Carbon Solutions Group Comments on IPA 2016 Draft Electricity Procurement Plan

Carbon Solutions Group is pleased to offer the following comments on the Illinois Power Agency's ("IPA") proposal to procure renewable energy in its 2016 Draft Electricity Procurement Plan. Our comments primarily focus on the opinion that IPA should run a full renewables procurement on behalf of ARES using RERF funds in 2016-17.

We understand that it is not required that IPA delineate planned actions for RERF funds in its Draft Procurement Plan. However, we believe dialogue could be fruitful based on the precedent set by discussion and inclusion of the Supplemental Procurement in the 2015 plan.

We hold this pro-ARES procurement opinion because we believe that the code and the regulations agree on it and that constraints that were applicable in prior years due to customer migration are no longer applicable in the upcoming energy year. Further, it is our understanding that said RECs should be procured in a quantity that is consistent with 1-75(c)(1).

The 2016 Draft Plan alludes to the constraints in using the RERF funds listed in the Supplemental Photovoltaic Procurement Plan (p 3-4). In our comment we will first outline the rationale for an ARES procurement. Next, we will briefly discuss each of the previously mentioned constraints and clarify how we have evolved our understanding that none of the constraints is currently applicable with regard to an ARES procurement in 2016-17. Finally, after the discussion of the constraints we will pose a solution that details the timing, quantities and types of RECs that should be procured under 1-56.

To address the specifics of the 2016 plan and IPA's requests for feedback, our comments are organized into the following sections:

1) Rationale for REC procurement on behalf of ARES
2) Discussion of IPA constraints on use of RERF for ARES procurement
3) Discussion of quantities & types of RECs suggested to be procured

1) Rationale for REC procurement on behalf of ARES

Carbon Solutions Group's rationale for the IPA running a full ARES REC procurement in 2016-17 using RERF funds begins with the administrative code, *Section 455.110 Obligation to Procure Renewable Energy Resources* which states:

> (a) Each RES shall procure cost-effective renewable energy resources in accordance with the requirements of Section 16-115D of the Act.

In (a) the key is that the RES "shall procure cost- effective renewable energy resources".

These renewable energy resources as defined by Section 16-115D as:

"Renewable energy resources" includes energy and its associated renewable energy credit or renewable energy credits from wind, solar thermal energy, photovoltaic cells and panels, biodiesel, anaerobic digestion, crops and untreated and unadulterated organic waste biomass, tree waste, hydropower that does not involve new construction or significant expansion of hydropower dams, and other alternative sources of environmentally preferable energy. For purposes of this Act, landfill gas produced in the State is considered a renewable energy resource. "Renewable energy resources" does not include the incineration or burning of tires, garbage, general household, institutional, and commercial waste, industrial lunchroom or office waste, landscape waste other than tree waste, railroad crossties, utility poles, or construction or demolition debris, other than untreated and unadulterated waste wood.

Further defined is a “renewable energy credit” "Renewable energy credit" means a tradable credit that represents the environmental attributes of a certain amount of energy produced from a renewable energy resource.

So, we would assert that the administrative code requires that each RES *shall procure* renewable energy or RECs as defined by the Act. This is echoed by the regulations which state:

(20 ILCS 3855/1-56)Section C

(c) The Agency shall procure renewable energy resources at least once each year in conjunction with a procurement event for electric utilities required to comply with Section 1-75 of the Act and shall, whenever possible, enter into long-term contracts on an annual basis for a portion of the incremental requirement for the given procurement year.

Next, (d) of the same section of the administrative code (455.110) reads:

“(d) The minimum quantity of renewable energy resources to be procured for each compliance year shall be calculated based on the annual percentages set forth in Section 1-75(c)(1) of the IPA Act.”

The minimum quantity *to be procured* is defined as "the annual percentages set forth in Section 1-75(c)(1) of the IPA Act. This is defined as:

“(c) Renewable portfolio standard.
(1) The procurement plans shall include
cost-effective renewable energy resources. A minimum percentage of each utility's total supply to serve the load of eligible retail customers, as defined in Section 16-111.5(a) of the Public Utilities Act, procured for each of the following years shall be generated from cost-effective renewable energy resources: at least 2% by June 1, 2008; at least 4% by June 1, 2009; at least 5% by June 1, 2010; at least 6% by June 1, 2011; at least 7% by June 1, 2012; at least 8% by June 1, 2013; at least 9% by June 1, 2014; at least 10% by June 1, 2015; and increasing by at least 1.5% each year thereafter to at least 25% by June 1, 2025. To the extent that it is available, at least 75% of the renewable energy resources used to meet these standards shall come from wind generation and, beginning on June 1, 2011, at least the following percentages of the renewable energy

resources used to meet these standards shall come from photovoltaics on the following schedule: 0.5% by June 1, 2012, 1.5% by June 1, 2013; 3% by June 1, 2014; and 6% by June 1, 2015 and thereafter. Of the renewable energy resources procured pursuant to this Section, at least the following percentages shall come from distributed renewable energy generation devices: 0.5% by June 1, 2013, 0.75% by June 1, 2014, and 1% by June 1, 2015 and thereafter. To the extent available, half of the renewable energy resources procured from distributed renewable energy generation shall come from devices of less than 25 kilowatts in nameplate capacity. Renewable energy resources procured from distributed generation devices may also count towards the required percentages for wind and solar photovoltaics. Procurement of renewable energy resources from distributed renewable energy generation devices shall be done on an annual basis through multi-year contracts of no less than 5 years, and shall consist solely of renewable energy credits."

In both (a) and (d) of the code it is the ***procurement*** of renewable energy or RECs that is explicitly stated. In (d) it is clear that the minimum amount to be procured is defined in 1-75 of the IPA act as at least 11.5% by June 1, 2016 (13% by June 1, 2017). This suggests that it is the procurement of renewable energy or RECs that is expected to reach the quantities required by 1-75 (c)(1).

We assert that making the alternative compliance payment in (e) of the code does not alone satisfy (e). Making the compliance payment is a method of satisfying the "obligation to procure." Without actually procuring renewable resources we argue that (e) has not been satisfied.

We understand that it has been determined that the ARES satisfy their obligation under the law solely by purchasing 50% of the requirement in RECs and paying ACP on the other 50%. However, we believe that this does not satisfy the requirements of the State of Illinois with regard to compliance with the law.

In the past the constraints mentioned in the Supplemental Photovoltaic Procurement Plan (specifically the lack of utility procurement with which to run an ARES procurement in parallel) gave IPA pause for good reason and resulted in an unfortunate situation beyond control.

Missing the opportunity to procure renewable resources has resulted in a quantity of RECs not being purchased equal to 50% of the ARES compliance share for energy years 2012, 2013, 2014 and 2015; an amount in excess of 15,000,000 MWh of Renewable Energy Resources in Illinois.

However, as it becomes clear that the aforementioned constraints have been alleviated there is no longer a compelling reason not to bring the State of Illinois into compliance with its renewables mandate, thus avoiding any further gaps between mandated and procured renewables. We hope that the RERF will now be used for that purpose.

We believe that the quantity of RECs which should be procured (whether by ARES directly or the IPA using RERF funds) is that quantity referred to in (d) which is to be "…calculated based on the annual percentages set forth in Section 1-75(c)(1) of the IPA Act." We think it is important to recognize the careful use of the phrase "calculated based on." It would seem that the code is considering that ARES customers are not the "eligible retail customers" described in 1-75(c)(1), but that there must be a calculation performed to determine the quantity to be procured.

2) Discussion of IPA constraints on use of RERF for ARES procurement

In this section we discuss the constraints listed in the Supplemental Photovoltaic Procurement Plan issued 10/28/14 (pages 3-4). In the indented paragraph we provide the discussion of constraints and then below provide CSG's interpretation. Our intent here is to simply engage in dialogue regarding these constraints. Ultimately, we understand that our viewpoint as a market participant may differ considerably from that of a body such as IPA. However, we hope to work together to narrow the gap with the ultimate result being more renewable energy resources consumed in Illinois.

> "The procurement of renewable energy resources using the RERF is subject to a set of unique constraints. First, unlike with the utility renewable resources budgets, the RERF may only be used to procure renewable energy credits. While the term "renewable energy resources" is defined in the Illinois Power Agency Act as RECs or both renewable energy and associated RECs, 7 the Public Utilities Act makes clear that "alternative compliance payments . . . shall be deposited in the Illinois Power Agency Renewable Energy Resources Fund and used to procure renewable energy credits."8

CSG Interpretation: This constraint should only preclude IPA from using RERF monies to enter into renewable energy resource contracts consisting of electricity and RECs. An ARES procurement such as we are suggesting using RERF funds would be REC only. Therefore, this constraint is not applicable in the upcoming energy year when in the context of a REC only procurement of wind, solar and DG.

> "Second, Section 1-56(c) of the IPA Act calls on the IPA to use the RERF to "procure renewable energy resources at least once each year in conjunction with a procurement event for electric utilities required to comply with Section 1-75 of the Act."9 Given the IPA's strategy of advance purchases to hedge load requirements and the unexpectedly high levels of migration to alternative retail electric suppliers, corresponding energy procurement events for electric utilities had not occurred since 2012. 10 This has left the Agency without a procurement event "in conjunction with" which it could procure RECs using the RERF."

CSG Interpretation: Due to the utility procurement on behalf of MidAmerican there will be an "in conjunction with" event. Therefore, we believe that this is not a constraint in the upcoming energy year.

> "Third, Section 1-56(d) of the IPA Act requires that "the price paid to procure renewable energy credits" using the RERF "shall not exceed the winning bid prices paid for like resources procured for electric utilities required to comply with Section 1-75 of this Act."11 The lack of a conjoining procurement event has also left the Agency without a statutorily envisioned price ceiling for "like resources," further constraining procurement using the RERF."

CSG Interpretation: Similarly to the second constraint this will be resolved with the full procurement of RECs on behalf of MidAmerican.

> "Fourth, the IPA Act clearly articulates a preference for longer-term contracts using the RERF, presumably to provide a stable stream of revenue necessary to incent the development of new resources. Section 1-56(c) of the IPA Act calls

> for the Agency to, "whenever possible, enter into long-term contracts on an annual basis for a portion of the incremental requirement for the given procurement year."12 Similarly, Section 1-56(b) of the Act requires that any contracts for resources from distributed generation ("DG") must run a minimum of 5 years.13 But due to unsettled and dynamic load migration between utility and alternative supplier service, the Agency must approach long-term contracting with prudence and care, as the RERF's future balance is subject to the whims of future customer switching.14 "

CSG Interpretation: The fourth constraint is only a hard and fast issue for the procurement of Distributed Generation. We would assert that the phrase "whenever possible" does not have the same meaning as "shall" as is used throughout the law to indicate that a stipulation of the regulations is required by the law. However, even if one were to interpret "whenever possible" to have the same meaning as "shall" then it must be considered that it would only be for **"a portion of the incremental requirement for the given procurement year."** Therefore, the solution is to either resolve that this fourth constraint only unequivocally applies to Distributed Generation, or that it applies only to "a portion of the incremental requirement." In the former case this constraint would not impact a procurement of Wind RECs on behalf of ARES. In the latter we would suggest that a portion might be interpreted to mean a percentage such as 20% so that the amount of long term contracts entered into would meet the requirements of "prudence and care" in an effort to avoid stranded resources due to reverse migration in the future.

Proposed Solutions: Either run a one year wind procurement and a five year DG procurement (along with the Supplemental Procurement of SRECs). Or run a 5-year procurement with a laddering approach similar to that described below in the 2013 procurement plan which was developed to mitigate customer migration risk for all products (wind, solar and DG). From 2013 procurement plan:

> "In order to deal with the risk associated largely with retail customer migration, the Illinois Power Agency recommends that its former hedging strategy for energy products, designed to result in a ladder of products and predicated on a philosophy of being 100% hedged for the first year in the planning horizon, 70% hedged for the second and 35% hedged for the third, be replaced with one suggested by Commission Staff and supported as a general matter by the Commission's Procurement Monitor"
>
> "Fifth, Section 1-56(b) of the IPA Act contains delineated targets for the procurement of RECs from specified types of generation: at least 75% of RECs procured must come from wind generation; at least 6% from solar photovoltaics; and at least 1% from DG. 15 As a result, even assuming other statutory constraints were addressed and the Agency felt confident in its projected future budget, it is unclear whether the IPA could simply conduct a "solar procurement" event at scale in isolation. The Agency looks forward to working with the Illinois General Assembly to address these constraints through a solution that allows for more streamlined access to RERF funds." 16

CSG Interpretation: The fifth constraint was a relevant issue when other constraints made it impossible to purchase wind and DG alongside solar. We fully understand the risks that would have existed in previous years. The solar only procurements run previously would

give a price to buy RECS for solar but would put the IPA at risk of not properly allocating money to purchase RECS from all products (DG, Solar, Wind, other) in the proper proportions. However, now that there will be a concomitant utility procurement of all three products delineated in 1-56(b) it is reasonable to conduct a procurement of each product on behalf of ARES using RERF funds, in concert and at scale. This removes all risk of buying products in the wrong ratio. In fact, Illinois is best able to hit its target goal if a procurement for all products are run at once or in succession.

3) Discussion of quantities & types of RECs suggested to be procured

> "(d) The minimum quantity of renewable energy resources to be procured for each compliance year shall be calculated based on the annual percentages set forth in Section 1-75(c)(1) of the IPA Act."

We propose that IPA run a full ARES procurement using RERF funds which would include a laddering approach to purchase RECs based on the proportions defined in 1-75. This equates to a procurement which endeavors to purchase 13% of the 50% of ARES sales not already covered by REC purchases made by ARES themselves (6.5% of sales by June 1, 2017).

Further, 75% of this quantity would be composed of Wind, 6% of Solar PV and 1% of Distributed Generation. 100% of these values would be purchased for energy year 16-17 with a laddering approach resulting in declining annual percentages over a 5-year period as IPA should see fit in order to mitigate risks of reverse migration. We also propose that the laddering approach might cover less of the forward years than prior procurement plans in order to preserve as much flexibility as possible to deal with reverse migration trends while still showing preference for long term contracts.

Alternatively, we believe that another course for determine the quantity to be purchased might be purchasing wind RECs in proportion implied by the Supplemental Procurement quantity. That is to say that if 75% of RECs must come from wind and 50,000 RECs are purchased over 5 years which fall into the DG category then the wind purchase could be at a 75/1 ratio or 3.75M wind RECs. Again, a laddering scheme could be used to allocate the 3.75M wind RECs over the 5 year duration.

In conclusion, we reiterate our appreciation for the opportunity to submit comments on the IPA's 2016 Plan. We look forward to continued dialogue with regard to the furtherance of renewables objectives in Illinois.

With regards,

Rory Gopaul
Director of Biocommodities
Carbon Solutions Group
rmgopaul@carbonsolutionsgroup.com
312-498-6446