BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of California Renewable Portfolio Standard Program. R.11-05-005 Sec. 399.20 program (Filed July 21, 2011)

REPLY COMMENTS OF AGPOWER GROUP, LLC TO ADMINISTRATIVE LAW JUDGE'S RULING SETTING FORTH IMPLEMENTATION PROPOSAL FOR SB 32 AND SB 2 1X AMENDMENTS TO SECTION 399.20

Donald C. Liddell DOUGLASS & LIDDELL 2928 2nd Avenue San Diego, California 92103 Telephone: (619) 993-9096 Facsimile: (619) 296-4662

Email: liddell@energyattorney.com

Counsel for AGPOWER GROUP, LLC

August 26, 2011

TABLE OF CONTENTS

I.	INTR	ODUCTION	1		
II.	AGPOWER PROPOSES A PRICING METHODOLOGY BASED ON AVOIDED COSTS2				
	A.	General Avoided Cost for Energy	2		
	B.	Renewable Content Value ("RCV")	3		
	C.	Estimated Cost of Renewables as an Alternative Core Avoided Cost	3		
	D.	Adders	4		
		1. Power-Related Adders	4		
	E.	Avoided Transmission Investment	5		
	F.	Avoided Distribution Investment	5		
	G.	Line Losses (Beyond that Included in the MPR)	6		
	H.	Resource Adequacy Value	6		
		1. Environmental/Heath-Related Adders	7		
	I.	Air Emissions Benefits Associated with Better Manure/Waste Management	8		
	J.	Additional Factors	8		
	K.	Numeric Sample Calculation.	9		
III.		OWER'S PROPOSAL IS CONSISTENT WITH THE LANGUAGE AND NT OF PUBLIC UTILITIES CODE SECTION 399.20	10		
IV.		OWER'S PROPOSAL IS CONSISTENT WITH ALL APPLICABLE MISSION POLICIES, ORDERS, AND DECISIONS	11		
V.	AGPO	OWER'S PROPOSAL IS CONSISTENT WITH FEDERAL LAW	12		
VI.		OWER'S RESPONSES TO SPECIFIC POSITIONS AND ARGUMENTS ARTIES IN THEIR OPENING COMMENTS	13		
VII.	THE	PROJECT SIZE CAP SHOULD BE 3 MW	14		

VIII.	THE COMMISSION SHOULD INSTRUCT THE UTILITIES TO CONTINUE USING STREAMLINED SECTION 399.20 CONTRACTS, WITH ONLY		
	LIMITED MODIFICATIONS REQUIRED TO MAKE THEM CONSISTENT WITH THE REQUIREMENTS OF SB 32.	15	
IX.	CONCLUSION	16	

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of California Renewable Portfolio Standard Program. R.11-05-005 Sec. 399.20 program (Filed July 21, 2011)

REPLY COMMENTS OF AGPOWER GROUP, LLC TO ADMINISTRATIVE LAW JUDGE'S RULING SETTING FORTH IMPLEMENTATION PROPOSAL FOR SB 32 AND SB 2 1X AMENDMENTS TO SECTION 399.20

Pursuant to Administrative Law Judge Regina DeAngelis' *Ruling Setting Forth Implementation Proposal For SB 32 and SB 2 1X Amendments To Section 399.20* issued June 27, 2011, as supplemented by Administrative Law Judge DeAngelis' message to the Service List dated August 15, 2011 extending the due date for reply comments to August 26, 2011 ("ALJ's Ruling"). AgPower Group, LLC ("AgPower") hereby submits these reply comments in accordance with the California Public Utilities Commission's ("Commission's") Rules of Practice and Procedure.

I. <u>INTRODUCTION.</u>

AgPower's reply comments focus for the most part on the central, and most vital, subject in this proceeding - pricing. Other parties will highlight and make recommendations on additional important issues, including an expedited and streamlined interconnection process, but all of the best efforts of every stakeholder will be for naught if the pricing methodology that is adopted by the Commission does not produce tariffs and forms of contract that make available a project revenue stream for eligible projects that can be financed. In these reply comments, AgPower proposes and advocates for a pricing methodology that is (i) drawn directly from the language and intent of Public Utilities Code (P.U. Code) §399.20, (ii) consistent with all

2

¹ AgPower strongly supports the positions of Sustainable Conservation in its Opening Comments that festering interconnection problems require immediate attention. *See also, Petition of Sustainable Conservation for Modification of D.07-07-027*, filed June 29, 2011.

applicable Commission policies, orders, and decisions, and (ii) in conformance with applicable Federal law. AgPower's pricing proposal is also designed to be easy for stakeholders to understand and reasonably simple for the Commission to administer.

Additionally, AgPower responds to certain Opening Comments filed by parties, and draft tariffs and forms of agreement proposed by Pacific Gas and Electric Company ("PG&E"), Southern California Edison Company ("SCE"), and San Diego Gas & Electric Company (SDG&E"), referred to collectively as the "Utilities".

II. <u>AGPOWER PROPOSES A PRICING METHODOLOGY BASED ON AVOIDED</u> COSTS.

AgPower's proposed pricing methodology starts with a generic "brown power" avoided cost and adds to it additional costs avoided by the Utilities specific to the renewable power that would be provided by biogas or other eligible renewables selling power to the Utilities under the feed-in-tariffs and related forms of contract that are the subject of this proceeding ("FiTs"). An alternative is also presented that is based on the actual levelized cost of renewable power rather than the MPR. Many (but not all) of proposed additional avoided cost "adders" will be common across all renewable technology types. This approach is conceptually consistent with the proposals presented in Opening Comments of Fuel Cell Energy, CALSEIA, and CEERT filed in this proceeding on July 21, 2011.

A. General Avoided Cost for Energy

There are a number of "avoided costs" for non-renewable power used for different purposes at the Commission. These include the market price referent ("MPR") (long-run avoided cost based on a CGCC), avoided costs for payments to Qualifying Facilities ("QFs") (short-run based on a negotiated "market value" for capacity plus market energy); avoided costs for evaluating the cost-effectiveness of energy-efficiency and other public purpose programs. Of these, the MPR best reflects the long-run avoided costs that should be included as part of a FiT price.

Current (2009) MPR prices range from 8.448¢/kWh (10-year contract beginning in 2010) to 14.061¢/kWh (20-year contract beginning in 2021). The MPR will likely be updated later this year. In addition to updating the raw gas price forecast and more current environmental compliance costs, that update should include the hedging value that takes into account the

uncertainty of the actual magnitude of the largely technologically unproven shale gas reserves³ as well as the potential increase in demand anticipated as gas-fired power plants replace coal-fired power plants that cannot economically comply with new environmental regulations and the overall effects of with a recovered economy.

B. Renewable Content Value ("RCV")

The resources that will provide power to the Utilities under the FiTs discussed in these Opening Comments can be used by the Utilities for complying with the state's Renewable Portfolio Standard ("RPS") requirements. This value, dubbed here the Renewable Content Value ("RCV"), must be included in the FiT so as to fully compensate the generator. For a FiT, a floor value for the RCA should be the long-term price of a fully bundled Renewable Energy Credit ("REC"), as the power and the renewable attributes would be delivered simultaneously into the California Independent System Operator's ("CAISOs") grid.

Given that the "Bundled" REC product is the most tightly constrained of those available for RPS compliance, and the fact that the load serving entities ("LSEs") in California will have to increasingly rely upon them for RPS compliance as the more flexible "Tradable" RECs are phased out, it is reasonable to place the RCV at the higher estimates for Bundled REC values. To that end, AgPower recommends using the high value for RECS presented in Attachment A to CalSEIA's Opening Comments in this proceeding, \$50/MWh (5¢/kWh).

C. Estimated Cost of Renewables as an Alternative Core Avoided Cost

The FiT rate should reflect the cost to the Utilities of actually purchasing/generating new renewable power. The MPR plus RCV is supposed to approximate this. However, it can also be more directly calculated by estimating the cost of renewables that the Utilities would have otherwise purchased. This can be approximated by taking up-to-date estimates from reliable sources for the levelized cost of producing renewable power for each of the major technologies

_

³ For example, the US Geological Survey ("USGS") very recently released a new estimate for the Marcellus shale potential that reduces the technically recoverable reserve from 410 Trillion cubic feet ("TCF") to 80 TCF. The EIA's 2011 Annual Energy Outlook ("AEO") onshore Lower 48 States natural gas shale technically recoverable resource estimate is 862 TCF, so this USGS update represents a 38% decrease in the total unconventional onshore gas reserves from the 2011 AEO. Coleman, James L., et al, "Assessment of Undiscovered Oil and Gas Resources of the Devonian Marcellus Shale of the Appalachian Basin Province, 2011." ESGS Fact Sheet 2011-3092. August, 2011. http://pubs.usgs.gov/fs/2011/3092/

and using those costs to create a weighted average that reflects a reasonable bundle of renewable technologies.

This result could be described as a renewable price referent ("RPR") for distributed renewable projects. This RPR could serve as a core avoided cost (to which additional appropriate adders are applied) instead of starting with the MPR, which is derived from a natural gas combined cycle, since it would more directly represent the utility's "avoided renewable energy cost."

AgPower derived such a RPR using recent (e.g., no earlier than 2009) estimates of the levelized cost of power for wind, solar thermal, solar photovoltaic, direct-fired biomass, small hydro, and biogas resources. (A list of these sources is included as an appendix to this filing.) These costs were weighted assuming a resource mix equaling the new in-state renewables added in the 33% RPS Reference Case from the Commission's 2009 "33% Renewables Portfolio Standard Implementation Analysis Preliminary Results" report and supporting 33% RPS Calculator.⁴

The RPR resulting from that calculation is consistent with the sum MPR plus RCV: for a project coming on line in 2012, the MPR and RCV sums on the order of 14-15¢/kWh, depending upon the contract length. The RPR, as calculated above, equals 14.4¢/kWh.

D. Adders

In their Opening Comments, Fuel Cell Energy, CalSEIA and CEERT all listed factors that should be taking into account via adders when formulating the FiT rate. AgPower generally concurs with this approach, and proposes grouping these adders into two broad categories: power related, such as avoided transmission investment; and environmental, such as reduced water use/air emissions. Many of these adders will be the same across all renewable technologies that may be afforded the FiT; others may differ, as specific technologies can provide attributes with differing avoided costs.

1. Power-Related Adders

The following are power-related avoided cost adders that AgPower recommends being included in the FiT price. This list is not exhaustive; other parties may proffer other adders.

٠

⁴ See, http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/33implementation.htm

Simply because AgPower does not include them here should not necessarily be interpreted as opposition to those adders.

E. Avoided Transmission Investment

The primary alternative to small, modular renewables such as would participate in the FiT program is large, "utility-scale" projects. The Commission has spent years on siting cases to allow the Utilities to invest billions on transmission lines whose primary justification was connecting remote utility-scale renewables into the California grid.⁵ FiT-scale projects require no such investment. As such, an adder for avoided transmission is clearly justified.

AgPower calculated an avoided transmission cost based on the dollar per kilowatt-year values used in the cost-effectiveness evaluation of the 2012-2014 Utility Demand Response Programs, Pilots and Budgets (A.11-03-001, *et al*). The deferred transmission values are then averaged across all three years for each Utility. To adapt the dollar per kilowatt value to an energy rate appropriate for a baseload biogas plant, an "effective load carrying capacity" of 95% was applied (to account for the generator's ability to contribute to meeting the utility's peak load) and an annual load factor of 85% is assumed.⁶ The resulting average avoided transmission costs are shown in the table below. The cent-per-kilowatt-hour values would differ with technology, depending upon their contribution at peak times and load factor.

IOU	\$/kw-yr	e/kwh
PG&E	\$19.97	0.25
SCE	\$24.33	0.30
SDG&E	\$21.93	0.27

F. Avoided Distribution Investment

The small renewable FiT projects will likely interconnect to the grid at primary- or secondary-voltages and thus be much nearer to load centers than the utility-scale renewables. As such, some deferred distribution investment should also be accounted for in the avoided costs underlying the FiT price.

⁵ See, e.g., D.08-12-058 (Sunrise Powerlink) and D.09-12-011 (Tehachapi Renewable Transmission Project, Segments 4 through 11).

⁶AgPower assumptions for typical biogas generators.

AgPower calculated an avoided distribution cost in a similar manner as avoided transmission cost: begin with the dollar per kilowatt-year values used in the cost-effectiveness evaluation of the 2012-2014 Utility Demand Response Programs, Pilots, and Budgets (A.11-03-001 *et al*). To adapt the dollar per kilowatt value to an energy rate appropriate for a baseload biogas plant an effective load carrying capacity of 95% was applied (to account for the generator's ability to contribute to meeting the utility's peak load) and an annual load factor of 85%. The resulting average avoided distribution costs are shown in the table below. The cent-per-kilowatt-hour values would differ with technology, depending upon their contribution at peak times and load factor.

IOU	\$/kw-yr	c/kwh
PG&E	\$58.18	0.73
SCE	\$31.32	0.39
SDG&E	\$54.35	0.68

G. <u>Line Losses (Beyond that Included in the MPR)</u>

The 2009 MPR calculation includes approximately 2% for losses, while average transmission and distribution ("T&D") losses are on the order of 7.8%.⁸ This implies an additional 5.8% for losses should be applied to the energy portion of the FiT avoided cost.

H. Resource Adequacy Value

Some FiT resources, such as biogas, can provide firm, reliable power when a utility requires it, and hence help the utility meet its Resource Adequacy ("RA") requirement. The megawatt amount that a generator can count toward meeting RA requirements is its "net qualifying capacity" or "NQC." NQCs are often specified per month, so as to reflect resources' differing outputs throughout the year.

To arrive at a value for the RA capacity a FiT resource is providing, the NQC of the resource can be multiplied by the price for capacity established by the CAISO in Interim Capacity Procurement Mechanism ("ICPM") proceedings. The ICPM is the capacity price paid by the CAISO to procure capacity when this becomes necessary due to failure by an LSE to meet

⁷AgPower assumptions for typical biogas generators.

⁸ Self-Generation Incentive Program (SGIP) Staff Proposal, September 2010 (R.10-05-004), page 58. Also noted by CALSEIA's Opening Comments, Attachment A, page 20.

its RA obligation or when system conditions necessitate procurement of additional capacity. It is currently set at \$41/kW-yr.

Thus, to arrive at a cents-per-kWh RA value to be included in the FIT, AgPower recommends the following:

- 1. Take the average summer NQC (June through September) of the resource.
- 2. Multiply that by the ICPM price.
- 3. Divide that dollar amount by the annual generation of the resource.

Therefore, for a 500 kW biogas plant with a summer NQC that equals 95% of its rated capacity and an average capacity factor of 85% the price would be: 500 kW x 95% x \$41/kW-yr/ (500 kW x 8760 hours/yr x85%) = 0.52 ¢/kWh.

1. Environmental/Heath-Related Adders

Both Fuel Cell Energy and CALSEIA reported that in addition to the avoided costs directly experienced by the Utilities (and their ratepayers) described above there are environmental and health costs that can avoided by generation from FiT-renewables. These include:

- Avoided water use beyond that assumed in the MPR's variable operation and maintenance ("O&M") costs.
- Value of avoided criteria pollutant emissions beyond that assumed in the MPR model.
- Value of avoided CO₂ emissions beyond that assumed in the MPR model.
- Value of health benefits associated with other avoided emissions.

It should come as no surprise that the estimated values of these factors can vary widely. For example, CALSEIA's Opening Comments, Attachment A shows values that can exceed 2ϕ /kWh when health-related externalities are included. However, simply because it is difficult to monetize these benefits does not mean they should be ignored. To do so would effectively set their values to zero. To the degree that the Commission finds that there are environmental benefits to FiT renewable projects, it should include some compensation to the providers of those benefits through the FiT.

⁹ Pages 33-34.

Some technologies may provide additional benefits through avoided environmental costs that are unique to the technology and thus not appropriate to include in the general cost above. For biogas in particular, this includes:

I. Air Emissions Benefits Associated with Better Manure/Waste Management

A primary feedstock for biogas in California is manure from dairies. Many of the state's dairies are located in either the Central Valley or the Inland Empire (e.g., Corona), which are Clean Air Act non-attainment areas. Using on-site digesters for manure management results in net reductions in VOCs that would have otherwise been emitted from the dairies' lagoons, storage ponds and settling basins in these non-attainment areas.

The San Joaquin Valley Air Pollution Control District places the emissions from such sources at 1.3 pounds VOC per head per year.¹⁰ Assuming that the biodigester can eliminate 46%¹¹ of these emissions, with typical cow-per-MW and VOC Emission Reduction Credit ("ERC") values, the resulting benefit can be monetized to 0.4¢/kWh.¹²

Although not quantified here, dairy-based biogas generation can likely result in reductions in other criteria pollutants, too. For example, a recent California Energy Commission Public Interest Energy Program Report suggested that the use of anaerobic biodigesters can result in net reductions in ammonia and PM₁₀ from dairies.¹³

J. Additional Factors

<u>Escalation</u>. Rather than a flat levelized price to be paid for the length of the contract, AgPower supports an annual escalation factor, on the order of inflation. This escalation factor could be explicitly built into the FiT tariff or tied to a published index.

<u>Time-of-Delivery Multipliers</u>. As with the current method, time-of-delivery ("TOD") multipliers should be used to reflect the time value of power delivery. The TOD multipliers are applicable only to the MPR element of the FIT price.

AGPOWER GROUP, LLC

¹⁰ San Joaquin Valley Air Pollution Control District, *Air Pollution Control Officer's Revision of the Dairy VOC Emissions Factor*, January 2010, page 23.

¹¹ San Joaquin Valley Air Pollution Control District, BACT Cost Effectiveness for Digester, May 17, 2004.

¹² This further assumes 4,250 cows per MW (AgPower's figure) and \$25,000 per ton-years VOC ERC value.

¹³ See, CH2M Hill, Commerce Energy Biogas/PV Mini-Grid Renewable Resources Program, *Making Renewables Part of an Affordable and Diverse Electric System in California*, Contract No. 500-00-036, Task 3.1.6.C—Assessment of Ammonia - PM10 for Anaerobic Digesters, February 2006.

K. Numeric Sample Calculation

The formula and example calculation below illustrate AgPower's recommended FiT calculation methodology. Note that the energy value will vary per the structure of the MPR (*i.e.*, TOD factors) while the RA adder and the avoided transmission and distribution components will vary among the three Utilities and with the operating characteristics of the generator.

AgPower's recommended FiT pricing formula is:

$$FIT_{hour x} = MPR \times (TOD \text{ factor }_{hour x}) \times (1 + losses) + RCV + Avoided T&D + RA value + quantifiable environmental benefits$$

While AgPower believes the numbers in the table below are generally accurate, they are presented for illustrative purposes. AgPower expects to make further refinements which it will present at any future Commission workshop on FiT pricing.

Feed-in-Tariff Element, c/kWh	PG&E	SCE	SDG&E
Base MPR ¹	9.21	9.21	9.21
Above-MPR Line Losses ²	5.8%	5.8%	5.8%
MPR grossed up for losses	9.74	9.74	9.74
RCV ³	5.00	5.00	5.00
Avoided Transmission ⁴	0.25	0.30	0.27
Avoided Distribution ⁴	0.73	0.39	0.68
RA Value ⁵	0.52	0.52	0.52
VOC Savings at Dairies ⁶	0.40	0.40	0.40
Other Environmental Benefits ⁷	0.29	-0.06	0.41
TOTAL	16.98	16.35	17.08

Sources

- 1 2009 MPR, 10-year contract beginning in 2012; no TOD factor
- 2 Based on 7.8% total T&D losses, as used in September 2010 Staff Report in SGIP modifications proceeding (R.10-05-004), page 58.
- 3 CALSEIA's Opening Comments, Attachment A, page 9.
- 4 Calculated from data used to evaluate the cost-effectiveness of demand response in A.11-03-001, et al.
- 5 AgPower Estimate for biogas generator
- 6 AgPower Estimate for biogas generator
- 7 CALSEIA's Opening Comments, Attachment A, 32. The value for PG&E is for the San Joaquin Valley. The value for PG&E not in the San Joaquin valley is -0.04¢/kwh

III. <u>AGPOWER'S PROPOSAL IS CONSISTENT WITH THE LANGUAGE AND INTENT OF PUBLIC UTILITIES CODE SECTION 399.20.</u>

The ALJ's Ruling notes "In the most basic terms, the amendments provided for in SB 2 1X can be reduced to the following rudimentary formula: Eight mandatory considerations for calculating the price, as follows:

- 1. Market price determined by the Commission § 399.20(d)(1);
- 2. Long-term market price for fixed price contracts § 399.20(d)(2)(A);
- 3. Long term operating and fuel costs § 399.20(d)(2)(B);
- 4. Value of electricity products, e.g., base load, peaking and as-available § 399.20(d)(2)(C);
- 5. Kilowatt hour price § 399.20(d)(1);
- 6. Ratepayer indifference § 399.20(d)(4);
- 7. 10, 15, and 20 year contract terms § 399.20(d)(1);
- 8. All current and anticipated environmental compliance costs §399.20(d)(1); and two optional inputs, as follows:
 - 1. Time of Delivery (§ 399.20(d)(3)); and
 - 2. Locational Distribution Circuit adder § 399.20(e)." (page 6).

The AgPower pricing proposal complies with the first nine considerations listed above. It is market-based (via the MPR) and determined by the Commission (Consideration (1)). It is based on long-term prices (via the MPR) and offers fixed price contracts (Considerations (2) and (3)). The TOD multipliers inherent in the MPR, along with the RA adder reflect the differing value of electricity products on a per kilowatt-hour basis (Considerations (4), (5) and (9)). As the MPR offers 10, 15, and 20 year contract terms, the AgPower pricing proposal clearly complies with consideration (7). Given the environmental compliance costs build into the MPR, along with the renewable technology-specific benefits included in the adders of AgPower's pricing proposal, Consideration (9) is addressed.

Consideration (6), Ratepayer Indifference, is intimately linked to avoided cost. If a resource is procured, such as through a FiT, at the same cost that the utility would have otherwise procured the same product, then ratepayers are indifferent. This is by definition the avoided cost. The key matter here is what costs are avoided and over what time period. By purchasing power via the FiT, the Utilities avoid more than the simple wholesale commodity cost of power. For example, the power procured via the FiT can, and presumably will, be used to meet the State's RPS requirements. A simple "brown" market power price, such as from the CAISO's day-ahead market or even a futures price clearly will not capture this. Furthermore, the FiT contracts should, and do, reflect long-run avoided cost (see Consideration (3), above). Basing the FiT prices on auctions, short-run avoided cost prices for QFs, or as SCE proposes, CAISO day-ahead prices, clearly do not reflect this required long-run perspective. The bottom line is that as long as the components of the FiT represent genuine avoided costs, which AgPower believes its pricing proposal does, customer indifference will be maintained.

The AgPower pricing proposal does not explicitly include a Locational Distribution Circuit adder (Consideration (10)), however, its structure is sufficiently robust to accommodate one when such an adder can be developed.

IV. <u>AGPOWER'S PROPOSAL IS CONSISTENT WITH ALL APPLICABLE</u> COMMISSION POLICIES, ORDERS, AND DECISIONS.

The ALJ's Ruling lists a number of goals for implementing the new aspects of the FiT program should include (1) market stability, (2) regulatory certainty, (3) increased transparency,(4) complying with related federal law, (5) administrative ease, (6) cost containment, (7) incorporating environmental benefits, (8) reducing transaction costs for sellers, buyers and regulatory agencies and, (9) to the greatest extent possible, harmonizing the Commission's § 399.20 program with other existing programs, such as the Renewable Auction Mechanism ("RAM") established in D.10-12-048, the Commission's Combined Heat and Power program under Assembly Bill (AB) 1613, and the net-metering program under Public Resources Code § 2827." (page 5).

AgPower's pricing proposal meets all of these goals. It offers a stable, structure: fixed price contracts, but with flexibility to change with market conditions via incorporation of the MPR. Beyond the MPR, none of the other considerations are tied to the outcome of other Commission proceedings. This provides both transparency and regulatory certainty. While some elements are technology-specific, such as the RA credit and potential environmental adders, it is still fundamentally a fixed price offering, that minimizes administrative burdens, contains costs and minimizes transaction costs for the FiT owner, the purchasing utility and the overseeing regulatory agency (*i.e.*, the Commission). It explicitly includes credits for environmental benefits provided by renewables participating in the FiT. Last, all of the components of the AgPower pricing proposal are quantifiable costs that the purchasing utility (and in the case of the environmental adders, society) actually would avoid by purchasing renewable power via the FiT.

While the pricing structure offered by AgPower differs from that offered by the RAM or the Combined Heat and Power ("CHP") program, it need not be identical. In fact, it should not be. The FiT is designed for a specific niche market that cannot be reached by the RAM or CHP/QF programs. As such, as long as the Commission creates clear rules as to which types and sizes of projects are to be addressed in which of the three utility programs, common pricing structures are not needed.

V. AGPOWER'S PROPOSAL IS CONSISTENT WITH FEDERAL LAW.

As noted in the Opening Comments of numerous parties, FERC's Order Denying Rehearing provides guidance for establishment of avoided cost prices that are consistent with PURPA. FERC clearly stated that: (a) states may determine what particular capacity is being avoided, (b) states may rely on the cost of the avoided capacity to determine an avoided cost rate, and (c) the avoided cost rate may take into account the cost of electric energy from the generators being avoided, such as generators with certain characteristics. There is nothing in the Order Denying Rehearing suggesting that the Commission may not categorize the "generators being avoided, such as generators with particular characteristics by technology or other criteria. Thus, there is nothing preventing the Commission from setting avoided cost prices that are specific to each resource category as proposed by AgPower.

As discussed above, P.U. Code § 399.20 requires specific features of eligible generation to be addressed, including long-term utility fixed price contract prices, costs associated with new generating facilities, and the value of different electricity products. The price must include current and anticipated environmental compliance costs, and the Commission is authorized to adjust rates to reflect time of delivery and is obligated to ensure ratepayer indifference. Nothing in P.U. Code § 399.20 or AgPower's pricing proposal is inconsistent with federal law or the guidance provided by FERC in its Order Denying Rehearing.

VI. <u>AGPOWER'S RESPONSES TO SPECIFIC POSITIONS AND ARGUMENTS OF</u> PARTIES IN THEIR OPENING COMMENTS.

In their Opening Comments, a number of parties recommended a structure analogous to that proposed by AgPower. Fuel Cell Energy, CALSEIA, CEERT, California Wastewater Climate Change Group ("CWCCG"), and Solar Alliance all support the basic structure of a base price plus specific adders, albeit with some disagreement as to whether or not the MPR is the appropriate price upon which the adders should be applied and the exact nature of the adders. The Clean Coalition and Sun Edison support a FiT price based on the MPR plus an adder to reflect locational benefits.

CALSEIA, CWCCG, Agricultural Energy Consumers Association, Fuel Cell Energy, and Sustainable Conservation all support technology-specific FiT pricing that reflect the unique characteristics and benefits provided by each renewable technology. AgPower agrees with this sentiment and believes that its adder approach provides sufficient flexibility so as to capture the unique benefits that renewables can provide.

In their August 5, 2011 draft tariff proposals, PG&E and SDG&E both recommend continuing use of the MPR price - and that alone- for the FiT. TURN supports this position. ¹⁴ As demonstrated in these reply comments, this is not sufficient because there are clear, quantifiable long-run avoided costs that are not captured in the MPR but should be included in the FiT pricing.

SCE's August 5 P.U. Code § 399.20 implementation proposals is clearly unworkable. First, it is opaque, and would move up and down in a nearly random fashion, depending solely upon the monthly requests for FiT services received by SCE. This alone would make it

-

¹⁴ TURN's Opening Comments, page 2.

impossible to finance a project, as price certainty is an obvious requirement for securing investment. Second, its starting point, historic CAISO day-ahead price, is grossly below its true avoided costs. Furthermore, it's proposed renewable adder, the "Department of Energy (DOE) established price for renewable attributes in the Western United States," has been demonstrated in R.07-05-025 to be inappropriate for valuing RPS-compliance energy in California. The prices reported in this source actually represent incremental amounts utilities charge retail customers for participating in voluntary green programs. This in no way represents the avoided cost to SCE of procuring bundled renewable power compliant with the State's RPS requirements.

VII. THE PROJECT SIZE CAP SHOULD BE 3 MW.

Section 399.20(j)(2) authorizes the Commission to reduce the 3 MW capacity limitation established in section 399.20(b)(1) if it "finds that a reduced capacity limitation is necessary to maintain system reliability within that electrical corporation's service territory." In its Opening Comments, SDG&E requests limiting the program to projects 1.5 MW or smaller. However, in the absence of a showing that the limitation is "necessary to maintain system reliability" within SDG&E's territory, the Commission should not grant SDG&E's request. If the Commission concludes that SDG&E's concerns regarding the impact of intermittent resources on its system justify a limit, that limit should not be applied to base load resources. The Commission should dismiss the Clean Coalition's request that the Commission use its "inherent authority" to expand the size cap to 5 MW. The Clean Coalition offers no justification relating to the purpose of SB 32, but instead cites as its "key rationale" the expansion of fast track interconnection eligibility by PG&E and CAISO. If SB 32 were not a relatively small program this proposal might have merit. Since the program is very limited in scope and capacity, projects should be limited to 3 MW or less.

¹⁵ See, R.07-05-025, Testimony of John P. Dalessi, Mark E. Fulmer, Margaret A. Meal On Behalf Of The Joint Parties On A Fair And Reasonable Methodology To Determine The Power Charge Indifference Adjustment (PCIA) And The Competition Transition Charge (CTC), January 31, 2011, page 27.

¹⁶ Cal. Pub. Ut. Code § 399.20(j)(2).

¹⁷ SDG&E Comments at 12.

¹⁸ Clean Coalition Comments at 8.

¹⁹ Id.

AgPower agrees with Fuel Cell Energy that the Clean Coalition's recommendation appears also to be driven by its prediction that "the SB 32 program will be dominated by projects at or close to 3 MW unless additional pricing options are included to support smaller projects." Id. at 17. It is certainly true that if the Commission adopts the Clean Coalition's proposals on pricing the program may only work for the Clean Coalition's apparent constituency — larger solar PV projects. But as discussed herein, this should not be the program's objective and hopefully will not be the outcome of this proceeding.

VIII. THE COMMISSION SHOULD INSTRUCT THE UTILITIES TO CONTINUE USING STREAMLINED SECTION 399.20 CONTRACTS, WITH ONLY LIMITED MODIFICATIONS REQUIRED TO MAKE THEM CONSISTENT WITH THE REQUIREMENTS OF SB 32.

The proposed tariffs and forms of contract submitted by the Utilities on August 5 should be rejected outright by the Commission. PG&E and SCE propose to use a modified form of the current P.U. Code § 399.20 contract for projects up to 1 MW, and to replace it with a lengthy RAM-based contract for all projects. SDG&E proposes adding security requirements and other terms taken from its standard RPS contract. All of the Utilities' proposed tariffs and forms of contract should all be rejected, because there is no evidence that the existing forms of FiT contracts are not workable for projects sized up to 3 MW. Use of a complex and very lengthy contract used for 20 MW projects would be contrary to the Commission's clearly expressed intent to eliminate tariffs and forms of contract that are a barrier to meeting the requirements of the California RPS program. The Commission should authorize the Utilities to make only limited modifications to tariffs and forms of agreement reflecting the specific changes that SB 32 has made to P.U. Code § 399.20.

As proposed, there are significant differences in language between the SDG&E and SCE and PG&E's forms of contract, which is reason alone to reject them all and order the Utilities to start over. More importantly, and troubling, PG&E's submittal apparently introduces a geographical limit of sales to its service territory, a two-tier payment structure, and other substantive changes that are introduced with no explanation or justification. Parties should not be required to pore through proposed tariffs and forms of contract that are completely inappropriate to sniff out "gotchas" buried in dense text.

IX. CONCLUSION.

AgPower appreciates this opportunity to submit these reply comments to the ALJ's Ruling.

Respectfully submitted,

Donald C. Liddell Douglass & Liddell

2928 2nd Avenue

San Diego, California 92103 Telephone: (619) 993-9096 Facsimile: (619) 296-4662

Email: liddell@energyattorney.com

Counsel for

AGPOWER GROUP, LLC

August 26, 2011

VERIFICATION

I, Donald C. Liddell, am counsel for the AgPower Group, LLC and am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing copy of the Reply Comments Of AgPower Group, LLC to Administrative Law Judge's Ruling Setting Forth Implementation Proposal for SB 32 ad SB 2 1x Amendments to Section 399.20, filed in R.11-05-005, are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

Executed on August 26, 2011, at Woodland Hills, California.

Donald C. Liddell
DOUGLASS & LIDDELL

Othild

Counsel for

AGPOWER GROUP, LLC

Appendix Sources Used to Create Renewable Price Referent

Bloomberg New Energy Finance, "Weathering the Storm: public funding for low-carbon energy in the post financial crisis era," November 2010.

Cheremisinoff, Nicholas, Kathryn George, and Joseph Cohen. 2009 Economic Study of Bioenergy Production From Digesters at California Dairies. California Energy Commission, PIER Program. CEC 500-2009-058

Klein, Joel. 2009. Comparative Costs of California Central Station Electricity Generation Technologies, California Energy Commission, CEC-200-2009-017-SD

Lazard, Levelized Cost of Energy Analysis-Version 3.0, February 2009, http://blog.cleanenergy.org/files/2009/04/lazard2009 levelizedcostofenergy.pdf

Levelized Cost of New Electricity Generating Facilities, EIA, http://www.instituteforenergyresearch.org/wp-content/uploads/2011/02/Levelized-Cost-of-New-Electricity-Generating-Technologie11.pd

EIA, Levelized Cost of New Generation Resources in the Annual Energy Outlook 2011, http://www.eia.gov/oiaf/aeo/electricity_generation.html

Renewable Energy Transmission Initiative Phase 2B, Draft Report, April 2010, http://www.energy.ca.gov/reti/documents/phase2B/RETI Phase 2B Draft.pdf
PacifiCorp Integrated Resource Planning, Table 6.3, March 2011

US Energy Efficiency and Renewable Energy Report, Solar Technologies Market Report, January 2010, http://www1.eere.energy.gov/solar/pdfs/46025.pdf