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Indiana Utility Regulatory Commission
PNC Center
101 West Washington Street
Suite 1500 E
Indianapolis, IN 46204

Re: Comments to Vectren 2014 IRP

Dear Indiana Utility Regulatory Commission:

Thank you for considering my comments. I participated, in person, at all three public meetings held by Vectren, yet was still shocked and dismayed by the lack of competence displayed by the 20 year plan submitted by Vectren. Their plan was basically, no plan, but to continue with virtually all coal for the next 20 years. They have failed to recognize and submit a plan to adapt to the evolving role of the utility.

Vectren's 20 year plan does not reflect the conclusion by utility industry and finance experts that almost without exception the riskiest investment for utilities, the ones that can cause the most financial harm for utilities, ratepayers, and investors, are large base load fossil fuel plants.

As grid modernization occurs to enhance the reliability of electricity service, reduce electricity costs, and empower customers to adopt new electricity technologies, the winning power resources will be the ones with low marginal costs like wind and solar. Vectren needs to acquire renewables to thrive in the new environment.

If Vectren continues with the path they submitted, the costs of their primarily coal-generated electricity will be higher than ratepayers can bear, and the operations will no longer be profitable to Vectren. Vectren will then turn the facilities over to the government, and the government will have the burden of cleaning up the mess Vectren created. Their current plan is not economically sustainable, and it leaves ratepayers with too high rates and too much risk.

170 IAC 4-7-4 Methodology and documentation requirements

A discussion of how the utility's fuel inventory and procurement planning practices have been taken into account and influenced the IRP development.

Due to the previous vertically integrated structure of Vectren owning both the coal source and the utility, and their vested interests in continued contracts, I request an independent auditor ensure coal prices were, and are, just. Ensure ratepayers were not/ will not be harmed by the inherent conflict of interest.

170 IAC 4-7-5 Energy and demand forecasts

A utility should include a forecast, at a minimum for high, low, and most probable energy and peak demand forecast based on a combination of alternative resources.

Vectren has not complied with this requirement in either the 2011 or 2014 IRP. The 2011 IRP identified only Base and High energy and peak demand. The 2014 IRP identified Base, High, and Low energy and peak demand. Most probable energy and peak demand were not identified. If “base= most probable”, the IRP needs to state those are equivalent terms.

170 IAC 4-7-6 Resource assessment

The utility’s electric power resources must include at a minimum, the net dependable generating capacity, including retirements, deratings, and plant life extensions.

In the Vectren 2011 IRP, no mention was made regarding any issues with Broadway 1 gas peaking facility and it was listed as a resource in meeting summer peak capacity demand for the entire projected 20 years. Reference page 166 of the 2011 IRP. However, in the 2014 IRP, Broadway 1 has been loss for meeting summer demand. The loss of this plant is significant, because as demand decreases, we need to lose high-cost coal plants, not this low-cost peaking unit. Vectren has left out the Operation & Maintenance (O&M) costs of the facilities in the 2014 report, but is clear from the 2011 report (p.166) that the O&M for Broadway1 was \$11.07/Kw-yr, versus up to \$32.97/Kw-yr for Culley 2. Vectren must bring Broadway 1 up to full operating capacity – at their expense. It was due to their negligence that it is no longer used to meet summer capacity. Vectren has a responsibility to ratepayers to cut overhead, and maintain equipment at peak efficiencies to produce electricity at a just rate.

Additionally, the %EFOR, a measure of unreliability of the generating facilities, increased for Broadway 2, Warrick 4, and AB Brown 4. Reference page 186 of the 2014 IPR, versus page 166 of the 2011 IRP. There is no explanation for the decrease in reliability. Vectren needs to improve the operating efficiencies of the facilities for peak performance. Poor operational practices increase the ratepayer costs.

The amount of capacity of each generating plant has been reduced across the board from the 2011 IRP to the 2014 IRP. The report needs to discuss the method of calculation that changed the capacity. Reference page 15 of the 2011 IRP, to page 19 of the 2014 IRP.

An electric utility shall provide a description of the utility's electric power resources that must include, the significant environmental effects, including: solid waste disposal; hazardous waste; and subsequent disposal.

Vectren ratepayers made a \$20 million investment in ash handling and loading which enabled Vectren to beneficially reuse 100% of its fly ash. Verify that the proceeds from the sale of the fly ash to cement manufacturers go to the ratepayers, and not to Vectren Corporation.

The utility shall consider a comprehensive array of demand-side measures that provide an opportunity for all ratepayers to participate in DSM, including low-income residential ratepayers.

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Vectren has reduced their efforts in the Direct Load Control (DLC) program. Vectren was granted a rate increase in Cause No. 43830 to maintain and upgrade equipment for this summer cycler program. At that time, they claimed a 25MW program capacity. However, a comparison of 2011 IRP page 22 and 2014 IRP page 28 shows a clear intent to let this program wither. Now they only project 17MW for this program. As rates increase, there's no reason this program should decline in use.

Likewise, the same page comparison indicates their intended lax implementation of the Interruptible Power Agreements. Recent years show an increase from the 2011 IRP projected 35MW to a current 50MW, then it drops off to only a projected 28MW in the 2014 IRP. This indicates an intentional decrease in the effort to pursue Interruptible Power Agreements.

DSM programs are CRITICAL to reducing electric rates. Demand must drop so that coal plants can be retired, ratepayers can be freed from the heavy costs of operating coal plants, and Vectren can diversify to less expensive generating sources. Vectren has known for well over 15 years the coming environmental regulations and the costs of meeting those regulations, but failed to diversify away from coal.

170 IAC 4-7-8 Resource integration

Demonstrate that the utilities resource plan utilizes, to the extend practical, all economical load management, conservation, nonconventional technology relying on renewable resources, cogeneration, and energy efficiency improvements as sources of new supply.

The 2014 IRP considered a new build of a 50MW solar facility. It also looked at purchasing power; however, it did not look at Power Purchase Agreements for Solar. Austin Energy this year signed a 20 year Power Purchase Agreement (PPA) with Recurrent Energy for a 150MW solar facility at less than 5 cents/kWh. <http://www.austinchronicle.com/news/2014-07-04/aes-solar-deal-game-changer/> Adjusting for the lower Solar Irradiance in Evansville, IN versus Austin, TX, an equivalent rate would be around 5.66 cents/kWh. Also, there are no up-front costs. Vectren ratepayer funding of new facilities is not likely due to the excessive rate burden they already carry, so the PPA is an ideal solution. The contract can be clean with a known rate for 20 years. The IRP should include multiple bids from solar PPA providers such as Canadian Solar, SunEdison, or Clean Energy Collective. Vectren must diversify away from coal to reduces costs and risks to the ratepayers. Over the course of the 20 year IRP plan, a cycle of adding 150MW or larger units of solar PPA should be interspersed with coal plant retirements.

Discuss how the utilities resource plan takes into account the utility's judgment of risks and uncertainties associated with potential environmental and other regulations.

The Pentagon issued a 2014 report <http://www.acq.osd.mil/ie/download/CCARprint.pdf> that asserts that Climate Change represents an immediate threat to national security, with increased risks from terrorism, infectious disease, global poverty and food shortages. It also predicted rising demand for military disaster responses as extreme weather creates more global humanitarian crises. For Vectren to present a 20-year plan in its IRP for continued use of all its existing coal plants is detrimental to national security. Even if the regulations to ban coal plants aren't here yet, a plan to move away from coal is the only prudent path. The IRP plan indicates Vectren is ignoring this issue and are hoping it will go away. Such a plan is irresponsible and

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demonstrates willful ignorance. The sociopolitical environment must be more heavily considered as in done in other IRPs recently issued. Reference:

http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2013IRP/PacifiCorp-2013IRP_Vol1-Main_4-30-13.pdf

The grid is evolving to be more secure, resilient, and adaptable in case of weather disasters like Sandy, terrorist attacks like occurred in San Jose, CA in 2013, or cyber-attacks. The evolution calls for diversification, smaller-scale distributed resources, and the introduction of self-healing microgrids.

Ignoring the sociopolitical environment leaves ratepayer at too great a risk. The risk may be minimized by diversification from coal. A good report directed at State Regulators was issued by Ceres in November 2014, and may be found at <http://www.ceres.org/resources/reports/practicing-risk-aware-electricity-regulation-2014-update> reference page 16 of the report for a risk ranking of resources.

Demonstrate that the most economical source of supply-side resources has been included in the integrated resource plan.

Energy avoidance is the least cost resource, and yet Vectren is decreasing its use of its DLC, and Interruptible Power agreements. This planned lax pursuit of these program need to be addressed.

The ratepayers are saddled with the extremely costly coal plants, paying for the high and ever increasing O&M costs, and bearing the risks associated with the current sociopolitical environment. Vectren's IRP considered the scenario of closing Culley 2; however, it did not model the divestment of Warrick 4. Ratepayers need relief; Alcoa already owns 50% of Warrick 4. Vectren needs to look at relieving ratepayers of the expense of this plant and attempt the sale to Alcoa, or give it to Alcoa in exchange for avoiding the decommissioning expenses and continued environmental liabilities associated with the plant. To ensure adequate reserve margin, the divestment may be part of a multi-year plan where solar PPAs and efficiency programs lower demand, and the Broadway 1 peak generating gas unit it brought up to adequate performance prior to the divestment. Vectren's IRP indicates a lack of ability for strategic planning.

Discuss the financial impact on the utility of acquiring future resources identified in the utility's resource plan. The discussion should include, as appropriate, the average price per kilowatt-hour as calculated in the resource plan.

It is appropriate to provide the average price per kilowatt-hour for resources in the IRP, but it is not provided. The Solar PPA bids are provided on a price per kilowatt-hour (e.g. 5cents/kWhr Recurrent Energy contract). The 2011 Vectren IRP, p166 provided an indirect price per kilowatt-hour, but the 2014 didn't provide price per kilowatt-hour values for any resources. The Integrated Resource Plan process was initiated across the United States in the late 1980's as a response to nuclear cost overruns of the previous decade. Stakeholders must be able to see resource prices in an understandable price per output to ensure the most cost effective resources are selected. The changing role of the utility requires more than ever a robust, transparent, and inclusive IRP process.

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You will notice that the previously referenced PacifiCorp IRP includes costs per unit of electricity produced for resources, as do other utilities across the U.S. Please enforce this vital part of the IRP rule.

Vectren has petitioned for confidentiality on resource costs because providing the information would disincite the negotiation or competitive bidding process by allowing potential suppliers or vendors to know what Vectren's expectations are with respect to its resource and other costs; thus, these suppliers or vendors would have the advantage of knowing how to price their bids or renegotiate to provide resources.

I request this Petition be vigorously denied. The ratepayers must have this information to determine that electricity is being provided at a just rate. If Vectren's sale of Wholesale Power is detrimentally affected, that is purely in the ratepayer's favor. The current distribution of profit from Wholesale Sales creates a conflict of interest between Vectren Corporation and the ratepayer. The maintenance of excessive capacity, paid for by the ratepayers, allows Vectren to produce Wholesale electricity, of which the first \$7.5 million of profit goes to Vectren, and then the profit is shared with ratepayers. It is my belief that summer capacity figures were intentionally under-reported in this IRP so that Vectren can keep the excess capacity at ratepayer expense. Excess capacity was hidden by

- 1) Allowing the Broadway 1 peak unit, contributing to 65MW summer capacity in 2011, to fall into disrepair
- 2) Changing the calculation for summer capacity so that all plants were determined to contribute less MW for meeting summer capacity in 2014 than in 2011.
- 3) Reducing the amount of summer capacity from DLC, Interruptible Power Agreements, and Efficiency Programs.

The amount of excess capacity that must be maintained to ensure grid safety levels as determined by MISO, should be retained, but there should be NO financial incentive for Vectren to make Wholesale sales. 100% of profit from wholesale sales should be applied to mitigation of environmental damage incurred by coal burning, thereby removing this conflict of interest. Only then can ratepayers stop paying to maintain excessive, expensive coal plants so that Vectren can make Wholesale sales.

But even if there is no IURC move to change the distribution of profit between Vectren and ratepayers, Vectren profit from wholesale sales will drop due to market forces. Low marginal-cost resources like wind and solar will be dispatched as demand increases in the day. Overall wholesale prices will drop. Vectren will find, like Kewaunee nuclear plant, that they will be unable to make money in the MISO market.

The current 2014 IRP is not economically sustainable and it leaves both the ratepayer and Vectren with too much risk.

Sincerely,

Jean M. Webb