BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of the California Renewables Portfolio Standard Program.

R.11-05-005 (Filed May 5, 2011)

REPLY OF IBERDROLA RENEWABLES, INC. TO VARIOUS PARTIES' RESPONSES ON IMPLEMENTATION OF NEW PORTFOLIO CONTENT CATEGORIES

August 19, 2011

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Iberdrola Renewables, Inc. ("Iberdrola Renewables") provides the following replies to the responses of various parties to the questions posed by ALJ Simon in the Ruling issued July 12, 2011.

QUESTION #1. While parties provided somewhat differing interpretations of the word "transactions," there appeared to be little disagreement that "electricity products" are the actual energy, renewable energy credits, and services such as firming and shaping that retail sellers obtain to comply with SB 2X. If the meaning of "transactions" is the execution of a contract and not the performance under it, then "transactions" is not a correct interpretation. Compliance with the

RPS law and the product content categories is measured by obtaining minimum or maximum quantities of eligible renewable energy resources that have been procured by the Load Serving Entity ("LSE"), so a benchmark that is upstream of the actual receipt of the electricity products is invalid.

QUESTION #4. Most parties provided responses and examples consistent with those in the August 8, 2011 Response of Iberdrola Renewables. Three sets of comments merit a reply, however, and should be rejected by the Commission.

Ormat Technologies suggests a distinction between "..physically dispatchable resources that can be predictably scheduled into a California BAA, and (to exclude) distant intermittent resources that require additional steps to be reliably deliverable…" and proposes using a Firm Contingent energy product code that was suggested for use in the WECC by Bonneville Power Administration ("BPA").¹ But the law makes no such distinction among resources. Further, intermittent resources have both a track record of predictable scheduling and the availability of intra-hourly ancillary services to ensure schedules are kept. It is no surprise, then, that BPA has abandoned its proposal to designate variable resources as Firm Contingent. Consequently, the ill-conceived Ormat proposal is moot.

¹ Ormat Technologies, PP. 4-5.

Sempra Generation and Arizona Public Service respond that Section 399.16(b)(1)(A) is intended to catch schedules using dynamic transfer². Noting that Section 399.16(b)(1)(B), which is immediately below Section 399.16(b)(1)(A) in SB 2X and explicitly addresses dynamic transfers, Iberdrola Renewables credits the General Assembly for carefully identifying two distinctive electricity products in the two distinctive subparagraphs. The interpretation put forth by Sempra Generation, consequently, is not a valid one. Sempra Generation subsequently suggests "(c)onfigurations which provide functionally equivalent energy and capacity delivery (i.e., via firm transmission for the full contract capacity) from the renewable resource to California loads may also qualify under this interpretation." But there is no statutory requirement to provide capacity, or to utilize firm transmission – compliance with the RPS is based solely on procuring quantities of qualifying renewable energy, not capacity, in the portfolios of the LSEs.

Finally, Davenport Newberry Holdings LLC⁴ and the Division of Ratepayer Advocates,⁵ like Sempra Generation, suggest schedules must be on firm transmission to qualify under Section 399.16(b)(1)(A). Nothing in the statute suggests such a requirement is intended and no party suggests with any precision

² Sempra Generation, P..4., Arizona Public Service, P. 4.

³ Id

⁴ Davenport Newberry Holdings LLC, PP.4-5.

⁵ Division of Ratepayer Advocates, P. 3.

why a completed schedule on non-firm transmission is inadequate to meet the requirements of Section 399.16(b)(1)(A). Further, using more flexible scheduling arrangements (e.g., conditional firm, non-firm) will create a more efficient use of the transmission grid at lower cost to ratepayers than reliance only on firm transmission. Only a bundled product scheduled on an hourly basis from the project to a California BA will meet the requirements of 399.16 (b) (1) (A). Whether firm or non-firm transmission was utilized to make the delivery is not relevant.

QUESTION #5. Some parties responded that the issues in Ordering Paragraph 26 were resolved; other parties responded that they were subsumed; a few suggested that both occurred; and, several said that the question is irrelevant.

Merriam-Webster defines "resolve" to mean in relevant part "to deal with successfully; clear up; find an answer to." Merriam-Webster defines "subsume" to mean "to include or place within something larger or more comprehensive: encompass as a subordinate or component element."

The question was posed as an either/or proposition but after examining the responses of the parties it should not a binary choice. In fact, the new RPS statute and this proceeding resolve or subsume most of the multiple issues raised in the investigation of real-time deliveries using firm transmission that arose from

Ordering Paragraph 26 from D. 10-03-021, and render the questions about firm transmission irrelevant.

The law resolves the question of whether a real-time delivery may be considered a bundled product which a utility may purchase without limit in its RPS compliance.

This rulemaking subsumes the issues in the OP26 proceeding in two respects. From procedural standpoint, the record from that proceeding has become part of the SB 2X implementation rulemaking of which this inquiry is a part. Several parties note the useful information included in the record of that proceeding so the Commission is well-served to have that information subsumed by this proceeding and at its disposal now. Substantively, this proceeding tackles questions of tracking and verification that were central to the OP 26 investigation but not resolved by enactment of SB 2X. The information gathered in the April 23, 2010 Workshop and associated written comments on use of NERC eTags, WREGIS certificates, and metered output data have become useful, foundational elements of a tracking and verification system that is the subject of inquiry in this proceeding.

Finally, the Commission need not concern itself now with a definition or demonstration of the use of firm transmission rights as the statute does not require use of firm transmission for the hourly or subhourly schedules needed to comport with Section 399.16(b)(1)(A). Thus, whether firm transmission is used for a schedule is irrelevant.

QUESTION #6. Pacific Gas & Electric ("PG&E") suggests the "Bucket attribute' of each REC (to) be recorded on the WREGIS certificates when they are created to ensure that these attributes remain with the REC if it is later sold on a secondary market." While intuitively, a recording of the "bucket attribute" of each REC upon generation is attractive, the proposal is problematic for several reasons.

First, this approach may be feasible for products qualifying for one of the categories in Section 399.16(b)(1). Iberdrola Renewables is not certain how this may be feasibly accomplished for firmed and shaped products, however. PG&E proposes assigning the content category *when the REC is created*. Many parties, however, propose a period of time, typically within the same calendar year⁷ of the generation and energy scheduling, to reconcile firmed and shaped products. As it may take some time for many WREGIS certificates to be assigned to a specific increment of energy imports, the proposal is not practicable for this product category, and may be better suited for defining in retirement.

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⁶ Pacific Gas & Electric, P.14.

⁷ IEP, P.12; Southern California Edison, P.19; TURN, P.8.

Second, as stated in its response to Question #10, Iberdrola Renewables disagrees with the reasons stated by PG&E for making this identification – to retain the original product content categorization of a REC in the event of a resale of that REC.

Iberdrola Renewables supports the verification process proposed by TURN, including sworn attestations to the veracity of the categorization of specific products, combined with CEC audits and penalties for misrepresentation. In addition, there should be a concerted effort to work with WREGIS and other affected parties to automate the tracking and verification process, but the attestation/audit process may be implemented immediately.

In the meantime, though existing data should be sufficient to give all parties confidence that products may be tracked, categorized, and verified. Included in this filing as "Attachment A" is a table that Iberdrola Renewables has developed to identify the steps required to verify each product content categorization — utilizing existing processes as well as proposed additional steps.

"Attachment B" details the current elements and mechanisms employed in the WREGIS certification and retirement process. This diagram is provided to demonstrate that there is already a robust platform to support support verification in both the immediate term and in the future. "Attachment C" provides an example analysis that categorizes specific schedules and metered data for determining the product content category, specifically for a product that qualifies under Section 399.16(b)(1)(A). This example is based on the actual generation of a wind facility (Star Point Wind Energy Project in Sherman County, Oregon). The format includes:

- * hourly meter data from a specific source ("MWh Generation" and "SOURCE");
- *eTags from source (Star Point) to sink (MID System); and,
- * hourly schedule quantity received by customer ("MWH FINAL").

The "SOURCE" column lists an eligible renewable energy resource. The "TAG ID" contains the relevant purchasing/selling entity (PSE) information. The "SINK" column demonstrates scheduling to a California Balancing Authority. Comparing the "MWh Generation" with "MWH FINAL" data enables an analysis of the schedule and metered output data, the lesser of which may be categorized as a Section 399.16(b)(1)(A) product.

Using the 4:00 Metering Hour as an example, 10 MWh were scheduled from the Star Point wind project ("Starpoint") to Modesto Irrigation System ("MID.SYSTEM") to the SMUD BA (see TAG ID). In the hour, 11.39 MWh of generation was metered at Star Point which will result in creation of an equivalent quantity of WREGIS certificates. For this hour, the lesser of the generation or the

schedule equals 10 MWh, so 10 MWh would be categorized as Section 399.16(b)(1)(A) product. The remaining 1.39 MWh of metered generation would be available for a Section 399.16(b)(2) product later (though in the same calendar year).

Using the 13:00 Metering Hour as another example, 12 MWh were scheduled from the Star Point wind project ("Starpoint") to Modesto Irrigation System ("MID.SYSTEM") to the SMUD BA (see TAG ID). In the hour, 5.40 MWh of generation was metered at Star Point, which will result in creation of an equivalent quantity of WREGIS certificates. In this hour, the lesser of the generation or the schedule equals 5 MWh, so 5 MWh would be categorized as a Section 399.16(b)(1)(A) product. The 7 MWh of scheduled energy that did not come from the ERER may be paired with RECs from hours when generation exceeded the schedule (such as Metering Hour 4:00 in the previous example). This would be classified as a Section 399.16(b)(2) product.

As these illustrations demonstrate, information currently available may be assembled and analyzed to categorize specific products. Load-serving entities may attest to the veracity of the data, which creates an auditable trail.

QUESTION #7. As noted in Iberdrola Renewables' reply to the responses to Question #4 above, the suggestion of Ormat Technologies to use a Firm Contingent product designation is both inadvisable and moot.

QUESTIONS #12/13. Most parties agree with the notion that, while the individual words "firming" and "shaping" may mean different thing, products that fall into this category are intended for use to help retail sellers manage their complex responsibilities by ensuring that predictable energy delivery schedules may be set and fulfilled. Firming and shaping products are directed primarily, but not exclusively, to managing intermittent renewable energy resources and utility load. By focusing on this type of product and providing certain eligibility parameters outlined in the reply to responses to Question #14, Iberdrola Renewables believes the Commission may devise a product category that is good for utility operations, promotes the development of new renewable resources, and shields California ratepayers from price volatility.

QUESTION #14. Iberdrola Renewables and several parties proposed criteria to define "incremental" in order to distinguish firmed and shaped renewable energy products in a manner that provides additional value to ratepayers and California at large when compared with unbundled RECs. Firmed-and-shaped products were

discussed extensively during the OP 26 proceeding, particularly at the Workshop. Comments of several parties echo these earlier discussions, and give good reasons for establishing a few criteria to define "incremental." Several parties suggest a "but for" test which is quite similar to the proposal of IEP to compare the firming and shaping energy against a retail seller's energy import levels and contractual obligations at the time a firming and shaping contract is executed. The "but for" test is also functionally similar to what UCS describes as "…any electricity imports (are) not otherwise part of an LSE's portfolio at the time the 'firmed and shaped' contract is executed." Several parties propose a fixed-price requirement (described by enXco as a "stable rate component".

The proposed "but for" test may still be somewhat subjective but since the firming and shaping service will be tied to an underlying eligible renewable energy resource procurement, the Commission should be able to determine that a package of services results in the scheduling of incremental quantities of energy.

The fixed-price component provides a quantifiable hedge against fuel-cost volatility and will help to drive transactions that are not the type of "matching" transactions that TURN and UCS pointedly seek to avoid. Iberdrola Renewables agrees with UCS' proposal for a minimum time period of five years for the fixed-

⁸ TURN,P.8; UCS, PP.4-8; CEERT, PP.12-13; enXco, PP.12-13.

⁹ NextEra, P.7; Shell Energy, PP.7-8; Western Power Trading Forum, P8.

¹⁰ LICS P. 6.

¹¹ TURN, P.8; UCS, P.7; CEERT, P.13; IEP, P.12.

 $^{^{12}}$ enXco. P.13.

priced firming and shaping service (allowing for pre-determined non-energy escalators and tariff-driven price adjustments) for long-term transactions but would allow for shorter-term firming and shaping arrangements under a 1-for-1 match of the fixed-price requirement for firming and shaping associated with the underlying renewable energy procurement.

Specific geographic sourcing or delivery requirements for firming energy, as proposed by TURN¹³ and Sempra Generation¹⁴, are inadvisable. There are more than three-dozen balancing authorities in the WECC and "system" sales (rather than source-specific energy sales) are prevalent in the WECC and sources may often cross subregions. Thus, the ability to identify a specific resource, never mind firming and shaping resource one that shares a common balancing authority with the underlying renewable resource, is infeasible. Further, unlike the "but-for" and fixed-price requirements that provide supply and price benefits to ratepayers, the imposition of impractical geographic limits on firming and shaping resources would come at a cost to ratepayers with no apparent gain.

In summary, Iberdrola Renewables asserts that modest criteria defining "incremental" would serve the interests of ratepayers while drawing a sensible

¹³ TURN,P.8.

¹⁴ Sempra Generation, P. 8.

distinction between the portfolio content categories described in Section 399.16(b)(2) and (3).

Dated: August 19, 2011

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ATTACHMENT A

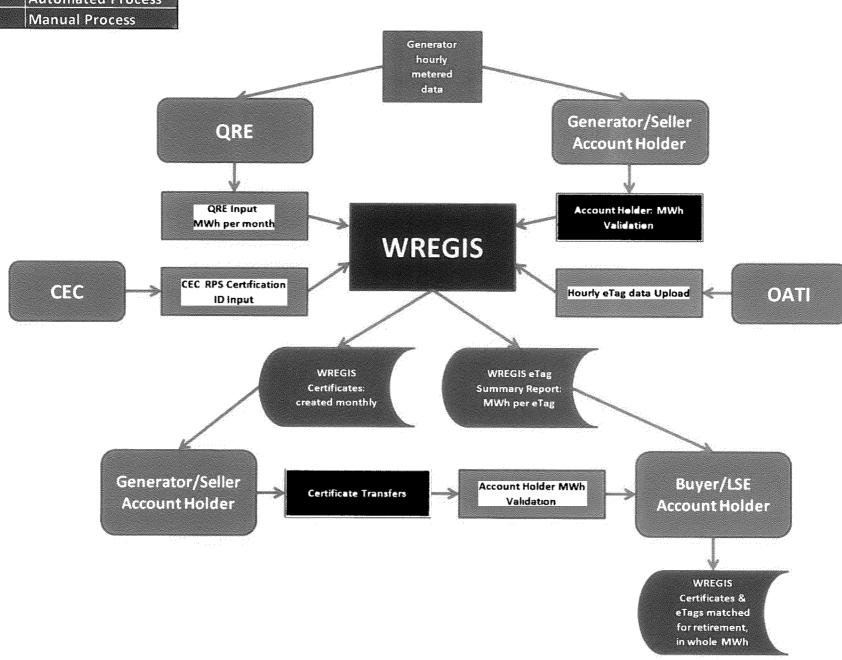
Processfor "Product Content Category" Verification

VerificationSteps	DataSource	399.16(b)(1) "Bucket1"	399.16(b)(2) "Bucket2"	399.16(b)(3) "Bucket3"
1.CPUCapprovestransaction	AdviceLetter	V	v	V
2.CECcertifiesrenewableenergyresource eligibilityforRPS	CECCertificationApplication&FinalCertificate	V	v	V
3.Eligible RenewableEnergyResource(ERER) generatesMWh	Facilityhourlymeterdata(MWs)QREmonthlyreporttoWREGIS(MWh)	v	v	V
4. Energy is scheduled to buyer, a sevidenced by eTags	eTags(fromOATIorothervendors)	v	v	
5.Comparisonbetweenmeterdata andeTag, onanhourlybasis		√		
a.Lesserof:(1)eTagwith "source" of an ER and "sink" of a CBA; and (2) meter data	 Today: ManualReport Facilityhourlymeterdata WREGISCertificates HourlyeTags(reportedtoWREGIS) Future:Automatedreport WREGIS(?) 	V		
b. Generation, net of Bucket 1 qualified MWh, matched with e Tagwith "source" in the WECC and "sink" of a CBA in same calendar year	ContinuationofReportin#5a: • WREGISCertificates(netofBucket1) • HourlyeTags		V	
c.NoeTagdatarequired	WREGISCertificates			V
6. Retirement of WREGISC ertificates into separate content category sub-accounts	WREGIS: InformationfromStep#5 usedfor WREGISretirementprocess	V	V	V
7.LSEatteststotheaccuracyofproducts assignedtocontent"Buckets"1and2	LSEAttestationLetter	V	V	

ATTACHMENT B

Current WREGIS Verification Process & Components

ORANGE	Inputs
RED	Automated Process
BLUE	Manual Process



ATTACHMENT C

${\bf Example Comparison of Hourly Data for Bucket 1 Analysis}$

M	eteredGenera	tionDATA			(e-TagData				
Meter	ingHour	MWhGeneration	TAG_ID*	TAG_INDEX	SOURCE	SINK	START_TIME	STOP_TIME	MWH_FINAL	Bucket1
	B####I@PHPIOODIF	RTMID0601_S 1ABU019		19159358		MID.SYSTEM	6/1/100:00		15	13
	6/1/102:00	20.49	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/101:00	6/1/102:00	10	10
	6/1/103:00	12.89	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/102:00	6/1/103:00	10	10
	6/1/104:00	11.39	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/103:00	6/1/104:00	10	10
	6/1/105:00	7.50	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/104:00	6/1/105:00	5	5
	6/1/106:00	5.00	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/105:00	6/1/106:00	5	5
	6/1/107:00	3.30	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/106:00	6/1/107:00	5	3
	6/1/108:00	1.00	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/107:00	6/1/108:00	0	-
	6/1/109:00	-	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/108:00	6/1/109:00	3	-
	6/1/1010:00	0.10	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/109:00	6/1/1010:00	0	-
	6/1/1011:00	3.20	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1010:00	6/1/1011:00	3	3
	6/1/1012:00	2.90	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1011:00	6/1/1012:00	2	2
	6/1/1013:00	5.40	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1012:00	6/1/1013:00	12	5
	6/1/1014:00	10.79	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1013:00	6/1/1014:00	12	11
	6/1/1015:00	5.60	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1014:00	6/1/1015:00	15	6
	6/1/1016:00	4.90	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1015:00	6/1/1016:00	23	5
	6/1/1017:00	2.60	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1016:00	6/1/1017:00	10	3
	6/1/1018:00	2.00	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1017:00	6/1/1018:00	10	2
	6/1/1019:00	6.80	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1018:00	6/1/1019:00	5	5
	6/1/1020:00	5.20	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1019:00	6/1/1020:00	5	5
	6/1/1021:00	0.30	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1020:00	6/1/1021:00	10	0
	6/1/1022:00	-	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1021:00	6/1/1022:00	10	-
	6/1/1023:00	-	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1022:00	6/1/1023:00	10	-
	6/2/100:00	-	BPAT_PPMIRTMID0601_SMUD	19159358	Starpoint	MID.SYSTEM	6/1/1023:00	6/2/100:00	0	-
Total	•	124.43							190	103

WREGISCertificates	124
Bucket1Certificates	103
EnergyavailableforBucket2Matching	87
RECsavailableforBucket2Matching	21

^{*}The Tagl D includes the Source Control Area (BPA), the two PSEs (Iberdrola Renewables, a ka"PPM" and MID), and the sink control area (SMUD).

VERIFICATION

I am an employee and representative of Iberdrola Renewables, Inc. and am authorized to make this verification on its behalf. I have been delegated authority by the officer responsible for regulatory matters to sign this regulatory filing, due to his absence today. I have read the foregoing REPLY OF IBERDROLA RENEWABLES, INC. TO VARIOUS PARTIES' RESPONSES ON IMPLEMENTATION OF NEW PORTFOLIO CONTENT CATEGORIES and am informed and believe, and on that ground allege, that the matters stated are true and correct to the best of my knowledge.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 19th day of August, 2011, at Portland, Oregon.

/s/ Kevin A. Lynch
Kevin A. Lynch