

Vectren 2019 IRP
4th Stakeholder Meeting Minutes Q&A
 June 15, 2020, 1:00 p.m. – 3:30 p.m.

Lynnae Wilson (CenterPoint Energy Indiana Electric Chief Business Officer) – Welcome, Safety Message (Firework Safety Tips), and Vectren Introductions

Subject Matter Experts in the Room: Matt Rice, Justin Joiner, Natalie Hedde, Bob Heidorn, Wayne Games, Angila Retherford, Jason Stephenson, Ryan Wilhelmus

Subject Matter Experts Participating Via Webex: Ryan Abshier, Rina Harris, Shane Bradford, Angie Casbon-Scheller, Tom Bailey, Steve Rawlinson, Chris Leslie, Heather Watts, Cas Swiz, Matt Lind, and Gary Vicinus

Stakeholders: Approximately 180 stakeholders registered to participate in the Webex meeting. List of affiliations include the following:

ACES	First Solar	NextEra Energy Resources
Advanced Energy Economy	GE Gas Power	NIPSCO
AECOM	GSG Communications LLC	Origis Energy
AEP	Hallador Energy	Orion Renewable Energy Group
AES/IPL	Hoosier Energy	Ranger Power
Air Quality Services	I&M	Repower IN and Solarize Evansville
Alcoa Corp	IBEW Local 702	Shell Energy
Arevon Energy Management	Indeck Energy Services, Inc.	Sierra Club
AstraZeneca Pharmaceuticals	Indiana Coal Council	Solarize Indiana Inc
Boardwalk Pipelines	Indiana Office of Utility Consumer Counselor	Solarpack Development, Inc.
Bowen Engineering	Indiana DG	Southern Illinois Generation Company
Citizens Action Coalition of IN	Indivisible Evansville	Southwest Indiana Chamber of Commerce
City of Evansville	Inovateus Solar LLC	St. Joseph Phase II, LLC
Community Energy	Invenergy	State Utility Forecasting Group
CountryMark	IURC	Valley Watch
Earthjustice	juwi Inc.	Vectren Industrial Group
Economic Development Coalition of Southwest Indiana	MEEA	Vermillion Rise Mega Park
Energy Futures Group	Midwest Fertilizer	Vote Solar
Energy Ventures Analysis Inc	Morton Solar	Whole Sun Designs
ENGIE Solar	New Master Development LLC	

Presentation Summary:

Lynnae Wilson (CenterPoint Energy Indiana Electric Chief Business Officer) / **Matt Rice** (Vectren Manager of Resource Planning) Meeting Guidelines, Agenda, IRP Stakeholder Process, and the presenting of the Preferred Portfolio

Peter Hubbard (Manager of Energy Business Advisory, Pace Global) Risk Analysis Process and Results

Justin Joiner (Vectren Director of Power Supply Services) Future Considerations, MISO OMS Survey Results, and Next Steps

Lynnae Wilson (CenterPoint Energy Indiana Electric Chief Business Officer) Closing Comments

Stakeholder Q&A:**Question:**

Wendy Bredhold: When do you plan to share the slides?

Jean Webb: I'd like to have it now to print out and mark up.

Suzanne Escudier: Will the PPT be available after the meeting?

Wendy Bredhold: Can you post slides now since we are done?

Answer:

The slides will be posted today at www.vectren.com/irp at 3:30 Central.

Question:

Wendy Bredhold: Are you building that wind in 2022?

Answer:

We will continue to evaluate this resource, and there could be a second RFP (timing is yet to be determined).

Question:

John Blair: Are you planning ownership or PPA for both wind and solar? If so, are you also prepared to use your power of eminent domain to secure the necessary sites for both? Last are you considering using useless, non-productive stripper pits as sites for your solar plants?

Answer:

Eminent domain would be a last resort.

Answer to Second Question:

We are looking at all of the above. We are looking at all of the land around us trying to determine the best plan forward.

Question:

Mike Mullett: Please define "universal solar" in relation to transmission-connected vs. distribution-connected solar and/or above/below 10 mw facilities.

Answer:

Universal solar is utility scale solar, which is the most cost-effective option for our customers. Customer owned solar connected to the distribution system was accounted for in our load forecast as a load reduction, reducing the resources needed to serve our customers. That forecast is included in a report at www.Vectren.com/irp, titled 2019 Long Term Electric Energy and Demand Forecast Report.

<https://www.vectren.com/assets/downloads/planning/irp/IRP-2019-Vectren-Sales-and-Demand-Forecast-Documentation.pdf>

Question:

Wendy Bredhold: What is the retirement date for Culley 3 in this plan?

Answer:

The preferred portfolio continues to run Culley 3 throughout the forecast, but that can be determined at a later date.

Question:

Laura Arnold: Are there any phone numbers available for someone to call who is experiencing Internet difficulties?

Answer:

Phone number: 1-415-655-0003, access code: 1332773493

Question:

Emily Medine: What is assumed about MISO dispatchability of wind and solar?

Answer:

For solar it was assumed capacity factor would be around 24% and 38% for wind.

Question:

Emily Medine: No. MISO's right to dispatch

Answer:

We use MISO's current practices and provide a forecast and then MISO dispatches our units based on that forecast.

Question:

Mike Mullett: Please comment on the Forum Energy - Great River Energy Agreement re very long duration storage -- see, e.g. , <https://www.greentechmedia.com/articles/read/form-energys-first-project-pushes-long-duration-storage-to-new-heights-150-hour-duration>

Answer:

We will review this after the meeting. We did model 8-hour flow batteries but they were not cost effective, thus not selected.

Question:

Mike Mullett: Please comment on the Vectren Electric capex requirements for the Preferred Portfolio, especially regarding BAU and other portfolios evaluated.

Answer:

There aren't any capital requirements for the preferred portfolio but all paths forward cost money, including BAU which would require a large investment. We don't know what capital spend will be at this point because we haven't determined how much solar and wind will be PPA vs. an ownership option.

Question:

Michael Smith: With renewables and DR increasing to 64% of portfolio, what percentage of that 64% renewables will be Vectren-owned resources or will the energy be procured through 3rd party PPAs?

Answer:

This is yet to be determined.

Question:

John Haselden: Will the gas pipeline to the CT's be sized for additional future resources?

Answer:

This is yet to be determined.

Question:

Suzanne Escudier: Can you type in the website where we can find the presentation after the meeting?

Answer:

www.vectren.com/irp. At this site you will also find all materials from past meetings. The deck will be posted today at 3:30 p.m.

Question:

Jean Webb: So, the reason for not selecting the renewables by 2030 portfolio is because of your limits on market sales/purchases? How much is now purchased from market as a reference.

Answer:

This portfolio had a heavy reliance on the market for both capacity and energy and we felt that the preferred portfolio performed better overall. This portfolio also relies heavily on battery storage which is an emerging technology. It also requires an additional \$20-\$30 million in transmission system upgrades. With renewables it is important to have dispatchable resources to back them up when not available. [In 2019, Vectren purchased approximately 9% of its need as a percentage of generation].

Question:

Jean Webb: Will the current wind contracts be renewed? Benton and Fowler Ridge.

Answer:

We will look at all resource available in the RFP. Also, these contracts don't expire for several more years (late 2020's).

Question:

John Blair: What are your current plans for Warrick 4?

Answer:

We currently plan to exit joint operation of Warrick 4 in 2023.

Question:

Mary Lyn Stoll: As noted in the presentation, technology and renewable energy markets are in a period of rapid growth and transition. Given how quickly these changes occur, does Vectren have a formal policy in place to continue to actively review the latest updates and changes to quickly determine whether and when a higher proportion of renewables would become the best option given Vectren's goals?

Answer:

This IRP is a first step in this process, and the analysis will be performed again in 2022.

Question:

Anna Sommer: Where do you stand with respect to negotiations with respondents to the RFP? Are you planning to acquire these planned new resources from those respondents and the question is whether those acquisitions are PPA or asset transfers? Or is there some other resource acquisition process anticipated?

Answer:

We've been in communication with respondents to gain more clarity on the status of the projects. We are still working to determine what projects will be PPA and which will be utility owned. A second RFP would be the other resource acquisition process at this point.

Question:

Crystal Young: Is there any plan for electric vehicle infrastructure buildout?

Answer:

We are actively investigating this enterprise wide to determine our best steps forward for both the Houston area, as well as southern Indiana. We did include an EV forecast as an addition to load so we've thought through what the need would be from a generation standpoint.

Question:

Mike Mullett: How is OVEC contract being modeled, and for how long in the Preferred Portfolio?

Answer:

OVEC was modeled as a PPA and is included as a resource in the preferred portfolio throughout the forecast.

Question:

Michael Smith: Assuming the 2 each, GTs (460MW) are simple cycle and not a 2 x 1 CCGT with HRSTG boiler and steam turbine for waste heat?

Answer:

Correct. These are 2 simple cycle gas turbines.

Question:

Sadie Holzmeyer: Since it is currently financially beneficial for business and homeowners to invest in their own solar panels to not only sustain their own energy needs by generating their own renewable energy independent from Vectren's energy production, but also save money into the future, could Vectren not consider something like incorporating rooftop solar to supplement their renewable energy demands?

Answer:

We modeled universal solar because it is the most cost-effective solution for our customers.

Question:

Jean Webb: I had asked about modeling expanding net-metering so that rooftop solar expanded, and therefore less capacity would need to be built. Was that done?

Answer:

We modeled about 84 MW's of installed capacity from rooftop solar as a reduction to our load. There was not a portfolio where we modeled leasing space on customer roofs to install solar. There is a lot of cost and legal issues with this approach. Large scale solar is more efficient; plus, we would not get capacity credit from MISO with rooftop solar.

Question:

Mike Mullett: When will next all-source RFP be conducted? Will there be stakeholder engagement on the terms and conditions of that RFP?

Answer:

The RFP in the fall would not be all-source. The next all-source would potentially be for the next IRP but we've found there are many difficulties with this process. The long time frame makes it difficult for developers to hold their projects and pricing plus many projects are picked up by other groups while the IRP analysis is being performed.

Question:

Niles Rosenquist: On an annual basis, how much of the power production did you show earlier is projected to be from the gas turbines?

Answer:

Matt Rice reviewed the generation graph on slide 19 showing a small amount of generation from combustion turbines.

Question:

Anna Sommer: When does Vectren anticipate coming in for regulatory approvals for these new resources? And what steps remain before that happens?

Answer:

We are working on evaluating the best time to make our submissions, but it will likely be done over a period of time. We will likely start with some of the renewable resources we need later this year and the gas CT's will likely be in 2021.

Question:

Jean Webb: What years will the gas plants open?

Answer:

We are projecting they will be in service in the 2024-2025 planning year.

Question:

Jean Webb: Where will they be built?

Answer:

This is yet to be determined, but the A.B. Brown site offers many benefits including close proximity to the 345 KV transmission line, existing equipment that can be utilized by the CT's, as well as existing interconnection rights.

Question:

Jean Webb: Update on coal ash ponds there?

Answer:

We have contracts in place to recycle the ash from the Brown ash pond for use in a concrete application. We would anticipate filing our application with IDEM for approval probably in 2021. The west pond at Culley is almost complete and should be complete later this year. We are currently evaluating the east pond at Culley to determine how we will close it.

Question:

Pam Locker: Can you remind me of the expected cost of the natural gas plant?

Answer:

Two CT's are around \$300-\$320 million. We will have a better idea after the equipment is sent out for bids.

Question:

Jean Webb: Does that cost include the gas lines our will that go on our bills as a rider?

Answer:

If a pipeline is needed then yes, it would be part of customer rates. We won't know exact cost until we determine where the CT's will be built. [Pipeline cost estimates were included in the modeling as a firm gas service.]

Question:

Wendy Bredhold: How do you justify to continue to run Culley 3 when it isn't a least cost option?

Answer:

When we looked at Culley 3 in 2016 there was a little bit of premium to run that unit but we received approval to upgrade the plant and plan to implement those upgrades for diversity of our fleet.

Stakeholder Feedback:

Mike Mullett: Thank you for a very informative and interactive presentation, especially given the virtual nature of the meeting. For me, at least, the internet quality was very high, both in terms of the slides and the audio. The use of the Chat for Q&A was also very helpful.

Pam Locker: Thank you for increasing the percentage of renewable resources.