



Illinois Department of Commerce & Economic Opportunity

JB Pritzker, Governor

State of Illinois Energy Transition Workforce Commission November 18, 2022 11:00 am – 1:00 pm Minutes

Locations:

Virtual

Zoom Video Conference

Meeting ID: 876 3122 9109

Access Code: 139961

Video Link: <https://uis.zoom.us/j/87631229109?pwd=T1RDWkk2S2ZCd3BrYm9CZ3FkTHNXZz09>

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Agenda:

- I. Call to Order at 11:02am by Jason Keller, Chair, Energy Transition Workforce Commission
 - a. Roll was called by Tonda Reece (UIS), the following were present via Zoom:
Angela Morrison, Chicago Jobs Council
Sameer Doshi
Pat Devaney, AFL-CIO
Jason Keller, IDOL, Chair, Energy Transition Workforce Commission
 - Chair Keller went on to mention that we do not have a quorum so we will not be adopting any minutes at this time. We will likely wait for the December eighth meeting to adopt all of the minutes. He continued to say we also are basically just meeting to go over the draft report. That was uh distributed to you on Wednesday evening. Hopefully, you got a chance to review that. But I do want to essentially turn it over to Dr. Kriz to give a presentation of the draft report.
- II. Draft Report – Dr. Ken Kriz
 - Dr. Kriz began with saying thanks to Chair Keller um When we met as a smaller group earlier in the week, I was told to present a ten-to-fifteen-minute kind of basic outline of things. This is not the final presentation which will be I guess at the meeting on December eighth, after people have had a chance to review, and I believe the comments are requested back by and questions by November thirtieth. Is that right Chair Keller? Okay. So, this is going to basically outline things. But this is not intended to be the final presentation.

- Before Dr. Kriz began his presentation a few questions were asked by Commissioners they were as follows:
- Commissioner Devaney asked is this report publicly available right now? Correct?
- Dr. Kriz replied by saying I don't think so.
- Chair Keller chimed in and added that it is not. Technically when we discuss this internally, it could be FOIA'd if you know someone wanted to. But right now, it's still in draft form, and we're hoping to keep it that way until we release it on the eighth.
- Commissioner Devaney replied by saying thank you.
- Commissioner Doshi asked Chair Keller if he could ask a question
- Chair Keller said yes sir
- Commissioner Doshi went on to say that he didn't previously see the notice or invitation about providing comments by November thirtieth. Could you explain your expectation of how that will work consistent with the open meetings act and any other procedural requirements?
- Chair Keller replied by saying we simply wanted to provide commission members an opportunity to hear Dr. Kriz's presentation today, and then take it back read through the report and offer any changes to him in writing by the thirtieth. That is kind of a midway point between now and the eighth that would give him sufficient time to make any suggested changes, and then we can redistribute final draft for review before the meeting on the eighth.
- Commissioner Devaney asked Chair Keller if he could make a request, and perhaps this is what you intend to do. But any changes that are submitted between now, and when the report is redistributed with modifications, will that be provided in a tracked change format to where we can see the edits that were suggested by commission members?
- Chair Keller replied I believe so and asked Dr. Kriz, is that something you'll be able to do or manage?
- Dr Kriz replied by saying yes and his intent is to share at least with Chair Keller any comments feedback that comes to me. So, if you email me Commissioner Devaney I will make sure that, that's done. Chair Keller you can distribute it to the rest of the commission. But I will also. I can work in.
- Commissioner Devaney replied by saying yeah just so we could see the changes that have been suggested in the interim. Thank you.
- Chair Keller said fair request.
- Dr Kriz went on to ask if there were any more questions? After all the questions were answered Dr. Kriz began his presentation. He added that this is the report that what I would call the task 2 report. So, we have three tasks. Two is to produce this report in two thousand and twenty-two; next year, in two thousand and twenty-three will have a much more comprehensive report. So, these are preliminary estimates. They are forward looking, so I will say upfront that there are plenty of assumptions and you can look through the report for the assumptions and if you have any comments on those. But I tried to make them according to what was publicly available data or data that I had received in one case from a commission member. I documented when that was the case. He proceeded to his PowerPoint presentation.
- Once the presentation was done Chair Keller said thank you very much and asked if there are any questions or comments from the commission members?
- Commissioner Devaney said yes, he'll start and work my way backwards here since this slide is up. The emission reductions, is that as a percentage of emissions that are produced through electricity generation, or is that from all emitters in the State across all industries?

- Dr. Kriz replied by saying so the statewide total is all sources. So, if you look at the one hundred and sixty-nine million, one hundred and seventy million tons of Co2, a lot of that is cars. But the totals are just from the plants. So, we got the plants estimate, and let me let me say one thing that I'm. That's a good question, Commissioner. These are what are called the adjusted numbers that the EPA has. The unadjusted numbers include what is called co-generation. So, there are some plants that are both electric and heat generating like, if you have uh the Archer Daniels Midland plant in Decatur, I believe that's a co-generation plant. So, this is just for the electrical generating side. I'm assuming there that the law does not uh make the plant close down the heat generating portion.
- Commissioner Devaney went on to say so there was a section in the report, and I think you you've touched on it in your presentation regarding union percentages across the various sectors.
- Dr. Kriz answered yes, I did not present that today.
- Commissioner Devaney continued by saying just for my own, so what I'm having like thinking about how we're providing comments to make sure I understand it. You mentioned that you had surveyed the IBEW, I have a big presence in those in the facilities, but you also looked at data available from another source. I was wondering if those unionization percentages were specific to Illinois, or if that data from the alternative source was just aggregated from across the country.
- Dr. Kriz replied by saying that that's across the country.
- Commissioner Devaney continued by saying he'll provide this in the comments. It just occurs to me that Illinois has a significantly higher unionization rate. Do you think there would be a better way to develop that data?
- Dr. Kriz added that's the only data that I found; I can talk to the authors. I know the dean of one of the authors, so I can talk to the authors and see if maybe they have something that's more localized. but that is it's Union Stats.org; they have a paper that they published almost twenty years ago, and they've been keeping this data. So, I'll ask them if they have any more data.
- Commissioner Devaney then maybe we could. Maybe I could recommend in my written comments waiting it towards the Illinois Unionization rate versus the rest of the country or some other method.
- Dr. Kriz said that he will make that attempt.
- Commissioner Devaney continued by saying and the question about you were unable to, I believe, determine or distinguish between full time job creation versus part time job, creation,
- yes, a lot of the work in renewable development-- and I was surprised as to how low the percentage was on the construction side of particularly solar, because I thought that was more of a significant portion of the work-- but those jobs are definitely different than in fossil generation, particularly on coal generation where they're full time, like stationary jobs as opposed to construction jobs, particularly for Blue collar workers that are in, you know, various parts of the State. There's just not data available to make those determinations.
- Dr. Kriz added now, the one thing is this is this is quarterly census of employment and wages. So, this would be construction jobs in the particular industries, and that's that is a limitation of this report. Next year we will be able to capture, for example, contract construction jobs when they contract out. That's a really good point, and I'll make a note of that, that I need to caveat that it's only when I have the data, the full model built, because we, you know, this just looks at employees in, for example, a solar firm. If they, if they have a queue or I'm sorry. The next code of twenty, two, one, one, one, one, one, two, and so that's not going to capture the contract construction. Does that answer your question?

- Commissioner Devaney said I think, so I think we'll be able to put a little bit more meat on the bone around that as you have additional data if that become available is that essentially what you're saying? Is that what you're saying?
- Dr. Kriz, answered yes that is what I'm saying
- Commissioner Devaney added that he had just one or two more here in regards to coal mining jobs. Did we look, did you look at the coal produced in Illinois where it's actually used? Because I think there's a fundamental assumption made for, and I just did it. One read of this report. So, I again, that this may be a question may be misguided regarding the coal that's produced in Illinois, being used in other states that perhaps don't have as aggressive decarbonization goals is that was that taken into consideration, and the number of coal mining jobs that would be lost in Illinois?
- Dr. Kriz answered by saying it wasn't and I don't have that data. And I don't have that data. I will look for that data that will also be in the plan data that we will use next year because they have a regional sales coefficient so that will be present, and I will use that for next year.
- Commissioner Devaney said okay and the last question, I was. I was kind of surprised by on the demographics across the different industries. Regarding particularly regarding race. Could you tell me? I mean it is this: from like a labor like data set that you were able to obtain. I believe you reference in a couple of different places. Anecdotally, I don't know if the if a minority, representation and wind and solar development to date where there's a lot of things in terms of equity that we built into, see that that's which is going to try to improve that as we develop wind and solar in Illinois. But how did you? How did you arrive at the at those?
- Dr. Kriz said this data is from a company called Emsi. Actually It's now called Lightcast now. It used to be called Emsi. It is the largest labor market data analytics provider. They use data from the quarterly census of employment and wages, the current population survey. This is all foot noted in the report by the data sources and private sources of data to build these estimates. But this is this: is industry standard, when economic development agencies use, want to look at what the nature of their industry and what their employment is. This is the company that they use, and so I don't know of any other better data. I am all always open. If you know a better data to, or you will bring that to my attention.
- Commissioner Devaney said I was just curious how it was I was derived. Thank you very much. I appreciate all your responses.
- Chair Keller said still sticking with commission members, are there other questions or comments?
- Commissioner Doshi said Chair Keller. I have a few questions and comments for Dr. Kriz.
- Chair Keller said yea please proceed.
- Commissioner Doshi said thank you. I'll try to keep my comments and questions somewhat high level, and of course I'll give more specific feedback, in written comments. Starting on page four of the report, I know we're looking at a PowerPoint, and not the report itself, But on page four of the report it says: We next proceeded to assess the base case for electric capacity growth. One might think of this as a necessary baseline, or how much capacity needs to grow over the next several years to meet energy demand. And I take it the forecast is, yes, in relation to this graph, roughly speaking, I take it, the forecast is based on historic trends. I would note that the two thousand and twenty-one climate and equitable jobs act expands funding for distributed generation programs, as well as energy efficiency which potentially could reduce peak load. There also may be changes in for expansions of electric vehicle usage and electrification of buildings which potentially could increase. And so, if the forecast of future capacity could be made robust to some of these scenarios that could give a more realistic look at what's to come.

- Dr. Kriz asked realistic in what sense? You just told me that there is a lot of uncertainty about what's going to be.
- Commissioner Doshi said sure we know that the past trend will likely not hold exactly going forward due to new changes in the state law. I agree there is a lot of uncertainty.
- Dr. Kriz replied that he is more than welcome to look at scenarios. But you're starting to build more and more assumptions in for me it is unless we know that something is going to happen in the future you have to make. I mean I made an assumption about the fossil fuel plants, were going to close. It was an assumption I wasn't entirely comfortable with, but I made it because I know it's in the law, the natural gas. But when you start talking about capacity growth in things that we aren't yet doing, I mean, I can look at those scenarios, but that's just going to increase the uncertainty. So yeah, I'm fine with building in scenarios, but we're starting to look at more and more estimates, and with the sense of what the probability is it's going to happen. Is that what you're asking for?
- Commissioner Doshi replied by saying I think I'm asking for scenarios that take into account the changes envisioned by current State law. I agree that the future is, uncertain, even with defined quantified programs in the law. The future is nonetheless uncertain.
- Dr. Kriz added I will. I can develop scenarios that look at different levels, but I'm going to put a lot of caveats in there.
- Chair Keller asked Commissioner Doshi is that something you would want in the report that we release on December eighth, or is that something you would want in a uh later report that will be issued.
- Commissioner Doshi answered by saying I think that would depend on the capacity of Dr. Kriz and his team. Ideally, it would be in the first report, but I understand, if developing the scenarios in three weeks, maybe too short notice. Moving forward on page six through eight of the report there's a column listing the plant transmission or distribution system owner name for each power plant. But on page five at the bottom of page five, it states that table one shows that plants along with their owners, which I think is an error
- Dr. Kriz agreed and said yes that's an error thanks for pointing that out.
- Commissioner Doshi continued by saying on page eight, I align myself with Commissioner Devaney's comment that the report seems to assume that all Illinois coal will be consumed by Illinois power plants, which may not be a fully accurate assumption and if that dynamic could be quantified in the report that could be helpful. On page nine of the report it speaks about a paucity of data on closure, of natural gas power plants, and then on page ten of the report, there's a S-shaped curve to project future natural gas power plant closures. I would note that the new State law, the CEJA has very specific prescriptive closure dates for different types of power plants depending on their location and emissions levels. So, if each power plant in your chart, or rather your table, 2, for example, could be identified, based on emissions levels, and whether it's within three miles of an environmental justice community, and so forth. Then closure dates could be forecasted with accuracy, and I can send more information about that.
- Dr. Kriz I'm making a note. I'll look at that
- Commissioner Doshi continued that on pages eleven and twelve of the report. You discuss the recent trends of wind, capacity, growth, and solar capacity growth. And I think actually this this graph that's on the screen now is also figure six on page twelve in the report, and I would note that the CEJA passed last year contains specific quantified goals for the amount of wind and solar to be in the ground by two thousand and thirty and two thousand and 40 percent of Ameren Illinois, and ComEd usage should be represented by renewable energy credits by two thousand and thirty fifty, by two thousand and forty; additionally the Illinois power agency is to um facilitate ComEd and Ameren Illinois entering into contracts

to procure forty-five million renewable energy credits from wind and solar annually by two thousand and thirty, all that is in the State law. So, if those...

- Dr. Kriz asked how are those estimates developed?
- Commissioner Doshi said those numbers are just hard coded in State law.
- Dr. Kriz asked do they know it's possible for that to happen?
- Commissioner Doshi said well, that's a good question, you're right. Also, potential uncertainty, but it is a new development.
- Dr. Kriz said for example, I've heard a lot of things bandied about there's going to be one hundred and fifteen thousand. There has to be one hundred and fifteen thousand jobs in renewable energy, which is a totally un. So again, you're talking about things that. Yes, are they a goal? Yeah, they're, that's a great goal. Can it happen? I don't know, and I'll go back and I'll check the numbers against that to see if that's going to be the case. But I'm again you're talking about things which, all due respect, a lot of times estimates that are made when you're putting together when you're putting your legislation, are not necessarily realistic.
- Commissioner Devaney added that if he could speak on that point before you, Commissioner Doshi, move to your next. I think it would be instructive to look at the goal stated in FEJA versus where we actually are in development today. Now we're not hoping that that continues to be the pattern, but that is certainly there's a wide disparity as to where we're supposed to be in two thousand and twenty-two. When that law was passed in two thousand and sixteen versus where we were actually at today.
- Dr. Kriz added the growth in wind and solar is impressive already. I mean this is you this is an industry which is, I had to use the term exploding, but it's growing faster than most any industry now. And so it may be entirely possible that the goals are or what they have, and I'll check the numbers.
- Commissioner Doshi said thank you, Dr. Kriz. On page thirteen of the report I was struck by the statement that, wind generation employment is point zero, eight workers per megawatts, zero point five workers per megawatt for solar, whereas fossil fuel employment is point zero three workers per megawatt. But I was wondering are all of those uh permanent FTE jobs, or are they? Are we comparing apples and oranges? Somehow.
- Dr. Kriz said again, what I used was data from the Bureau of Labor Statistics and so it's total numbers of jobs. That would be in companies that and you know, I use annual averages. So you know, if you're talking about temporary workers if they're I guess it's possible that there are a considerable amount of temporary workers there. But these are these are annual averages going back over time.
- Commissioner Doshi said Okay, Thank you. Moving to pages seventeen through twenty of your report, where you have a number of charts about different types of occupations within the energy sector salaries for the different types of occupations. Then you break it down by educational attainment. That's table seven across fossil wind and solar industries. Age distribution, that's table eight across fossil wind and solar industries. Gender distribution, that's table nine across fossil wind and solar industries. And racial and ethnic distribution, that's table ten across fossil, wind solar industries. I was wondering, are all of these national data, or are they regional or Illinois based?
- Dr. Kriz said no, they're Illinois. I got the Emsi I got the reports for Illinois.
- Commissioner Doshi said Okay, Thank you. On pages twenty-two twenty-three, twenty-four and twenty-five which is your uh table twelve, emissions for coal plants and table thirteen, emissions for gas plants, I noted at the bottom of each table. It says it's based on an air quality report for two thousand and twenty. So, does that mean these are emissions that happened in calendar year twenty?

- Dr. Kriz answered yes
 - Commissioner Doshi said okay. I would note that generally economic activity and generation were a little bit down in two thousand and twenty, due to Covid, so a different year might be more representative for total emissions, although I understand that, the percentages of statewide emissions should be roughly unaffected, even though Covid year.
 - Dr. Kriz said I'll check the two thousand twenty. They have also the two thousand and nineteen. You need eGRID available, so I'll check those numbers.
 - Commissioner Doshi said also on emissions I, at the previous meeting on October fifth I mentioned the EPA's COBRA tool, which I believe, allows estimation of the effect of the point sources' emissions, including power plants on nearby counties. I think they take into account wind direction and wind speed, and things like that, if it's possible to incorporate that type of analysis to show who, within Illinois would benefit from closures of particular power plants that could be helpful.
 - Dr. Kriz said I will consider that I'll note that earlier reports that I've read have not had that, but I will check it out.
 - Commissioner Doshi said thank you. And my final point. Sorry. I've taken so long. On page twenty-six discussing changes in tax revenues, I think, in general, if this section could be expanded to show the actual changes for each locality that would be great. Also, the section expresses a lot of uncertainty about how wind and solar property are assessed. But State tax law is very specific in terms of particular dollar amounts per megawatt for commercial wind and solar, and I can send the citations for that.
 - Dr. Kriz said if you would please. I know there's a constant discussion on the interagency working group about how wind and solar will be treated in terms of taxes, so I'll take a look at the citation and reconcile it with those.
 - Commissioner Doshi said oh, and I'm sorry. One more thing the statute that authorizes our commission, and the report calls for an accounting of all employees who work in fossil fuel, energy, generation, nuclear energy; generation, and coal mining. And I did not see the nuclear piece of it in this report.
 - Dr. Kriz said I'll check the language.
 - Commissioner Doshi said thank you, that's all and of course I'll send more detailed written comments.
 - Chair Keller replied thank you very much. Yeah, thank you very much. Again, sticking with any other commission members out of comments or questions.
 - Commissioner Devaney said Chairman, I just have one follow up to Commissioner Doshi's point that I would ask Dr. Kriz to consider regarding. If you are going to look at, make additional assumptions around future energy needs or capacity. Baseload needs and consider energy efficiency reducing those I would also ask for, I guess similar weight to be assigned to electrification goals, particularly around automobiles and other types of electrification goals that are not only in CEJA, but I think there will be continuing to develop. So, if in fact, we're going to be looking at that making assumptions on savings due to energy efficiency. We would also need to assign equal weight to other things that would increase the need for a load.
 - Dr. Kriz said thank you for that comment. I'll try and put them in there. Thank you.
 - Chair Keller asked if there are any further comments from commission members?
- III. New Business/Public comments Jason Keller, Chair, Energy Transition Workforce Commission
- Chair Keller moved on to public comments by saying Okay. With that, I would turn to. I know that Tonda had put in the chat for public comment. If anyone seeks to have public comment here, we would make

that available right now. The only comment that I can see is from Amanda Pankau out is that Illinois has State legislation. It standardizes tax assessment of solar, and when, we need similar legislation for battery storage. That was put in the chat, I don't know if she wishes to speak it certainly can make that available.

- Amanda Pankau replied yeah, I don't need to expand. I think Dr. Kriz can just maybe that you'd heard from their agency working group that it was needed for solar and wind, and so it's just clarifying that we do have State legislation on the books on that for solar and wind, but not for battery storage. So, I think it's in the works for hopefully the spring session, though so more on that.
- Chair Keller said okay, Thank you very much.
- Dr. Kriz replied by saying I made a note of that Amanda.
- Chair Keller said just going to check the chat one more time to see if anyone's requesting to speak. I'll call one more time for any public comments,
- Amanda Pankau added and I'm driving so now Can't put anything in the chat. Can I ask when this will be available for members of the public to view it? Will we be able to view it in draft form, or will it?
- Chair Keller said I believe the hope from us is that you allow us time to work on some of the changes requested by commission members between now and December eighth, and then, once the full Commission votes on that on December eighth to approve it. Then we will release it to the public. It looks like it got a thumbs up from somebody. With that I do want, I'm going to go ahead and cut off public comment at this time what I would like to discuss really quickly, and maybe this is a question for Dr. Kriz is given the amount of comments and the amount of work that may still be ahead of you on changes to the report. Is there a discussion needs to be had? What can be made to this report, and what should be shifted to the later report next year?
- Dr. Kriz said yes, I guess it would be more for the commission to discuss.
- Chair Keller I mean, I guess it will. We'll get the written comments by November thirtieth, and then we can assess and try to be open and honest about the amount of time we have to make changes and what it can be modeled out, based upon the comments we've received.
- Dr. Kenneth said yes, it sounds like a lot of the comments are ready already. Is that fair commissioners?
- Commissioner Doshi said Chair, Keller and Dr. Kriz? I can probably write up an initial set of comments in the next couple of days, and maybe Dr. Kriz could begin reviewing that, and then I'll maybe send the second set a little later in the month after I give it a little more time.
- Chair Keller said that's fine. I just want to make sure I have the right expectations in place, as far as what can be done by the eighth in place before you, and what would need to be shifted to a later date to do proper modeling in the report.
- Dr. Kriz said that may be a until I start looking at the data. I really what's available, what assumptions have to be made.
- Jason Keller said maybe what I can promise is to just try to keep commissioners updated on what is possible, and what we can place before you. Before the meeting on the eighth, I'll try to stay in touch with Dr. Kriz and see on the progress.

IV. Upcoming Meetings – Discuss upcoming meeting tentative dates among membership to confirm

- a. December 8, 2022 from 11 am – 1 pm – Approval of Final Report

This meeting will be held at the Discovery Partners Institute (DPI), 200 South Wacker Drive Room 2032, Chicago, IL 60606

- Chair Keller said okay, with that, Then I just kind of want to place a reminder the meeting on the eighth is in person in Chicago and I might need to lean on either Tonda or Molly. It's at the DPI and what is the address of DPI again, or can somebody put that in in the chat? And the room as well.
- Tonda (UIS) replied yes, I'll put that in the chat and the room as well, it has been changed. It's going to be the same room we were in the first time, but I will put that in the chat.
- Chair Keller said thank you very much and went on to he wanted to stress the importance of people being there in person, if possible, obviously. We wanna have robust discussion, and then vote on this. I have spoken with the governor's office about getting an extra appointment to ensure that we have a quorum that day. and I will follow up on that so that we can actually vote on this and be respectful of people's time that day as well. With that I would ask for if there's a motion to adjourn.

Adjournment

- Chair Keller asked for a motion to adjourn the meeting
- Commissioner Doshi motioned that the meeting be adjourned
- Commissioner Devaney seconded the motion
- Chair Keller went to vote to pass the motion and the motion passed to adjourn the meeting
- Meeting was adjourned at 11:58 am
- Jason Keller with that can I ask for all in favor? Say, aye, any opposed Say, no. This meeting is adjourned, and before I do that I do see Commissioner Morrison just asked that the location be updated in the calendar invite, and Tonda will do that. So that'd be my last remark, and I'll say thank you to Dr. Kriz for all your work and your team. And hope everyone has a happy Thanksgiving next week.

Minutes submitted by: Tonda Reece, UIS on 11/18/2022

Materials:

- I. Draft Report
- II. Meeting audio
https://uis.zoom.us/rec/share/mmNd4Z6FdLtVUzy2VTUuJSvfmi58GE3SxZRbbMB4q1zWPHKIlxwnM8vLp_IW1rIP.Nk_khgsEnHiB3GEej