

**COMMENTS OF THE STAFF OF THE ILLINOIS COMMERCE COMMISSION ON THE
ILLINOIS POWER AGENCY'S JULY 11, 2017
DRAFT ZERO EMISSION STANDARD PROCUREMENT PLAN**

July 21, 2017

NAKHIA C. CROSSLEY
JOHN C. FEELEY
MATTHEW L. HARVEY
Office of General Counsel
Illinois Commerce Commission
160 North LaSalle Street, Suite C-800
Chicago, IL 60601
Phone: (312) 793-8824
Fax: (312) 793-1556
nakhia.crossley@illinois.gov
john.feeley@illinois.gov
matthew.harvey@illinois.gov

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INTRODUCTORY REMARKS

On July 11, 2017, pursuant to Section 1-75(d-5)(1)(C) of the Illinois Power Agency Act (“IPA Act”), the Illinois Power Agency (“IPA”) made available to the public a Draft Zero Emission Standard Procurement Plan (“Draft Plan”) and invited interested parties to submit comments on the Draft Plan by July 21, 2017. In response, the Staff of the Illinois Commerce Commission (“Staff”) hereby submits these comments to the IPA’s Draft Plan. The outline of these comments conforms to the outline of the Draft Plan.

1 Introduction

No comments as it pertains to this section.

1.1 Plan Organization

No comments as it pertains to this section.

1.2 Action Plan

No comments as it pertains to this section.

2. Legislative Overview

2.1 Illinois Power Agency Authority

2.2 Renewable Energy Resource Procurement

No comments as it pertains to this section.

2.3 House Resolution 1146, Public Act 99-0906, and the Zero Emission Standard

No comments as it pertains to this section.

2.4 ZEC Procurement Plan Development Timeline

The Draft Plan, when addressing the ZEC Procurement Plan Development Timeline, states that the ICC proceeding approving the Plan will be a “notice and comment proceeding.” The Draft Plan also states that the Commission must act by September 15, 2017, assuming the IPA files the Plan by July 31, 2017. While Staff supports conducting the proceeding as a notice and comment proceeding, without an evidentiary hearing, the IPA Act specifically directs the Commission, in conducting its review of the IPA Plan, to give notice and convene a hearing. See 20 ILCS 3855/1-75(d-5)(1)(C) (“[i]f the Commission determines that the plan will result in the procurement of cost-effective zero emission credits, then the Commission shall, after

notice and hearing, but no later than 45 days after the Agency filed the plan, approve the plan or approve with modification.”) It is clear, therefore, that the IPA Act requires a hearing. Further, under the Commission’s rules all parties must agree to a paper hearing. See 83 Ill. Adm. Code 200.525 (a proceeding may be conducted based on written pleadings and submissions alone, provided that all parties, Staff and the ALJ agree and stipulate to such a procedure), but no such stipulation can be assumed. Accordingly, Staff recommends that the phrase “comment proceeding” be stricken from page 9 of the Draft Plan and replaced with “hearing.” However, Staff has no objection to the IPA Plan stating a preference for a paper hearing process/comment proceeding, recognizing that all parties would have to agree to such a process.

The Draft Plan refers to the last date for Commission Action approving the Plan. (Draft Plan, 9.) A Commission order approving the Plan is required no later than forty-five days after the IPA files the Plan with the Commission. 20 ILCS 3855/1-75(d-5)(1)(C). Staff calculates the last day for the Commission to approve the Plan to be Thursday, September 14, 2017, rather than September 15 as the IPA indicates in the Draft Plan. Accordingly, Staff recommends that “September 15” be stricken and replaced with “September 14” in the sentence which states: “Should the Agency file its Zero Emission Standard Plan with the Commission on July 31, 2017 (as it currently plans to do), this would leave the Commission with an approval deadline of September 15, 2017.”

Proposed Modifications to the Draft Plan

(Draft Plan, 9-10.)

* * *

The Act provides the Commission with 45 days to review the filed Plan and determine if the Plan would result in the cost-effective procurement of ZECs. After that notice and hearing ~~comment proceeding~~, should the Commission determine that the Plan would result in the cost effective procurement of ZECs, “then the Commission shall . . . approve the plan or approve with modification.” The IPA supports a paper hearing process for the filing of comments on the Plan, assuming all parties agree.

Should the Agency file its Zero Emission Standard Plan with the Commission on July 31, 2017 (as it currently plans to do), this would leave the Commission with an approval deadline of September 1415, 2017. At present, the Commission has a Special Open Meeting scheduled for September 11, 2017.

* * *

Finally, with regard to the process for approving the Plan, as indicated above, Staff supports the Commission holding paper hearings to address Staff’s and other parties’ objections to the Plan, if any exist, assuming no party objects to a paper hearing. Given the forty-five day deadline for the Commission to issue a final order (20 ILCS 3855/1-75(d-5)(1)(C)), Staff recommends that the paper hearings be conducted on an expedited basis. If a party objects to paper hearings, then Staff proposes a one-day hearing following the filing of verified reply comments. Consistent with the above, Staff

supports the schedule set forth below and would have no objection to the IPA setting forth a proposed schedule in its cover memo when it files its Plan with the Commission.

Staff Proposed Schedule

IPA Files Plan (<i>Planned</i>)	July 31, 2017
Notice of Schedule Served on Parties	August 1, 2017
Verified Initial Comments	August 11, 2017
Verified Reply Comments	August 16, 2017
Verified Surreply Comments	August 18, 2017
Hearing (<i>Only If a party objects to paper hearings</i>)	August 21, 2017
ALJPO	September 1, 2017
Brief on Exceptions	September 7, 2017
Final Order Approving Plan	September 11, 2017
Last Day for Commission Action	September 14, 2017

3 Plan Development and Procurement Requirements

3.1 Zero Emission Facilities and Zero Emission Credits

No comments as it pertains to this section.

3.2 Requirements of the Plan

No comments as it pertains to this section.

3.3 ZEC Procurement Contracts

No comments as it pertains to this section.

3.4 ZEC Pricing

No comments as it pertains to this section.

3.5 ZEC Procurement Cost Cap

The Draft Plan proposes that ZECs ineligible for payment in a delivery year as a result of the cost caps “will be delivered to the purchasing utility without charge for that particular delivery year, and will constitute ‘unpaid contractual volume’ eligible for payment in a future delivery year when the rate cap does not limit the total amount paid for ZECs for that year.” (Draft Plan, 17.) Staff supports this aspect of the Draft Plan. Staff does not agree, however, as the Draft Plan proposes, that unpaid contract volumes should be paid the price used for the delivery year in which payment is actually made for the ZEC. (Draft Plan, 17, footnote 60.) The Zero Emission Standard imposes specific and explicit affordability constraints on the zero emission credits that are produced each year that are a function of the social cost of carbon reduced by the amount by which the market price index for the applicable delivery year exceeds the baseline market price index. 20 ILCS 3855/1-75(d-5)(1)(B). Thus, the plan establishes

an affordable price for each zero emission credit produced in a particular delivery year. Under the Draft Plan proposal, it is possible that zero emission credits produced in a delivery year could be paid amounts in excess of the affordable price established for the zero emission credit. While, as the Draft Plan notes, paying zero emission credits their affordable price may result in several different prices applying to a given delivery year, these various prices (and the zero emission credit volumes associated with them) will be known, which should minimize the administrative burden associated with managing such payments. Therefore, the Plan should not pay zero emission credits prices that depart from the affordable prices prescribed by law if the only reason for doing so is a slight increase in ease of administration.

In addressing the general issue of unpaid contract volume carryover, the Draft Plan does not address the related issue of unpaid contract volumes that remain on January 1, 2028 when the statutory provisions related to the Zero Emission Standard cease to be in force and effect by operation of law. 20 ILCS 3855/1-75(d-5)(7). Staff recommends that this aspect of the plan be clarified so as to avoid any ambiguity. Because the statutory provisions related to the Zero Emission Standard becomes inoperative on January 1, 2028, the Plan should make clear that no further payments will be made to contract volumes that remain unpaid after December 31, 2027.

Proposed Modifications to the Draft Plan

(Draft Plan, 17.)

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⁶⁰ This raises the question of what price would be paid for “unpaid contractual volume” in a future delivery year: the ZEC price from the original delivery year, or the ZEC price used for the delivery year in which payment is actually made for the ZEC? ~~On this point, the law appears to be unclear. IPA believes that the price paid per ZEC should be uniform across a given delivery year, the subsequent year’s ZEC price should apply to any prior year’s “unpaid contractual volume” (doing otherwise could potentially result in a host of different ZEC prices applying to a given delivery year), but would be interested in further comments on this draft ZES Plan on this topic. As noted above, ZECs will be delivered in the year they are generated. Section 1-75(d-5)(1)(B) establishes the price for each ZEC procured for each delivery year. Thus, regardless of when facilities are compensated for their unpaid contractual volume, ZECs shall be paid the ZEC price from the original delivery year. Additionally, no payments will be made for contract volumes that remain unpaid after December 31, 2027.~~

* * *

3.6 ZEC Procurement Process Overview

No comments as it pertains to this section.

4 ZEC Price, Volumes and Cost Cap Determination

4.1 Social Cost of Carbon

No comments as it pertains to this section.

4.2 Baseline Market Price Index

No comments as it pertains to this section.

4.3 Market Price Index

No comments as it pertains to this section.

4.4 ZEC Price Calculation

In Section 4.4, the Draft Plan describes the proposal for annual calculation of the ZEC price pursuant to the index method specified in the statute. The Draft Plan provides the calculations for the 2017-2018 delivery year, and states that, “The same methodology will be used to calculate the Market Price Index for each future delivery year.” (Draft Plan, 23.) The Draft Plan also states, “As described in Section 6.4 the ZEC Price for future delivery years will be updated May of each future year.” (Draft Plan, 24) Section 6.3 of the Draft Plan states that, “The Agency expects that it would publish the 2017-2018 delivery year ‘payment calculations’ approximately two weeks after the Commission’s approval of the procurement results. For subsequent delivery years, the payment calculation will be published by May 25th of each year.” First, the reference to Section 6.4 in Section 4.4 should be a reference to Section 6.3. More significantly, there should be some role for the ICC and/or Staff in the annual payment calculation process prior to publication by the IPA. For subsequent years, Staff recommends the addition of a step in that process for ICC or Staff review prior to publication. In particular, Staff

recommends the IPA seek Commission preapproval of its ZEC price calculations subject to the consensus of the IPA, Staff, the Procurement Monitor, and the contracting utilities.

Proposed Modifications to the Draft Plan

(Draft Plan, 24.)

* * *

As described in Section 6.4 the ZEC Price for future delivery years will be updated May of each future year. The methodology used for future delivery years will be the same as described in this Section as used for the 2017-2018 delivery year. The IPA seeks pre-approval of its ZEC price calculations subject to the consensus of the IPA, Staff, the Procurement Monitor, and the contracting utilities.

* * *

4.5 ZEC Contractual Volume

No comments as it pertains to this section.

4.6 ZEC Cost Cap

No comments as it pertains to this section.

4.7 ZEC Volume Cap

No comments as it pertains to this section.

5 Bid Evaluation and Selection

5.1 Public Interest Criteria

As noted in the Draft Plan, electric generating resources are dispatched to minimize the total system-wide cost of producing electricity while safely operating the transmission system. (Draft Plan, 31.) Thus, if a zero emission facility located in a state were to close, it could be replaced by generation from other states within a regional transmission system or even from generation that is part of other regional transmission systems. Nevertheless, the Draft Plan proposes that “the replacement generation mix used in the ZEC bid scoring reflects the contribution of the coal and natural gas generation sources **to the state-wide generation mix for the state in which the zero emission facility is located.**” (Draft Plan, 31-32) This assumption is a significant departure from the reality of regional dispatch. The Draft Plan explains that the reason for the state-specific dispatch assumption is that emission and dispatch data are available on a state-by-state basis and not available in a way that reflects regional dispatch. (Draft Plan, 32, footnote 100)

Staff recommends that this element of the Draft Plan be reconsidered. Staff suggests that all attempts be made to acquire generation and emissions data better reflecting the reality of regional dispatch. Staff recommends approaching the RTOs (PJM and MISO) in this regard. Staff recommends modeling avoided unit emissions over the ten-year ZES period.

5.2 Bid Scoring and Selection

The Draft Plan proposes to assign equal weights to each of the four applicable pollutants (carbon dioxide (“CO₂”), sulfur dioxide (“SO₂”), nitrogen oxide (“NO_x”), and particulate matter (“PM”) identified in the statute. (Draft Plan, 33) In particular, the Draft Plan states, “under the proposed bid selection methodology, a baseline of 25 points would be awarded for each of the CO₂, SO₂, NO_x, and PM emission criteria (PM₁₀, and PM_{2.5} each would receive 12.5 points, totaling 25 points overall for PM) for an equal weighting for each criterion in the ZEC bid selection.” Id.

Rather than equal weighting, Staff proposes that CO₂ be given 50% weighting with the remaining 50% divided equally amongst the three other pollutants (SO₂, NO_x, and PM).

The Draft Plan supports its proposal to weight the pollutants equally with the statement that, “The statute does not provide express guidance on the weighting attributed to each pollutant in determining an overall facility score.” (Draft Plan, 33) While the statute does not provide express guidance, it is not silent on this question. As will be shown below, the legislative findings made in enacting P.A. 99-0906 suggest that the General Assembly considers CO₂ to warrant a greater weighting for purposes of the Act. It likely is also true, as the Plan acknowledges, that “the actual adverse impacts of these pollutants to citizens of Illinois” may not be equal for each pollutant. (Draft Plan, 33)

In its legislative findings and declarations, Section (Section 1.5), Public Act 99-0906 places emphasis on reducing carbon emissions. For example, Section 1.5(4) states that, “Preserving existing zero emission energy generation and promoting new zero emission energy generation is vital to placing the State on a glide path to achieving its environmental goals.” When discussions on the idea for zero emissions credits were first initiated, significant consideration was given to how Illinois would achieve compliance with the CO₂ reduction requirements of the federal Clean Power Plan and establishing a “glide path” to compliance was a key component for Clean Power Plan compliance because of its phase-in provisions. While compliance with the Clean Power Plan may now be moot (at least for the short-to-medium run), it was a driver in the early stages of the ZEC evolution. Despite changes in federal CO₂ requirements, the Zero Emission Standard, as the General Assembly finds, will still place Illinois on a CO₂ reduction glide path and retention of that paragraph in the final version of the statute suggests an emphasis on carbon over SO₂, NO_x, and PM.

The findings and declarations found in Section 1.5 of Public Act 99-0906 establishes that “the Social Cost of Carbon is an appropriate valuation of the environmental benefits provided by zero emission facilities.” It is notable that, while the statute specifies that the Social Cost of Carbon is the appropriate valuation of the environmental benefits provided by zero emission facilities, the agency that developed the Social Cost of Carbon was focused on the costs of carbon, not on the costs of SO₂, NO_x, or PM. In effect, the social cost of SO₂, NO_x, and PM are not captured in the

Social Cost of Carbon. So, if the Social Cost of Carbon is used as a proxy for the valuation of all environmental benefits provided by zero emission facilities, which the statute appears to implicitly do, the implicit valuation of SO₂, NO_x, and PM costs should be considered modest relative to CO₂ costs for purposes of the Act. While Staff does not recommend placing zero weight on SO₂, NO_x, and PM avoidance, Staff believes this is another example where the statute places greater emphasis on carbon dioxide versus SO₂, NO_x, and PM.

Other portions of the Federal Jobs Act also support increased weighting for CO₂. In particular, Section C-5 of the Zero Emission Standard section requires the ICC to provide several analyses, one of which (subsection iii.aa) is to quantify “the value of avoided greenhouse gas emissions”. That paragraph of the statute does not specifically refer to SO₂, NO_x, and PM emissions, rather it deals specifically with CO₂.

Giving greater weight to CO₂ in the ZEC bid evaluation and selection process is also consistent with the State’s position in federal forums on the role for state public policy initiatives vis a vis the evolution of wholesale power market design. Wholesale power markets already have taken strides to internalize the impacts of traditional environmental control legislation like that historically used for SO₂, NO_x, and PM. Attributes, like the avoided CO₂ attribute of zero emissions generation facilities, are not currently accounted for in the federally-overseen energy and capacity selection processes as represented in wholesale power markets. Therefore, the Zero Emission Standard is currently the exclusive vehicle addressing Illinois CO₂ concerns related to

power generation. This is not the case with SO₂, NO_x, or PM, the costs of which, as noted, are considered in other statutes.

For all these reasons, Staff proposes that CO₂ be given 50% weighting with the remaining 50% divided equally amongst the three other pollutants (SO₂, NO_x, and PM).

In evaluating bids, the Plan proposes to “determin[e] the degree to which emissions from a facility’s replacement generation would indeed have adverse impacts on Illinois citizens.” (Draft Plan, 34.) The emissions as specified in FEJA are CO₂, SO₂, NO_x and particulates. 20 ILCS 3855/1-75(d-5)(1)(C) To calculate that adverse impact, the IPA must first estimate how much of each pollutant that an alternative electricity supplier would emit absent the ZE facility. The Plan proposes to base its emission calculations on the 2014 generation mix by state (see above for an explanation of why relying upon only each state’s specific generation mix is problematic). Staff notes that this data for 2015 is available at the EIA, which is the same source cited in the Draft Plan. A more concerning problem, however, is that even the 2015 data may be out of date. It appears that the generation mix is rapidly changing. The ‘but for’ analysis should account for this fact, since the changes across regions and states are unlikely to be uniform. As a result, the evaluation criteria may not be accurate. Staff urges the IPA to, at the least, gather data that are more recent. And the IPA might even account for recent trends by projecting the generation mix over the 10-year span of the ZEC program.

The following table shows the large changes in the share of coal generation in just one year:

State	2014 Coal (as % of Coal & NG)	2015 Coal (as % of Coal & NG)
AR	78%	59%
IA	96%	93%
IL	94%	87%
LA	26%	19%
MD	88%	75%
MI	81%	73%
MN	88%	77%
MO	95%	93%
MS	25%	12%
NJ	7%	5%
OH	79%	72%
PA	60%	52%
VA	50%	34%
WI	82%	74%

Proposed Modifications to the Draft Plan

(Draft Plan, 33.)

* * *

The statute does not provide express guidance on the weighting attributed to each pollutant in determining an overall facility score. Nevertheless, the FEJA statute places emphasis on reducing carbon emissions. For example, Paragraph 4 in the FEJA findings and declarations establishes states that, “Preserving existing zero emission energy generation and promoting new zero emission energy generation is vital to placing the State on a glide path to achieving its environmental goals.” When discussions on the idea for zero emissions credits were first initiated, significant consideration was given to how Illinois would achieve compliance with the CO2 reduction requirements of the federal Clean Power Plan and establishing a “glide path” to compliance was a key component for Clean Power Plan compliance because of its phase-in provisions. While compliance with the Clean Power Plan may now be moot (at least for the short-to-medium run), it was a driver in the early stages of the ZEC evolution. Despite changes in federal CO2 requirements, the Zero Emission Standard, as the General Assembly finds, will still place Illinois on a CO2 reduction glide path and retention of that paragraph in the final version of the statute suggests an emphasis on carbon over SO2, NOx, and PM.

The last paragraph of the FEJA findings and declarations establishes that “the Social Cost of Carbon is an appropriate valuation of the environmental benefits provided by zero emission facilities.” It is notable that, while the statute specifies that the Social Cost of Carbon is the appropriate valuation of the environmental benefits provided by zero emission facilities, the agency that developed the Social Cost of Carbon was focused on the costs of carbon, not on the costs of SO2, NOx, or PM. In effect, the social cost of SO2, NOx, and PM are not captured in the

Social Cost of Carbon. So, if the Social Cost of Carbon is used as a proxy for the valuation of all environmental benefits provided by zero emission facilities, which the statute appears to implicitly do, the implicit valuation of SO₂, NO_x, and PM costs are negligible relative to CO₂ costs. This is another example where the statute places greater emphasis on carbon dioxide versus SO₂, NO_x, and PM.

Other portions of the Federal Jobs Act also support increased weighting for CO₂. In particular, Section C-5 of the Zero Emission Standard section requires the ICC to provide several analyses, one of which (subsection iii.aa) is to quantify “the value of avoided greenhouse gas emissions”. That paragraph of the statute does not specifically refer to SO₂, NO_x, and PM emissions, rather it focuses on CO₂.

Giving greater weight to CO₂ in the ZEC bid evaluation and selection process would also be consistent with the State’s position in federal forums on the role for state public policy initiatives vis a vis the evolution of wholesale power market design. Wholesale power markets already have taken strides to internalize the impacts of traditional environmental control legislation like that historically used for SO₂, NO_x, and PM. Attributes, like the avoided CO₂ attribute of zero emissions generation facilities, are not currently accounted for in the federally-overseen energy and capacity selection processes as represented in wholesale power markets. Therefore, unlike with SO₂, NO_x, or PM, the Zero Emission Standard is currently the exclusive vehicle addressing Illinois CO₂ concerns related to power generation.

For all these reasons, CO2 will be given 50% weighting with the remaining 50% divided equally amongst the three other pollutants (SO2, NOx, and PM).

~~While the actual adverse impacts of these pollutants to citizens of Illinois may not be evenly distributed, the IPA believes that any attempts to prioritize one pollutant above another could introduce problematic discretion into the bid scoring process and may be inconsistent with language in the Act that does not differentiate among the importance of the public interest criteria.⁴⁰⁵ Thus, under the proposed bid selection methodology, a baseline of 50 points would be awarded to CO2 and 25 a baseline of 16.66 points would be awarded for each of the CO2, SO2, NOx, and PM emission criteria (PM₁₀, and PM_{2.5} each would receive 12.5 points, totaling 25 points overall for PM) for an equal weighting for each criterion in the ZEC bid selection. Notably, equal treatment would not necessarily result in each pollutant having equal influence in bid scoring, as this approach still captures the intensity of differences offered between competing bids for a given pollutant. The IPA would be interested in receiving feedback in the draft Plan comment process on whether this is indeed the optimal weighting approach.~~

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(Draft Plan, 34.)

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To accomplish this, the emission factor for each non-CO2 emission criterion is first determined by taking the weighted average emissions associated with the expected replacement generation mix for that facility's state. These weights are determined using the most recent data available

to the EIA, the 2014⁵ state-level generation in MWh from the EIA to calculate the relative ratios of coal and natural gas to the combined total generation from the two fuels. Table 1 shows the expected replacement generation mix for each state with a zero emission facility in PJM or MISO. Alternatively, the IPA could take into account recent trends that have seen substantial numbers of coal plants retire. Thus, the IPA could project the mix of coal and gas plants that are likely to occur over the ten-year span of the ZES program. The IPA seeks comment on how to best estimate the generation mix over the entire span of the ZES program.

* * *

(Draft Plan, 44.)

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¹³¹ Maximum points is 2550 points for CO₂, 16.66 points each for NO_x, SO₂, and 42.58.33 points each for PM_{2.5} and PM₁₀. ...

* * *

5.2.1 CO₂ Scoring

No comments as it pertains to this section.

5.2.2 NO_x, SO₂, PM_{2.5}, and PM₁₀ Scoring

No comments as it pertains to this section.

5.3 Incremental Environmental Benefits Preserved

No comments as it pertains to this section.

5.3.1 Risk-Based Multiplier

No comments as it pertains to this section.

5.3.2 Economic Stress Multiplier

No comments as it pertains to this section.

5.4 Scoring Calculation

The Draft Plan proposes two metrics in the emission impact scoring weighting, these being the facility size metric, and the facility 10-year average capacity factor. Neither metric is fully supported or explained. All else equal, the facility size metric, which equals the ratio of a nuclear facility's summer-rated capacity in megawatts relative to the average summer-rated capacity of all nuclear facilities in the facility's regional transmission organization, favors larger plants. The reason for this preference is not explained in the Draft Plan, nor is it self-evident. In particular, this facility size metric could result in the selection of a single nuclear unit that has a smaller environmental impact relative to two smaller nuclear units with comparable cumulative capacity. The facility 10-year average capacity factor, all else equal, favors nuclear units that on average produce at a level relatively closer their maximum capacity. The reason for this preference is also not explained in the Draft Plan, nor is it self-evident. In particular, the facility 10-year average capacity factor could result in the procurement of zero emission credits from a facility that has a smaller environmental impact than another facility producing the same amount of zero emission credits only because the latter facility has a lower capacity factor. The rationale and reasoning behind these two assumptions should be further explained and supported or, in the alternative, these factors should not be included in weighting for the emission impact score.

Proposed Modifications to the Draft Plan

(Draft Plan, 43-44.)

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The emission factors described in the previous sections are used to develop the scoring weighting, which then provides the basis for determining the emission criteria multipliers that are applied to obtain the score for each of the public interest criteria emissions. Emission metrics for a zero emission facility that participates in the procurement are developed based on a calculation that provides a value which reflects a measure of the amount of each of these pollutants that would be prevented from being emitted by the continued operation of the zero emission facility. An emission scoring metric for each emission criterion, based on the expected replacement generation mix, is calculated by taking the ratio of the emissions factor in a given state to the average emissions factor in the applicable RTO.¹²⁸ ~~A facility size metric is included to account for the size of the zero emission facility relative to the average size of a nuclear facility sited in that RTO.^[2] Facility generation is accounted for by multiplying the scoring metrics and weights by the **Facility 10-year Average Capacity Factor**.~~¹³⁰

~~The **Facility Size Metric** = (the facility summer-rated capacity in megawatts from the form in Appendix F)/(the average summer-rated capacity for nuclear units in the applicable RTO in megawatts)~~

The **Emission Scoring Metric** (for each emission criterion) = (state pollutant **Emission Factor** for the emission criterion in pounds per megawatt hour)/(MISO or PJM pollutant average **Emission Factor** for the emission criterion in pounds per megawatt hour)

The **Emissions Scoring Weight** = For NO_x, SO₂, PM_{2.5}, and PM₁₀ the percent of time the wind blows from the direction of the replacement

^[2] The summer-rated capacity in megawatts for each PJM and MISO nuclear facility and the calculated average are in Appendix D.

generation sources; and for CO₂ the MISO and PJM-specific ratios for Illinois and non-Illinois facilities.

Score for each emissions criterion = ~~Facility 10-year average Capacity Factor * Facility Size Metric~~ * Emission Scoring Metric * the Emissions Scoring Weight * Maximum points for the emission criteria.

¹³¹

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(Draft Plan, 44.)

* * *

¹³¹ ... ~~In the event that the facility size metric is greater than one, individual emission scores may exceed the maximum score of 25 points.~~

* * *

6 Procurement Process Administration

No comments as it pertains to this section.

6.1 Bidder Qualification

On page 46 of the Draft Plan, the IPA lists eligibility information for each zero emission facility, which in turn is taken from Section 1-75(d-5)(1)(A). Staff notes that the reference to “return on working capital” is an unusual, not to say atypical, financial ratio that may cause some confusion. If the intent is to estimate the profitability of the qualifying generating units, then the IPA would be well advised to define how that return is to be calculated. Staff proposes that such return be calculated as the projected earned return on total investment for each calendar year for each generating unit.

Proposed Modifications to the Draft Plan

(Draft Plan, 46.)

* * *

- o A return on working capital (This return shall be the projected earned return on total investment for each calendar year for each generating unit.);

* * *

6.2 Procurement Process

No comments as it pertains to this section.

6.3 Commission Approval of Procurement Results

The Draft Plan correctly observes that Section 16-111.5(f) provides “that the Procurement Administrator provide to the Commission a confidential report on the recommended winning bids within two business days of the bid date (and concurrently on a confidential basis the Procurement Monitor also provide a separate report on their assessment of the procurement), and the Commission would have two more business days to accept or reject those recommendations.” (Draft Plan, 48) However, the IPA proposes that it “may be appropriate to modify that timeline to take into account the additional time that may be needed by the Commission to be able to produce the ‘public notice’ given the non-price selection criteria to be applied to the ZEC bids described in the following section.” (Draft Plan, 48) Staff agrees with the proposal to alter the timeline for purposes of the ZEC procurement event and Staff recommends that the Commission specify the timeline of events when approving the Draft Plan. As the IPA correctly notes, the public notice requirements following the Commission’s approval of a ZEC procurement event are substantially different from the public notice requirements resulting from prior procurement events. The public notice following a ZEC procurement event must:

- (i) identify how the winning bids satisfy the public interest bid selection criteria described in the law (i.e., minimizing carbon dioxide emissions that result from electricity consumed in Illinois and minimizing sulfur dioxide, nitrogen oxide, and particulate matter emissions that adversely affect the citizens of this State);

(ii) specifically address how the selection of winning bids takes into account the incremental environmental benefits resulting from the procurement, including any existing environmental benefits that are preserved by the procurements held under this Act and that would have ceased to exist if the procurements had not been held, including the preservation of zero emission facilities;

(iii) quantify the environmental benefit of preserving the resources identified in item (ii), including the following:

(aa) the value of avoided greenhouse gas emissions measured as the product of the zero emission facilities' output over the contract term multiplied by the U.S. Environmental Protection Agency eGrid subregion carbon dioxide emission rate and the U.S. Interagency Working Group on Social Cost of Carbon's price in the August 2016 Technical Update using a 3% discount rate, adjusted for inflation for each delivery year; and

(bb) the costs of replacement with other zero carbon dioxide resources, including wind and photovoltaic, based upon the simple average of the following:^[1]

^[1] 20 ILCS 3855/1-75(c)(1)(G)(i), (ii).

(I) the price, or if there is more than one price, the average of the prices, paid for renewable energy credits from new utility-scale wind projects in the procurement events specified in the “initial forward procurements” for new wind generation; and

(II) the price, or if there is more than one price, the average of the prices, paid for renewable energy credits from new utility-scale solar projects and brownfield site photovoltaic projects in the procurement events specified in this Act and, after January 1, 2015, renewable energy credits from photovoltaic distributed generation projects in procurement events held under the “initial forward procurements” for new solar and the IPA’s DG procurements proposed in its 2015, 2016, and 2017 annual procurement plans.

While Staff agrees with the IPA that the Commission may need more than two business days after the receipt of the reports from the procurement administrator and the procurement monitor to approve or reject the recommendations of the procurement administrator and to issue the public notice required by Section 1-75(d)(5) of the IPA Act, the procurement administrator’s report must include the “procurement administrator’s recommendation for the acceptance and rejection of bids based on the

price benchmark criteria and other factors observed in the process.” (220 ILCS 5/16-111.5(f). In other words, it appears likely that the procurement administrator will evaluate the bids in accordance with the Commission-approved ZES procurement plan and that the procurement administrator’s report to the Commission will describe the basis for the procurement administrator recommending the winning bids pursuant to the criteria listed in Section 1-75(d)(5)(i)-(iii) of the IPA Act. Moreover, much like the current confidential reports from the procurement administrator to the Commission contain a section with the information for the Commission’s public notice to be released at the time of approving the procurement results, the confidential report of the procurement administrator following a ZEC procurement event should contain a section with the information for the Commission’s public notice to be released at the time of approving the procurement results. As a result, Staff recommends that the Commission, in any Order approving the Draft Plan, specify that the reports from the procurement administrator and from the procurement monitor be provided to the Commission within five business days after opening the sealed bids. Staff further recommends that the Order specify that the Commission accept or reject the recommendations of the procurement administrator within five business days after receipt of the reports.

Proposed Modifications to the Draft Plan

(Draft Plan, 48.)

* * *

Under Section 16-111.5(f), the Agency's procurement process includes the provision that the Procurement Administrator provide to the Commission a confidential report on the recommended winning bids within two business days of the bid date (and concurrently on a confidential basis the Procurement Monitor also provide a separate report on their assessment of the procurement), and the Commission would have two more business days to accept, or reject, those recommendations. However, for the purposes of this procurement, the IPA believes that it may be appropriate to modify that timeline to take into account the additional time that may be needed by the Procurement Administrator to prepare the confidential report following the procurement event and for the Commission to review the confidential report ~~be able to produce the "public notice"~~ given the non-price selection criteria to be applied to the ZEC bids described in the following section.

* * *

(Draft Plan, 49-50.)

* * *

Given the significant amount of information required in the Commission's public notice, the Procurement Administrator will need more time to include the basis for its recommendation in a format that is consistent with the public notice items required by Section 1-75(d-5)(1)(C) of the IPA Act. As a result, the Agency recommends that the Commission's Order approving the ZES Procurement Plan specify that the confidential reports of the Procurement Administrator and the Procurement Monitor must be provided to the Commission within five business days after opening the sealed bids. Similarly, the Commission may need more than the two business days after the receipt of the reports from the Procurement Administrator and the Procurement Monitor that is envisioned in Section 16-111.5(f), and the Agency recommends that the Commission's Order approving the ZES Procurement Plan specify that the Commission must approve or reject the recommended procurement results within five business days of receiving the confidential reports of the Procurement Administrator and the

~~Procurement Monitor determine the schedule for what it will require to develop the public notice and approve the procurement results.~~

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6.4 ZEC Contracts

No comments as it pertains to this section.

6.4.1 Contract Suspension or Termination

No comments as it pertains to this section.

6.4.2 Six Year Review of Actual ZEC Payments

No comments as it pertains to this section.

6.5 Tracking ZECs

No comments as it pertains to this section.

Appendices

Appendix A ZEC Cost Workbook

Appendix B Utility Data Responses

Appendix C Wind Direction and Distance Factors

Appendix D MISO & PJM Nuclear Facility Summer Rated Capacity

Appendix E Bid Evaluation

Appendix F Bidder Eligibility Form

Appendix G Procurement Process Applicability Comparison (Section 16-111.5)

Appendix H Legislative Compliance Index

Conclusion

Staff respectfully requests that the Illinois Power Agency revise its Draft Plan consistent with Staff's Comments herein.

Respectfully submitted,

NAKHIA C. CROSSLEY
JOHN C. FEELEY
MATTHEW L. HARVEY
Office of General Counsel
Illinois Commerce Commission
160 North LaSalle Street, Suite C-800
Chicago, IL 60601
Phone: (312) 793-8824
Fax: (312) 793-1556
nakhia.crossley@illinois.gov
john.feeley@illinois.gov
matthew.harvey@illinois.gov

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*Counsel for the Staff of the
Illinois Commerce Commission*