for all generators is expected to provide greater certainty regarding study

## PacifiCorp's Reply Comments

1

timelines and provide a clearer path for interconnecting projects that are commercially
 viable.

3	PacifiCorp's reform efforts began over a year ago with a six-month stakeholder
4	process that was well received and attended by numerous developers, including Oregon
5	QF developers, trade associations, and Staff. PacifiCorp's proposal was then vetted at
6	FERC, where it was reviewed by a wide range of interested stakeholders, including REC,
7	CREA, NIPPC, and NewSun, who together filed over 150 pages of pleadings in that
8	docket. FERC approved PacifiCorp's proposal on May 12, 2020. <sup>1</sup>
9	PacifiCorp's Oregon filing largely mirrors reforms approved by FERC. Because
10	the Oregon reforms will apply to QFs, however, PacifiCorp is not requiring QFs to
11	demonstrate commercial readiness in order to enter a Cluster Study, which provides
12	Oregon QF's a clear path forward to receive interconnection studies more quickly than is
13	currently the case. This is the only notable difference between the study process
14	approved by FERC and is directly responsive to concerns raised by REC, CREA, and
15	NIPPC. Since filing, PacifiCorp has held three multi-hour workshops with stakeholders
16	to explain and receive feedback on its proposal. PacifiCorp has taken that feedback
17	seriously and accepted several recommended changes to its proposal.
18	PacifiCorp's proposal is not expected to have a negative impact on QF
19	development in Oregon, in fact, the proposed procedures will likely encourage QF
20	development. The use of Cluster Studies will provide a more certain study timeline and is
21	expected to accelerate the provision of interconnection studies, which have been bogged
22	down by the serial study process due, in part, to large non-QF requests. By creating a

<sup>&</sup>lt;sup>1</sup> PacifiCorp, 171 FERC ¶ 61,112 (May 12, 2020) (hereinafter FERC Order).

more predictable interconnection study process, PacifiCorp's proposal removes
uncertainty, which should aid QFs in planning other aspects of their project development,
including accounting for standard avoided cost pricing updates, finalizing power purchase
agreements (PPAs), and permitting. Moreover, because PacifiCorp's Oregon queue is
dominated by renewable energy projects, queue reform that clears a path for
interconnection is expected to further Oregon's state energy policy to reduce greenhouse
gas emissions.

8 By clearing commercially non-viable, FERC-jurisdictional, large projects from the 9 interconnection queue, PacifiCorp's reforms provide a path to interconnection for QFs 10 that can actually get built. Far from discouraging development, queue reform simply 11 removes the economic value associated with queue position and instead allows all 12 commercially viable projects to move forward and compete on the project merits, not 13 queue position.

14 Moreover, requiring PacifiCorp to continue to process Oregon QFs serially would 15 place those projects at a significant disadvantage relative to FERC-jurisdictional projects and 16 QFs in neighboring states. The only feasible way for PacifiCorp to maintain an Oregon serial 17 queue and meet its obligations under its FERC-jurisdictional Open Access Transmission 18 Tariff (OATT) would be to study Oregon QFs in between annual OATT-mandated Cluster 19 Studies. Because of the potentially limited time between Cluster Studies, however, this 20 means Oregon QF's may only be studied in limited windows between PacifiCorp's cluster 21 studies regardless of when requests are submitted which would be directly contrary to both 22 Oregon and FERC precedent prohibiting discriminatory treatment for QFs.

### PacifiCorp's Reply Comments

3

PacifiCorp appreciates that it has requested review of its queue reform proposal on a relatively fast timeline and appreciates stakeholder's efforts to engage, even if they object to the pace of the review. PacifiCorp's proposed review timeline is driven by the desire to allow Oregon QFs to participate in the transition process that begins in October. PacifiCorp believes that if Oregon QFs sit out that process, and potentially the April 2021 cluster process, they will be at a significant disadvantage.

PacifiCorp appreciates that its proposal is a departure from a process that has been in place for many years, although there is little dispute that the serial queue process is fundamentally broken, and reforms are needed. To address concerns that queue reform may create unintended consequences, PacifiCorp has committed to file with FERC a report within two years that will assess the efficacy of the Company's reforms. If, after the transition and April 2021 cluster process there is a need for additional reforms, the Company can revisit its process and seek additional modifications based on what was learned.

14

### II. DISCUSSION

### 15 A. Consistency between the FERC and Oregon study processes is critical.

16

17

1. Continuing serial queue processing will disadvantage Oregon QFs.

The Interconnection Customer Coalition argue that there is no "pressing need to

18 change PacifiCorp's interconnection process" to align state and federal processes.<sup>2</sup> They

- 19 further recommend that all small generators be exempt from the Cluster Study process.<sup>3</sup>
- 20 Maintaining an Oregon-only serial queue, however, would be administratively inefficient and

<sup>&</sup>lt;sup>2</sup> Joint Comments of Interconnection Customer Coalition at 7.

<sup>&</sup>lt;sup>3</sup> Joint Comments of Interconnection Customer Coalition at 19.

burdensome and—more importantly—likely to disadvantage Oregon interconnection
 customers.

3 Interconnection studies necessarily require numerous assumptions. One of the most 4 important assumptions is what other interconnection customers are assumed to have already 5 interconnected to the system. Under a serial queue process, this assumption was 6 straightforward—all interconnection requests with higher priority queue positions were 7 assumed to be in-service. Under a Cluster Study process, this assumption is also 8 straightforward—all interconnection requests included in prior Cluster Studies are assumed 9 to be in-service. Under a hybrid cluster-serial approach, it is less clear what other 10 interconnection customers would be assumed in-service when performing a study. What this 11 means is that the cluster and serial process cannot occur at the same time because they could 12 have conflicting assumptions. Instead the serial processing would have to occur between 13 Cluster Studies to ensure the assumptions in each study process are not in conflict. 14 To comply with its obligations under it OATT, PacifiCorp must begin each Cluster 15 Study process on April 1 of each year. The April 1 date is fixed in the tariff. Therefore, if the Commission were to allow Oregon-jurisdictional interconnection customers to be exempt 16 17 or to opt out of the Cluster Study process, then the Company would need to implement the 18 exemption by studying the Oregon serial queue in between Cluster Studies, i.e., when a 19 Cluster Study concludes, PacifiCorp would then turn to the Oregon queue and serially 20 process interconnection requests until the next Cluster Study begins. This would mean that 21 an Oregon-jurisdictional generator's study would assume that the following are in service: 22 (1) all interconnection customers with executed interconnection agreements; (2) all Oregon-23 jurisdictional generators that have been exempted from the Cluster Study and have higher

### PacifiCorp's Reply Comments

5

priority queue positions; and (3) all generators included in prior Cluster Studies. Each
 Cluster Study would, in turn, assume that all Oregon-jurisdictional generators studied after
 the previous Cluster Study concluded are in-service. Such an approach would likely
 disadvantage QFs that are exempt from the Cluster Study process because of the lower
 priority relative to the previous Cluster Study and limited time between Cluster Studies.

6 The Cluster Study window must open on April 1 of each year. PacifiCorp anticipates 7 completing the initial Cluster Study by approximately November 1 of each year. At that 8 point, interconnection customers would have 30 days to choose whether to proceed to a 9 Facilities Study. If customers choose to drop out, then there would likely be a restudy. A 10 restudy could also be required if a FERC-jurisdictional customer changes their service type 11 after the initial Cluster Study. If a restudy is required (which is likely), PacifiCorp 12 anticipates that the cluster restudy may not be completed until approximately April 1 of the 13 following year.

After the Cluster Study (or restudy) concludes and all required upgrades are known PacifiCorp can then begin to process the Oregon serial queue requests for any Oregon QF that did not have a study completed before the prior year's Cluster Study began (those projects would have already been included in the baseline assumption for the prior year's Cluster Study). PacifiCorp cannot begin to process the Oregon serial queue until the Cluster Study (or restudy) is complete because the results of the Cluster Study form the baseline assumptions for the Oregon serial queue interconnection studies.

This means that it is possible, and potentially probable, that PacifiCorp could complete at most one Oregon serial study annually between Cluster Studies (because of the nature of serial studies, PacifiCorp would need to study each serial request individually and

### PacifiCorp's Reply Comments

6

1	in order of priority). In some years it is possible that there would be insufficient time
2	between Cluster Studies to complete any Oregon serial studies. Any pending Oregon serial
3	queue requests that are not studied would be deferred and studied following the next Cluster
4	Study, assuming there is sufficient time.
5	The exemption or opt-out scenario described above essentially creates an annual
6	study window for Oregon QF requests that would be open between PacifiCorp's Cluster
7	Studies. Oregon QFs would be studied to the extent permissible in the small window
8	between the OATT-mandated Cluster Studies regardless of when during the year an Oregon
9	QF request was submitted. This hybrid cluster-serial approach would likely create long and
10	inherently uncertain study timelines for QFs participating in the serial process.
11	Although the Interconnection Customer Coalition requests an Oregon-only serial
12	process, other stakeholders have recommended against such an approach. During
13	PacifiCorp's 2019 stakeholder process, NIPPC stated that it "does not support limiting any
14	changes to a geographic subset of PacifiCorp's system NIPPC urges PacifiCorp to focus
15	on system-wide reforms." <sup>4</sup> NIPPC further argued that, "Creating two or more queue
16	processes with different requirements and processes may also violate FERC's directives
17	against discrimination and preferential treatment."5 At FERC, NIPPC generally supported
18	PacifiCorp's reforms and "concurs with PacifiCorp that effective queue reform would be best
19	achieved by PacifiCorp applying the same Cluster Study process to both state and FERC
20	jurisdictional interconnection requests." <sup>6</sup>

<sup>&</sup>lt;sup>4</sup> NIPPC Stakeholder Comments at 3 (July 31, 2019) (available here: <u>https://www.oasis.oati.com/woa/docs/PPW/PPWdocs/NIPPC\_Queue\_reform\_comments\_final.pdf</u>).

<sup>&</sup>lt;sup>5</sup> NIPPC Stakeholder Comments 3 (July 31, 2019).

<sup>&</sup>lt;sup>6</sup> Comments of Northwest and Intermountain Power Producers Coalition on PacifiCorp's March 13 Response to Deficiency Letter at 1, FERC Docket No. ER20-924-001 (April 10, 2020) (emphasis added).

1	The Interconnection Customer Coalition support their request for an Oregon-only
2	serial queue process by asserting that PacifiCorp has not claimed that its "Oregon system, as
3	a whole, is a problem with only 22 FERC-jurisdictional requests in Oregon for a total of
4	3,488 MW." <sup>7</sup> As explained during the workshops, however, the peak demand in
5	PacifiCorp's western Balance Area (PACW) is only 4,354 MW. This means that the new
6	generation resources attempting to interconnect just in Oregon represent 80 percent of
7	PACW's peak load—without accounting for the existing generation already serving that peak
8	load. The dramatic imbalance between load and generation is one of the key reasons that
9	PacifiCorp's serial interconnection process requires reform. Although the volume of
10	interconnection requests is greater in PacifiCorp's eastern Balancing Area (PACE), the same
11	problems exist in Oregon. CREA made this same argument to FERC, which was rejected
12	when FERC approved system-wide reforms. <sup>8</sup>
13 14	2. PacifiCorp's proposed reforms reasonably allow late-stage projects to conclude their serial study process.
15	While a prospective process that includes an Oregon-only serial queue would be
16	extremely problematic, the Company's proposal recognizes that certain customers with
17	pending interconnection requests should be allowed to complete the interconnection process
18	according to the terms of that serial process. Thus, the Company's proposed transition
19	process allows interconnection customers that are at or beyond the point in the
20	interconnection process when they have been tendered a Facilities Study Agreement (i.e.,
21	including those in the Facilities Study process, or those that have been tendered a draft

<sup>&</sup>lt;sup>7</sup> Joint Comments of Interconnection Customer Coalition at 6; *see also* Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 5.

<sup>&</sup>lt;sup>8</sup> Motion to Reject Tariff Filing and for Technical Conference and Settlement Proceeding and Protest of the Community Renewable Energy Association and the Renewable Energy Coalition, FERC Docket No. ER20-924-000 at 9-10 (April 10, 2020).

1 interconnection agreement) by April 1, 2020, will have the option to complete their 2 interconnection process without being included in a transition cluster, or they may elect to proceed under the transition process.<sup>9</sup> It is reasonable to allow these late-stage projects to 3 4 proceed based on the results of their serial study because they have each received system 5 impact studies, which means that when the Company conducts its transition Cluster Study it 6 can assume these projects are in-service based on the results of the system impact studies. 7 The Interconnection Customer Coalition incorrectly claims that "interconnection 8 customers in the queue, even ones with Facilities Studies, will not be allowed to move forward towards interconnection based on those study results."<sup>10</sup> As explained above, this is 9 10 incorrect. The Interconnection Customer Coalition further recommend that QFs with pending 11 12 requests should have the option of continuing to be processed serially, instead of through Cluster Studies.<sup>11</sup> PacifiCorp recognizes that the Commission allowed this optionality when 13 it approved the small generator interconnection rules in 2009.<sup>12</sup> In this case, however, given 14 15 the specific reforms approved by FERC and requested here, allowing that optionality is 16 unworkable and likely to disadvantage QFs due to the incompatibility of concurrent serial 17 and cluster study processes. If an interconnection request is pending, but not yet studied, 18 then the transition Cluster Study cannot assume that interconnection request is in-service 19 because PacifiCorp will not know what is required to interconnect that request. This means 20 PacifiCorp either must process the Oregon QF first and delay the transition Cluster Study

<sup>&</sup>lt;sup>9</sup> PacifiCorp Proposed QF-LGIP Appendix 8, Section 1.2.1.

<sup>&</sup>lt;sup>10</sup> Joint Comments of Interconnection Customer Coalition at 23.

<sup>&</sup>lt;sup>11</sup> Joint Comments of Interconnection Customer Coalition at 23.

<sup>&</sup>lt;sup>12</sup> In the Matter of a Rulemaking to Adopt Rules Related to Small Generator Interconnection, Docket No. AR 521, Order No. 09-196 at 5 (June 8, 2009).

(thereby violating its OATT) or complete the transition Cluster Study and then turn to the
 Oregon QF. As described above, not violating the OATT would necessarily mean studying
 the transition cluster first, which would likely delay, potentially significantly Oregon QF
 studies.

5 6 7

# 3. The Company's proposal reasonably exempts small generators that are able to interconnect under the Tiers 1, 2, or 3 interconnection processes.

8 Oregon's small generator interconnection rules provide four different levels of 9 scrutiny before a project can interconnect. Tiers 1, 2, and 3 have less rigorous study 10 requirements because projects are only eligible for those tiers if the project passes strict 11 screening criteria. Small generators that do not pass the strict screening criteria are studied 12 under the Tier 4 study process, which is akin to the study process used for large generators 13 and consists of the same feasibility, system impact, and facilities studies. PacifiCorp's 14 proposed queue reform would apply to only Tier 4 small generators because those are the 15 only small generators that are currently studied in the serial queue. 16 The Interconnection Customer Coalition argue that if PacifiCorp is not requiring 17 small generators subject to Tiers 1, 2, or 3 to enter clusters, it should exempt Tier 4 small 18 generators as well.<sup>13</sup> Because small generators reviewed under Tiers 1 to 3 are already 19 studied differently from Tier 4 generators, there is no reason that Tier 4 should be exempt 20 from the cluster study process just because Tier 1, 2, and 3 are exempt. 21 Moreover, Tiers 1, 2, and 3 are exempt because projects that meet the requirement for 22 review under those tiers are subject to strict screening criteria intended to determine that the

23 output of those generators are either unlikely to flow back onto PacifiCorp's system or

<sup>&</sup>lt;sup>13</sup> Joint Comments of Interconnection Customer Coalition at 18.

1 require no upgrades to PacifiCorp's system, which is why their interconnection study process 2 is different. Tier 4 generators do impact the broader distribution, and potentially 3 transmission, system and therefore require a more robust interconnections study process. The Community Solar Program interconnection process is 4 **4**. 5 irrelevant. 6 The Interconnection Customer Coalition also point to the fact that Community Solar 7 Program (CSP) projects and net metering projects will not be included in the Cluster Studies and argue that if these projects can be studied outside of a cluster then so can others.<sup>14</sup> This 8 9 argument, however, ignores the unique statutory provisions, Commission precedent, 10 processing rules, and circumstances surrounding both CSP projects and traditional net 11 metering projects, both of which are subject to specific screening criteria, including a size 12 cap, that allow them to be studied differently from other QFs because of the expectation that 13 CSP and traditional net metering projects will have limited impact on the Company's system 14 and other generators that are not in their immediate vicinity. Indeed, even before the 15 Company proposed queue reform, eligible CSP projects were studied differently from other 16 QFs and outside of the serial queue process. The fact that CSP and traditional net metering 17 projects were studied outside of the serial queue process before clustering and will continue 18 to be studied that way after clustering does not mean that all other QFs can be studied in a 19 serial queue. 20

The Interconnection Customer Coalition also argues that it is discriminatory to treat CSP projects different from other QFs.<sup>15</sup> The Commission already addressed this issue when 21

<sup>&</sup>lt;sup>14</sup> Joint Comments of Interconnection Customer Coalition at 19; Comments of Northwest and Intermountain Power Producer's Coalition at 3.

<sup>&</sup>lt;sup>15</sup> Joint Comments of Interconnection Customer Coalition at 19-20.

1	approving the CSP interconnection process in Order No. 19-392 that treats CSP project
2	differently. CSP projects and typical QFs are not similarly situated because of the screening
3	criteria used for the CSP interconnection process and, more importantly, because CSP
4	projects are participating in a state-created virtual net metering program. <sup>16</sup>
5	The Interconnection Customer Coalition threaten that QFs will abuse the CSP process
6	by "pursu[ing] the CSP queue simply to obtain interconnection and without a genuine desire
7	to participate in the CSP." <sup>17</sup> If that occurs, however, the QF will be unable to execute an
8	interconnection agreement, which requires that the interconnecting customer participate in
9	the CSP program. This means that QFs attempting to sabotage the CSP, as the
10	Interconnection Customer Coalition suggest, would reach a dead end and be unable to
11	interconnect.
12	B. PacifiCorp's proposed reforms have been subject to extensive process.
13	The Interconnection Customer Coalition's "biggest concern" with PacifiCorp's filing
14	is that they believe there has been insufficient process. <sup>18</sup> PacifiCorp disagrees. The Oregon
15	filing draws heavily from the six-month stakeholder process that began in 2019 and the
15 16	filing draws heavily from the six-month stakeholder process that began in 2019 and the FERC process that began January 2020.
15 16 17	filing draws heavily from the six-month stakeholder process that began in 2019 and the FERC process that began January 2020. In June 2019, PacifiCorp initiated a broad stakeholder process to discuss queue
15 16 17 18	filing draws heavily from the six-month stakeholder process that began in 2019 and the FERC process that began January 2020. In June 2019, PacifiCorp initiated a broad stakeholder process to discuss queue reform. Contrary to the Interconnection Customer Coalition's comments, <sup>19</sup> that stakeholder
15 16 17 18 19	filing draws heavily from the six-month stakeholder process that began in 2019 and the FERC process that began January 2020. In June 2019, PacifiCorp initiated a broad stakeholder process to discuss queue reform. Contrary to the Interconnection Customer Coalition's comments, <sup>19</sup> that stakeholder process was not limited to only FERC-jurisdictional reforms. In fact, many stakeholders that
<ol> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	filing draws heavily from the six-month stakeholder process that began in 2019 and the FERC process that began January 2020. In June 2019, PacifiCorp initiated a broad stakeholder process to discuss queue reform. Contrary to the Interconnection Customer Coalition's comments, <sup>19</sup> that stakeholder process was not limited to only FERC-jurisdictional reforms. In fact, many stakeholders that participated in the process are QF developers in Oregon and other states (such as EDP

<sup>&</sup>lt;sup>16</sup> See In the Matter of Public Utility Commission of Oregon Community Solar Program Interconnection Update, Docket No. UM 1930, Order No. 20-038, App. A at 10 (Feb. 4, 2020).

<sup>&</sup>lt;sup>17</sup> Joint Comments of Interconnection Customer Coalition at 20.

<sup>&</sup>lt;sup>18</sup> Joint Comments of Interconnection Customer Coalition at 16.

<sup>&</sup>lt;sup>19</sup> Joint Comments of Interconnection Customer Coalition at 16.

1	Renewables North America LLC and Ecoplexus), trade groups representing QF developers in
2	Oregon (such as NIPPC and Renewable Northwest), and representatives of state
3	commissions, including Oregon Staff, and representatives from the Public Service
4	Commission of Utah and Public Service Commission of Wyoming. Even counsel for REC
5	participated in the stakeholder process on behalf of a Wyoming QF developer. The
6	stakeholder process focused generally on queue reforms that would impact both state- and
7	FERC-jurisdictional projects because both types of projects were in the same queue.
8	Stakeholders submitted comments on a broad array of topics, including how queue reform
9	should be applied to QFs.
10	After that six-month process, the Company submitted its proposed reforms to FERC
11	on January 31, 2020. NIPPC, REC, CREA, and New Sun (four of the five commenters here)
12	participated fully in the FERC process, filing multiple rounds of comments. Notably,
13	NIPPC, REC, and CREA's comments were not limited to only FERC issues. They focused
14	much of their attention on state-jurisdictional matters. In particular, they emphasized that
15	queue reform could harm QF development if the commercial readiness criteria PacifiCorp
16	proposed for FERC generators applied to QFs. In response to this concern, PacifiCorp made
17	clear at FERC, and in its filing here, that QFs are not required to demonstrate commercial
18	readiness. PacifiCorp's FERC comments also made clear that the Company intends to
19	transition both federal- and state-jurisdictional interconnection customers into the same
20	Cluster Study process on the same timeline and largely subject to the same requirements, <sup>20</sup>
21	which was also responsive to recommendations made at FERC, including by NIPPC.

13

<sup>&</sup>lt;sup>20</sup> See FERC Order ¶ 157.

1 The fact that NIPPC, REC, CREA, and New Sun participated fully in the FERC 2 process, together with the fact that the proposed Oregon reforms largely mirror the FERC 3 reforms, means that these parties have now had five and-a-half months to analyze and 4 understand the full scope of the Company's proposed reforms. While the Oregon reforms are 5 specifically tailored to Oregon's QF interconnection process, the overall structure and most 6 of the implementation details are the same.

7 Finally, the process that has occurred in Oregon should not be downplayed. 8 PacifiCorp posted notice of this filing on its OASIS site, which is where all interconnection 9 related notices are posted. PacifiCorp also served notice of its filing on the service lists for 10 several generic QF dockets in Oregon. The Company held three, two-hour workshops. 11 During those workshops, the Company provided participants with an overview of the queue 12 reform process, explained in detail how Cluster Study areas would be identified and studied, 13 and discussed how the proposed interconnection reforms fit into the broader implementation 14 of PURPA in Oregon, including the timing of Cluster Studies relative to standard avoided 15 cost pricing updates and QF contracting practices. Prior to the first workshop, REC submitted written questions, which the Company answered during the workshop. Thereafter, 16 17 parties were invited to submit written questions before the following workshops, which the 18 Company answered to the best of its ability. Notably, despite the specific invitation to 19 submit written questions, neither NIPPC, OSEIA nor CREA did so. The Company also 20 responded in writing to Information Requests submitted by Staff.

The Interconnection Customer Coalition also claims that PacifiCorp has refused to
 make any changes to its proposal.<sup>21</sup> That is simply untrue. During the workshops,

<sup>&</sup>lt;sup>21</sup> Joint Comments of Interconnection Customer Coalition at 18.

1	PacifiCorp explained that it would consider potential changes proposed by stakeholder and
2	was open to modifying its proposal as long as doing so was reasonable and maintained
3	general consistency with the FERC-approved process. As discussed below, the Company has
4	agreed to several recommended changes to its proposal.
5	Moreover, to address concerns that queue reform could be less effective than
6	expected, PacifiCorp committed to filing a report with FERC within two years of the
7	effective date of the queue reform proposal to address the efficacy of the proposed changes.
8	This informational report will include, among other things, a discussion on (1) the
9	withdrawal penalty received, (2) the allocation of the withdrawal penalty, (3) the number of
10	withdrawals, and (4) the timeline for processing requests, and any other informational
11	reporting conditions required by regulators. Filing the report in two years will allow for
12	completion of the transition process and one prospective Cluster Study, permitting
13	PacifiCorp and stakeholders time to adjust to the changes and identify areas where further
14	adjustment may be necessary. The Company commits to filing the same report with the
15	Commission.
16 17	C. Queue reform will provide greater certainty on the timing of interconnection studies.
18	The Interconnection Customer Coalition argue that under the proposed Cluster Study
19	approach "QFs may be unable to lock in avoided cost prices due to the lack of certainty on
20	interconnection costs and schedule[.]"22 PacifiCorp disagrees. Indeed, the annual Cluster
21	Study process creates greater certainty for QFs obtaining interconnection study reports.

<sup>&</sup>lt;sup>22</sup>Joint Comments of Interconnection Customer Coalition at 24.

1	First, the annual Cluster Study process begins April 1 each year-a date certain set
2	forth in PacifiCorp's OATT and the proposed reforms here. Second, the Cluster Study
3	process will proceed according to a defined timeline that anticipates issuance of a Cluster
4	Study report within 150 days of its commencement. <sup>23</sup> This means that a QF could submit an
5	interconnection request in April and receive its Cluster Study report in November. This
6	timeline is substantially faster than the current study process. The Interconnection Customer
7	Coalition claim that "customers under the current processes should have a system impact
8	study (which is the equivalent of the Cluster Study) in a few months." <sup>24</sup> While that timeline
9	is possible in theory, in practice serial queue studies take significantly longer. And because a
10	customer's queue position dictates the timing of their study, the customer has less control
11	over when their study occurs and there is less certainty about when the study will occur
12	because the study's timing is dependent on many factors outside of the QF's and
13	PacifiCorp's control.
14	Concerns over potential changes to avoided cost prices that might occur during the
15	pendency of an interconnection study exist under either process. But the Cluster Study
16	process is expected to provide greater certainty both in terms of when studies begin and is
17	expected to provide studies sooner than the current process. To the extent that uncertainty in
18	the interconnection process hinders QF's ability to determine avoided cost price eligibility or
19	execute PPAs, PacifiCorp's proposed reforms will improve the process, not harm it.

<sup>&</sup>lt;sup>23</sup> If restudies are required, which is something that PacifiCorp cannot control, the Cluster Study report may be delayed several additional months, which would still provide an interconnection study to the QF on a faster timeline than the current process.

<sup>&</sup>lt;sup>24</sup> Joint Comments of Interconnection Customer Coalition at 30.

1 The Interconnection Customer Coalition are also concerned that if a QF misses the April window to enter a Cluster Study it will have to wait until the next one.<sup>25</sup> That is true; 2 3 but QFs will be well aware of those deadlines and can plan accordingly. 4 D. PacifiCorp's proposed cost allocation methodology is fair. 5 Per capita allocation of station equipment network upgrade costs 1. is reasonable. 6 7 Consistent with the network upgrade allocation among interconnection customers approved by FERC,<sup>26</sup> PacifiCorp proposes to separate network upgrades into two categories: 8 9 (1) station equipment network upgrades, including all equipment located in the station to 10 which the generator is connecting; and (2) all other network upgrades, including transmission 11 lines, transformers, and distantly located breakers. Station equipment network upgrades will 12 be allocated on a per capita basis (i.e., per interconnection request) based on the number of generators interconnecting at an individual station.<sup>27</sup> 13 14 The Interconnection Customer Coalition and NewSun and OSEIA criticize the per 15 capita methodology for allocating station equipment because they claim it may shift costs onto small generators.<sup>28</sup> PacifiCorp disagrees. Station upgrades include all network 16 17 upgrades at the point of interconnection substation, which may include physical equipment 18 such as circuit breakers, switches, and instrument transformers along with their associated 19 foundations, structures, bus, and wire connections. The station upgrades also may include 20 protective relays, shared communications infrastructure, and other shared facilities such as

<sup>&</sup>lt;sup>25</sup> Joint Comments of Interconnection Customer Coalition at 29.

<sup>&</sup>lt;sup>26</sup> FERC Order ¶ 18, 49.

<sup>&</sup>lt;sup>27</sup> PacifiCorp Proposed QF-LGIP Article 4.2.3(a).

<sup>&</sup>lt;sup>28</sup> Joint Comments of Interconnection Customer Coalition at 34; Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 8; *see also* Comments of Northwest and Intermountain Power Producer's Coalition at 3.

fencing, ground grid, gravel, etc. These station facilities are designed and constructed on a
per-termination basis and the specifications for equipment is determined by the voltage class
and system characteristics on a whole station basis, not by the anticipated power flow of any
one termination. In other words, station equipment upgrades are dictated by the number of
interconnecting generators, not the size of the interconnecting generators. For this reason,
cost allocation on a per capita basis instead of pro rata size basis is appropriate.

7 The Interconnection Customer Coalition claim to show the potential inequity of per 8 capita cost allocation by positing an example where a 3 MW and a 500 MW project share 50/50 in a \$50 million station equipment upgrade.<sup>29</sup> Fist, this example is entirely unrealistic 9 10 because a 3 MW generator and a 500 MW generator would never interconnect at the same 11 voltage level so under no circumstances would projects in the Interconnection Customer 12 Coalition example ever share station equipment upgrades. Additionally, based on 13 PacifiCorp's proposed allocation methodology, the small generator in this example would 14 pay nothing. To avoid excessively burdening small generators with significant network 15 upgrade costs, PacifiCorp proposes a floor of 1 percent of total capacity within a cluster 16 under which projects will be deemed not to contribute to the network upgrades identified in the Cluster Study.<sup>30</sup> As applied to the Interconnection Customer Coalition example, the 3 17 18 MW project is less than one percent of the total capacity in the cluster (503 MW) and 19 therefore would pay nothing. Far from discriminating against small QFs, PacifiCorp's 20 network upgrade cost allocation proposal benefits small generators.

<sup>&</sup>lt;sup>29</sup> Joint Comments of Interconnection Customer Coalition at 34.

<sup>&</sup>lt;sup>30</sup> PacifiCorp Proposed QF-LGIP Article 4.2.3(d).

## 12.PacifiCorp's proposed one percent floor reasonably protects small2generators.

PacifiCorp's proposal would study small and large generators in the same clusters,
just as small and large generators are currently included in the same queue. As noted above,
PacifiCorp proposes a floor of one percent of total MW within a cluster under which projects
will be deemed not to contribute to the network upgrades identified in the Cluster Study. The
Company developed and proposed the one percent floor during its stakeholder process in
2019.

9 The Company's FERC filing included the same one percent floor. At FERC, only 10 one stakeholder objected to the provision and recommended it be eliminated because in some 11 scenarios, a relatively small project could contribute to the need for significant network upgrades, at or above its proportionate nameplate capacity.<sup>31</sup> Despite this concern that the 12 floor was too high, FERC approved the Company's proposal finding that it "will avoid 13 burdening small generators with excessive Network Upgrade costs."32 14 15 The Interconnection Customer Coalition recommend that the floor increase to 10 16 percent, which would mean that if an individual generator comprised less than 10 percent of 17 the total capacity in a cluster, then the small generator would pay for no network upgrades.<sup>33</sup> 18 The Interconnection Customer Coalition claim that PacifiCorp's one percent floor "appears

19 to be an arbitrary decision," but concede that they have "no specific basis" for their 10

<sup>&</sup>lt;sup>31</sup> FERC Order ¶ 31.

<sup>&</sup>lt;sup>32</sup> FERC Order ¶ 49.

<sup>&</sup>lt;sup>33</sup> Joint Comments of Interconnection Customer Coalition at 38; Comments of Northwest and Intermountain Power Producer's Coalition at 3.

percent floor.<sup>34</sup> NewSun and OSEIA also recommend that the one percent floor increase but
 provide no specific recommendation.<sup>35</sup>

3	The Commission should reject the Interconnection Customer Coalition
4	recommendation. Adopting a 10 percent floor would potentially shift significant network
5	upgrade costs onto other generators in the cluster. If a generator represents 10 percent of the
6	total capacity in a cluster, it is not reasonable to assume that generator contributes nothing to
7	the need for network upgrades. The Company's conservative one percent floor is better
8	designed to mitigate unreasonable cost shifting while also protecting small generators that are
9	less likely to contribute to the need for network upgrades.
10	Adopting a 10 percent floor could also be problematic because it could apply to more
11	than one generator in a cluster. As a simplistic example, assume there are four generators in
12	a cluster—one is 140 MW and the other three are 20 MW each. Under a 10 percent floor, all
13	of the network upgrades would be assigned to the 140 MW generator even though that
14	generator represents only 70 percent of the total capacity.
15	The Interconnection Customer Coalition asks PacifiCorp to "clearly articulate and
16	confirm that the normally applicable rules entitling Oregon QFs to refunds of network
17	upgrades with a systemwide benefit are not altered by the proposed queue reform process." <sup>36</sup>
18	To be clear, PacifiCorp's proposal does not recommend any changes to the Commission's
19	policy applicable to large generators that make the QF "responsible for all costs associated
20	with network upgrades unless they can establish quantifiable system-wide benefits, at which
21	point the [QF] would be eligible for direct payments from the Transmission Provider in the

<sup>&</sup>lt;sup>34</sup> Joint Comments of Interconnection Customer Coalition at 38.

<sup>&</sup>lt;sup>35</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 8.

<sup>&</sup>lt;sup>36</sup> Joint Comments of Interconnection Customer Coalition at 38-39.

1	amount of the benefit."37 For small generators, QFs will remain responsible for "system
2	upgrades" as required by OAR 860-082-0035(4), which states:
3 4 5 6 7 8 9 10 11 12 13 14	A public utility must design, procure, construct, install, and own any system upgrades to the public utility's transmission or distribution system necessitated by the interconnection of a small generator facility. A public utility must identify any adverse system impacts on an affected system caused by the interconnection of a small generator facility to the public utility's transmission or distribution system. The public utility must determine what actions or upgrades are required to mitigate these impacts. Such mitigation measures are considered system upgrades as defined in these rules. The applicant must pay the reasonable costs of any system upgrades.
15	The Interconnection Customer Coalition further request that PacifiCorp "explain[]
16	how a large interconnection customer will be able to show quantifiable system benefits under
17	a Cluster Study approach." <sup>38</sup> Again, there is no change to the Commission's standard and
18	the use of Cluster Studies instead of individual serial queue studies has no impact on how a
19	large generator can demonstrate system-wide benefits.
20	The Interconnection Customer Coalition also recommend that as part of its approval
21	of queue reform, the Commission also effectively reverse Oregon's long-standing cost
22	allocation policy and require retail customers to pay for network upgrades unless PacifiCorp
23	can demonstrate that the QF's interconnection did not produce quantifiable system-wide
24	benefits <sup>39</sup> That issue is currently under investigation in docket UM 2032 and there is no
25	basis to change it here.

<sup>&</sup>lt;sup>37</sup> See In the Matter of Public Utility Commission of Oregon Investigation into Interconnection of PURPA Qualifying Facilities with Nameplate Capacity Larger than 20 Megawatts to a Public Utility's Transmission or Distribution System, Docket No. UM 1401, Order No. 10-132 at 3 (Apr. 7, 2010).

<sup>&</sup>lt;sup>38</sup> Joint Comments of Interconnection Customer Coalition at 42.

<sup>&</sup>lt;sup>39</sup> Joint Comments of Interconnection Customer Coalition at 52.

### 1 2

## **3.** PacifiCorp's proposed methodology for allocating study costs is reasonable.

3	The Interconnection Customer Coalition also object to PacifiCorp's proposal to
4	determine each project's share of the actual study costs by allocating: (1) 50 percent of the
5	applicable study costs to projects on a per capita basis based on the number of requests in the
6	cluster; and (2) 50 percent of the applicable study costs on a pro rata basis based on project
7	size. <sup>40</sup> PacifiCorp's approach strikes a reasonable balance because there are some study
8	costs that are incurred regardless of how large a project may be, while others are driven by
9	the size of the project studied. The Interconnection Customer Coalition return to their
10	example of a 3 MW and 500 MW project in a cluster and argue that it is unfair for the 3 MW
11	project to pay 50 percent of the study costs "even though the 500 MW generator is obviously
12	going to make the study far more complicated and expensive."41 The Interconnection
13	Customer Coalition, however, misstate how study costs would be allocated in their example.
14	In fact, in their example, the small generator would be responsible for only 25.6 percent of
15	the study costs. <sup>42</sup>
16	E. PacifiCorp's proposed transition process is reasonable.
17 18	1. PacifiCorp's proposed January 31, 2020, cutoff for entering the transition process is reasonable.
19	The purpose of the Transition Process is to clear out the existing queue, which
20	requires resolving the existing interconnection queue backlog. To that end, at FERC
21	PacifiCorp proposed a cutoff whereby only those generators with interconnection requests

<sup>&</sup>lt;sup>40</sup> Joint Comments of Interconnection Customer Coalition at 35.

<sup>&</sup>lt;sup>41</sup> Joint Comments of Interconnection Customer Coalition at 35.

 $<sup>^{42}</sup>$  If the cluster had only these two generators, 50 percent of the costs would be split between the two generators. So the small generator would pay 25 percent. The other 50 percent would be split based on the relative size. So of that 50 percent, the small generator would pay 0.6 percent (3/503).

1	pending as of January 31, 2020, would be eligible for the transition process. FERC approved
2	the January 31, 2020, cutoff date because the "Transition Process accounts for the significant
3	amount of interconnection requests currently in the queue and creates a mechanism for
4	efficiently processing those requests while moving forward to a more efficient process." <sup>43</sup>
5	Applying the same cutoff date for all projects ensures the queue can be effectively cleared
6	out and no one type of generator has an unfair advantage over another type of generator.
7	The Interconnection Customer Coalition "proposes that the cut-off date to elect to be
8	in this year's Cluster Study for Oregon QFs be extended to 30 days after the Commission's
9	order approving PacifiCorp's Queue Reform Proposal (assuming it is eventually approved,
10	after revisions)" and that "all Oregon QFs should be allowed to elect to opt into the Cluster
11	Study this year, even those who did not have an active interconnection request before
12	January 1, 2020." <sup>44</sup> These recommendations are unreasonable.
13	First, contrary to the Interconnection Customer Coalition's claim that the January 31
14	cutoff date for eligibility in the transition process is a "denial of interconnection service," <sup>45</sup>
15	the January 31 cutoff only impacts whether a project is included in the transition process. It
16	has no bearing on whether a QF will interconnect, it only impacts when.
17	Second, PacifiCorp's plan to move forward with queue reform was hardly a surprise
18	given the six-month stakeholder process leading up to PacifiCorp's FERC filing. As

 $<sup>^{43}</sup>$  FERC Order ¶ 148. PacifiCorp's Transition Close date is consistent with the cutoff date that FERC has approved for other similar queue reform efforts. *Pub. Serv. Co. of Colo.*, 169 FERC ¶ 61,182 at PP 65-67 (2019) (*PSCo Order*) (accepting PSCo's proposed transition process, in which Interconnection Customers with an assigned queue position prior to September 27, 2019 are eligible to enter the transition cluster. PSCo filed its queue reform proposal on September 9, 2019).

<sup>&</sup>lt;sup>44</sup> Joint Comments of Interconnection Customer Coalition at 22; Comments of Northwest and Intermountain Power Producer's Coalition at 3.

<sup>&</sup>lt;sup>45</sup> Joint Comments of Interconnection Customer Coalition at 22.

1	discussed above, many Oregon stakeholders participated in that process-including NIPPC,
2	several individual developers, and counsel for REC. REC and CREA then participated in the
3	FERC process where the January 31 cutoff date was proposed and addressed at length by
4	stakeholders and FERC.
5	Notably, despite the fact it was widely known that PacifiCorp had proposed a
6	transition cut-off date, there have been only four Oregon-jurisdictional interconnection
7	requests submitted since January 31, 2020. Those requests were submitted after April 1,
8	2020—the effective date of the FERC reforms—and represent large QFs. <sup>46</sup> These are not
9	unsophisticated developers.
10	If these projects are excluded from the transition Cluster Study, they will be included
11	in the April 2021 Cluster Study, which means they are expected to receive their
12	interconnections study reports within approximately 18 months of submitting their request.
13	That length of time is not unreasonable and is a necessary consequence of needing to clear
14	the queue backlog and apply consistent requirements to all generators. It is also, as almost
15	universally agreed upon by stakeholders, a shorter timeframe than PacifiCorp's current serial
16	queue process.
17 18	2. QFs entering the transition process will not pay any additional study deposit.
19	The Interconnection Customer Coalition is also concerned over the treatment of study
20	deposits that have already been paid for studies that have not been received. <sup>47</sup> As PacifiCorp
21	explained in its Application, interconnection customers will not be assessed additional study

<sup>&</sup>lt;sup>46</sup> The requests are Q1204 (20 MW), 1205 (20 MW), and 1206 (20 MW), which were submitted on April 6, 2020, and Q1219 (80 MW), which was submitted on April 20, 2020.

<sup>&</sup>lt;sup>47</sup> Joint Comments of Interconnection Customer Coalition at 40.

1 deposits for purposes of the transition Cluster Study. Contrary to the Interconnection 2 Customer Coalition's claims, PacifiCorp does not expect Cluster Study costs to be 3 "substantially higher" than the serial study process and customers entering the transition 4 cluster are expected to receive their studies sooner than they necessarily would have had the 5 serial study process remained in place.

- 6
- 7

#### 3. Delaying approval of queue reform will prohibit Oregon QFs from participating in the transition process.

Several stakeholders recommend that the Commission take additional time to review 8 PacifiCorp's proposed reforms.<sup>48</sup> If the Commission is inclined to do so, however, it will 9 10 presumably mean that Oregon QF developers will be unable to participate in the transition 11 process that will commence in October 2020. If that occurs, Oregon QFs will be delayed 12 because the Company's transition Cluster Study process will proceed ahead of Oregon QFs, 13 as required by the OATT. And because the transition Cluster Study process may well last 14 until April 2021, when the first prospective cluster process begins, Oregon QFs may be 15 sidelined again if they are not allowed to participate in the Cluster Study process. 16 The Company appreciates concerns over the process to review and approve its 17 proposal. But delay is unlikely to benefit Oregon QFs and will likely place them at a 18 disadvantage relative to Oregon FERC-jurisdictional interconnection and QFs from other 19 states that participate in the Cluster Study process.

20 21

23

## F. PacifiCorp's proposal provides sufficient time for QFs to review Cluster Study reports.

22

The proposed Cluster Study process provides customers with 30 days to evaluate the results of the Cluster Study before deciding whether to withdraw or move to the Facilities

<sup>&</sup>lt;sup>48</sup> See, e.g., Comments of Northwest and Intermountain Power Producer's Coalition at 1.

Study phase. The Interconnection Customer Coalition argue 30 days is insufficient and
 customers should have 60 days to decide whether to continue through the interconnection
 process.<sup>49</sup> This proposal is unreasonable and should be rejected.

4 First, it is critical that both the FERC and state Cluster Study processes move in 5 tandem because whether projects move forward or withdraw will determine whether restudies are required.<sup>50</sup> FERC-jurisdictional interconnection customers must decide within 6 7 30 days whether to sign their Facilities Study agreement or withdraw. If Oregon QFs are 8 allowed an additional 30 days, then FERC-jurisdictional customers will be required to sign a 9 Facilities Study agreement or withdraw before knowing if a restudy will be required. A 10 mismatch here would create an unworkable process that would discriminate against FERC-11 jurisdictional customers. Indeed, the Interconnection Customer Coalition point out this flaw 12 in their recommendation when they acknowledge that "PacifiCorp is likely unwilling to extend this period of time given that other interconnection customers in the Cluster Study 13 may be dependent upon the decision to move forward with the Facilities Study."<sup>51</sup> 14 15 Second, the Interconnection Customer Coalition's recommendation fails to account for the fact that the Company's proposal provides *more* time for small generators to review 16 17 their interconnection study before proceeding to the Facilities Study phase. The 18 Commission's small generator interconnection rules provide that an interconnection

<sup>&</sup>lt;sup>49</sup> Joint Comments of Interconnection Customer Coalition at 41-43.

<sup>&</sup>lt;sup>50</sup> Notably, FERC approved the 30-day review period after NIPPC and CREA recommended a 60-day period. *See* Motion to Reject Tariff Filing and for Technical Conference and Settlement Proceeding and Protest of the Community Renewable Energy Association and the Renewable Energy Coalition, FERC Docket No. ER20-924-000 at 39-40 (April 10, 2020); Comments of Northwest and Intermountain Power Producers Coalition on PacifiCorp's March 13 Response to Deficiency Letter at 10-11, FERC Docket No. ER20-924-001 (April 10, 2020).

<sup>&</sup>lt;sup>51</sup> Joint Comments of Interconnection Customer Coalition at 43.

customer "must execute the interconnection facilities study agreement within 15 business
 days after receipt of the agreement or the application is deemed withdrawn."<sup>52</sup> Under
 PacifiCorp's proposal, small generators have 30 days to execute the Facilities Study
 agreement. For large generators, the timing for execution of the Facilities Study is
 unchanged.

6 The Interconnection Customer Coalition is also concerned that PacifiCorp will be 7 unwilling to work with customers to understand study results and consider alternatives to 8 lower costs and resolve disputes.<sup>53</sup> PacifiCorp's use of Cluster Studies will in no way change 9 its approach to working with customers to both understand the results of their studies and 10 resolve potential disputes over costs or timing of necessary upgrades.

11 NewSun and OSEIA recommend that PacifiCorp allow time for independent studies as provided for in OAR 860-082-0060(7)(h).<sup>54</sup> That rule states: "If an applicant provides an 12 13 independent system impact study to the public utility, then the public utility must evaluate 14 and address any alternative findings from that study." PacifiCorp has not requested a waiver 15 of that provision of the small generator interconnection rule and it will continue to apply. 16 PacifiCorp will not, however, modify the proposed Cluster Study timelines. As discussed 17 above, the proposed reforms already provide more time for review than the existing small 18 generator interconnection rules.

<sup>&</sup>lt;sup>52</sup> OAR 860-082-0060(8)(c).

<sup>&</sup>lt;sup>53</sup> Joint Comments of Interconnection Customer Coalition at 43.

<sup>&</sup>lt;sup>54</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 11.

G. PacifiCorp's proposed requirements for large generators strike a reasonable
 balance.

3

## 1. Posting security for network upgrade obligations is reasonable

In order to proceed to the Facilities Study, PacifiCorp proposes that large QFs be
required to post security equal to 100 percent of the allocated network upgrade costs
determined in the Cluster Study. The purpose of this provision is to ensure that only those
projects that can be developed move into the Facilities Study process.

8 NewSun and OSEIA argue that this requirement is problematic because it requires the 9 customer to post security within 30 days of receiving the network upgrade cost estimate from 10 the Cluster Study and the security deposit is too high because it is 100 percent of the allocated network upgrade cost.<sup>55</sup> At FERC, the network upgrade security requirement was 11 12 relatively non-controversial and approved without substantive discussion by FERC. There is 13 no material difference between FERC-jurisdictional generators that would be required to post 14 the network upgrade security and state-jurisdictional generators. Therefore, treating these 15 generators differently is unreasonable. 16 NewSun and OSEIA further recommend that PacifiCorp accept a bond as acceptable security.<sup>56</sup> PacifiCorp's proposal did not change the existing forms of acceptable security, 17 18 which includes a surety bond.

- 19 NewSun and OSEIA recommend that Oregon QFs have 60 days to post security.<sup>57</sup>
- 20 As discussed above, creating a timing mismatch between Oregon QFs and FERC-
- 21 jurisdictional generators creates an unworkable process.

<sup>&</sup>lt;sup>55</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 9; Comments of Northwest and Intermountain Power Producer's Coalition at 4.

<sup>&</sup>lt;sup>56</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 9.

<sup>&</sup>lt;sup>57</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 9.

1 2

## 2. The proposed withdrawal penalties for large generators are reasonable.

3 PacifiCorp proposes penalties for large generator withdrawals only under certain 4 conditions. Specifically, there are no withdrawal penalties if (1) the withdrawal of the large 5 generator does not negatively affect the timing or cost of other projects within the same 6 cluster; (2) the large generator withdraws after receiving the most recent Cluster Study report 7 and the costs assigned to the interconnection request identified in that report have increased 8 by more than 25 percent compared to costs identified in the previous Cluster Study report 9 (i.e., a cluster restudy occurs and assigns higher network upgrade costs to projects that 10 remained in the cluster); or (3) the large generator withdraws after receiving the individual 11 Facilities Study Report and the costs assigned to the interconnection request identified in that 12 report increased by more than 100 percent compared to costs identified in the most recent 13 Cluster Study Report. 14 FERC approved the same withdrawal penalties after concluding that the penalties 15 "strike[] a reasonable balance between increasing the requirements for keeping a queue position and minimizing barriers to entry."58 FERC explained that the "withdrawal penalties 16

17 provide an incentive to interconnection customers to ensure that their interconnection-related

18 decisions take into account the costs associated with an interconnection customer

19 withdrawing from the queue."<sup>59</sup> FERC rejected concerns that the withdrawal penalties were

20 excessive, finding the "withdrawal penalties should encourage prudent siting decisions and

21 the timely acquisition of permits[.]"<sup>60</sup> Because "PacifiCorp's proposal exempts

<sup>&</sup>lt;sup>58</sup> FERC Order ¶ 112.

<sup>&</sup>lt;sup>59</sup> Id.

<sup>&</sup>lt;sup>60</sup> *Id.* ¶ 113.

interconnection customers from withdrawal penalties to the extent their withdrawal does not
 inconvenience other interconnection customers," FERC noted, a customer "that is assessed
 withdrawal penalties has imposed costs and delays on other interconnection customers in its
 cluster."<sup>61</sup>

5 The Interconnection Customer Coalition argue that the withdrawal penalties 6 applicable to large QFs are excessive because the "obligation to pay for study costs may well 7 be an adequate disincentive to state-jurisdictional generators entering [a Cluster Study] without adequate clarity of their intent."62 While study deposits could theoretically deter 8 9 speculative projects from entering a cluster only to later withdraw, this has not occurred 10 historically. The current serial queue backlog occurred despite study deposits, which 11 indicates that study deposits alone are insufficient to deter speculative projects from clogging 12 the interconnection process. Moreover, the study deposits for large generators under 13 PacifiCorp's proposal will be *lower* for most, if not all, Oregon QFs, as discussed below. 14 The withdrawal penalties are also particularly important for Oregon QFs because the 15 Company is not proposing the same commercial readiness requirement that will apply to 16 FERC-jurisdictional generators. PacifiCorp's proposed reforms are driven by a need to 17 better ensure that only those projects that will actually get developed are included in the 18 interconnection study process. The withdrawal penalties for large projects are critical to 19 ensure that only those projects that are ready to move forward and commercially viable enter 20 a Cluster Study.

<sup>&</sup>lt;sup>61</sup> Id.

<sup>&</sup>lt;sup>62</sup> Joint Comments of Interconnection Customer Coalition at 44; Comments of Northwest and Intermountain Power Producer's Coalition at 2.

1	NewSun and OSEIA claim that the withdrawal penalties are "unduly punitive" and
2	should be reduced or eliminated. <sup>63</sup> In particular, NewSun and OSEIA argue that the
3	thresholds for exempting a QF from withdrawal penalties (i.e., if the Cluster Study report
4	increases costs by more than 25 percent above the prior Cluster Study or if the Facilities
5	Study increases costs by more than 100 percent from the Cluster Study) should be reduced to
6	encourage PacifiCorp to provide accurate cost estimates. This argument misunderstands the
7	purpose of the exemptions from withdrawal penalties, which are not designed for a scenario
8	where the Company poorly estimates the network upgrade costs. Instead, these thresholds
9	are designed for a scenario where a restudy is required and the interconnection customer does
10	not withdraw based on the results of the initial cluster study but does withdraw after the
11	restudy or the scenario where a project withdraws after the Cluster Study but there is no
12	restudy and the Facilities Study identifies higher costs because of the withdrawal. As
13	NewSun and OSEIA correctly note, PacifiCorp will remain obligated to provide a Facilities
14	Study with estimated costs within plus-or-minus 10 or 20 percent depending on the
15	interconnection customer's preference.
16 17	<b>3.</b> The proposed study deposits for large generators are lower than current requirements.
18	The current QF-LGIP requires a large QF to pay a deposit of \$50,000 for a System
19	Impact Study and \$100,000 for a Facilities Study. This means that assuming a customer
20	proceeds directly to the System Impact Study, it would pay a total deposit of \$150,000 for its
21	studies. PacifiCorp's proposal would require a total deposit of only \$75,000 for large
22	generators less than 50 MW and \$150,000 for generators between 50 and 200 MW. The only

<sup>&</sup>lt;sup>63</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 7-8.

generators that will pay a higher study deposit under the proposed reforms are generators
 larger than 200 MW.

3	NewSun and OSEIA argue that the proposed study deposits "will likely be too high
4	for many QFs to bear." <sup>64</sup> This claim cannot be squared with the fact that study deposits will
5	actually decrease under PacifiCorp's proposal. Indeed, NewSun and OSEIA concede that
6	because of the size limit on QFs, none will be subject to the higher deposits for projects
7	larger than 200 MW. <sup>65</sup>

8 9

## 4. PacifiCorp's heightened site control requirements for large generators should deter withdrawals and restudies.

10 PacifiCorp's queue reform proposal includes heightened site control requirements for 11 large generators, which are designed to better ensure that only those projects that have a path 12 to development will be included in the Cluster Studies. To enter a Cluster Study, a large 13 generator would be required to either demonstrate site control as part of their interconnection 14 request submission, or to provide a \$10,000 deposit in lieu of showing site control. If a 15 customer paid a deposit in lieu of site control, the customer must then demonstrate actual site 16 control to obtain a Facilities Study. To demonstrate site control, the customer must show that 17 the site is of "sufficient size" to construct the facility and that the customer has an exclusive 18 right to occupy the site. PacifiCorp has posted the size requirements to OASIS. To provide 19 project developers with flexibility, PacifiCorp will also permit customers to propose 20 alternative specifications for site size to those posted on OASIS, consistent with the site 21 control requirements approved by the FERC in PacifiCorp's queue reform proceeding and

<sup>&</sup>lt;sup>64</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 7.

<sup>&</sup>lt;sup>65</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 7.

1	other similar reform efforts. <sup>66</sup> In fact, the site control sizing that PacifiCorp is utilizing was
2	generally supported by stakeholders during PacifiCorp's FERC queue reform process.
3	Additionally, as recommended by many stakeholders, PacifiCorp's site control requirements
4	only cover the site of the generating facility and not interconnection customer
5	interconnection facilities such as tie lines.
6	NewSun and OSEIA argue that the proposed site control requirements for large
7	generators should be rejected because the requirements leave too much discretion to
8	PacifiCorp. <sup>67</sup> In particular, NewSun and OSEIA claim that the requirement that the site must
9	be of "sufficient size" to construct the facility is too discretionary. PacifiCorp will approve
10	reasonable alternative site size specifications proposed by the Interconnections Customer,
11	supported by an engineer's certificate demonstrating site size adequacy if PacifiCorp and the
12	interconnection customer cannot agree on adequate site size.
13	NewSun and OSEIA also argue that it is unreasonable to require full site control
14	"before definitive studies are completed as it would impose unnecessary costs on the
15	customer without knowing the electrical outcomes and costs[.]"68 PacifiCorp's proposal only
16	requires actual site control prior to the Facilities Study. So before full site control is required,
17	the QF will know the expected interconnection costs. This is consistent with PacifiCorp's
18	current interconnection procedures which also require site control at the facilities study stage.

<sup>&</sup>lt;sup>66</sup> *Pub. Serv. Co. of N.M.*, 136 FERC ¶ 61,231 at P 81 (2011) (*PNM Order*); *PSCo Order* at P 58; PNM LGIP Section 3.3.1(iii); PSCo LGIP Section 3.4.1(c).

<sup>&</sup>lt;sup>67</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 6-7.

<sup>&</sup>lt;sup>68</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 6.

1	H. PacifiCorp clarifies the small generator rules subject to its waiver request.
2	The Interconnection Customer Coalition request greater clarity on the specific small
3	generator interconnection rules that are the subject of PacifiCorp's waiver request. <sup>69</sup> To that
4	end, PacifiCorp reiterates that its waiver request applies to only one rule—OAR 860-082-
5	0060, which is the rule describing the study process for Tier 4 interconnections. Attached to
6	these comments as Attachment 1 is a document showing the specific provisions that are
7	subject to the waiver. As described in the Company's Application, the study provisions in
8	OAR 860-082-0060 will be superseded by the Cluster Study provisions set out in the revised
9	QF-LGIP, Article 7.
10	In addition, as explained in the Application, the Company is also requesting approval
11	of the following:
12 13 14 15	• Approval to allocate interconnection study costs as set forth in proposed QF- LGIP Article 4.2.2. This reform would modify the terms of OAR 860-082-0035 related to payment of study costs by small generators. The study <i>deposit</i> , however, would not change.
16 17 18 19 20 21	• Approval to share network upgrade costs identified in Cluster Studies as set forth in proposed QF-LGIP Article 4.2.3. OAR 860-082-0035(4) requires the utility to identify necessary network upgrades and requires the generator to pay for the reasonable costs of the identified upgrades. This proposal does not modify those provisions but does provide additional details into how PacifiCorp will identify and allocate the costs of network upgrades.
22 23 24	• Subject small generators to the Material Modification provisions set forth in the proposed QF-LGIP Article 4.4. OAR Chapter 860, Division 82 has no comparable provision.
25 26 27	• Allow small generators to request Informational Interconnections Studies as set forth in proposed QF-LGIP Article 6.1. OAR Chapter 860, Division 82 has no comparable provision.
28 29	• Require small generators to use the modified Facilities Study Agreement, included as Attachment C to the Application and require small generators to use

<sup>&</sup>lt;sup>69</sup> Joint Comments of Interconnection Customer Coalition at 46-47.

1 2	the modified Cluster Study Agreement included as Appendix 3 to the modified QF-LGIP.
3	To be clear, small generators will have no change to study deposits or application
4	fees, no withdrawal penalties, no requirement to post security for network upgrades, and no
5	increased requirements for demonstrating site control.
6	The Interconnection Customers Coalition fault PacifiCorp for not proposing new
7	rules for small generators and instead relying on the QF-LGIP. <sup>70</sup> Given that PacifiCorp's
8	proposal impacts only the Company, and is therefore not generally applicable, PacifiCorp did
9	not propose new utility-specific administrative rules. <sup>71</sup>
10 11	I. PacifiCorp's proposed reforms reasonably fill the existing gap for Oregon QFs between 10 and 20 MW.
12	Oregon's current interconnection framework has a gap—there are no applicable rules
13	for interconnecting generators with capacity greater than 10 MW and less than 20 MW. As
14	part of its queue reform proposal, PacifiCorp proposed to close that gap by applying the
15	interconnection process applicable to large generators to all QFs larger than 10 MW.
16	Stakeholders recommend that the Company modify its proposal so that the small generation
17	interconnection procedures apply to all projects that are 20 MW or less. <sup>72</sup> The Commission's
18	original framework for large generators was intended to apply to all those above 10 MW,
19	consistent with PacifiCorp's proposal here. Moreover, if a QF is 10 MW, then it is almost
20	certainly interconnecting to the Company's transmission system. Thus, its system impact is
21	more comparable to a 21 MW large generator than a 2 MW small generator interconnecting

<sup>&</sup>lt;sup>70</sup> Joint Comments of Interconnection Customer Coalition at 14.

<sup>&</sup>lt;sup>71</sup> See ORS 183.310(9) ("'Rule' means any agency directive, standard, regulation or statement *of general applicability* that implements, interprets or prescribes law or policy, or describes the procedure or practice requirements of any agency.") (emphasis added).

<sup>&</sup>lt;sup>72</sup> See, e.g., Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 6.

1	to the distribution system. This means, for example, that if an 11 MW project withdraws
2	from a cluster, it is far more likely to trigger a restudy. Therefore, it is reasonable to apply
3	the deterrents to withdrawal, such as penalties, to 11 MW projects.
4 5	J. PaciCorp agrees to modify and clarify its proposal in response to stakeholder feedback.
6 7	1. QFs can downsize their project consistent with the provisions under the current QF-LGIP.
8	NewSun and OSEIA seek confirmation that an interconnection customer can
9	downsize their project consistent with the current QF-LGIP, which allows a customer to
10	reduce the size of a project by up to 60 percent prior to executing a System Impact Study
11	Agreement. <sup>73</sup> The Cluster Study is now the equivalent of the System Impact Study. An
12	interconnection customer can change the size of its project in any way it wants prior to
13	executing a Cluster Study Agreement. Interconnection customers are also still allowed to
14	downsize their requests by up to 15 percent following the cluster study but prior to executing
15	the facilities study agreement. <sup>74</sup> However, once that Cluster Study Agreement is executed,
16	any change other than the 15 percent downsize will be studied as a Material Modification to
17	prevent harm to other interconnection customers. This is the same as the current QF-LGIP
18	where any changes occurring after the System Impact Study are addressed as potential
19	Material Modifications.
20	To support this recommendation, NewSun and OSEIA argue that PacifiCorp's
21	proposed reforms "fail to meet FERC standards of a new OATT not being worse than
22	before." <sup>75</sup> This appears to ignore the fact that FERC already approve queue reform after

\_\_\_\_\_

<sup>&</sup>lt;sup>73</sup> QF-LGIP, Art. 4.4.1.

<sup>&</sup>lt;sup>74</sup> PacifiCorp Proposed QF-LGIP, Art. 4.4.2.

<sup>&</sup>lt;sup>75</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 10.

specifically finding that the proposed reforms were consistent with or superior to the *pro forma* OATT.<sup>76</sup>

3 4

## 2. PacifiCorp is not proposing a commercial readiness requirement for Oregon QFs.

5 The Interconnection Customer Coalition is worried that PacifiCorp might ask in the 6 future to apply commercial readiness to Oregon QFs.<sup>77</sup> If PacifiCorp determines that 7 applying commercial readiness to Oregon QFs is reasonable, it will file a request with the 8 Commission for approval of that change, together with any other changes to QF contracting 9 practices that may be required to implement a commercial readiness requirement for QFs. 10 The Company will not, and cannot, make that change unilaterally and without Commission 11 approval.

12 13

## 3. PacifiCorp's proposal does not change how it addresses existing QFs needing to replace an expiring interconnection agreement.

14 The Interconnection Customer Coalition request that PacifiCorp clarify how the

15 proposed reforms impact existing interconnection customers that may be nearing the end of

16 the term of their existing interconnection agreement.<sup>78</sup> PacifiCorp's proposal does not

17 specifically address this issue because there is no change from existing policies. PacifiCorp's

- 18 current and ongoing practice is that existing projects are not restudied in order to execute a
- 19 new interconnection agreement<sup>79</sup> unless there is a material change to the project, such as an

<sup>&</sup>lt;sup>76</sup> See FERC Order ¶ 7 (". . .we find that the alternate proposals offered by PacifiCorp in its Deficiency Response are consistent with or superior to the procedures promulgated under Order No. 2003, and we therefore direct PacifiCorp to submit a compliance filing within 45 days of the date of this order.").

<sup>&</sup>lt;sup>77</sup> Joint Comments of Interconnection Customer Coalition at 48.

<sup>&</sup>lt;sup>78</sup> Joint Comments of Interconnection Customer Coalition at 45; Comments of Northwest and Intermountain Power Producer's Coalition at 2.

 $<sup>^{79}</sup>$  While the existing project is not restudied, there may be additional requirements or equipment upgrades that are necessary to bring the interconnection facilities up to current standards. *See* OAR 860-082-0025(1)(e)(C) ("A public utility may require the interconnection customer to pay for interconnection facilities, system upgrades, or changes to the small generator facility or its associated interconnection equipment that are

increase in capacity.<sup>80</sup> Under the serial queue process, an increase in capacity would require
the existing customer to submit a new interconnection request for the increased capacity.
That request would go to the back of the queue and would be studied after all other prior
queued projects. Under the Cluster Study process, that new capacity would be studied in the
next cluster following the submission of the request.

6 The Interconnection Customer Coalition argue it is unfair that an existing project's 7 increased capacity would be studied in a cluster with other QFs because the existing project's 8 new interconnection agreement could be delayed if they are forced into a cluster. PacifiCorp 9 believes that the Cluster Study process provides much more certainty that the serial queue 10 approach. In the case of an existing QF, that project would know exactly when its current 11 interconnection agreement ends and can easily plan to enter the cluster that will provide it 12 results before its agreement ends. Under the prior serial process, there was much less certainty because the timing of a study was dependent on the volume of higher queued 13 14 requests and impacted by persistent withdrawals. 15 4. **Clarifications on performance of Informational Interconnection** 

## 154. Clarifications on performance of Informational Intercon16Studies.

17 PacifiCorp agrees to the NewSun and OSEIA request that the Company publicly post

18 its Informational Interconnection Studies.<sup>81</sup> PacifiCorp also agrees that it will begin

necessary to bring the small generator facility interconnection into compliance with the small generator interconnection rules or IEEE 1547 or 1547.1.").

<sup>&</sup>lt;sup>80</sup> See OAR 860-082-0025(1)(b) ("A person with an existing interconnected small generator facility who proposes to make any change to the facility, other than a minor equipment modification, must submit an application to the public utility. This includes changes affecting the nameplate capacity of the existing interconnected small generator facility or the output capacity authorized in the agreement governing the terms of the interconnection.").

<sup>&</sup>lt;sup>81</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 8.

1	processing Informational Interconnection Studies in the order that the requests are received. <sup>82</sup>
2	This does not necessarily mean that Informational Interconnection Studies will be issued in
3	the order received, however, because the time required to complete individual studies may
4	vary. NewSun and OSEIA request that the Company's timeline for completing
5	Informational Interconnection Studies provide that the Company will use reasonable efforts
6	to complete the Informational Interconnection Studies within 45 days, consistent with the
7	requirement that currently applies to Feasibility Studies. <sup>83</sup> PacifiCorp agrees that it will
8	make reasonable efforts to complete Informational Interconnection Studies as expeditiously
9	as possible. But depending on when a request is received and the volume of requests
10	received, it may not be possible to complete studies within 45 days. For example, if a request
11	for an Informational Interconnection Study is received in the middle of a Cluster Study, the
12	Company must complete the Cluster Study before turning to the Informational
13	Interconnection Study, which could delay completion of the study.
14 15	5. PacifiCorp will file a report within two years to review the efficacy of queue reform.
16	NewSun and OSEIA recommend that PacifiCorp provide stakeholder check-ins at
17	various points in the initial implementation stages of queue reform. <sup>84</sup> As discussed above,
18	PacifiCorp has already committed to preparing a detailed report within two years of the
19	effective date of the queue reform proposal to address the efficacy of the proposed changes.

<sup>&</sup>lt;sup>82</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 8.

<sup>&</sup>lt;sup>83</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 8; Comments of Northwest and Intermountain Power Producer's Coalition at 4.

<sup>&</sup>lt;sup>84</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 11.

- Moreover, NewSun and OSEIA's request for a report after each Cluster Study
   summarizing the results is effectively describing the Cluster Study reports, which will be
   publicly posted just as current interconnection studies are publicly posted.
  - 4 5

## 6. PacifiCorp agrees to accept Oregon interconnection requests at any time.

6 The Interconnection Customer Coalition and NewSun and OSEIA recommends that 7 PacifiCorp accept interconnection request from Oregon QFs at any time, not just during the 8 45-day Cluster Study window beginning on April 1 of each year.<sup>85</sup> This request was 9 discussed during the Oregon workshops and PacifiCorp indicated that it would not object to 10 this modification. To be clear, however, the Company's receipt of interconnection requests 11 before the April 1 Cluster Study window opens for FERC-jurisdictional requests does not 12 mean that Oregon QFs have any priority for purposes of the Cluster Study.

13 The Interconnection Customer Coalition also request that customers be allowed to request Informational Interconnection Studies at any time of the year.<sup>86</sup> To be clear there is 14 15 no limit on the timing for Informational Interconnection Studies, except that the Company 16 will not provide them until after October 15, 2020. The Company's proposal is intended to 17 relieve the burden on PacifiCorp as it prepares for the transition Cluster Study process. 18 Moreover, an Information Interconnection Study provided before October 15, 2020, would 19 be of limited value because PacifiCorp would have to assume that the currently existing 20 interconnection queue remains in place. After the queue is cleared on October 15, 2020, 21 Informational Interconnection Studies will have more meaning.

<sup>&</sup>lt;sup>85</sup> Joint Comments of Interconnection Customer Coalition at 40-41; Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 7; Comments of Northwest and Intermountain Power Producer's Coalition at 2.

<sup>&</sup>lt;sup>86</sup> Joint Comments of Interconnection Customer Coalition at 40-41.

1 NewSun and OSEIA also request that customers have 10 days to remedy a deficient 2 interconnection request even if that interconnection request is not remedied by the close of the 45-day Cluster Study window.<sup>87</sup> Given that PacifiCorp agrees customers can submit 3 4 requests at any time, this additional requirement is unnecessary and risks delaying the 5 commencement of Cluster Studies. 6 7. Consistent with current practice, changes between state and FERC-jurisdiction are studied as a Material Modification. 7 8 NewSun and OSEIA request that the Company confirm that its current practice of addressing changes between jurisdictions as a Material Modification.<sup>88</sup> PacifiCorp confirms 9 that if a customer changes from state- to FERC-jurisdiction, or from FERC- to state-10 11 jurisdiction, or requests any other change to its interconnection request, the change will be 12 studied as a Material Modification to ensure that the change does not harm other interconnection customers. 13 14 K. The Cluster Study process is reasonable. 1. 15 Clusters will be established based on electrical relevance. 16 The Interconnection Customer Coalition request additional clarification on how PacifiCorp will identify electrically relevant areas for purposes of determining clusters.<sup>89</sup> 17 18 PacifiCorp discussed this issue at length during the second workshop. As explained, a 19 project is electrically relevant to another project if they both impact the same facilities (e.g., 20 transmission lines or substations) or if the interconnection of one project directly impacts the

<sup>&</sup>lt;sup>87</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 7.

<sup>&</sup>lt;sup>88</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 11.

<sup>&</sup>lt;sup>89</sup> Joint Comments of Interconnection Customer Coalition at 47-48; Comments of Northwest and Intermountain Power Producer's Coalition at 3.

1	other. Electrical relevance is distinct from geography, i.e., two projects could be
2	geographically close to one another but not electrically relevant.
3	PacifiCorp will define Cluster Study areas by discrete electrical boundaries (e.g.,
4	transmission line and substation interfaces). Cluster areas will be determined by the requests
5	received for a given cluster, not pre-determined based on existing load bubbles or other
6	definitions. Known constraints will be useful in identifying the cluster areas, such as:
7 8	<ul> <li>Geographic and electrical proximity behind known or expected transmission constraints/bottlenecks;</li> </ul>
9 10	• Existing "load bubbles" in Oregon, which are generally defined by third-party transmission interconnections;
11	• Results of other Cluster Studies and resulting transmission system improvements;
12	• Locations of new planned transmission expansion; and
13	• Locations of any known generator retirements;
14	The Company cannot precisely define Cluster Study areas until the requests are
15	submitted and the study participants are known.
16 17	2. Allowing changes to points of interconnection after the Cluster Study harms other customers.
18	NewSun and OSEIA recommend that customers be allowed to change their point of
19	interconnection after the Cluster Study. <sup>90</sup> Under PacifiCorp's proposal, such a change would
20	be studied as a Material Modification. If the new point of interconnection constitutes a
21	Material Modification, then the change would be prohibited because it would adversely
22	impact other interconnection customers. Allowing customers unfettered discretion to change
23	their points of interconnection when doing so would require a restudy increases the risk of

<sup>&</sup>lt;sup>90</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 7; Comments of Northwest and Intermountain Power Producer's Coalition at 3.

study delays and undermines the study certainty the Company is attempting to achieve with
 Cluster Studies. Moreover, to the extent an interconnection customer wants to test various
 points of interconnection, they can use the Informational Interconnection Study process to do
 so.

5

### 3. Shortening the timeline for cluster restudies is unworkable.

6 NewSun and OSEIA recommend that PacifiCorp should conduct cluster restudies 7 within 10 business days if any restudies are required because of withdrawal after the initial Cluster Study.<sup>91</sup> This proposal is entirely unworkable and presumes that the Company 8 9 should take short-cuts in the process that would be contrary to good utility practice. 10 PacifiCorp appreciates the concern that cascading restudies could delay conclusion of Cluster 11 Studies, which is why the Company has proposed gating mechanisms, such as withdrawal 12 penalties, increased site control requirements, limited ability to change points of 13 interconnection, and posting security for network upgrades, that are designed to deter 14 projects from entering clusters unless they are prepared to complete the process. NewSun 15 and OSEIA recommend eliminating or watering down all these requirements, which will 16 produce just the "quagmire" they complain about. Taking study short-cuts is not the 17 solution.

<sup>&</sup>lt;sup>91</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 10.

1 2	L. PacifiCorp's proposal to limit post-study and post-interconnection agreement modifications reasonably balances interests among interconnection customers
3 4	1. PacifiCorp's proposal reasonably protects other interconnection customers from the impact of suspended interconnection agreements.
5	NewSun and OSEIA recommend that there be no changes to a customer's suspension
6	rights. <sup>92</sup> They fail to identify any reason for this recommendation or any specific change to
7	which they object. PacifiCorp proposed one change to the QF-LGIP related to suspension-
8	if an interconnection customer suspends its interconnection agreement, then the customer
9	will be required to pay for costs associated with any studies or restudies required as a result
10	of the suspension, including any restudies associated with affected interconnection
11	customers. <sup>93</sup> This provision is designed to minimize the impact on other interconnection
12	customers arising from the suspension of an interconnection agreement.
13 14	2. Customers should not have expanded rights to extend their commercial operation date.
15	PacifiCorp proposed a clarification to the ability of an interconnection customer to
16	request an extension of its commercial operation date (COD). Under the current QF-LGIP, it
17	states:
18 19 20 21 22 23 24	Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing; provided, however, that extensions may necessitate a determination of whether additional studies are required pursuant to Applicable Laws and Regulations and Applicable Reliability Standards. <sup>94</sup>

<sup>&</sup>lt;sup>92</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 8.

<sup>&</sup>lt;sup>93</sup> PacifiCorp Proposed QF-LGIP Article 3.6.1.1.

<sup>&</sup>lt;sup>94</sup> QF-LGIP, Art. 4.4.5.

1 PacifiCorp proposes additional sentences to clarify that, "For purposes of this Article, 2 the Commercial Operation Date reflected in the initial Interconnection Request shall be used. 3 Such cumulative extensions are inclusive of extensions requested after execution of the QF-4 LGIA by Interconnection Customer." Because extensions of CODs can adversely impact 5 other interconnection customers, PacifiCorp's proposal clarifies that any extension of more 6 than three years from the initial interconnection request COD will be subject to a Material 7 Modification analysis to ensure that other customers are not harmed by virtue of an extended 8 COD.

9 NewSun and OSEIA recommend that PacifiCorp remove the clarifying language but 10 it is not clear how much time they recommend allowing an extended COD or whether they are recommending a change to the current QF-LGIP or simply retaining the status quo.<sup>95</sup> In 11 12 the alternative, NewSun and OSEIA recommend that customers be allowed to suspend their 13 request after executing a QF-LGIA for up to three years beyond the three years from the COD in the initial interconnection request.<sup>96</sup> Although it is not entirely clear what is 14 15 proposed, allowing extensions beyond three years without requiring a Material Modification 16 analysis risks harming other interconnection customers and should be rejected. Again, 17 allowing the types of changes NewSun and OSEIA recommend creates more uncertainty in 18 the study process and increases the likelihood of restudies that will bog down the 19 interconnection process and result in the same backlog that plagues the current serial queue 20 process.

<sup>&</sup>lt;sup>95</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 10.

<sup>&</sup>lt;sup>96</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 10.

1 2

## M. Queue reform does not require any changes to standard QF PPAs or contracting practices.

3 The Interconnection Customer Coalition recommend that if queue reform is 4 approved, PacifiCorp should be required to execute PPAs before QFs have Cluster Study reports.<sup>97</sup> NewSun and OSEIA make a similar recommendation.<sup>98</sup> The Commission has 5 6 indicated that it "generally consider[s] it reasonable for electric companies to complete the 7 due diligence process before sending final draft executable contracts for signature by QFs."99 8 As part of the Company's basic due diligence before executing a QF PPA, the Company has 9 historically verified that the QF's stated COD is reasonably supported by its interconnection 10 studies. Failure to perform this basic due diligence could result in inconsistent CODs in the 11 PPA and interconnection agreement. As discussed during the workshops, while this 12 contracting practice may be under review for a variety of reasons in other ongoing dockets,<sup>100</sup> there is no reason that PacifiCorp transmission's proposal to switch from serial 13 14 processing to cluster study processing as proposed in this docket would require any change to 15 the Company's contracting practices. If anything, all things being equal, it would seem to 16 facilitate such a practice, as the timing of Cluster Studies and the issuing of reports are 17 expected to be more certain and timelier than interconnection studies under the existing serial 18 queue process.

<sup>&</sup>lt;sup>97</sup> Joint Comments of Interconnection Customer Coalition at 31.

<sup>&</sup>lt;sup>98</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 11.

<sup>&</sup>lt;sup>99</sup> Blue Marmot v. Portland General Electric Co., Docket No. UM 1829, et al., Order No. 19-322 at 16 (Sept. 30, 2019).

<sup>&</sup>lt;sup>100</sup> PacifiCorp is also reassessing this contracting practice in light of FERC's recent PURPA rulemaking order. See Qualifying Facility Rates and Requirements Implementation Issues Under the Public Utility Regulatory Policies Act of 1978, 172 FERC ¶ 61,041 (July 16, 2020).

1	Although NIPPC's comments touch on this issue, <sup>101</sup> NIPPC informed FERC that,
2	"NIPPC believes that compliance with PURPA requires that QFs either be able to obtain a
3	power purchase agreement without having to complete an interconnection agreement or,
4	conversely, qualify for a cluster study without being subject to the same eligibility criteria
5	applied to non-QF projects." <sup>102</sup> Because the Company is not requiring commercial readiness
6	to qualify for a Cluster Study, the Company has resolved NIPPC's concern. (Nor has it been
7	PacifiCorp's practice to make an interconnection agreement a prerequisite to a power
8	purchase agreement in any event.)
9	The Interconnection Customer Coalition further recommend that if the Commission
10	approves the use of Cluster Studies, it change the Company's standard QF PPA to provide
11	the QF a unilateral right to terminate the PPA without damages within 30 days of receipt of
12	an interconnection study report and to provide the QF the unilateral right to amend the
13	Scheduled COD in the PPA up to five years from the effective date of the PPA. <sup>103</sup> These
14	changes are well beyond the scope of this docket and are unnecessary because the use of
15	Cluster Studies will not materially change the current relationship between QF PPA and
16	interconnection processes, as discussed above.
17	Moreover, to the extent the Commission wants to examine contracting practices and
18	terms more broadly, that topic and the specific issue raised by the Interconnection Customer
19	Coalition is currently being addressed in docket AR 631 on a generic basis applicable to all

<sup>&</sup>lt;sup>101</sup> Comments of Northwest and Intermountain Power Producer's Coalition at 2.

<sup>&</sup>lt;sup>102</sup> Comments of Northwest and Intermountain Power Producers Coalition on PacifiCorp's March 13 Response to Deficiency Letter at 3, FERC Docket No. ER20-924-001 (April 10, 2020).

<sup>&</sup>lt;sup>103</sup> Joint Comments of Interconnection Customer Coalition at 33.

three utilities. PacifiCorp's queue reform proposal provides no basis to modify this policy in
 this docket.

3 4	N. PacifiCorp does not oppose making additional changes to the QF-LGIP to conform to the OATT but those changes should occur in another proceeding.
5	NewSun and OSEIA recommend that PacifiCorp further revise the QF-LGIP to
6	incorporate additional changes that have been made to the OATT since the Commission
7	adopted the QF-LGIP in 2010. <sup>104</sup> PacifiCorp does not necessarily disagree with this
8	recommendation, although not all changes to the OATT are reasonable for Oregon. That
9	said, this request is well outside the scope of this docket and would be better addressed in the
10	generic interconnection docket that the Commission recently opened.
11 12	O. PacifiCorp's interconnection study modeling is reasonable and consistent with industry standards.
13	The Interconnection Customer Coalition claim that PacifiCorp's "flawed power flow
14	analysis and discredited Business Practice 73 [] lead to the queue's backlog." <sup>105</sup> NewSun
15	and OSEIA make similar claims. <sup>106</sup> This is entirely incorrect and irrelevant to whether the
16	Company's proposed reforms are reasonable.
17	First, the Interconnection Customers Coalition do not identify with specificity any
18	real flaw in PacifiCorp's modeling, offering only its general accusations that PacifiCorp does
19	not appropriately model power flows off its system. <sup>107</sup> The Interconnection Customer
20	Coalition's premise is that the entire queue backlog would be solved if, when study area load
21	has been exhausted in an interconnection study, PacifiCorp would just "model" the output of

<sup>&</sup>lt;sup>104</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 11.

<sup>&</sup>lt;sup>105</sup> Joint Comments of Interconnection Customer Coalition at 7; Comments of Northwest and Intermountain Power Producer's Coalition at 3.

<sup>&</sup>lt;sup>106</sup> Joint Comments of NewSun Energy LLC and Oregon Solar Energy Industries Association at 4.

<sup>&</sup>lt;sup>107</sup> Joint Comments of Interconnection Customer Coalition at 8.

1 a generator onto a neighboring system, without any evidence that the generator has a 2 customer on a neighboring system or that there is load there to absorb the generation. The 3 Interconnection Customer Coalition offers no guidance on how PacifiCorp should choose 4 among PacifiCorp's several neighboring utilities for exporting purposes, and it appears to 5 suggest PacifiCorp should apply this study assumption even if the proposed interconnecting 6 generator has made it clear it intends to serve load on PacifiCorp's system. To assume the 7 generation is exported would create a situation where PacifiCorp exports a reliability 8 problem to a neighboring region.

9 Moreover, the OATT provides for studying the impacts of an interconnection on a 10 neighboring system (called an "Affected System" under the OATT). Contrary to the claims 11 asserted by NewSun and OSEIA, PacifiCorp uses WECC power flow base cases that include 12 the full transmission topology of the Western Interconnection and identify power flow 13 impacts on neighboring systems, not just the PacifiCorp system. When power flows affect 14 one or more neighboring systems, those Affected Systems are notified by PacifiCorp and 15 included in the interconnection study process. However, this process does not mean 16 PacifiCorp has the unilateral ability to assume that the generator will be serving loads on a 17 third-party system, nor does it obligate those Affected Systems to use the generator to serve 18 loads on their system.

19 Second, PacifiCorp does not unreasonably ignore "known changes planned to load 20 and generation" in its interconnection studies.<sup>108</sup> PacifiCorp uses standardized load forecasts 21 and load as well as resource information provided by PacifiCorp's network customers when 22 conducting interconnection system impact studies. With respect to the specific NewSun and

<sup>&</sup>lt;sup>108</sup> Joint Comments of Interconnection Customer Coalition at 8.

OSEIA example of new data center load, while PacifiCorp's transmission function cannot speak to the precise metrics its network customers may apply in determining when to designate a new network load under the OATT, FERC's requirement that load be "verifiable" before such a network service request is submitted<sup>109</sup> suggests that the electric service arrangements associated with a new data center would need to be further along than the speculative "proposed load" stage described by NewSun and OSIEA.

7 Third, the fact that an interconnection study must match generation and load (i.e., 8 balance the system) does not mean that the Company is requiring deliverability to a specific load as a condition of interconnection.<sup>110</sup> When load exceeds generation, the system is 9 10 unstable, which creates potential reliability issues. That is why the interconnection study 11 power flows are problematic when generation exceeds load. But this not simply a matter of 12 the "model"; actual operations require the Company to balance load and generation within its 13 Balancing Areas and, in actual operations, PaciCorp cannot achieve this balance simply by 14 exporting excess generation elsewhere. Fourth, PacifiCorp Business Practice 73 provided interconnection customers with 15 16 additional detail regarding how and when non-viable interconnection requests might arise, 17 how PacifiCorp will inform customers when that occurs, and the next steps. As a general 18 matter, the prospect of nonviable conditions is a direct consequence of the amount of

- 19 generation in the serial queue that vastly overwhelms the amount of load in the study area. In
- 20 other words, Business Practice 73 was implemented in response to the serial queue backlog

<sup>&</sup>lt;sup>109</sup> Under section 31.2 of the PacifiCorp OATT, the designation of new Network Load "must be made through a modification of service pursuant to a new Application." New network loads must be based on "reasonably forecasted and verifiable native and network load growth." *Preventing Undue Discrimination and Preference in Transmission Service*, Notice of Proposed Rulemaking, FERC Stats. & Regs. ¶ 32,603, 115 FERC ¶ 61,211, at P 358 (2006).

<sup>&</sup>lt;sup>110</sup> Joint Comments of Interconnection Customer Coalition at 8.

1	and excessive generation in the queue and was not its cause. Indeed, Business Practice 73
2	was not implemented until June 2019, at which point the backlog already existed.
3	Moreover, the Company has never actually relied in Business Practice 73 to issue a
4	non-viable interconnection study report. In recent years, PacifiCorp's attention has been
5	necessarily focused on issuing numerous restudies of Oregon interconnection customers due
6	to changing circumstances associated with higher queued projects. The fact that PacifiCorp
7	has had limited opportunities to study new requests in Oregon is therefore a consequence of
8	the serial queue process and not Business Practice 73.
9	As the Interconnection Customers Coalition points out, PacifiCorp has now
10	withdrawn Business Practice 73, but not because it was "discredited." Rather, as PacifiCorp
11	explained to FERC, Business Practice 73 was necessary because of the queue backlog. Now
12	that queue reform has been approved and the backlog is expected to be cleared, the business
13	practice is no longer necessary.
14	/////
15	/////
16	/////
17	/////
18	/////
19	/////
20	/////
21	/////
22	/////

1	III. CONCLUSION
2	PacifiCorp appreciates the opportunity to file these reply comments and recommends
3	that the Commission approve the Company's proposal to revise its interconnection study
4	process. PacifiCorp's proposal will create a more efficient and fairer interconnection process
5	for Oregon QFs.
	Respectfully submitted this 24 <sup>th</sup> day of July, 2020.

By:

lan former Adam Lowney

McDowell Rackner Gibson PC 419 SW 11<sup>th</sup> Avenue, Suite 400 Portland, OR 97205 Phone: 503-595-3926 Email: adam@mrg-law.com

Karen Kruse PacifiCorp 825 NE Multnomah Street, Suite 1800 Portland, OR 97232 Phone: 503-813-5585 Email: karen.kruse@pacificorp.com

Attorneys for PacifiCorp d/b/a Pacific Power

## BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 2108

## PACIFICORP

## Attachment 1 to PacifiCorp's Reply Comments

PacifiCorp's Application for an Order Approving Queue Reform Proposal

July 24, 2020

### OAR 860-082-0060 Tier 4 Interconnection Review

(1) A public utility must use the Tier 4 interconnection review procedures for an application to interconnect a small generator facility that meets the following requirements:

(a) The small generator facility does not qualify for or failed to meet the Tier 1, Tier 2, or Tier 3 interconnection review requirements; and

(b) The small generator facility must have a nameplate capacity of 10 megawatts or less.

(2) A public utility must approve an application to interconnect a small generator facility under the Tier 4 interconnection review procedures if the public utility determines that the safety and reliability of the public utility's transmission or distribution system will not be compromised by interconnecting the small generator facility. The applicant must pay the reasonable costs of any interconnection facilities or system upgrades necessitated by the interconnection.

(3) In addition to the timelines and requirements in OAR 860 082 0025, the timelines and requirements in sections (5) through (12) of this rule apply to Tier 4 interconnection reviews.

(4) A public utility and an applicant may agree to waive the requirement for a scoping meeting, the feasibility study, the system impact study, or the facilities study.

(5) <u>If requested</u>, <u>Aa</u> public utility must schedule a scoping meeting within <u>10-15</u> business days after <u>the close of the Cluster Request Windownotifying an applicant that its application is</u> <u>complete</u>.

(a) The public utility and the applicant must bring to the scoping meeting all personnel, including system engineers, as may be reasonably required to accomplish the purpose of the meeting.

(b) The public utility and applicant must discuss whether the public utility should perform a feasibility study or proceed directly to a system impact study, a facilities study, or an interconnection agreement.

(c) If the public utility determines that no studies are necessary, then the public utility must approve the application within 15 business days of the scoping meeting if:

(A) The application meets the criteria in section (2); and

(B) The interconnection of the small generator facility does not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment.

(d) If the public utility determines that no studies are necessary and that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good faith, non binding estimate of the costs of such proposed minor

modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds \$10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application within 15 business days of receipt of the applicant's agreement to pay for the minor modifications.

(6) If a public utility reasonably concludes that an adequate evaluation of an application requires a feasibility study, then the public utility must provide the applicant with an executable feasibility study agreement within five business days of the date of the scoping meeting.

(a) The feasibility study agreement must include a detailed scope for the feasibility study, a reasonable schedule for completion of the study, and a good faith, non binding estimate of the costs to perform the study.

(b) The feasibility study agreement must follow the standard form agreement developed by the public utility and approved by the Commission.

(c) The applicant must execute the feasibility study agreement within 15 business days of receipt of the agreement or the application is deemed withdrawn.

(d) The public utility must make reasonable, good faith efforts to follow the schedule set forth in the feasibility study agreement for completion of the study.

(e) The feasibility study must identify any potential adverse system impacts on the public utility's transmission or distribution system or an affected system that may result from the interconnection of the small generator facility. In determining possible adverse system impacts, the public utility must consider the aggregated nameplate capacity of all generating facilities that, on the date the feasibility study begins, are directly interconnected to the public utility's transmission or distribution system, have a pending completed application to interconnect with a higher queue position, or have an executed interconnection agreement with the public utility.

(f) The public utility must evaluate multiple potential points of interconnection at the applicant's request. The applicant must pay the costs of this additional evaluation.

(g) The public utility must provide a copy of the feasibility study to the applicant within five business days of the study's completion.

(h) If the feasibility study identifies any potential adverse system impacts, then the public utility must perform a system impact study.

(i) If the feasibility study does not identify any adverse system impacts, then the public utility must perform a facilities study if the public utility reasonably concludes that a facilities study is necessary to adequately evaluate the application.

(A) If the public utility concludes that a facilities study is not required, then the public utility must approve the application with 15 business days of completion of the feasibility study if the

application meets the criteria in section (2) and the interconnection of the small generator facility does not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment.

(B) If the public utility concludes that a facilities study is not required and that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good faith, non binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds \$10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application within 15 business days of receipt of the applicant's agreement to pay for the minor modifications.

(7) If a public utility is required to perform a system impact study under subsection (6)(h), or if an applicant and a public utility agree in the scoping meeting to waive the feasibility study and proceed directly to the system impact study, then the public utility must provide the applicant with an executable system impact study agreement within five business days of completing the feasibility study or from the date of the scoping meeting, whichever is applicable.

(a) The system impact study agreement must include a detailed scope for the system impact study, a reasonable schedule for completion of the study, and a good faith, non binding estimate of the costs to perform the study.

(b) The system impact study agreement must follow the standard form agreement developed by the public utility and approved by the Commission.

(c) The applicant must execute the system impact study agreement within 15 business days of receipt of the agreement or the application is deemed withdrawn.

(d) The public utility must make reasonable, good faith efforts to follow the schedule set forth in the system impact study agreement for completion of the study.

(e) The system impact study must identify and detail the impacts on the public utility's transmission or distribution system or on an affected system that would result from the interconnection of the small generator facility if no modifications to the small generator facility or system upgrades were made. The system impact study must include evaluation of the adverse system impacts identified in the feasibility study and in the scoping meeting.

(f) In determining possible adverse system impacts, the public utility must consider the aggregated nameplate capacity of all generating facilities that, on the date the system impact study begins, are directly interconnected to the public utility's transmission or distribution system, have a pending completed application to interconnect with a higher queue position, or have an executed interconnection agreement with the public utility.

(g) The system impact study must include:

(A) A short circuit analysis;

(B) A stability analysis;

(C) A power flow analysis;

(D) Voltage drop and flicker studies;

(E) Protection and set point coordination studies;

(F) Grounding reviews;

(G) The underlying assumptions of the study;

(H) The results of the analyses; and

(I) Any potential impediments to providing the requested interconnection service.

(h) If an applicant provides an independent system impact study to the public utility, then the public utility must evaluate and address any alternative findings from that study.

(i) The public utility must provide a copy of the system impact study to the applicant within five business days of completing the study.

(j) If a public utility determines in a <u>system impactcluster</u> study that interconnection facilities or system upgrades are necessary to safely interconnect a small generator facility, then the public utility must perform a facilities study.

(k) If the public utility determines that no interconnection facilities or system upgrades are required, and the public utility concludes that the application meets the criteria in section (2), then the public utility must approve the application with 15 business days of completion of the system impact study.

(1) If the public utility determines that no interconnection facilities or system upgrades are required and that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds \$10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application within 15 business days of the applicant's agreement to pay for the minor modifications.

(8) If a public utility is required to perform a facilities study under subsection (6)(i) or 7(j), or if an applicant and a public utility agree in the scoping meeting to waive the system impact study and proceed directly to the facilities study, then the public utility must provide the applicant with an executable facilities study agreement within five business days of completing the system impact<u>cluster</u> study or within five business days from the date of the scoping meeting, whichever is applicable.

(a) The facilities study agreement must include a detailed scope for the facilities study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the costs to perform the study.

(b) The facilities study agreement must follow the standard form agreement developed by the public utility and approved by the Commission.

(c) The applicant must execute the interconnection facilities study agreement within <del>15</del> business<u>30</u> days after receipt of the agreement or the application is deemed withdrawn.

(d) The public utility must make reasonable, good-faith efforts to follow the schedule set forth in the facilities study agreement for completion of the study.

(e) The facilities study must identify the interconnection facilities and system upgrades required to safely interconnect the small generator facility and must determine the costs for the facilities and upgrades, including equipment, engineering, procurement, and construction costs. Design for any required interconnection facilities or system upgrades must be performed under the facilities study agreement. The public utility must also identify the electrical switching configuration of the equipment, including transformer, switchgear, meters, and other station equipment.

(f) The public utility may contract with a third-party consultant to complete the interconnection facilities and system upgrades identified in the facilities study. A public utility and an applicant may agree in writing to allow the applicant to hire a third-party consultant to complete the interconnection facilities and system upgrades, subject to public utility oversight and approval.

(g) The interconnection facilities study must include a detailed estimate of the time required to procure, construct, and install the required interconnection facilities and system upgrades.

(h) If the applicant agrees to pay for the interconnection facilities and system upgrades identified in the facilities study, then the public utility must approve the application within 15 business days of the applicant's agreement.

(9) The public utility may contract with a third-party consultant to complete a feasibility study, system impact study, orcluster study or facilities study. A public utility and an applicant may agree in writing to allow the applicant to hire a third-party consultant to complete a feasibility study, system impact study, or facilities study, subject to public utility oversight and approval.

(10) The interconnection process is not complete until:

(a) The public utility approves the application;

(b) Any interconnection facilities or system upgrades have been completed;

(c) Any minor modifications to the public utility's transmission or distribution system required under subsections (5)(d), 6(i)(B), or (7)(l) have been completed;

(d) The witness test, if conducted by the public utility, is successful; and

(e) The applicant and public utility execute a certificate of completion.

(11) If a small generator facility is not approved under the Tier 4 interconnection review procedures, then the public utility must provide a written explanation of the denial to the applicant.