Freddie Coleman 1-18-2020 RECEIVEE 795 Kingdom Come Cnk. JAN 2 3 2020 whitesburg, Ky 41858 PUBLIC SERVICE OMMISSION Before the Public Service Commission Case NO. 2019-06443 Pertaining to the affidavit of Brian Kiwest asking for Confidiential treatment for some information. I ask the PSC to make all information available that is needed to keep Ky. power Company honest. I ask the PSC to make Ky. power Co. show how much additional profits its AEP affailates make Each year from Ky. power projects. I have believed for a long time that the generation at Rockport is not needed now by Ky power customers. People are leaving East Ky. to find jobs, coal mineshas shut down, the well to do people are installing root top solar panels and the old and poor people is left behind with No hope. I believe most of the 15% of the generation at Rock port that Kypower co. leases is being gold to

Non-Ky, power customens on the PJMgrid. Nowlook at "Ehibitl" at the line for 2020 year, Notice capacity of 1302 MW and for Peak and Reserves 1056 MW leaving a Capacity surplus of 236 MW. NOW look at "Ehibita" at table 3 Ky, power existing supply side Resources showing Big Sandy PJM I Cap rating at 280 MW + Mitchellat 780 MW + Rockpont at 392 mw = total of 1442 mw. If peak and Reserves equal 1066 MW for 2020 and 2019 is not much different. I ask the PSC to find out where this extra generation 15 going and where 15 The money from its sales.

2

During case No. 2018-00209 PSC ordered that the Enterprize Ind. park project Could go ahead if Enerblu Could get enough money to build the batteny plant. Since the PSC issued its order the Greenhouse Co. left and Enerblu has filed for bankruptcy. Since Enerblu Neoved on Ky power had to come up with another reason to get to do the Enterprize Ind. park project. So Ky, power Read Fhibit 3 b 4

3

came up with thermal and voltage violations to get to do the Entenprize project, why not let Ky power fix these violations on the existing 46 KU transmission line It would be a lot cheaper. Now Read "Ehibit 5" Now the City of Pikeville has \$5,7 million and they are building a 60,000 sq.ft, building in the Entenprize pank hoping a factory will come along and move into the building

there are two 3 phaze power sources at Entenprize Ind. pank, one source come from the Fords Br. substation and one source comes from Island Creek. There is sufficient power already here to run a lot of businesses. It would be a big mistake to put this trasmission line to the Eintenprize industrial pank at this time not Knowing if this type of demand will ever be needed. the infrastructure already in place has supported a lot of Coal mines in the past. Ky power customers has never paid for a come co. to

recieve electricity by building a Transmission line to their mine. all coal mines paid for it themselves. any well established Co. would pay for their own power needs. Poor people can not payto put people into business. When you start handing out money you are going to attract Crooks.

I ask the psc to deny Enterpriz project which is not needed at this time. We do not Know what kind of demand for energy is going to be needed there. There is sufficient power there Now.

anothen thing caught my eye Please read "Ehibit Le" wh says (c) # 0.7 million for the retirement of the Fords Br. 46 KV substation. Ky powen customen is being over changed here. It would take three daysand 3 men to take the substion down h move it out. This is a big estimate. Send some one to check it out.

During Case NO 2017-00328 Hazand to wooten project Ky power co. gave the reason for doing this project was damaged or rotten poles, cross-bans and damaged insulators during Lassio testimony. Please read "Ehilbit 7" I believe the real reason for this project was for AEPT move more power to LgoE and TVA. Since demand for electricity 15 decline in East Ky there is no reason to increase conductor size, double transformen size but to move more electricity and open up other markets.

5

Solar power is not very dependable. I ask the PSC to deny any solar plan pertaining to this case NO 2019-00443 If Ky power customens need additional generation when the Rock port upa runs out, then I ask the PSC to have unit 2 at Big Sandy converted over to natural gas.

I ask the PSC to Keep AEP and Ky power under Control. Ky power Customers Cannot afford all these projects and pay for mitchel, Big sandy, Rock port. Ky power is using Fercand PJM to get what they want from the PSC. PSC need to investigate

all of Ky power purposed projects very Carefully to make sure they are needed. Iask the PSC not to allow Ky. power co. to do anymore projects until the projects being done at this time are paid for by it's Ky power Customers. there is to much debt made by Kypowen co. and AEP being put on its customers I would say the Ky power customers are indebt close to \$1 1 billion.

6

I ask the PSC to put Ky power co. on pay as you go basis on these rebuild and new projects. When one project is paid for by Ky. power customens let Ky, power co. do another project. Thereis to much debt and to much interest being paid. The interest being paid would pay for a lot of projects. I ask the Kpsc Not to allow AEP to pay for any project or own or hold any part of Ky power Co. AEP and Kypo are over changing Ky power customens, Iask the PSE to investigate the cost of thesprojects. Kpsc 15 being played by AEP, Kypco, PJM. AEP is not honest. Respectfully Tredchie Coleman

Ehibit 1"

(1

KPSC Case No. 2019-00443 2019 Integrated Resource Plan Of Kentucky Power Plan Volume A - Public Version Page 214 of 2268

#### Kentucky POWER COMPANY 2019 INTEGRATED RESOURCE PLAN

Preferred Plan w ST PPA Only Allowed 2022-2024 and Limited EE Base Band Commodity Pricing and Allowance Market Pricing

	Resource (Capacity) Additions								Energy & Capacity Positions									Carbon Output					
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)={20}+(21)+(22)	(24)	(25)	(26)=(24)-(25)	(27)=(23)-(26)	(28)	(29)	(30)=(28)-(29)	(31)	(32)
	(Current an Supply Purchased Capacity	d Planned) -Side + Unforced (UCAP)	(Increm) Energy Efficiency+ VVO + DR + Battery		Distributed Soli	ted Solar	ar Geni	heric Wind	Utility Solar		Thermal Generation	(Current) Purchased Energy	(New) Generic Wind + Utility Solar	= Market Sales	Load (Net of Embedded EE)	Less: (Increm) Energy Efficiency+ VVO+Dist Solar	= Net Load Require- ments	ENERGY Surplus	Capacity	Peak + Reserves	CAPACITY Surplus	Reserve Margin	Existing Units CO2 Emissions
	Ann MW	Cum MW	Ann MW	Cum MW	Ann MW	Cum MW	Ann MW	Cum MW	Ann MW	Cum MW	GWh	GWh	GWh	GWh	GWh	GWh	GWh	GWh	MW	MW	MW	%	tons
2020	0	1,302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,801	112	0	5,913	6,060	0	6,060	(147)	1,302	1,066	236	33.1	5,769,805
2021	0	1,302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,273	111	0	5,384	6,037	0	6,037	(653)	1,302	1,065	237	32.5	5,267,945
2022	(217)	1,085	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	6,096	156	0	6,252	6,155	16	6,139	113	1,087	1,076	11	10.0	6,138,111
2023	(50)	1,035	1.9	4.1	1.0	1.0	0.0	0.0	51.7	51.7	4,756	156	211	5,123	6,194	33	6,161	(1,038)	1,092	1,077	15	10.4	4,742,434
2024	(100)	935	5.9	10.0	0.5	1.5	0.0	0.0	77.6	129.3	4,433	155	538	5,126	6,175	64	6,112	(986)	1,076	1,074	2	9.1	4,400,121
2025	0	935	(0.4)	9.6	0.0	1.5	0.0	0.0	0.0	129.3	4,423	155	527	5,105	6,161	61	6,100	(996)	1,076	1,071	5	9.4	4,419,866
2026	0	935	(0.5)	9.1	0.0	1.5	0.0	0.0	0.0	129.3	4,568	154	527	5,249	6,145	58	6,087	(838)	1,075	1,068	7	9.6	4,568,059
2027	0	935	(0.5)	8.6	0.5	2.0	0.0	0.0	0.0	129.3	4,292	154	527	4,973	6,132	56	6,076	(1,104)	1,075	1,067	8	9.7	4,297,964
2028	0	935	(0.6)	8.0	0.0	2.0	12.3	12.3	0.0	129.3	3,081	153	863	4,098	6,121	52	6,069	(1,971)	1,087	1,066	21	11.0	3,059,633
2029	0	935	(0.7)	7.3	0.5	2.6	0.0	12.3	0.0	129.3	3,194	153	852	4,199	6,120	49	6,071	(1,872)	1,087	1,066	21	11.0	3,194,418
2030	0	935	0.1	7.4	0.5	3.1	12.3	24.6	0.0	129.3	3,058	152	1,176	4,386	6,108	50	6,059	(1,672)	1,100	1,065	34	12.4	3,052,403
2031	(140)	795	3.1	10.5	0.5	3.6	0.0	24.6	103.4	232.7	3,104	152	1,598	4,854	6,101	61	6,040	(1,186)	1,067	1,065	2	9.0	3,146,840
2032	0	795	(0.2)	10.3	0.0	3.6	0.0	24.6	0.0	232.7	3,201	152	1,619	4,971	6,092	58	6,035	(1,064)	1,066	1,065	1	9.0	3,240,392
2033	0	795	(0.6)	9.7	0.5	4.1	0.0	24.6	0.0	232.7	3,061	151	1,598	4,810	6,089	55	6,033	(1,223)	1,066	1,065	1	9.0	3,097,617
2034	0	795	(0.3)	9.4	0.5	4.6	0.0	24.6	0.0	232.7	3,105	151	1,598	4,854	6,084	54	6,030	(1,175)	1,067	1,066	1	9.0	3,148,496
2035	0	795	(0.0)	9.4	0.0	4.6	0.0	24.6	0.0	232.7	3,447	151	1,598	5,196	6,081	54	6,028	(832)	1,067	1,066	0	8.9	3,506,318
2036	0	795	0.3	9.6	0.5	5.1	0.0	24.6	0.0	232.7	3,023	151	1,619	4,793	6,077	56	6,021	(1,228)	1,067	1,067	0	8.9	3,064,179
2037	0	795	(0.3)	9.3	0.0	5.1	0.0	24.6	0.0	232.7	2,708	151	1,598	4,456	6,076	55	6,021	(1,565)	1,067	1,067	0	8.9	2,745,361
2038	0	795	(0.5)	8.8	0.5	5.6	12.3	36.9	0.0	232.7	2,994	150	1,922	5,066	6,074	55	6,020	(954)	1,079	1,068	12	10.1	3,037,874
2039	0	795	(4.7)	4.2	0.0	5.6	0.0	36.9	0.0	232.7	3,096	150	1,922	5,168	6,073	36	6,036	(869)	1,075	1,068	7	9.5	3,136,866
2040	0	795	(0.3)	3.9	0.5	6.1	0.0	36.9	0.0	232.7	2,978	150	1,944	5,072	6,070	37	6,033	(961)	1,075	1,070	5	9.4	3,023,461
2041	0	795	(0.2)	3.7	0.0	6.1	0.0	36.9	0.0	232.7	3,099	149	1,922	5,170	6,069	36	6,033	(863)	1,075	1,070	5	9.3	3,145,013
2042	0	795	(0.2)	3.5	0.5	6.6	0.0	36.9	0.0	232.7	2,742	149	1,922	4,813	6,066	37	6,029	(1,216)	1,075	1,071	4	9.3	2,782,514
2043	0	795	(0.1)	3.4	0.5	7.2	0.0	36.9	0.0	232.7	2,888	149	1,922	4,958	6,063	39	6,024	(1,066)	1,075	1,071	5	9.3	2,942,342
2044	0	795	(0.1)	3.3	0,0	7.2	0.0	36.9	0.0	232.7	3,030	149	1,944	5,122	6,057	38	6,019	(897)	1,075	1,071	4	9.3	3,084,196
2045	0	795	(0.0)	3.3	0.5	7.7	0.0	36.9	0.0	232.7	2,777	148	1,922	4,848	6,057	40	6,017	(1,170)	1,076	1,072	4	9.3	2,828,329
2046	0	795	(3.3)	0.0	0.5	8.2	0.0	36,9	0.0	232.7	2,873	148	1,922	4,943	6,053	29	6,024	(1,081)	1,073	1,072	1	9.0	2,932,987
2047	0	795	0.0	0.0	0.5	8.7	0.0	36.9	0.0	232.7	3,081	148	1,922	5,150	6,046	31	6,015	(865)	1,074	1,071	2	9.1	3,141,548
2048	0	795	0.0	0.0	0.5	9.2	0.0	36.9	0.0	232.7	2,869	148	1,944	4,960	6,038	33	6,005	(1,045)	1,074	1,071	3	9.2	2,921,892
2049	0	795	0.0	0.0	0.0	9.2	0.0	36.9	0.0	232.7	2,548	146	1,922	4,615	5,960	33	5,927	(1,312)	1,074	1,070	4	9.2	2,602,227

Ehibit



for the 2020/2021 PJM planning year, and decreases to 8.87% in 2022/2023 for the remainder of the planning period.

The current PJM rule requires future capacity auctions to transition from current capacity products to 100% Capacity Performance products by June 1, 2020. Kentucky Power resources under the Fixed Resource Requirement (FRR) alternative will begin to transition to the capacity performance rules starting in the 2019/20 planning year. Capacity Performance resources will be held to stricter requirements than current capacity resources and will be assessed substantial charges if power is not provided during emergency "performance assessment" intervals.

Table 3 below, displays key parameters for the supply-side generation resources currently utilized by Kentucky Power. These supply-side resources have remained consistent since the Company's 2016 IRP.

Plant	Unit	Location	Fuel	In-Service Year	PJM ICAP Rating (MW) <sup>A</sup>
Big Sandy	1	Louisa, KY	Natural Gas	1963 <sup>8</sup>	280 🥌
Mitchell	1	Moundsville, WV	Coal	1971	385 <sup>c</sup>
	2	Alasta Karanti	Coal	1971	395 <sup>c</sup>
Rockport	1	Rockport, IN	Coal	1984	197 <sup>D</sup>
	2		Coal	1989	195 <sup>0</sup>

Table 3. Kentucky Power Existing Supply-Side Resources

<sup>A</sup> ICAP = Installed Capacity,

<sup>B</sup> Big Sandy Unit 1 was converted from coal to natural gas in 2016

<sup>C</sup> Represents KPCo's 50% Ownership Stake in Mitchell Units 1 and 2

<sup>D</sup> Represents KPCo's 15% purchased share of the output of Rockport Units 1 and 2 under the Unit Power Agreement

Figure 11 below illustrates Kentucky Power's "Going-In" capacity position with respect to the Company's obligation. The "Going-In" position represents how Kentucky Power's existing and planned capacity resources would compare with the capacity requirements absent of any incremental changes. Kentucky Power's capacity obligation is determined using the PJM capacity obligation attributed to Kentucky Power's zone in PJM up through 2022. After 2022, PJM does not offer a projection of capacity requirements for the Regional Transmission Organization (RTO).

# Ehibit 3

## 'A bogus Eastern Kentucky battery plant'; Lawsuit seeks \$30 million from Enerblu officials



A lawsuit filed against Enerblu executives asks that the failed battery manufacturing plant pay \$30 million in compensatory and punitive damages, the Lexington-Herald Leader reports.

By WYMT Staff | Posted: Wed 7:55 AM, Sep 18, 2019 | Updated: Wed 1:35 PM, Sep 18, 2019

PIKEVILLE, Ky. (WYMT) -- A lawsuit filed against Enerblu executives asks that the failed battery manufacturing plant pay \$30 million in compensatory and punitive damages, news outlets report.

The lawsuit was filed by Dapco LTO Investment, LLC., an investor group from Florida, and calls Enerblu "a bogus Eastern Kentucky battery plant that was never more than drawings on a piece of paper."

The group gave \$3 million to Enerblu back in 2018. The suit says the now-bankrupt company said its executives paid themselves and took useless trips overseas.

The lawsuit filed in Jefferson Circuit Court makes multiple allegations about Enerblu's CEO Dan Elliott, Executive Chairman Michael Weber, CFO and executive vice president for corporate development Darren Marino and Najib el Khoury, an agent for a cluster of companies owned by one of the members in the Qatari royal family. Some of those allegations include fraudulent misrepresentation.

Officials at Enerblu announced back in 2017 that they would invest \$400 million in a battery plant in Pikeville and bring nearly 900 jobs.

Enerblu declared bankruptcy earlier this year. It is already facing another lawsuit from a group of Pikeville investors.

"EnerBlu's management team worked diligently to make the venture a success, but, ultimately, the company failed due to circumstances beyond the control of its management," Jeremy Rögers, a Louisville attorney representing Enerblu, said in the suit.

Enerblu officials responded to the suit, saying Dapco should file suit against Enerblu, not the individuals involved.

Bankruptcy records showed multiple company executives having salaries of more than \$230,000, with tens of thousands more in consulting fees and reimbursement expenses.

The lawsuit reads that Enerblu used very little, if any, of the \$9.6 million it raised for developing products or technology. A line reads that the Enerblu executives "were traveling around the world at great expense, purporting to be closing in on investments from some of the wealthiest people and entities on the planet."

"Two relatives of Weber, his daughter and a son-in-law, were on the EnerBlu payroll. Such spending, it appears, is where the \$3 million invested by Dapco largely went," the lawsuit reads.

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Fhibit 4



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# Lawsuit Filed in Pike Co against **EnerBlu by Investors**

Paintsville, KY, USA / K-94.7 WKLW FM | East Kentucky's Hit Music News Staff September 03, 2019 06:34 am



Pike Co investors have filed a lawsuit against EnerBlu in Pike Circuit Court. Pikeville EB Investors (the plaintiff), alleges EnerBlu made material misrepresentations to various members of the group in order to convince them to purchase stock in EnerBlu. The lawsuit is against Michael Weber, CEO of EnerBlu, and Daniel Elliot who is an EnerBlu employee. State and local officials announced Dec. 15, 2017, that EnerBlu was building a high tech manufacturing plant in Pikeville. The project would cost nearly \$400 million dollars and create 875 full-time jobs. At the announcement of the project, EnerBlu did not have the funds to construct the facility. Local business owners and individuals created Pikeville EB Investors in February 2018 to help fund the project. The lawsuit alleges Enerblu knew representations were false or erroneous for the Pikeville project.

Pikeville EB Investors purchased \$1.2 million dollars in EnerBlu stock March 15, 2018, because of EnerBlu's misrepresentations, the lawsuit claims. As a result of the misrepresentations, Pikeville EB Investors said it never learned about the failure of EnerBlu's ability to obtain the funding necessary to construct the manufacturing facility. The lawsuit said the investors learned that EnerBlu suspended the project shortly before the announcement Feb. 5, 2019. Pikeville EB Investors is suing EnerBlu for \$1.2 million dollars, the full amount of its investment.



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Memories

**BRUNO MARS** TREASURE 7 minutes ago Tunes



**JONAS BROTHERS Only Human** 10 minutes ago iTunes



LIZZO **Truth Hurts** 13 minutes ago iTunes



AIR **Dear Winter** 18 minutes ago iTunes

More

#### WEATHER



37 °F Cloudy

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Ehibit5

http://www.news-expressky.com/news/article\_0863daa4-f458-11e9-99b3-7fbe1c8a9456.html Pikeville gets \$5.7M for new industrial park spec building

By Chris Anderson News Editor Oct 22, 2019

Pikeville's Kentucky Enterprise Industrial Park got a massive shot in the arm this week when the city agreed to accept millions of dollars to construct a new building at the park.

At a recent meeting of the Pikeville City Commission, held Oct. 14, city commissioners voted unanimously to authorize and approve a memorandum of agreement with the state, the state Energy and Environment Cabinet and the Kentucky Division of Abandoned Mine Land to accept funding in the amount of \$5.7 million for the construction of a new speculative building at the industrial park. The spec building will be constructed in hopes of attracting an industrial tenant to the park, similar to the process undertaken by the city which resulted in truck manufacturer SilverLiner to locate at the park.

Pikeville City Manager Philip Elswick said the plans to construct the building originated with EnerBlu, which, after much fanfare, failed to locate in Pikeville and filed bankruptcy this past summer. Elswick said the money accepted by the city was to be used to construct EnerBlu's facilities and after the project died, the money "became inactive for some time." Elswick said the city successfully petitioned the state to go ahead with granting the money for use in constructing a 60,000-square-foot building.



"With this money, we will be able to go forward with the design and eventually construction of the building," Elswick said, adding that construction is expected to begin by spring, if not sooner.

Elswick said if the city is successful in attracting a tenant for the proposed spec building, it will succeed in meeting the same end as what it would have with EnerBlu, even if at a smaller scale than the 800-plus jobs EnerBlu promised. He said the city has not stopped its promotion and marketing of the Kentucky Enterprise Industrial Park in the wake of the EnerBlu failure. He added, however, that EnerBlu's failure changed the process for marketing the park.

"EnerBlu was unique," Elswick said. "It was a large project with a large number of jobs. When that sort of project comes along, you have to pursue it. With what has happened, we've basically gone back to our original plan for the park."

Elswick said the city's focus will now be to attract several tenants to the park "in the 100to-300 jobs range." He said that plan will give the city a more sustainable economy, which would not be as dependent on one single entity employing many hundreds of people.

Elswick also said he is not concerned with recent action undertaken by Kentucky Public Service Commission in regard to the park.



The PSC recently asked Kentucky Power to provide reasons why a Certificate of Public Convenience and Necessity, which was issued in order to provide power infrastructure to the industrial park in anticipation of the EnerBlu project, should remain active. The project, which was expected to cost \$33.6 million, would have seen the construction and operation of a transmission line and substations for the industrial park. The project was to consist of five miles of new transmission line in Floyd and Pike counties, a substation near the Kentucky Enterprise Park in Pikeville and upgrades to the company's existing substation in Cedar Creek in Pikeville, as well as the retirement of another substation on Fords Branch in Pike County.

Despite the PSC bringing the Kentucky Power project into question, Elswick said he is confident the project will move forward and will provide valuable infrastructure for future tenants at the park.

"The EnerBlu project is not the only reason the new substation was being built," Elswick said.



controls associated with the Project. All work at the Cedar Creek 138/69/46 kV Substation will take place within the existing substation footprint.

#### **Financial Aspects Of The Project**

21. The total functional estimate of the Company's share of the Project cost is \$33.6 million. That sum comprises: (a) approximately \$19.9 million for transmission line work including right-of-way acquisition; (b) approximately \$12.5 million for improvements to be made by Kentucky Power at the new substation; (c) \$0.7 million for the retirement of the Fords Branch 46 kV Substation; and (d) \$0.5 million for the Cedar Creek 138/69/46 kV Substation upgrade. The Project does not involve sufficient capital outlay to affect the existing financial condition of Kentucky Power.

22. Kentucky Power projects the annual operating cost will be approximately \$16,000 for general maintenance and inspection. The projected annual additional ad valorem taxes resulting from the Project are expected to total approximately \$229,000.

#### **Property Acquisition**

23. The Kewanee 138 kV Substation will be constructed on a 16.4-acre tract to be acquired from a private landowner pursuant to an option held by Kentucky Power. The tract is located south of and adjacent to the Kentucky Enterprise Industrial Park near Industry Drive. The 16.4-acre parcel being acquired constitutes the entirety of the tract; the parcel was not available for subdivision. The parcel will enable the Company to locate the new substation so as to provide adequate safety clearances, to provide required ingress and egress, to permit grading and cut-fill work, to accommodate the transmission line entrance, to accommodate the distribution lines to be served by the substation, and lastly, to provide for future expansion of the substation, if necessary.

er maximal and An A&P Comora SCHALDERES FALLPON

Ehibit 7"

Kentucky Power has one DSM program, the TEE program, related to residential income-eligible programs. There are no advertising expenses related to the program and the program is administered through local Community Action Agencies, which promote the program.

### 3.5 AEP-PJM & Kentucky Power Transmission

### 3.5.1 General Description

The Kentucky Power transmission system is composed of approximately 1,272 transmission circuit miles operating at or above 34.5 kV, which is connected with the AEP eastern transmission system, and takes transmission service under the PJM Open Access Transmission Tariff (OATT). The transmission circuit miles in Kentucky include approximately 258 miles of 765 kV, 8 miles of 345 kV, 48 miles of 161 kV, 359 miles of 138 kV lines, 431 miles of 69 kV, 166 miles of 46 kV lines, and 2 miles of 34.5kV lines. Exhibit F includes a map of the entire AEP System-East Zone transmission grid, as well as a map of Kentucky Power's transmission grid.

The AEP eastern transmission system, which includes Kentucky Power, is part of the Eastern Interconnection, the most integrated transmission system in North America. The entire AEP eastern transmission system is located within the ReliabilityFirst Corporation (RFC)<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Responsible for the reliability and security of the electric grid in the Great Lakes and Mid-Atlantic areas of the United States, which includes all or portions of Delaware, New Jersey, Pennsylvania, Maryland, Virginia, Illinois, Wisconsin, Indiana, Ohio, Michigan, Kentucky, West Virginia, Tennessee, and the District of Columbia under Federal Energy Regulatory Commission approved delegation agreements with the North American Electric Reliability Corporation.



geographic area. On October 1, 2004, AEP's eastern zone joined the PJM RTO and participates in the PJM markets.

As a result of the AEP eastern transmission system's geographical location and expanse, as well as its numerous interconnections, the eastern transmission system can be influenced by both internal and external factors. Facility outages, load changes, or generation re-dispatch on neighboring companies' systems, in combination with power transactions across the interconnected network, can affect power flows on AEP's transmission facilities. As a result, the AEP eastern transmission system is designed and operated to perform adequately even with the outage of its most critical transmission elements or the unavailability of generation. The eastern transmission system conforms to the North American Electric Reliability Corporation (NERC) Reliability Standards and applicable RFC standards and performance criteria.

Over the years, numerous studies have been performed to assess the impact of the connection of potential merchant generation to the eastern transmission system. The integration of merchant generation now connected to the eastern transmission system required incremental transmission system upgrades, such as installation of larger capacity transformers and circuit breaker replacements. In addition, transmission modifications may be required to address changes in power flow patterns and changes in local voltage profiles resulting from operation of the PJM and MISO markets.

There is one area in particular where the planned transmission enhancements will allow the reliable operation of the Kentucky Power transmission system. The transmission network in the Hazard-Wooton area that serves approximately 300 MW of load is connected to TVA's 161 kV system at TVA's Pineville Station and to LG&E's 161 kV system at Wooton Station. A



KPSC Case No. 2019-00443 2019 Integrated Resource Plan Of Kentucky Power Plan Volume A - Public Version Page 84 of 2268

comprehensive plan has been developed that will address these issues, and has been the subject of past and present filings before the Kentucky Public Service Commission.<sup>9</sup>

#### 3.5.2 Transmission Planning Process

AEP, working on behalf of Kentucky Power and PJM coordinate the planning of the transmission facilities in the AEP System-East Zone through a "bottom up/top down" approach. AEP will continue to develop transmission expansion plans to meet the applicable reliability criteria in support of PJM's transmission planning process. PJM will incorporate these expansion plans with those of other PJM member utilities and then collectively evaluate the expansion plans as part of its Regional Transmission Expansion Plan (RTEP) process. The PJM assessment will ensure consistent and coordinated expansion of the overall bulk transmission system within its footprint. In accordance with this process, AEP will continue to take the lead for the planning of its local transmission system under the provisions of Schedule 6 of the PJM Operating Agreement. By way of the RTEP, PJM will ensure that transmission expansion is developed for the entire RTO footprint via a single regional planning process, ensuring a consistent view of needs and expansion timing while minimizing expenditures. When the RTEP identifies system upgrade requirements, PJM determines the individual member's responsibility as related to construction and costs to implement the expansion. This process identifies the most appropriate, reliable and economical integrated transmission reinforcement plan for the entire region, while blending the local expertise of the transmission owners such as Kentucky Power with a regional view and formalized open stakeholder input.

Limitations, constraints, and future potential deficiencies on the Kentucky Power transmission system are identified using the AEP planning criteria, which are posted on the AEP

<sup>&</sup>lt;sup>9</sup> Application Of Kentucky Power Company For Certificate Of Public Convenience And Necessity To Construct A 161 kV Transmission Line In Perry And Leslie Counties, Kentucky And Associated Facilities, KPSC Case Nos. 2017-00328 and 2019-00154.

KPSC Case No. 2019-00443 2019 Integrated Resource Plan Of Kentucky Power Plan Volume A - Public Version Page 85 of 2268



website.<sup>10</sup> The AEP planning criteria are filed with FERC annually as part of AEP's FERC Form 715 and pursuant to PJM's M-3 Process, are made available for review by PJM and transmission stakeholders. Projects that affect the topology of the grid and are necessary to address limitations, constraints and future potential deficiencies on the Kentucky Power transmission system are submitted to PJM and subjected to two rounds of review with the Transmission Expansion Advisory (TEAC) and Sub-regional RTEP Committee-Western. All transmission stakeholders may attend and participate in the TEAC and Sub-regional RTEP Committee-Western meetings. After stakeholder input is vetted through this committee meeting process, solutions are budgeted and implemented as appropriate to ensure that system enhancements will be timed to address anticipated deficiencies.

PJM also coordinates its regional expansion plan on behalf of the member utilities with the neighboring utilities and/or RTOs, including MISO, to ensure inter-regional reliability. The Joint Operating Agreement between PJM and MISO provides for joint transmission planning.

#### 3.5.3 System-Wide Reliability Measure

Transmission reliability studies are conducted routinely for seasonal, near-term, and longterm horizons to assess the anticipated performance of the transmission system. The reliability impact of resource adequacy (either supply- or demand-side) would be evaluated as an inherent part of these overall reliability assessments. If reliability studies indicate the potential for inadequate transmission reliability, transmission expansion alternatives and/or operational remedial measures would be identified.

<sup>&</sup>lt;sup>10</sup>https://www.aep.com/assets/docs/requiredpostings/TransmissionStudies/docs/2019/2019%20AEP%20PJM%20FE RC%20715%20FINAL%20Part%204.pdf.