

House Committee on Energy and Environment Oregon State Capitol 900 Court St. NE Salem Oregon 97301

March 22, 2021

Subject: House Bill 2021, -1 Amendment

Dear Chair Marsh, Vice-Chair Brock Smith, Vice-Chair Helm, and members of the committee,

We have gone to publicly available regulatory records to find information on the status of renewable energy projects in Oregon that that are far enough along in development to enter PacifiCorp's interconnection queue and report on how many have dropped out or withdrawn.

This is only PacifiCorp's interconnection queue. There is also a queue for the Bonneville Power Administration.

You will see that, except for a pumped storage project in Klamath (which stores and recycles energy, it does produce energy) the substantial majority of recently proposed projects have dropped or withdrawn. Obsidian very much believes we should be finding a path to successful renewable energy development, and that it is very important that we do not lose this decade.

Please see attached.

Sincerely,

/s/David W Brown
David W. Brown
Principal and Manager

## Klamath and Lake Cty

Cluster   Greek   Int C.   Greek   Coper   Comments   Coper														
Exercise   Description   Des		Serial												
Image:   Solar   11/26/18   So	Cluster	queue	Int Q			date					Requested	COD per		
Dispay	queue no	no	status	Name (if known)	energy source	su bmitted	size	location	POI	int cost	COD	study	IA signed?	Comments
Q1192	in progress	5:												
Pac has igned an IA, but does not consider these to be part of the interconnection gueue	TCS-20	Q1087			solar	11/26/18	50. MW	Lake Cty	Bullard Sub		12/31/20		n	NR/ER
Pac has signed an IA, but does not consider these to be part of the interconnection queue   Descuted, but not in service		Q1192			wind	2/11/20	239. MW	Klamath Cty	Malin sub		12/31/25		n	NR
Pac has signed an IA, but does not consider these to be part of the interconnection queue   Descuted, but not in service		PAC	Assumes to	be assigned to 2021 cluster	study									
Pac has signed an IA, but does not consider these to be part of the interconnection queue   Decouted, but not in service						i	289. MW							
Decuted, but not in service														
Descripted, but not in service	Par has sig	ned an IA	hut does n	nt consider these to be part	of the interconn	ertion queue								
Q687   IA signed   Swan Lake Hydro   Hydro   Malin sub at 500 kv   S 250 M   12/31/22   10/19/15   Storage only, not new generation. 5230Mtto build new marker substance of the power to Portland.		•	•	or consider these to be part		CLUON QUEUE			·					
Commonship   Com	LACCULE	I I	III SEIVICE	: 		i i			<del>i i</del>	-	·			Storage only not new generation, \$730Mto build new
Q721   A signed   Skysol, LLC   solar   11/34/15   55. MW   Klamath Cty   KF-Malin 230kv   S 10. M   6/5/17   9/30/27   6/5/11   10 years.		0607	IA cimod	Supp Lake Hudes	hudeo	7/30/45	415 0 5 6 57		Malin cub at 500 kg	6.750 M	12/21/22		10/10/10	
Q721   As signed   Skysol, LLC   Solar   11/14/15   55. MW   Klamath Cty   KF-Malin 230kv   S 10. M   6/5/17   9/30/27   6/5/17   10 years.   SMM three ring circus. No operation until Q687 is done, est   Q741   IA signed   Sparrow Solar   Solar   S/6/16   40. MW   Klamath Cty   Copco 2 V line   S 2.9 M   12/1/19   12/31/19   3/30/27   11/6/17   In etap to 56 kV line.   G757   IA signed   Sparrow Solar		Upa/	IA Signed	Swall Lake Hydro	пушто	7/28/13	413.6 (0)00		IVIAII II SUU AL SUU KV	\$ 230.101	12/31/22		10/19/19	
C741   La signed   Sparrow Solar   S		l											-1-1-	
Q741   IA signed   Sparrow Solar   S		Q/21	IA signed	Skysol, LLC	solar	11/14/15	55. MW	Klamath Cty	KF-Maiin 230kV	\$ 10. M	6/5/17	9/30/27	6/5/17	,
Q757   A signed   Beaver State Hidgs   Solar   G/10/16   20. MW   Klamath Cty   Copco 2 Y line   S 2.9 M   12/1/19   12/31/19   5/7/17   line tap to 69 kV line.										_				
CR49   IA signed   SPower   Solar   2/6/17   100. MW   Klamath Cty   KF-Main line   S 9.8 M   12/31/19   1/24/27   5/13/19   requires Q687 line to Albany; power can't be taken in KF   G825   IA signed   Blue Marmot   Solar   11/21/16   10. MW   Lake Cty   Bulland Sub   57.1 M   11/30/19   6/1/20   10/1/19   TSR S1said that new transformers at Warner and   G826   IA signed   EDP   Solar   11/21/16   10. MW   Lake Cty   Bulland Sub   11/30/19   6/1/20   10/1/19   Chiloquin, and reconductoring of 115 line, would   G827   IA signed   EDP   Solar   11/21/16   10. MW   Lake Cty   Bulland Sub   11/30/19   6/1/20   10/1/19   be required to allow all of these TSRs.						-,-,				<b>*</b>				,
Q825   A signed   Blue Marmot   Solar   11/21/16   10. MW Lake Cty   Bullard Sub   S7.1 M   11/30/19   6/1/20   10/1/19   TSR SI said that new transformers at Warner and   Q826   M signed   EDP   Solar   11/21/16   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   Chiloquin, and reconductoring of 115 line, would   CR27   A signed   EDP   Solar   11/21/15   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   De required to allow all of these TSRs.					solar									
Q826   A signed   EDP   solar   11/21/16   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   be required to all ow all of these TSRs.			IA signed	sPower	solar	_, _, _,	100. MW	Klamath Cty	KF-Malin line	\$ 9.8 M	12/31/19	1/24/27		
Q827   IA signed   EDP   Solar   11/21/15   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   be required to allow all of these TSRs.		Q825	IA signed	Blue Marmot	solar	11/21/16	10. MW	Lake Cty	Bullard Sub	\$7.1 M	11/30/19	6/1/20	10/1/19	TSR SI said that new transformers at Warner and
QB29   IA signed   EDP   Solar   11/21/15   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   \$8.3M for connecting to LVA ring bus; \$10.6M to Mile Hi   QB30   IA signed   EDP   Solar   11/21/16   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   \$4.5M is new transformer at chiloquin   GB28   IA signed   EDP   Solar   11/21/16   13. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   \$4.5M is new transformer at chiloquin   GB28   IA signed   EDP   Solar   11/21/16   13. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   QB28 is 13 MW interconnection; 2 TSRs for 13 MW.   GB28   IA signed   IA signe		Q826	IA signed	EDP	solar	11/21/16	10. MW	Lake Cty	Bullard Sub		11/30/19	6/1/20	10/1/19	Chilo quin, and reconductoring of 115 line, would
Q830   IA signed   EDP   solar   11/21/16   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   \$4.5 Mis new transformer at Chiloquin		Q827	IA signed	EDP	solar	11/21/16	10. MW	Lake Cty	Bullard Sub		11/30/19	6/1/20	10/1/19	be required to allow all of these TSRs.
Q830   IA signed   EDP   solar   11/21/16   10. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   \$4.5 Mis new transformer at Chiloquin														
Capability   Cap		Q829	IA signed	EDP	solar	11/21/16	10. MW	Lake Cty	Bullard Sub		11/30/19	6/1/20	10/1/19	\$8.3M for connecting to LVA ring bus; \$10.6M to Mile Hi
CB28   IA signed   EDP   Solar   11/21/16   13. MW Lake Cty   Bullard Sub   11/30/19   6/1/20   10/1/19   CB28 is 13 MW interconnection; 2 TSRs for 13 MW.		Q830	IA signed	EDP	solar	11/21/16	10. MW	Lake Cty	Bullard Sub		11/30/19	6/1/20	10/1/19	\$4.5M is new transformer at Chiloguin
C971   IA signed   Rogue Rover Holdings   Solar   11/7/17   2.7 MW   Klamath Cty   Turkey Hill sub   12/15/19   6/4/20		-		EDP	solar	11/21/16	13. MW	Lake Ctv	Bullard Sub		11/30/19	6/1/20	10/1/19	Q828 is 13 MW interconnection: 2 TSRs for 13 MW.
Executed, but not in service subtotal:   696.5 MW			_	Rogue Rover Holdings	solar				Turkey Hill sub			-,-,-		, , , , , , , , , , , , , , , , , , , ,
LA signed, Suspended:   Fresh Air Energy II   (EcoPlexus) Hamamker		Execut	_											
Fresh Air Energy														
Fresh Air Energy	IA signed	Suspender	d•											
(EcoPlexus) Hamamker		- Spender	-	Fresh Air Energy II		<del>                                     </del>			i i					
Op05 MTN PV1 solar 7/12/17 50. MW Klamath Cty Co pco 2-KF line \$ 6.8 M 12/1/19 1/1/21 NR only. Reconductor 69 kV line, requires new line to Port Fresh Air Energy II - Hayden Op06 Mtn PV2-A solar 7/12/17 80. MW Klamath Cty KF - Lone Pine In \$ 9.8 M 12/1/19 6/1/21 3/24/20 ER and NR. Ring bus on 230 kV line. Fresh Air Energy II - Haden Op07 Mtn PV2-B solar 7/12/17 80. MW Klamath Cty KF - Lone Pine In \$ 3.2 M 12/1/19 6/1/21 3/24/20 ER and NR. Connects to Q906 POI at same line position.														
Fresh Air Energy II - Hayden   Op06   Mtn PV2-A   solar   7/12/17   80. MW Klamath Cty   KF - Lone Pine In   \$ 9.8 M   12/1/19   6/1/21   3/24/20   ER and NR. Ring bus on 230 kV line.   Fresh Air Energy II - Haden   Op07   Mtn PV2-B   solar   7/12/17   80. MW Klamath Cty   KF - Lone Pine In   \$ 3.2 M   12/1/19   6/1/21   3/24/20   ER and NR. Connects to Q906 POI at same line position.		0005			colar	7/47/47	50 1.54	Vlamath Ctv	Conco 3-VEline	¢ = 01.4	12/1/10	1/1/24		NR only Reconductor 50 kV line, requires new line to Dectland
Op06 Mtn PV2-A solar 7/12/17 80. MW Klamath Cty KF - Lone Pine In \$ 9.8 M 12/1/19 6/1/21 3/24/20 ER and NR. Ring bus on 230 kV line. Fresh Air Energy II - Haden Op07 Mtn PV2-B solar 7/12/17 80. MW Klamath Cty KF - Lone Pine In \$ 3.2 M 12/1/19 6/1/21 3/24/20 ER and NR. Connects to Q906 POI at same line position.		C000				//12/1/	30. IVIVV	Mariaul Cty	copco z-krime	⇒ 0.0 IVI	12/1/19	1/1/21		nk only. Reconductor by kv line, requires new line to Portland
Fresh Air Energy II - Haden O907 Mtn PV2-B solar 7/12/17 80. MW Klamath Cty KF - Lone Pine In \$ 3.2 M 12/1/19 6/1/21 3/24/20 ER and NR. Connects to Q906 POI at same line position.													- 1 1	to - for all - to
Q907 Mtn PV2-B solar 7/12/17 80. MW Klamath Cty KF - Lone Pine In \$ 3.2 M 12/1/19 6/1/21 3/24/20 ER and NR. Connects to Q906 PO lat same line position.		Q906			solar	7/12/17	80. MW	Klamath Cty	KF - Lone Pine in	\$ 9.8 M	12/1/19	6/1/21	3/24/20	ER and NR. Ring bus on 230 KV line.
													- 1 1	
IA signed, Suspended subtotal: 210. MW		ــــــــــــــــــــــــــــــــــــــ			solar	7/12/17		Klamath Cty	KF - Lone Pine In	\$ 3.2 M	12/1/19	6/1/21	3/24/20	ER and NR. Connects to Q906 POTat same line position.
		IA signed	, Suspended	subtotal:			210. MW							
									<u> </u>					

## Klamath and Lake Cty

Removed: I	ack of or	ngress											
			Fresh Air Energy II Hayden	•	i i			Copco 2 - Westside	i				İ
	Q904	d	Mountain PV1	solar		50 mw	Klamath	Тар	\$9m				
			Fresh Air Energy II - Hayden										
	Q915		Mtn PV3-A	solar	7/28/17	80. MW	Klamath Cty	Cap Jack - Merdn	\$32.7M	12/1/19	12/1/23	n	ER and NR. 525 kV ring bus. NR requires new line to Portland.
			Fresh Air Energy II - Hayden	1			•						
	Q916		Mtn PV3-B	solar	7/28/17	80. MW	Klamath Cty	Cap Jack - Merdn	\$23M	12/1/19	12/1/23	n	ER requires Q915 first. NR reuires new line to Portland.
			Fresh Air Energy II - Hayden	l									
	Q917		Mtn PV3-C	solar	7/28/17	80. MW	Klamath Cty	KF co-gen - Merdn	\$.8M	12/1/19	12/1/23	n	ER requires Q915 first. NR requires new line to Portland.
	Q1034			solar	6/5/18	60. MW	Lake Cty	Alturas-MH line		11/30/20		n	NR/ER
	Q1133			solar+battery	5/7/19	80. MW	Klamath Cty	KF - Yamsay line		12/1/22		n	NR/ER
	Q1134			solar+battery	5/7/19	120. MW	Klamath Cty	KF - Yamsay line		12/1/22		n	NR/ER
	Q1135			solar+battery	5/7/19	80. MW	Klamath Cty	Chilq - Mile Hi		12/1/22		n	NR/ER
	Remove	d: lack of pro	gress subtotal:			580. MW							
Deactivate	d: su bmit	ted afterdu	ister cutoff date:										
	Q1220			solar	4/24/20	500. MW	Klamath Cty	Malin sub					
	01221			solar+battery	4/27/20	200. MW	Klamath Cty	Cap Jack - Merdn					
	Q1222			solar+battery	4/27/20	200. MW	Klamath Cty	KF - Lone Pine In					
	Deactiva	ted: submit	ted after cluster cutoff date :	subtotal:		900. MW							
Withdrawn	by custo	mer:											
								Lakeview Junction-					
		IA signed	Beaver State Hldgs	solar	9/30/16		Klamath Cty	Alturas line	\$ 3.3 M		12/31/19	2/5/18	
	Q1062			solar	8/15/18		Klamath Cty	KF-Malin line	! .	12/31/22		n	ER/NR
	Withdra	wn by custo	mer subtotal:			260. MW							
													Note: ER = Energy Resource; NR = Network Resource
Total in pro	gress:					289. MW							
				ļ									
Total execu	ted, not	in service:				696.5 MW							
		İ	<u> </u>										
	spended, removed for lack of progress, 1950. MW												
Deacti	ivated fo	r after cu tof	f submission, or withdrawn b	by customer:									

## Boardman and East of Summer Lk

Cluster	Serial				submitte						COD per	IA	
no	no	TSR AREF	Name (if known)	energy	d	size	location	POI	int cost	Reg COD	study	signed?	Comments
	Boardma	'								,	,	-6	
TCS-55	Q1219	I		solar+battery	4/20/20	80 MW	Gilliam	Dalreed substation		6/1/2023			
10333	QILLI			JOIN TOURCEY	4/20/20	CO. INTER	dillian	Daile ca saturation		0/1/1013			
	Heming	ı way - Summe	r Lake 500 kV line										
Withdraw	n: lack of	readiness											
	Q718			wind	11/6/15	400. MW	Lake Cty	Burns-SL500kv	\$45.7 M	12/1/19	12/15/22	n	3-breakerring bus. 4 mi. 500 kV line. \$43.5M reimbrs
													Affected systems study required to move ahead
													47.5M network upgrade incl Walla Walla cap bank repl, 2M
	Q1029		Invenergy	solar	5/29/18	400. MW	Lake Cty	Burns-SL500kv	\$49.5 M	12/1/21	12/1/23	n	di rect assgn
	Q1031			solar	5/30/18	80. MW	Harney C	Burns-SL500kv		12/1/20			
	Q1032			solar	5/30/18	80. MW	Harney C	Burns-SL500kv		12/1/20			
	Q1033			solar	5/30/18	80. MW	Harney C	Burns-SL500kv		12/1/20			
Total activ	Total active:					80. MW							
Total With	hdrawn: la	ack of readin	ess		1	1040. MW							

## Bend-Redmond

Cluster	Serial									COD per	IA	
no	no	Name (if known)	energy	submit ted	size	County	POI	int cost	Reg COD	study	signed?	Comments
	Active:											
							Ponderosa sub or					
TCS-43	Q1161		solar+battery	9/19/19	40. MW	Crook	Houston Lk line		5/30/22			
							Ponderosa sub or					
TCS-44	Q1162		solar+battery	9/19/19	80. MW	Crook	Houston Lk line		5/30/22			
							Baldwin Road -					
TCS-45	Q1163		solar+battery	9/19/19	40. MW	Crook	Ponderosa line		5/30/22			
							Baldwin Road -					
TCS-46	Q1164		solar+battery	9/19/19	80. MW	Crook	Ponderosa line		5/30/22			
							Ponderosa sub or					
TCS-51	Q1204		solar	4/6/20	20. MW	Crook	Baldwin road line		5/1/23			
							Ponderosa sub or					
TCS-52	Q1205		solar	4/6/20	20. MW	Crook	Houston Lk line		5/1/23			
							Ponderosa sub or					
TCS-53	Q1206		solar	4/6/20	20. MW	Crook	Houston Lk line		5/1/23			
							Ponderosa sub or					
TCS-54	Q1214		solar+battery	4/13/20			Houston Lk line		5/30/24			
	All of these	e were delayed in studies due to large	number of inte	rconnection	requests, n	ow in duster	study.					
	Subtotal a	ctive:			340. MW							
Deactiva		tted after cluster cutoff date:										
	Q1208		solar+battery	4/8/20	150. MW		Ponderosa sub		12/31/2023			
							Ponderosa sub or					
	Q1213		solar+battery	4/13/20	200. MW		Baldwin road line		5/30/24			
						<b>I</b>	Ponderosa sub or					
	Q1215		solar+battery	4/13/20		Crook	Houston Lk line		5/30/24			
	Subtotal s	ubmitted after cluster cutoff:			550. MW							
Withdra		readiness:	color	a da m da m		Const	Delife to send out	* 4 * * * *				Non-contribution of Politicia Board or b
	Q739		solar	4/29/16	59. MW		Baldwin road sub	\$ 4.6 M	10/1/22	10/1/22	n	New position at Baldwin Road sub
	01000		colou banc	and the factor		1	Corral sub or Ochoco		r ho head			
	Q1093		solar+battery	12/6/2018	600. MW		Corral line		5/30/2021			
	Q1165		andari harress	0/10/10	COO		Ochoco sub or Corral		1/1/24			
	Q1165 Q1188		solar+battery solar+battery	9/19/19	600. MW 80. MW		Ochoco line Steams Butte sub		1/1/24			
	-	Chladrone lask of conditions	solar+battery	11/1/19		Crook	Steams Butte Sub		12/31/2022			
	Subtotal V	Vithdrawn lack of readiness:			1339. MW							