



Illinois Department of Commerce & Economic Opportunity

JB Pritzker, Governor

State of Illinois Energy Transition Workforce Commission September 7, 2023 9:45 am – 10:15 am Minutes

Location:

Virtual

Zoom Video Conference

Meeting ID: 425 404 9596

Access Code: ST8EQG

Video Link: <https://uis.zoom.us/j/4254049596?pwd=SU0yamIBY0hxU2pESEFBSWqVWYrZz09>

Agenda:

- I. Call to Order at 9:48 am by Jason Keller, Chair, Energy Transition Workforce Commission
 - a. Roll Call of Membership – Tonda Reece (UIS), the following were present via Zoom:
 - Angela Morrison
 - Sameer Doshi (joined at 10am)
 - Pat Devaney
 - Lisa Jones
 - Larry Dawson
 - Nate Keener
 - Jason Keller (Chair)
 - Director Kristin Richards (absent)
 - Chair Keller said, thank you very much. Quorum having been established, I'm going to go ahead and make sure everyone again is aware that any public comments will be taken at the end of the meeting. Each person seeking public comment will have 3 minutes to speak. So please send a message to Tonda, if you do wish to speak, and we will get you set up towards the end of the meeting.
 - b. Approval of minutes from August 2, 2023 meeting - Jason Keller, Chair, Energy Transition Workforce Commission
 - Chair Keller said with that I'm going to go ahead and seek approval of the minutes from our last meeting on August 2, 2023. Those should have been distributed to you earlier. I know the last version had some of Commissioner Doshi edits, is there any discussion on those minutes from Commission members? Hearing none, I would ask for a motion to approve the minutes from August 2nd.
 - Commissioner Keener motioned to approve the minutes.
 - Chair Keller said motion made. Is there a second?

- Commissioner Jones seconds the motion.
 - Chair Keller said all in favor, please say aye. Any opposed say no, and the ayes have it.
 - All voted aye, the motion passed.
 - Chair Keller said the minutes from the August 2nd meeting are adopted.
- II. Discussion of Board Members who will be present at regional meeting
- Chair Keller said right now, then, I want to, I'm going to check the roll here. Sorry. I'm just scrolling through my Webex. I know that we have a new member that was appointed recently. His name is Shad Etchason, representing the IBEW. Once he hops on I may give him a minute to say Hello, but I did want to update Commission members that he has been appointed. With that, then the main purpose of this meeting is to prepare for our regional meeting that's coming up on the 13th first one in Romeoville. I'm going to go a little bit out of order in the agenda. I've asked Dr. Kriz to go after the review of the PowerPoint presentation. I do want to get any feedback from Commission members on the PowerPoint presentation and I welcome any and all edits to it, because this is something that I do want to go over at the meeting on the 13th. I can update you as far as what I've done to promote the meeting.
- III. Promoting the regional events
- Chair Keller went on to say I have been working with local legislators to promote it up to as I guess as late as yesterday, I've been working with local legislators to get some press announcements out of it, and then working with different constituencies in the area to promote the event. I would appreciate, I guess, any commission members that represent constituencies that would wish to testify or participate in the hearing to promote it as well, if possible, that is something the flyer that we distributed asked for anyone seeking to testify to reach out to me by September 11th, which would be next Monday. So far, I've not heard anything from anyone. So, I do want this to be a productive meeting where we do get some feedback. I did distribute it to the business community late last week as well, should they have anyone who wishes to testify in the area. I guess I would open it up for any comment on that before I go to the PowerPoint presentation. Does anyone have any further ideas, as far as promotion is concerned from commission members.
 - Commissioner Devaney said I don't have any additional ideas. But I just wanted to confirm with you. We have distributed that on our contact list of our climate coalition, and we'll give it more social media play like today and tomorrow.
 - Chair Keller said okay much appreciated.
 - Commissioner Morrison said Angela. The same like Pat, my organization is definitely promoting it. We've circulated in various coalitions and tables where we sit at it and plan to continue doing so in the next few days.
 - Chair Keller said okay, very much appreciate that as well. I do want to sing the praise of Amanda Pankau, Prairie Rivers Network. I know she's on here, she's been great to work with and has been instrumental on helping put some of this together. So, a big hat tip to Amanda for help on this. Okay, I'm going to go ahead and close that portion and go to my PowerPoint presentation. Tonda, I might need permission to share if I may.
 - Tonda of UIS said there you go, sorry.
- IV. Overview of Regional meeting presentation on September 13, 2023
- Chair Keller said thank you, ma'am. Continued by saying so this was distributed to you in the calendar invite again. I welcome any and all edits on this trying to summarize the great work that Dr. Kriz did in his report was difficult just because I had to summarize it and not include all of it. So, I do appreciate his work and appreciate any edits that you guys can provide. So, my plan is to basically start with an overview of the Energy Transition Workforce Commission. (Started presentation at 06:48 minute mark)

- Chair Keller at minute mark 07:24 asked if there were any changes to this, to this page fairly straightforward. Moved on to slide two at 07:38 minute mark. Asked at 07:57 minute mark if there were any changes to this slide?
- Commissioner Jones said I don't know if we want to make mention, it's not just we also have an intergovernmental agreement with the University of Illinois Champaign-Urbana to help with just workforce programs in general. So, I don't know if you want to include that as well?
- Chair Keller said so I'll make plural agreements with University of Illinois Urbana- Champaign and University of Illinois Springfield.
- Commissioner Jones said just a point of information, it's actually the Smart Energy Design Assistance Center who does all the program pieces for CEJA.
- Chair Keller said okay.
- Commissioner Jones said sorry.
- Chair Keller said no, no, it's all good. I just want to make sure I'm capturing it correctly.
- Dr. Kriz said sorry, Chair Keller. It would also be University of Illinois Urbana-Champaign is the full name, hate to be technical.
- Commissioner Jones said no, no that's fine thank you Dr. Kriz.
- Chair Keller said University of Illinois, okay, so then I'm going to add us another bullet point it's through. Can you give me the proper nomenclature there?
- Commissioner Jones said yeah, it's the Smart Energy Design Assistance Center or SEDAC. Yeah.
- Chair Keller asked does that capture it, or that need massaging, yeah.
- Commissioner Jones said no. I would just capitalize Smart Energy Design Assistance Center. But yeah, but otherwise, yeah, it's fine.
- Chair Keller said okay.
- Commissioner Jones said thank you.
- Char Keller said you're welcome. Then said I'm going to hit, save just to make sure that's, done next slide. Moved on to the next slide at 10:15 minute mark. At minute mark 11:03 asked if any additions to this slide? Okay. Moved on to slide five at 11:09 minute mark I have three slides for preliminary findings. This one's very tiny. So, you'll need your glasses. Continued at slide six at minute mark 11:52. After reading slide six Chair Keller said that was a mouthful. So, I welcome any input on that hearing, none moving to slide seven he continued at minute mark 13:27. Asked at minute mark 14:53 if there were any changes on that slide?
- Commissioner Devaney said the only thing I would ask Jason, I mean, I understand that wind increased over time, but in terms of the forecast for the ability for renewables given the current path of development or rate of development versus the needs down the road. I mean, does then doesn't the report acknowledge that there needs to be increased development? So, there is a significant opportunity. But is that rate increased rate of development that you're noting in the last bullet sufficient to meet our goals in the future? Or would we also want to summarize it as saying, we need to continue to increase the rate, to be able to meet that, because I don't know if that last sentence reflects our current situation. But maybe I don't remember the report correctly.
- Chair Keller said I'm certainly open to adding another bullet point, stating that...
- Commissioner Devaney said it's more of a question than a request. I don't know if Dr. Kriz like it could weigh in on that.
- Dr. Kriz said we do need to develop the capacity, I don't think you were here for the first briefing on the phase 2 report, but we've moved to using the NREL, National Renewable Energy Lab; READS, Regional Energy and Deployment System which forecasts capacity and looks at the mix. One of the things that kind of feeds into this is the cost of wind and solar is falling rather dramatically, and so we will be able to build

the capacity. In fact, that's what relates that in the new forecasts is that it's going to grow dramatically, and you'll see that in the jobs numbers I'll talk about today.

- Commissioner Devaney said okay, I don't think a change is necessary then, I just wanted to ask a question.
- Chair Keller said okay, very good. I appreciate the comments in the back and forth. Going to some shorter slides, continued to slide eight at minute mark 17:09. At minute mark 17:52. Chair Keller said now that I read that, I'm not sure that flows very well, I might try to clarify that a little bit for the 13th, maybe.
- Commissioner Keener said maybe just make it a little bigger, too.
- Chair Keller said yes, so I will make some changes to that. But I will still summarize the age distribution by industry.
- Commissioner Dawson asked what's the overall point that we're trying to make with this slide.
- Chair Keller replied by saying I'm just trying to summarize the discrepancy, I guess, in age of workers in each of the industries. If I'm summarizing it correctly the fossil fuel industry has more older workers where the I think the renewable has less older workers.
- Commissioner Dawson said so in this transition, more older workers will be negatively impacted effectively.
- Dr. Kriz said yes, that's the implication.
- Commissioner Jones said so I guess, then, my question would be... we know they're going to be more negatively impacted. Is that what phase 2 will look at is like, what are strategies? Or is this where we would make a connection to the work force programs in helping address that discrepancy?
- Commissioner Devaney said I think when you look at age, I think there's a certain thought that younger workers through workforce development and transitioning into other types of industries have a greater ability to do so, whereas workers who are over 55 who might be approaching retirement. We might need other just transition techniques or plans to be able to give them a softer landing, cause it's less likely that they'll go through a transition. I think that's kind of the point, right? Or what we would do in phase and making those recommendations.
- Commissioner Dawson said right. That's getting at it.
- Commissioner Jones said yeah, yeah, that makes sense. I'm just yeah. That's what I was thinking, too Larry. I think that's a good point to make, though Chair Keller, Pat's comments.
- Chair Keller said okay, I will jot that down
- Commissioner Jones said its kind of just inaudible... is like there, I think.
- Chair Keller said okay I will jot that down. Do you want that part of the slide. Or do you want to simply pause there and have me bring up workforce training programs, and the reason why we're going into these communities is to take these recommendations as far as what you need to meet, what the community needs to retrain these workers or get them on their feet.
- Commissioner Jones said well, since we're kind of getting feedback, I'd like for them to come to that conclusion on their own, but I don't want to go in with these meetings, either, thinking that we already have the solution.
- Commissioner Devaney said well, there's also, I mean, I don't know how you're... are you going to present on this, Jason?
- Chair Keller said that was my plan, yeah.
- Commissioner Devaney said so, I mean, everything you say doesn't have to be in the slide. So maybe just in your notes section maybe you could just make a comment like consider, we speculate that in phase 2, we're going to have to make considerations as to the proper planning for transitioning younger to employees to other types of like employment versus other types of just transition strategies for older employees who are transitioning out of fossil generation something like that. It doesn't necessarily have to be in a slide. Maybe it's just a maybe just a note on why this would be useful in the future.

- Commissioner Jones said right, right. Yeah, Larry, Nate that seems to make sense to you?
- Commissioner Dawson said it does, it does.
- Commissioner Jones said okay.
- Commissioner Morrison said Chair Keller this is Angela. I agree, I think, noting it probably off the slide is good and the connectivity to the other workforce investments in CEJA for the transitioning workers, and their family members of their investments. There for those workers that are transitioning independent members in the legislation.
- Chair Keller said I am taking notes. I've got it down. Any other comments on this one? Okay, I'll move to slide nine gender distribution at 22:34 minute mark. At minute mark 22:49 asked any comments on this slide? Okay. Next slide race and ethnicity distribution minorities slide ten at 23:00 minute mark. At 23:20 minute mark asked any comments on this one? Alright next slide eleven effects on communities continued at minute mark 23:30. At minute mark 24:29 asked if there were any comments.
- Commissioner Devaney said I just have a question on the second slide and those statistics. And remind me, so when you were using data on the left, on the reduction in emissions, did we look at the actual closure announcements of the plant when we were creating those statics, statistics in the timeline? Or were we looking at the CEJA closure timeline to make those, because when, even before we passed CEJA, all but one of the privately held coal plants were had -- already have closure announcements. So can you just remind me of the methodology of that. I don't think the slide necessarily needs to be changed, but just for my own, as we're doing these meetings. If there's questions.
- Dr. Kriz said it's a CEJA, a closure date, so.
- Commissioner Devaney asked you didn't use the closure dates that had already been announced prior to the passage of CEJA.
- Dr. Kriz said no.
- Commissioner Devaney said okay, thank you.
- Dr. Kriz said I amend that, I'm sorry. For coal it was the actual closure announcement, because, like you said, a lot of them had already been made. For the natural gas it was CEJA because I couldn't find a lot of the announcements for the natural gas.
- Commissioner Devaney said I wasn't clear enough. I was specifically asking about coal cause that same, that same circumstance was like we observed it with natural gas. So, yeah.
- Dr. Kriz said the data comes from the E-grid database, the Environmental Protection Agency Database attracts it.
- Commissioner Devaney said the only thing I'd say on this one Jason is like the just stylistic, the font like being small on the right.
- Chair Keller said yeah, I will try to fix this and make it look better.
- Hilary of DCEO said can I also provide some aesthetics for this particular slide? If for this section on the left-hand side, I think you could take the top to 3 lines out before the colon and just list them 1, 2, 3 cause, you see, and maybe say that, but -- cause your header already says effects of communities. And then for the element on the right-hand side your sentence that says this is disproportionately strong improvement in our state emissions. You can make that a header of the top of that slide, and just and say that, like in bold: improvement in our state energy profile. Just take that phrase and make that the header, and then put the other -- the support of that in bullet points, or 1, 2, 3, like you did the other side, and so that way the slides would look the same you know, they would have similar structure.
- Chair Keller said okay. Forgive me because I don't want to show how poor my skills are.
- Dr. Kriz said if I could add something, the slides seem not to make sense the way it is, but it really does make sense in the context to the report. So, the point about at the bottom about we're going to take up environmental effects. Those are the local or community effects will be in this report that the point is you say that in your last sentence on the left. But then you present environmental effects on the right. The

point is that those are statewide effects that we have at this point and so I don't know if you simply... I would recommend deleting that last sentence on the left, and then talk it through. So just say to this point, we have statewide effects. In this year's report there'll be the community effects. I just some something to that effect. I just it didn't make sense kind of together, and it's because it's you know I did have statewide effects, I calculated, but this year is the EPA COBRA tool for local effects.

- Hilary of DCEO said while we're on that, this report will be what's, the best way to say this? The results of this report need to be considered and other state agency decisions like ICC EPA when other state agencies are right now, planning and thinking about how to address natural gas. You know how to include or not include, or to what extent they are included in Illinois clean energy transition. So, I guess my question to the Commission is how do you plan to engage and share this information with other state agencies so they can apply it, and there be a holistic approach to our transition to clean energy?
- Chair Keller said can certainly discuss that verbally.
- Hilary of DCEO said yeah it needs to be an agenda item maybe sometime in the future. Because they're conversations about natural gas right now and other agencies and our data is saying that it still needs to be closed by 2045. What does that look like? And then how does DCEO seek to plan for that?
- Chair Keller said okay. Any further comments on this slide.
- Commissioner Doshi said Chair Keller, on the right-hand part of the slide. I guess this is a question for Dr. Kriz. The stated emissions reduction percentages. Is there a baseline year for those reductions?
- Dr. Kriz replied by saying oh, there is. But I forgot. I only have to go back to the data. Look, I think it was 2021. I'll go back, and I forget which. It was either 21 or I don't think I had 22 data yet, so I think it's 2021. But I'll check.
- Commissioner Doshi said just so readers understand we're not talking about closures that happened prior to CEJA.
- Chair Keller said okay. Do you want me to add anything, Commissioner Doshi?
- Commissioner Doshi said if Dr. Kriz can identify the baseline year that could be useful to add in this text on the right side.
- Chair Keller said okay just put that in here as a placeholder and check. Then, with Dr. Kriz, inserts that. Anything else on this slide? Continued on to slide twelve at minute mark 31:58. At minute mark 33:48 asked any changes here?
- Commissioner Keener said I don't have any changes to this slide, but I was just trying to figure out for continuity sake on the previous slide. We talk about this report has data on the tax revenue as well as supply chain effects. I didn't know if we should have a supply chain slide. To summarize that.
- Chair Keller said okay, I can add that
- Hilary of DCEO asked are you planning on sharing these slides?
- Chair Keller said yes.
- Hilary of DCEO said okay.
- Commissioner Doshi said Chair Keller, can I ask a question for Dr. Kriz, I think.
- Chair Keller said yes.
- Commissioner Doshi said so it says total property tax revenue loss would be 55.4 million per year. Does that mean that when all the coal and gas power plants are closed... inaudible?
- Dr. Kriz said it's based upon closure date. So it would be, yeah, that's the average over the period. So, it's obviously going to be less initially and then ramp up.
- Commissioner Doshi said got it, okay.
- Dr. Kriz went on to say I could say one thing that last bullet is something I'm working on as part of phase 2. I don't know if you want to say that is, we do have a wind and solar siting model in phase 2 which I'll talk about this morning and so we can identify better what the property tax revenue gains are by county.

- Commissioner Doshi said I have a question that's maybe not for the slide, but just for my understanding and curiosity, then does that mean the total property tax revenue per year, attributable to all the coal and gas plants is more than 55 million?
 - Dr. Kriz said that's an average per year. So yeah, it's considerably more. But again, the wind and solar gains are going to be much larger also. You're talking about billions of dollars in investment that will be taxed.
 - Chair Keller asked any other questions on this slide move to the limitations on the findings. Again, I need to probably balance the two slides out. I'll do some fine tuning. Continued at minute mark 36:49 on slide thirteen. At minute mark 37:15 asked any changes to this?
 - Dr. Kriz said again, I just might specify. It's the community or local environmental effects. We have statewide estimates.
 - Chair Keller said okay, I'll adjust.
 - Dr. Kriz said I was talking about on the right-hand side.
 - Chair Keller said those are just my notes. So yeah. Come back to that then.
 - I'll go to what is next. Continued on slide fourteen at minute mark 37:50. At minute mark 38:23 asked any changes to this slide.
 - Chair Keller went on to the last slide at minute mark 38:25, which was a thank you and questions slide that had all of his contact information. I hate to do this. I do have to run to another presentation. I will make all of the changes and fine tune this before the 13th. I can even redistribute to commission members as well. What I would ask the indulgence of the Commission is if I may appoint Lisa Jones as the chairperson pro tem. So that she can facilitate this meeting and allow Dr. Kriz to give his presentation while I step away. Any objections to that, if not, I thank you for your input. Lisa, I'll hand it off to you and have a good day.
- V. Dr. Kriz update
- Commissioner Jones said great thanks, Chair Keller. Went on to say all right, Dr. Kriz, if you don't mind, we will turn it over to you for your presentation.
 - Dr. Kriz said okay, let me pull up my presentation here. I have to apologize for my voice, apologize for that, so hopefully you can all see my presentation. I was told to give a short update on what we what I've accomplished so far as well as what remains to be done so, that's the purpose of this. So, the list of small bullets here are the things which we outline needed to be done in the phase 2 report. Started presentation at minute mark 40:05. A lot of what we've already kind of talked about is we went through Chair Keller's report. The items that I've completed are first of all as I said in my comments to Commissioner Devaney, we've gone to the NREL READS model for our electric capacity model. It provides a much more kind of full-fledged model for electric capacity in phase one. I use just very simple averages and projections to look at it. Just to remind people it has significantly higher estimates for electric needs, kind of what Commissioner Daveney was alluding to. In the future, especially in what they call the high electrification model which looks at adoption of electric vehicles, other things that require us, you know, internet of things, type of adoption that will require a greater electric load. So, it definitely increases capacity as well as generation. Also, updated the coal plant model, noting that the majority of coal is actually exported from the state. Therefore, we do not expect to see as many coal plant closures and very few coal plant closures in relation to the CEJA. They may close because of other reasons, but it won't be attributable to the Act. There's also...
 - Commissioner Doshi said Dr. Kriz.
 - Dr. Kriz said yes, sir.
 - Commissioner Doshi went on to say I was asking did you mean coal mine closure?
 - Dr. Kriz said yeah, I'm sorry. I should say coal mine. I apologize. Thank you. Then there is rooftop solar in the NREL data, so we have a much better model of that. You'll see data on that shortly. We just

completed, and these things we all talked about in the last presentation that I gave stuff I'll be talking about today is, first of all, our statewide economic model -- the improved economic model that we implemented and some results from that a solar and wind siting model which allows us to project where our renewables are going to be generated throughout the state and then based on that some local economic models. Depending upon kind of the granularity we want in the report. I still have to complete more local economic models, I have done them for about 20 counties. Just based on the kind of where I thought there would be the major kind of losses and gains throughout the state plus some counties of interest. Then we're also going to look at the air pollution effects, using the EPA COBRA tool and then identifying developing industries and plant closure regions. That's one of the one of the things that we're required to produce. I'll talk a little bit about my approach to that at the end of today's presentation. Also, we'll also need to develop kind of the, I hate to say model, but we need to look at plant closure effects. What happened to people? That's the last kind of thing that is on my list of things to do. So that's where we're at. Any questions or thoughts about that? I'll be presenting on the statewide model results.

- Commissioner Devaney said so I had one question, and this is just out of curiosity. So, when we talk about the electric capacity model, and then you also mentioned like changes due to the impact of electrification. Did you see anything that came out of New York? I passed the city an ordinance regarding buildings, no longer being able to use natural gas and being required to be electrified and like using heat, pump technology and otherwise. Have you seen any studies that show that the impact of that on electric needs our capacity needs?
- Dr. Kriz replied by saying I haven't. I've heard about it. I think it was during Covid, wasn't it like 2021 or something?
- Commissioner Devaney said yeah, that sounds like a right timeframe. But I just, I just thought there's proposals being bandied about in the city of Chicago. That would do something similar. And I just was curious if all of a sudden, we found ourselves in a world as we continue this work where that was making progress, or certainly past, how we would know how that would impact like the forecast.
- Dr. Kriz said Los Angeles has passed a requirement to be at a hundred percent renewable global generation by 2030. I believe it is that was just passed. Also, NREL has some model-based stuff on that. When I was looking through their sites, I came across that.
- Commissioner Devaney said we don't have to consider today. But I just down the road, if, in fact, that they progress in the city as some wish to do. I just think that might factor in the work we're doing.
- Dr. Kriz said yeah, no, the I mean kind of if you if you kind of compare the mid case that is in the NREL models with the high electrification. It adds a substantial amount of generation. Capacity doesn't increase as much because some of it is off peak type of generation on kind of what you were talking about last year. But the generation numbers definitely increase, and that'll impact ultimately what we have in terms of the mix of sources.
- Commissioner Devaney said got it? Thank you.
- Dr. Kriz asked if there were other questions. Thoughts. Okay. So, the economic model again, just refresh people mind is something called a Computable General Equilibrium Model. What it does is it looks at the interaction between what you might think of as the energy market. So, the generation and consumption of electricity and the effects it has on other markets like labor markets and consumption markets. You know how people basically realize their economic well-being. One of the things you get from this model, and it's the reason we do it as compared to other types of economic models is it allows us to look at kind of follow-on effects. So, we'll see this in in a couple of slides. There's a slight take back effect. Essentially, so we're going to generate a lot of jobs from this transition we knew that from last year. I've even got better estimates this year because I've got the proper data sources. But there is that kind of slight takeback and that's the reason why we do this kind of more full economic model is to see the overall effects.

- Dr. Kriz continued the presentation at 48:40 minute mark on slide three. Stopped at 54:27.
- Commissioner Devaney said I don't think I understand this slide. Could you maybe describe the 2 lines, again?
- Dr. Kriz said sure. Okay. So, the orange line is an easier one. This is the direct losses in fossil fuels. So, coal plants, not mines, full plants, and natural gas plants close that one we talked about last year. That's just the same figures that we had last year. The blue line comes through the economic model, and this is, in fact, why we did this type of economic model because we knew that there would be some take back. So, the first one to walk through is that because the price of electricity to the end user is going to rise initially, there's going to be less disposable income of households, and that effect runs through 2028. Okay? So as households have less disposable income, they don't spend in shops and food places and everything like that. So, there are going to be some job losses we project. It's only 3 or 4,000 jobs out of that effect. And that's going to take place before kind of leading up to 2028. Does that part kind of make sense?
- Commissioner Devaney said yeah. So, on the orange line, the number on the left is job losses, right? The units in a blue line. Then it's dollar
- Dr. Kriz said I'm sorry I should have labeled it better. These are all job losses.
- Commissioner Devaney said oh, okay, when it says disposable income, I wrongly assumed you're talking about dollars that people like.
- Dr. Kriz said no, no, no, I'm sorry. This is job losses due to a reduction in disposable income.
- Commissioner Devaney said I understand now. Thank you. That's why I was having trouble with it.
- Sr. Kriz said okay.
- Commissioner Doshi said Dr. Kriz, the vertical value of the graph at any given time is the cumulative job losses. Is that correct?
- Dr. Kriz said yes, it is. There's actually a take back effect. Or there's actually the good news. And this is one of the reasons why we're going to have such a strong ability to implement. This is electric rates are actually going to fall after 2028. So, in 2030, we actually get back jobs because electrical weight rates are going to fall are for forecast to fall. So that's why, the line kind of jots back up as we actually get back jobs.
- Commissioner Keener asked when you're saying the reduction disposable income? Did you say those are across the entire workforce or... inaudible
- Dr. Kriz said yeah, it's throughout the entire economy. Yeah, and again, I was pleasantly surprised with how small the effect is forecast to be.
- Commissioner Devaney said I would just say again, if there's a way to clarify for future use, the line, if you, said job, losses due to.
- Dr. Kriz said I should really put job changes. Because again, there's actually a slight increase that we add back in 2030, I think through 2040, because of the cost of energy falling.
- Commissioner Devaney said yeah, that'd be even more descriptive.
- Dr. Kriz said okay, so that's where I'm at in terms of the statewide model. And this is just I. I've got tons of graphs, tons of data, different scenarios, different you know. So, I can talk at length I'm going to then...
- Hilary of DCEO said I have a question where, if you said this, my apologies for missing it. Where are we predicting the jobs based off of the implementation? The sustainability of these jobs and those jobs that will exist after we've implemented our clean energy transition and things under running, as we hope them to be. What does? Okay, the next slide?
- Dr. Kriz said yeah, the first slide I went over really kind of bits of that. So, we ended in 2045, because that's what we were required to. But the majority of these jobs. I guess this slide comp combined with this slide really gives you that number and it's over 30,000 jobs from 2045 onward. Because a lot of these are operations jobs by that point.

- Hilary of DCEO said the jobs that we're losing are the construction related?
- Dr. Kriz replied by saying the jobs we're losing are in fossil fuels generation. Plus, some again, just because of a small change in the wages. So, the wage, the wage increase jumps up again at the end, because we have another big generation and 2045. But as that kind of comes down then this will all also get smaller the job losses. So, by 2045 then these fossil fuel job losses are going to be 0 from that point, because we're going to be out of fossil fuels generation.
- Hilary of DCEO said right.
- Dr. Kriz said so yeah, I'll make that clear in the report. That's a good point. Now, I will take these numbers after, in their final report, and do what I did before and actually IMPLAN, has better data on this in terms of the, the mix of jobs. I'll show you that in just a second how I can do that in terms of the mix of jobs we expect to see. That will you know, like occupations?
- Commissioner Doshi said Dr. Kriz, on slides three and four where you show job changes in, I guess what you're referring to as the you don't use the word primary sector, but I sort of think of it as primary sector, because slide five says, other sectors. Does that mean the power sector alone, or does it consider jobs in the fields of like contractors or electricians?
- Dr. Kriz said yeah, this is, this includes supply chain impacts. And that's one of the things I was required to. So, this will include, for example, in the construction phase. So, it's best to see this in slide four again this includes construction workers, but everybody who works at a manufacturing plant who does turbine generation. Turban manufacturing as well as solar panel manufacturers, everybody there. So, this is total jobs throughout the economy including what we might call indirect or induced impacts from the changes.
- Commissioner Doshi said that would include jobs to electrify buildings. And yeah, install electric vehicle chargers and work like that.
- Dr. Kriz said I'm not sure about yeah, those because that no, I don't think that would include well, include anything with distributed solar. So, anything that's related to that but the electrification itself I don't think that'll pick it up.
- Commissioner Doshi said okay.
- Dr. Kriz said yeah. Okay. Other questions. These are good questions.
- Commissioner Dawson said I'll say that with this slide, that one thing that immediately hit me and maybe it kind of speaks to Commissioner Doshi's comment as well. Maybe is I just see the precipitous drop off here in jobs, and if under construction. If that does not include a lot of the electrician work with regard to distribution with regard to EVs, then it makes me a little less concerned because I know we're right now working really hard to try to increase the number, well, try to work very closely with IBEW and others to get their electrical apprenticeships to accept a lot more of pre-apprentices to get a to get a lot of this electrification done. But it's very concerning that. All that work essentially could go by the wayside. If a tremendous number of those jobs are going to disappear.
- Dr. Kriz said again, what I would stress is this is the generation side. This is simply on the generation side. So, if there are electrical there, in fact, there's going to be a big demand for electrical workers for the transmission lines to connect us that is included in here. But anything on the demand side, the electrification side is not included in here. So, in a way this may kind of augment. You know one of the things that is concerning here, and this leads to the losses due to the wage increases is we're going to have to import labor during this period, and that that the economic model picks that up there just won't be enough people to do all the construction and we have an unemployment rate that's what 4% now. It's going to be very difficult to generate the amount of labor we're going to be importing it for other states that's going to raise the wage rates temporarily. So that's why it leads to this blue line which I didn't adequately label is, you know, a loss of almost 10,000 jobs because the wages are going to go up.
- Hilary of DCEO asked does this includes the infrastructure for transmission? Like, does this include...
- Dr. Kriz said yes it does, anything on the generation transmission side.

- Hilary of DCEO said okay, I have a comment. I do see Amanda here and Andrew. But on the 20th and 21st there is a conference that will be held in Normal Illinois, the Illinois Renewable Energy Conference and I wanted to know if you were planning on attending first of all? Or if there are any commission members who will be attending that event?
- Dr. Kriz said I'm not.
- Hilary of DCEO said okay. Also, that will be occurring that day is a Round Table of that is being facilitated by DCEO's red team. And this is our strategic Illinois strategic plan, and how we will implement clean energy right? And of course, CEJA is part of that implementation strategy, the information and the data, and this Commissions report should be represented at these conversations, one at that event, and two in, particularly at this round table conversation, as Illinois seeks to implement it 's strategy for clean energy. This this data is essential to making those decisions and establishing that strategy. So, I'm simply asking the Commission just to discuss who could one represent the Commission at this round table, and two who would be prepared to provide and have this data available to add to the conversation?
- Commissioner Jones said I think that's a very good point Hilary.
- Commissioner Devaney said I'd say, since planning on doing these presentations at the regional meetings, also because he's not here, I think, Chair Keller would be an ideal candidate.
- Commissioner Jones said I was thinking the same exactly.
- Commissioner Devaney said no objection, done.
- Commissioner Jones said hey, could we just pause for a minute? I just want to do a time check with everyone. This is a great conversation, but do want to be cognizant of folks time, but still allow Dr. Kriz to get through his presentation. I know the agenda only had us going for actually a half an hour. So, when we you know, we're half an hour past that so.
- Commissioner Morrison said Commissioner Jones, just want to note that I do have to jump off at 11. I have a hard stop at 11, but I do plan to be there in person. And Romeoville. I do appreciate Hilary's comment about this data. I recognize that it is part of Dr. Kriz's phase 2 report. So not at the point to share out at that upcoming meeting, but I think it's a good idea to have something like this presented. I won't be there at that event happening later this month. But I know some folks that are attending.
- Commissioner Jones said okay, great.
- Dr. Kriz said I was just going to say that, so thank you. Commissioner Morrison. The point here is this phase 2 report has not been accepted signed off on by the Commission, and so I would say that this is preliminary at this point, and I would point out that in the phase one report I got such good input from several commissioners that really shaped its form. So, I would be a little bit low to present this preliminary work until I get that input.
- Commissioner Jones said yeah. The one thing, though, that does come to mind for me is, we are right now. In DCEO, meaning, we are doing our economic development plan. So, it does feel like some of this information would be pertinent for that plan. So, I'm not really sure what the protocol is, since we haven't signed off on this yet for the phase 2 and the timing of the reports are kind of out of sync, but I do think it might be worth having a conversation about how to not marry, but make sure that we're at least referencing in the Economic Development Plan that this information's forthcoming.
- Dr. Kriz said I'm glad to make presentations as requested. But I want to make sure it's the Commission requesting it because I work for you.
- Commissioner Jones said sure, sure, absolutely. Yeah. So does anybody have any thoughts with us, at least pursuing a conversation with internal DCEO staff on this preliminary information for purposes of the Economic Development Report.
- Commissioner Dawson said of its relevance.
- Commissioner Jones said pardon.

- Commissioner Dawson said I agree of its relevance. And I mean, you're asking who? How should we apply this information? How we should get that information to be a part of that Economic Development discussion, you mean?
- Commissioner Jones said yes, exactly. Yeah. And you know, like, I said, maybe it's just at this point a reference since the you know, the entire Commission hasn't signed off on it. But certainly, would love other Commissioners thoughts on at least an initial conversation with Dr. Kriz having with our team. That's doing the Economic Development Report.
- Commissioner Devaney asked Lisa what are you asking to do specifically?
- Commissioner Jones said yeah, I just think so. One of the Economic Development Report or Plan. Sorry is actually required every 5 years. And it looks at it outlines like, what are the growing sectors? What are going to be the sector priorities for the state and industries for the state. What strategies will we be looking at to deploy as part of, as in the next 5 years. And so, I'm just thinking that some of this job information that Dr. Kriz has been talking about is relevant for that report.
- Commissioner Devaney said I don't have any objection to it, but if we could have a little bit of time to, just since we're just seeing it for the first time now to review it and have some other people like in within our own organizations take a look at it. Who might have a level of expertise, and then we can confirm it.
- Commissioner Jones said yeah, sure, absolutely. Yeah. And like I said it, it may be just something, you know, a reference we can say, you know this report, the Energy Workforce Transition Commission report is going to be forthcoming and we're going to look at what kind of strategies come out of that report to incorporate in the larger economic development plan. And that's bad wording. Sorry about that. But just even if it's something like that, I think would be helpful.
- Commissioner Dawson said if we make any. Commissioner Jones, if we make any references to, if we decide to make any references to the document in its current shape. Would it be appropriate just to make those, as you know, to refer to it as a draft document, since it hasn't been adopted and approved by the Commission yet?
- Commissioner Jones said yes, I think. Yes, absolutely. All right. Sorry, Dr. Kriz. I didn't mean to take us down a trail...
- Commissioner Doshi said yeah. Thank you very much. I noticed we just lost Commissioner Morrison. I wanted to say was not directly related to the question of the draft report, but I just wanted to say, before Commissioners left at 11. If anyone is desiring to go to the Romeoville meeting next week. If anyone's able to be picked up anywhere around the western suburbs, I'd be happy to give anyone a ride just wanted to put that out there, and anyone can contact me if you're interested.
- Commissioner Jones said well, thank you for that. Yeah, I will not be at the Romeoville one, I'm planning on the Pekin and or Marion locations. So okay, in the interest of time. I think Dr. Kriz, are you, I noticed were on... inaudible
- Dr. Kriz said I can. I can go through these slides fairly quickly and just briefly talk about how I got to the wind and solar sighting model. Continued presentation at slide six at minute mark 1:13:58.
- Dr. Kriz went to slide seven at minute mark 1:17:25. At minute mark 1:20:56 asked are there any questions on that? Continued at minute mark 1:21:01.
- Dr. Kriz finished the presentation at minute mark 1:22:47, then asked if there were any questions, any thoughts?
- Commissioner Jones said okay, thank you Dr. Kriz we appreciate you taking the extra time.
- Commissioner Doshi said if you can't hear me, stop me, and I'll put my comments in the chat. My comment is that several municipal utilities throughout the state have relatively difficult policies and protocols for connecting rooftop solar. And I don't know what the Commission thinks about integrating that fact in into your analysis of where the best opportunities for solar are, but I just wanted to mention that.

- Dr. Kriz said that's actually included in the NREL, the technical. They have a database of municipal policies. And again, we're I'm assigning it at the county level. So somewhat Springfield has their own municipal ordinance, but other parts of the county may develop. But yeah, that is, and I check to make sure that was the case, because I saw that on their site.

VI. Public Comment

- Commissioner Jones said okay, do we have any other questions for Dr. Kriz? If not, we will start to close the meeting out by taking public comment. And I did see in the chat we do have one individual wanting to provide public comment. Prairie Rivers network would you like to.
- Amanda Pankau of Prairie Rives Network said so I appreciate the update today. To the phase 2 report understanding that most of Illinois coal goes out of state. So, what our coal utilities sector does won't necessarily drive coal mine retirements. So just kind of food for thought for the Commission. Our Illinois Department of Natural Resources is our state agency that does coal mine permitting. They work closely with industry on these permits, many of which have plans for the future. They know what the recoverable reserves are. They know what the current permit allows them to mine, what they might mine in the future. Anyway, I'd love to see the Commission work closely with the Department of Natural Resources to better understand our coal mining industry and understand which mines might close, and when, perhaps, industry would even join the conversation. And one of the big reasons this is important, of course is so, communities can plan better in advance, particularly for the transition community grants. That were created by CEJA and administered by DCEO communities are eligible to apply six years before a coal miner coal plant closure occurs. So, we saw communities like Newton apply for the grant this year because their coal plant will close in 2027. This is something that's not currently available to coal mine communities because they don't have those closure dates. And ultimately those closer days usually come with just a few months' notice, just like we used to see with the coal plants. So, we've made a lot of progress with the coal plants and Vistra and energy, you know, have let communities know up to sometimes five plus years in advance now. But we don't have that same thing going on with the mining industry, so would love to involve the Department of Natural Resources in this conversation. I've attempted, without success, to reach out to them to try to spur this conversation, would love to be part of this conversation. The Commission is able to use their power and influence in the state to begin what that might look like, so that we can sure ensure those communities have a better idea of job losses, revenue loss and also access to those grants. So maybe that's something, if not covered in this report could be a recommendation of something that our state and the Commission could look at in the future.
- Commissioner Jones said okay, thank you.
- Amanada of Prairie Rivers Network said a couple more things, and I do promise to be. I'm not usually a long talker. But also, similarly, kind of just a flag for the future that Illinois surprisingly does have a rather a robust oil and gas industry, particularly in the southwestern counties of our state. And there's some pretty outstanding numbers of tax revenue and jobs there. So, I know you know, we don't have State policy. Guiding the transition away from that industry. However, it's likely something that will also be impacted as our state and nation reaches decarbonization goals. So just another flag of I need to start a conversation of what does the transition for those oil and gas producing counties look like, how are they eligible for some of these grants? My knowledge is, CEJA does not include loss of oil and gas, tax revenue or jobs. And like that, grant, for instance, so just a flag of maybe potential future policy needs and something this report could maybe mention as a recommendation for the future. I think a couple of other of the notes I had jotted down were kind of addressed by Commission members, including insurance that you know, transmission is looked at, Miso has, approved Tranche 1 of the largest transmission mission plans in US History along which will come a lot of jobs. A lot of additional opportunity to move clean energy around might change where and how much we need to build, depending on the timeline of Tranche 1 so just ensuring that that's included in the models, both from a

generation standpoint, but also from a job standpoint. There's me a lot of jobs created there. And then kind of actually, my final point was related to what Commissioner Doshi just mentioned with the rural electric cooperatives and municipal utilities. And long-term contracts with coal that may prevent their members, owners, and communities from accessing clean energy resources. It sounds like some of that is included in the model. But just to kind of a something else to kind of put a microscope to here in the future is, how can we help those Co- ops and municipal utilities? Plans for the future? Especially with the loss of revenue, loss of jobs from the coal assets they own, and or other fossil fuel assets. And then also being able to take advantage of these State and Federal opportunities while they exist. In light of their long-term contracts with coal. So those are just a few of my comments today. I would also take this opportunity of having them microphone to say that I continue to hear from communities about their Energy Transition Community Grants, many of which have not yet heard from their grant administrator. And I'm getting a lot of questions on when they might love to. Yeah, have an update from DCEO, even just boilerplate language of when folks might hear from the grant managers. Some of these for both projects are weather sensitive, so they're anxious to get started this fall before winter hits. So, any boilerplate language on things I could be telling communities about the status of hearing from their grant managers would be helpful. Thank you.

- Commissioner Jones said thank you. that's a lot of great discussion points to put on the agenda for our next meeting, and I don't know, Hilary, if you're still on, do you have just a quick minute to do an update on the energy transition grants?
- Hilary of DCEO said sure. So, all of those who have received awards have been informed. I do not have a timeframe on when their grant managers will contact them. OGM is the is handling that, the Office of Grant Management is handling that bucket of grant awards. So, I will send an email to see if they can give me an idea. But everyone has been informed if they were funded.
- Commissioner Jones said thanks Hilary. There was a follow-up question in the chat. What should communities that have not received their award notifications do? For example, Fulton County has not heard anything.
- Hilary of DCEO said they should reach out to the email that was provided in the notice of funding opportunity and specifically to get the current status of their award.
- Commissioner Jones said great. Thank you.

VII. Adjournment

- Commissioner Jones said alright, if there's no other public comment or anything else, I will entertain a motion to adjourn the meeting.
- Commissioner Dawson motioned to adjourn.
- Commissioner Jones said is there a second?
- Commissioner Keener seconded the motion.
- Commissioner Jones said all in favor please say aye.
- All voted aye, the motion passed.
- The meeting was adjourned at 11:21 am.

– Future meeting dates

- September 13th at 6 pm- Romeoville
- October 11th at 11 am
- October 18th at 6 pm- Pekin
- November 9th at 6 pm- Marion
- December 6th at 11 am

Minutes submitted by: Tonda Reece, UIS on 9/18/2023

Materials:

- I. 9/7 meeting audio [Energy Transition Workforce Meeting 9/7-Zoom](#)