[Commenter 4 Letterhead]

December 18, 2018

InClime
Illinois Adjustable Block Program
Program Administrator

Dear Sirs and Madams,

[Commenter 4 description]

We are grateful for the work the Illinois Power Agency and InClime are doing to launch the ABP.

In response to your request for comments on the *Draft REC Contract*, please find our comments below. Except as noted otherwise, all references herein are to the Renewable Energy Credit Agreement ("Credit Agreement") or its exhibits and schedules. Capitalized terms are, likewise, those used in the Credit Agreement.

1. **Collateral Requirements.** Credit Agreement §13(b), amending Master REC Agreement Section 1.15.2, defines the Collateral Requirement for each Designated System:

   For systems not yet energized, the requirement is 5% x Proposed Price x Designated System *Expected* Maximum REC Quantity (italics added). This REC quantity is defined elsewhere in §13(b), amending Master Rec Agreement §1.22.7, as the nameplate capacity x the capacity factor x 8760 x 15. This formula does not account for degradation.

   For systems already energized, the requirement is 5% x Proposed Price x Designated System *Contract* Maximum REC Quantity (italics added). This REC quantity is defined elsewhere in §13(b), amending Master Rec Agreement §1.22.6, as the sum of the Delivery Year Expected REC Quantities, which do account for degradation.

   Per §13(e), collateral is be posted within 30 days of the Trade Date, which §1(a) defines as the date the ICC approves a Transaction. The Trade Date may therefore be before the date of Energization.

   The above construction has three problems:

   First, systems not yet Energized as of the Trade Date have a higher collateral requirement than those Energized before the Trade Date. It is not clear why the date of Energization should matter with respect to the amount of collateral required.

   Second, for systems not yet Energized as of the Trade Date, this construction requires Sellers to deposit collateral before the system is Energized. For some projects, this timing difference could be significant. It is also not clear what would happen to the collateral deposits if systems are never Energized. Both the cost of capital and administrative burdens here are potentially significant and yet unnecessary. It is also uncertain why the Buyer should receive collateral before Energization to protect it from non-delivery of something that cannot possibly be

delivered until after Energization.

Third, it is not clear if or how, for systems not yet Energized as of Trade Date, a Seller could get a partial refund of collateral once systems are Energized.

As an alternative, [Commenter 4] proposes that collateral requirements be based solely on the Designated System Contract Maximum REC Quantity and that collateral be due when Sellers invoice Buyers as described in §13(c), Section 2.2.

2. **REC Quantities.** Credit Agreement §6(c) defines the Delivery Year Expected REC Quantity as the nameplate capacity multiplied by the capacity factor, with an annual degradation of 0.5%, rounded down to the nearest whole REC. It also specifies that this be included in Schedule B, which per §1(c) is the basis for payments under the REC contract.

   We have three concerns with this definition:

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First, rounding down the number of RECs annually, as is required by §6(c), will underestimate the number of RECs a reasonable observer would actually expect to be produced over the contract term. See the example below for a hypothetical residential system where the expected SREC quantities are rounded down on a total basis versus annually:

Rounding Case	Total		Annual	
Year	**kWh**	**SRECs**	**kWh**	**SRECs**
1	10,000	10.00	10,000	10.00
2	9,950	9.95	9,950	9.00
3	9,900	9.90	9,900	9.00
4	9,851	9.85	9,851	9.00
5	9,801	9.80	9,801	9.00
6	9,752	9.75	9,752	9.00
7	9,704	9.70	9,704	9.00
8	9,655	9.66	9,655	9.00
9	9,607	9.61	9,607	9.00
10	9,559	9.56	9,559	9.00
11	9,511	9.51	9,511	9.00
12	9,464	9.46	9,464	9.00
13	9,416	9.42	9,416	9.00
14	9,369	9.37	9,369	9.00
15	9,322	9.32	9,322	9.00
Total expected SRECs		144.00		136.00
Value at $72.97 / SREC		$10,508		$9,924
Loss from annual rounding instead of total				$584
Percent				6%

Note: Although he above suggests the existence of partial SRECs (which can't literally be sold) it is mathematically equivalent to taking any production in excess of what is necessary to produce a whole SREC in a given year and allocating it to the subsequent year. In fact, this is exactly what happens with generation attribute tracking systems such as PJM-GATS.

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Second, fixing the degradation rate a 0.5% unfairly benefits system with high expected degradation and unfairly hurts systems with low expected degradation.

The ABP has been proactive in ensuring consumers understand what they are getting from suppliers. To assume that all equipment or service contracts are the same does not seem consistent with this goal.

See the example below for a hypothetical residential system with either low-degradation or high-degradation panels:

Degradation case:	0.25%		1.00%	
Year	**kWh**	**SRECs**	**kWh**	**SRECs**
1	10,000	10	10,000	10
2	9,975	9	9,900	9
3	9,950	9	9,801	9
4	9,925	9	9,703	9
5	9,900	9	9,606	9
6	9,876	9	9,510	9
7	9,851	9	9,415	9
8	9,826	9	9,321	9
9	9,802	9	9,227	9
10	9,777	9	9,135	9
11	9,753	9	9,044	9
12	9,728	9	8,953	8
13	9,704	9	8,864	8
14	9,680	9	8,775	8
15	9,656	9	8,687	8
Total expected SRECs		136		132
Value at $72.97 / SREC		$9,924		$9,632
Loss from using low-degradation panels				$292
Percent				3%

Note: The benefit of low-degradation panels would be higher if SREC estimates were rounded based on the 15-year total, as we suggested on the previous page, instead of annually.

[Commenter 4 address]

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Finally, the current definition makes no distinction between systems where the equipment is warrantied for the entire SREC contract period versus those where it is warranted for only a portion of it. For example, see the analysis below for a hypothetical residential system using either equipment warrantied for 15 year or 12 years.

Warranty Case:	>=15 Years		12 Years	
Year	**kWh**	**SRECs**	**kWh**	**SRECs**
1	10,000	10	10,000	10
2	9,950	9	9,950	9
3	9,900	9	9,900	9
4	9,851	9	9,851	9
5	9,801	9	9,801	9
6	9,752	9	9,752	9
7	9,704	9	9,704	9
8	9,655	9	9,655	9
9	9,607	9	9,607	9
10	9,559	9	9,559	9
11	9,511	9	9,511	9
12	9,464	9	9,464	9
13	9,416	9	4,708	4
14	9,369	9	4,685	4
15	9,322	9	4,661	4
Total expected SRECs		136		121
Value at $72.97 / SREC		$9,924		$8,829
Unfair advantage from using short-warranty equipment				$1,095
Percent				12%

(We reduced the expected production by 50% after the warranty period in the area shaded in red. There may be other reasonable ways of de-rating after the warranty period.)

Once again, the ABP has generally been proactive in ensuring consumers understand what they are getting from suppliers. To assume that all equipment, leases, or service contracts are the same despite their obvious differences does not seem to further this goal.

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To resolve these concerns, [Commenter 4] proposes two definition changes. (Italics below indicate changed portions of definitions.)

First, Delivery Year Expected REC Quantity, which is defined in §6(c), should be defined as:

> "the number of *whole or notional fractional* RECs expected to be Delivered in each Delivery Year based on the applicable Capacity Factor, Contract Nameplate Capacity and *a degradation factor equal to the warrantied degradation rate of the solar panels*.
>
> *For the purposes of the above, the number of RECs expected to be Delivered in a Delivery Year shall be multiplied by 50% for any year in which replacement of failed solar panels or inverter(s) are would not be covered under a warranty in place at the time of Energization.*"

Second, the definition of "Designated System Contract Maximum REC Quantity, which is defined in §13(b), should be modified to make clear than rounding is to happen on a total basis, not annually:

> "with respect to a Designated System, the number of RECs expected to be Delivered under this Agreement as of the date of Energization, which may be amended subsequently thereto, and shall be equal to the sum of the Delivery Year Expected REC Quantity across Delivery Years, *rounded down to the nearest whole REC."*

Once again, thank you for the work you are doing to administer the ABP. Please do not hesitate to contact me with any questions.

Sincerely,

[Commenter 4 representative's contact information]