BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio)	
Edison Company, The Cleveland Electric)	
Illuminating Company, and The Toledo Edison)	
Company for Authority to Provide for a)	Case No. 14-1297-EL-SSO
Standard Service Offer Pursuant to)	
R.C. 4928.143 in the Form of An Electric)	
Security Plan)	

POST-HEARING REPLY BRIEF OF THE SIERRA CLUB

Public Version

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Throughout this case, the Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (collectively, "FirstEnergy" or "Companies") have tried to sell their customers – and the Commission – on the proposed Retail Rate Stability Rider ("Rider RRS") based on varying rationales. FirstEnergy's filings have variously emphasized the purported credits that customers would receive, the rider's supposed retail rate stabilizing effect, and a panoply of benefits (resource diversity, avoided transmission costs, and jobs and economic development) that are premised on the erroneous assumption that Sammis and Davis-Besse would retire if the rider is not approved. But despite FirstEnergy's creative rationales, the fact remains that Rider RRS is unauthorized by law and would be a bad deal for customers, as the record in this case demonstrates. The Commission should reject the rider.

As Sierra Club explained in its initial brief, if Rider RRS were approved, customers would be forced to bear the enormous financial and regulatory risks of several generating plants owned by FirstEnergy Solutions Corp. ("FES"), while ensuring that FES recovers its costs and receives a projected in return on equity over the eight-year term of the rider. Whereas even FirstEnergy acknowledges that customers would lose \$363 million over the first 31 months of Rider RRS, the evidence shows that the cost to customers would almost certainly be much higher. And because FirstEnergy's projection of future customer credits is based on unreasonable and outdated assumptions, customers would likely face even greater costs and risks during the later years of the rider. These financial risks are compounded by the structure of

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¹ SC Ex. 90c (Atts. JJL-1, JJL-2). The figure is in nominal dollars.

² SC Ex. 89. This figure represents the net present value of projected customer losses during that time period.

FirstEnergy's proposal, which further shifts risk away from FES and onto the Companies' customers.

Despite FirstEnergy's claims to the contrary, customers would receive nothing meaningful in exchange for bearing the financial risks of FES's generating plants. As explained in Sierra Club's initial brief and in Section III.A below, there is no evidence in the record that customers will face retail rate volatility in coming years – and even if they did, Rider RRS would exacerbate, rather than mitigate, such volatility. The other purported benefits of Rider RRS – avoided transmission upgrade costs, resource diversity, and economic development – are illusory and are based on the unfounded threat that Sammis and Davis-Besse would suddenly retire if Rider RRS were rejected. And even if Rider RRS were not such a bad deal for customers – which it plainly is – it still could not be approved because this rider is not authorized by R.C. 4928.143.

In its initial brief, FirstEnergy ignores the extensive evidence demonstrating the unreasonableness of Rider RRS, and it fails to cite, or even acknowledge, its evidentiary burden under O.A.C. 4901:1-35-06(A) and R.C. 4928.143(C)(1). Instead, the Companies continue to stand by their projection of a net credit to customers under Rider RRS even though it has long been evident that the mid-2014 market forecasts upon which that projection is based are outdated and already proving to be wrong. And FirstEnergy continues to rehash its same, discredited claims about retail rate volatility, resource diversity, avoided transmission costs, and jobs and economic development in an attempt to make a deal that is a loser for customers somehow look more favorable. As explained below, however, there is nothing in FirstEnergy's initial brief that undercuts the numerous deficiencies with Rider RRS that Sierra Club has already identified.

In sum, Rider RRS is unlawful, harmful to customers, unjust and unreasonable, and against the public interest. Because the rider is legally impermissible, and because FirstEnergy has utterly failed to meet its burden of showing that its proposal is "just and reasonable," the Commission should reject Rider RRS.

ARGUMENT

I. Rider RRS is Not Authorized Under Ohio Law.

As Sierra Club explained in its post-hearing brief, Rider RRS must be rejected because it is not authorized by R.C. 4928.143.⁴ A proposed rider cannot be approved as part of an ESP unless it falls within one of the enumerated categories set forth in R.C. 4928.143(B)(2).⁵ And because Rider RRS does not fall within any of these categories, and is therefore legally impermissible, the Commission must reject it.⁶ Although FirstEnergy argues that Rider RRS

³ O.A.C. 4901:1-35-06(A); *see also* R.C. 4928.143(C)(1) ("The burden of proof in the proceeding shall be on the electric distribution utility.")

⁴ See generally Initial Post-Hearing Brief of the Sierra Club ("SC Br."), Section I.B.

⁵ See, e.g., In re Application of Columbus S. Power Co., 128 Ohio St.3d 512, 2011-Ohio-1788, 947 N.E.2d 655, ¶ 33; see also In re Ohio Power Co., Case No. 13-2385-EL-SSO et al., Opinion and Order, at 20 (Feb. 25, 2015) (hereinafter, "AEP ESP III Order").

In its post-hearing brief, FirstEnergy does not argue that Rider RRS can be approved under R.C. 4928.143(B)(1), and therefore implicitly concedes that its proposal cannot be authorized under that provision of the ESP statute. Regardless, as Sierra Club previously explained, Rider RRS cannot be approved under (B)(1). *See* SC Br. at 9 n.33.

⁶ Because Rider RRS is legally impermissible, the rider, which was included in the Third Supplemental Stipulation and Recommendation ("Stipulation"), Co. Ex. 154 at Section V.B, necessarily violates an important regulatory principle. See In the Matter of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan, Case No. 12-1230-EL-SSO, Opinion and Order, at 24 (July 18, 2012) (hereinafter, "FE ESP III Order") (describing three factors that the Commission typically evaluates with respect to a stipulation).

could be approved under R.C. 4928.143(B)(2)(d) or (B)(2)(i), ⁷ the Company's arguments are without merit.

A. Rider RRS is not permissible under R.C. 4928.143(B)(2)(d).

Rider RRS cannot be approved under R.C. 4928.143(B)(2)(d). Under this provision, "terms, conditions, or charges" can be legally permissible under an ESP if they satisfy two threshold requirements: First, those "terms, conditions, or charges" must relate to "limitations on customer shopping for retail electric generation service, bypassability, . . . [or] default service." Second, the "terms, conditions, or charges" must "have the effect of stabilizing or providing certainty regarding retail electric service." Because Rider RRS does not satisfy either of these requirements, it cannot be authorized under (B)(2)(d).

1. Rider RRS does not relate to "limitations on customer shopping for retail electric generation service, bypassability, . . . [or] default service."

In its post-hearing brief, FirstEnergy tries to shoehorn Rider RRS into R.C. 4928.143(B)(2)(d) by variously arguing that its rider "operates as a financial limitation on the consequences of customer shopping," "relates to bypassability," and "relates to default service." None of these contentions has merit.

⁷ See generally Post-Hearing Brief of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company ("Co. Br.") at 113-22.

⁸ R.C. 4928.143(B)(2)(d). FirstEnergy has not argued that Rider RRS is a term, condition, or charge relating to "standby, back-up, or supplemental power service, . . . carrying costs, amortization periods, and accounting or deferrals, including future recovery of such deferrals." *Id.* As FirstEnergy implicitly concedes, these provisions plainly do not apply to its proposed rider.

⁹ Id

¹⁰ See generally Co. Br. at 117-20.

a. Rider RRS is not related to "limitations on customer shopping for retail electric generation service."

As Sierra Club explained in its initial brief, Rider RRS is not related to "limitations on customer shopping for retail electric generation service," for two independent reasons. First, the proposed rider has nothing to do with retail electric generation service. Under Ohio law, "[r]etail electric service" is defined as "any service involved in supplying or arranging for the supply of electricity to ultimate consumers in this state, from the point of generation to the point of consumption." In other words, in order to qualify as a "limitation[] on customer shopping," the rider at issue must address provision of energy to retail customers through an SSO, or the ability of retail customers to obtain energy for their own needs from a competitive retail electric service ("CRES") provider. ¹²

Here, by contrast, the energy associated with Rider RRS would not be used to serve the Companies' customers. ¹³ Instead, the Companies would purchase the output from Sammis, Davis-Besse, and the OVEC entitlement from FirstEnergy Solutions Corp. ("FES"), and then sell that output into the wholesale PJM markets. ¹⁴ In effect, the Companies' customers would stand

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¹¹ R.C. 4928.01(A)(27). This definition includes "generation service, aggregation service, power marketing service, power brokerage service, transmission service, distribution service, ancillary service, metering service, and billing and collection service." *Id*.

¹² This definition would also include services related to the electricity supplied by a CRES provider to the Companies' shopping customers, such as distribution services involved in the delivery of that electricity. See, e.g., In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan, Case No. 11-346-EL-SSO et al., Opinion and Order, at 31 (Aug. 8, 2012) ("AEP ESP II Order") (noting that AEP's proposed rider "provides rate stability and certainty through CRES services, which clearly fall under the classification of retail electric service, by allowing customers the opportunity to mitigate any SSO increases through increased shopping opportunities that will become available . . .").

¹³ Tr. I at 37-38, 39. Shopping customers would continue to receive electricity through their CRES provider, and non-shopping customers would still receive energy through an SSO auction process. *See* Tr. I at 38, 107-08.

¹⁴ Co. Ex. 33, Ruberto Direct at 3; Tr. I at 36-37; Tr. XIII at 2808.

in the shoes of a merchant generator, paying for the costs of producing energy at FES's facilities, and earning whatever revenue that energy might receive from the wholesale market. As the Ohio Energy Group ("OEG"), a signatory to the Stipulation, observed in its post-hearing brief, "Rider RRS is merely a financial device." Because FirstEnergy's proposal has nothing to do with "the supply of electricity to ultimate consumers," and is therefore unrelated to retail electric service, Rider RRS cannot be authorized under R.C. 4928.143(B)(2)(d).

In its post-hearing brief, FirstEnergy does not directly address this fatal shortcoming of its Rider RRS proposal. Instead, FirstEnergy simply cites the orders from last year's AEP and Duke ESP proceedings, with the apparent hope that the Commission will sign off on Rider RRS.¹⁷ But in both of those cases, the Commission granted rehearing of the same orders that FirstEnergy is relying upon.¹⁸ Moreover, neither of those orders directly addressed the problem discussed above, namely, that FirstEnergy's proposal is not related to "retail electric service," and therefore cannot be authorized under R.C. 4928.143(B)(2)(d). Sierra Club raised this very issue in its Application for Rehearing in the Duke ESP IV proceeding, ¹⁹ and the Commission

¹⁵ Post-Hearing Brief of the Ohio Energy Group ("OEG Br.") at 9.

¹⁶ R.C. 4928.01(A)(27).

¹⁷ Co. Br. at 115-18 (citing AEP ESP III Order at 20-22, and *In the Matter of Application of Duke Energy Ohio, Inc. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan, Accounting Modifications, and Tariffs for Generation Service, Case No. 14-841-EL-SSO et al., Opinion and Order, at 42-44 (Apr. 2, 2015) ("Duke ESP IV Order")).*

¹⁸ Case No. 13-2385-EL-SSO et al., Entry on Rehearing (Apr. 22, 2015) (granting applications for rehearing of the AEP ESP IV Order); Case No. 14-841-EL-SSO et al., Entry on Rehearing (May 28, 2015) (granting applications for rehearing of the Duke ESP IV Order);

¹⁹ See Case No. 14-841-EL-SSO et al., Sierra Club's Memorandum in Support of its Application for Rehearing, at 2-4 (May 4, 2015).

granted that application.²⁰ Consequently, FirstEnergy's reliance on the AEP ESP III and Duke ESP IV orders is misplaced.²¹

The second reason why the "limitations on customer shopping for retail electric generation service" provision does not apply is because, quite simply, Rider RRS does not limit customer shopping. This statutory provision only applies to restrictions on customer shopping that relate to the "supply of electricity" to FirstEnergy's customers. And here, as FirstEnergy has conceded, Rider RRS would not have any impact on customers' ability to shop for the energy supply they receive. Because customers' ability to shop for their retail electric service would be unaffected by Rider RRS, the rider cannot qualify as a "limitation[] on customer shopping for retail electric generation service" under R.C. 4928.143(B)(2)(d).

FirstEnergy nonetheless argues that Rider RRS is legally permissible because it "imposes a financial limitation on the consequences of customer shopping." The statute, however, does not authorize a rider whenever such rider could potentially offset the pricing of retail electric generation service. The statute speaks in terms of limitations on actual shopping, and as FirstEnergy acknowledges, Rider RRS "does not in any way limit a customer's ability to shop."

²⁰ Case No. 14-841-EL-SSO et al., Entry on Rehearing, at 2 (May 28, 2015) (granting applications for rehearing filed by, *inter alia*, the Sierra Club).

²¹ The Ohio Energy Group advanced the same argument that FirstEnergy makes, OEG Br. at 8-10, and its argument should be rejected for these same reasons.

²² R.C. 4928.01(A)(27) (definition of "retail electric service").

²³ Co. Br. at 117 n.566; Co. Ex. 155, Mikkelsen Fifth Suppl. at 9; Tr. I at 108; Co. Ex. 1, ESP Application at 9; Co. Ex. 13, Strah Direct at 7.

²⁴ Co. Br. at 117; *id.* at 118 (claiming that the Rider RRS charges or credits "would function as a financial restraint on complete reliance on the retail market for the *pricing* of retail electric generation service") (quoting AEP ESP III Order at 22) (emphasis added by FirstEnergy).

²⁵ Moreover, as explained below at 43-56, Rider RRS would not, in fact, bring stability or certainty to customers' bills.

²⁶ Stipulation at 18.

If FirstEnergy's position were credited, the statutory language would be effectively drained of its meaning. In essence, FirstEnergy views Rider RRS as a "financial limitation" on customer shopping because the rider's charges (or credits) would affect a customer's overall bill. This means that *any* type of customer charge – no matter how unrelated to retail electric service – could be approved under R.C. 4929.143(B)(2)(d). Under FirstEnergy's theory, the Companies could (i) impose charges on their customers, (ii) use that money to buy a financial investment they believe will gain value over time (e.g., natural gas futures, stock in a natural gas development company), and (iii) give customers a credit in future years if those investments pay off. Although such a scheme has nothing to do with limitations on customer shopping, it would, under FirstEnergy's theory, "impose[] a financial limitation on the consequences of customer shopping," and therefore be permissible under FirstEnergy's reading of the statute. Because FirstEnergy's "interpretation would remove any substantive limit to what an electric security plan may contain," the Commission should reject it. In sum, because the Rider RRS

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²⁷ *Id*.

Notably, this holds true regardless of the type of investment. If FirstEnergy was feeling bullish about the future financial prospects of IBM, it could use customer money to buy stock in that company, on the theory that IBM's future stock price could serve as a "hedge" against the purported future increases in energy prices. The capaciousness of FirstEnergy's interpretation is underscored by the Ohio Energy Group, whose post-hearing brief lauded "Rider RRS is akin to a retirement account that *includes both stocks and bonds*." OEG Br. at 10 (emphasis added). But the financial wisdom – or lack thereof – of such schemes is quite beside the point, because such schemes are not permitted by R.C. 4928.143(B)(2)(d). And neither is Rider RRS.

 $^{^{29}}$ In re Application of Columbus S. Power Co., 128 Ohio St.3d 512, 2011-Ohio-1788, 947 N.E.2d 655, \P 34.

³⁰ As the Northeast Ohio Public Energy Council ("NOPEC") argued persuasively in its post-hearing brief, FirstEnergy's "financial limitation" theory also runs afoul of the legislative intent of S.B. 221. *See* NOPEC Br. at 22-23.

mechanism would not limit customer shopping for retail electric generation service, it cannot be approved under the customer shopping provision of R.C. 4928.143(B)(2)(d).³¹

b. Rider RRS is not related to "bypassability" or "default service."

Perhaps recognizing the weakness of its "limitations on customer shopping" argument, FirstEnergy also tries to justify Rider RRS on two alternative grounds, namely, that the rider relates to "bypassability" and to "default service." Both arguments are without merit.

First, the mere fact that Rider RRS would be non-bypassable – with all of the Companies' customers, both shopping and non-shopping, being forced to bear the financial risks of FES's generating plants – does not qualify the rider for inclusion as part of an ESP. Indeed, FirstEnergy's own cited authority, the AEP ESP III order, squarely rejected this "bypassability" theory. As the Commission explained, "we . . . agree with Staff that, since nearly any charge may be bypassable or non-bypassable, 'bypassability' alone is insufficient to fully meet the second criterion of R.C. 4928.143(B)(2)(d)." 33

Nor does the DP&L ESP II order, cited in FirstEnergy's brief, hold otherwise.³⁴ In that case, the Commission approved DP&L's service stability rider ("SSR") in order to "maintain[]

³¹ Although the Commission concluded that a PPA-related rider was permissible in the AEP ESP III and Duke ESP IV orders, as noted above at 6, the Commission granted rehearing on both of those orders. And, for the reasons explained above, FirstEnergy's reliance on those orders is misplaced.

³² Co. Br. at 117-20.

³³ AEP ESP III Order at 22. Notably, although the Commission granted rehearing in response to several applications for rehearing, none of those applications challenged the Commission's conclusion that the PPA rider could not be authorized based on the "bypassability" provision in R.C. 4928.143(B)(2)(d). Given the Commission's finding in the AEP ESP III case – a finding that was supported by Staff, Order at 22 – the Commission should disregard FirstEnergy's attempts to justify its rider through this provision.

³⁴ Co. Br. at 118.

DP&L's financial integrity so that it may continue to provide default service."³⁵ In doing so, the Commission found that R.C. 4928.143(B)(2)(d) "authorizes a financial integrity charge to the extent that such charge is necessary to ensure stability and certainty for the provision of SSO service."³⁶ The Commission further found that the rider should be nonbypassable.³⁷ The Commission did not, however, conclude that this rider is legally permissible under (B)(2)(d) solely because it is nonbypassable. And as noted above, in the AEP ESP III case, the Commission concluded that a rider's nonbypassability is not a sufficient basis for meeting this criterion of (B)(2)(d).

FirstEnergy's final argument, that Rider RRS is related to "default service," is equally flawed. FirstEnergy claims that this criterion is met "by virtue of the fact that [Rider RRS] operates as a rate-stability and price mitigation mechanism to reduce the impact on SSO customers of increasing SSO pricing." Assuming, for the sake of argument, that "default service" were synonymous with voluntary SSO service, ³⁹ FirstEnergy's argument would fail because Rider RRS has nothing to do with SSO service, i.e., the supplying of electricity to the Companies' non-shopping customers. As FirstEnergy witness Mikkelsen acknowledged, "[t]he

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³⁵ In the Matter of the Application of The Dayton Power and Light Company for Approval of its Electric Security Plan, Case No. 12-426-EL-SSO et al., Opinion and Order, at 21 (Sept. 4, 2013) ("DP&L ESP II Order").

³⁶ *Id*.

³⁷ *Id.* ("Both shopping and non-shopping customers benefit from the existence of the standard service offer, which is available even if market conditions become unfavorable for retail shopping customers over the term of the ESP.").

³⁸ Co. Br. at 119.

³⁹ As NOPEC explained in its post-hearing brief: "While customers can *voluntarily* elect to receive the 'SSO service' set by an MRO or ESP proceeding pursuant to R.C. 4928.141, 'default service' is the service that consumers receive *involuntarily* as the result of their competitive supplier no longer being able to provide service for the reasons described in R.C. 4928.14. To meet the 'default service' criterion of R.C. 4928.143(B)(2)(d), Rider RRS must relate to an event of default described in R.C. 4928.14. It does not." NOPEC Br. at 20.

companies would not use the energy purchased as part of the proposed transaction to serve SSO customers."⁴⁰ Ms. Mikkelsen later elaborated on this point:

Q. Okay. Fair enough. Would the companies nonshopping customers continue to receive their energy through a standard service offer even if rider RRS were approved?

A. Yes, absent any change in the Commission-approved structure for providing service to customers who choose not to shop.

Q. Okay. But under the current proposal -- application from the companies, there would be nonshopping customers who would continue to receive their energy through an SSO even if rider RRS were approved, correct?

A. The physical provision of energy and capacity to the nonshopping customers would occur through the competitive bid process and delivered to the SSO customers.⁴¹

Because Rider RRS does not affect the energy received by SSO customers, nor the price of such energy, this rider cannot be authorized under the "default service" prong.

Indeed, FirstEnergy's argument – that the rider relates to the proposed SSO because it would purportedly "mitigate the long-term risk of wholesale market price increases that will be incorporated directly into the SSO" ⁴² – merely underscores that Rider RRS has nothing at all to do with SSO service. By FirstEnergy's logic, *any* type of charge or credit – regardless of its source – would relate to "default service" simply because it would affect the overall amount that SSO customers have to pay to the Companies. Here again, FirstEnergy's "interpretation would remove any substantive limit to what an electric security plan may contain." The fact that SSO

⁴⁰ Tr. I at 37-38.

⁴¹ *Id.* at 107-08.

⁴² Co. Br. at 119.

 $^{^{43}}$ In re Application of Columbus S. Power Co., 128 Ohio St.3d 512, 2011-Ohio-1788, 947 N.E.2d 655, \P 34.

customers pay electric bills, and that Rider RRS would affect the overall amount that customers must pay, does not connect the rider to "default service."

Although FirstEnergy tries to bolster its default service argument by citing to the AEP ESP II rehearing order, FirstEnergy's reliance on that decision is misplaced. In the AEP ESP II case, the Commission found that AEP's proposed rider related to default service because it "freezes non-fuel generation rates throughout the term of the ESP,[] allowing all standard service offer customers to have rate certainty throughout the term of the ESP that would not have occurred absent the [retail stability rider]." In other words, AEP's proposal directly affected the generation rates for electricity *being generated by AEP and used by SSO customers*. By contrast, as FirstEnergy has repeatedly conceded, the energy and capacity that the Companies would purchase from FES would not be used to serve the Companies' customers, but would instead be sold into the PJM markets.

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⁴⁴ See Co. Br. at 119 n.572.

⁴⁵ Case No. 11-346-EL-SSO et al., Entry on Rehearing, at 15 (Jan. 30, 2013); *see also id.* at 16 ("[A]s we discussed in extensive detail in our Opinion and Order, the RSR promotes stable retail electric service prices by stabilizing base generation costs at their current rates, ensuring customers have certain and fixed rates going forward.") (citing AEP ESP II Order at 31-32).

⁴⁶ Tr. I at 36-39. More generally, FirstEnergy's attempted analogies to the AEP ESP II and DP&L ESP II cases are inapposite. Among other differences, in those cases the utilities owned generation assets, and the Commission approved stability-related riders that were aimed at ensuring the financial integrity of the utility. As the Commission noted in the DP&L ESP II order: "The SSR is a nonbypassable stability charge for the purpose of maintaining DP&L's financial integrity so that it may continue to provide default service. . . . We agree with DP&L that if its financial integrity becomes further compromised, it may not be able to provide stable or certain retail electric service. . . . DP&L is not a structurally separated utility; thus, the financial losses in the generation, transmission, or distribution business of DP&L are financial losses for the entire utility. Therefore, if one of the businesses suffers financial losses, it may impact the entire utility, adversely affecting its ability to provide stable, reliable, or safe retail electric service. The Commission finds that the SSR will provide stable revenue to DP&L for the purpose of maintaining its financial integrity." DP&L ESP II Order at 21-22; see also AEP ESP II Order at 31 (noting that "approval of the RSR will provide AEP-Ohio with sufficient revenue to ensure it maintains its financial integrity as well as its ability to attract capital"). The situation in those cases is a far cry from FirstEnergy's proposal, which would not preserve the financial integrity of a regulated utility, but is instead designed to boost the return on equity for an unregulated merchant generator.

In sum, Rider RRS is not related to limitations on customer shopping for retail electric generation service, bypassability, or default service. Consequently, this rider is not legally permissible under R.C. 4928.143(B)(2)(d).

2. Rider RRS would not "have the effect of stabilizing or providing certainty regarding retail electric service."

Even if Rider RRS could satisfy the threshold requirement discussed in Section I.A.1 above – which it cannot – this rider could still not be approved under R.C. 4928.143(B)(2)(d) because it would not "have the effect of stabilizing or providing certainty regarding retail electric service." Rider RRS fails this requirement for two independent reasons. First, even if Rider RRS had a stabilizing effect – it would not, as explained in Section III.A below – that effect would not impact retail electric rates. And as the plain language of R.C. 4928.143(B)(2)(d) makes clear, the stabilization or certainty provided must be with respect to "retail electric service," *i.e.*, the electricity purchased by the Companies to supply their customers' needs. ⁴⁷ Because Rider RRS would not affect the rates that the Companies' customers pay for their electricity, it fails this requirement of 4928.143(B)(2)(d). Second, even if the statute did not require that any hedging effects be tied to retail electric service, Rider RRS would still not be permissible because, as explained below in Section III.A, this rider would not have the effect of stabilizing or providing certainty to customers' bills.

In support of its argument, FirstEnergy cites to the Commission's orders from the AEP ESP III and Duke ESP IV proceedings. ⁴⁸ But those orders did not squarely address the issue discussed above at 5-7, namely, that a rider cannot be approved under (B)(2)(d) if it is not related

⁴⁷ R.C. 4928.01(A)(27).

⁴⁸ Co. Br. at 120 & nn. 575-76.

to retail electric service. And again, the Commission has granted rehearing on both of these orders, which remains pending.

FirstEnergy also errs in claiming that the record "demonstrates" that Rider RRS "would have the effect of stabilizing what customers pay for retail electric service." In fact, the opposite is true: the record evidence contradicts each of the factual claims FirstEnergy makes in support of this argument. First, as explained above, Rider RRS would not provide stability to "what customers pay for retail electric service" because it would not affect such service at all. Second, as Sierra Club discussed at length on pages 12-45 of its initial brief, FirstEnergy has not shown that Rider RRS would provide customers with a net \$561 million credit over the 8-year term. Although several cost and revenue projections were presented in this case, including one from FES, the owner of the generating plants, the Companies' projection

claims made by FirstEnergy witness Strah, which are cited in FirstEnergy's brief,⁵¹ have no support in the record. Among other things, Mr. Strah's testimony about "keeping baseload generating plants open," and his related concern about resource diversity, lack merit because the Companies provided no reliable evidence that Sammis and Davis-Besse will retire.⁵² And Mr. Strah's "retail rate stabilization" claims are equally misplaced because, as explained in Section III.A below, Rider RRS would not provide stability to customers' bills.

⁴⁹ *Id.* at 121.

⁵⁰ *Cf. id.* Note: FirstEnergy's brief cites to its projected credit in nominal dollars (i.e., the \$561 million figure). The discussion on pages 12-16 of Sierra Club's initial brief references these same charges and credits on a net present value basis. Both the nominal and the net present value figures are presented in Ms. Mikkelsen's workpaper, SC Ex. 89.

⁵¹ Co. Br. at 121 (citing Strah Direct at 7).

⁵² See generally SC Br., Sections VI.A, VI.B.

In short, there is no legal or factual basis for FirstEnergy's assertion that Rider RRS would "have the effect of stabilizing or providing certainty regarding retail electric service." For this reason, as well as those stated above in Section I.A.1 and in Sierra Club's initial brief at pages 7-12, this rider cannot be authorized under R.C. 4928.143(B)(2)(d). 54

B. Rider RRS is not permissible under R.C. 4928.143(B)(2)(i).

FirstEnergy's further argument, that Rider RRS could be approved pursuant to R.C. 4928.143(B)(2)(i), is not credible. FirstEnergy claims that the rider is permissible under this provision because "the mitigation of long-term retail price increases, which is projected to provide a customer benefit of over \$560 million . . ., will benefit Ohio's economy and lead to job retention and creation," and because the Sammis and Davis-Besse plants "are engines of economic development." ⁵⁵

FirstEnergy does not cite any Commission precedent in support of this argument, and with good reason: If FirstEnergy's position were given credence, there would be no meaningful limits on what could be included in an ESP as virtually any spending of customer money by a

⁵³ R.C. 4928.143(B)(2)(d).

⁵⁴ FirstEnergy's reliance on *In re Application of Columbus S. Power Co.*, 138 Ohio St.3d 448, 2014-Ohio-462, 8 N.E.3d 863, is misplaced. See Co. Br. at 121 n.581. The carrying charges that were permitted in Columbus Southern Power concerned generating facilities that were owned by the utility and that were serving the utility's own customers. *Id.* ¶ 34 (upholding the inclusion of environmental investment carrying charges for retrofitted coal units "because AEP generally uses its own generating units to serve its customers."). This is far different than FirstEnergy's proposal, which would provide a subsidy to FES, an unregulated merchant generator that owns the plants at issue in this proceeding, and where the output of FES's plants would not serve the Companies' customers. Instead, that output would be sold into the PJM wholesale markets, while FirstEnergy's customers would still have to obtain their own electricity through an SSO or from a CRES provider. For these same reasons, FirstEnergy's position is not aided by the fact that the Commission in Columbus Southern Power found that AEP's carrying charges were important to the utility's "ability to provide generation power at a cost that was below the market rate for purchased power at that time." Id. ¶ 32 (emphasis added). In other words, AEP's carrying charges were related to "retail electric service," as defined by R.C. 4928.01(A)(27), see Columbus Southern Power ¶ 32 (discussing statutory definition), while as discussed in Section I.A above, FirstEnergy's proposal has nothing to do with such retail electric service.

⁵⁵ Co. Br. at 122-23.

utility could arguably have some tangential impact on jobs or economic development. Under R.C. 4928.143(B)(2)(i), an ESP may include "[p]rovisions under which the electric distribution utility may implement economic development, job retention, and energy efficiency programs " The obvious intent of this provision is to authorize provisions that will implement programs, such as the energy efficiency and economic development riders that were approved by the Commission in the AEP ESP III order, that are specifically targeted at one or more of the three categories enumerated in the statute. FirstEnergy, however, urges the Commission to interpret this provision as encompassing a rider that would not implement any economic development, job retention, or energy efficiency programs. The Commission should reject FirstEnergy's interpretation as inconsistent with the plain language of the R.C. 4928.143(B)(2)(i). 57

Even if the statutory language were swept aside, Rider RRS would still not pass muster because FirstEnergy has failed to demonstrate that the rider would "benefit Ohio's economy and lead to job retention and creation" or "spur economic development." Indeed, FirstEnergy has not established any of the factual claims that it makes in support of this argument:

- FirstEnergy's projection of \$561 million of customer credits is unreasonably optimistic. ⁵⁹
- Because there is no reliable evidence that Sammis and Davis-Besse would suddenly retire in the absence of Rider RRS, the purported resource diversity and avoided transmission upgrade benefits are illusory.⁶⁰

⁵⁶ AEP ESP III Order at 68 (approving the EE/PDR rider, which allows AEP to offer energy efficiency programs); *id.* at 69 (approving the Economic Development Rider, which enables recovery of foregone revenues associated with reasonable arrangement approved under R.C. 4905.31).

⁵⁷ Not surprisingly, in the AEP ESP III order, the Commission declined AEP's invitation to find the PPA rider to be permissible under R.C. 4928.143(B)(2)(i). Although the Commission noted that AEP had made such an argument, Order at 10, 20, it elected not to address the argument.

⁵⁸ Co. Br. at 122.

⁵⁹ See generally SC Br. at 12-45; infra at 18-31.

⁶⁰ SC Br. at 80-91, 107; *infra* at 56-62.

- FirstEnergy's resource diversity and transmission upgrade arguments are otherwise flawed. 61
- Mr. Strah's claims regarding price stability, and the related economic effects of such stability, ⁶² are spurious because FirstEnergy has produced no evidence that customers are experiencing price volatility, or that Rider RRS would provide a price-stabilizing effect. ⁶³
- The purported job and economic development benefits discussed by FirstEnergy witness Murley are illusory because there is no evidence that the plants will suddenly retire. Moreover, the reports attached to her testimony ignore opportunity costs and neglect to consider the actual on-the-ground impacts that would occur if these plants contrary to the record evidence did suddenly retire.⁶⁴

In short, because there is no evidence that FES's generating plants would retire in the absence of Rider RRS, FirstEnergy cannot claim that this rider would provide any economic development benefits. And even if FirstEnergy had met its burden of proving those claims – it has not – Rider RRS could still not be approved under R.C. 4928.143(B)(2)(i) because this rider does not implement any economic development or job retention program. The statutory language is fatal to FirstEnergy's argument, and Rider RRS cannot legally be approved as part of this ESP.

⁶¹ SC Br. at 90-102, 106-14; *infra* at 62-72.

⁶² Co. Br. at 123 (citing Strah Direct at 11).

⁶³ SC Br. at 76-80; *infra* at 43-56.

⁶⁴ SC Br. at 102-06; *infra* at 56-62, 72-73.

II. FirstEnergy's Projection of Quantitative Benefits From Rider RRS Lacks Credibility and is Unsupported by the Record, Which Shows that Customers Would Lose Hundreds of Millions of Dollars or More Over the Eight-Year Term of Rider RRS.

In its initial brief, FirstEnergy relies heavily on its claim that Rider RRS would purportedly provide a \$561 million net credit to customers over its eight-year term. According to FirstEnergy, this projected net credit demonstrates that Rider RRS is beneficial to customers and more favorable in the aggregate than a market rate offer. As the record thoroughly demonstrates, however, FirstEnergy's projection of a net credit lacks credibility and is unsupported by the record because (a) it is based on market forecasts that are outdated, unreasonable, and already proving to be wrong, (b) it likely underestimates the costs facing the Sammis plant, and (c) it is based on only a single modeling run using an unsophisticated, Microsoft Excel-based model. In fact, the record instead demonstrates that customers would almost certainly lose hundreds of millions of dollars or more under Rider RRS. Just as it did throughout the proceeding, FirstEnergy fails in its initial brief to overcome – or even address – these fundamental inadequacies in its projection of credits under Rider RRS. As such, FirstEnergy has failed to demonstrate that Rider RRS would be just and reasonable, benefit customers, or be more favorable in the aggregate than a market rate offer.

A. The evidentiary record demonstrates that customers would lose money under Rider RRS.

While there are many projections of charges and credits under Rider RRS, FirstEnergy's suggesting that customers would somehow benefit over the

⁶⁵ Co. Br. at 12-15, 17, 121. The \$561 million figure is in nominal dollars. *See* SC Ex. 89. In net present value, the figure is \$260 million.

⁶⁶ Co. Br. at 12, 17.

⁶⁷ SC Br. at 12-45.

eight-year term (and even FirstEnergy's projection shows that customers would lose \$363 million, on a net present value basis, over the first 31 months of Rider RRS). For example, using FES's internal market forecasts from 2014 shows that under Rider RRS customers would over the full eight-year term. Despite the FES, the owner of the plants that are the subject of the proposed transaction, FirstEnergy never addressed in its initial brief under FES's numbers. FirstEnergy's brief also ignores the fact that projections from witnesses for P3-EPSA and OCC/NOPEC, using up-to-date market forecasts, demonstrate that the net present value of customer losses under Rider RRS would likely range between \$793 million and \$2.7 billion over the eight-year term. FirstEnergy's silence in the face of projections establishing that customers would almost certainly pay dearly under Rider RRS is deafening.

B. FirstEnergy's projection of credits and charges under Rider RRS is based on price forecasts that are outdated, unreasonably high, and already proving to be wrong.

The core inadequacy with FirstEnergy's projection of customer credits under Rider RRS is that that projection is based on market energy, natural gas, and capacity price forecasts that are outdated, unreasonably high, and already proving to be wrong. While FirstEnergy forecasted significant increases in energy and natural gas prices _______, both prices have fallen substantially since FirstEnergy's mid-2014 forecasts and are expected to remain significantly lower than forecasted for at least the next few years. Meanwhile, FirstEnergy the capacity prices that resulted from the PJM capacity auction held in

⁶⁸ SC Ex. 89, line 13.

⁶⁹ SC Ex. 96c, Comings Third Suppl. at 4. These figures are expressed in net present value.

 $^{^{70}}$ SC Br. at 15 (citing P3/EPSA Ex. 12, Kalt Second Suppl. at 17 and OCC/NOPEC Ex. 9, Wilson Second Suppl. at 12).

⁷¹ *Id.* at 19-28.

2015 (for the 2018/2019 delivery year), and there is little basis in the record to believe that capacity prices will FirstEnergy assumed for future auctions. FirstEnergy assumed for future auctions. As a result, actual losses to customers for the first few years of Rider RRS would be significantly higher than FirstEnergy projected, and there is no credible basis in the record upon which to conclude that the claimed credits in the latter years of Rider RRS will materialize. Even if credits appeared to some extent in later years, they would be insufficient to offset the losses in the early years.

In its initial brief, FirstEnergy does not even acknowledge that its energy, natural gas, and capacity price forecasts are already proving to be wrong, and does not attempt to explain why the Commission should rely on outdated forecasts that are running counter to reality. Instead, FirstEnergy simply repeats the forecasts received from Judah Rose, claims that Mr. Rose is highly qualified and the only witness to use "methodologically-sound" modeling to present "fundamental forecasts" of energy and capacity prices, 73 and pleads that natural gas prices have "nowhere to go but up" from the record low levels experienced in December 2015. 74 The question, however, is not whether market prices will go up over time but, instead, whether they will reach the substantially higher prices that Mr. Rose forecasts and that would be necessary for Sammis, Davis-Besse, and the OVEC units to have a chance of being profitable over the term of Rider RRS. The evidence to date shows that the answer to that question is almost certainly "no," because prices are already significantly lower than what Mr. Rose forecast and are projected, even more recently by ICF, to continue to be so. 75 In addition, the record shows that Mr. Rose

⁷² *Id.* at 30-39.

⁷³ Co. Br. at 13.

⁷⁴ *Id.* at 64.

⁷⁵ SC Br. at 24-25.

has a long track record of projecting significant market price increases that fail to materialize, which further undercuts the credibility of Mr. Rose's forecasts.

1. FirstEnergy's wholesale energy price forecast is outdated and unreasonably high.

In its initial brief, FirstEnergy cites Mr. Rose's forecast that wholesale energy prices would increase from the 2009-2013 average of \$34/MWh to ⁷⁶ to support its claim that customers would receive a net credit under Rider RRS. FirstEnergy further notes that such forecast assumed increasing natural gas prices and increasing energy demand, along with various assumptions about plant retirements and environmental regulations. ⁷⁷

FirstEnergy's continued reliance on Mr. Rose's energy price forecast is unreasonable and unsupported in the record for a few reasons. First, rather than actual energy prices in 2015 in ATSI and AEP Dayton Hub were \$32.93/MWh and \$31.80/MWh,⁷⁸ respectively, which are lower than the 2009 to 2013 average cited by FirstEnergy. Mr. Rose acknowledged during the October 2015 rebuttal hearing that actual year-to-date energy prices were 10 to 15% lower than he forecast,⁷⁹ and by the end of 2015 actual prices were in ATSI and in the AEP Dayton Hub than Mr. Rose forecast.⁸⁰

Second, lower than forecasted energy prices are expected to continue for at least the next few years. In particular, Mr. Rose acknowledged at hearing that market forward energy prices

⁷⁶ Co. Br. at 13. The 2009-2013 average is expressed in 2013 dollars. Unless otherwise noted, all energy prices in this section of the brief are expressed in nominal dollars.

⁷⁷ *Id.* at 14.

⁷⁸ Comings Third Suppl. at 12.

⁷⁹ Tr. XXXV at 7228.

⁸⁰ SC Br. at 20 & n.66.

for 2016 through 2019 are "pretty much steady at 35 or so dollars a megawatt-hour," which is than Mr. Rose's forecast of prices in ATSI increasing from in 2019.⁸² As such, current market forwards show that revenues from Sammis, Davis-Besse, and the OVEC entitlement through 2018 will almost certainly be lower than FirstEnergy projected, which means the net present value charges to customers will be higher than the \$363 million projected by FirstEnergy. Similarly, while 2019 is the first year in which FirstEnergy projects that annual revenues under Rider RRS would exceed costs, 83 such a result will almost certainly not occur given that market energy forward prices for 2019 are around \$35/MWh. Finally, virtually all of the increase in energy prices forecasted by Mr. Rose, and cited in FirstEnergy's brief, are forecasted to occur with prices (excluding inflation) .84 Given that the forecasted energy price are no longer expected to occur, it is highly unlikely that increases energy prices will be nearly as high as Mr. Rose projected for ______. That, in turn, suggests that revenues will be much lower than projected under Rider RRS, and that the net credits projected for those years either will not materialize or will be significantly lower than projected.

A third reason that continued reliance on Mr. Rose's energy price forecast is unreasonable is that two of the key factors identified as putting upward pressure on energy prices

⁸² Rose Direct, Att. II.

⁸³ SC Ex. 89.

⁸⁴ Rose Direct, Att. II.

have changed significantly. First, as discussed in Section II.B.2 below, natural gas prices are turning out to be lower than Mr. Rose projected, and even ICF forecasts that they will continue to be lower. Second, in contrast to Mr. Rose's assumption of increasing energy demand, which is one of the bases for his forecast of higher energy prices, PJM has significantly lowered its energy demand forecast. Since Mr. Rose created his forecast in mid-2014, PJM has twice lowered its energy forecast for every year of Rider RRS. As a result, energy requirements in ATSI and in the PJM RTO are now forecast to be lower in 2024 than PJM had forecasted for 2016 in its 2014 load forecast. Such decline in forecasted energy requirements would, all else being equal, put downward pressure on energy prices that was not accounted for in Mr. Rose's forecast.

Finally, it is worth noting that this is not the first time that Mr. Rose has submitted in a PUCO proceeding an energy price forecast that turned out to be significantly too high. In particular, in

⁸⁵ SC Br. at 20-21.

⁸⁶ *Id.* at 21.

⁸⁷ IGS Ex. 3c at 51.

⁸⁸ IGS Ex. 3c at 49.

⁸⁹ IGS Ex. 3c at 56.

The

evidence in the record demonstrates that Mr. Rose's energy price forecast in this proceeding is similarly flawed, lacking in support and credibility, and unreasonably high.

2. FirstEnergy's natural gas price forecast is outdated and unreasonably high.

FirstEnergy's brief hardly mentions Mr. Rose's natural gas price forecast, much less tries to defend that forecast. This is perhaps not surprising given how outdated and unreasonable that forecast clearly is. As Sierra Club detailed in its initial brief, Mr. Rose's 2015 natural gas price was 66% higher than actual prices in 2015, his forecasts for 2016 and 2017 are 70% higher and respectively, than market forwards for those years, and ICF itself issued a Henry Hub natural gas price forecast in August 2015 that forecasts prices than Mr. Rose forecasted for each year of Rider RRS. In short, there is no reasonable basis to rely on Mr. Rose's natural gas price forecast in this proceeding. And, given that Mr. Rose's higher forecasted natural gas prices were a key factor in his forecast of higher wholesale energy prices, that Mr. Rose's natural gas price forecast is unreasonably high and already wrong further undermines the credibility of his energy price forecast in this proceeding.

In an effort to distract attention from its flawed forecast, FirstEnergy contends that "[n]atural gas prices have nowhere to go but up" and that, therefore, the "question is not 'if' but

⁹⁰ Comings Third Suppl. at 12.

⁹¹ Rose Direct at Attachment II.

⁹² SC Br. at 23-26. Indeed, ICF's August 2015 gas price forecast has a price for 2018 of approximately \$3.75/mmBtu, which is significantly lower than the \$4.34/mmBtu that Mr. Rose in this proceeding forecasted for 2015 and the \$4.28/mmBtu that he forecasted for 2016. *Id.*

⁹³ Co. Br. at 14.

'when' today's historically low natural gas prices will increase and increase significantly." In support, FirstEnergy notes that natural gas prices in December 2015 reached a 16-year low, and that the U.S. Energy Information Administration ("EIA") projects that natural gas prices will increase in 2016. But the simple fact that natural gas prices will not stay at a 16-year low does nothing to suggest that the level of price increases that Mr. Rose forecasted will be realized. In fact, the EIA document cited in FirstEnergy's brief forecasts a Henry Hub natural gas price of \$2.65/mmBtu in 2016 and \$3.22/mmBtu in 2017. Mr. Rose's forecasted natural gas prices of \$4.28/mmBtu in 2016 and in 2017 are 61.5% and higher, respectively, than what EIA is now expecting in those two years, which further demonstrates the unreasonableness of using Mr. Rose's natural gas price forecast from mid-2014 in this proceeding.

While FirstEnergy portrays an increase in natural gas prices from their 16-year low as inevitable, the critical question is whether such prices would increase to the level needed for Sammis, Davis-Besse, and the OVEC units to produce a credit for customers under Rider RRS. FirstEnergy projects that revenues will exceed costs under Rider RRS in 2019, the first year in which Mr. Rose projected a natural gas price above in nominal dollars. Given how much natural gas prices have dropped since Mr. Rose's forecast in this proceeding, there is no evidentiary basis to conclude that natural gas prices will reach the mark in 2019. In

⁹⁴ *Id.* at 64.

⁹⁵ Co. Br. at 64 n.294.

⁹⁶ Co. Ex. 167, Tbl. 1.

⁹⁷ *Id.*; Rose Confidential Workpapers at 4.

fact, Henry Hub natural gas prices have not cleared on an annual basis since on an annual basis

More fundamentally, a review of past forecasts from Mr. Rose/ICF further undermines the credibility of Mr. Rose's forecast that natural gas prices will clear in 2019. In each of those past forecasts, Mr. Rose/ICF forecast that natural gas will reach in a few years. Then, when it later becomes clear that such a price is not coming as quickly as forecast, they back up the forecasted date for clearing at that price. For example:

- ICF's April 2011 forecast had natural gas clearing
- Mr. Rose's February 2012 testimony in the Flint Creek case at the Arkansas PSC, which used a November 2011 ICF forecast, had natural gas clearing

- Mr. Rose's testimony in this proceeding has natural gas clearing
- ICF's August 2015 forecast has natural gas clearing.

To paraphrase Dr. Makovich, FirstEnergy's projection of credits under Rider RRS faces a "missing money" problem, namely, a missing matural gas price problem. While Mr.

⁹⁸ EIA Henry Hub, available at https://www.eia.gov/dnav/ng/hist/rngwhhdA.htm; *see also* Tr. VIII at 1550 (taking administrative notice of Henry Hub prices).

⁹⁹ SC Br. at 26.

¹⁰⁰ SC Ex. 21c at 2. We adjusted this and the other past natural gas price forecasts from ICF to nominal dollars, assuming a 2.1% per year inflation rate. *See* Rose Public Workpapers at 4; Rose Direct at 37 (assuming 2.1% inflation rate).

¹⁰¹ SC Ex. 22c at 2.

¹⁰² SC Ex. 9 at 19.

¹⁰³ SC Ex. 24c at 2.

¹⁰⁴ SC Ex. 25c at 2.

Rose/ICF have consistently forecasted that natural gas prices will significantly increase to an annual price higher than that this time will be different.

3. FirstEnergy's capacity revenue projections are outdated and unreasonably high.

In support of its projection of a net credit to customers under Rider RRS, FirstEnergy also highlights Mr. Rose's forecast that capacity prices will increase by from the 2013-2017 average to 2024. While identifying various factors that will purportedly push capacity prices up, FirstEnergy offers no further justification for the capacity price projection outside of claiming that the forecasted increase in capacity prices "has already begun." This claim, however, is disingenuous at best, as actual results and newer forecasts from ICF show that Mr. Rose's forecast of capacity prices, and FirstEnergy's projection of capacity revenues, is significantly overstated. In particular:

- Mr. Rose projected that capacity prices would spike to 2018/2019 base residual auction, but the actual clearing price for capacity performance products in that auction was \$164.77/MW-day. 107
- Although ICF issued reports before the base residual auction in August 2015 forecasting lower 2018/2019 prices than Mr. Rose forecast, FirstEnergy never updated the forecast used for its projection of Rider RRS charges and credits.¹⁰⁸
- PJM lowered its peak demand forecast twice since the forecast that Mr. Rose used in his capacity price forecast, which would put downward pressure on capacity prices. 109
- ICF recently issued a whitepaper noting that there is a "plausible scenario" in which the 2019/2020 capacity price would be lower than the actual 2018/2019 price. 110

¹⁰⁵ Co. Br. at 14.

¹⁰⁶ *Id.* at 15.

¹⁰⁷ SC Br. at 32, citing Co. Ex. 25c, Lisowski Workpapers at page 5, line 2.

¹⁰⁸ SC Ex. 87 and SC Ex. 88.

¹⁰⁹ SC Br. at 35-36.

¹¹⁰ SC Ex. 87 at 11.

• While FirstEnergy assumed that and the OVEC entitlement would clear the capacity auctions, in 2018/2019 cleared. Clear



¹¹¹ SC Br. at 33-34.

¹¹² *Id.* at 34.

¹¹³ SC Br. at 37.

¹¹⁴ IGS Ex. 3c at 56, Exhibit T. Because Mr. Rose reports his projected capacity prices in calendar years, rather than delivery years, and in \$/kW-yr, rather than \$/MW-day, the prices reported in Exhibit T had to be converted to be comparable to PJM auction results. First, Mr. Rose's \$/kW-yr figures are divided by 0.365 to convert to \$/MW-day. Then the results for two consecutive years are averaged to reflect seven months of the first year's value and five months of the second year's value.

¹¹⁵ For the 2016/2017, 2017/2018, and 2018/2019 delivery years, the reported actual prices are for capacity performance resources rather than base capacity resources.

The results to date demonstrate that Mr. Rose has once again put forth a forecast of capacity prices that is unreasonably high. This provides yet another reason that FirstEnergy's projection of revenues under RRS is unsupported by the record and unreasonably high.

C. The dispatch modeling performed for the Companies was deeply flawed.

In its initial brief, Sierra Club described in details the numerous deficiencies with the modeling run that was used to support FirstEnergy's cost and revenue projection – which, in turn, was used to come up with FirstEnergy's estimate that customers will receive \$561 million in net credits over the eight-year term of Rider RRS. 116 Among other shortcomings, FirstEnergy (i) evaluated the potential costs and revenues of the proposed transaction (each of which exceed \$11.5 billion¹¹⁷) using a crude, Microsoft Excel spreadsheet-based dispatch model; (ii) performed such evaluation based on only a single modeling run, without any sensitivities; and (iii) failed to perform any independent verification of the modeling run, which was performed by Mr. Lisowski, a member of the team that negotiated the proposed transaction on behalf of FES. 118 Moreover, because FirstEnergy failed to produce the actual model in this proceeding, the Commission, Staff, and other parties are also unable to independently verify the model and its assumptions, algorithms, and other features.

Despite the extensive evidence in the record regarding the deficiencies of this modeling run, FirstEnergy's initial brief ignores all of it. Sidestepping the fact that Mr. Lisowski's modeling run was heavily discredited, the Companies continue to treat that modeling as if it were

¹¹⁶ See generally SC Br. at 39-43. The projections, reflecting the modifications from the Stipulation, are presented in SC Exhibits 89 and 90c.

¹¹⁷ See SC Ex. 89, lines 10-11.

¹¹⁸ FirstEnergy's silence regarding the dispatch model's lack of sophistication is ironic, given that it largely stakes its defense of Mr. Rose's flawed forecasts on grounds that Mr. Rose/ICF use "the most sophisticated computer models available." Co. Br. at 13 & 14 n.44.

somehow reliable.¹¹⁹ FirstEnergy's failure to address this serious (and obvious) shortcoming of its Rider RRS proposal further confirms that FirstEnergy has not carried its burden of showing that Rider RRS is just and reasonable.¹²⁰

D. FirstEnergy has not demonstrated that its projection adequately accounts for environmental costs.

As Sierra Club explained in its initial brief, under FirstEnergy's proposal the Companies' customers would bear the risk that costs for the Sammis, Davis-Besse, and OVEC units end up higher than projected. These risks are exacerbated by the Companies' failed to provide adequate documentation two categories of costs: legacy cost components and environmental compliance costs. 122

With regard to environmental costs, among other potential oversights, ¹²³ FirstEnergy has failed to demonstrate that it fully accounted for the compliance costs the Sammis plant may face from two regulations recently finalized by U.S. EPA: the Effluent Limitations Guidelines ("ELG") ¹²⁴ and the Coal Combustion Residuals ("CCR") rule. Although FirstEnergy witness Evans sought to downplay these costs at hearing, FirstEnergy failed to provide any basis for Mr. Evans's off-the-cuff cost estimates. Indeed, FirstEnergy has never produced any study of ELG

¹¹⁹ Co. Br. at 15, 51.

¹²⁰ Cf. O.A.C. 4901:1-35-06(A) (establishing that the utility carries "the burden of proof to show that the proposals in the application are just and reasonable").

¹²¹ See generally SC Br. at 43-45.

¹²² FirstEnergy's failure to provide sufficient information on legacy cost components is discussed in Section III.B of Sierra Club's initial brief, and in Section II.E.1 below.

See SC Ex. 41c, 42c.

¹²⁴ Although Mr. Evans stated that Sammis is already in compliance with the ELGs, Co. Ex. 46, Evans Suppl. at 5, he later clarified that this statement in his testimony was referring only to the ELGs dating from 1982, not the standards finalized last year. Tr. XIX at 3803.

compliance methods or costs, ¹²⁵ and its analysis of CCR compliance will not be finished until 2017. ¹²⁶ In short, FirstEnergy has failed to demonstrate that potential environmental compliance costs facing the Sammis plant have been fully accounted for in this proceeding.

In its initial brief, FirstEnergy's discussions of environmental compliance overlook its failure to provide documentation of the compliance costs for an array of environmental regulations, and do not address the heightened cost risks stemming from the ELG and CCR rules. The Commission should therefore disregard FirstEnergy's unsupported assertions that Sammis "has a plan to comply with pending regulations at minimal cost," and that "any costs that the Plants may incur to comply with these regulations are included in the Companies' cost forecast provided by Company witness Lisowski." The fact remains that environmental compliance, particularly at the Sammis plant, is an unknown and possibly significant cost risk that customers would bear under Rider RRS.

E. The structure of FirstEnergy's proposal exacerbates the financial risks of Rider RRS.

As Sierra Club explained in Section III of its post-hearing brief, the significant risks that Rider RRS poses for the Companies' customers are compounded by the structure of FirstEnergy's proposal. In particular, the proposed transaction between FES and the Companies is structured in a way that significantly favors FES to the detriment of the Companies' customers. The financial risks of Rider RRS are further exacerbated by FirstEnergy's request that the Commission sign off on a large category of costs – the so-called "legacy cost components" – without sufficient information about these costs. And although the Stipulation

¹²⁵ Tr. XXXIII at 6787.

¹²⁶ Tr. XIX at 3800-02.

¹²⁷ See Co. Br. at 30, 71-73, 131-40.

¹²⁸ *Id.* at 131.

includes a proposal for "risk sharing" credits and an audit process, neither of these provisions would truly mitigate the substantial risks facing customers under Rider RRS.

FirstEnergy's post-hearing brief does not seriously address any of these shortcomings of its proposal. FirstEnergy downplays the numerous flaws of the proposed transaction, and it paints a misleadingly rosy picture of the negotiation process that resulted in the term sheet. And though it has asked the Commission to approve all legacy cost components, FirstEnergy's brief hardly mentions those legacy costs at all. FirstEnergy also fails to acknowledge the numerous deficiencies of its risk-sharing and audit provisions.

1. Under FirstEnergy's proposal, customers would be financially responsible for legacy costs.

As Sierra Club explained in its initial brief,¹²⁹ the financial risks of Rider RRS are exacerbated by FirstEnergy's proposal that all "legacy cost components" be deemed reasonable and not subject to challenge in a future Commission proceeding.¹³⁰ FirstEnergy's request encompasses "all costs that arise from decisions or commitments made and contracts entered into prior to December 31, 2014, including any costs arising from provisions under such historic contracts that may be employed in the future."¹³¹ This broad category of costs – whose potential amounts are massive – would not be subject to a future audit or prudency review.¹³²

Despite the magnitude of these legacy costs, FirstEnergy failed to provide adequate information about legacy cost components and their ultimate future impact. The specific monetary amounts that would be deemed reasonable are not in the record, and FirstEnergy never

¹³⁰ Tr. I at 79, 92, 93.

¹²⁹ SC Br. at 58-60.

¹³¹ Co. Ex. 7, Mikkelsen Direct at 14. There is no start date for which contracts, decisions, or commitments constitute legacy cost components, and no limit on the amount of legacy costs that can be included in Rider RRS. Tr. I at 88.

¹³² See Mikkelsen Direct at 14; id. at 15.

provided any basis on which such amounts could be calculated.¹³³ FirstEnergy also failed to adequately disclose such information in discovery.¹³⁴ In short, the legacy cost components included in FirstEnergy's proposal represent an unknown, major source of financial risk to the Companies' customers.

In its initial brief, FirstEnergy fails to address the financial risks of its proposal on legacy cost components. Indeed, FirstEnergy barely mentions legacy cost components at all: other than two cursory references, ¹³⁵ the initial brief lacks any discussion regarding this large category of costs. The Companies' refusal to forthrightly acknowledge such costs, and discuss their potential impact on customers, underscores the risks that customers would face under Rider RRS, and FirstEnergy's utter failure to safeguard customers' finances in developing this proposal.

2. The proposed transaction favors FES to the detriment of the Companies' customers.

Because the proposed transaction between FES and the Companies directly relates to Rider RRS, ¹³⁶ the terms of that transaction are directly relevant to the costs that customers would be responsible for under Rider RRS. And the structure of the proposed transaction is highly beneficial to FES, thereby exacerbating the risks that customers would face if the rider were approved.¹³⁷

As an initial matter, the proposed transaction is risky for the Companies' customers because the actual purchase power agreement ("PPA") between FES and the Companies has not

¹³⁴ SC Br. at 59-60.

¹³³ Tr. I at 92.

¹³⁵ Co. Br. at 73 & 74 n.340.

¹³⁶ See, e.g., Tr. XI at 2333; Ruberto Direct at 2-3; Tr. IV at 703.

¹³⁷ See generally SC Br. at 46-58.

been drafted.¹³⁸ Although FES and the Companies prepared a term sheet, that term sheet is not subject to Commission review, and there is nothing preventing FirstEnergy from modifying the terms before it finalizes the PPA. Even if all of the term sheet conditions were included in the PPA, FES and the Companies could mutually agree to add additional terms to the detriment of ratepayers.¹³⁹

Assuming the term sheet provisions were included in the final PPA, the Companies' customers would still be at risk, because those provisions are highly skewed in FES's favor. The term sheet's provisions prejudice the Companies' customers in at least three major respects.

First, the term sheet includes a "unit contingent" provision that excuses FES from providing energy, capacity, and ancillary services during unit outages of up to 180 days. This 180-day exemption, which is provided on a unit-by-unit basis, starts over with each new outage. Under this provision, the Companies would continue to pay fixed operation and maintenance ("O&M") costs, taxes, and a return on equity for a unit even when it's unavailable – costs that would ultimately be passed along to customers through Rider RRS. The scope of this outage exemption is significant. Although the Sammis units

¹³⁸ Tr. I at 56-57; Tr. XIII at 2750.

¹³⁹ See Tr. IV at 869-70 (FirstEnergy witness Strah admitting that he does not know "what the exact contract is going to look like or the exact words putting forth those provisions in the term sheet"); Tr. XI at 2332 (FirstEnergy witness Moul acknowledging that additional provisions could potentially be added to the contract).

¹⁴⁰ Term Sheet § 8.

¹⁴¹ *Id.* § 13; see also Tr. XI at 2296, 2298.

¹⁴² Term Sheet §§ 8, 13.

As of October 2015, Sammis's year-to-date EFOR was 17%. Tr. XXXII at 6550-51.

SC Ex. 37c, Att. 1 at 35.

¹⁴⁴ ELPC Ex. 13c, Att. 1; see also Tr. XII at 2593-94.

And although the Companies would not be required to pay FES's costs during unit outages if the outage could have been avoided "by exercise of Good Utility Practice," this provision offers little financial protection to the Companies – and their customers. 147

Despite the sweeping nature of this exemption, and its corresponding benefit to FES at the expense of customers, FirstEnergy's brief ignores the unit contingent provision entirely. Instead, FirstEnergy touts the fact that FES's operating work at the plant must adhere to "good utility practice." But this requirement is almost meaningless: Although, as FirstEnergy notes, the term sheet directs FES to operate the plants "in accordance with Good Utility Practice," there is no consequence for failing to meet this requirement, except in the context of a unit outage. And when there is an outage, the term sheet does not give the Companies the final say over whether "good utility practice" was followed. This important question has been deferred until the final PPA is drafted, 150 an event which has not yet occurred.

Second, under the term sheet FES, rather than the Companies, has ultimate control over capital expenditure decisions at Sammis and Davis-Besse. ¹⁵¹ These decisions directly impact ratepayers, because under the proposed transaction the Companies must not only pay

¹⁴⁵ ELPC Ex. 13c, Att. 1.

¹⁴⁶ Term Sheet § 8.

¹⁴⁷ See generally SC Br. at 49-50.

¹⁴⁸ Co. Br. at 53 (citing, *inter alia*, Term Sheet § 11).

¹⁴⁹ See generally Term Sheet; see also Tr. XI at 2295 (FirstEnergy witness Moul conceding that the term sheet does not specify which party decides whether the plants were operated consistent with good utility practice).

¹⁵⁰ Tr. XII at 2530.

¹⁵¹ Term Sheet § 12; *see also* Tr. I at 80; Tr. XIII at 2781. Under the term sheet, the Companies are allowed to comment upon FES's capital expenditure plans, but FES has no obligation to follow the Companies' recommendations. Term Sheet § 12.

depreciation on FES's capital expenditures for the remainder of the transaction, ¹⁵² they must also pay a return on equity for the capital invested in the plants. ¹⁵³

In its brief, FirstEnergy emphasizes the Companies' right to "review and comment upon" FES's planned capital expenditures, ¹⁵⁴ but the fact remains that FES, not the Companies, has the final say. This mismatch – where FES controls capital expenditure decisions, but the Companies are responsible for much of the resulting costs – magnifies the financial risks that Rider RRS poses to the Companies' customers. Moreover, in contrast to plant operations, FES's capital expenditure decisions are not subject to the "good utility practice" requirement. ¹⁵⁵ These risks are compounded by the fact that, as FirstEnergy witness Donald Moul conceded at hearing,

."¹⁵⁶ Put simply, the term sheet's skewed treatment of capital expenditure decisions gives FES an incentive to over-invest in its plants during the term of the proposed transaction,

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¹⁵² Term Sheet § 13(1)(iii); Tr. XIII at 2783-84; *see also id.* at 2856-57. The depreciation costs would then be passed on to customers through Rider RRS. *See* Tr. I at 81.

¹⁵³ See Term Sheet at 13 (calculation of the "capacity payment"); *id.* § 13(1)(iv) (requiring capacity payment to FES); *see also* Conf. Tr. XI at 2462.

¹⁵⁴ Co. Br. at 53.

¹⁵⁵ Tr. XIII at 2856-57. *Compare* Term Sheet § 11 (stating that "Seller has an obligation to perform the Operating Work in accordance with Good Utility Practice") *with id.* at 15 (definition of "Operating Work," which "exclud[es] any Capital Expenditures Work") Although FirstEnergy witness Ruberto claimed otherwise during his redirect examination, as Sierra Club has explained on page 51 of its initial brief, his testimony is unpersuasive. Consequently, FirstEnergy's reliance on this testimony is misplaced, *see* Co. Br. at 53 & n.242, and the Commission should disregard any suggestion that the Companies could avoid paying depreciation and an equity return for capital investments they disagreed with.

¹⁵⁶ Conf. Tr. XI at 2462-63; *see also id.* at 2461. Additionally, as FirstEnergy acknowledges, under the term sheet FES can accelerate the depreciation of capital assets with the Companies' consent. Co. Br. at 54; *see also* Term Sheet § 13(1)(iii) ("... Seller agrees not to charge accelerated depreciation (i.e., advance the useful life of an asset) without Buyers' written agreement").

with the Companies' customers being ultimately responsible for the depreciation and equity return associated with those investments.¹⁵⁷

Third, as Sierra Club explained in detail on pages 54-58 of its initial brief, the term sheet provides, at best, minimal protection against the risk of FES terminating the proposed transaction early, or modifying its terms to FES's advantage. For example, FES and the Companies could mutually agree to renegotiate the PPA, a contingency that the term sheet does not address. had if the Companies were unwilling to renegotiate the PPA, FES could still terminate it early without the Companies' agreement. Even assuming that FES's early termination were considered to be a breach of the proposed transaction, had that the Companies were willing to vigorously litigate against their corporate affiliate, the term sheet would likely preclude the Companies from recovering their expected future profits (the difference between the expected future revenues from selling the plants' output into the PJM markets, and the plants' future estimated costs). Because the Companies would likely forgo such profits in that situation, the Companies' customers would thus lose any credits that Rider RRS might otherwise produce in the latter years of its eight-year term. Here again, despite the risk of early termination, and the

¹⁵⁷ FirstEnergy's further claim, that FES would bear the "significant risk of a potential increased cost of equity over the eight-year period," Co. Br. at 48, is also misplaced. FirstEnergy cannot credibly claim that FES is bearing "risk" when it would enjoy a locked-in return on equity for its invested capital, as well as full recovery on long-term debt even if interest rates rise over the next eight years. In the weighted average cost of capital calculation provided in the term sheet, the debt component will change annually based on FES's long-term embedded cost of debt. Term Sheet at 13; *see also* Tr. VIII at 1665 (FirstEnergy witness Lisowski confirming that "the debt rate would float or sink with FirstEnergy Solutions' actual debt rate," and that "we don't know what that debt rate will be in any given year"). Put simply, under FirstEnergy's proposal, none of the financial risks are allocated to FES. *See also* SC Br. at 61-63.

¹⁵⁸ Tr. XI at 2284-86.

¹⁵⁹ There is a chance that the final purchase power agreement could give FES a right to terminate the agreement early. *See* Tr. XI at 2332 (Mr. Moul acknowledging that additional provisions could potentially be added to the contract).

extremely restrictive "limitations of liability" clause in the term sheet, FirstEnergy fails to grapple with any of these problems in its post-hearing brief.

At this point, no one knows what language, exactly, will be in the final PPA between FES and the Companies. But even if the term sheet provisions were fully incorporated into the PPA, and no additional terms were added, the proposed transaction would lack safeguards to protect the Companies' customers. The Companies have agreed to a term sheet whose provisions are skewed in FES's favor, further shifting risk away from FES, and onto captive ratepayers who would bear the financial burdens of Rider RRS. Accordingly, FirstEnergy's claim, that the "Companies negotiated an outcome beneficial to customers" with "robust protections for customers," 160 is belied by the clear language of the term sheet.

The Companies' evaluation and negotiation of the proposed 3. transaction was deficient.

Sidestepping these serious flaws in the term sheet, FirstEnergy's brief focuses instead on the process that resulted in the term sheet. In FirstEnergy's telling, the EDU Team "engaged in an extensive due diligence and analysis process to determine whether the proposal could benefit customers," and then negotiated hard on customers' behalf. But the record proves otherwise.

As Sierra Club explained in Section IV of its initial brief, the EDU Team's evaluation and negotiation of the proposed transaction was both rushed and substantively flawed. And although FirstEnergy spends several pages of its brief highlighting the EDU Team process, nothing in that discussion undercuts the numerous problems identified by Sierra Club. Indeed, the very things emphasized in FirstEnergy's brief underscore the deficiencies of the process.

¹⁶⁰ Co. Br. at 49, 53.

¹⁶¹ *Id.* at 50, 53.

FirstEnergy similarly misses the mark in boasting that the EDU Team "benefitted from the expertise of Company witness Rose," and in citing the Team's "confidence . . . in Mr. Rose's forecast." As explained in Section II of Sierra Club's initial brief, and as discussed further *supra* at 18-29, Mr. Rose's market price forecasts were unreasonably high, and are already proving to be incorrect. Consequently, the EDU Team's confidence in Mr. Rose's forecasts was misplaced. The revenue projection for the plants is almost certainly too high, and the customer credits projected for the latter years of Rider RRS that are highlighted in FirstEnergy's brief¹⁶⁹ will almost certainly not materialize, which further undercuts FirstEnergy's claim that the Team

¹⁶² Co. Br. at 50-51.

¹⁶³ Conf. Tr. XIII at 2917-18; SC Ex. 37c, Att. 1 at 36-39; Conf. Tr. XIV at 2936.

¹⁶⁴ SC Ex. 37c at 2-3.

¹⁶⁵ SC Br. at 73.

¹⁶⁶ Mikkelsen Direct at 14.

¹⁶⁷ See SC Br. at 59 n.211.

¹⁶⁸ Co. Br. at 50; *id.* at 53 (quoting testimony by FirstEnergy witness Ruberto, Tr. XIII at 2769-70).

¹⁶⁹ See Co. Br. at 50 (discussing Mr. Rose's forecasts and the resulting cost and revenue projections for FES's plants); *id.* at 51 (discussing the EDU Team's purported corroboration of the "revenue projections FES provided to the Companies during the negotiation process"); *id.* at 52 (discussing projected customer credits, which are based on Mr. Rose's price forecasts); *id.* at 52-53 (discussing the Team's belief that the plants would support a hedge if prices turned out different than Mr. Rose's forecasts, in part, because the forecasted prices were so much higher than the plants' variable costs).

negotiated "an outcome beneficial to customers." Moreover, as discussed in Section VI.C of Sierra Club's initial brief, the transmission and economic development analyses relied on by the EDU Team were deeply flawed. Put simply, FirstEnergy's attempt to characterize the EDU Team's evaluation as "extensive," or the term sheet as the product of an arm's-length negotiation, 172 is unconvincing.

4. FirstEnergy's proposal lacks safeguards to mitigate the risks Rider RRS poses for the Companies' customers.

Although FirstEnergy's brief touts the supposed benefits of its proposed "risk-sharing" credits and the audit process, ¹⁷³ in reality these Stipulation terms provide minimal protections against the financial and operational risks associated with FES's generating plants. As Sierra Club explained at length in Section III.C of its initial brief, these features of FirstEnergy's proposal would not truly protect customers from the enormous financial risks of Rider RRS. Among other flaws, FirstEnergy's proposal would not establish a cap on the amount of charges that customers could be responsible for under Rider RRS, and none of the financial risks are allocated to FES.¹⁷⁴

As for the proposed audit process, this, too, suffers from numerous deficiencies, including the fact that the Commission would not be entitled to consider the reasonableness of the revenue projection that has been presented in this case, and the fact that legacy cost

XIV at 2934, 2936. And the Team did not

. Conf. Tr.

¹⁷⁰ Co. Br. at 49.

¹⁷¹ Co. Br. at 51 (discussing transmission and economic impacts studies). The deficiencies of the EDU Team process do not stop there. For example, although FirstEnergy emphasizes that the Team toured Sammis and Davis-Besse, and "observed the condition of the Plants," *id.*,

[.] *Id.* at 2934-35.

¹⁷² Co. Br. at 49. The flaws in the negotiation are further described in Sierra Club's initial brief at 75-76.

¹⁷³ Co. Br. at 73-76.

¹⁷⁴ See SC Br. at 61-63.

components would be unreviewable.¹⁷⁵ And, as discussed in Sierra Club's brief, the audit process has many other procedural and substantive shortcomings.¹⁷⁶

Likewise, the "new risk sharing mechanism" proposed in the Stipulation is also flawed, providing little mitigation for the financial risks of Rider RRS. Under this provision, the Companies could pay out limited credits to customers, under certain conditions, based on the financial performance of Rider RRS during the last four years of the eight-year period. Sierra Club has already explained the deficiencies with this provision. This is compounded by the fact that such credits would be funded by the Companies, not FES or FirstEnergy Corp., so there is a risk that the Companies would seek recovery for those payments in a future Commission proceeding.

Additionally, the total potential amount of these credits pales in comparison to the magnitude of charges that customers could face under Rider RRS. As noted above, projections using up-to-date market forecasts show that the net present value of customer losses under Rider RRS would likely range between \$793 million and \$2.7 billion over the eight-year term. ¹⁸⁰ If these projections are borne out, the total amount of "risk sharing" credits – up to \$100 million, in

¹⁷⁵ *Id.* at 63-66. The fact that legacy cost components cannot be reviewed in the audit process belies FirstEnergy's claim that "[t]he Companies welcome rigorous Commission oversight of *all* costs and revenues included in Rider RRS." Co. Br. at 73 (emphasis added). The record demonstrates that this is not the case.

¹⁷⁶ SC Br. at 66-68.

¹⁷⁷ Stipulation at 7-8.

¹⁷⁸ SC Br. at 68-70.

¹⁷⁹ SC Br. at 69-70; *see also* Tr. XXXVI at 7525 (FirstEnergy witness Mikkelsen conceding "there is no language in the Third Supplemental Stipulation and Recommendation that precludes the companies from recovering those costs in a future Commission proceeding").

¹⁸⁰ Kalt Second Suppl. at 17; Wilson Second Suppl. at 12.

nominal dollars, sprinkled over a four-year period – would be a drop in the bucket compared to the overall losses customers would face. ¹⁸¹

Despite the many flaws of its audit and "risk sharing" proposals, FirstEnergy does not acknowledge any of these issues in its initial brief. Instead, FirstEnergy essentially limits itself to briefly summarizing these proposals. FirstEnergy has failed to meet its burden of showing that the Rider RRS proposal includes safeguards to customers. And the record in this case amply demonstrates that FirstEnergy's proposal lacks any such protections.

If anything, FirstEnergy's "risk sharing" provision, together with the other changes made to Rider RRS in the Stipulation (e.g., reducing the term to eight years, and lowering the PPA's return on equity to 10.38%), simply underscore the unreasonableness of FirstEnergy's proposal. In August 2014, FirstEnergy proposed a rider that would shift the risks of FES's generating plants onto the Companies' customers, exposing them to significant financial risk. Today, although FirstEnergy agreed to a few tweaks to its proposal along the way, the same fundamental problem remains: Under Rider RRS, customers would face enormous financial risks, would almost certainly pay much more than the Companies have projected, and would receive no meaningful benefits in return.

III. The Purported Price-stabilizing, Reliability, Fuel Diversity, and Economic Benefits of Rider RRS are Illusory and Unsupported by the Record.

In addition to the discredited projection of customer charges and credits discussed in Sections II.A-D above, FirstEnergy tries to justify Rider RRS by citing a panoply of other

Under FES's projection, which used market forecasts from 2014, the total over the eight-year term – would the total amount of credits permitted under this provision.

¹⁸² Co. Br. at 73-76. Likewise, although Staff highlights the "risk sharing" provision in its post-hearing brief, it fails to address any of the significant shortcoming of this provision. Post-Hearing Brief of the Public Utilities Commission of Ohio Staff ("Staff Br.") at 11, 15.

benefits this rider would purportedly create. All of the purported benefits, however, are illusory. As explained below, the rider's supposed retail rate stabilizing effects concern a problem that has not been shown to exist. And, in fact, the record demonstrates that Rider RRS would increase, rather than decrease, uncertainty and volatility regarding customers' bills. The other benefits cited by FirstEnergy – resource diversity, avoided transmission upgrade costs, and job and economic development – are all based on the erroneous assumption that Sammis and Davis-Besse would retire in the absence of Rider RRS. Moreover, as explained below and in Section VI.C of Sierra Club's initial brief, FirstEnergy's claims regarding these benefits are otherwise flawed.

A. FirstEnergy has not demonstrated that shifting merchant generation risks to customers would provide retail rate stability or certainty to customers.

Perhaps realizing that no reasonable case can be made that Rider RRS would provide a net credit to customers over its proposed eight-year term, FirstEnergy spends much of its initial brief trying to sell Rider RRS as providing retail rate stability and certainty by serving as a hedge against the purported threat of increasing and more volatile energy prices. In particular, FirstEnergy surmises that if energy prices go up, Rider RRS will offset such increases, while if energy prices remain low, Rider RRS would provide protection against the risk that prices will go up in the future. While creative, FirstEnergy's effort to sell a proposal that would shift virtually all of the market risks facing Sammis, Davis-Besse, and the OVEC entitlement from FES to customers as somehow providing stability to those customers falls under its own weight. In addition, FirstEnergy has failed to provide credible evidentiary support for the claim that customers will face significant retail price volatility, much less that Rider RRS would serve as a

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¹⁸³ See, e.g., Co. Br. at 4-5, 21-24, 41-47, 120-22, and 145; see also OEG Br. at 9-10.

¹⁸⁴ Co. Br. at 22.

hedge against such volatility. In fact, for the only example of purported retail price volatility that

FirstEnergy identifies – energy price increases in the months following the 2014 polar vortex –

Rider RRS would have

. As such, FirstEnergy has failed to demonstrate that Rider RRS would stabilize or provide customers with certainty regarding retail electric prices.

1. Rider RRS does not provide "insurance" to customers.

In an argument that implicitly acknowledges that the escalating market prices that it forecast back in mid-2014 are unlikely to occur, FirstEnergy attempts to package Rider RRS simply as an insurance policy against the mere risk that such price escalation may occur. As FirstEnergy explains it, if market prices do not escalate the way that it is forecasting, "customers will nevertheless benefit from having insurance against the risk of price increases." As such, the Companies claim, Rider RRS is akin to car insurance which provides protection against the risk of a car accident that is valuable even if an accident never happens. ¹⁸⁶

FirstEnergy's attempt to sell Rider RRS as an insurance policy fails because the rider lacks at least three critical hallmarks of an insurance policy – knowledge about the size of the loss being insured against, certainty about the price of the insurance, and the ability to shop for a better deal. FirstEnergy cites favorably to the testimony of OEG witness Baron that Rider RRS is about "betting against a bad outcome, if you don't have that bad outcome, the premium that you paid for that bet will be worth it." But there is no basis in this record upon which one could reasonably conclude that the "bet will be worth it." For one thing, the record is bereft of any quantification of the "bad outcome" that is purportedly being insured against. In particular,

¹⁸⁵ *Id.* at 4.

¹⁸⁶ *Id.* at 22.

¹⁸⁷ *Id.* at 4-5 (citing Tr. XXII at 4384).

FirstEnergy has offered no estimate of (i) how much customers' retail rates would purportedly increase if Mr. Rose's outdated and unreasonably high market forecasts ended up coming true, or (ii) the probability that such forecasts will come true. And on the other side of the ledger, FirstEnergy has provided no estimate of the premium that would be paid – i.e., how much the Rider RRS "insurance policy" would cost customers if the "bad outcome" did not occur. In fact, the Companies failed to run any sensitivity analyses estimating the cost of Rider RRS in the event that Mr. Rose's market forecasts do not pan out. ¹⁸⁸

As such, FirstEnergy's car insurance analogy is inapposite. When you purchase car insurance, your policy tells you how much loss you are being insured against, and the premium that you will pay for such coverage. And if you believe that the coverage being offered by one insurance company is too low and/or the premium is too high, you can seek a better deal with a different insurance company. Yet with Rider RRS, there is no information or guarantee about the size of the loss (in the form of higher retail energy prices) customers are purportedly being insured against, no certainty regarding the price that customers would pay for such insurance, and no ability to shop for a better deal. No one would buy car insurance under such conditions and, similarly, the Companies' customers should not be forced to buy FirstEnergy's misleadingly packaged Rider RRS "insurance policy."

FirstEnergy's insurance analogy is further, and fatally, flawed because the only entity that would receive any certainty under Rider RRS and the associated proposed transaction is FES.

No matter what happens, Rider RRS and the proposed transaction ensure that FES would be reimbursed for all of its costs – including interest, a return on equity, and taxes – related to Sammis and Davis-Besse. Yet customers receive no certainty, as the charges or credits that

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¹⁸⁸ See generally SC Br. at 41-43.

would pass through Rider RRS are subject to all of the risks inherent in the wholesale energy markets. Those market risks are currently borne by FES, an unregulated generation company. Shifting those risks to customers – which is what FirstEnergy's proposal would do – qualifies as insurance for the bottom line of FES and its shareholders, but not for customers.

2. FirstEnergy has not shown that customers face significant retail rate volatility.

FirstEnergy's retail rate stability and certainty claims also fail because the Companies have not demonstrated that customers face any significant retail rate volatility over the eight-year term of Rider RRS. According to FirstEnergy, "it is widely recognized that retail prices will increase and become more volatile in the future, potentially to a significant degree," which is a claim that is repeated incessantly throughout FirstEnergy's initial brief. But simple repetition of a claim does not make it true and, in fact, FirstEnergy has not provided any credible evidentiary basis upon which to conclude that customers face significant retail rate volatility in the coming years.

FirstEnergy's effort to demonstrate retail rate volatility comes in three forms, each of which fails. First, FirstEnergy highlights Mr. Rose's forecasts of increasing wholesale market energy, natural gas, and capacity prices to claim that customers face the threat of increasing retail rates. As already explained in Sierra Club's initial brief and in Section II.B above, however, Mr. Rose's forecasts are outdated, unreasonably high, and already proving to be wrong. In addition, Mr. Rose's forecasts are only of wholesale prices, not retail prices, and Mr. Rose acknowledged at hearing that he had not "done a detailed forecast of retail prices in this

¹⁸⁹ Co. Br. at 1.

¹⁹⁰ See, e.g., id. at 2, 3, 4, 8, 22, 41, 45, 124, 141, and 145.

¹⁹¹ See, e.g., id. at 22.

proceeding," and had not performed any quantitative analysis of retail price volatility in the Companies' service territories. ¹⁹² In fact, the record is vacant of any analysis of the extent to which Mr. Rose's forecasted increases in wholesale prices – if they were to actually occur – would impact the retail rates being charged to the Companies' customers, especially in light of the staggering and laddering of SSO supply contracts, which the Staff¹⁹³ has already found is effective at mitigating price volatility. As such, FirstEnergy's forecasted escalation of wholesale market prices fails to provide a credible basis upon which to conclude that customers face significant retail price volatility or uncertainty.

The only concrete example of retail rate volatility identified by FirstEnergy came in the wake of the 2014 polar vortex which led to increases in CRES offers and SSO auction results starting in early to mid-2014. Such a backward-looking analysis, however, does not establish that retail rates will be volatile over the term of Rider RRS, especially given that, as discussed in Section III.B.2, PJM has already made short- and long-term reforms designed to address the issues that led to wholesale market price spikes during the polar vortex. And, as explained in Section III.A.3.a below, rather than serving as a countercyclical hedge to the polar vortex, Rider RRS would have

Regardless, FirstEnergy's claims of retail price volatility tied to the polar vortex are overstated at best.

FirstEnergy relies heavily on a comparison of CRES offers listed on the Commission's Apples-to-Apples website for selected months to conclude that the price of the offers increased

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¹⁹² Tr. VI at 1198-99.

¹⁹³ Staff Ex. 12, Choueiki Pre-filed at 14.

¹⁹⁴ Co. Br. at 42-45.

in the first four full months after the polar vortex. What FirstEnergy, however, has not done is provide any analysis of what prices shopping customers were actually paying for electric service before and after the polar vortex, much less what prices they may be paying during the term of Rider RRS. It is important to note, too, that CRES offer prices have stabilized since the post-polar vortex jump that FirstEnergy identifies and are beginning to decline. For example, the average price for 12-month offers listed on the October 23, 2015 Apples-to-Apples comparison chart for Ohio Edison was \$0.0803/kWh, 197 which is essentially the same as the average offer price of \$0.081/kWh identified by FirstEnergy for May 2014. For 36-month offers, the average of the prices listed on the October 23, 2015 chart was \$0.078/kWh.

¹⁹⁵ *Id.* at 43.

¹⁹⁶ In this section, the figures reporting CRES offer averages were computed using the same method that Ms. Mikkelsen used in computing averages in her Rebuttal Testimony. Consequently, the average calculations include offers for "fixed price, full requirements product[s] (excluding introductory offers or offers with a green component or monthly fee)." Mikkelsen Rebuttal at 4.

¹⁹⁷ SC Ex. 84. The \$0.0803/kWh price was calculated by averaging the 12-month offers from AEP Energy, Agera Energy, Censtar Energy Corp., Constellation New Energy, Direct Energy Services, IGS Energy, Plymouth Rock Energy, Source Power & Gas, Star Energy Partners, Think Energy, Town Square Energy East, and XOOM Energy Ohio.

¹⁹⁸ Mikkelsen Rebuttal at 4.

¹⁹⁹ SC Ex. 84. The \$0.078/kWh price was calculated by averaging the 36-month offers from Champion Energy Services, Constellation New Energy, Just Energy, Star Energy Partners, and Direct Energy Services.

Average CRES offer prices were even lower in the January 15, 2016 Apples-to-Apples Comparison Chart for Ohio Edison, which showed an average price for 12-month offers of \$0.073/kWh, and for 36-month offers of \$0.072/kWh. (The \$0.073/kWh price was calculated by averaging the 12-month offers from AEP Energy, Agera Energy, Censtar Energy Corp., Constellation New Energy, Direct Energy Services, Dynegy Energy Services East, IGS Energy, Plymouth Rock Energy, Star Energy Partners, Think Energy, Town Square Energy East, and XOOM Energy Ohio. The \$0.072/kWh price was calculated by averaging the 36-month offers from AEP Energy, Constellation New Energy, Direct Energy Services, and Star Energy Partners.) Just as the Attorney Examiners took administrative notice of the Apples-to-Apples Comparison Charts marked as exhibits during the hearing, the Commission can take administrative notice of the January 15, 2016 chart, which is the last one published before the hearing ended in this proceeding. The chart is available at

http://www.puco.ohio.gov/emplibrary/files/A2aArchive/Electric/Ohio_Edison/Residential/2016/2016-01-15_Ohio_Edison.pdf (last visited Feb. 25, 2016).

In addition, while FirstEnergy notes that there were "only" four 36-month CRES offers on the September 11, 2015 comparison chart, ²⁰⁰ that is significantly more than in the pre-polar vortex timeframe when there was only one such offer on the September 16, 2013 chart, ²⁰¹ and none on the December 2, 2013 chart. ²⁰² In addition, the October 23, 2015 chart had 36-month offers from six different CRES providers. ²⁰³ As such, the evidence in the record shows that any post-polar vortex increase in CRES offer prices was temporary, that prices are coming back down, and that more CRES providers are providing 36-month contracts than did before the polar vortex. In short, the record does not demonstrate significant retail price volatility for shopping customers to date, much less over the term of Rider RRS.

Finally, FirstEnergy raises the specter that increased reliance on natural gas-fired generation will cause retail rates to be more volatile in the future given that natural gas prices vary more significantly than coal prices. This argument fails for two reasons. First, the natural gas price volatility that FirstEnergy references is almost all due to short term, daily or weekly price changes. On an annual basis – which is the time frame upon which Rider RRS would be calculated – there has been fairly little natural gas price volatility as prices since 2009 have stayed between \$2.62/mmBtu and \$4.37/mmBtu. In addition, FirstEnergy has again

²⁰⁰ Co. Br. at 42-43.

²⁰¹ Co. Ex. 82.

²⁰² SC Ex. 80.

²⁰³ Notably, the January 15, 2016 chart had 36-month offers from seven different CRES providers.

²⁰⁴ Co. Br. at 64.

²⁰⁵ Tr. XXXIX at 8284.

²⁰⁶ EIA Henry Hub, available at https://www.eia.gov/dnav/ng/hist/rngwhhdA.htm; *see also* Tr. VIII at 1550 (taking administrative notice of Henry Hub prices); SC Ex. 11. To the extent that FirstEnergy is using volatility to refer to the longer-term escalation of natural gas prices forecasted by Mr. Rose, such a claim is undermined by the fact that, as discussed in Section II.B.2, Mr. Rose's forecast is outdated and already proving to be wrong, and Mr. Rose/ICF have

provided no analysis of how changes in the wholesale price of natural gas would filter down into the retail rates paid by the Companies' customers. In particular, FirstEnergy has provided no basis to conclude that the staggering and laddering of SSO contracts, and the availability of 12-to 36-month CRES offers would not mitigate the impact of daily and weekly changes in natural gas prices. As such, FirstEnergy's fear-mongering about price volatility is, once again, unsupported by the evidence.

3. The record demonstrates that Rider RRS would not serve as a countercyclical hedge against retail rate volatility.

Even if FirstEnergy had demonstrated that customers face significant retail rate volatility, its case fails because FirstEnergy has not demonstrated that Rider RRS would serve as an effective hedge against such volatility. As FirstEnergy explains, "to be effective, a hedge must be designed to work counter to the risk being hedged against." In other words, a hedge would need to have a countercyclical impact so that if the price being hedged against goes up, the hedge offsets that increase. Throughout its initial brief, FirstEnergy – apparently acting on the belief that saying something often enough somehow makes it true – repeatedly states that Rider RRS would serve as a countercyclical hedge. But FirstEnergy cannot satisfy its evidentiary burden by simply saying something over and over; instead, it was required to provide credible evidence to support its claim. And it did not. Indeed, FirstEnergy's initial brief fails to identify any such evidence establishing that Rider RRS would serve as a countercyclical hedge. Such failure is perhaps not surprising given that no such evidence exists in the record, but it is fatal to FirstEnergy's case, especially given that the record actually shows that Rider RRS would increase, rather than decrease, volatility and uncertainty for customers.

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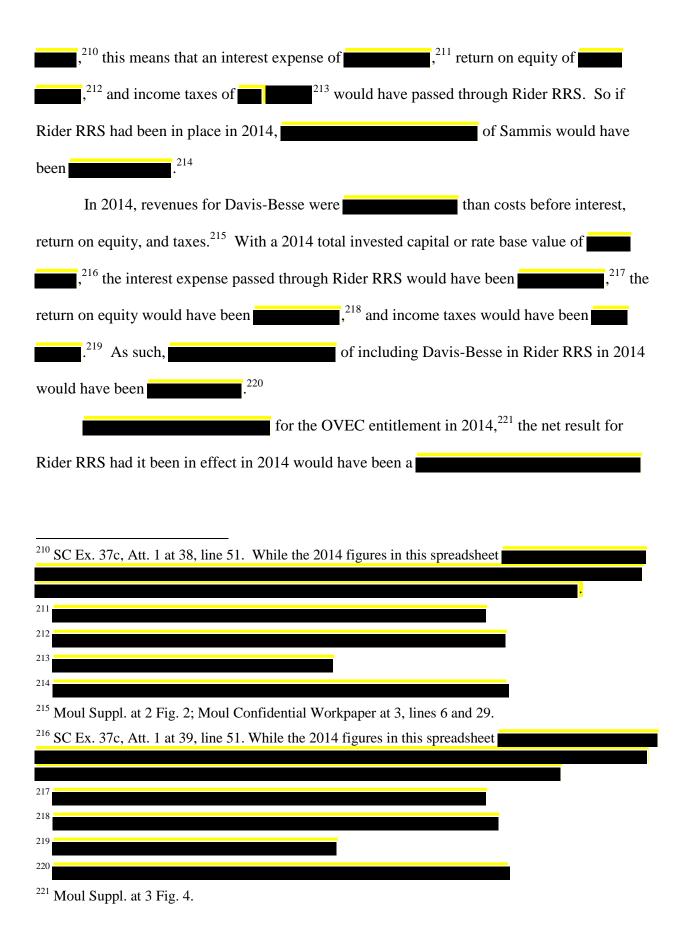
²⁰⁷ Co. Br. at 4.

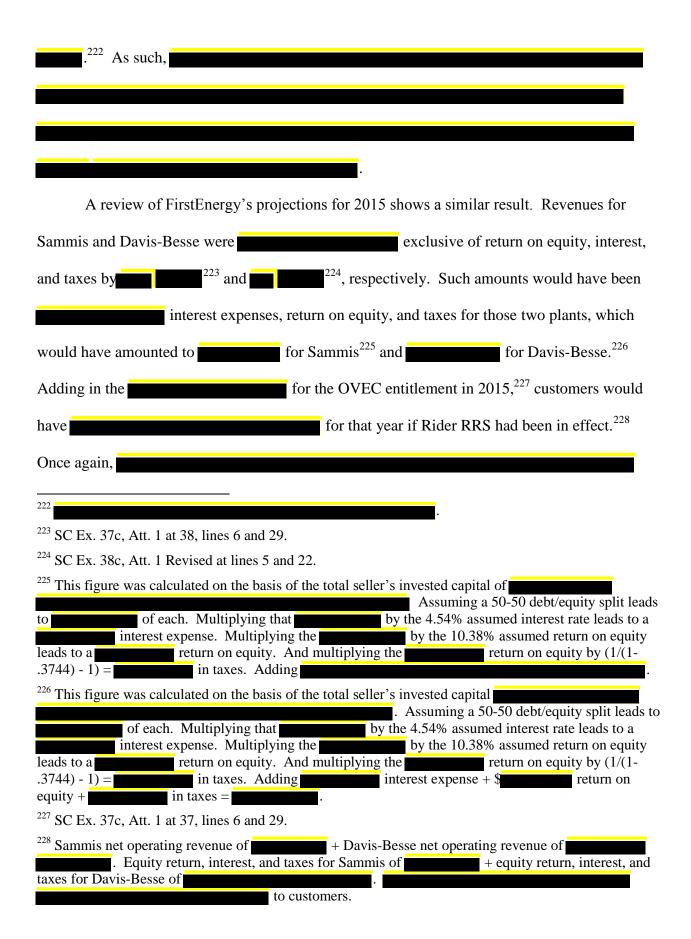
a. Rider RRS would have not have offset the purported retail price impacts of the polar vortex.

As explained above, the only concrete example of purported retail rate volatility identified by FirstEnergy is in the wake of the 2014 polar vortex. In FirstEnergy's telling, Rider RRS would have acted to offset increases in CRES offers and SSO auction results experienced in 2014 to 2015 after the polar vortex and, to the extent that locational marginal prices ("LMPs") ended up being higher than rates being paid by the Companies' customers, Rider RRS would have "captur[ed] the actual value" of those higher prices. 208 Yet real-world results from 2014 and FirstEnergy's own projections for 2015 show that . Instead of offsetting the price increases that FirstEnergy claims occurred after the polar vortex, if Rider RRS had been in effect in 2014 and 2015 In short, instead of a countercyclical hedge, Rider RRS That Rider RRS can be seen by reviewing Mr. Moul's supplemental testimony and cost data that FES provided to the Companies shortly before Rider RRS was proposed. In his supplemental testimony, Mr. Moul reports that for the Sammis plant in 2014, , not including interest, return on equity, or taxes, by figure provides only part of the story of the charges and credits that would flow through Rider RRS. Given that the total invested capital or rate base value of Sammis in 2014 was

²⁰⁸ *Id.* at 43-45 (citing Mikkelsen Rebuttal at 6-7).

²⁰⁹ Moul Suppl. at 2 Fig. 1; Co. Ex. 31c, Moul Confidential Workpaper at 2, lines 6 and 29.





As such, there is simply no basis on this record to conclude that Rider RRS would help stabilize retail rates or offset the impact of price volatility on customers' bills.

b. Rider RRS would increase, rather than decrease, uncertainty regarding customers' bills.

The ineffectiveness of Rider RRS as a price stabilizer is also a result of how charges and credits are calculated under the rider. In particular, under FirstEnergy's proposal, the charges or credits to be passed through to customers under Rider RRS in a particular year are based on a projection of costs and revenues made at the beginning of that year. Those results are then trued up at the end of February of the next year, with the results of such true up folded in to the charge or credit to be paid in the twelve months after the true-up. As a result, if FirstEnergy projects that revenues in one year will be significantly higher than they actually end up being, then customers would pay a lower charge, or perhaps receive a higher credit, under Rider RRS than they should have for that year. But then once the projections are trued up, customers would be paying back that extra charge, or receiving a lower credit over a twelve-month period starting at the end of February of the next year. In short, Rider RRS does not increase price certainty for customers but, instead, adds yet another uncertain factor into the calculation of customers' bills.

The wide variation between projected and actual revenues from Sammis and Davis-Besse in 2014 and 2015 demonstrates the impact of the added uncertainty from Rider RRS. For example, in July 2014 FES,

²²⁹ Co. Br. at 41 (citing Co. Ex. 43, Savage Direct at 3; Mikkelsen Direct at 14-15).

²³⁰ Savage Direct at 3.

exclusive of equity return, interest, and taxes, for a Actual 2014 results for Sammis, however, were in revenues and In other words, before equity costs, for a return, interest, and taxes, for Sammis were than projected. For Davis-Besse, the 2014 projected values were in costs (exclusive of in revenues and The actual 2014 results equity return, interest, and taxes) for in revenues and in costs, for for Sammis and Davis-Besse combined was So, while the projected , the actual was , a difference of means that customers would have than actual market conditions in 2014 would have called for. And that would have been counted against the calculation of charges or credits under Rider RRS for the twelve-month period starting at the end of February 2015, causing customers to than actual market conditions in that time period would have called for. Such disparity between the market conditions in a particular twelve-month period and the charges or credits paid under Rider RRS over that period further undermines FirstEnergy's unsupported contention that Rider RRS would offset market volatility and provide retail price stability to customers.

A similar disparity would have been experienced in 2015 if Rider RRS had been in effect.

In particular, FES projected in July 2014 that the Sammis plant would earn in

²³¹ SC Ex. 37c, Att. 1 at 38, lines 6 and 29.

²³² Moul Confidential Workpaper at 2, lines 6 and 29.

²³³ SC Ex. 37c, Att. 1 at 39, lines 6 and 29.

²³⁴ Moul Confidential Workpaper at 3, lines 6 and 29.

energy revenues in 2015.²³⁵ That projection was based, in part, on the forecast that the Sammis plant would have an capacity factor in 2015.²³⁶ In reality, due to lower-than-forecasted energy and natural gas prices, the Sammis plant's capacity factor year-to-date through October 2015 was 47%.²³⁷ As a result, as Sierra Club witness Tyler Comings showed in unrebutted testimony, actual energy revenues from Sammis in 2015 would be which is capacity factor year-to-date through October 2015 was 47%.²³⁸ Such a significant disparity between projected and actual revenues means that customers would have called for, while customers would have under Rider RRS than actual market conditions in 2015 would have called for, while customers would have under Rider RRS than actual market conditions in the twelve-month period starting at the end of February 2016 would have called for. As such, the actual evidence in the record once again disproves FirstEnergy's unsupported contention that Rider RRS would somehow provide increased certainty around retail rates paid by the Companies' customers.

B. FirstEnergy's resource diversity arguments are without merit.

A major theme throughout FirstEnergy's post-hearing brief is the notion that Rider RRS is needed to maintain resource or fuel diversity. Time and again, FirstEnergy cites this resource diversity rationale in an attempt to justify Rider RRS.²³⁹ Although there are minute differences in the phrasing FirstEnergy employs in repeating this argument throughout its brief, the argument remains the same: According to FirstEnergy, Rider RRS would preserve resource diversity by maintaining the Sammis and Davis-Besse plants, and thereby prevent greater reliance on

²³⁵ SC Ex. 37c, Att. 1 at 38, line 3.

²³⁶ Comings Third Suppl. at 12 & n.21.

²³⁷ *Id.* at 12.

²³⁸ *Id.* at 13.

²³⁹ See, e.g., Co. Br. at 5-6, 21, 24-27, 55-67, 128-31, 146.

purportedly unreliable natural gas generation. The problem for FirstEnergy, however, is that none of these claims has merit. There is no reliable evidence indicating that Sammis and Davis-Besse would retire in the absence of Rider RRS. And FirstEnergy grossly exaggerates the purported reliability risks of natural gas, while ignoring the fact that PJM has already addressed the reliability concerns raised by the polar vortex. Finally, FirstEnergy conveniently ignores the reliability problems associated with coal units, including the FES units that are the subject of Rider RRS.

1. There is no evidence in the record that FES would retire Sammis or Davis-Besse if Rider RRS is rejected.

All of FirstEnergy's oft-repeated resource diversity arguments are premised on the implicit threat that the Sammis and Davis-Besse plants will retire if Rider RRS is not approved. Although FirstEnergy generally phrases this threat in the negative, by claiming that Rider RRS²⁴⁰ would continue the operation of these plants,²⁴¹ the implication is the same: FirstEnergy is suggesting that without Commission approval of its proposal, Sammis and Davis-Besse will retire. Because all of Rider RRS's purported resource diversity benefits are premised on the notion that the plants will otherwise retire, it is hardly surprising that FirstEnergy invokes this threat throughout its brief.

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²⁴⁰ Although FirstEnergy frequently refers to the "Economic Stability Program," Rider RRS and the Economic Stability Program are essentially one and the same.

²⁴¹ See, e.g., Co. Br. at 5 ("By supporting the continued operation of the Plants through the current short-term market turmoil, the Economic Stability Program . . . preserv[es] resource diversity"); *id.* at 6 (Rider RRS "enhances reliability . . . by continuing the operation of baseload, fuel-diverse generating units"); *id.* at 27 (Rider RRS "ensures the continued operation of essential baseload coal and nuclear assets"); *id.* at 55 ("The Economic Stability Program benefits customers and is in the public interest because it enhances reliability by preserving and promoting generation resource diversity."); *id.* at 61 (claiming that "the Economic Stability Program will ensure 'the continued operation of baseload generating units . . .") (quoting Ms. Mikkelsen's testimony); *id.* at 128 ("approval of Rider RRS is critical to ensure the ongoing operation of the Plants"); *id.* (suggesting that Rider RRS will "maintain[] the Plants"); *id.* at 21 n.81 (citing FirstEnergy witness Fanelli's claim that the "proposed economic stability program...provides certainty regarding the continued operation of the [P]lants. . ."); *id.* at 146 (asserting that "the Economic Stability Program supports generation resource diversity").

But the Commission should reject this implicit threat, and disregard FirstEnergy's resource diversity arguments, because there is no credible evidence that Sammis and Davis-Besse would retire if Rider RRS were rejected. The emptiness of this threat was discussed at length in Sierra Club's initial brief, ²⁴² and is further addressed below.

First, nowhere in its 149-page brief does FirstEnergy actually say that Sammis and Davis-Besse would retire in the absence of Rider RRS. Instead, as noted above, FirstEnergy raises this specter by stating the point in reverse: that the rider will ensure the plants' continued operation. At most, FirstEnergy vaguely warns that the plants' future is "uncertain," that their "economic viability . . . is in doubt," or that without an unspecified amount of "additional revenue . . . FES simply may be forced to retire them." In each of these instances, however, FirstEnergy is careful to avoid stating that the plants will actually close without Rider RRS. And, as Sierra Club noted in its initial brief, FirstEnergy's witnesses likewise avoided saying that the plants would retire, and there is no evidence that FES or the Companies have evaluated or discussed retiring those plants if Rider RRS were not approved. 244

Second, the lack of evidence that the plants would retire is buttressed by the ample evidence that they will not retire. For one thing, according to FirstEnergy's own projections, neither Sammis nor Davis-Besse would retire. As Mr. Moul testified at hearing,

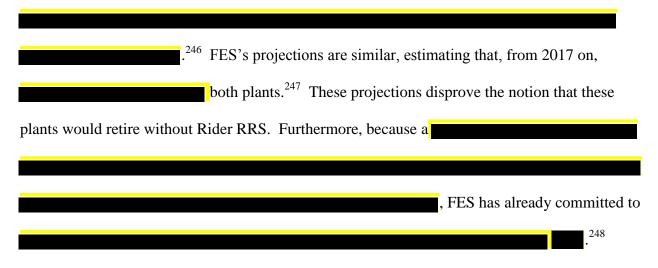
And that is precisely what FirstEnergy's projections show. For each year of Rider RRS, FirstEnergy projects that the

²⁴² SC Br. at 80-90.

²⁴³ Co. Br at 5, 29, 125, 126, 128.

²⁴⁴ See SC Br. at 81-84.

²⁴⁵ Conf. Tr. XI at 2432-33; see also id. at 2445.



In its initial brief, FirstEnergy essentially ignores the evidence discussed above. The Companies instead focus on at Sammis and Davis-Besse, and discuss at length the retirement of other generating units, in claiming that the "future of the Plants is in doubt." Neither argument has merit.

²⁴⁶ See SC Br. at 85, Tbls. 7 and 8 (citing SC Ex. 90c, Atts. JJL-1, JJL-2).

²⁴⁷ SC Ex. 36c at 1, 2.

²⁴⁸ Conf. Tr. X at 2140-44.

²⁴⁹ Co. Br. at 125-28.

²⁵⁰ *Id.* at 125-26 (citing Moul Rebuttal at 2-3) (conf.).

, does not support the notion that the plants would retire if Rider RRS were not approved.²⁵¹

Further, FirstEnergy's reliance on "industry trends," and its attempted analogy to Hatfield's Ferry, ²⁵² is unconvincing because FirstEnergy produced no evidence that the financial situation of those plants is comparable to Sammis, Davis-Besse, or the OVEC units. Indeed, although FirstEnergy claims that the Hatfield plant is "similarly situated" to Sammis, ²⁵³ the available evidence indicates that Hatfield's financial situation was ________. FirstEnergy witness Lisowski testified that Hatfield's Ferry, which closed in 2013, had "incurred past near-term losses and negative cash flow that were expected to continue in the near-term." At Sammis, by contrast, the plant _________, ²⁵⁵ and according to FirstEnergy's projections, the __________.

²⁵¹ *See* Co. Br. at 126 (discussing Lisowski Rebuttal at 3-4) (conf.); *cf.* SC Br. at 87-88 (addressing Mr. Lisowski's rebuttal testimony).

²⁵² Co. Br. at 126-28.

²⁵³ *Id.* at 127. During his redirect examination, Mr. Lisowski talked at length about the similarities between Sammis and Hatfield's Ferry. Tr. XXXIII at 6858-61. FirstEnergy cites that testimony in drawing an analogue between the two plants. Co. Br. at 127-28 & n.618. But FirstEnergy produced no data regarding Hatfield's financial information, and as discussed in the text, the financial situation of the two plants is demonstrably different.

²⁵⁴ Lisowski Rebuttal at 6.

²⁵⁵ Lisowski Rebuttal, Att. JJL-4 (conf.).

²⁵⁶ See SC Br. at 85, Tbl. 7 (citing SC Ex. 90c, Att. JJL-1).

FirstEnergy cannot have it both ways. If the Companies believe their own projections, ²⁵⁷ then the veiled threat that Sammis and Davis-Besse would retire without Rider RRS is nothing more than a cynical attempt to spook the Commission into approving the rider. And if the Companies do not believe their own projections, then FirstEnergy's repeated references to the estimated \$561 million in customer credits is wholly disingenuous. ²⁵⁸ Either way, there is no legitimate basis for approving Rider RRS.

The emptiness of FirstEnergy's veiled retirement threat is further underscored by the Ohio Energy Group's post-hearing brief. Although OEG is a signatory to the Stipulation and a supporter of Rider RRS, it acknowledged that the plants "are not scheduled to retire," which "means that the same amount of energy and capacity will participate in the PJM markets with or without the [proposed transaction]." OEG was unequivocal on this point, stating that "[w]hile FirstEnergy has indicated that the future of the PPA Units is 'uncertain,' there is no evidence that any of the PPA Units will shut down absent approval of Rider RRS" 260

²⁵⁷ At the January 2016 hearing, Ms. Mikkelsen confirmed that the Companies stand by their projections for the eight-year term of Rider RRS. Tr. XXXVI at 7675, 7677.

As such, if FirstEnergy were to attempt to to claim that Sammis and/or Davis-Besse would retire without Rider RRS, then FirstEnergy would also need to update its projection of charges and credits under Rider RRS to reflect

The result of such change would be the \$363 million loss to customers that FirstEnergy projects for Rider RRS through 2018, the net credit that FirstEnergy claims customers would receive over the eight-year term of Rider RRS.

²⁵⁹ OEG Br. at 11. *See also id.* at 33 (disputing the allegation "that the PPA Units would retire if not included in the Rider").

²⁶⁰ *Id.* at 33.

The lack of evidence that Sammis and Davis-Besse would retire if Rider RRS were rejected, and the ample evidence showing they would not, is dispositive. And because FirstEnergy's resource diversity claims are premised on the incorrect assumption that Sammis and Davis-Besse would retire in the absence of Rider RRS, the Commission should disregard the resource diversity arguments presented in FirstEnergy's brief.

2. FirstEnergy's resource diversity claims are otherwise meritless.

Even assuming, *arguendo*, that Sammis and Davis-Besse would retire without Rider RRS, FirstEnergy's resource diversity claims would still be without merit. Sierra Club has already explained the many flaws with FirstEnergy's resource diversity argument.²⁶¹ And although FirstEnergy devoted many pages of its brief to this topic, none of those arguments withstand scrutiny. As a threshold matter, though FirstEnergy repeatedly bemoans the retirement of coal and nuclear units,²⁶² none of the Companies' witnesses could identify the optimal generation mix from a resource diversity perspective.²⁶³

The core of FirstEnergy's resource diversity claims – that natural gas generation is purportedly unreliable, in contrast to supposedly "bedrock" coal and nuclear units – is belied by the facts. Throughout its brief, FirstEnergy makes this same basic point over and over again. ²⁶⁴

²⁶¹ SC Br. at 106-14.

²⁶² Co. Br. at 26, 28, 55-56, 57, 59, 121, 126-27. Notably, in spite of these claims, FirstEnergy's own witness, Dr. Makovich, conceded that it is unlikely that coal would be eliminated from PJM's generation mix in the next ten years, or that nuclear would be eliminated from the mix in the next five years. *See* Tr. XVII at 3501.

²⁶³ SC Br. at 107-08. And although FirstEnergy tried to bolster its resource diversity claims with supplemental testimony from Dr. Makovich, Dr. Makovich submitted his testimony with virtually no knowledge about Sammis and Davis-Besse, the proposed transaction, or Rider RRS. *Id.* at 111-14.

²⁶⁴ See, e.g., Co. Br. at 5 (warning of an increasing reliance on natural gas generation, and the "potential for . . . reliability concerns attendant to such reliance"); *id.* at 21 (claiming that Rider RRS "will help assure customers have reliable electric service . . . by supporting resource diversity in a market that will be increasingly dominated by natural gas-fired generation"); *id.* at 26 (warning of "[t]he risk of increasing reliance on natural-gas fired generation in PJM," and that a shift towards gas generation "pose[s] serious

But the repetition of this talking point cannot overcome the flaws in FirstEnergy's argument.

And those flaws are many.

First, much of FirstEnergy's critique of natural gas generation improperly focuses on plants with an interruptible fuel supply.²⁶⁵ FirstEnergy is well aware of the difference between the interruptible and firm supply contracts. But FirstEnergy creates a strawman by contrasting interruptible gas plants with coal and nuclear baseload units.²⁶⁶ By juxtaposing interruptible plants with baseload plants, FirstEnergy paints a misleading picture of gas plants' reliability.

Second, despite FirstEnergy's claims to the contrary, gas plants that have contracted for firm delivery *are* reliable. The reliability of such plants is well established in the record. PJM – which "is ultimately responsible for reliability of the bulk electric system in the PJM Region," including Ohio²⁶⁷ – treats gas plants with firm deliverability meeting certain basic standards as

reliability challenges for Ohio"); *id.* at 56 (warning of "potentially catastrophic reliability issues related to overreliance on natural gas-fired generation"); *id.* at 57 (claiming that the retirement of coal and nuclear units, together with the addition of gas units, "poses serious reliability challenges"); *id.* at 59 (claiming that "[t]he danger of relying on interruptible gas generation to replace baseload coal and nuclear units is thus readily apparent."); *id.* at 60 (claiming that the natural gas infrastructure is "stressed" and less reliable); *id.* at 60-61 (arguing that firm supply contract "is no substitute for a coal or nuclear facility's onsite fuel supplies"); *id.* at 61 (claiming that "gas-fired generation . . . simply is not a suitable reliability substitute for baseload generation with onsite fuel capabilities like [Sammis and Davis-Besse]"); *id.* (referencing, yet again, "the reliability issues arising from the increased amount of gas-fired generation in PJM"); *id.* at 62 ("in terms of reliability, it is simply not feasible for renewables and natural gas to supplant Ohio's coal and nuclear baseload generation assets with onsite fuel capabilities"); *id.* at 128 (extolling the supposedly "bedrock" coal and nuclear units); *id.* at 129-30 (criticizing the reliability of natural gas generation).

²⁶⁵ See, e.g., Co. Br. at 57, 59, 121.

²⁶⁶ See id. at 57, 59. FirstEnergy compounds this problem by sometimes referring to the fuel source itself as "interruptible." See id. at 122 (claiming that Rider RRS offers "protection against future over-reliance on interruptible and more volatile natural gas-fired generation"). Although some gas plants do indeed have interruptible supply contracts, it is misleading to bootstrap a contractual term into a broad generalization about the inherent characteristics of a generation type.

²⁶⁷ Brief for Amicus Curiae PJM Interconnection, L.L.C. ("PJM Amicus Br.") at 9.

Capacity Performance products.²⁶⁸ And FirstEnergy's own witness, Mr. Moul, has conceded that a gas plant with firm pipeline transportation and a long-term supply contract can operate as reliable baseload generation.²⁶⁹

Third, and more generally, there is no basis for FirstEnergy's shrill claim that the retirement of coal and nuclear units, and/or an increasing role for natural gas generation, "poses serious reliability challenges." As PJM noted in its amicus brief, FirstEnergy's concerns "relating to electric system reliability are categorically unfounded." PJM specifically cited the increase in new capacity resources in western PJM, the development of new generating plants in Ohio, and the fact that "due to PJM's robust forward capacity market and regional transmission planning process, generation retirements have been absorbed and the generation replaced with newer resources as resource adequacy targets have been met and exceeded year after year." PJM thus concluded that "PJM's operation of the power grid will remain reliable because the PJM capacity market is still attracting investment in replacement resources, particularly natural gas-fired and alternative resources, which are anticipated to meet future demand requirements, with sufficient and adequate reserves." 273

FirstEnergy's claims to the contrary are unpersuasive. FirstEnergy tries to support its resource diversity claims, including its criticism of natural gas generation, by repeatedly

. Conf. Tr. XI at 2413-14.

²⁶⁸ Tr. X at 2217. *See also* OCC/NOPEC Ex. 4, Wilson Direct at 53-54 (noting that under PJM's capacity performance proposal, "in the future the gas-fired power plants needed for reliability will have firm fuel arrangements").

²⁶⁹ Tr. X at 2217-18. He likewise admitted that

²⁷⁰ Co. Br. at 57.

²⁷¹ PJM Amicus Br. at 9.

²⁷² *Id.* at 10.

²⁷³ *Id.* at 11 (emphasis added).

invoking the polar vortex.²⁷⁴ But neither that event, nor the "Siberian express" of the following winter, support FirstEnergy's arguments.

FirstEnergy builds its case by focusing almost exclusively on the outage percentages for different fuel types during the polar vortex.²⁷⁵ According to FirstEnergy, the disproportionately high number of gas outages "caused substantial difficulties in PJM, including the potential for severe service disruptions and load shedding."²⁷⁶ FirstEnergy also cites the gas outages during the Siberian express of the following winter. FirstEnergy then bootstraps these two examples into a sweeping claim that gas-fired generation is inherently unreliable²⁷⁷ – all the while ignoring major developments that have occurred within PJM since then.

In truth, the polar vortex and Siberian express offer no support for FirstEnergy's resource diversity claims. As an initial matter, FirstEnergy ignores the fact that there were substantial outages at coal units as well, with coal generation responsible for 34% of the forced outages at the height of the polar vortex – a figure that rose to 41% during the following winter's Siberian express. (By contrast, gas plant outages accounted for 24% of the total generator outages during the polar vortex, dropping to 13% during the Siberian express.)²⁷⁹ Moreover, during the

²⁷⁴ See Co. Br. at 5-6, 26, 57-59, 61, 129-30.

²⁷⁵ *Id.* at 5-6, 26, 58-59, 129-30.

²⁷⁶ *Id.* at 58. Although more than 15,000 MW of coal and nuclear capacity also suffered outages, SC Ex. 8 at 26, FirstEnergy apparently believes that the gas plants were solely responsible for such reliability problems.

²⁷⁷ See, e.g., Co. Br. at 129 & n.626 (citing, *inter alia*, two pages in PJM's May 2014 report for its claims that "Gas-fired generation cannot be relied upon to provide the reliability backbone of the electric system").

²⁷⁸ IGS Ex. 1 at 21.

²⁷⁹ *Id.* at 21. FirstEnergy suggests that a higher proportion of gas plant outages occurred during the Siberian express than during the polar vortex. Co. Br. at 58 ("PJM once again found that gas-fired units were disproportionately responsible for the forced outages that occurred"). But the excerpt from PJM's May 2015 report – which FirstEnergy misquotes – is actually referring to gas supply interruptions, not

winter storm that occurred that January 17-29, 2014 – also addressed at length in PJM's May 8,

2014 report²⁸⁰ –

Specifically, there were unplanned outages

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Far more importantly, though, PJM has already addressed the reliability concerns raised by the polar vortex. Following the winter of 2013-14, PJM began the process that culminated in the adoption of the Capacity Performance requirements in June 2015. (Indeed, the same PJM report from May 2014, which FirstEnergy cites in discussing the polar vortex, included recommendations that helped launch this process.) The Capacity Performance requirements were expressly designed to provide a long-term solution to reliability problems that could arise during severe weather events such as the polar vortex. As PJM noted in its May 2015 report:

Capacity Performance, currently under consideration by the FERC, would create stronger performance incentives for committed capacity resources. The incentives would ensure more operational availability and flexibility during peak power system conditions.

Generator performance issues during peak conditions in the winter of 2014 identified the need for a more robust capacity product to ensure system reliability. Capacity Performance addresses issues of generation fuel security, performance, winter peak operations and operational characteristics of resources needed to ensure that

outages resulting from problems at the plants themselves. This is clear from both the second sentence in the quoted paragraph, as well as the MW figures cited in the passage. IGS Ex. 1 at 6, 21.

²⁸⁰ See generally SC Ex. 8 at 31-52.

²⁸¹ ELPC Ex. 15c, Att. 2.

²⁸² *PJM Interconnection LLC*, Docket Nos. ER15-623-000 et al., 151 FERC ¶ 61,208, Order on Proposed Tariff Revisions (June 9, 2015).

²⁸³ SC Ex. 8 at 53.

²⁸⁴ See, e.g., IGS Ex. 1 at 7, 67 (recommending the continued "implementation of the Capacity Performance proposal to address resource performance incentives on a sustained basis").

system reliability will be maintained throughout the current industry transformation and beyond. ²⁸⁵

These Capacity Performance reforms were designed to, among other things, encourage gas plants to acquire reliable natural gas supplies.²⁸⁶ Thus, the gas supply interruption concerns repeatedly raised in FirstEnergy's brief have already been addressed. And as Capacity Performance is implemented, customers within PJM, including Ohio, will have "an insurance policy" that ensures "greater protection from power interruptions and price spikes – especially during times of extreme system conditions."²⁸⁷

In pressing its resource diversity claims, FirstEnergy largely ignores this major reform within PJM. In particular, FirstEnergy fails to mention Capacity Performance in the text of its many discussions about the polar vortex. And the one time FirstEnergy does address this issue – in a footnote – it completely misrepresents PJM's conclusions. According to FirstEnergy, PJM's May 2015 report noted that "the recent Capacity Performance product was deemed 'inadequate' as a 'long-term solution.'" This is not at all what the report says. In truth, PJM stated that the short-term solutions adopted for the 2014-15 winter were inadequate, and thus there was a need for a long-term solution. The long-term solution, of course, is the Capacity Performance product that FERC approved in June 2015.²⁸⁹

²⁸⁵ *Id.* at 68.

In approving the Capacity Performance proposal, FERC noted that "PJM's currently-effective offer cap for existing generators . . . skews investment decisions toward capital procurement and does not allow sellers to include in their sell offers costs attributable to other means of securing reliable fuel, such as natural gas firm transportation arrangements or priority fuel procurement contracts." *PJM Interconnection LLC*, Docket Nos. ER15-623-000 et al., 151 FERC ¶ 61,208, Order on Proposed Tariff Revisions, ¶ 46 (June 9, 2015).

²⁸⁷ PJM Amicus Br. at 8.

²⁸⁸ Co. Br. at 59 n.269 (citing IGS Ex. 1 at 6).

²⁸⁹ Notably, the adoption of the Capacity Performance product also addresses Dr. Makovich's concern – cited on page 56 of FirstEnergy's brief – regarding the adequacy of capacity payments in PJM. *Compare* Co. Ex. 42, Makovich Suppl. at 10-12 *with* P3-EPSA Ex. 5, Kalt Suppl. at 21-22.

FirstEnergy's other attempts to cast doubt on the PJM system's reliability also lack merit. For example, although FirstEnergy claims that the "natural gas infrastructure in Ohio is stressed," their key witness on this point did not analyze Ohio's gas infrastructure for purposes of this proceeding. FirstEnergy also tries to bolster its reliability claims by citing Ohio's status as a net importer of energy, and quoting FirstEnergy witness Evans's claim that Ohio's "reliance on imports from other states has been growing recently...." Here again, FirstEnergy's claim is contradicted by the record evidence. As FirstEnergy witness Phillip conceded at the hearing, PJM "maintain[s] reliability irrespective of the distance between generation centers and the load." Further, as Mr. Phillips acknowledged, Ohio has been a net importer of electric power every year since at least 1990. For at least 13 of those years, Ohio had a larger deficit than it did in 2013, the most recent year for which data is available.

Fourth, FirstEnergy ignores the fact that coal and nuclear units can have reliability problems of their own. FirstEnergy lionizes the supposedly "bedrock" reliability of Sammis and Davis-Besse, claiming that these plants are "capable of running continuously for prolonged periods." Here again, FirstEnergy's assertions are contradicted by the record evidence. Far

²⁹⁰ Co. Br. at 60; See also id. at 129.

²⁹¹ Tr. XI at 2312.

²⁹² Co. Br. at 26, 27.

²⁹³ *Id.* at 63 n.288. Mr. Evans's errata sheet includes no citation or other basis for this claim. FirstEnergy witness Phillips made similar claims, asserting that "Ohio is a large net importer of power," with the deficit "trending upward." Phillips Suppl. at 6. But, as explained in the text, Mr. Phillips's claims are belied by the evidence.

²⁹⁴ Tr. XVI at 3297 (agreeing with Attorney Examiner Price's question).

²⁹⁵ *Id.* at 3301: *see also* OCC Ex. 14.

²⁹⁶ Id.

²⁹⁷ Co. Br. at 25; *see also id.* at 128. Citing the testimony of Companies' witness Harden, FirstEnergy characterizes Sammis and Davis-Besse as "bedrock" assets, i.e., "the plants that are operating all the time" *id.* at 128 n.621 (citing Tr. XII at 2523).

from "running continuously for prolonged periods," in recent years the Sammis plant has experienced numerous forced outages. In

.298 And as of October 2015,

Sammis's year-to-date EFOR was 17%.²⁹⁹

Conf. Tr. XII at 2705.

²⁹⁸ SC Ex. 37c, Att. 1 at 35. Moreover, Davis-Besse must undergo refueling outages every two years, Co. Ex. 32, Harden Direct at 3, and during years where there is such an outage "

²⁹⁹ Tr. XXXII at 6550-51.

³⁰⁰ SC Ex. 67, Lanzalotta Suppl. at 9-10. Notably, the only mention of RMR contracts in FirstEnergy's entire brief is a cursory footnote reference regarding the allocation of costs for such contracts. Co. Br. at 70 n.324.

³⁰¹ SC Br. at 89-90. Similar to Mr. Moul, the Ohio Energy Group stresses the fact that generators are not compelled to accept an RMR agreement. OEG Br. at 13. But as Sierra Club explained, it is highly unlikely that FES would refuse a PJM request to delay a plant retirement (and to receive compensation for doing so) and, instead, potentially cause reliability problems by shutting down Sammis or Davis-Besse before reliability upgrades are in place. SC Br. at 89-90.

³⁰² PJM Amicus Br. at 11.

In sum, despite FirstEnergy's repeated invocation of alleged reliability concerns, and its repeated invocation of resource diversity as a justification for Rider RRS, those arguments are without merit.

C. FirstEnergy's reliability arguments are flawed and unsupported by the record.

In its initial brief, FirstEnergy tries to bolster the case for Rider RRS by claiming that rejecting it could force the Companies' customers to pay substantial transmission costs necessitated by the retirement of Sammis and Davis-Besse. The Companies characterize these purportedly avoided transmission costs as a key benefit of the rider, and they cite massive cost figures in a transparent effort to scare the Commission regarding such costs. Because the purported transmission and reliability benefits of Rider RRS are illusory, and the purported reliability benefits of Rider RRS are fictitious, the Commission should disregard these claims in evaluating the proposed Rider.

Sierra Club has already explained in detail the numerous flaws in FirstEnergy's transmission-related arguments,³⁰⁴ and nothing in FirstEnergy's brief undercuts the problems identified by Sierra Club. Nonetheless, it bears repeating that all of these purported reliability benefits of Rider RRS (including the avoided transmission costs) are premised on the assumption that the seven Sammis units and Davis-Besse would all retire by June 2017.³⁰⁵ Because there is no evidence in the record that the units would retire in the near future in the absence of Rider RRS, all of these purported benefits are illusory.

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³⁰³ See Co. Br. at 6, 21, 27-29, 67-71, 140.

³⁰⁴ See generally SC Br. at 90-102.

³⁰⁵ Tr. XV at 3224, 3226, 3264.

Moreover, even setting aside the implausibility of the underlying retirement scenario, the Companies' cost figures are not credible. To take but a few examples of the flaws in FirstEnergy's approach:

- The transmission impact study presented by the Companies and the accompanying cost figures provided by Ms. Mikkelsen fails to address any scenario other than the simultaneous retirement of all these generating plants by June 2017. (By contrast,

 .306) FirstEnergy's simultaneous retirement assumption improperly inflates the estimated cost of any transmission upgrades that would be needed if a unit retired.
- The Companies' study relies on outdated information, which fails to reflect substantial new generation that is scheduled to come on-line in the next several years, and which could reduce the need for new transmission upgrades if the Sammis units or Davis-Besse did retire.
- FirstEnergy's assumption that 82% of the transmission upgrade costs would be borne by the Companies' customers is both wholly unsupported and unreasonably high.
- More generally, FirstEnergy witness Phillips who provides testimony about the purported transmission upgrade costs that would result if, against all evidence, the Sammis units and Davis-Besse retired in June 2017 overlooks PJM's critical role in maintaining reliability, and fails to consider the well-establish RMR process for situations where a generator deactivation affects reliability. Notably, at hearing, Mr. Phillips admitted that PJM "maintain[s] reliability irrespective of the distance between generation centers and the load." 307

In short, there is no support for FirstEnergy's claim that Rider RRS "enables 'the avoidance of significant transmission investment' and the increase in electric prices between \$1.7 billion and \$4.1 billion associated with such investment." Those cost figures, which are

³⁰⁶ Conf. Tr. X at 2140-44.

³⁰⁷ Tr. XVI at 3297 (agreeing with Attorney Examiner Price's question). Given this concession, FirstEnergy err in claiming that, if transmission upgrades were made following the plants' retirement, "outages would still be more likely to occur because 'the simple fact is that increasing distance between generation and a load center increases the potential for outages on the transmission system." Co. Br. at 28 (quoting Phillips Suppl. at 6).

³⁰⁸ Co. Br. at 70-71 (quoting Ms. Mikkelsen, Tr. I at 96).

presented in Ms. Mikkelsen's testimony, 309 have no basis in fact. More generally, FirstEnergy's initial brief wholly ignores the extensive evidence regarding the deficiencies of its transmission impact study, and the additional flaws that resulted in their massively overinflated cost estimates. And, of course, FirstEnergy fails to grapple with the complete lack of evidence that the plants will retire by next June. For these reasons, and the reasons set forth in Sierra Club's opening brief, the Commission should reject the Companies' claim that Rider RRS would create transmission-related benefits.

D. FirstEnergy's economic development analysis is flawed.

FirstEnergy similarly errs in touting the purported "economic development and job retention" benefits of Rider RRS. Here again, FirstEnergy repeatedly cites these supposed benefits to justify its proposal.³¹⁰ And here again, FirstEnergy's claims do not withstand scrutiny.

As Sierra Club explained in its initial brief, the economic development studies sponsored by FirstEnergy are incomplete and otherwise flawed.³¹¹ For one thing, these purported benefits rest on the erroneous assumption that Sammis and Davis-Besse would suddenly retire if Rider RRS is not approved. Because that assumption is wrong, these studies are simply irrelevant.

Additionally, these studies suffer from multiple other flaws, which render their conclusions largely meaningless. For example, the studies fail to account for opportunity costs, thereby presenting a skewed picture of the plants' economic impacts, and of Rider RRS. The

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³⁰⁹ Co. Ex. 9, Mikkelsen Second Suppl. at 7-8.

³¹⁰ See Co. Br. at 20, 29-30, 123-24, 141-44.

³¹¹ See generally SC Br. at 102-06. As for FirstEnergy's additional economic claims, for which they cite testimony from FirstEnergy witnesses Santino Fanelli, Eileen Mikkelsen, Rodney Phillips, and Steven Strah, Co. Br. at 21, 29-30, 122-23, those claims lack merit because the purported transmission upgrade and fuel diversity benefits are illusory, and because FirstEnergy has failed to demonstrate that customers will face retail price volatility, or, even if they did, that Rider RRS would offset any such volatility. See supra, Sections III.A-C.

studies also disregard the likely consequences of a plant retirement, ignoring the fact the retirement of Sammis and Davis-Besse would likely result in either replacement generation, transmission upgrades, or some combination of the two. All such economic impacts were ignored in these studies. And the studies suffer from additional shortcomings.

Notably, FirstEnergy's initial brief fails to acknowledge the many deficiencies of these studies. Instead, the Companies uncritically accept the study results, mistakenly presenting them to the Commission as if they were fact. 312 Because these studies are based on an erroneous assumption (closure of Sammis and Davis-Besse), and fail to evaluate the true costs and benefits of Rider RRS, the Commission should disregard these studies in considering the Companies' proposal.

IV. The Non-Binding Factors of the AEP ESP III Order Favor the Rejection of Rider RRS.

As Sierra Club explained in its initial brief, consideration of the non-binding criteria set forth in the Commission's Order from the AEP ESP III case would weigh against approval of Rider RRS.³¹³ And, although FirstEnergy devotes many pages of its brief to a discussion of these factors, ³¹⁴ none of those arguments undercut the conclusion that, when weighed against the criteria set forth in the AEP ESP III order, Rider RRS should be rejected.

In the AEP ESP III Order, the Commission created a placeholder PPA rider (with an initial value of zero), and identified several factors that it stated it would balance, but not be bound by, in considering future PPA rider proposals:

> financial need of the generating plants; necessity of the generating facility, in light of future reliability concerns, including supply

³¹² See Co. Br. at 141-44.

³¹³ See SC Br. at 114-18 (applying factors set forth in the AEP ESP III Order at 25).

³¹⁴ Co. Br. at 124-44.

diversity; description of how the generating plant is compliant with all pertinent environmental regulations and its plan for compliance with pending environmental regulations; and the impact that a closure of the generating plant would have on electric prices and the resulting effect on economic development within the state. 315

The Commission also identified several issues that a rider proposal must address, namely, such proposal must "provide for rigorous Commission oversight of the rider, including a proposed process for a periodic substantive review and audit; commit to full information sharing with the Commission and its Staff; and include an alternative plan to allocate the rider's financial risk between both the Company and its ratepayers."

With regard to the first criterion, "financial need of the generating plant," Sierra Club has demonstrated that FES's generating units are not in financial need. As explained in Sections VI.A-B of its initial brief, and above in Section III.B.1, there is no evidence that Sammis, Davis-Besse, or the OVEC plants would retire in the absence of Rider RRS.³¹⁷

The second criterion, "necessity of the generating facility, in light of future reliability concerns, including supply diversity," also cuts against approval of FirstEnergy's proposal. The purported transmission and reliability benefits of Rider RRS are illusory because Sammis and Davis-Besse are not at risk of retirement. And, as explained in Section III.C above and in Section VI.C.1 of Sierra Club's initial brief, the transmission upgrade cost estimate presented by FirstEnergy is unreasonably high. Additionally, as explained in Section III.B.2 above, and in

³¹⁵ AEP ESP III Order at 25.

 $^{^{316}}$ Id

³¹⁷ Although Staff discusses the AEP ESP III Order, and states that many of its concerns are addressed by the Stipulation, Staff does not separately address the four non-binding criteria set forth in the AEP ESP III Order. *See* Staff Br. at 13-15.

³¹⁸ AEP ESP III Order at 25.

³¹⁹ See SC Br. at 81-90.

Section VI.C.3 of Sierra Club's initial brief, FirstEnergy's resource diversity claims are without merit.

The third criterion, "description of how the generating plant is compliant with all pertinent environmental regulations and its plan for compliance with pending environmental regulations," also favors disapproval of the rider. As explained in Section II.E of Sierra Club's initial brief, and in Section II.D above, the Sammis plant could face unanticipated costs due to the recently-finalized Coal Combustion Residuals rule and Effluent Limitations Guidelines rule.

The Sammis plant also faces future regulatory risk under U.S. EPA's Clean Power Plan. As Sierra Club witness Tyler Comings explained in testimony that was unrebutted, FirstEnergy failed to present the results of a mass-based compliance scenario that was modeled on behalf of EPA. Under that mass-based scenario,

.321 Although these modeling results are illustrative, they help underscore a key point emphasized by Mr. Comings: FirstEnergy witness Evans is simply wrong in claiming that Sammis will "help Ohio meet the requirements of the [Clean Power Plan]." Noting EPA's goal of cutting carbon pollution from power plants, Mr. Comings explained that "[i]t is counterintuitive to claim that continuing to operate the most carbon-intensive type of generation resource—a coal plant—helps Ohio achieve carbon reductions compared to operating less

³²⁰ SC Ex. 78c, Comings Second Suppl. at 2.

³²¹ *Id.* at 2-3 & Conf. Tbl. 1.

³²² Co. Ex. 49c, Evans Suppl. Errata at 2. FirstEnergy makes a similar claim in its initial brief. Co. Br. at 72 (quoting Mr. Evans's statement that "Sammis is a valuable asset for Ohio's compliance with the [Clean Power Plan]. . . .").

carbon-intensive resources."³²³ Given the future environmental compliance risks that the Sammis plant faces, the third criterion weighs against the rejection of Rider RRS.

The fourth AEP ESP III Order factor, "the impact that a closure of the generating plant would have on electric prices and the resulting effect on economic development within the state," also tilts against the rider. Because there is no evidence that Sammis and Davis-Besse would close during the eight-year term of Rider RRS, there is no serious risk that a closure would affect electric prices. And as explained above in Section III.C, and in Sierra Club's initial brief in Section VI.C.1, FirstEnergy significantly overestimated the transmission upgrade costs associated with plant retirements. Accordingly, this factor weighs firmly against the approval of Rider RRS.

FirstEnergy's proposal also fails to meet other relevant factors identified in the AEP ESP III Order. As shown above in Section II.E.4 and in Section III.C.1 of Sierra Club's initial brief, the audit process proposed by FirstEnergy does not "provide for rigorous Commission oversight of the rider." And, as the points made on pages 61-63 of Sierra Club's initial brief

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³²⁴ See AEP ESP III Order at 25.

demonstrate, the Stipulation lacks an alternative plan that fairly allocates Rider RRS's financial risk between FirstEnergy and ratepayers. 325

In sum, the AEP ESP III Order's non-binding factors, as well as the other conditions described in that Order, all weigh against the approval of Rider RRS.

V. The Stipulation, including Rider RRS, is Otherwise Unreasonable and Unlawful.

As explained in Sierra Club's initial brief, and discussed further above, Rider RRS, and the Stipulation that includes it, is legally impermissible under Ohio law, would significantly harm the Companies' customers, and fails to satisfy the ESP versus MRO test. Moreover, because the rider is not in the public interest, and violates important regulatory principles, it also fails to satisfy the criteria the Commission often employs when considering a stipulation. These serious deficiencies are dispositive, and the Commission should reject Rider RRS.

It is important to note, however, that the foregoing deficiencies are far from an exhaustive list of the Stipulation's and Rider RRS's numerous shortcomings. Two additional problems bear emphasis.

First, as Sierra Club has explained at length in its initial brief, the "resource diversification" provisions included in the Stipulation are toothless. Each of these provisions is either subject to contingencies, or unenforceable in its entirety. Because these provisions would do little to achieve their self-announced goals, Sierra Club recommended that the Commission disregard them in considering the Stipulation.

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³²⁵ FirstEnergy's proposal also fails Dr. Choueiki's recommendation that, if the Commission were inclined to approve Rider RRS, the Companies and FES should be required to "develop a sharing mechanism whereby FES commits to be responsible for a portion of the costs associated with Rider RRS in exchange for a portion of the revenues associated with Rider RRS." Choueiki Pre-filed at 16-17. Nor does the Stipulation include any caps on the charges that can flow through Rider RRS. *See id.* at 17.

³²⁶ See generally SC Br. at 118-21 (discussing Sections V.E.1, V.E.3, and V.E.4 of the Stipulation).

In its initial brief, FirstEnergy does nothing to address the shortcoming of these provisions, or otherwise defend them. Indeed, apart from summarizing language in the Stipulation itself, FirstEnergy essentially does not address these provisions at all. The fact that FirstEnergy has not even attempted to show that such provisions are meaningful further demonstrates the toothless character of these provisions. The Commission should disregard them.

Second, as Sierra Club has explained, the Commission cannot lawfully approve Rider RRS because such approval is preempted by the Federal Power Act ("FPA").³²⁸ In its initial brief, FirstEnergy does not address this issue at all.

OEG attempts to protect Rider RRS from FPA preemption challenges – should the Commission choose to approve it – but its efforts ultimately miss the mark. First, OEG observes that Maryland and New Jersey policymakers, in approving the programs that were subsequently overturned by federal courts, publicly expressed the "purpose" of attempting to drive down PJM wholesale prices, and, in contrast, in OEG's telling, Ohio policymakers have expressed no such explicit purpose. Though the question of Congress's intent is relevant to a federal preemption analysis, an either the text of the FPA nor the federal court decisions that overturned that Maryland or New Jersey programs reveal any determinative importance to the intent of state policymakers in assessing the merits of a preemption challenge. Instead, here, the operative questions would be whether Rider RRS's out-of-market subsidy "scheme [] effectively

³²⁷ Co. Br. at 7, 31, 94-96.

³²⁸ SC Br. at 121-25.

³²⁹ See OEG Br. at 16-19.

³³⁰ OEG Br. at 16 ("Maryland and New Jersey attempted to incentivize new generation for the explicit purpose of driving down wholesale capacity prices."); *see id.* at 17.

³³¹ *PPL EnergyPlus, LLC v. Nazarian*, 753 F.3d 467, 474 (4th Cir. 2014) ("Preemption of all varieties is ultimately a question of congressional intent.").

supplants the rate generated by the auction with an alternative rate preferred by the state,",332 eliminates the price signals wholesale markets are intended to send to market participants, and otherwise has the effect of intruding upon federal wholesale market regulation. The answer to each of these questions shows that Rider RRS and the associated proposed transaction improperly intrude on PJM wholesale markets and, therefore, any Commission approval of Rider RRS would be federally preempted.

Second, as OEG notes, both the *Nazarian* and *Solomon* decisions explicitly recognized limits to field-preemption doctrine in the context of wholesale power markets.³³⁴ But these courts' observations in this regard do not protect Rider RRS. The *Nazarian* court acknowledged that a state may regulate generation by providing "direct subsidies or tax rebates,"³³⁵ without intruding into an area of exclusive federal control. The *Solomon* court observed that a state may "directly subsidize generators so long as the subsidies do not essentially set wholesale prices" and it may regulate in other ways such as tax breaks, bonding, favorable siting agreements, and the relaxation of permit requirements.³³⁶ OEG's observation that these courts acknowledged limits to field preemption do not save Rider RRS as it does not rely on a scheme of, for example, direct subsidies unrelated to wholesale markets – but instead, unlike the permissible forms of state regulation referenced, is directly tied to PJM's wholesale markets.

Finally, OEG's citation to the saving provision of a specific section of the Energy Policy

Act of 2005 related to grid reliability standards is misplaced and irrelevant. FERC's and

³³² *Nazarian*, 753 F.3d at 476.

³³³ See SC Br. at 121-25.

³³⁴ OEG Br. at 18.

³³⁵ *Nazarian*, 753 F.3d at 478.

³³⁶ PPL Energyplus, LLC v. Solomon, 766 F.3d 241, 253 n.4 (3d Cir. 2014).

³³⁷ OEG Br. at 17 (citing 16 U.S.C. § 824o(i)(3)).

PJM's authority over wholesale markets does not arise from the Energy Policy Act of 2005 and thus a saving provision that expressly applies to a specific section of that Act only can have no bearing on federal authority over wholesale markets.³³⁸

CONCLUSION

For the foregoing reasons, as well as the reasons set forth in Sierra Club's initial brief, Sierra Club respectfully requests that the Commission: (i) conclude that Rider RRS is not permissible under R.C. 4928.143; (ii) find that Rider RRS, and the Stipulation, are harmful to the Companies' customers, and are not just and reasonable; (iii) find that Rider RRS, and the Stipulation, are not more favorable in the aggregate as compared to a market rate offer; and (iv) hold that Rider RRS is otherwise impermissible under State and federal law.

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 $^{^{338}}$ 16 U.S.C. § 8240(i)(3) ("Nothing *in this section* shall be construed to preempt any authority of any State") (emphasis added).

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing public version of the Post-Hearing Reply Brief of the Sierra Club has been served upon the following parties via electronic mail on February 26, 2016:

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