

CITY OF BATAVIA

Department of Public Works

MEMO TO: Eldon Frydendall – Public Utilities Chair
FROM: Gary Holm
DATE: November 19, 2009
SUBJECT: Committee Consideration – NIMPA Eagle View Wind Project

Over the next several meetings the Committee will be considering whether or not the City should participate in the proposed NIMPA Eagle View wind project. In order to facilitate the discussions, Staff will compile a running list of questions/issues along with corresponding responses. The list will include questions/issues generated by both the Committee and the general public. To the extent possible, questions/issues will be organized by general topic.

QUESTIONS/STAFF RESPONSES FROM 10/26/09 MEETING W/UPDATES

Renewable Energy Credits (RECs). Are renewable energy credits something that Batavia legally needs – now or in the future? Will we get them if we participate in Eagle View? Will we get them if we participate in a PPA?

Under current Illinois law, public power entities, such as Batavia, are exempt from renewable energy standards. Investor owned utilities, such as Exelon or Ameren, are required to have a certain percentage of their generation come from renewable sources.

Currently there are no Federal renewable energy standards. Legislation is being considered by both the House and Senate which would require a certain percentage of renewable energy at some point in the future; however, all versions of the pending legislation have so far exempted utilities which have retail sales of less than 4 MWh annually. All three NIMPA communities combined have annual sales of 1+/- MWh. Therefore, the NIMPA communities would be exempt under the proposed legislation.

Is it possible that we may be required to have green credits at some point in the future? Yes, it is possible; however, the Federal legislation under consideration contemplates timeframes out to 2025. If regulations were to change, and we were no longer exempt, then I believe that the timeframes for our compliance would be even longer than 2025.

As currently proposed, all participants in the Eagle View project would get the associated green credits for their respective share of the project.

Purchase Power Agreements can be setup such that green credits are included or not included. It all depends on the contractual arrangement between the seller and the buyer.

UPDATE – While researching another question, Staff has become aware of additional information and we are uncertain about the status of RECs for the Eagle View project.

Our previous answer may be incorrect. All references that we have found indicate that RECs are associated with renewable energy “on the grid”. It may be that PJM will consider the turbines to be “on the grid” but “behind the meter”; however, Staff will need to perform additional research to verify this.

If the turbines are not “on the grid”, then Batavia and Geneva may not receive credit for the RECs. Again, additional research is needed.

UPDATE – Staff has contacted the Illinois Power Authority (IPA) to inquire whether NIMPA would be able to market “Illinois” RECs from the Eagle View project. According to the IPA, Eagle View will need to have the RECs certified by PJM in order to market them in Illinois. Subsequently, Eagle View will need to be registered as a “behind the meter” generator with PJM.

If the green credits are just an economic benefit and only Rochelle will receive them, I (Betsy) assume that there would be an equitable distribution of the benefit among the NIMPA members. Is this correct?

It was stated during the presentation that all risks and benefits would be shared equally among the participants in accordance with their ownership share.

UPDATE – See above update

Should the city hold onto green credits from the project or market them to other utilities?

At this time we are not required to have renewable energy as part of our generation portfolio. Therefore, if the city elects to participate in the project, we will have the option of keeping or marketing the green credits. By keeping the green credits we are making a commitment to renewable energy. By marketing the credits we could potentially receive revenue which would help offset some of the cost of the project. This is a policy decision that will need to be made by Council.

UPDATE – See above update

Provide the Committee/Council with updates of the pending climate change legislation in the House and Senate and what potential impacts that legislation may have on the Prairie State project as well as the requirements for green credits.

Staff will continue to provide updates on the process. Significant events are reported via e-mail to everyone. General updates are provided at committee meetings. As of now, the potential impacts on Prairie State are still unknown. The requirements for green credits are also still unknown.

As you wrote in your memo and as I (Betsy) understand this from other sources, it does seem that PPAs might be a more economically feasible option for renewable energy. I ideally would like to see a net present value calculation of a 20 year fixed contract for a PPA to compare with the Eagle View project. I think it would be helpful to understand the dollar premium for ownership. There are ownership benefits but what are they worth?

PENDING - Staff will work on compiling the data necessary to address this question. Vendors offering PPAs typically require confidentiality agreements. Therefore, it may not be possible for us to use actual data from a specific project. We may have to utilize more generic data and develop a relative cost differential between PPAs and ownership.

UPDATE – It was stated at the November NIMPA meeting that cost estimates for the Eagle View project are being updated to reflect a reduced project scope and the award of Clean Renewable Energy Bonds. It was stated that the updated cost estimates will be distributed to all members soon.

Staff will be recommending that if Council elects to proceed forward with the project, then at some point in the future, when costs are better defined, an analysis of this type should be performed to verify that ownership is the best long-term option.

How will risks/benefits associated with the project be balanced among the three NIMPA communities?

Again, it was stated during the presentation that all risks and benefits would be shared equally among the participants in accordance with their ownership share.

Why not locate a wind project in the Batavia/Geneva area? Are there any potential locations locally?

There are some potential locations within the local area. To date, Staff has not spent any appreciable amount of time investigating the locations; however, we are aware that the property owners have performed some preliminary studies. This leads us to believe that the owners have at least some interest in wind.

Address the perception that we are physically going to get power from the project.

The proposed wind turbines will generate power “behind the meter” within Rochelle’s system. None of the power will physically go out onto the “grid” and travel to Batavia/Geneva. Batavia & Geneva will “get power” from the turbines via a contractual arrangement with NIMPA.

It is evident from our preliminary discussions that the details of the contractual arrangement will be quite complex and will need to address all possible scenarios so that benefits/risks are shared equitably among the project participants.

UPDATE – Some of the details of how the arrangement between the three communities will be handled were addressed at the November NIMPA meeting. It was stated that with NIMPA acting as Owner, all administrative items would be handled by NIMPA and the contracts would be structured to ensure that benefits/risks are distributed equitably among the participants. As stated previously, the contractual arrangements will be complex.

Discuss how the contractual relationships related to energy/green credits/Rochelle distribution/Rochelle generation/NIMPA purchase power contracts will work.

It is evident from our preliminary discussions that the details of the contractual arrangement will be quite complex and will need to address all possible scenarios so that benefits/risks are shared equitably among the project participants.

According to the presentation, the details will be developed during Phase II with execution as part of Phase III.

UPDATE – See previous updates.

When will Eagle View become a NIMPA project?

Once the communities decide if and to what level they are going to participate, then they will need to execute a committee agreement. A draft copy of the agreement is attached for your reference.

According to the presentation, the official project documents will not be executed until Phase III.

UPDATE – Staff’s understanding is that this schedule may be revised. The open house presentation indicated that project documents and turbine acquisition would occur during Phase III of development; however, comments made at the November NIMPA meeting would suggest that the process could be accelerated and a commitment for turbines made during Phase II.

Statement - we should explore the possibility of delaying our participation in the project until some point in the future.

According to Section 8 of the draft committee agreement, “NIMPA members who do not execute this (committee) agreement may become eligible to participate in the Project at a later date in accordance with such terms as may be mutually agreed upon by all Participating Members.”

The details of this have not yet been discussed by the NIMPA board. Therefore, Staff cannot speculate what the terms & conditions may be for future participation.

Does a decision have to be made within the next 30 to 60 days?

The 30-60 day deadline is a self imposed deadline by NIMPA. There are no external factors driving the need to absolutely have a decision by that time. The deadline was simply suggested to keep the process moving forward in a reasonable manner. The timing of when the Committee makes a decision is entirely up to the Committee.

UPDATE – At the November NIMPA meeting it was requested that each community be prepared to declare their commitment to the project or to not participate by the December 9th meeting.

It was stated that NIMPA will be in a position to proceed forward with making firmer commitments to purchase turbines once the project participants are finalized.

Given this timeframe, Staff will prepare our recommendations for discussion at the November 23rd Committee meeting with the anticipation that the matter will move forward to Council for consideration at the December 7th meeting.

Can the project be constructed in phases?

Although not included in the presentation, it has been stated by the NIMPA board in the past that the project could be constructed in phases. Economics would likely drive this decision. It may be more economical to purchase 8-12 turbines up front as opposed to purchasing 2-3 at a time. That said, Bowling Green took a phased approach with their project and it was quite successful.

UPDATE – At the November NIMPA meeting it was stated that the scope of the initial project may be reduced to be in line with the CREBs that were received.

Provide a financial status update for the Batavia Electric Utility

A financial update will be provided as part of the 2010 budget process.

What is the current status of the bond market? What rates might we expect to receive if the project is required to utilize “traditional” funding as opposed to grants and/or CREBs.

PENDING – Staff will work to get current rate information.

UPDATE – At the November NIMPA meeting it was stated that the overall project scope is being reduced to better match the allocation of CREBs that the project received. Therefore, it is anticipated that the project will not utilize “traditional” funding sources.

UPDATE – Staff has received additional information on the “new” round of CREBs. Apparently, the terms have changed from previous issues. The bonds are no longer 0% interest. It is estimated that they will be similar to the BABs that we recently issued for the Prairie State project. Interest rates are projected to be in the neighborhood of 3-4%. Also, the bonds are available only for a maximum of 16 years and are 100% term.

What is the timing of the CREBs or other potential grants? When will they be awarded? Can the decision to go forward be delayed until we find out if we have secured any CREBs or grants?

PENDING – Staff will work to get the general timeframes for the grants/bonds.

There are no pending deadlines which would require the Committee to act before we know the results of the grant/bond requests. The timing of when the Committee makes a decision is entirely up to the Committee.

UPDATE – As indicated in Staff’s October 28th e-mail to the Mayor and City Council, NIMPA was successful in securing \$19.8M in CREBs for the Eagle View project.

In addition to CREBs, there are pending grant applications that were submitted for the project. The timing of the grant awards is unknown at this time.

NIMPA has requested that each community make a decision to proceed or not proceed by early December.

QUESTIONS/STAFF RESPONSES FOR 11/09/09 MEETING

(Betsy) Based on my observations and discussions, there seems to be a disconnect between the City of Batavia and NIMPA. Communication may not be complete. There is an uneasiness. Although I have been assured that this is not the case, still I observe it. In June, when the public utilities committee had a discussion on wind energy, there was not mention of NIMPA’s Eagle View project even though it had been in the works for close to two years and a discussion of the open house was in progress. Later in June, there was mention of the project yet committee members were told that the project was on hold due to a poor economy. Why was this? How can city council have input into the direction of NIMPA if they are unaware of what is happening? I have continued concerns about the reporting of the work of NIMPA and our role in that agency. This concerns me for a number of reasons. First and foremost, we are \$170 mm invested with NIMPA. Second, there is an economic benefit to continuing and augmenting our work with NIMPA. Regardless of the wind project we ultimately decide to pursue, it would benefit us to do it with Rochelle and Geneva. As I see it, NIMPA is 45% Batavia. This should be our agency, our project, regardless of its location. Batavia should be leading the way. The Eagle View project is at its infancy. It is scalable and malleable. We can mold it into a project that we want. Or we can lead NIMPA to a wind PPA that more closely meets our needs.

It is important to remember that as an agency NIMPA is still relatively new and still working through many issues. The process of considering Eagle View has posed challenges for all of the members. Staff agrees that the process has brought to light some issues that the agency will need to address as it moves forward.

It is Staff’s understanding that several years ago the member communities directed NIMPA to investigate renewable energy projects, specifically wind. Over the past several years NIMPA has investigated wind, specifically the Eagle View project. Early in 2009 the agency began to formulate plans to bring the project to the communities for consideration. It was decided that it would be best if all three members presented the project to their respective communities at the same time. In June Staff coordinated two general information meetings which were meant to set the stage for the announcement of Eagle View.

Staff has and will continue to keep the Committee updated on the progress of NIMPA. We respectfully disagree with the notion that we are not providing the Committee with all of the available information so that proper decisions can be made.

Staff agrees that Batavia does have a permanent connection with NIMPA through our involvement with the Prairie State project. It is certainly in our best long-term interest to continue a positive working relationship with the other member communities.

Staff agrees that if City Council elects to continue our participation in the Eagle View project, then as a community we need to take a stronger role in steering the direction of the project. Our formal recommendation will include conditions that we feel are necessary to protect our interests in the project.

(Betsy)It would be helpful to see a long term (20 yr) comparison of the various sources of energy to get a sense of cost. How does capacity and transmission affect the cost from these different sources? Would it be possible to get a cost estimate for the various options of acquiring electricity?

	<i>Eagle View</i>	<i>Wind PPAs</i>	<i>Prairie State</i>	<i>Traditional PPAs</i>
<i>ENERGY</i>				
<i>Energy \$/MWh</i>	<i>\$85 - \$100 fixed for 20 yrs</i>	<i>\$60-\$80 + 2-3% annual escalations</i>	<i>\$53 (2013 on?)</i>	<i>\$35-\$75 ? expected incr?</i>
<i>20 year \$/MWh***</i>	<i>\$1700-\$2000</i>	<i>\$1520-\$2230</i>	<i>na</i>	<i>na</i>
<i>CAPACITY</i>				
<i>Transmission issues</i>	<i>Virtually no line loss/transmission \$</i>		<i>?</i>	
<i>Capacity \$/MW</i>	<i>?</i>	<i>?</i>	<i>?</i>	<i>?</i>
<i>REGULATORY COSTS</i>				
<i>SO2 allowances (\$150-\$1500 per ton)**</i>	<i>0</i>	<i>0</i>		
<i>NOX allowances (\$800/ton)**</i>	<i>0</i>	<i>0</i>		
<i>Est. CO2 allowances</i>	<i>0</i>	<i>0</i>		
<i>Renewable energy credits (\$16 - \$21/wind REC)*</i>	<i>+</i>	<i>+</i>	<i>0</i>	<i>0</i>
<i>TOTAL</i>				

**Wind REC values based on recent auction by ComEd and Ameren who have massive economies of scale and price caps.*

***Although these market values vary wildly, I think it would be helpful to include a cost per mwh to get a better price comparison for wind. I believe SO2 and NOX costs combined are less than \$0.50/mwh.*

**** These are direct out of pocket costs per mwh over 20 years including annual price escalations. It does not make adjustments for inflation.*

Staff agrees that if the project moves forward this type of analysis should be performed. In fact, this type of analysis is valuable even if it is not associated with a specific project. Staff is currently in the process of considering energy market consultants who could help us with this. Staff anticipates bringing forward recommendations for a consultant in early 2010.

Will our Residential customers see any increases on their monthly bills as a result of the project? What about our Commercial or Industrial customers? What will the impacts (if any) be for our top ten Industrial customers?

At this time Staff is unable to estimate the financial impacts of the project on our customers. It was stated at the November NIMPA meeting that the scope of the project is being revised and new cost estimates are pending. It is anticipated that we will receive the updated information soon.

(Betsy) Has NIMPA considered the concept of reducing up-front costs by investing in a PPA as opposed to Ownership and utilizing the savings to implement energy conservation programs?

NIMPA has discussed the concept of investing in PPAs. NIMPA determined that PPAs may be a viable option for the future; however, Eagle View represents an ownership opportunity that offers benefits that PPAs do not. NIMPA has elected to pursue ownership and Eagle View at this time.

NIMPA has had some discussions related to energy conservation programs but to date has been focused on the development of projects such as Prairie State and Eagle View.

(Betsy) What are the economic factors that make Eagle View more expensive than wind PPAs? Is this all due to economies of scale? Is there anything that can be done to bring this cost down?

Once again, Staff is fully supportive of performing a complete economic analysis after all of the project costs have been determined. Staff feels that the economic analysis should play a key role in the ultimate decision to proceed with significant expenditures or to discontinue the project.

(Betsy) What are the risks of waiting to invest in wind energy? Now there is an opportunity for discounted turbines, 0% financing and grant money. There is also a legislated increase in demand for wind energy. As the demand increases and CO2 regulation kicks in, it is expected that wind energy prices will rise. Finally for Eagle View, it is a rare opportunity to have behind the meter generation. From an environmental perspective, this is the very best option. Are there other risks in waiting?

Staff feels that there are potential risks associated with “discounted” turbines that must be carefully weighed against any potential cost savings. Only after a complete analysis to determine that “discounted” turbines are the best alternative should they be used in support of an argument to invest in wind. The simple fact that they are available does not automatically make them the best option. The existence of “discounted” turbines may or may not have any bearing on the decision of whether or not to invest in wind.

Staff agrees that 0% financing and grants are positive factor for any project.

Once again, there are currently no legislative requirements for the NIMPA communities to have renewable energy. It is ultimately up to the Committee to determine if a decision should be made to invest in a project on the basis that some legislation may be imposed at some point in the future.

With all due respect, Staff does not necessarily believe that prices will automatically go up as demand for wind increases. We believe that it is possible that as demand increases, more vendors may enter the marketplace ultimately driving prices lower. Also, prices could decrease as technologies continue to advance. Once again, it is up to the Committee to determine if a decision should be made to invest in a project on the basis that prices could increase in the future.

There are many positives associated with “behind the meter” generation; however, as was stated at the November NIMPA meeting, RTOs are beginning to re-evaluate “behind the meter generation” and in the future it may not be as beneficial as it is in today’s market.

(Betsy) What are the risks of doing this project now? Can we afford a \$4 mm (1 turbine) - \$12.75 mm (3 turbine) project now? Uncertainty in the energy market – CO2 regulation, demand variations with economy and conservation measures. Uncertainty in securing Prairie State transmission path through PJM until 2014? Are there other risks in investing now?

Staff is concerned about our ability to afford any new major projects now given our position in the Prairie State project and the uncertainties associated therewith. Pending federal climate change legislation is also a concern. The impacts of that legislation on Prairie State are still unknown and have the potential to be significant.

(Betsy) What is the economic value of a renewable energy credit and how many would we receive assuming we purchase 3 turbines at 4.5 MW, 37,000 MWh?

See Updates to 10/26/09 meeting questions/responses.

(Betsy) Comment on “no line losses”. BCEC likes this aspect of the Eagle View project. It is beneficial to have the power generation in Rochelle where wind is best. It is beneficial that they use the power so there is no transmission costs or line loss. This is excellent and one of the best aspects of the project. I (Betsy) am unaware of any wind PPA that is equally as efficient.

Staff agrees that placing generation as close as possible to the corresponding load results in greater efficiencies.

What is the lifespan of RECs? One year? Ten years? Lifetime?

RECs are tied to a specific generator and are sold annually on a MWh basis in parallel with actual energy from that generator.

What is the status of NIMPA’s authority to erect the turbines? Have all permits been obtained? What is the opinion of the County Board or local land owners?

Staff understands that a special use permit will be required through Ogle County to erect the turbines. The process of obtaining the permit has not yet begun.

County Board members were present at the open house and offered some comments on the project. One specific comment was that Payment In Lieu of Taxes (PILOT) would be required for the project to support the local townships, school districts, fire districts, etc.

The local land owners were quite vocal at the open house. A citizens group known as "Ogle the 4th Community" has been established. They have a web site www.oglethe4thcommunity.org