CONFIDENTIAL] [END CONFIDENTIAL] per pole and exceeds the Old Telecom Rate by approximately [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] per pole.[57]

16. In its Response, Dominion contends that the 2015 New and Old Telecom Rates were instead [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] respectively.[58] We note, however, that pole attachment rates are correctly calculated [BEGIN CONFIDENTIAL] [END CONFIDENTIAL][59] Thus, even under Dominion's calculations, the [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] Joint Use Agreement rate is [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] the New Telecom Rate,[60] and is [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] than the Old Telecom Rate – which the Commission highlighted as a reference point to account for differences between competitive LEC and incumbent LEC attachments.[61]

17. Verizon has adduced substantial evidence in support of its argument that any advantages it obtains under the Joint Use Agreements do not remotely justify the difference between the rate it pays and the rate that competitive LECs pay to attach to Dominion's poles.[62] Based on that evidence, we find that Verizon has met its burden of showing that the rate it pays under the Joint Use Agreements is unjust and unreasonable. Any unique advantages Verizon receives under those agreements do not justify a rate that is [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] the Old and New Telecom Rates.[63]

18. Although Dominion maintains that unique benefits provided to Verizon under the Joint Use Agreements justify the [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] that it charges Verizon, our review of the record suggests that Dominion has overstated the value of a number of such alleged benefits.[64] For example, Dominion identifies as a financial benefit the fact that Verizon [BEGIN CONFIDENTIAL]

[57] Reply, Exh. A (Calnon Aff.) at 2, para. 2 & n.3; Reply, Exh. 8 (2015 invoice). The Joint Use Agreement rate that Dominion charged Verizon in 2015 was [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] per pole, which is the most recent rate year included in the record.

[58] *See* Resp. at 32; Resp., Exh. C (Roberts Decl.), Exh. MCR-1.

[59] Dominion's argument that the Old and New Telecom Rates should be applied on a [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]

[60] Resp., Exh. C (Roberts Decl.), Exh. MCR-1.

[61] *See Pole Attachment Order*, 26 FCC Rcd at 5337, para. 218; Compl. at 9, para. 12.

[62] *See, e.g.*, Compl. at 7-8, 20-39, paras. 8, 37-84; Reply at 23-62.

[63] Verizon asserts that, [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] Compl. at 21, para. 38; Reply at 58. We express no view on that claim in this interim Order.

[64] Resp. at 2.

[END CONFIDENTIAL][65] The Joint Use Agreements, however, [BEGIN CONFIDENTIAL] [END CONFIDENTIAL][66] Where Verizon performs a particular service itself and incurs costs comparable to its competitors in performing that service, we agree with Verizon that Dominion may not "embed in Verizon's rental rate costs that Dominion does not incur."[67]

19. In addition, although Dominion argues that it is [BEGIN CONFIDENTIAL] [END CONFIDENTIAL][68] [END CONFIDENTIAL]

20. Moreover, with only a few exceptions, Dominion does not quantify the purported material advantages that Verizon receives under the Joint Use Agreements and therefore fails to justify charging rates [BEGIN CONFIDENTIAL] [END CONFIDENTIAL][70] Where Dominion does attempt to assign a monetary value to particular purported advantages, it generally presents those values as the amount that all of its licensees "collectively" paid, thus omitting the information needed to analyze whether, and, if so, the extent to which, Verizon has been advantaged relative to a typical competitor or an average of its competitors.[71]

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[65] *See* Resp. at 19-20; Resp., Exh. A (Graf Decl.), Exh. MAG-1 at 1-2 [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]

[66] *See* Joint Use Agreements, Art. 15.03 [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]; Compl., Exh. C (Hansen Aff.) at 3-4, para. 8 [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]

[67] Reply at 32; *id*. at 31-33 (arguing that where Verizon pays for its own [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] by performing the work itself, and Dominion does not identify any costs that Verizon has not covered, Dominion may not justify charging higher rates to Verizon based on costs that only Verizon incurs). To charge a higher rate on this basis would effectively double charge Verizon – once when Verizon performs work [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]

[68] *See*, *e.g.*, Resp., Exh. A (Graf Decl.), Exh. MAG-1 at 2 (citing Joint Use Agreements, Arts. 17.01, 20.01, 21.01).

[69] Compl., Exh. A (Affidavit of Mark S. Calnon) at 37, paras. 77-79 (Calnon Aff.); Reply at 36-37; Joint Use Agreements, Art. 26.01 [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]

[70] Once a *prima facie* showing has been made by the complainant, the Commission's pole attachment complaint rules require the respondent to "set forth justification for the rate, term or condition alleged in the complaint not to be just and reasonable." *See* 47 CFR § 1.1407(a).

[71] *See*, *e.g.*, Resp. at 19 ("Dominion estimates that [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]; Resp., Exh. A (Graf Decl.), Exh. MAG-1 at 5 ("Over the 2011-2014 time frame, [BEGIN CONFIDENTIAL] [END CONFIDENTIAL]

21. Verizon next argues that the per-pole rate that Dominion charges Verizon is unjust and unreasonable because it far exceeds the per-pole rates that Verizon charges Dominion, despite the fact that Dominion uses significantly more space on each joint use pole than Verizon.[72] In fact, the record reflects that the [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] rate charged to Verizon in 2015 was [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] than the rate charged to Dominion to attach to Verizon Virginia poles (which account for 91 percent of the joint use poles belonging to Verizon), and [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] than the rate charged to Dominion to attach to Verizon South poles (which account for nine percent of the joint use poles belonging to Verizon).[73] The record confirms that, although Dominion's space allocation is [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] that of Verizon, Dominion pays [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] under the Joint Use Agreements for its use of that space.[74] Dominion argues that a simple comparison of annual pole rates "ignores that the parties divide costs associated with their combined pole network in direct proportion to the benefits that each derives from the joint use arrangement."[75] It concedes, however, that the parties enjoy "reciprocal" rights under the Joint Use Agreements.[76] By identifying as alleged "benefits" to Verizon services that Verizon is likewise required to extend to Dominion under the Joint Use Agreements, Dominion has failed to show that Verizon receives a disproportionate benefit that would account for the [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] between the parties.[77] We therefore conclude that Dominion has not justified charging Verizon a rate [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] the rates charged to Dominion under the Joint Use Agreements.[78]

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[72] Compl. at 10-11, para. 13.

[73] For Verizon's attachments on Dominion poles from 2011-2015, Dominion charged, under the Joint Use Agreements, the following per pole rates: [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] For Dominion's attachments on Verizon Virginia poles from 2011-2015, Verizon charged the following per-pole rates: [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] For Dominion's attachments on Verizon South poles from 2011-2015, Verizon charged the following per-pole rates: [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL]

[74] The Joint Use Agreements allocate [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] of space on each joint use pole to Dominion and [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] of space on each joint use pole to Verizon.

[75] Resp. at 28.

[76] *Id.* at 4.

[77] [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] *See* Resp., Exh. B (Zarakas Decl.) at 8, para. 14.

[78] *See Pole Attachment Order*, 26 FCC Rcd at 5337, para. 219 ("[I]n evaluating an incumbent LEC's complaint, the Commission may also consider the rates, terms and conditions that the incumbent LEC offers to the electric utility or other attachers for access to the incumbent LEC's poles, including whether they are more or less favorable than the rates, terms and conditions the incumbent LEC is seeking."); *see also id.*, 26 FCC Rcd at 5337, para. 218 n.662 (anticipating that incumbent LECs and electric utilities would charge each other roughly the same proportionate rate given the parties' relative usage of the pole "such as the same rate per foot of occupied space"). Verizon asserts that the rate it is charged under the Joint Use Agreements also [BEGIN CONFIDENTIAL] [redacted]

22. Accordingly, because Dominion has provided insufficient justification for the Joint Use Agreement rates, we conclude that the rate charged to Verizon under those agreements is unjust and unreasonable. We encourage the parties to negotiate an agreed-upon rate that is consistent with the guidance provided herein. Although we do not establish a new pole attachment rate at this time, we commit to doing so in a subsequent order if the parties are unable to achieve a negotiated resolution of the issues in dispute.[79]

C. Verizon Is Entitled to a Refund of Overpayments Made to Dominion

23. Verizon contends that the "sign and sue rule" permits it to challenge the unjust and unreasonable rates in the Joint Use Agreements and to seek a refund under Rule 1.1410(a)(3)[80] of any amounts it is determined to have overpaid dating back to the effective date of the *Pole Attachment Order*.[81] We agree.[82]

24. Under the Commission's "sign and sue rule," "an attacher may execute a pole attachment agreement with a utility, and then later file a complaint challenging the lawfulness of a provision of that agreement."[83] The rule was adopted at a time when only cable operators and competitive LECs, and not incumbent LECs, were deemed to have a right to just and reasonable rates, terms, and conditions under Section 224(b). In adopting the sign and sue rule, the Commission expressed concern that utilities' "monopoly control" over poles could force attachers to accept unreasonable terms as a condition for gaining timely access to utility poles.[84] The Commission also has observed a need for the sign and sue

[redacted] END CONFIDENTIAL]

[79] *See* Section IV *infra*.

[80] 47 CFR § 1.1410(a)(3) (stating that if the Commission determines that a rate is unjust and unreasonable, it may order a refund of "the difference between the amount paid under the unjust and/or unreasonable rate … and the amount that would have been paid under the rate … established by the Commission, plus interest, consistent with the statute of limitations").

[81] Compl. at 7-8, para. 8 (arguing that it was compelled to enter into agreements as a result of "Dominion's superior bargaining power and the insufficiency of market forces and independent negotiations" to ensure just and reasonable rates) (internal quotations omitted); *see also id.* at 11-17, 42-43, 46, paras. 15-31, 91, 98; Reply at 9, 77 (asking the Commission to "set Verizon's just and reasonable rate as of July 12, 2011 at the properly calculated new telecom rate and order Dominion to refund [the amount of any] net rentals that Verizon has since overpaid."). Verizon also asks the Commission to impose new just and reasonable rates on a prospective basis.

[82] Any rate relief for the pre-Complaint period is subject to true up and therefore must take into account all amounts invoiced and paid after July 12, 2011.

[83] *Implementation of Section 224 of the Act; A National Broadband Plan for Our Future*, Order and Further Notice of Proposed Rulemaking, 25 FCC Rcd 11864, 11905, para. 99 (2010); *Southern Co. Servs. v. FCC*, 313 F.3d 574, 578 (D.C. Cir. 2002) (under the "sign and sue" rule, "an attacher may 'sign' a contract with a utility and later file a complaint with the FCC to contest an element of that agreement deemed to be unfair").

[84] *See, e.g., Amendment of the Commission's Rules and Policies Governing Pole Attachments; Implementation of Section 703(e) of the Telecommunications Act of 1996*, Consolidated Partial Order on Reconsideration, 16 FCC Rcd 12103, 12112, para. 13 (2001) (noting that "the original purpose of the Pole Attachment Act" was "to prevent utilities from charging monopoly rents to attach to their bottleneck facilities" and that "[n]othing in the record demonstrates that the utilities' monopoly over poles has since changed"); *Pole Attachment Order*, 26 FCC Rcd at 5294, para. 123 ("the sign and sue rule was adopted in recognition that in some situations . . . an attacher may be

rule in situations where an attacher "acquiesces in a utility's 'take it or leave it' demand that it pay more than the statutory maximum . . . without any *quid pro quo* other than the ability to attach its wires on unreasonable or discriminatory terms."[85]

25. When the Commission first held in the *Pole Attachment Order* that incumbent LEC attachers are entitled to just and reasonable rates, terms, and conditions under Section 224(b), it recognized the need to "account[] for the potential differences between incumbent LECs and telecommunications carrier or cable operator attachers[,]" including with respect to applying the sign and sue rule to incumbent LECs.[86] At that time, the Commission considered it unlikely that electric utilities would attempt to coerce incumbent LECs to accept unreasonable terms by threatening a loss of access to the utilities' poles, "given the likelihood that incumbent LECs [as pole owners themselves] would, in response, deny electric utilities access to their poles."[87] Nonetheless, the Commission allowed for the possibility that incumbent LEC attachers, like cable and competitive LEC attachers, may be coerced to enter pole attachment agreements that include unjust and unreasonable terms as a result of a utility's unequal bargaining power.[88] In such a case, the Commission determined that "the 'sign and sue' rule will apply [] in a manner similar to its application in the context of pole attachment agreements between pole owners and either [cable or competitive LEC attachers]."[89]

26. The record reveals that, after years of intensive rate negotiations, Verizon faced a choice to accept what it believed were unjust and unreasonable rates under the Joint Use Agreements or [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL][90] While the record does not suggest that Dominion threatened Verizon with loss of access to its poles, the evidence reflects that Verizon nonetheless was coerced into signing the Joint Use Agreements as a result of Dominion's superior bargaining position.[91] In particular, years of rate negotiations had failed to achieve [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] in Verizon's net per pole rate,[92] and Verizon's leverage and options were further constrained by [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL][93] That is, [BEGIN CONFIDENTIAL] [redacted]

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forced to execute a pole attachment agreement containing what it believes to be unjust and unreasonable terms in order to gain timely access to the utility's poles.").

[85] *See Pole Attachment Order*, 26 FCC Rcd at 5294, para. 123 n.380 (quoting *Southern Co. Servs.*, 313 F.3d at 583 (quoting Commission Brief with approval); *see also Southern Co. Servs.*, 313 F.3d at 583 ("sign and sue" is likely to arise where "the attacher has agreed, for one reason or another, to pay a rate above the statutory maximum . . . to which it is entitled under the Pole Attachments Act and the Commission's rules").

[86] *Pole Attachment Order*, 26 FCC Rcd at 5333, para. 214; *id.* at 5335, para. 216 n.655.

[87] *Id.* at 5335, para. 216 n.655.

[88] *Id.*

[89] *Id.*

[90] In 2010, Verizon Virginia and Verizon South paid a gross rate of [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] under the parties' prior agreements. *See* Resp. at 13; Compl. at 41, para. 88 & n.221.

[91] Denial of access to a utility's poles represents one possible scenario that may support an attacher's right to sign and sue. *Pole Attachment Order*, 26 FCC Rcd at 5335, para. 216 n.655.

[92] *See* Section III.B *supra*.

[93] Compl., Exh. 5 (Verizon Virginia predecessor agreement), Art. 8; *id.*, Exh. 7 (Verizon South predecessor agreement), Art. VIII [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL].

[redacted] END CONFIDENTIAL][94] Verizon's choices were reduced to accepting the Joint Use Agreement rates or remaining locked into even higher rates indefinitely pending final resolution of any formal proceedings brought to challenge those rates. Under these circumstances, Verizon's decision to sign the Joint Use Agreements and then file a complaint challenging the agreement rates, constitutes a valid exercise of its sign and sue rights.[95]

27. Dominion argues that, even if the sign and sue rule were applicable here, Verizon did not properly invoke the sign and sue rule or take steps necessary to preserve its sign and sue rights.[96] For example, Dominion suggests that, after release of the *Pole Attachment Order*, Verizon was required to notify it before signing the Joint Use Agreements, if Verizon believed that the agreement rates were unlawful under that order.[97] The *Pole Attachment Order* expressly rejected a proposed rule that would have required an attacher to provide a utility written notice of its objections to a proposed pole attachment agreement, during contract negotiations, as a prerequisite to later bringing a complaint challenging the executed agreement.[98]

28. Dominion's suggestion that the requested relief should be rejected because Verizon unduly delayed filing its complaint is similarly without merit.[99] In the *Pole Attachment Order*, the Commission declined to impose time limits on the filing of pole attachment complaints and, instead, determined to allow monetary recovery dating back as far as the July 12, 2011 effective date of the order, "consistent with the applicable statute of limitations."[100] In this case, it appears that Verizon signed the Joint Use Agreements in August of 2011[101] and, at the earliest opportunity permitted under the agreements, [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL][102] The

[94] Compl., Exh. 5 (Verizon Virginia predecessor agreement), Art. 3; *id.*, Exh. 7 (Verizon South predecessor agreement), Art. III [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL].

[95] *See generally Pole Attachment Order*, 26 FCC Rcd at 5333, 5335, paras. 214, 216 n.655 (recognizing the need to "account[] for the potential differences between incumbent LECs and telecommunications carrier or cable operator attachers[,]" including with respect to applying the sign and sue rule to incumbent LECs); *id.* at 5335-36, para. 216 ("To the extent that an incumbent LEC can demonstrate that it genuinely lacks the ability to terminate an existing agreement and obtain a new arrangement, the Commission can consider that as appropriate in a complaint proceeding.").

[96] Resp. at 17 n.79; *id.* at 16-17 (suggesting that, if Verizon believed the Joint Use Agreement rates were unjust and unreasonable, it could have demanded further negotiations before signing them or it could have signed them and then exercised its "sign and sue" rights thereafter, and asserting that "Verizon did neither").

[97] Resp. at 16.

[98] *Pole Attachment Order*, 26 FCC Rcd at 5292-95, paras. 119-25.

[99] *See* Resp. at 17.

[100] *Pole Attachment Order*, 26 FCC Rcd at 5287-90, 5334, paras. 106, 110-12, 214 & nn.343, 345, 647; *id.* at 5289, para. 110 (reasoning that the former rule, which allowed recovery only from the date the complaint was filed, fails to make injured attachers whole, and is inconsistent with the way claims for monetary recovery are generally treated under the law).

[101] Resp. at 5 (citing Graf Decl., para. 16); Reply at 8-9.

[102] Compl., Exh. 13 (October 2013 Letter); Joint Use Agreements, Art. 33.08 [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL].

record shows that the parties then embarked on another 20 months of rate negotiations that concluded on May 29, 2015 without resolving the contested issues, and that Verizon then filed its Complaint on August 3, 2015.[103] Consistent with the Commission's decision authorizing refunds to extend back as far as the applicable statute of limitations allows,[104] but no earlier than the *Pole Attachment Order* effective date, we reject the suggestion that, by waiting until August 3, 2015, Verizon unduly delayed filing its Complaint.[105]

IV. CONCLUSION

29. In light of our interim findings that the Joint Use agreement rate is not just and reasonable, we direct the parties to meet and confer in an effort to resolve the remaining disputes. The parties should report to Commission staff within 30 days as to their progress. If the case cannot be resolved by settlement, Commission staff will conduct any further proceedings necessary to issue a subsequent order resolving all remaining issues and setting a just and reasonable pole attachment rate.

30. Accordingly, IT IS ORDERED, pursuant to the authority contained in Sections 4(i), 4(j), 208, 224, 301, 303, 304, 309, 316, and 332 of the Communications Act, 47 U.S.C. §§ 154(i), 154(j), 208, 224, 301, 303, 304, 309, 316, and 332, and Sections 0.111(a)(12), 0.311, 1.720-1.735, and 1.1401-1.1424 of the Commission's rules, 47 CFR §§ 0.111(a)(12), 0.311, 1.720-1.735, and 1.1401-1.1424, that the Complaint is GRANTED, in part, to the extent set forth in this Order.

FEDERAL COMMUNICATIONS COMMISSION

Rosemary H. McEnery
Acting Chief
Market Disputes Resolution Division

[103] Compl. at 13-17, paras. 21-30; Resp. at 7-9; Compl., Exh. 23 [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] (May 29, 2015)).

[104] Verizon contends that Section 8.01-246(2) of the Virginia Code provides the applicable statute of limitations in this case and that its Complaint was filed within the five-year limitations period specified therein. *See* Reply at 9 n.33. Dominion does not dispute this contention.

[105] We also reject Dominion's claim that Verizon's alleged failure to comply with Rule 1.1404(k) offers a basis to deny the requested relief. Resp. at 38-40. Dominion does not dispute that Verizon engaged in extensive executive-level discussions, [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL] in a serious effort to resolve the parties' dispute prior to filing its Complaint. Contrary to Dominion's claim, however, the record reflects that Verizon's March 25, 2014 letter, in conjunction with other correspondence within the same timeframe, fully outlined the basis for Verizon's demand for a just and reasonable rate under Section 224(b) and the *Pole Attachment Order*. *See*, *e.g.*, Compl., Exhs. 13, 14, 16, 18, 22, 23. Based on evidence that Verizon fully complied with the substantive goals and requirements of Rule 1.1404(k) (i.e., executive-level, pre-Complaint coordination and preview of substantive allegations), we find good cause to waive any procedural aspect of the rule with which Verizon may not have strictly complied. *See* 47 CFR § 1.3 (allowing waiver of Commission rule for "good cause shown").

Attachment B

verizon

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November 2, 2017

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BY EMAIL AND CERTIFIED MAIL

Dear Deanna,

Thank you for providing us a copy of Met-Ed's 2017 draft license agreement. Our purpose in originally requesting the draft back in early 2012 was to determine how the provisions of the draft license agreement, including the pole rental rate, compare to those being discussed in our ongoing effort to reach agreement on a new joint use agreement. Our review revealed that terms of the draft license agreement are not materially different from the terms of the parties' current Joint Use Agreements or the draft joint use agreement that we have been negotiating. In this respect, the draft license agreement confirms our view that Verizon has been entitled to the FCC's new telecom rental rate since the FCC issued its Pole Attachment Order back in 2011.

The Commission's recent Order in the Dominion pole attachment complaint proceeding fully supports our conclusion. The FCC's Enforcement Bureau vacated the rental rate in a "new" agreement because it was not just and reasonable and confirmed that Verizon was entitled to a refund of overpayments above the "just and reasonable' rate since the effective date of the Order. The Enforcement Bureau further confirmed that rate relief would also be warranted under an "existing" agreement if it, like the agreements here, was entered when the ILEC's pole ownership numbers placed it in an inferior bargaining position. In the Dominion proceeding, a 65% to 35% pole ownership disparity was sufficient to justify rate relief. Here, the disparity is even greater, with Met-Ed owning 81% of the joint use poles now and when the current rates were imposed on Verizon.

The Commission's Dominion Order and its pending Infrastructure NPRM confirm that the parties should be negotiating an appropriate new telecom rate for Verizon. Under our joint use arrangement, Verizon bears significant pole maintenance and replacement costs that are not imposed on our competitors. As such, Verizon does not enjoy any advantages that would justify a departure from the new telecom rate. Even under the draft joint use agreement, Verizon would not have an advantage over its competitors because we have worked to negotiate an agreement with modernized cost-causer terms and conditions.

While we appreciate Met-Ed's willingness to modify its rates, its series of offers all result in Verizon continuing to make a net annual pole payment in the [redacted] dollar range. For example, in 2016, Met-Ed invoiced Verizon for about [redacted]. Met-Ed's next rate offer, in April 2017, reduced that payment by $465. Similarly, its July offer would require Verizon to continue paying nearly [redacted] in annual payments – about a 1.5% discount off the 2016 invoiced amount. In stark contrast, were Verizon and Met-Ed to pay properly calculated proportional new telecom rates, the limited data currently available to Verizon shows that Verizon's annual net payment, using 2016 cost data, should be about $795,000, and possibly lower.

The latest rate offered by Met-Ed is [redacted], which is over [redacted] times the [redacted] new telecom rate that Met-Ed charges Verizon's competitors. In addition to this rate not being calculated under the new telecom rate formula, it is inflated by Met-Ed assigning Verizon 3 feet of occupied space, even though Verizon does not use 3 feet of space on Met-Ed's poles (nor is Verizon even allocated 3 feet of space under the Joint Use Agreements). Met-Ed also uses an average of 3.33 attaching entities but has not provided any survey evidence that supports this number. Verizon also notes that the number is different from Met-Ed's earlier position that its poles average 4 attaching entities. In the absence of actual data, the FCC's presumptive inputs apply.

In the Dominion Order, the Commission found that it was unjust and unreasonable for a power company to demand that Verizon pay a higher rate than the power company is willing to pay for the use of more space on each joint use pole. In our case, while Met-Ed occupies significantly more space on each pole than Verizon, it proposes to pay Verizon [redacted] per pole for that space, while proposing to charge Verizon [redacted] per pole.

Despite our efforts for nearly six years to agree on a just and reasonable rate, we have not been successful. Therefore, Verizon requests that executives of the parties with sufficient authority meet as soon as possible to resolve this dispute. If we are unable to reach agreement on a just and reasonable rental rate at the face-to-face meeting, Verizon will have no other option than to seek rate relief at the FCC and refunds for the amounts it has overpaid.

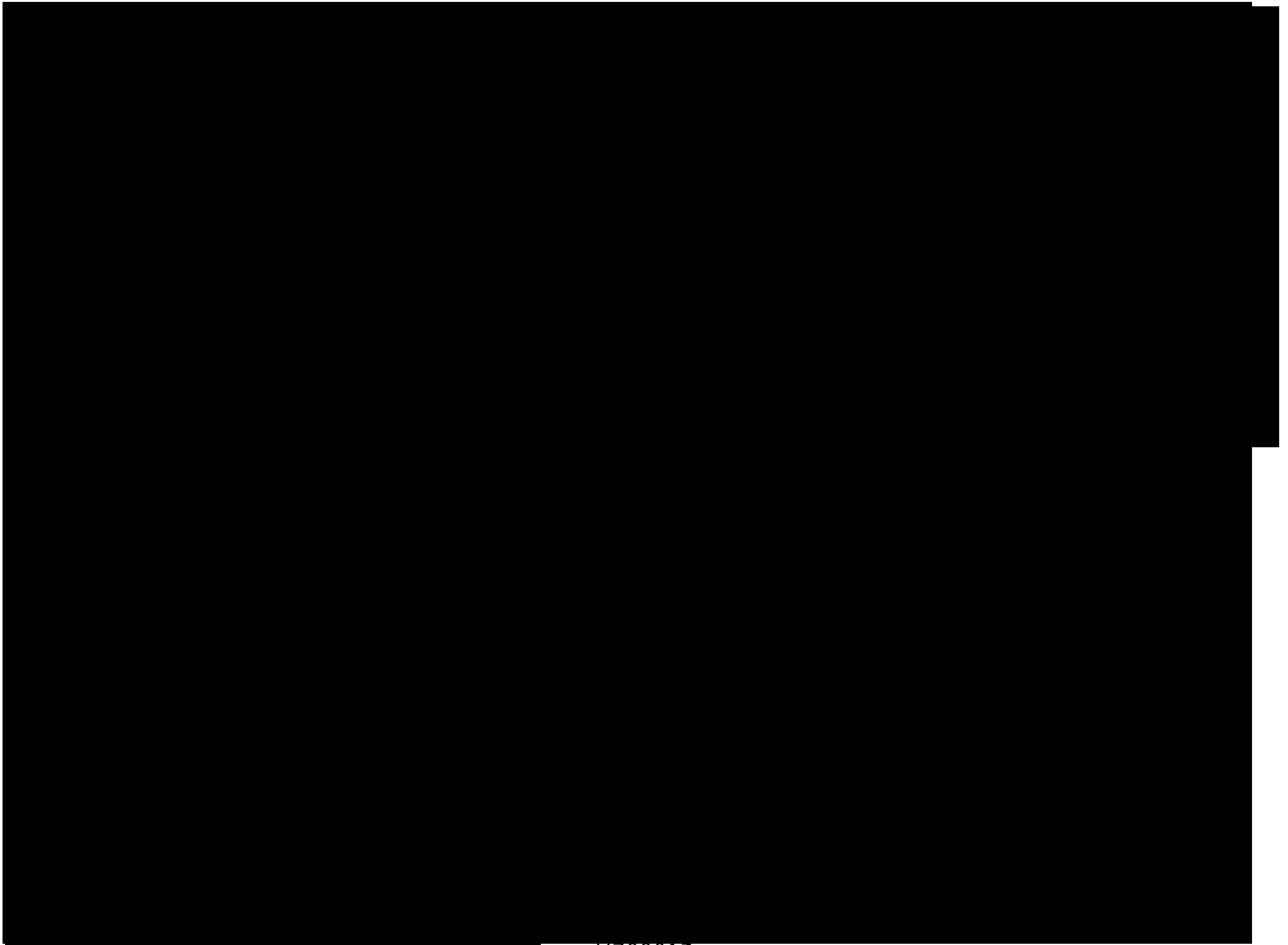
Please let us know as soon as possible when Met-Ed is available to meet during the next four weeks. If it will facilitate scheduling, Verizon is amenable to meeting at a location of Met-Ed's choosing.

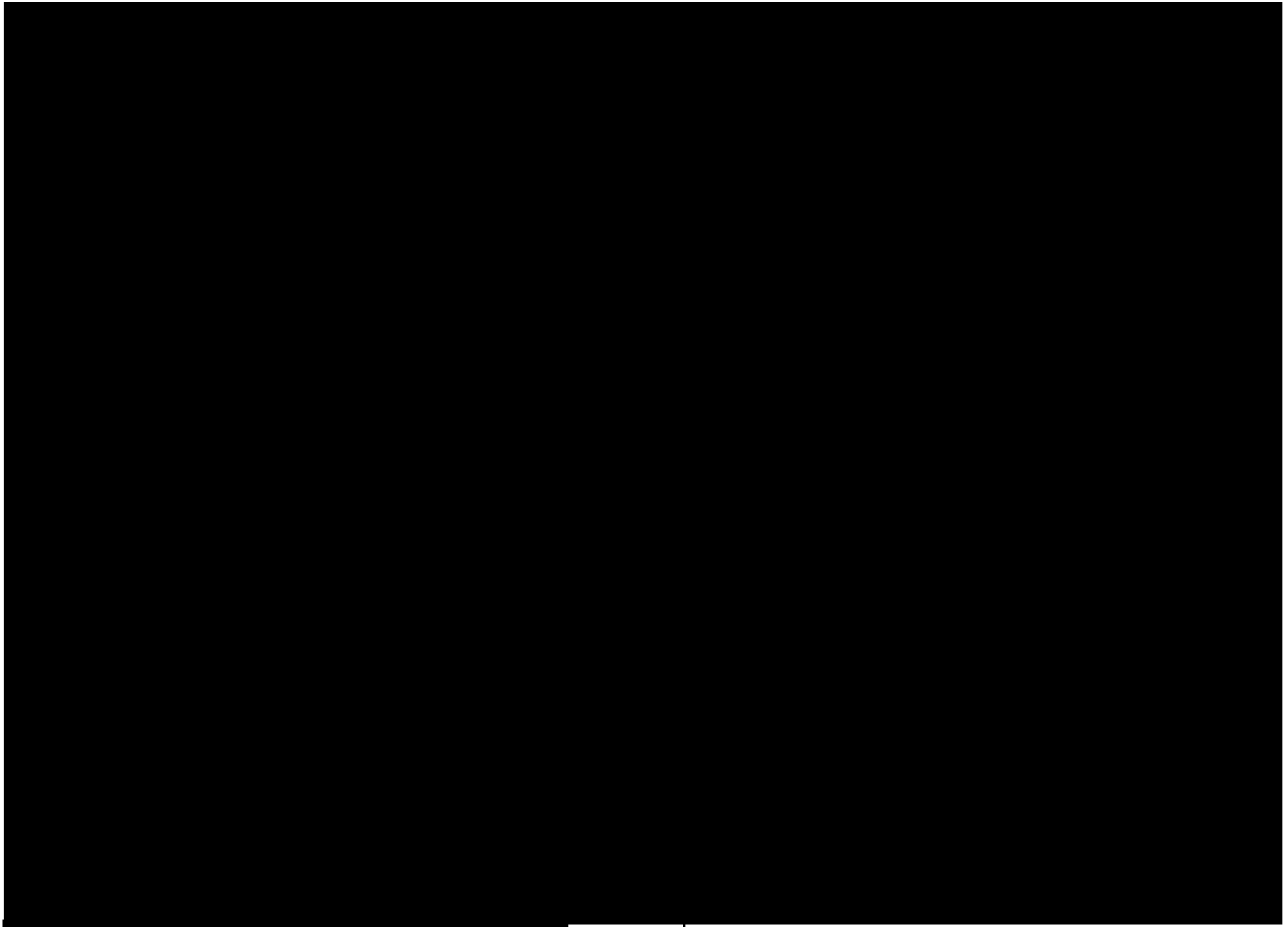
Sincerely,

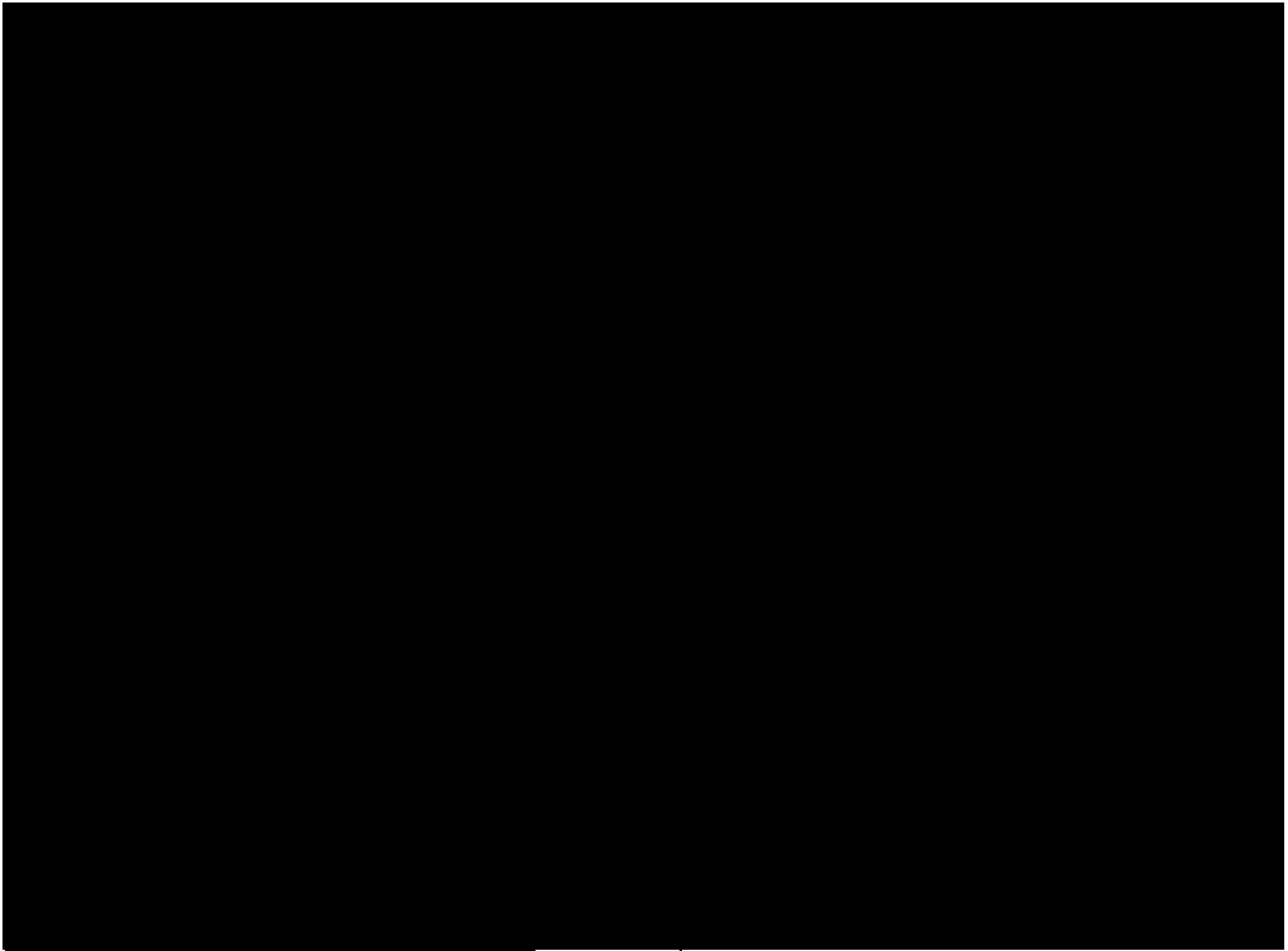
Stephen Mills

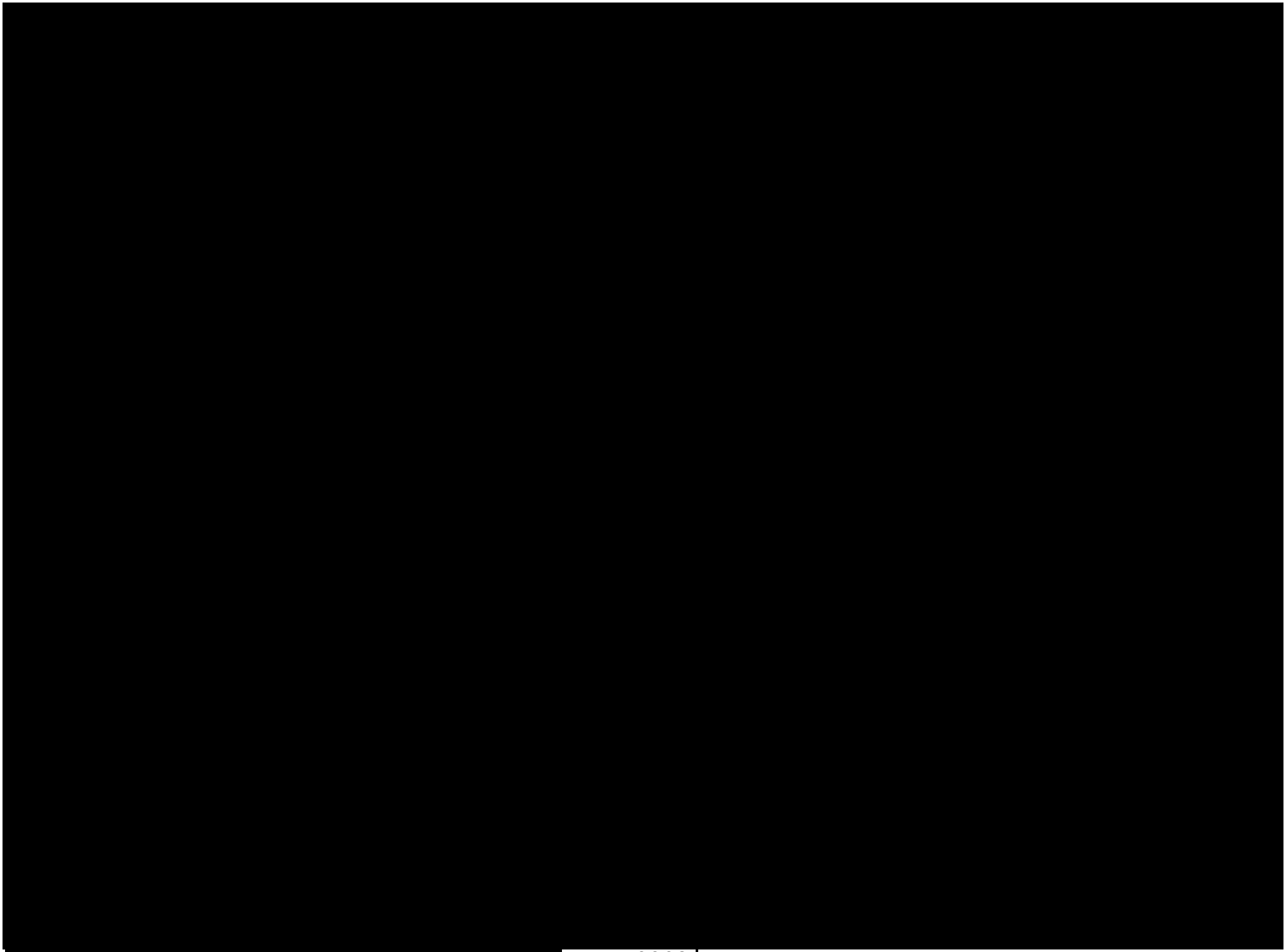
Attachment C

[redacted]









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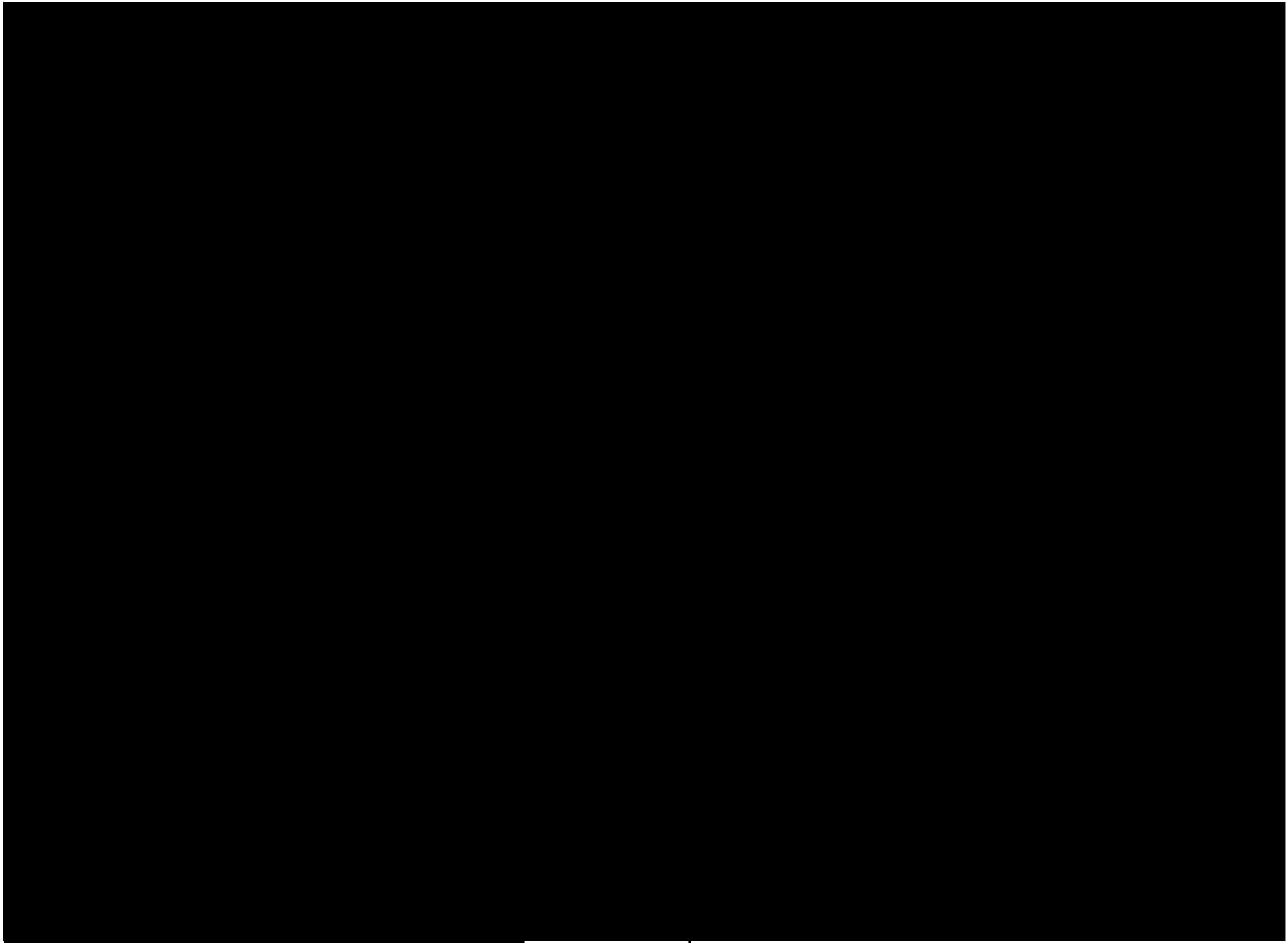

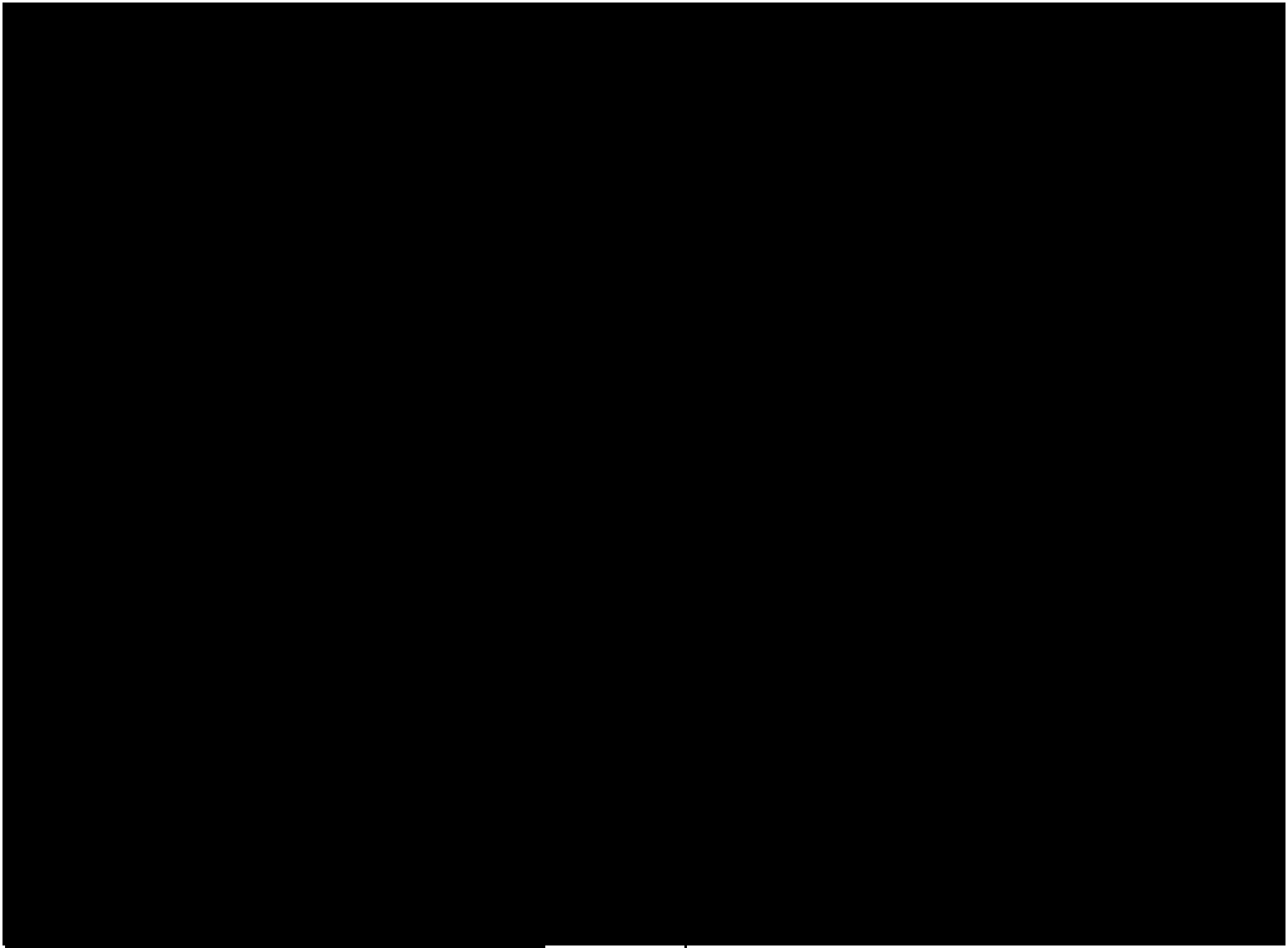

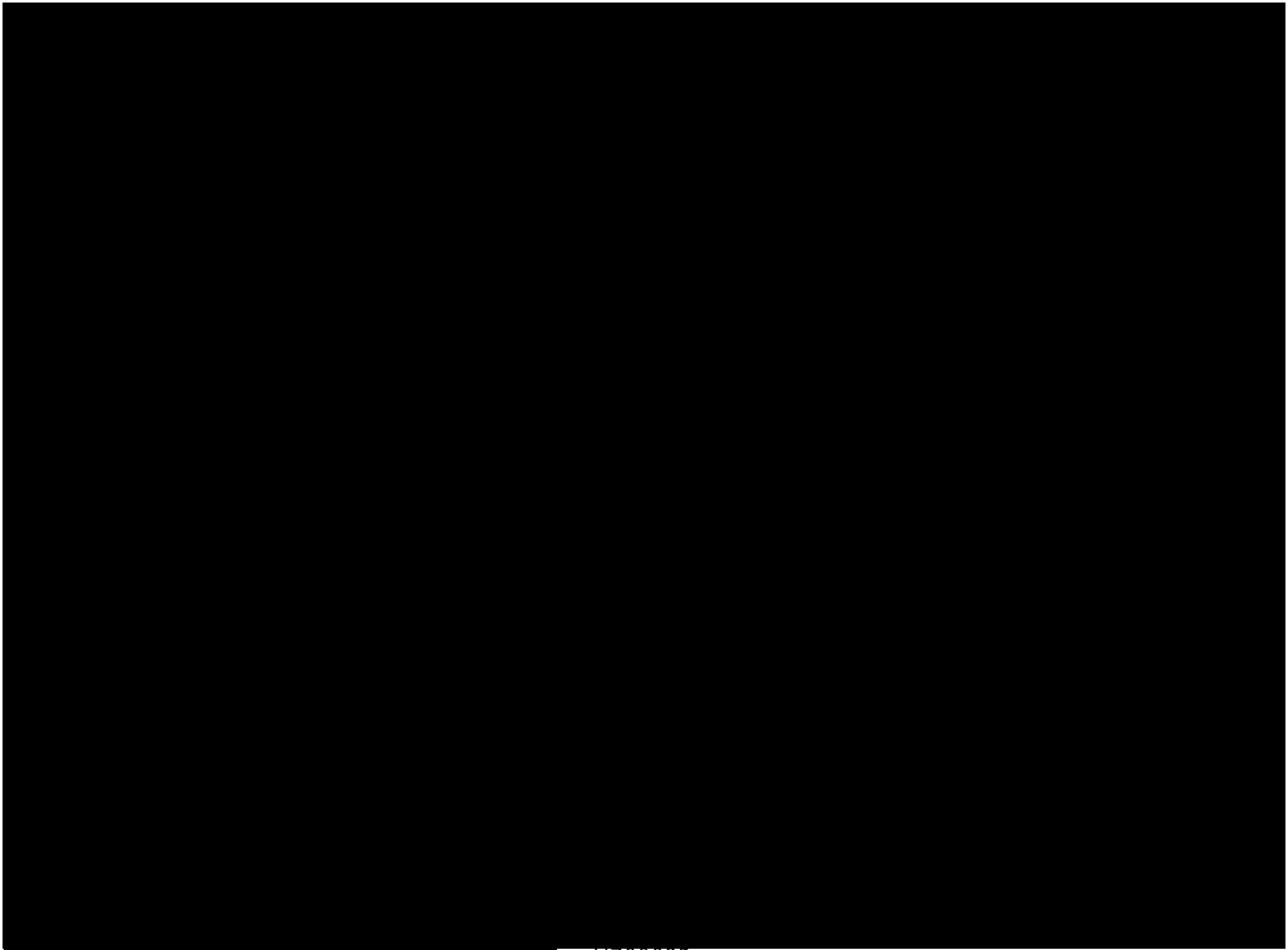

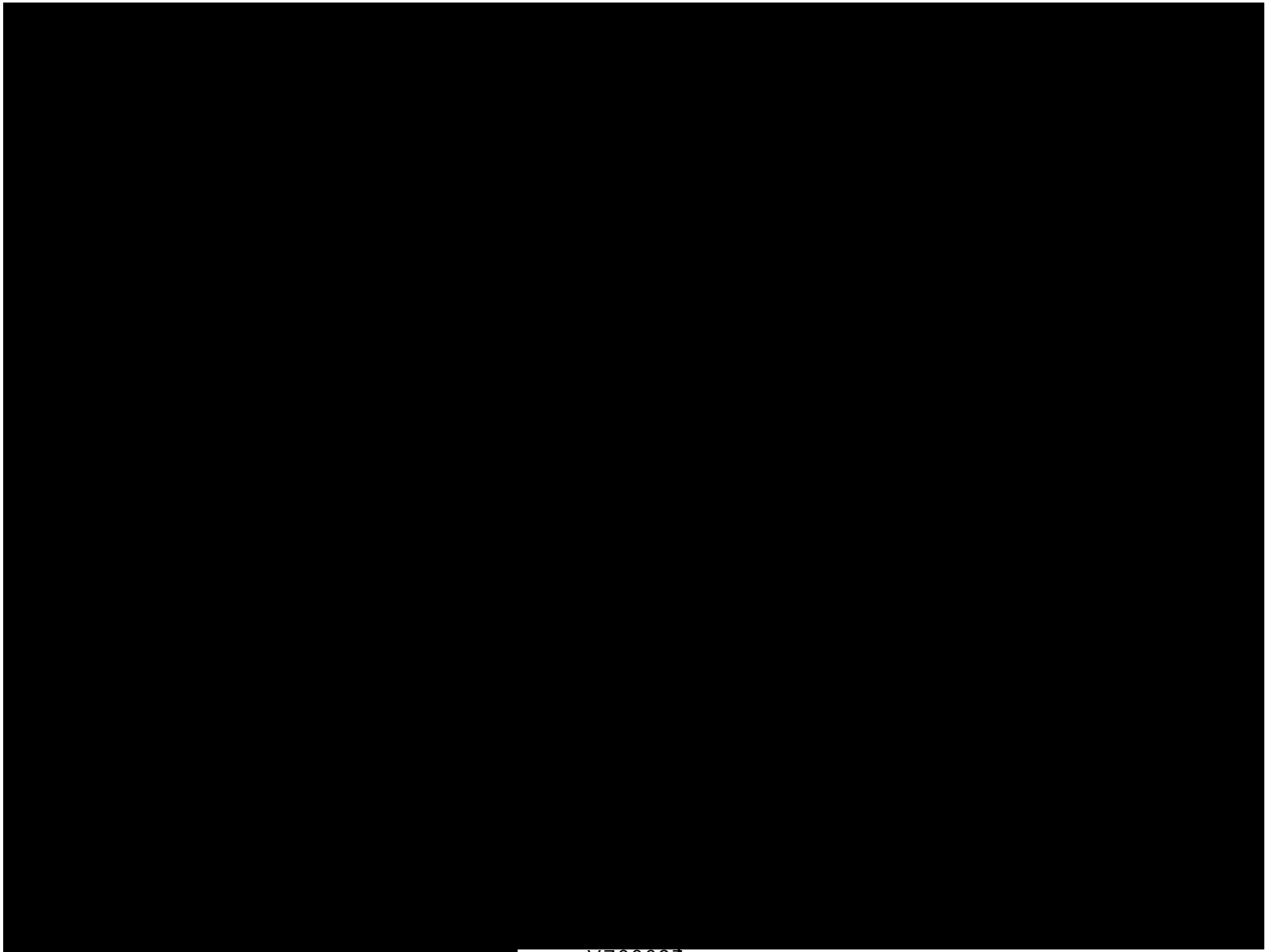

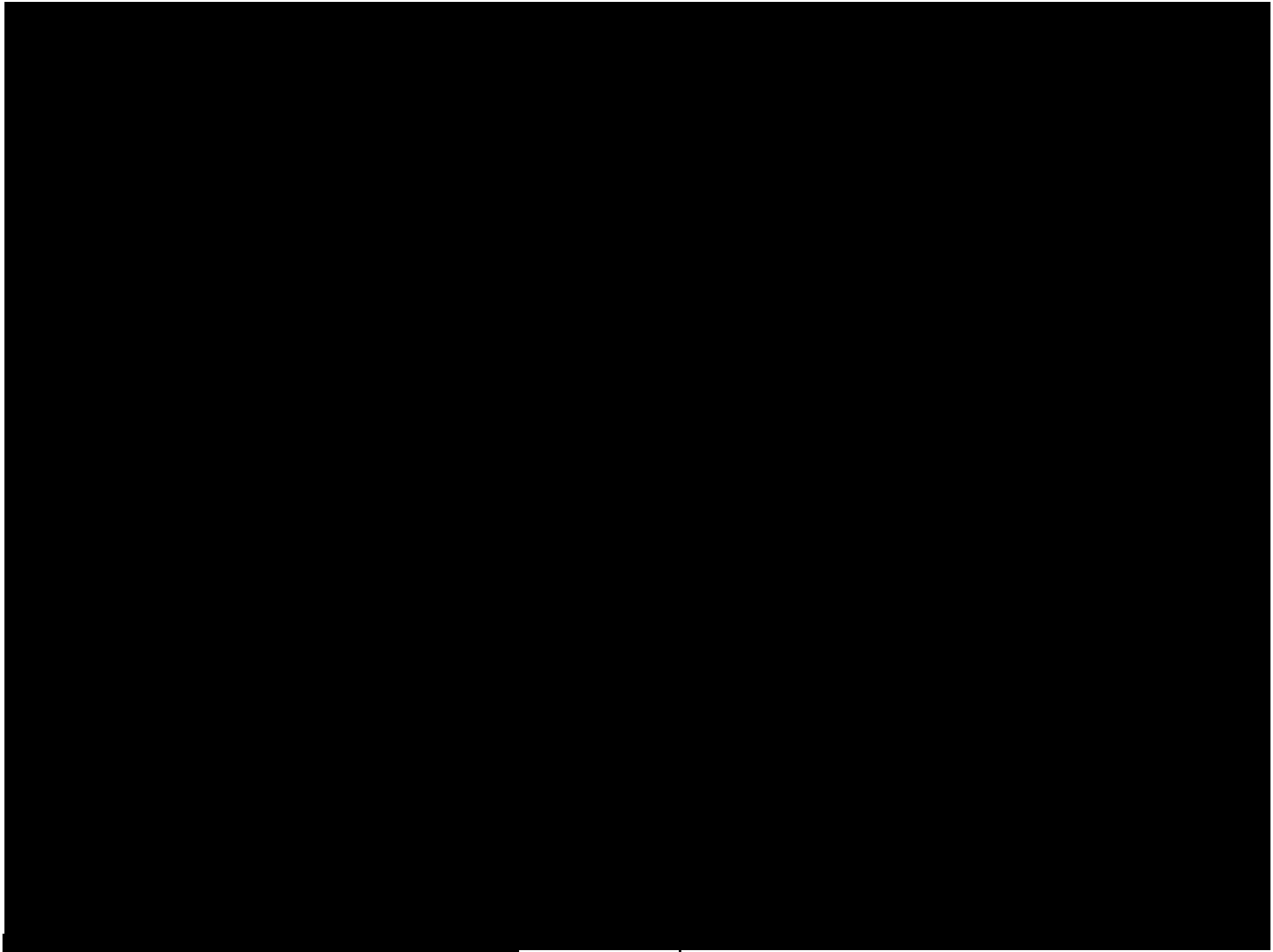

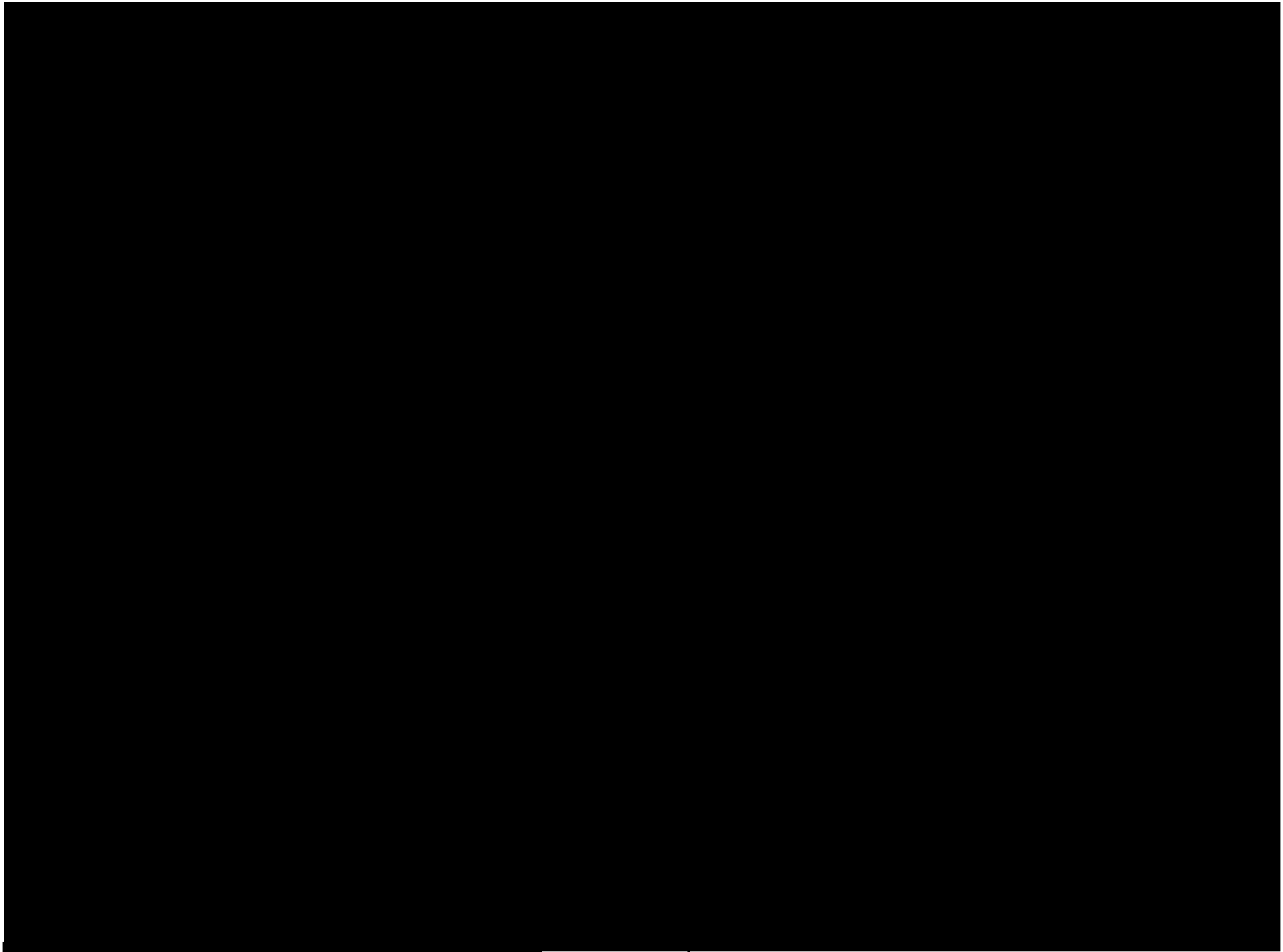

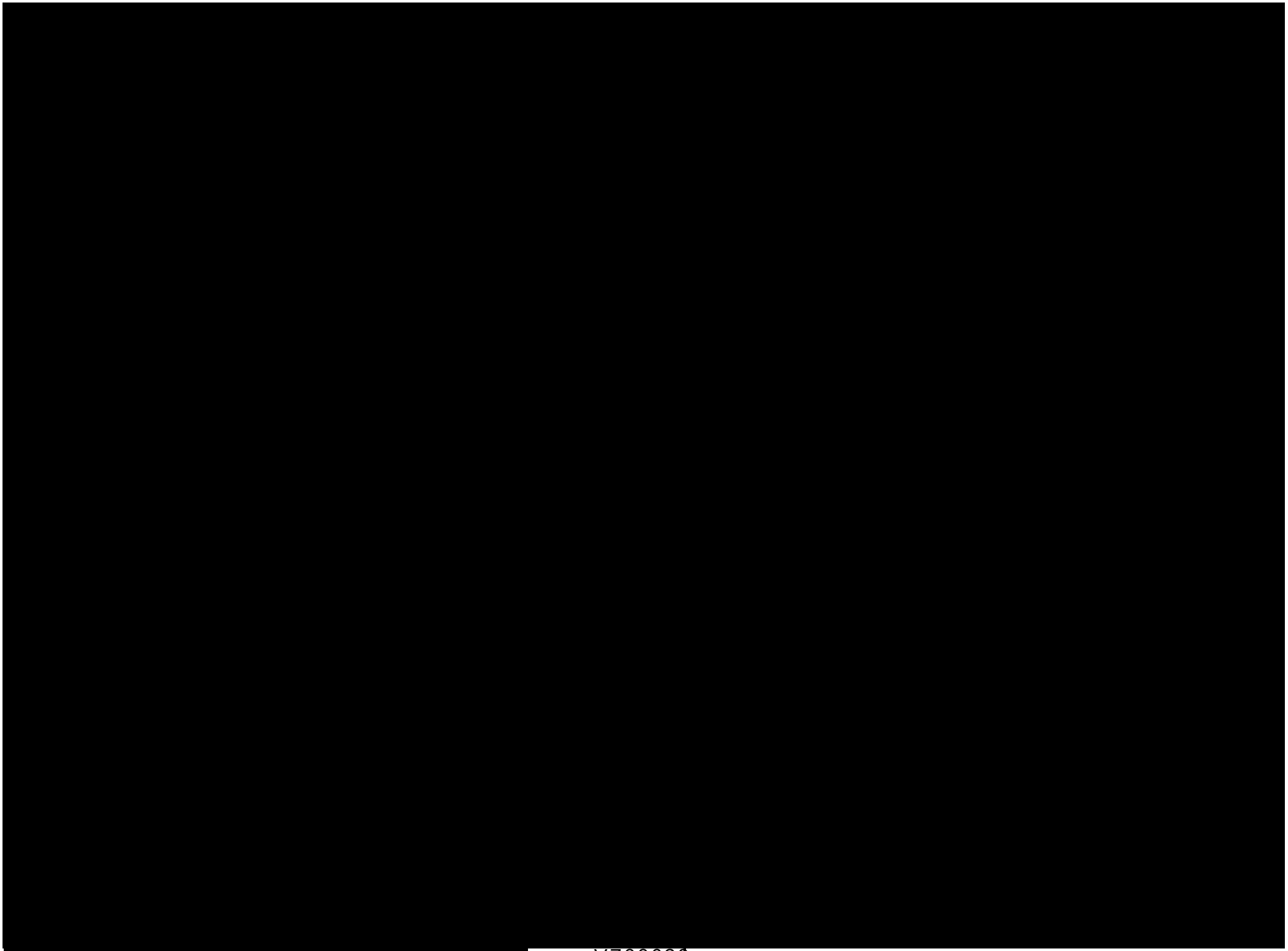

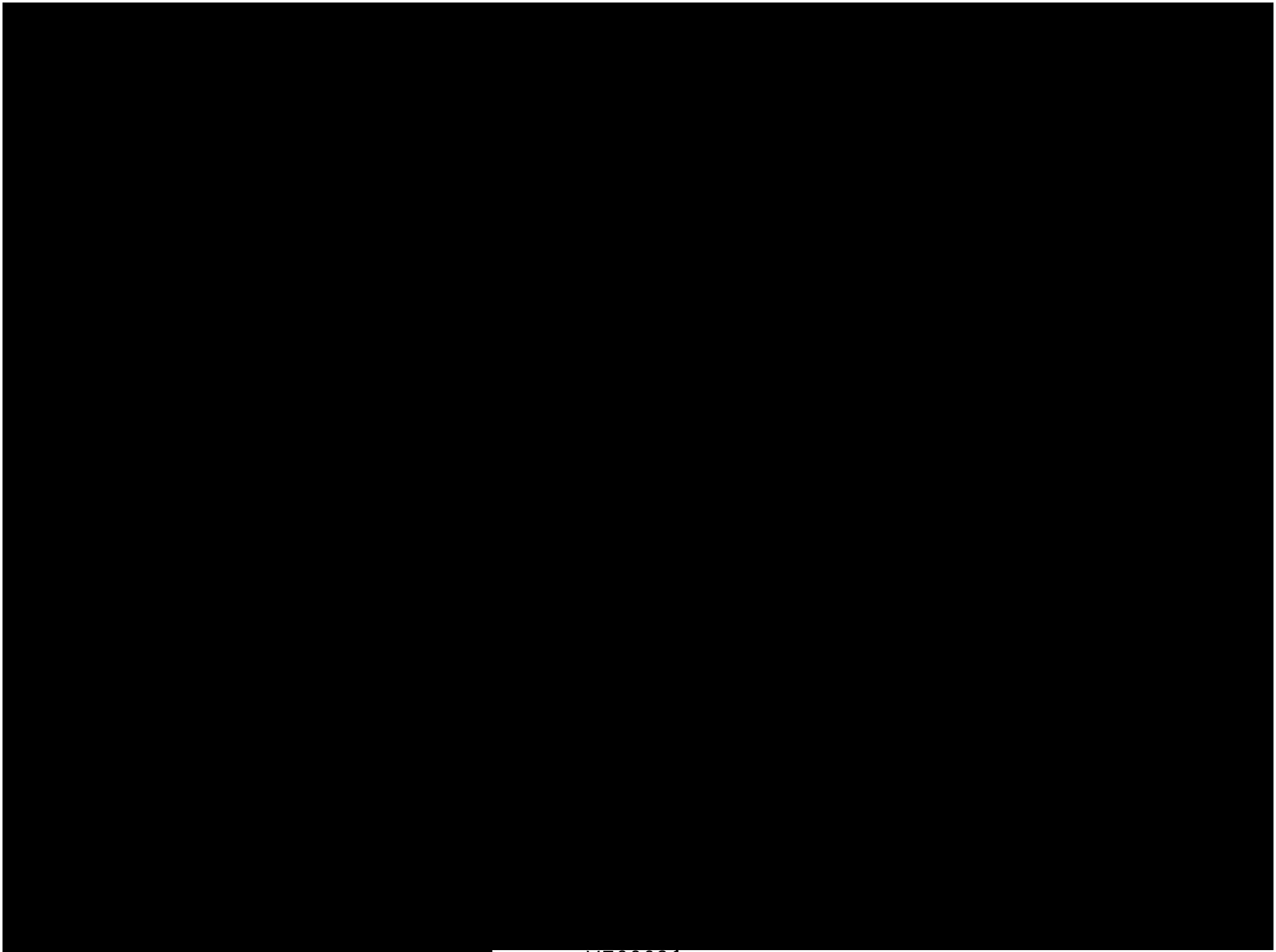

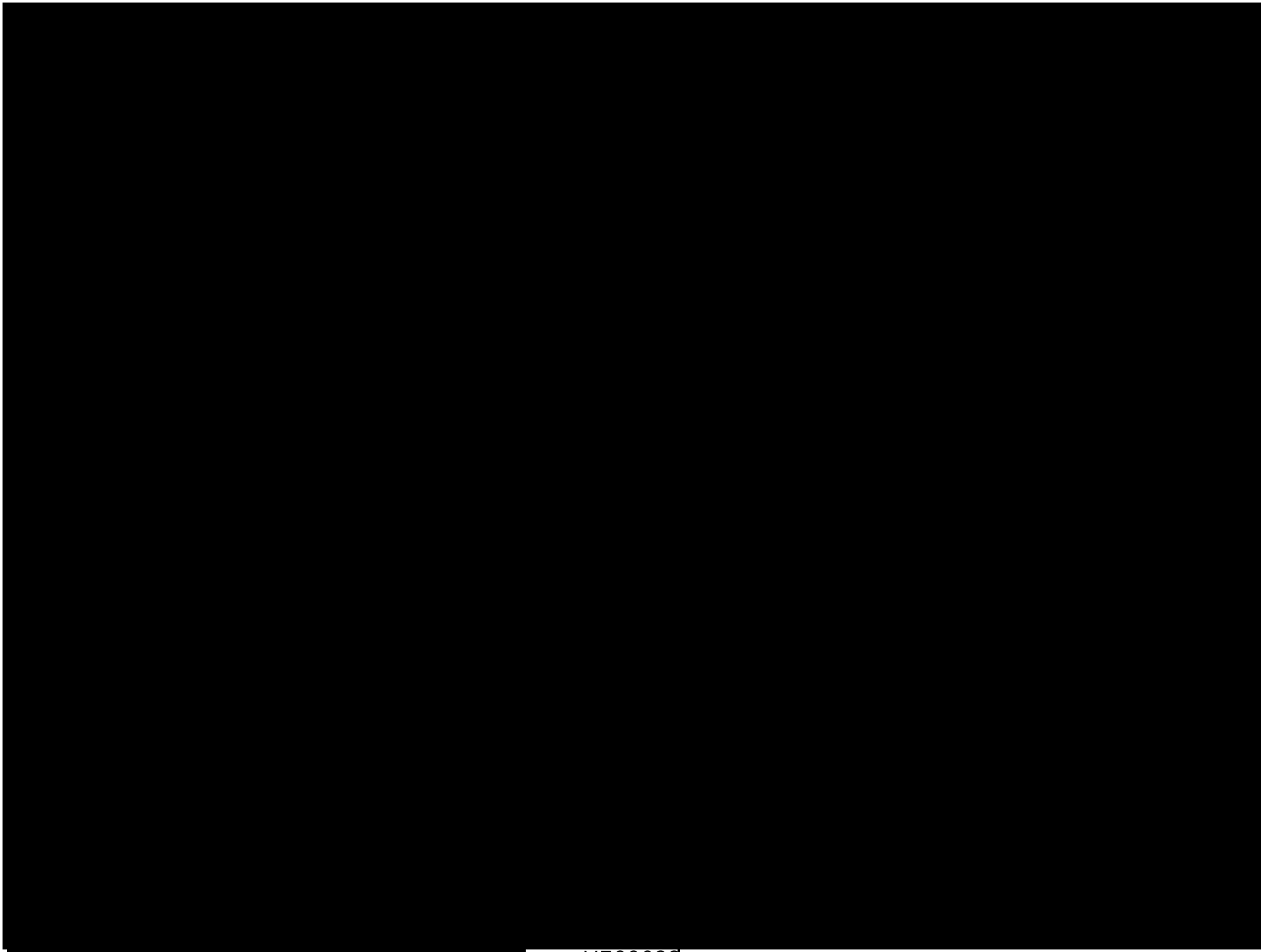

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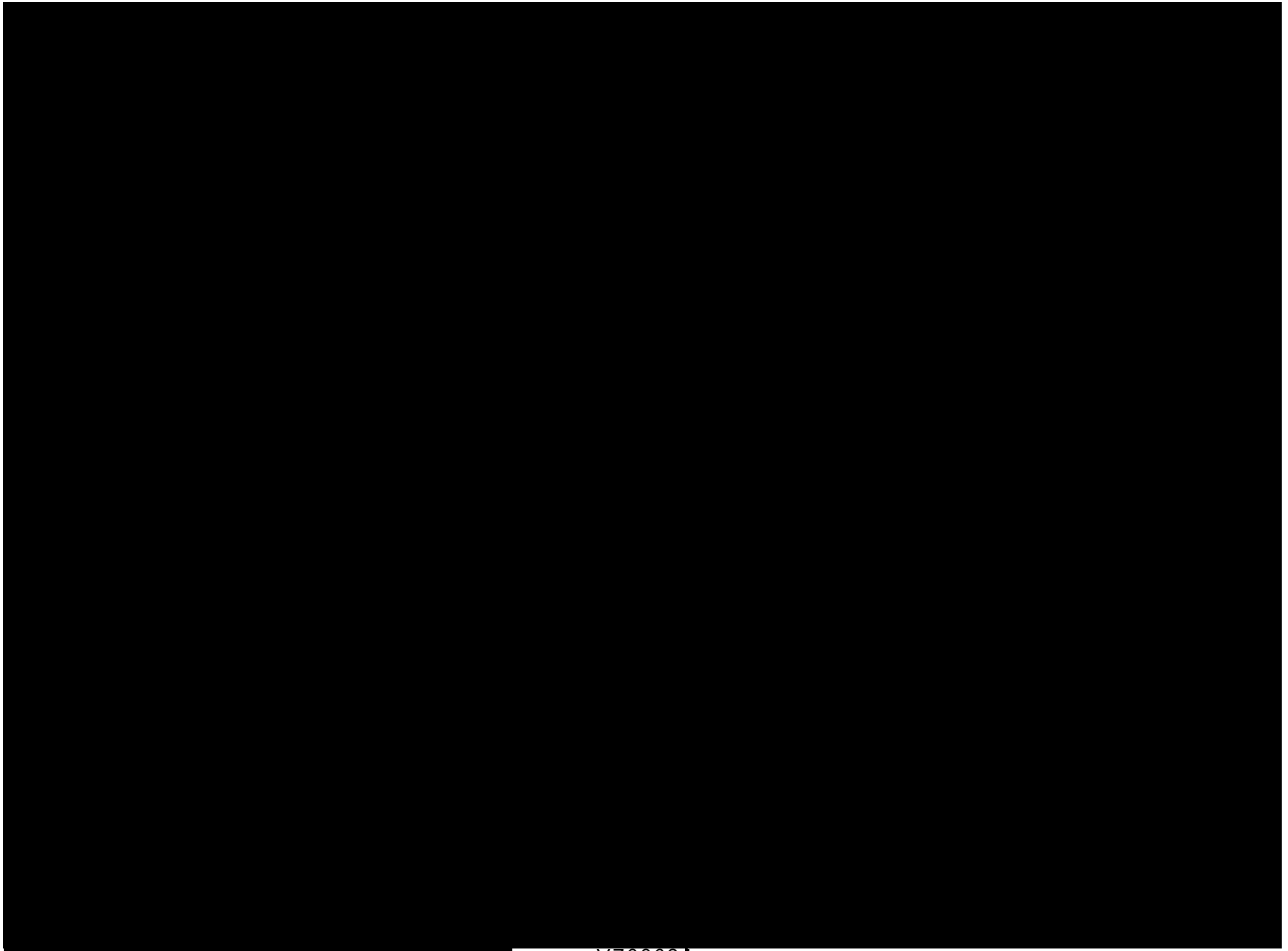

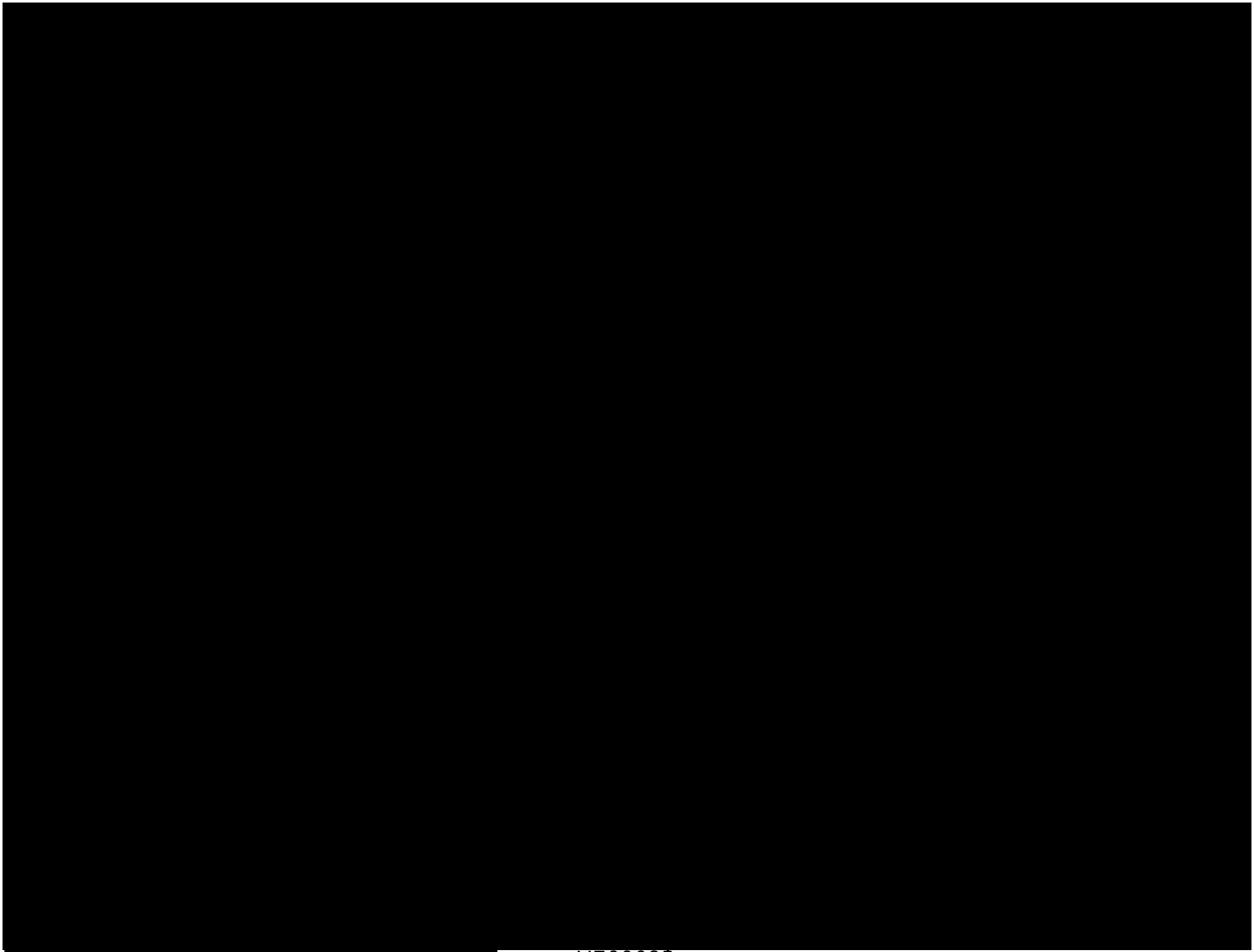

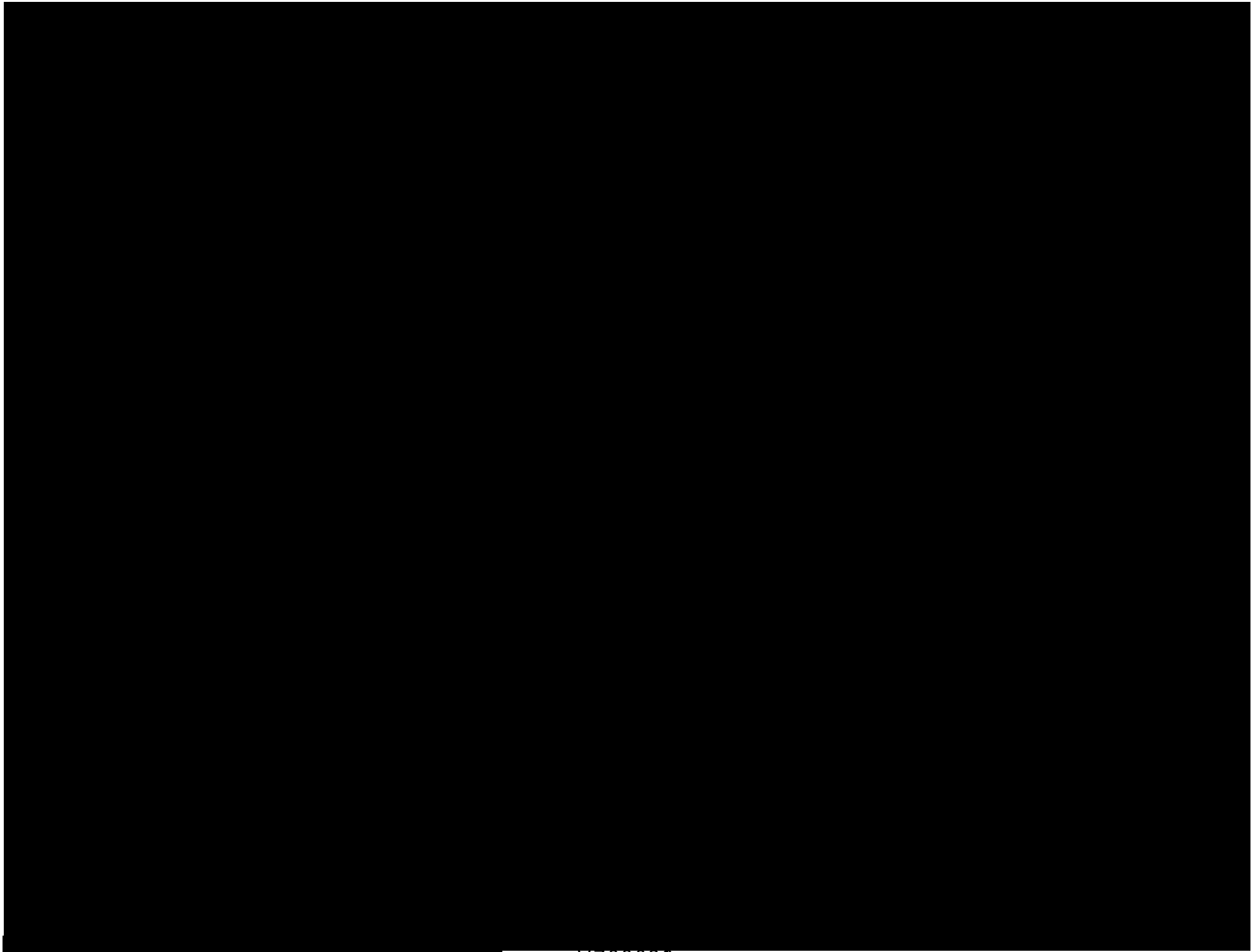

Exhibit 28

From: Schafer, Stephen F [mailto:sschafer@firstenergycorp.com]
Sent: Friday, May 11, 2018 2:55 PM
To: Slavin, James
Cc: Trosper, Brian H; Karafa, David J.; Pryatel, Thomas R.; DeWitt, Deanna R; Endris, Robert M; Haynes, Reneta; Mills, Stephen C (Steve)
Subject: [E] RE: FirstEnergy Counterproposal

Hello Jim

Please find attached FirstEnergy's rate calculations supporting our counteroffer. As we've said, we don't believe there is a requirement to use any given formula to establish negotiated rates. However, we agree the information may prove useful and I'm happy to answer any questions you may have.

FirstEnergy's offer is to apply any renegotiated rates prospectively. FirstEnergy would not agree that the existing contractual rates that were mutually agreed upon by both parties are not just and reasonable. Periodically renegotiating the rates is one of the features of our agreement and does not indicate that past amounts invoiced were not just and reasonable.

Let me assure you that it was not my intent to mischaracterize any aspect of Mr. Trosper's letter nor the April 11 meeting. If we misunderstood Mr. Trosper's email following the April 11 meeting as representing an offer. In fact, I may still be confused as to Verizon's current offer--if you could reiterate, it would be appreciated.

As you are evaluating this information, we remain interested in your response to our offer to terminate the Joint Use agreements and move to a CLEC Pole Attachment Agreement. As I mentioned, it's a concept originally floated by Verizon and it could definitively resolve the rate issue.

The 2011 Order identifies several preconditions to a determination that contract rates are not just and reasonable, including that bargaining leverage is present. We don't believe that pole ownership ratio confers bargaining leverage in this situation for the same reasons as described in FirstEnergy's response at the FCC to the Frontier complaint a few years back. Meanwhile, there are a number of significant advantages that Verizon enjoys in its ILEC agreements; for example, as recently as two weeks ago, Stacey Culbreath demanded that Penn Power NOT require Verizon to follow the same application process for attachments that is required of CLECs. We'd be happy to discuss these benefits further as we continue these discussions.

Steve

Stephen F. Schafer
Manager, Joint Use & Cable Locating
Energy Delivery - Operations Services
FirstEnergy Services Company
76 South Main Street A-GO-11
Akron, Ohio 44308
330.384.3711
SSchafer@FirstEnergyCorp.com

From: james.slavin@verizon.com <james.slavin@verizon.com>
Sent: Friday, May 04, 2018 5:24 PM
To: Schafer, Stephen F <sschafer@firstenergycorp.com>

Cc: brian.trosper@verizon.com; Karafa, David J. <djkarafa@firstenergycorp.com>; Pryatel, Thomas R. <pryatelt@firstenergycorp.com>; DeWitt, Deanna R <ddewitt@firstenergycorp.com>; Endris, Robert M <rendris@firstenergycorp.com>; reneta.haynes@verizon.com; stephen.c.mills@verizon.com
Subject: [EXTERNAL] RE: FirstEnergy Counterproposal

Steve,

Thank you for the counteroffer. Before we can evaluate your offer, we need more information to fully understand what FirstEnergy is offering. Could you please provide this information by Tuesday, so that we can work to provide a response by the end of next week?

First, please send your rate calculations. Verizon provided a hard copy of its rate calculations in Brian Trosper's December 20, 2017 letter and you'll recall that your team asked for an electronic copy of our Excel spreadsheet at our April 11 executive-level meeting so that FirstEnergy could use it to develop a counteroffer. Brian sent the spreadsheet on April 13, and based on our meeting and Dave Karafa's April 20 and May 1 emails, we expected to receive it back with an explanation for any formula or input changes that FirstEnergy made. So that we can understand FirstEnergy's offer, please provide us the electronic version of the spreadsheet you used to calculate the proposed rates, along with an explanation for each of the inputs you used. Dave indicated that your team found the detailed rate calculations that we provided in December and April beneficial, and we would find similar information from your team helpful as well.

Second, your email does not specify the effective date for these proposed rates. We assume that FirstEnergy would apply them retroactively, since Verizon has had the right to just and reasonable rates as of the effective date of the 2011 Pole Attachment Order. Refunds against past amounts paid was one of the items we highlighted, and as your offer indicates, this has been going on for at least 7 years with the parties considering different alternatives. But, to avoid any confusion, we would appreciate it if you would clarify the retroactive relief that FirstEnergy is offering.

We remain hopeful that we can reach agreement, but are disappointed that your email mischaracterizes aspects of our prior negotiations. For example, we explained that the rate calculations attached to Brian's December letter were the rate calculations that we believe, based on the best data available to us, are properly calculated, proportional, new telecom rates. We provided those calculations in advance of our executive-level meeting so FirstEnergy would fully understand the relief that Verizon will seek at the FCC should these negotiations fail. There was no requirement that Brian make any compromise offer in that letter, and clearly no reason for him to again offer the compromise [redacted] per pole reciprocal rate that Met-Ed rejected last summer.

And while we continue to believe that the FCC's new telecom formula should be used to set Verizon's rental rate with FirstEnergy, we have repeatedly acknowledged that the 2011 Pole Attachment Order permits a higher rate if a Joint Use Agreement provides an ILEC net material advantages over its competitors. As we have explained, our Joint Use Agreements do not provide any such advantages. We have asked FirstEnergy to let us know if it disagrees, and to detail any competitive advantages that it thinks would support a rate higher than the new telecom rate along with the value of any alleged competitive advantage, but it has not done so.

These are only some of the concerns that we have with the statements made in your email, but we can address each of them in detail once we have a chance to understand FirstEnergy's rate calculations and inputs. I look forward to hearing from you next week.

Thanks again,

verizon

James Slavin
Senior Manager, Network Operations & Engineering
Verizon Wireline Network

One Verizon Way
Basking Ridge, NJ 07920

908-559-2887
james.slavin@verizon.com

From: Schafer, Stephen F [mailto:sschafer@firstenergycorp.com]
Sent: Wednesday, May 02, 2018 5:31 PM
To: Slavin, James
Cc: Trosper, Brian H; Karafa, David J.; Pryatel, Thomas R.; DeWitt, Deanna R; Endris, Robert M
Subject: [E] FirstEnergy Counterproposal

Hello Jim
Hope this finds you well since we last met. As you know, executives at our respective companies have been discussing the rental rate issue. I was asked by Dave Karafa, FirstEnergy's VP of Distribution Support, to respond to Brian Trosper's offer, which was communicated during our April 11, 2018 meeting and reiterated afterwards, to use the Post-2011 Telecom Formula Rate (i.e. CLEC rate) as the basis for rental rates, not just for Met-Ed, but also for Penelec, Penn Power, and Potomac Edison-Maryland. We see that your company seems resolute in its view that the CLEC rate must be applied - initially using Met Ed's rate as a reciprocal rate for each other's attachments, and more recently using each FirstEnergy operating company's rate outcome for Verizon's attachments, and Verizon's rate outcome for FirstEnergy's attachments. We couldn't help but notice, however, that in Mr. Trosper's offer following the April 11 meeting, the Met-Ed rate remains essentially unchanged from Verizon's previous demand. And now, Verizon is proposing a significantly higher rate for Met-Ed's (and other FE operating company's) attachments to Verizon's poles. It may prove difficult to successfully negotiate a mutually acceptable outcome if Verizon continues to lower its counteroffers.

As Mr. Karafa indicated, FirstEnergy's view is that the only guidance issued by the FCC is that the Pre-2011 Telecom Formula Rate will be used as a reference point for a complaint regarding ILEC rates. Our previous suggestion to use the Pre-2011 Formula Rate resulted in a [redacted] recurring annual savings for Verizon versus the contract rate (for the Met-Ed service territory). In fact, using the Pre-2011 Telecom Formula Rate would result in approximately [redacted] recurring annual savings to Verizon for all four operating FirstEnergy operating companies. You may recall that Met-Ed proposed to use the Pre-2011 Telecom Formula Rates, calculated using FERC and ARMIS inputs, respectively. Despite Verizon's recent step backwards, in the spirit of cooperation and an effort to advance negotiations, FirstEnergy is hereby proposing to use the following table of respective rates, generated by using the Pre-2011 Telecom Formula to calculate the rates but modified by using the average urban/non-urban presumptive number of attachers instead of the actual number of attachers calculated from each operating company's records for the rates of Verizon's attachment to FirstEnergy poles. The bottom line of this approach results in a reduction to Verizon (for all four companies) in total annual net revenues of approximately [redacted] from our previous suggestion, and nearly [redacted] annual savings vis-à-vis current contract rates.

FE OpCo	**VZ-FE**	**FE-VZ**
Met-Ed	[redacted]	
PN		
PP		
PE		

As an alternative, if Verizon continues to insist on the CLEC rate, then I suggest we terminate our current Joint Use agreements and Verizon can enter into the standard CLEC agreement, as one of your Directors once proposed. Instead of FirstEnergy buying all of Verizon's poles as Verizon had offered approximately 7 years ago, each FirstEnergy operating company can simply set, pay for, and own all new and replacement poles. After all, FirstEnergy already sets the overwhelming majority of poles during storm restoration, car-pole accidents, and new development construction, so it would be a simple matter of not invoicing Verizon for the cost to replace Verizon's poles as is done under the existing

ILEC Joint Use agreements. This accelerated attrition will eventually transition Verizon out of the pole-owning business in FirstEnergy service territories and place it on equal footing with its CLEC competitors (ignoring the advantageous lowest position on existing poles). Of course, we will need to address the details for FirstEnergy's attachment(s) to Verizon's poles during the transition, but a simple solution could be to use the applicable operational terms and conditions of the existing agreements. I realize this suggestion may be as novel for Verizon as it is for FirstEnergy, but perhaps thinking "outside the box" can lead to creative solutions meeting both our needs.

Please contact me if you'd like to discuss these ideas before formulating a response. I look forward to hearing from you.

Steve

Stephen F. Schafer
Manager, Joint Use & Cable Locating
Energy Delivery - Operations Services
FirstEnergy Services Company
76 South Main Street A-GO-11
Akron, Ohio 44308
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SSchafer@FirstEnergyCorp.com

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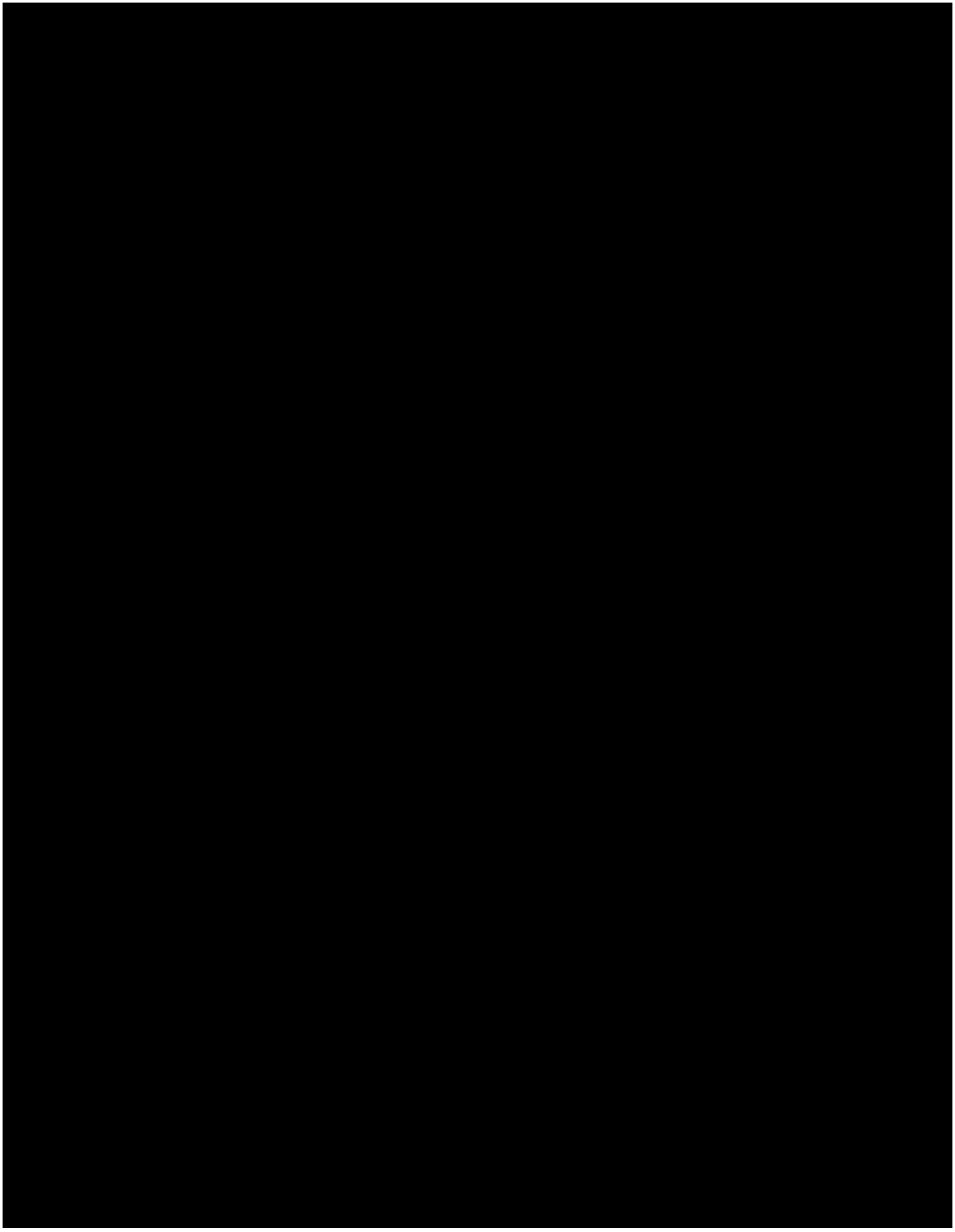

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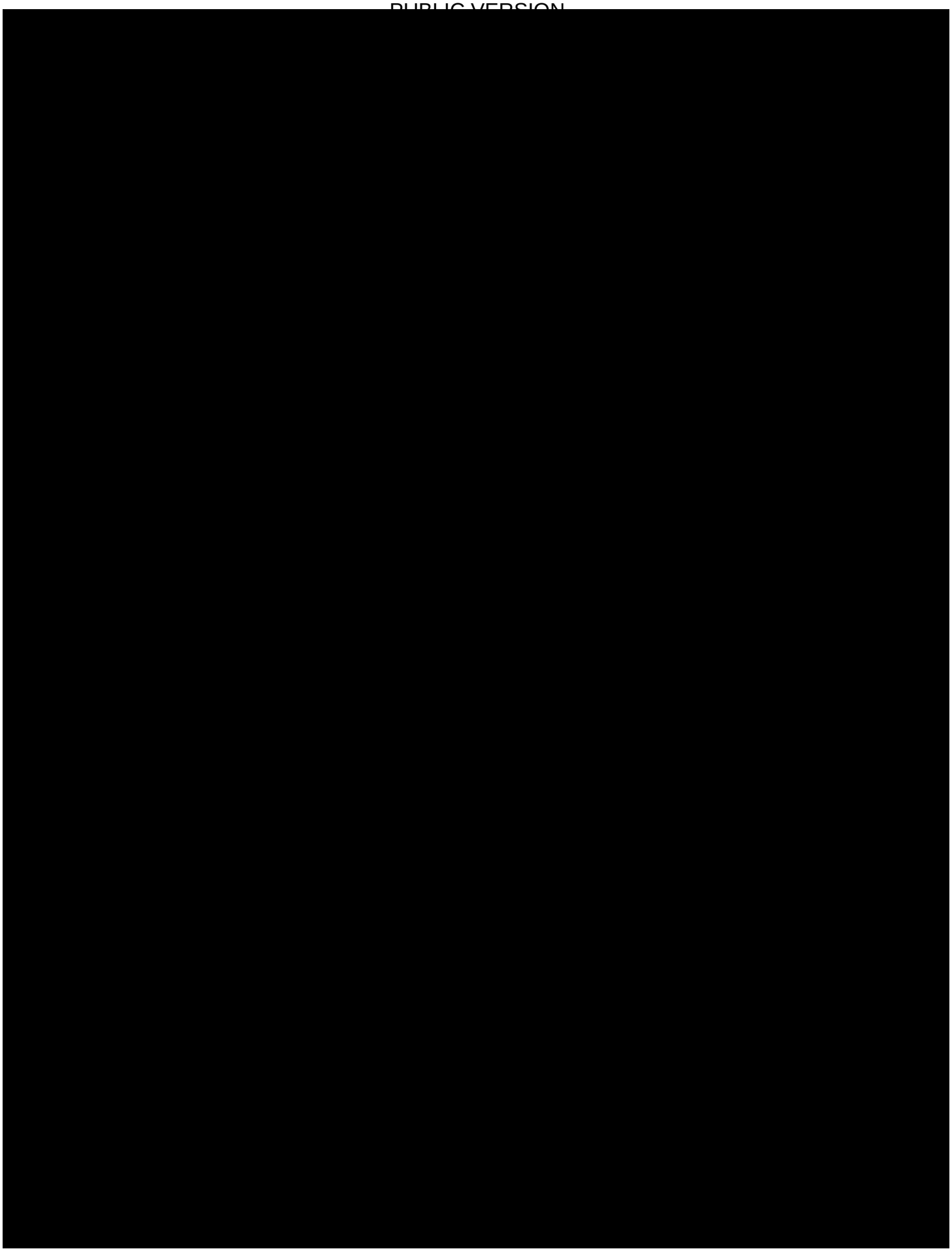

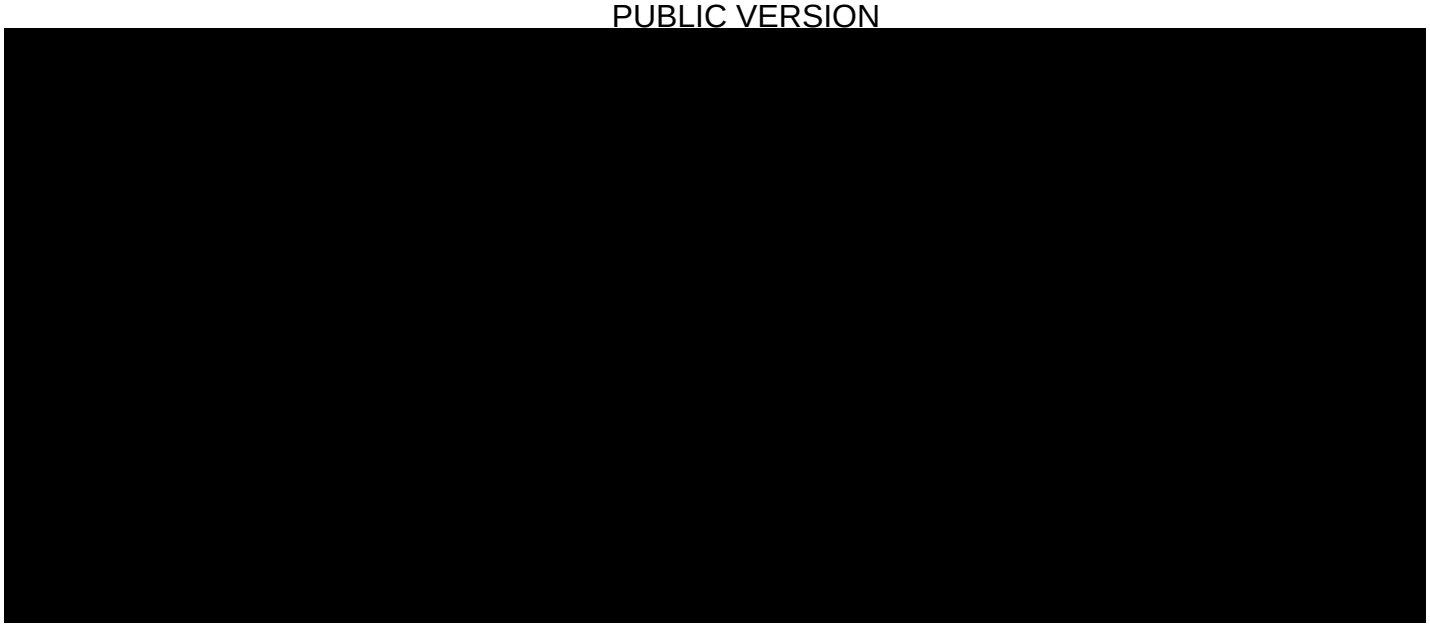

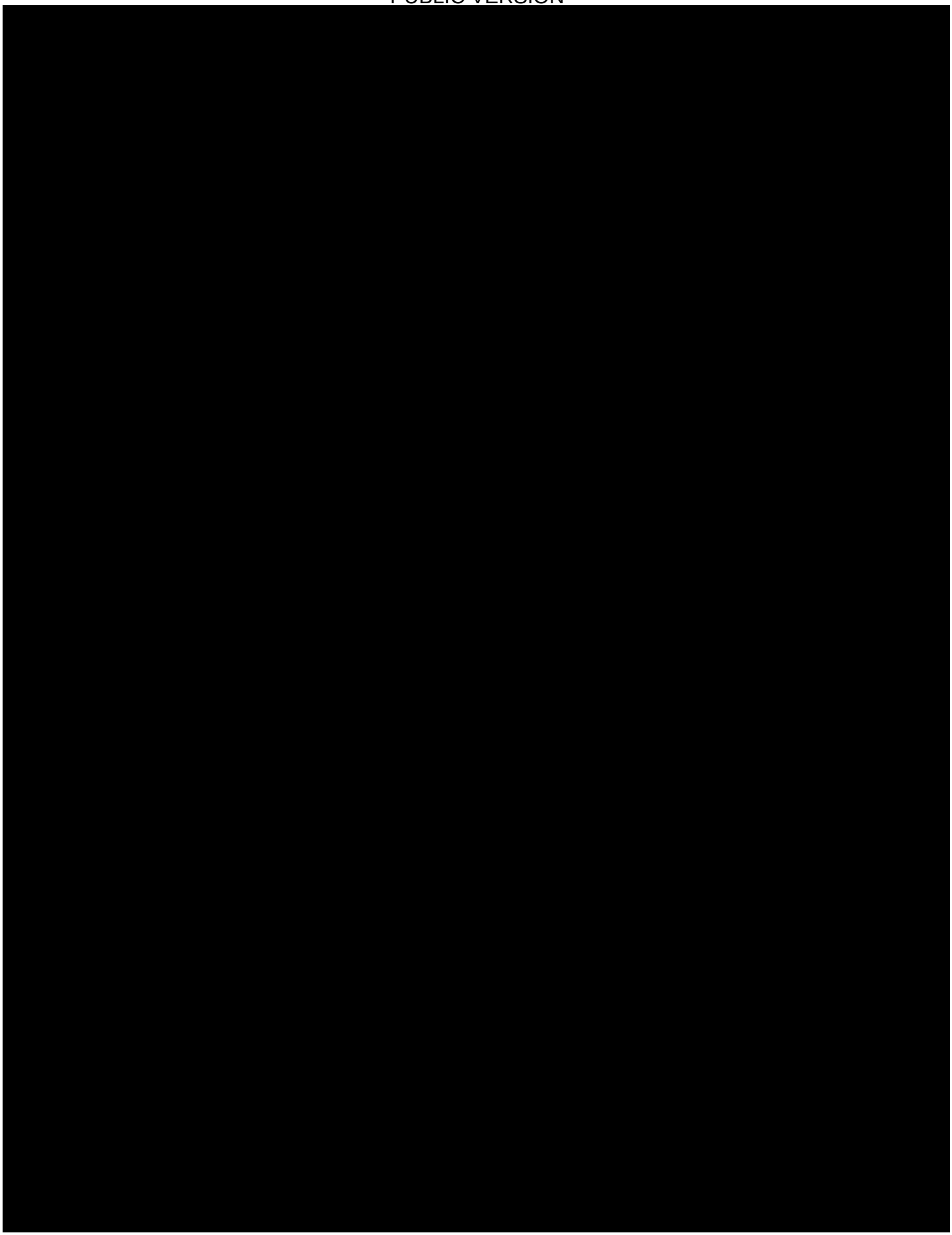

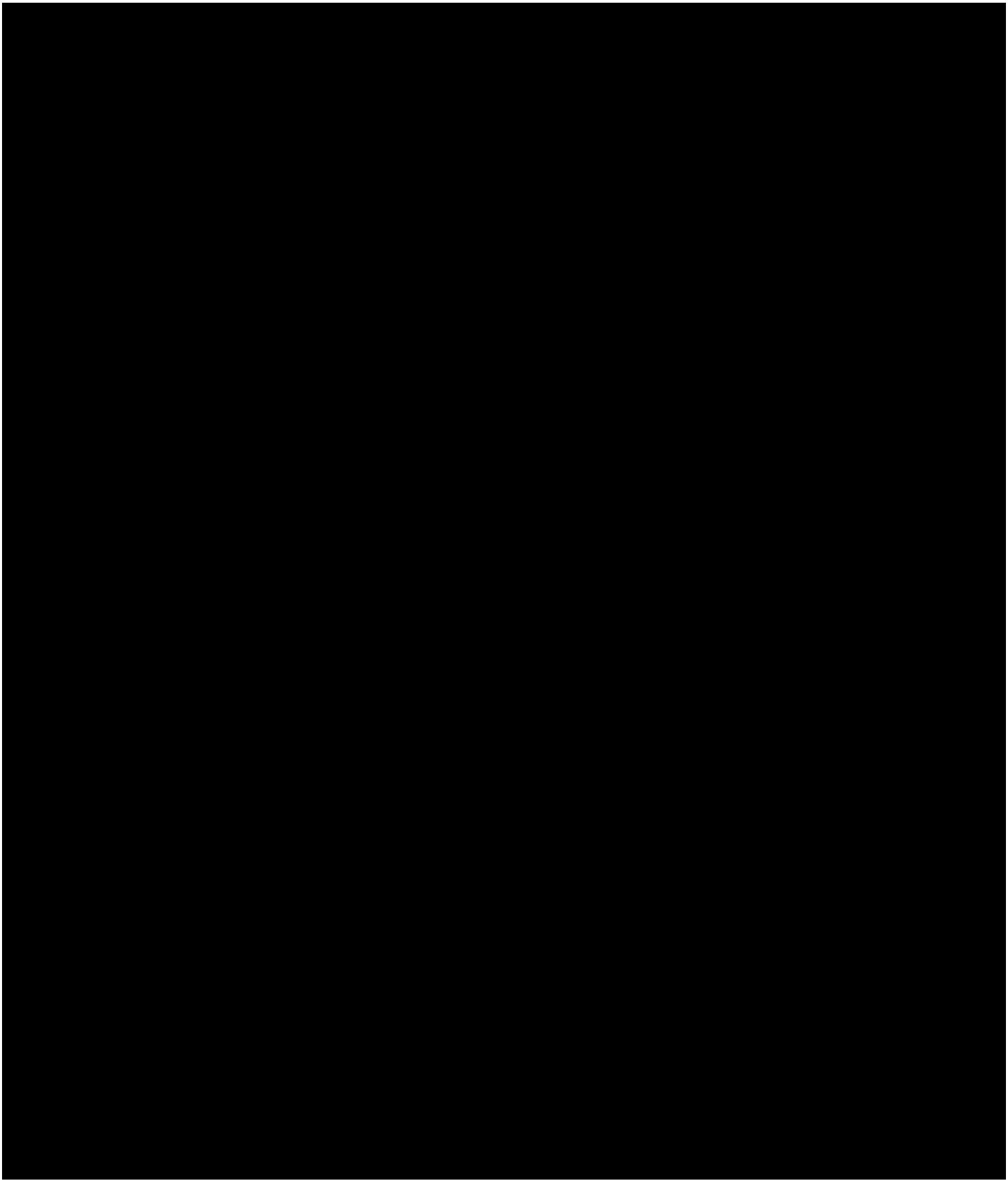

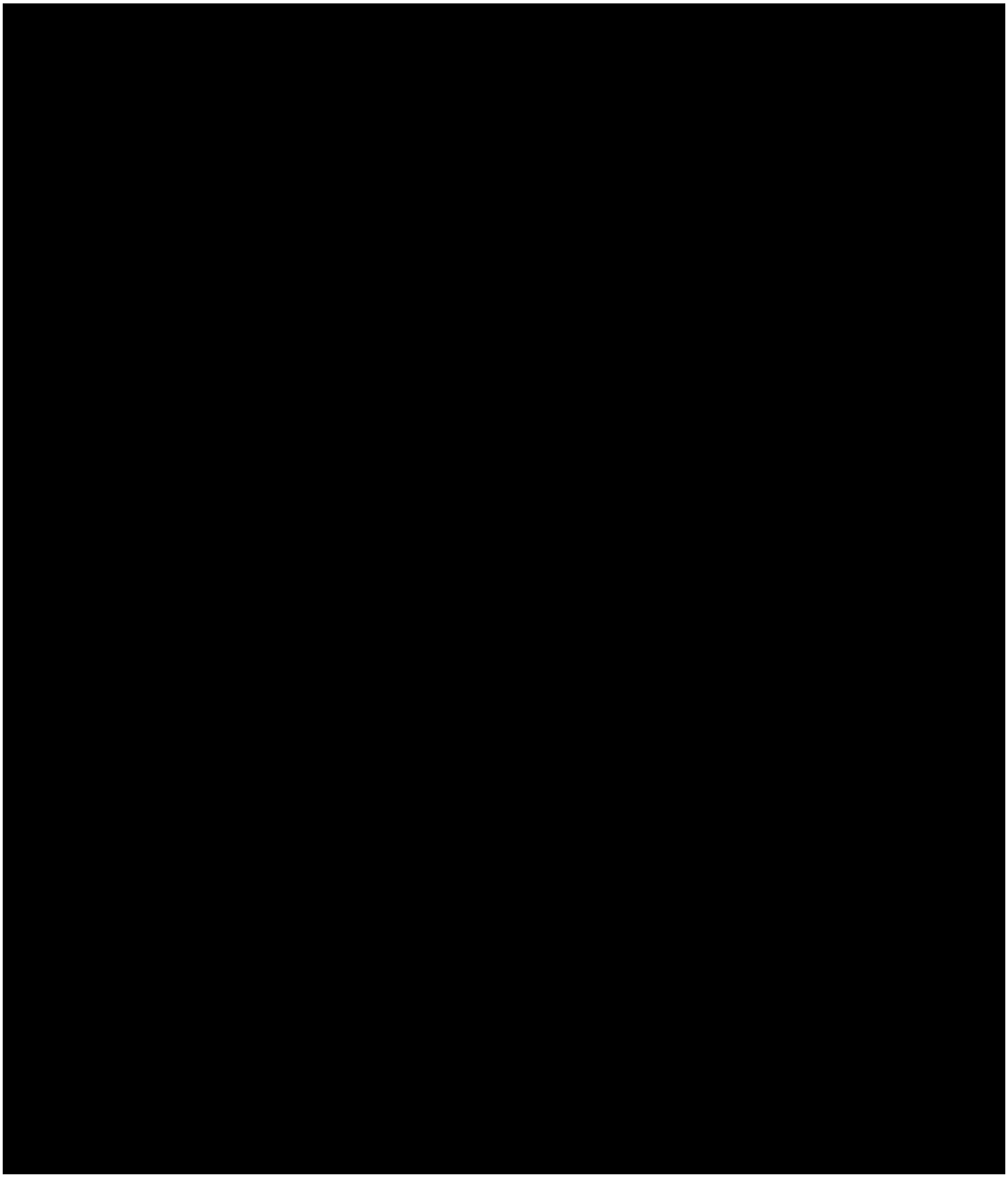

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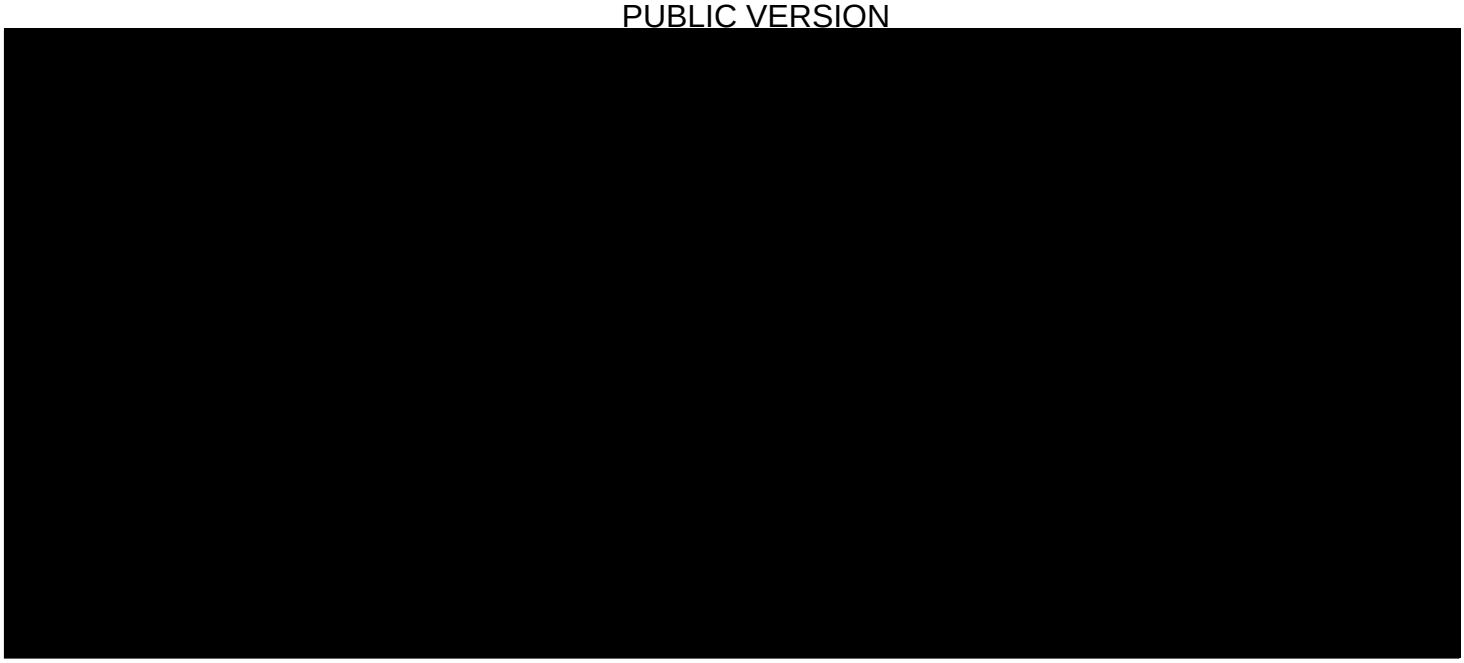

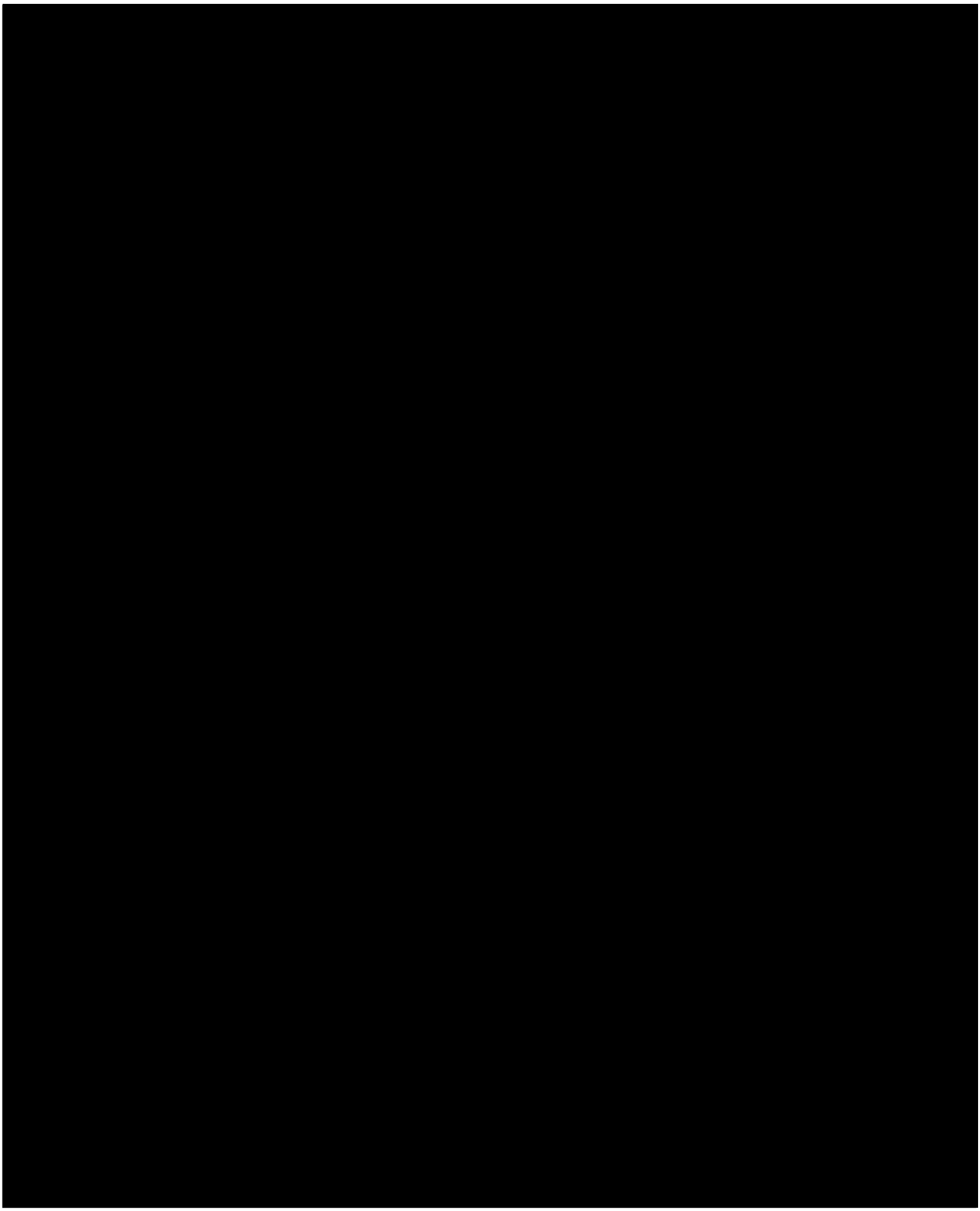

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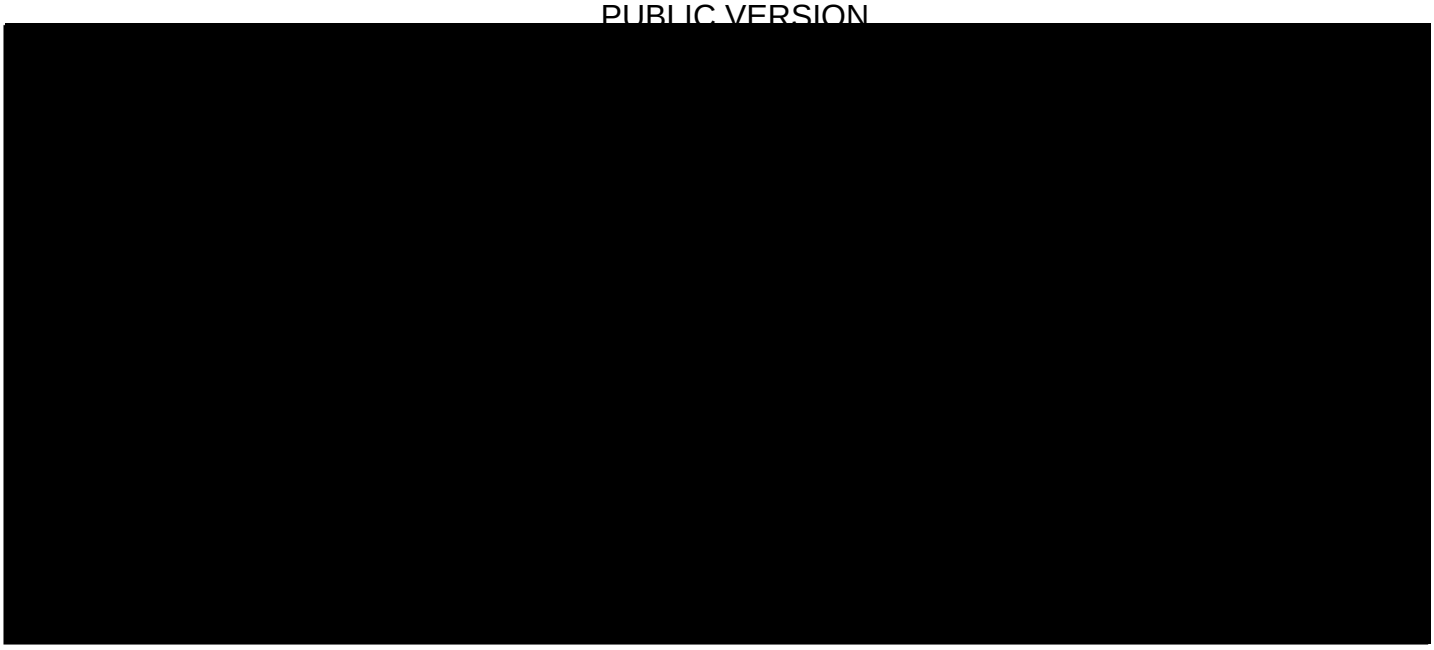

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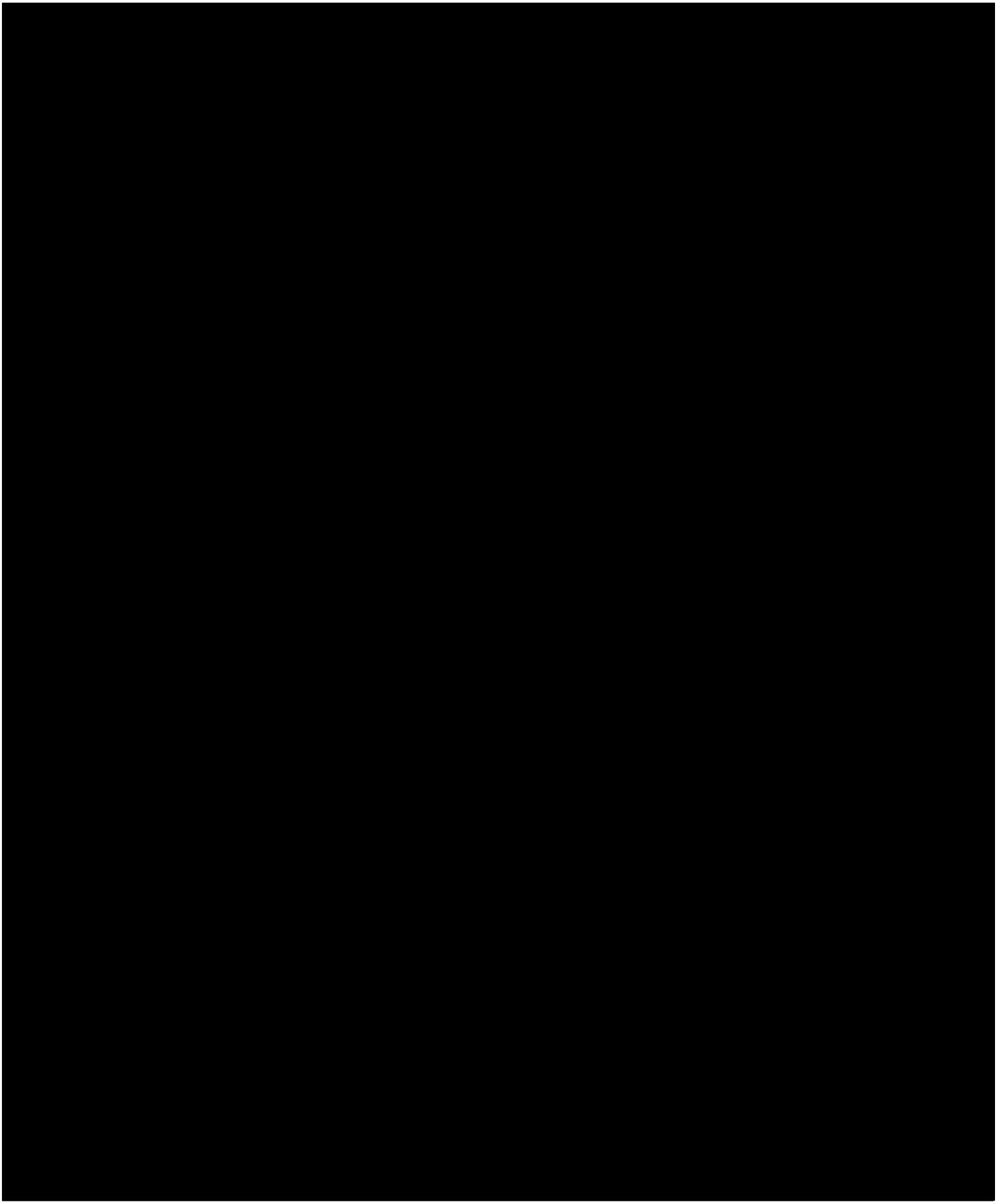


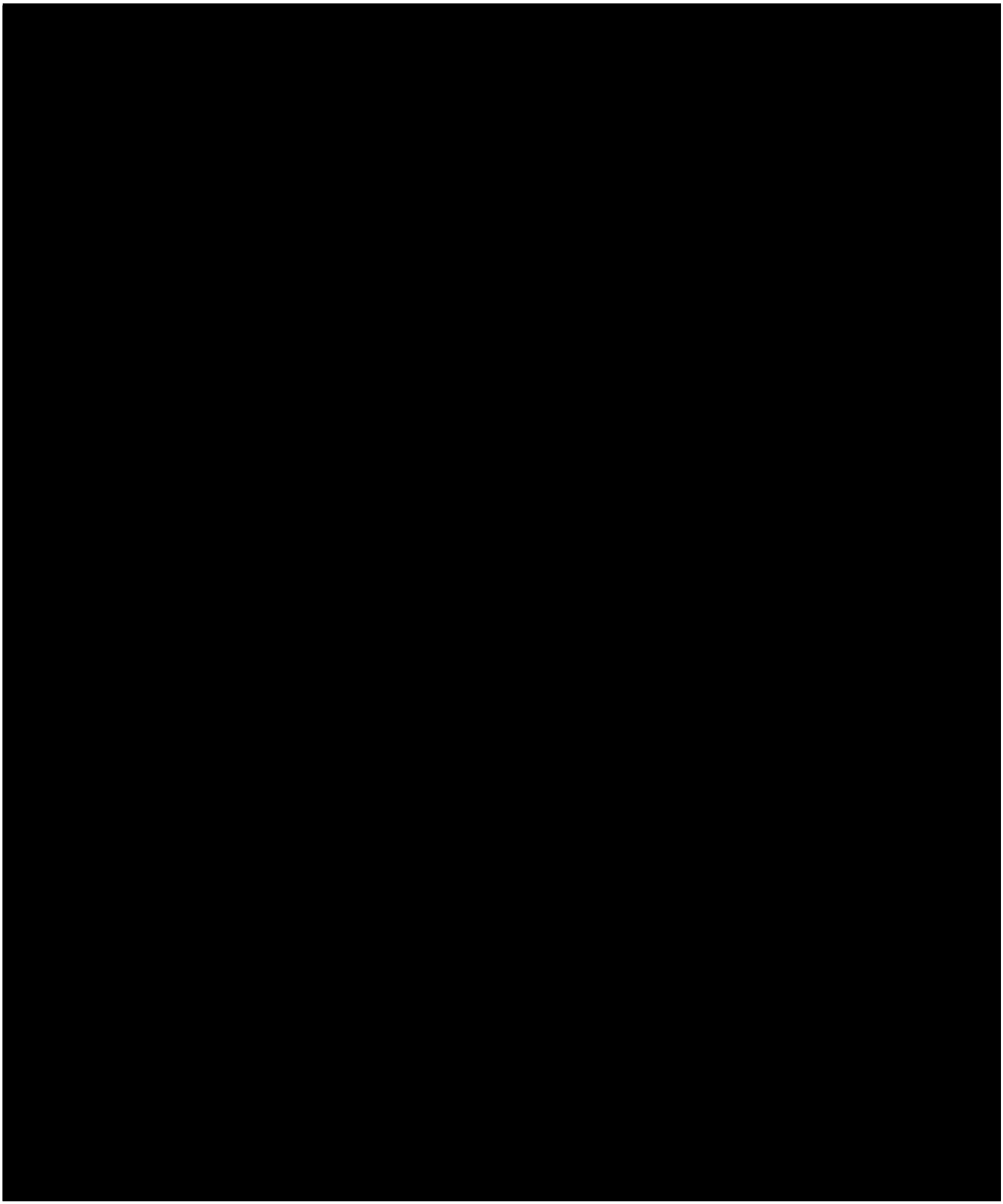


Exhibit 29

From: Karafa, David J. [mailto:djkarafa@firstenergycorp.com]
Sent: Thursday, June 7, 2018 10:47 PM
To: Trosper, Brian H <brian.trosper@one.verizon.com>
Subject: [E] RE: FirstEnergy Counterproposal

Brian:

I share your disappointment that the parties have not progressed further in our negotiations, and I appreciate that you recognize FirstEnergy's offer to use the pre-2011 Telecom rate is "a constructive step forward." Our longstanding existing joint use agreements are entitled to deference by the FCC, and our offer to use the pre-2011 Telecom rate is consistent with the range of calculations that Verizon itself proposed in 2015. We therefore agree that FirstEnergy's compromise is a constructive step forward.

We continue to hope Verizon too will be inclined to take some constructive steps forward of its own.

The FCC's April 2011 Pole Attachment Order states the FCC will defer to existing agreements and indicates it will reject complaints about agreements like these that no party has sought to terminate. The FCC will look for bargaining leverage, but FirstEnergy lacks such leverage because the parties are dependent on each other for access to the other's poles and because FirstEnergy can't contractually remove most of Verizon's attachments anyway. Additionally, Verizon's own bargaining leverage is evidenced by its earlier refusal to pay joint use invoices and by its continuing unwillingness to operate and maintain its pole distribution system in accordance with our existing joint use agreements, no matter what those agreements require.

As we've repeatedly stated, FirstEnergy is willing to discuss the numerous advantages that Verizon has over its competitors, including how those advantages should be quantified, and we believe Verizon's competitive advantages will easily justify current contract rates. As for refunds, neither the facts nor the law support refunds in this case. Refunds are not appropriate because (1) the contracts have not been terminated, (2) FirstEnergy's rates are otherwise justified, and (3) the FCC's ratemaking rules are so vague that it is difficult to predict what the rate should be. We are also confused as to why Verizon has included Penelec, Potomac Edison and Penn Power in its refund requests, when the parties have been negotiating only Met-Ed's rates (and the Met-Ed rate negotiations were placed on hold for more than two years while the parties tried to negotiate other terms for new Met-Ed and Penelec agreements), including Verizon's work stoppage.

The Enforcement Bureau's "interim" Verizon v. Dominion decision and the FCC's pending pole attachment Notice of Proposed Rulemaking (NPRM) do not stand for what Verizon claims. Unlike our situation, the Verizon v. Dominion proceeding addressed a joint use agreement that post-dated the FCC's April 2011 Pole Attachment Order, and in that proceeding Dominion for some reason made no effort to monetize Verizon's advantages as directed by the FCC. To the contrary, FirstEnergy will make every effort to do so. As for the FCC's NPRM, that notice of proposed rules is of course not a final rule anyone can rely on, and the facts in this case support a favorable ruling for FirstEnergy even if the FCC's proposal were adopted. If Verizon believes the FCC's final ruling on its NPRM would be helpful for our negotiations, perhaps the parties should await that ruling before going further (we expect the FCC to rule on its NPRM soon).

Verizon has asked FirstEnergy to monetize its advantages over its CLEC and cable company competitors, and I would like to reinforce that we have repeatedly said we're willing to discuss these competitive advantages, and we continue to be willing to discuss them. Verizon's competitive advantages historically have included, and today continue to include, the following (among others):

Verizon Competitive Advantages

- Pre-planning makes room in advance for Verizon, and Verizon benefits considerably from being the first attacher on an unencumbered pole
- Verizon gets lowest attachment height which is easier to access
- And because Verizon gets the lowest position on the pole, it benefits from one additional attachment (i.e. 2 attachments in first 12" of space).
- Verizon is guaranteed a number of feet on each pole
- New attachers that wish to compete with Verizon must contend with already-congested poles
- Verizon's make-ready costs are dramatically lower than its competitors' costs
- Verizon's survey costs are dramatically lower than its competitors' costs
- Verizon's engineering costs are dramatically lower than its competitors' costs
- Verizon does not have to wait for the permitting process to receive permission to attach and so can serve customers faster and with less expense than its competitors
- Unlike new attachers, Verizon can overlash at will without having to wait for the permitting process to receive permission to attach in the first place. This allows Verizon to serve customers faster and with far less expense than its competitors
- Verizon's speed to market compared to new attachers (and even existing third party attachers) is worth millions to Verizon, and costs millions to its competitors
- Pole transfer provisions relieve Verizon of considerable attachment transfer costs that third party attacher competitors must incur
- Verizon can attach to FirstEnergy's multi-ground neutrals, unlike Verizon's competitors
- Verizon can attach to FirstEnergy's guys and anchors, unlike Verizon's competitors
- Verizon is not subject to audit costs as are Verizon's competitors
- Verizon need not affix identification tags as do Verizon's competitors
- Verizon is not subject to unauthorized attachment penalties as are Verizon's competitors
- Verizon is not subject to safety violation penalties as are Verizon's competitors
- Verizon need not post bonds or other security, as must Verizon's competitors
- Verizon does not pay any agreement preparation fees as do Verizon's competitors
- Verizon does not pay any attachment application fees as do Verizon's competitors
- Evergreen provisions in our joint use agreements mean Verizon cannot be removed from FirstEnergy poles even if the contract is terminated, unlike Verizon's competitors
- Insurance provisions are less burdensome for Verizon than for Verizon's competitors
- Indemnification provisions are more favorable to Verizon, saving Verizon millions in out of court settlements over its competitors

In addition to these competitive advantages on FirstEnergy's poles, Verizon has enjoyed similar competitive advantages on its own poles. In addition, Verizon has saved considerable additional money by not complying with its joint use obligations and by shifting costs that Verizon itself should be incurring to its joint use partner FirstEnergy.

We believe these advantages Verizon has in its joint use agreement are the reasons why Verizon has not responded to FirstEnergy's repeated offers to move away from the pole owning business and switch to a standard CLEC agreement providing the same rates, terms and conditions that Verizon's CLEC competitors operate under.

As envisioned by the FCC, the process of monetizing these advantages that Verizon has over its competitors requires discovery from Verizon. The attached FCC Briefing Order in the Frontier v. FirstEnergy proceeding resulted in the attached First Set of Discovery Requests from FirstEnergy to Frontier. In any such proceeding that might take place between FirstEnergy and Verizon, we would expect significantly more discovery to address the additional issues not addressed in the Frontier case. …

FirstEnergy hopes and believes the parties can resolve this matter outside of FCC involvement and renews its offer to Verizon to continue negotiating a mutually-satisfactory resolution. Please let us know if Verizon agrees. If so, perhaps another meeting would be appropriate either between ourselves or our personnel to discuss a path moving forward.

Thanks…….

From: brian.trosper@verizon.com <brian.trosper@verizon.com>
Sent: Wednesday, May 30, 2018 4:04 PM
To: Karafa, David J. <djkarafa@firstenergycorp.com>
Subject: FirstEnergy Counterproposal

Dave,

As we discussed on the phone last week, I met with my team to review First Energy's counteroffer. I am disappointed that we remain so far apart on what constitutes a just and reasonable rental rate for Verizon's attachments on FirstEnergy's poles. While FirstEnergy's offer to use the Pre-2011 telecom formula to set the rental rate is a constructive step forward, the FCC's orders have made two things clear:

1. ILECs are entitled to the new telecom formula when comparably situated to their competitors, with the rate resulting from the Pre-2011 Telecom Formula serving as a high-level reference point only in circumstances, unlike those present here, in which an ILEC attaches to an IOU's poles under terms and conditions that provide it a net material advantage relative to its competitors, and
2. Verizon is entitled to a refund of overpayments as far back as the statute of limitations will allow, which I understand is four years in Pennsylvania.

Your offer ignores these rulings from the FCC and the policies and proposed rules contained in the NPRM it issued last year. Although our respective joint use groups have been negotiating for more than 7 years, FirstEnergy has only recently identified a single alleged advantage that Verizon enjoys relative to its competitors: a different application process than its CLEC competitors follow for making attachments. Setting aside the fact that following a different process does not make it advantageous, FirstEnergy has not quantified the annual per-pole value of such alleged "advantage." And, even if FirstEnergy could show that this different application process was advantageous and had some quantifiable value, neither of which is the case, that value could not justify the significant difference between the rate resulting from the New Telecom Formula and the rate FirstEnergy has offered using the Pre-2011 telecom formula. Moreover, any calculation of competitive differences must also account for competitive disadvantages, and any value associated with a possible one-time process difference could not offset the ongoing costs of owning and operating a substantial pole network that Verizon's competitors are not obligated to incur. Mr. Schafer's recent proposal to provide Verizon the New Telecom Rate if it were to sign a license agreement misses the point. It is the terms of the agreements that matter, not their titles. After my team reviewed FirstEnergy's template license agreement, we continue to believe that Verizon enjoys no material competitive advantage under its joint use agreements and thus there is no basis for any upward departure from the rates resulting from the proper application of the New Telecom Formula.

It seems clear to me that First Energy does not agree with items 1 and 2 applying based on the outcome of our meetings, conversations and email exchanges. That disagreement presents a serious challenge to being able to reach a business deal.

I had mentioned during the call that I would send a counteroffer along with this email. But reflecting on these fundamental areas of disagreement, I didn't think it would be productive since any offer is grounded in First Energy needing to ultimately accept that the new telecom rate formula, with appropriate inputs, applies. Regarding inputs, for purposes of these negotiations, First Energy's revisions to cross-arm allowance, distribution pole counts, and cost

of capital inputs are acceptable, subject to validation. The remaining inputs should be those that were used in the file attached to my April 17th email.

I welcome First Energy making an offer that incorporates the New Telecom Rate formula with acceptable inputs and an appropriate refund amount for past overpayments. If you don't plan to do so, please confirm that intent back to me. Then I'll move this along to what I feel are next steps for Verizon.

As we first discussed in late January and in subsequent exchanges, I continue to hope that we can reach a business deal regarding rental rates, but understand that may not be possible.

Regards,

Brian

Exhibit 30

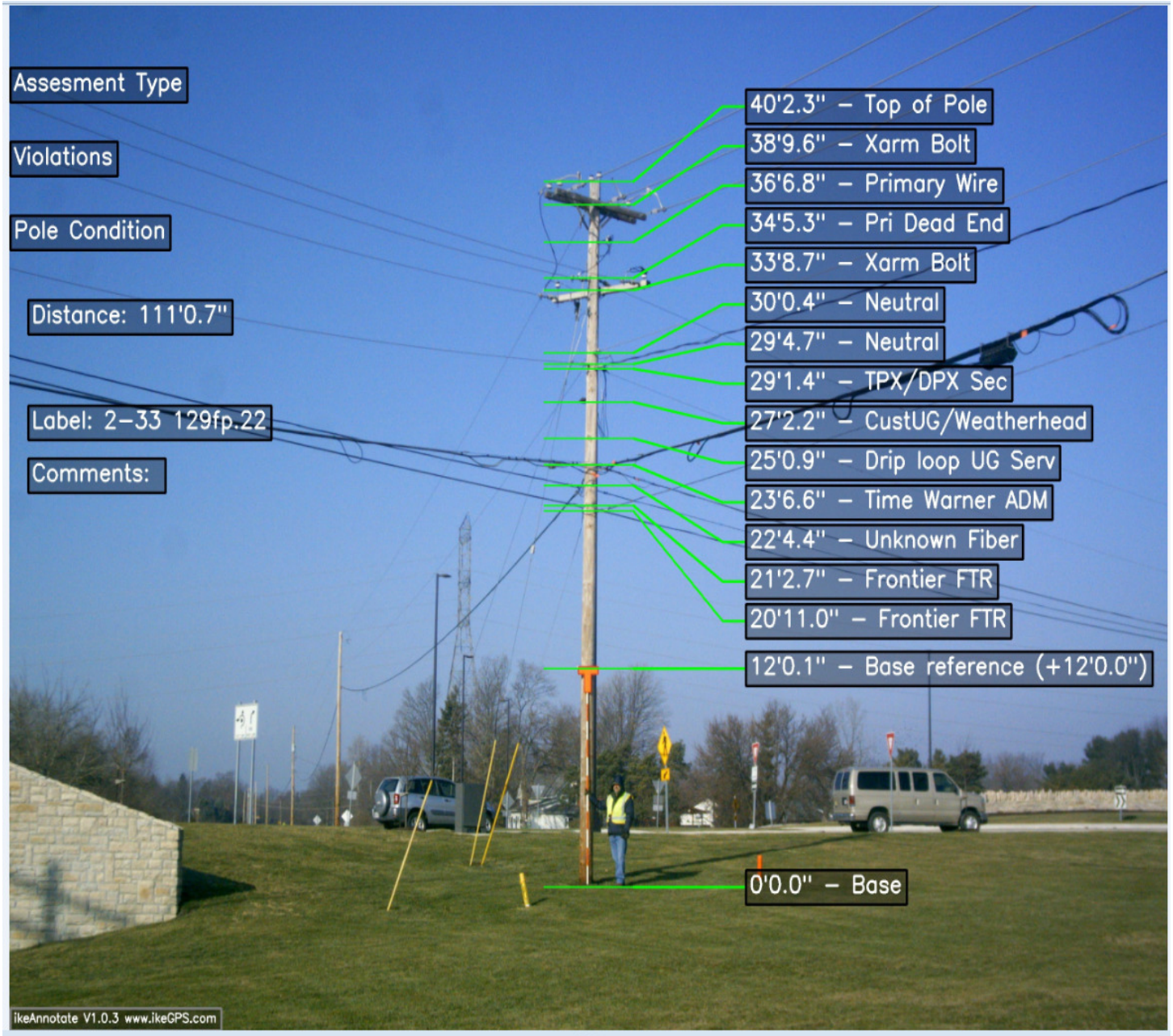
All attaching companies shall submit a Complete Application to FEOC. Incomplete applications will be returned to the applicant for correction and resubmittal. This document defines FEOC requirements for a Complete Application. Mandatory rules in this document are those that identify action that are specifically required and are characterized by the term shall**.** Prior to submitting a Complete Application, attaching company shall execute a Pole Attachment Agreement with FEOC. To establish a Pole Attachment Agreement, contact FirstEnergy Corporate Joint Use by email at corpjointuse@firstenergycorp.com.

A Complete Application shall include the following:

1. Use of FEOC's electronic permitting system (i.e., SPANS)
2. Submittal to the respective FEOC
3. Submittal of One Touch Make Ready (OTMR) separate from Non-OTMR
4. Attaching company name, key contacts, and approval signature
5. Contract number or pole attachment agreement ID
6. Application number
7. Maximum 25 poles per application for wireline attachments
8. Maximum 10 poles per square mile per application for wireless attachments
9. Pole/structure number (where tagged in the field) and location, including complete address and county
10. Telephone Company (i.e., ILEC) pole number (where tagged in the field)
11. Pole profile sheet[1] indicating height[2] of the following:
    a. Lowest power attachment
    b. Streetlights
    c. Existing communications attachments
    d. Mid-span clearances, including attachment above, below, and ground reference
    e. New attachment
12. Pole photographs[1] (equivalent to "Figure 1") including:
    a. Street view
    b. Adjacent spans
    c. Annotated heights for existing attachments
13. FEOC approved route map including:
    a. Permittable crossings (e.g., railroad crossings, limited access highways, and navigable waterways)
    b. Street names
    c. FEOC pole numbers (where tagged in the field)
    d. ILEC pole numbers (where tagged in the field)
14. Proposed make-ready construction
15. Description of any other work such as anchor attachments, vertical runs, etc.
16. Wireless Attachments have additional requirements:
    a. Exhibit D – Wireless Attachment and Associated Equipment Description and Approval
    b. MPE (Maximum Permissible Exposure) Report
    c. Manufacturer's equipment specifications for antenna and bracket
    d. RF warning signage
17. Transmission structures have additional requirements[3]:
    a. Must have distribution underbuild
    b. Number and size of cable being attached
    c. Max tension of cable and assumed conditions (e.g. NESC loading district)
    d. Guying application (applicable to angle structures and/or imbalanced loading conditions such as underground to overhead)

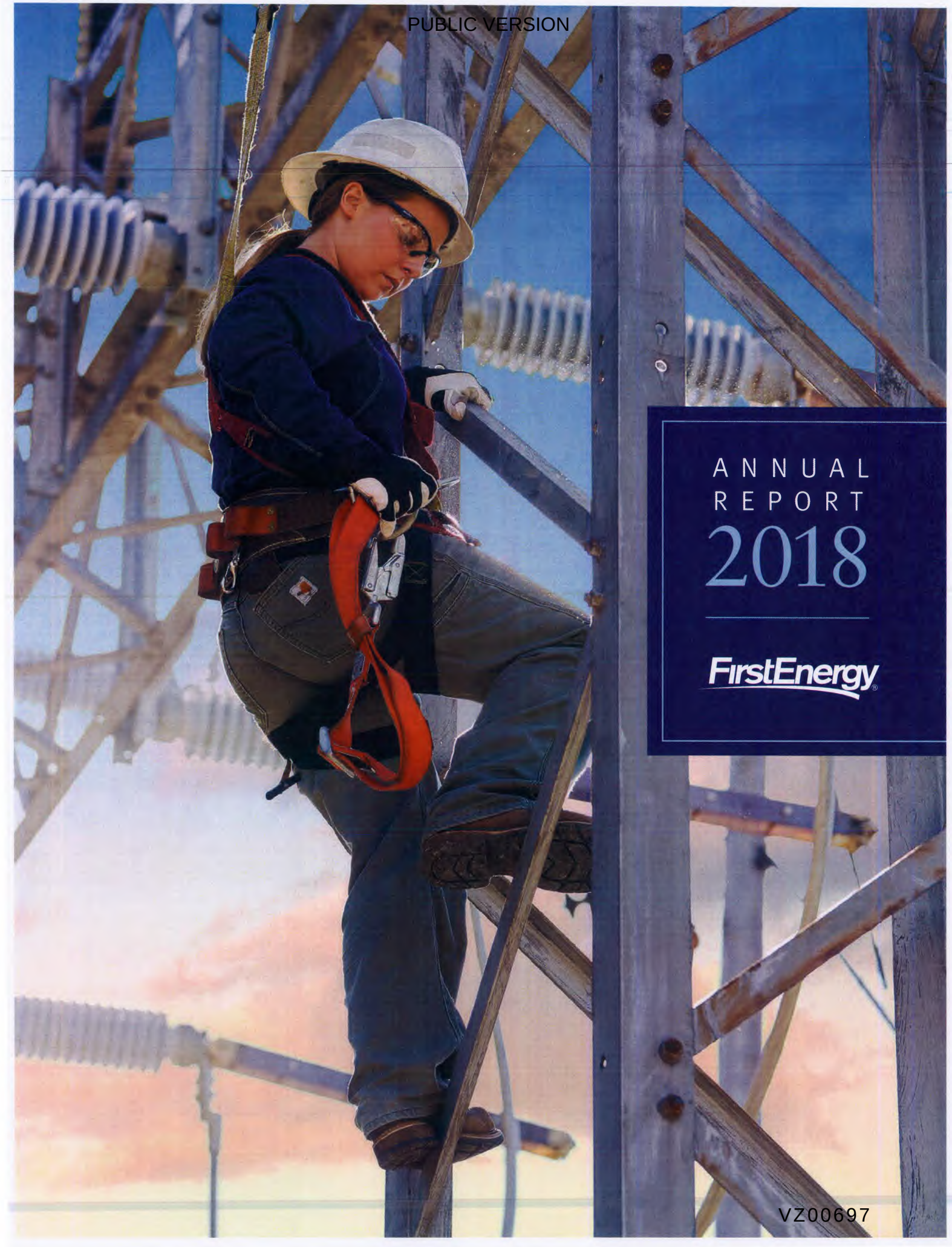
[1] Use of an ikeGPS™ or similar electronic measurement technology may be accommodated at FEOC sole discretion.
[2] Any breach of OSHA's minimum approach distance (including measurement) of electric facilities must be conducted by a qualified electrical worker and in accordance with good safety practices and OSHA guidelines.
[3] Transmission organization review and release of Complete Application is required before FEOC begins survey / engineering.

Figure 1



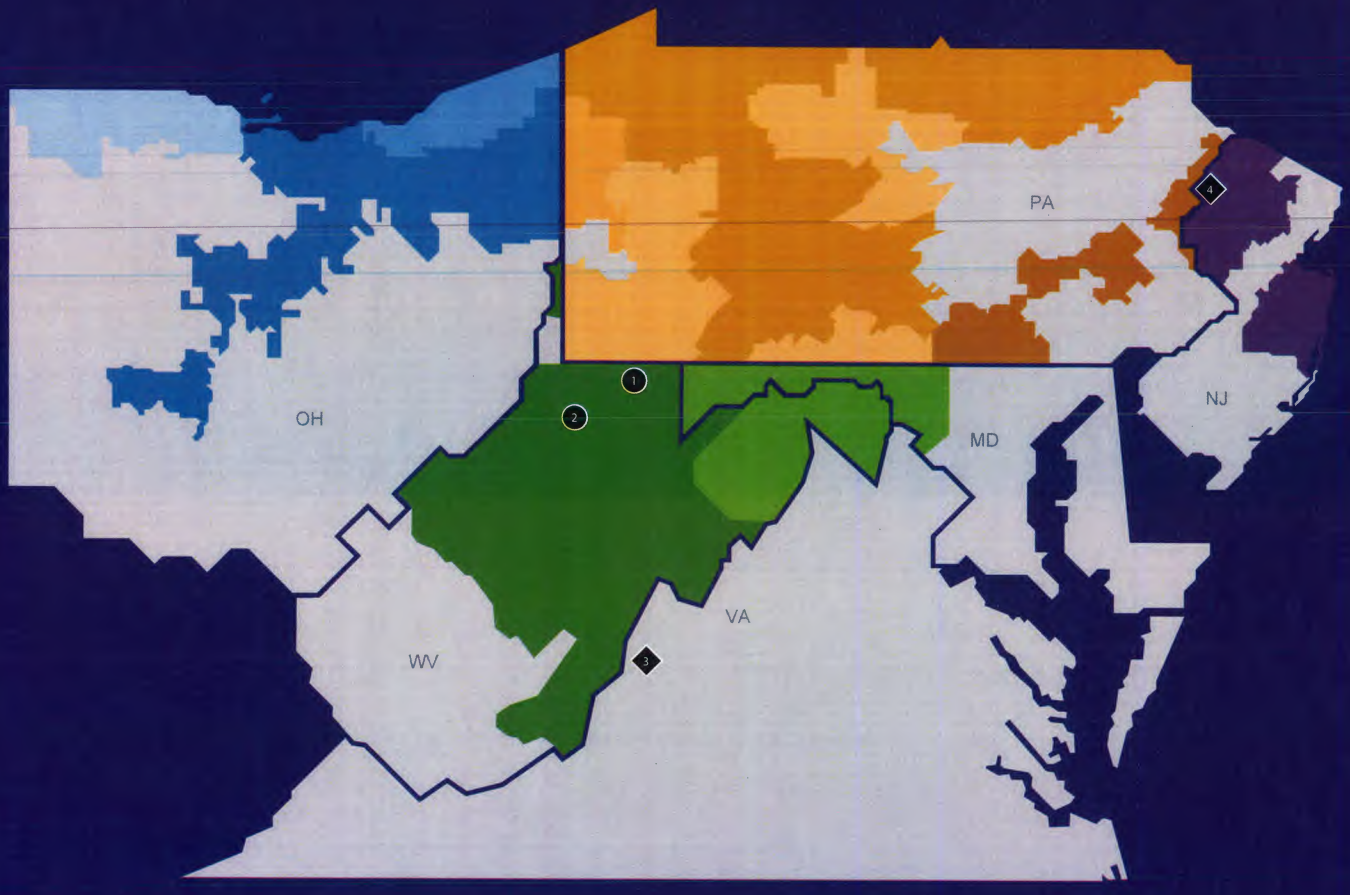
FEOC pole # 123d-654/CL pole # 987-789

Exhibit 31



ANNUAL REPORT 2018

FirstEnergy®



FIRSTENERGY CORPORATE PROFILE

Headquartered in Akron, Ohio, FirstEnergy is a forward-thinking electric utility powered by a diverse team of employees committed to making customers' lives brighter, the environment better and communities stronger. Our subsidiaries are involved in the transmission, distribution and regulated generation of electricity.

Our workforce of approximately 12,500 employees is dedicated to safety, reliability and operational excellence. Our 10 electric distribution companies form one of the nation's largest investor-owned electric systems, based on serving 6 million customers in Ohio, Pennsylvania, New Jersey, West Virginia, Maryland and New York. The company's transmission subsidiaries operate approximately 25,000 miles of transmission lines connecting the Midwest and Mid-Atlantic regions.

FirstEnergy's regulated subsidiaries own two regulated coal plants and generation capacity from two pumped-storage hydro facilities.

OHIO
- Ohio Edison
- The Illuminating Company
- Toledo Edison

PENNSYLVANIA
- Met-Ed
- Penelec
- Penn Power
- West Penn Power

WEST VIRGINIA/ MARYLAND
- Mon Power
- Potomac Edison

NEW JERSEY
- Jersey Central Power & Light

GENERATION STATIONS
- Coal
  - 1 Fort Martin Power Station
  - 2 Harrison Power Station
- Hydro
  - 3 Bath County Pumped-Storage Hydro
  - 4 Yards Creek Pumped-Storage Hydro

Exhibit 32

Supplement No. 10
Electric Pa P.U.C. No. S-1

METROPOLITAN EDISON COMPANY

Electric Generation Supplier Coordination Tariff

Company Office Location

2800 Pottsville Pike
P. O. Box 16001
Reading, Pennsylvania 19612

Issued: April 17, 2019 Effective: June 1, 2019

Steven E. Strah, President

NOTICE

Supplement No. 10 makes changes to existing Rules and Regulations.

Exhibit 33

Supplement No. 10
Electric Pa P.U.C. No. S-1

PENNSYLVANIA ELECTRIC COMPANY

Electric Generation Supplier Coordination Tariff

Company Office Location

2800 Pottsville Pike
P. O. Box 16001
Reading, Pennsylvania 19612

Issued: April 17, 2019 Effective: June 1, 2019

Steven E. Strah, President

NOTICE

Supplement No. 10 makes changes to existing Rules and Regulations.

Exhibit 34

Supplement No. 10
Electric Pa P.U.C. No. S-3

PENNSYLVANIA POWER COMPANY

Electric Generation Supplier Coordination Tariff

Company Office Location

233 Frenz Drive
New Castle, PA 16101

Issued: April 17, 2019 Effective: June 1, 2019

Steven E. Strah, President

NOTICE

Supplement No. 10 makes changes to existing Rules and Regulations.

Exhibit 35

Section 1: 10-K (10-K)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K
(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the FISCAL YEAR ended December 31, 2018

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number	Registrant; State of Incorporation; Address; and Telephone Number	I.R.S. Employer Identification No.
333-21011	FIRSTENERGY CORP. (An Ohio Corporation) 76 South Main Street Akron, OH 44308 Telephone (800)736-3402	34-1843785

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Registrant	Title of Each Class	Name of Each Exchange on Which Registered
FirstEnergy Corp.	Common Stock, $0.10 par value per share	New York Stock Exchange

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☑

Accelerated Filer ☐

Non-accelerated Filer ☐

Smaller Reporting Company ☐

Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☑

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and ask price of such common equity, as of the last business day of the registrant’s most recently completed second fiscal quarter.

$17,109,706,919 as of June 30, 2018

Indicate the number of shares outstanding of each of the registrant’s classes of common stock, as of the latest practicable date:

CLASS	AS OF JANUARY 31, 2019
Common Stock, $0.10 par value	530,152,175

Documents Incorporated By Reference

DOCUMENT	PART OF FORM 10-K INTO WHICH DOCUMENT IS INCORPORATED
Proxy Statement for 2019 Annual Meeting of Shareholders of FirstEnergy Corp. to be held May 21, 2019	Part III

PART I

ITEM 1. BUSINESS

The Companies

FE was incorporated under Ohio law in 1996. FE's principal business is the holding, directly or indirectly, of all of the outstanding equity of its principal subsidiaries: OE, CEI, TE, Penn (a wholly owned subsidiary of OE), JCP&L, ME, PN, FESC, AE Supply, MP, PE, WP, and FET and its principal subsidiaries (ATSI, MAIT and TrAIL). In addition, FE holds all of the outstanding equity of other direct subsidiaries including: FirstEnergy Properties, Inc., FEV, FELHC, Inc., GPU Nuclear, Inc., AESC and Allegheny Ventures, Inc.

FE and its subsidiaries are principally involved in the transmission, distribution and generation of electricity. FirstEnergy's ten utility operating companies comprise one of the nation's largest investor-owned electric systems, based on serving over six million customers in the Midwest and Mid-Atlantic regions. FirstEnergy's transmission operations include approximately 24,500 miles of lines and two regional transmission operation centers. AGC, JCP&L and MP control 3,790 MWs of total capacity.

FirstEnergy's revenues are primarily derived from electric service provided by its utility operating subsidiaries (OE, CEI, TE, Penn, JCP&L, ME, PN, MP, PE and WP) and its transmission subsidiaries (ATSI, MAIT and TrAIL).

Regulated Utility Operating Subsidiaries

The Utilities' combined service areas encompass approximately 65,000 square miles in Ohio, Pennsylvania, West Virginia, Maryland, New Jersey and New York. The areas they serve have a combined population of approximately 13.3 million.

OE was organized under Ohio law in 1930 and owns property and does business as an electric public utility in that state. OE engages in the distribution and sale of electric energy to communities in a 7,000 square mile area of central and northeastern Ohio. The area it serves has a population of approximately 2.3 million.

OE owns all of Penn's outstanding common stock. Penn was organized under Pennsylvania law in 1930 and owns property and does business as an electric public utility in that state. Penn is also authorized to do business in Ohio. Penn furnishes electric service to communities in 1,100 square miles of western Pennsylvania. The area it serves has a population of approximately 0.4 million.

CEI was organized under Ohio law in 1892 and does business as an electric public utility in that state. CEI engages in the distribution and sale of electric energy in an area of 1,600 square miles in northeastern Ohio. The area it serves has a population of approximately 1.6 million.

TE was organized under Ohio law in 1901 and does business as an electric public utility in that state. TE engages in the distribution and sale of electric energy in an area of 2,300 square miles in northwestern Ohio. The area it serves has a population of approximately 0.7 million.

JCP&L was organized under New Jersey law in 1925 and owns property and does business as an electric public utility in that state. JCP&L provides transmission and distribution services in 3,200 square miles of northern, western and east central New Jersey. The area it serves has a population of approximately 2.7 million. JCP&L also has a 50% ownership interest (210 MWs) in the Yard's Creek hydroelectric generating facility.

ME was organized under Pennsylvania law in 1917 and owns property and does business as an electric public utility in that state. ME provides distribution services in 3,300 square miles of eastern and south central Pennsylvania. The area it serves has a population of approximately 1.2 million.

PN was organized under Pennsylvania law in 1919 and owns property and does business as an electric public utility in that state. PN provides distribution services in 17,600 square miles of western, northern and south central Pennsylvania. The area it serves has a population of approximately 1.2 million. PN, as lessee of the property of its subsidiary, The Waverly Electric Light & Power Company, also serves customers in the Waverly, New York vicinity.

PE was organized under Maryland law in 1923 and under Virginia law in 1974. PE is authorized to do business in Virginia, West Virginia and Maryland. PE owns property and does business as an electric public utility in those states. PE provides transmission and distribution services in portions of Maryland and West Virginia and provides transmission services in Virginia in an area totaling approximately 5,500 square miles. The area it serves has a population of approximately 0.9 million.

MP was organized under Ohio law in 1924 and owns property and does business as an electric public utility in the state of West Virginia. MP provides generation, transmission and distribution services in 13,000 square miles of northern West Virginia. The area it serves has a population of approximately 0.8 million. MP is contractually obligated to provide power to PE to meet its load obligations in West Virginia. MP owns or contractually controls 3,580 MWs of generation capacity that is supplied to its electric utility business, including a 16% undivided interest in the Bath County, Virginia pumped-storage hydroelectric generation facility (487

1. I have reviewed this report on Form 10-K of FirstEnergy Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 19, 2019

/s/ Steven E. Strah

Steven E. Strah

Senior Vice President and Chief Financial Officer

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Section 16: EX-32 (EXHIBIT 32)

EXHIBIT 32

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Report of FirstEnergy Corp. ("Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each undersigned officer of the Company does hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Charles E. Jones

Charles E. Jones

President and Chief Executive Officer

/s/ Steven E. Strah

Steven E. Strah

Senior Vice President and Chief Financial Officer

Date: February 19, 2019

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Exhibit 36

PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17105-3265

Public Meeting held January 11, 2007

Commissioners Present:

Wendell F. Holland, Chairman
James H. Cawley, Vice Chairman, Concurring & Dissenting Statement attached
Kim Pizzingrilli
Terrance J. Fitzpatrick

Pennsylvania Public Utility Commission,	:	R-00061366
Met-Ed Industrial Energy Users Group and	:	
Industrial Energy Consumers of Pennsylvania,	:	R-00061366C0001
William R. Lloyd, Jr., Small Business Advocate,	:	R-00061366C0002
Irwin A. Popowsky, Consumer Advocate,	:	R-00061366C0003
Met-Ed Industrial Energy Users Group and	:	
Industrial Energy Consumers of Pennsylvania,	:	R-00061366C0005
R.H. Sheppard Co., Inc.	:	R-00061366C0013
	:	
v.	:	
	:	
Metropolitan Edison Company	:	
Pennsylvania Public Utility Commission,	:	R-00061367
Penelec Industrial Customer Alliance and	:	
Industrial Energy Consumers of Pennsylvania,	:	R-00061367C0001
William R. Lloyd, Jr., Small Business Advocate,	:	R-00061367C0002
Irwin A. Popowsky, Consumer Advocate,	:	R-00061367C0003
Penelec Industrial Customer Alliance and	:	
Industrial Energy Consumers of Pennsylvania,	:	R-00061367C0005
Pierre Fortis,	:	R-00061367C0007
L.C. Rhodes	:	R-00061367C0008
	:	
v.	:	
	:	
Pennsylvania Electric Company	:	
Petition of Metropolitan Edison Company for	:	
Approval of a Rate Transition Plan	:	P-00062213
Petition of Pennsylvania Electric Company for	:	
Approval of a Rate Transition Plan	:	P-00062214
Re: Merger Savings Remand Proceeding	:	A-110300F0095
	:	A-110400F0040

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d. Disposition

In deciding this issue, we focus on the provisions of 66 Pa. C.S. § 315(a) regarding burden of proof. Here, PennFuture attempts to place a significant amount of new costs upon the Companies for which the Companies have not requested recovery within their case-in-chief. When this occurs, the burden of proving these new costs are just and reasonable does not shift to the Companies but remains with PennFuture. We agree with the ALJs that PennFuture has not met its burden of proof regarding these new costs. Accordingly, we shall adopt the recommendation of the ALJs on this issue.

IX. RATE OF RETURN

A. Capital Structure

1. Positions of the Parties

MEPN proposed a capital structure consisting of 51% long-term debt and 49% common equity. (MEPN St. 7 at 7) Neither the OCA nor the OTS disagreed and stated that this is reasonable. (OTS St. 1, at 9-10; OCA St. 4, at 10-13). The OTS accepted this capital structure for the purpose of establishing appropriate returns in this proceeding as it is within the range of capital structures used by its witness. (OTS Exh. 1, Sch. 2.). The OCA recommended a capital structure consisting of 51% debt and 49% common equity, based upon its similarity to the Companies' pre-merger capital structures, the proxy group used by its witness and its support of a strong single A credit rating. (OCA St. 4 at 12 & 19; OCA St. 5S at 2). Included in ME's and PN's proposed capital structure are portions of FirstEnergy's merger acquisition debt.

The OCA and the OTS both objected to the methodology by which MEPN arrived at this proposed capital structure. The OCA objected to the methodology because it contends the methodology improperly includes goodwill and amounts to a request by

MEPN to impose an acquisition premium upon the ratepayers. The OCA contended that a condition of the Commission's approval of the FirstEnergy/GPU merger was that the Companies should not reflect in retail rates the acquisition premium. If the ratemaking capital structure is based on the goodwill amounts on the MEPN balance sheets, the OCA argued the acquisition premium is included in setting the authorized rate of return on the rate base for retail delivery service. The OCA concluded that this is improper and inconsistent with the Commission order prohibiting recovery of an acquisition premium through retail rates. (OCA St. 4 at 12-13., OCA St. 4S at 5-6).

Additionally, the OCA argued that while the Companies' method results in a reasonable capital structure in this case, it may not in future cases. (OCA St. 4 at 11-12). According to the OCA, the Companies' method artificially increases the embedded cost of debt component. (OCA St. 4 at 11-12). The OCA argued that the Commission should reject the Companies' procedure that allocates FirstEnergy's acquisition debt to MEPN. (OCA St. 4, at 10-13).

The OTS also argued that the Companies' capital structure is based on the misallocation of debt. To the extent that the Companies calculate the claimed capital structure by including a proportional share of FirstEnergy's debt securities used to finance the acquisition of GPU, the OTS argued the calculation is improper in this proceeding. According to the OTS, only debt used to finance the Companies' rate base is properly included in this proceeding. The OTS contended that including debt for the acquisition of GPU is not appropriate in determining the Companies' capital structure. (OTS M.B. at 32).

In response to the OTS and OCA position opposing allocation of FirstEnergy's acquisition debt to MEPN, the Companies replied that since the acquisition, they have incurred depreciation and amortization expenses and these expenses have altered the equity component of capitalization. MEPN opined that it is

unreasonable to assume that an amount equal to the goodwill associated with the acquisition premium continues to be reflected in the equity balance. MEPN stated that an adjustment for any alleged goodwill would be unwarranted and arbitrary. (MEPN 7-R, pp.2-3).

MEPN contended that their recommended capital structure does not attempt to recover the acquisition premium through rates. They noted that when the Commission approved the merger, the Commission did not address determination of the Companies' capital structure for ratemaking purposes nor did the Commission address the appropriate ratemaking treatment of any modifications or adjustments to the capital component due to merger accounting. Therefore, MEPN concluded that their proposed capital structure does not violate the Commission order prohibiting recovery of an acquisition premium through rates. (MEPN 7-R, at 3-4).

MEPN also argued in rebuttal that imputing portions of FirstEnergy's merger acquisition debt to MEPN is entirely appropriate because FirstEnergy used that debt to pay for the assets of the Companies. MEPN also pointed out that the FirstEnergy debt allocated to them was based on ten year and thirty year rates of 4.25% and 4.94%, respectively. These rates are historically among the lowest rates for ten and thirty year debt over the past twenty years. (MEPN 7-R, at 4-6).

2. ALJs' Recommendation

The ALJs recommended adoption of a capital structure of 51% long-term debt and 49% common equity. The ALJs found that all of the Parties agreed that this capital structure is appropriate, and concluded that it was reasonable to adopt it. (R.D. at 121).

In regard to the OTS and the OCA disagreement with the MEPN methodology used to arrive at this capital structure, the ALJs agreed with the OCA and the OTS position and rejected ME's and PN's methodology. The ALJs noted that MEPN stated that their proposed capital structures contain a portion of the FirstEnergy merger acquisition debt. According to the ALJs, a portion of the money that FirstEnergy borrowed to finance the merger represents the premium it paid to acquire GPU. The ALJs reasoned that if ME's and PN's proposed capital structure includes FirstEnergy debt, it would have to include a portion of the money borrowed to pay the acquisition premium for GPU. Therefore, rates based on a capital structure that includes a portion of the money borrowed to pay the acquisition premium would allow recovery of the premium through those rates. The ALJs concluded that ME's and PN's methodology is inconsistent with previous Commission rulings in the Merger Savings Remand Proceeding that the Companies should not collect the acquisition premium in retail rates. (R.D. at 121-122).

B. Cost of Capital

1. Positions of the Parties

MEPN proposed an average effective cost of debt of 6.088% for ME and 6.557% for PE (MEPN Exhs. JFP-26 and JFP-27) and weighted average cost of debt of 8.98% for ME and 9.22% for PN. (MEPN St. 7 at 11 and MEPN Exh. JFP-28). According to the Companies, the only substantive dispute concerning the determination of the appropriate weighted average cost of debt relates to the recognition of the actual cost of the FirstEnergy debt that was imputed to MEPN. MEPN argued that recognition of this debt is appropriate because it represents debt issued to pay for the assets of MEPN and the proceeds have assisted FirstEnergy in providing financial support to MEPN. (MEPN St. 7-R, at 4-6).

The OTS proposed a cost of long term debt for ME in this proceeding of 5.10% and 5.83% for PN. (OTS St. 1, at 11-12). The OTS based long term debt on the Companies' contractual obligations for capital used to finance their rate base. These cost rates represent the obligations used to finance the Companies' rate base and are consistent with the obligations of companies of similar size and risk characteristics. The OTS argued that inclusion of any debt that is used for purposes other than the financing of the rate base is inappropriate and must be rejected. The OTS contended that the Companies' proposed debt costs are flawed since they include a proportional share of FirstEnergy's debt that was issued in the acquisition of GPU. As a portion of the Companies' debt cost in this proceeding includes debt used to finance the acquisition of GPU, the OTS averred that its use in this proceeding is inappropriate. (OTS M.B. at 32-33).

The OCA proposed that ME's and PN's costs of debt are actually 5.051% and 5.83% respectively. The OCA argued that the Companies' proposal inflates them to about 6.09% and 6.56%, respectively, because it allocates debt and the cost of parent company debt in its adjusted capital structure. The debt of FirstEnergy, according to the OCA, carries a higher cost rate than either of the Companies' actual embedded cost of debt. (OCA St. 4S at 2). In particular, the FirstEnergy debt reflects FirstEnergy's business and financial risks, including the risks associated with unregulated generation costs. (OCA St. 4S at 6). The OCA contended that the Commission should not impose the FirstEnergy debt cost premium on MEPN customers. The OCA opined that customers should not be required to pay for the higher FirstEnergy cost of debt. (OCA St. 4 at 12). Instead, according to the OCA, the cost of debt should be based on each of the Companies' own cost rate of actual long-term debt on December 31, 2006. (OCA St. 4S at 2) (OCA M.B. at 53-54).

2. ALJs' Recommendation

The ALJs recommended adoption of the OCA position. The ALJs found that MEPN customers should not pay for the higher FirstEnergy cost of debt reflecting FirstEnergy business and financial risks, including the risks associated with unregulated generation costs, nuclear assets and environmental compliance. According to the ALJs, MEPN are regulated entities that do not have risks of this type. The ALJs agreed with the OCA that the cost of debt should be based on each of the Companies' own cost rate of actual long-term debt at December 31, 2006 and, concluded that the MEPN costs of debt are 5.051% and 5.83%, respectively. (R.D. at 123).

3. Exceptions

In its Exceptions, MEPN states that its proposed 51%/49% debt-to-equity capital structure reflects a significant reduction to the equity component of their capital structures, which is the most expensive component of capital. MEPN claims that by reducing the equity, this modified capital structure benefits customers through a lower overall cost of capital. The Companies note that this proposed capital structure was accepted by both the OTS and the OCA, the only parties to address capital structure, and was adopted by the ALJ's. (MEPN Exc. at 31-32).

MEPN states that it derived this modified capital structure by imputing to MEPN an appropriate portion of the Merger acquisition debt incurred by FirstEnergy to pay for the assets of MEPN. MEPN claims that the portion of the FirstEnergy debt allocated to MEPN was based on the percentage of the net Merger purchase price allocated to MEPN, not on the goodwill allocation as erroneously found by the ALJs in FOF No. 204. MEPN also claim that contrary to the erroneous conclusion by the ALJs in FOF No. 206, the imputed debt does not uniformly carry a higher cost rate than the stand-

alone MEPN debt. Rather, according to the Companies, the imputed FirstEnergy debt carries a lower cost rate than some MEPN debt. (MEPN Exc. at 32).

MEPN note that neither the OTS nor the OCA offered an alternative rationale for deriving the favorable capital structure it proposed. Nonetheless, according to the Companies, the ALJs reject the inescapable implications of the only rational basis for deriving the adopted capital structure that appears in the record, and refuse to recognize the associated cost of the imputed FirstEnergy debt. MEPN requests that the Commission correct this error so as to ensure that the logical consequences of the capital structure ratemaking determinations are properly reflected in the end result of this proceeding. (MEPN Exc. at 32-33).

Additionally, MEPN notes that the ALJs accept the arguments of the OTS and the OCA that reflection of the cost of the imputed FirstEnergy debt would somehow violate a Commission prohibition on the recovery of the Merger acquisition premium. MEPN opines that this conclusion is erroneous, as the Commission prohibition was designed to preclude the amortization of goodwill in MEPN's cost of service. MEPN argues that the Commission has never addressed capital structure/cost of debt issues in the context of any rulings on the Merger. Therefore, according to the Companies, because it is not seeking to amortize goodwill in their cost of service, recognition of the cost of the imputed FirstEnergy debt does not violate the prohibition on the recovery of the acquisition premium. (MEPN Exc. at 33).

In reply, the OCA rejoins that the ALJs correctly concluded that FirstEnergy debt should not be included in the cost of debt for MEPN. The OCA avers that the method used by the Companies to reach the debt-to-equity ratio improperly brings goodwill, an accounting concept, into Pennsylvania ratemaking and improperly imposes the merger acquisition premium on ratepayers. The OCA opines that the Companies are incorrect to claim that neither the OCA nor the OTS offers alternative

rationales to the Companies' that would support the 51/49 debt-to-equity capital structure. The OCA states that its witness noted that a 51/49 debt-to-equity capital structure is reasonable in this case because it is similar to the Companies' pre-merger capital structures, the equity ratio is similar to the OCA proxy group, and the ratio is supportive of a strong single A credit rating. (OCA R.Exc. at 20-21).

In regard to the embedded cost of debt, the OCA notes that the Companies' argument in favor of imputing FirstEnergy debt, that reflects total corporate risks, into the capital structures of ME and PN have been demonstrated to be unsound, based upon both contradictory statements and factual errors, and as such should be rejected. The OCA requests that the Commission adopt the ALJs' conclusion that recommends a capital structure of 51/49 debt-to-equity and the use of the actual cost rate of debt for MEPN rather than the inflated cost rate from imputing FirstEnergy debt. (OCA R.Exc. at 21).

The OTS, in its Reply Exceptions, rejoins that the Companies' argument relies heavily on a misguided discussion as to the determination of the capital structure adopted in this proceeding. The OTS avers that it adopted the Companies' proposed capital structure as it was representative of the capital structures routinely found in this industry. OTS claims that at no point did it adopt the Companies' methodology as it has consistently maintained that their claimed hypothetical capital structure is based on the misallocation of debt. The OTS states that the proper capital structure only includes debt that was used to finance the Companies' rate base. Furthermore, the OTS notes that the record clearly indicates that the imputed debt for ME carried a cost rate of 6.45%, which is significantly higher than the 5.051% cost rate determined on a stand-alone basis for ME. Similarly, OTS avers that for PN, the imputed FirstEnergy debt has an issue rate of 7.375% in contrast to the stand-alone debt cost of 5.83%. According to the OTS, these facts indicate that including the misallocated debt from FirstEnergy improperly inflates the appropriate debt cost for MEPN in this proceeding. (OTS R.Exc. at 16-19).

4. Disposition

The resolution of both the appropriate Capital Structure and allowable Cost of Capital rate are dependent upon whether MEPN should be permitted to include a portion of FirstEnergy's merger acquisition debt within its claims in this proceeding. Our review of the record evidence leads us to adopt the recommendation of the ALJs to not allow for the allocation of this acquisition debt to the Companies. As a result, we are in agreement with the ALJs that the Companies proposed 51% long-term debt and 49% common equity capital structure, as agreed to by the OTS and the OCA, is reasonable, but that the Companies' methodology for arriving at this capital structure should be rejected.

Similarly, we are in agreement with the ALJs that the appropriate cost of debt for ME should be 5.051% and the appropriate cost of debt for PN should be 5.83%, which were derived by eliminating the imputed FirstEnergy acquisition debt from the calculations. Specifically, we adopt the position of the OCA that the cost of debt should be based on each of the Companies' own cost rate of actual long-term debt at December 31, 2006.

MEPN have not demonstrated that its proposal to allocate FirstEnergy's acquisition debt to MEPN is appropriate. We are in agreement with the position of the OCA that the Companies' methodology artificially increases the embedded cost of debt component and in agreement with the position of the OTS that only debt used to finance the Companies' rate base is properly included in this proceeding. We reject the contention of the Companies that its customers should be subjected to the higher FirstEnergy cost of debt which reflects FirstEnergy's business and financial risks associated with unregulated generation costs, nuclear assets and environmental compliance. As noted by the ALJs, MEPN are regulated distribution entities that do not

have risks of this type. Accordingly, the Exceptions of MEPN are denied and the recommendations of the ALJs are adopted.

C. Return on Equity

Although there are various models used to estimate the cost of equity, the Commission favors the Discounted Cash Flow (DCF) Model. The DCF model assumes that the market price of a stock is the present value of the future benefits of holding that stock. These benefits are the future cash flows of holding the stock, i.e., the dividends paid and the proceeds from the ultimate sale of the stock. Because dollars received in the future are worth less than dollars received today, the cash flow must be "discounted" back to the present value at the investor's rate of return.

The following table summarizes the cost of common equity claims made, and methodologies used, by the Parties in this proceeding.

Methodology	**MEPN**	**OCA (5)**	**OTS (6)**
DCF	9.3 to 10.3 **(1)**	9.6 to 10.1	9.5 to 10.0
CAPM/ECAPM	10.8 to 12.5 **(2)**	n/a	n/a
CAPM/	n/a	9.2 to 11.0	n/a
Range Recommendion	11.5 to 12.25 **(3)**	9.6 to 10.1	9.5 to 10.0
Point Recommendation	12.0 **(4)**	9.7	9.75

(1) MEPN St. No. 8, Table MJV-7, MEPN M.B. at 71.
(2) MEPN St. No. 8 at 55, 62.
(3) MEPN St. No. 8 at 64.
(4) MEPN St. No. 8 at 63.
(5) OCA St. No. 4 at 4-6.
(6) OTS St. No. 1 at 27.

1. Positions of the Parties

MEPN proposed a return on equity of 12.0% for both Companies as just and reasonable. (MEPN St. 8, at 62-63). The Companies used the Capital Asset Pricing Model (CAPM) combined with the Empirical Capital Asset Pricing Model (ECAPM) to calculate a return on common equity. (ME/PE St. 8, at 22-27). The Companies advocated what their witness terms a Market Risk Premium of 6.5%-8.0% as an adjustment. This represents the risk that investors take by investing in stocks instead of risk-free Treasury bills. (ME/PE St. 8 at 28-30). The Companies argued that because of this greater risk, the Commission should allow a higher return on equity.

The Companies also advocated an adjustment to recognize financial risk. The underlying principle is that an equity investor intrinsically faces increased financial risk as the proportion of debt used to finance an investment increases. MEPN stated that applying this principle to determine the cost of equity involves two steps: (1) determine a market-derived overall cost of capital for a proxy group of companies of comparable business risk; and (2) use that overall cost of capital to derive the subject company's cost of equity by substituting its regulatory capital structure in the equation. According to MEPN, the two steps together recognize both business and financial risk and bring the Companies' cost of equity to a level that represents the rate of return that investors could expect to earn elsewhere without bearing more risk. (MEPN St. 8-R at 38).

The OCA used a cost of common equity analysis in which it relies on the Discounted Cash Flow (DCF) methodology, checked by a CAPM analysis, to recommend a 9.7% return on common equity for each company. When combined with its recommendation on capital structure and cost of debt, this produces an overall rate of return of 7.33% and 7.72% for MEPN, respectively. According to the OCA, the Commission has stated on numerous occasions that it prefers using the DCF method. The OCA admits that its recommendation is at the low end of the reasonable range

because of what it characterizes as ME's and PN's ongoing service problems that affect customers. (OCA St. 4 at 5).

To estimate the cost of equity, the OCA used a proxy group of similar companies, because as wholly-owned subsidiaries of FirstEnergy without publicly-traded stock, the market valuations for MEPN are unknown. (OCA St. 4 at 18). The OCA selected eight companies for its proxy group that: (1) are located in the Mid-Atlantic or Northeast; (2) are members of Regional Transmission Organizations; and (3) have divested most or all of their generation assets, thus operating primarily as delivery service utilities. (OCA St. 4 at 19 & Sch. MIK-3). According to the OCA, the capital structures of this group are similar to that of the Companies, and the average common equity ratio for the OCA's proxy group is 44.6%, a close match to the 49% that is being used for the Companies. (OCA St. 4 at 19, 20 & Sch. MIK-3).

Regarding the dividend yield (D_o/P_o) component in the DCF analysis, the OCA used a 4.9% DCF adjusted yield, based upon the 4.79% dividend yield of the proxy group of similar companies and assuming a half-year growth of 2.5% and a full year growth of 5%. (OCA St. 4 at 21).

Regarding the estimate for the growth rate (g) component of the DCF analysis, the OCA averaged the latest data for its group of proxy companies from four well-known sources of projected earnings growth rates, First Call, Zacks, Standard & Poors (S&P) and Value Line. (OCA St. 4 at 22-23 & Sch. MIK-5). This average of 5.19% represents the upper end of the OCA's growth rate, where the median five year growth rate for the group is 4.7% and the average was artificially inflated by growth rates of 10-11% of one company with a history of slow growth. (OCA St. 4 at 23 and Sch. MIK-5). The OCA's analysis determined that the DCF for its proxy group should result in a cost of equity in the range of 9.6% to 10.1% with a midpoint of 9.85%. (OCA St. 4 at 24).

Based on the above analyses, the OCA found a range for a return on equity of 9.6% to 10.1%. (OCA St. 4 at 24 & Sch. MIK-5). The OCA recommended a return on equity of 9.7% for each of the Companies, at the low end of the reasonable range, due to the Companies' ongoing service quality problems that affect ratepayers. (OCA St. 4 at 5). The OCA contended that MEPN have a long history of failing to achieve reliability standards. In support of its contention, the OCA referred to the Commission's investigation into this issue. *Investigation Regarding the Metropolitan Edison Co., Pennsylvania Electric Co., and Pennsylvania Power Co.'s Reliability Performance*, Docket No. I-00040102 (Order entered November 4, 2004). The OCA pointed out that the Companies have not yet fully achieved the agreed upon standards for reliability or key customer service metrics set forth in the settlement of that proceeding. The OCA concluded that because the Companies have failed to achieve reliability and service quality standards consistent with their obligations, their failure should be recognized in the rate of return.

The OTS also employed the DCF methodology to calculate the cost of common equity. The OTS recommended a 9.75% cost of common equity for MEPN as calculated by the application of the market based DCF. This leads to an overall rate of return of 7.38% for ME and 7.75% for PN. The OTS asserted that this methodology has traditionally been endorsed by this Commission and its continued use is warranted in this proceeding. To properly compute the components of the DCF method, the OTS utilized current, historical and forecasted market data for three different entities. (OTS St. 1).

The OSBA did not perform any calculation to arrive at a cost of equity recommendation. Rather, the OSBA advocated the recommendations of either the OTS or the OCA, given both Companies' poor reliability performance. Like the OCA, the OSBA refers to the Commission reliability investigation at Docket No. I-00040102. The

OSBA asserted that both MEPN have failed to achieve the level of performance to which they agreed in the settlement of the investigation. (OSBA St.1)

The OCA, the OSBA and the OTS all objected to the adjustments advocated by MEPN to recognize financial risk.

The Companies rejected the positions of the other Parties asserting that alleged reliability deficiencies should reduce the return on equity. The Companies argued that their reliability is improving. (ME/PE St. 18R (Revised) at 19-21). The Companies also asserted that they have expended significant amounts to improve overall reliability. The Companies contended that reducing the return on equity on this basis would be counter-productive because it would reduce the dollars available to the Companies to fund reliability improvements and perform maintenance functions.

2. ALJs' Recommendation

The ALJs recommended adoption of the OCA's position. The ALJs noted that while other methods can be used as a check on the results arrived at by use of the DCF method, the Commission has long favored use of the DCF method, tempered by informed judgment. The ALJs referenced the Commission Order at *PA Public Utility Commission v. Pennsylvania-American Water Co.*, Docket No. R-00016339, (Order entered January 25, 2002), as support for this position. Additionally, the ALJs stated that because of its strengths, and with its weaknesses ameliorated by informed judgment, primary reliance on the DCF method by the Commission is in the public interest. (R.D. at 125-127).

Furthermore, the ALJs found that MEPN have been unable to achieve reliability standards. The ALJs agreed with the Parties that the Companies have failed to achieve reliability and service quality standards consistent with their obligations and this

should be reflected in the approved rate of return. As a result, the ALJs recommended that the MEPN returns on equity should be 9.7%. (R.D. at 128-129).

Based upon the testimony and evidence of record, the ALJs recommended the following overall rate of return for each Company:

ME

Capital Type	**Percent of total cost (%)**	**Cost Rate (%)**	**Weighted Cost (%)**
Long-term Debt & Allocation Of Parent Debt	51	5.051	2.58
Preferred Stock	0	0	0
Common Equity	49	9.7	4.75
Total	*100*		*7.33*

PN

Capital Type	**Percent of total cost (%)**	**Cost Rate (%)**	**Weighted Cost (%)**
Long-term Debt & Allocation Of Parent Debt	51	5.83	2.97
Preferred Stock	0	0	0
Common Equity	49	9.7	4.75
Total	*100*		*7.72*

3. Exceptions

In its Exceptions, MEPN argues that the 9.7% return on equity recommended by the ALJ is 100 basis points lower than the return on equity deemed reasonable two years ago for another electric utility in Pennsylvania in *Pa. PUC v. Pennsylvania Power and Light*, Docket No. R-00049255 (Order entered December 22, 2004). This is so even though interest rates have increased since that time, opines the Companies. MEPN states that the ALJs' recommendation is inadequate and unreasonable due to several significant errors. MEPN notes that the ALJs failed to

recognize the impact of financial risk, failed to recognize that MEPN's business risk is greater than that of the proxy group because of the burden imposed by their POLR responsibility, failed to give any consideration whatsoever to alternative analyses such as risk premium or CAPM, failed to reflect application of informed judgment and improperly reduced the allowed return based on alleged poor reliability. MEPN avers that application of Commission precedent to the facts here warrants a move upward from the market derived baseline cost of equity to reflect financial risk, increased business risk and consideration of alternative analysis and informed judgment. (MEPN Exc. at 33-37).

MEPN states that the reduction in allowed return based on alleged poor reliability is improper. The Companies aver that the ALJs erroneously stated that they missed 2005 reliability targets by 70-100 minutes (R.D. at 230) because that target is a comparison to a goal set by the Reliability Settlement for year end 2007, not 2005. MEPN avers that they are, in fact, trending to meet that goal, having already spent $282 million on reliability improvements in 2005. Also, MEPN notes that the ALJs fail to consider properly the evidence in MEPN's Joint 2nd Quarter Service Reliability Report[21] that shows that reliability is improving. Additionally, MEPN avers that in 2005, they met 95% of the requirements of the Reliability Settlement.[22] As further evidence of improved reliability, the Companies claim that ME has experienced a 53% reduction in service quality complaints and PN has realized a 44% reduction.[23] MEPN rejoins that reducing their rate of return based on a flawed perception of poor performance will only impair their ability to continue reliability related spending. They request that the better approach is to follow the process already agreed upon in the Reliability Settlement. (MEPN Exc. at 37).

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21 OCA Cross Exh. 8, App A.
22 MEPN St. 18-R (Revised).
23 MEPN MB at 72.

In reply, the OCA rejoins that the Companies arguments are without merit. First, the OCA avers that its witness demonstrated that the Companies proposed financial risk adjustment is a conceptual argument that may only be valid in a non-regulated setting. The OCA also notes that even if the concept were to be considered valid, the overall business and financial risk of the proxy group on average is very close to that of the Companies in this case, so that no adjustment would be necessary. Second, the OCA refers to the Companies argument that their greater business risk compared to the proxy group should be recognized and increase the ROE allowance by 25 basis points. The OCA avers that the Companies failed to develop this issue on the record and have failed to show that they have any above-average risk pertaining to their distribution service as compared to the proxy group. As a result, the OCA opines it must be rejected as wholly unsupported by the evidence. (OCA R.Exc. at 21-24).

Furthermore, the OCA notes that the Companies arguments that the ALJs erred by reducing the cost of equity based upon poor reliability are incorrect. First, the OCA notes that this will not affect reliability related spending as these dollars are expense dollars that are fully reflected, without adjustment, in the Companies revenue requirement. Second, the OCA avers that the ALJs did not reduce the ROE but found that the lower end of the range of reasonableness was more appropriate. Third, the OCA claims that the Companies failed to meet service quality thresholds set forth in settlement. It points out that both MEPN failed to achieve actual year-end 2005 SAIDI that were required by the Settlement, and instead recorded SAIDI measurements that indicated worsening reliability. The OCA requests that the ALJs' recommendation for a ROE set at the lower end of the reasonable range should be adopted by the Commission. (OCA R.Exc. at 24-25).

The OTS replies that the Companies' Exceptions lack foundation in the record and should be dismissed. The OTS avers that the Companies mistakenly believe that a prior Commission decision has somehow established the minimum return on equity

allowance for the entire industry. The OTS avers this error is further exacerbated by an unsupported claim with respect to interest rates and their relative impact on the calculation of a return on common equity allowance. According to the OTS, it is a well established axiom that utility regulation in Pennsylvania is based on the facts of a specific proceeding and that precedent merely establishes a benchmark as to the regulatory treatment of a particular issue, it does not create a specific standard upon which all subsequent cases must depend. Additionally, the Companies statement concerning interest rates is unsupported in the record and is faulty as the OTS witness testified that long term bond rates are at historic low levels and are expected to remain relatively stable. (OTS R.Exc. at 19-20).

Next, the OTS states that the Commission's long-standing acceptance of the DCF method as the preferred method of determining an appropriate return on equity is not disputed in this proceeding. The OTS explains that the DCF method takes into account several factors in the determination of the fair rate of return: (1) preferences of investors; (2) equity financing; (3) risk; and (4) inflation. It opines that the Companies' myriad of adders and adjustments are unnecessary as the DCF method inherently accounts for these influences in its determination. According to the OTS, additional adjustments to a properly calculated equity allowance based on the DCF method would result in certain economic factors being counted twice which is improper and should be rejected. (OTS R.Exc. at 20-22).

The OTS further rejoins that the Companies' Exceptions mischaracterize the Recommended Decision with respect to the role of reported poor reliability in the rate of return calculation. Contrary to the Companies' erroneous assertion that its rate of return was reduced, the ALJs properly determined that the rate of return calculation must include consideration of the reliability shortcomings of the Companies. There was no stated reduction to the DCF findings per the Companies, as the ALJs' resulting recommendation remained within the range of DCF results calculated by the intervening

Parties. OTS avers that the higher end of the calculated results is simply not warranted based on the record in this proceeding. (OTS R.Exc. at 22-23).

The OSBA also replies that the ALJs did not err in reducing ME's and PN's rate of return based on their poor reliability. The OSBA avers that despite the Companies' effort to portray their reliability in a favorable light, both Companies' reliability has been, and continues to be, far below adequate. The OSBA notes that both Companies' SAIDI scores are worse now than they are required to be at year-end 2007, that ME's SAIDI score is worse now than it was at year-end 2003, that ME does not meet the Commission standard for SAIDI, that both Companies' SAIFI scores are worse than the Commission standard and benchmark and that both Companies' CAIDI scores do not meet the Commission benchmark. Despite these shortcomings, the OSBA notes that the Companies are advocating upward adjustments in the calculated DCF results to reflect claimed financial and business risks. The OSBA opines that it would be inconsistent to approve any upward adjustments to compensate stockholders when the Companies' ratepayers have been forced to accept inadequate service. (OSBA R.Exc. at 8-10).

4. Disposition

As noted previously, we have primarily relied upon the DCF methodology in arriving at our determination of the proper cost of common equity. However, we agree with the ALJs' statement that other methodologies can be used as a check on the reasonableness of the results arrived at by the use of the DCF method, tempered by informed judgment. We note that both the Companies and the OCA have done so in the instant proceeding. We will also use the results of the CAPM and ECAPM methods as a check of the reasonableness of our DCF derived equity return calculation.

Based upon our analysis and review of the record evidence, the Recommended Decision and the Exceptions and Replies thereto, we reject the ALJs'

recommendation to adopt the low end of the OCA's unadjusted DCF return of 9.7%. We note that the OCA recommended a return on equity range from 9.6% to 10.1%, but utilized a point near the lower end of the range due to the Companies ongoing service quality problems. While we acknowledge that the Companies have experienced reliability problems in the past and have been subject to a Commission investigation, we do not agree with the ALJs that it is necessary to reflect this situation by going to the lower end range of equity return.

Other factors must be considered in this proceeding. Based upon the evidence of record, we find that the OCA's recommended range of reasonableness from 9.6% to 10.1% is appropriate. We conclude that within that range, a cost of common equity of 10.1% is reasonable and appropriate to incorporate into our return determinations under the circumstances of this proceeding. This recommendation is based upon the high end of the OCA recommended range of reasonableness giving deference to the business risk faced by the Companies under the current electric industry environment and to the cost of equity results from the other methodologies, as well as recent Commission precedent. We note that the OTS recommended a range of reasonableness from 9.5% to 10.0% based upon the DCF methodology. The Companies DCF calculations, adjusted to remove their financial risk adders, resulted in a range of reasonableness from 9.3% to 10.3%. Also, the OCA calculated the range of reasonableness based on the CAPM methodology from 9.2% to 11.0%, while the Companies CAPM calculations indicated a range from 10.8% to 12.5%. Based upon these findings, we are of the opinion that an equity return of 10.1% is reasonable.

Accordingly, the Exceptions of MEPN are granted, in part, and denied, in part, to the extent consistent with the foregoing discussion.

The following table summarizes our determinations concerning the Companies' capital structure, cost of debt and cost of common equity, as well as the resulting weighted costs and overall rate of return:

ME			
Capital Structure	**Ratio** (%)	**Cost Rate** (%)	**Weighted Cost** (%)
Debt	51.00	5.051	2.58
Common Equity	49.00	10.1	4.95
	100.00		7.53

PN	**Ratio** (%)	**Cost Rate** (%)	**Weighted Cost** (%)
Capital Structure			
Debt	51.00	5.83	2.97
Common Equity	49.00	10.1	4.95
	100.00		7.92

X. COST OF SERVICE

A. ALJs' Interpretation of *Lloyd v. Pa. PUC*, 904 A.2d 1010 (Pa. Cmwlth. 2006), Petitions for Allowance of Appeal Pending

1. Positions of the Parties

The Companies submitted unbundled cost of service studies (COSS) based on data gathering systems (AM/FM, CREWS) and analytics (TACOS Gold) that allocate generation, transmission, and distribution system costs to establish a revenue requirement for each customer rate schedule. (MEPN M.B. at 77; MEPN St. 5 at 4; MEPN St. 5-R at 6-7). MEPN claims that this is consistent with the Commonwealth Court's determination in *Lloyd v. Pa. PUC*, 904 A.2d 1010 (Pa. Cmwlth. 2006), petitions for allowance of

Exhibit 37

1988 Pa. PUC LEXIS 407; 67 Pa. PUC 91; 93 P.U.R.4th 189

Pennsylvania Public Utility Commission

May 03, 1988

R-870732

Reporter
1988 Pa. PUC LEXIS 407 *; 67 Pa. PUC 91; 93 P.U.R.4th 189

Pennsylvania Public Utility Commission v. Pennsylvania Power Company

Core Terms

recommend, plant, defer, rate base, customer, load, block, valve, phase-in, energy, calculate, ratepayer, electric, dividend, annual, depreciate, estimate, charcoal, premium, modify, fuel, carrying charges, ratemaking, growth rate, amortize, nuclear, outage, tariff, peak, barometer

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Panel: Commissioners Present: Bill Shane, Chairman, dissenting in part; William H. Smith, Vice-Chairman; Linda C. Taliaferro; Frank Fischl

Opinion

OPINION AND ORDER

BY THE COMMISSION:

VII. RATE OF RETURN

A. Introduction

Before commencing a discussion of the evidence before us regarding [*183] the appropriate cost of common equity, we shall engage in our customary review of the legal standards which are relevant to such determination.

A public utility is entitled to an opportunity to earn a fair rate of return on the fair value of its property. Pennsylvania Gas & Water Co. v. Pa. P.U.C., 19 Pa. Commonwealth Ct. 214, 341 A.2d 239 (1975); Keystone Water Company White Deer District v. Pa. P.U.C., 19 Pa. Commonwealth Ct. 293, 302, 330 A.2d 873, 877 (1975); Riverton Consolidated Water Co. v. Pa. P.U.C., 186 Pa. Superior Ct. 1, 140 A.2d 114 (1958). Rate of return can be defined as:

. . . the amount of money a utility earns, over and above operating expenses, depreciation expense, and taxes, expressed as a percentage of the legally established net valuation of utility property, the rate base. Included in the 'return' are interest on long-term debt, dividends on preferred stock, and earnings on common equity. In other words, the return is the money earned from operations which is available for distribution among the various classes of contributors of money capital.

Public Utility Economics, Paul J. Garfield and Wallace F. Lovejoy (1964), at 116. The return authorized [*184] must not be confiscatory, and must be based upon the evidence presented. Pittsburgh v. Pa. P.U.C., 165 Pa. Superior Ct. 519, 69 A.2d 844 (1949).

Although it is acknowledged that the fair rate of return and cost of capital are not always synonymous, we consider the "cost of capital" approach to be one of the important bases upon which a fair rate of return is determined. Lower Paxton Twp. v. Pa. P.U.C., 13 Pa. Commonwealth Ct. 135, 317 A.2d 917 (1974); Pa. P.U.C. v. Duquesne Light Company, 54 Pa. PUC 695 (1981). In availing ourselves of this generally accepted method of arriving at a fair rate of return, we, the ratemaking authority, first examine the utility's capital structure to identify the sources of the utility's capital and accompanying ratios. We then ascertain the cost of each component; namely, the cost of debt, determined esstentially by the annual interest requirement of the utility's bonds, the cost of preferred stock, and the cost of common stock (common equity), determined by the return required to sell such stock upon reasonable terms in the market. Pa. P.U.C. v. The Bell Telephone Company of Pennsylvania, 57 Pa. P.U.C. 639 (1983); Pa. P.U.C. v. Pennsylvania Power Company, 55 Pa. P.U.C. 552 (1982).

Regardless of the procedure employed in determining fair rate of return, we must exercise "informed judgement". As we stated in Pennsylvania Power:

The return finding should consider the financial costs being incurred, so that the utility has the opportunity to recover its present cost of capital or to attract needed capital at reasonable cost. A fair rate of return for a public utility, however, is not a matter which is to be determined by the application of a mathematical formula. It requires the exercise of informed judgement based upon an evaluation of the particular facts presented in each proceeding. There is no one precise answer to the question as to what constitutes a proper rate of return. The interests of the company and its investors are to be considered along with those of the customers, all to the end of assuring adequate service to the public at the lest cost, while at the same time maintaining the financial integrity of the utility involved. (Emphasis supplied).

Id at 579. Moreover, we must adhere to the legal constraints which guide our decision.

In the landmark case of Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923), the United States Supreme Court addressed the issue of fair rate of return for a public utility. In Bluefield, the Court stated:

What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgement, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the

public equal to that generally being made at the same time and in the same general part of the country in investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate [*187] of return may be reasonable at one time, and become to high or too low by changes affecting opportunities for investment, the money market, and business generally.

Id. at 692-693.

In establishing the standards to be applied in implementing the Federal Natural Gas Act, the United States Supreme Court, in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944), said:

The rate-making process, under the Act, i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interest . . . . "[R]egulation does not insure that the business shall produce net revenues." (Citations omitted)

But such considerations aside, the investor interest has legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. The return, moreover, [*188] should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Id. at 603.

As noted in these cases, we are required to approve as just and reasonable, rates which will produce revenue sufficient to enable the utility to recover all reasonable operating and maintenance expenses, depreciation and taxes. Additionally, the utility is entitled to have an opportunity to earn a fair rate of return on the capital invested in the enterprise. Pa. P.U.C. v. North Penn Gas Company, 55 Pa. P.U.C. 425 (1981). We stated in Pa. P.U.C. v. Philadelphia Electric Co., 52 Pa. P.U.C. 772 (1978):

Among the factors to be considered in determining a fair return are (1) the earnings which are necessary to assure confidence in the financial integrity of the utility and to maintain its credit standing; (2) the payment of dividends and interest; and (3) the amount of the investment, the size and nature of the utility, its business and financial risks, and the circumstances attending its origin, development and operation.

Id. at 808.

Finally, we must engage in an appropriate balancing of the rates charged to the customers, [*189] for the services provided, with the return to which investors in the enterprise are entitled to have an opportunity to earn.

B. Capital Structure

The Company proposed a capital structure of: (1) 48.4% debt; (2) 14.2% preferred stock; and (3) 37.4% common stock, which represents its estimated capital structure as of April 30, 1988, the end of the future test year. No party took issue with the Company's proposal. The ALJ recommended its adoption.

We find the proposed capital structure to be reasonable and economical and, therefore, perceiving no reason to consider the use of a hypothetical capital structure, we adopt such capital structure for the purpose of determining a fair rate of return in this proceeding.

C. Cost of Debt

The Company claimed an estimated April 30, 1988, debt cost rate of 10.15%. No party took issue with this claim. The ALJ recommended that we adopt the Company's proposed cost rate. We find the Company's projected cost rate of 10.15% to be reasonable and, accordingly, adopt it for use in this proceeding.

D. Cost of Preferred Stock

The Company claimed a projected preferred stock cost rate of 9.89%, as of April 30, 1988. No party took issue [*190] with this claim. The ALJ recommended that we adopt the Company's proposed cost rate. We find that the Company's projected cost of rate of 9.89% to be reasonable and, accordingly, adopt it for use in this proceeding.

E. Cost of Common Equity

Testimony on the subject of the cost of common equity was presented by Paul R. Moul, Vice-President, Associated Utility Services, Inc., on behalf of the Company; Dr. Matityahu Marcus, Professor of Economics, Rutgers University, on behalf of the Office of Consumer Advocate; and Mr. John J. Steslow, Supervisor, Rate of Return Section, Office of Trial Staff, on behalf of that office.

When addressing the issue of the cost of equity, we have come to expect a wide range of cost estimates. Therefore, the controversy which is present here is to be expected. Due to the extensive record developed on this issue, we shall not be able to note or comment on every point, observation, supporting argument or criticism presented by the parties. However, this does not mean that we have not considered material which is not specifically addressed in the discussion below.

The following table and footnotes, provided by the ALJ at page 14 of his Recommended [*191] Decision, Summarize the methodologies, conclusions and recommendations of the various witnesses:

Methodology	Penn Power [1]	OCA [2]	OTS [3]
	%	%	%
Discounted Cash Flow	14.25	12.25	11.65-12.5
Risk Premium	15.25		
Capital Asset Pricing Model			13.05
Earnings/price ratio			12.5 -13.5
Recommendation	14.75	12.25	12.5 -13.0

[*] Penn Power, OCA and OTS have all adjusted the dividend yields of their respective DCF calculations to reflect next period growth (Penn Power Statement 4, p. 40; OCA Statement 1, p. 20; and OTS Statement 1, pp. 12-13). Penn Power adjusted its DCF by 25 basis points to reflect investment risk differences (Penn Power St. 4, p. 56). OTS adjusted the dividend yield component of its DCF calculation to reflect market pressure and selling expense (OTS St. 1, p. 13).

1. Comparison Companies or Groups

Mr. Moul employed a barometer group [*192] of five companies, based upon the following criteria:

1. SIC Code of 4911 (electric service) or 4931 (electric and other services combined);

2. actively traded common stock;

3. have not reduced or eliminated dividends on common stock;

4. operate in Pennsylvania, Ohio, or New York;

5. have at least 85% of their 1986 operating revenues from electric sales; and

6. have a major generating plant construction program.

These criteria yield the following five companies: Centerion Energy Corp.; Central Hudson Gas & Electric Corp.; New York State Electric & Gas Corp.; Ohio Edison Company; and Philadelphia Electric Company. Mr. Moul also looked to certain data pertaining to the Standard & Poor's 21 Electrics and Standard & Poor's 40 Public Utilities.

OTS witness Steslow utilized a barometer group of 6 electric utilities, consisting of: Centerion Energy Corp.; Central Hudson Gas & Electric Corp.; Duquesne Light Company; New York State Electric & Gas Corp.; Niagara Mohawk Power Corp.; and Philadelphia Electric Company. The primary consideration in Mr. Steslow's selection of his barometer group was "involvement in nuclear power generation to some degree since Penn Power's [*193] partial ownership of Perry 1 has had a major impact in its cost of capital" (OTS St. No. 1, p. 8). Mr. Steslow also noted that comparability of the six companies with Ohio Edison was demonstrated by the fact that the average of the company betas is .75, identical to that of Ohio Edison. He additionally noted that Value Line's average ranking for the six companies is 4/4 while the Ohio Edison ranking is 3/4 (OTS St. No. 1, p. 9).

Dr. Marcus utilized a group of 79 electric utilities consisting of "all electric utilities listed on the New York Stock Exchange which are also covered by Value Line, excluding utilities which have reduced or eliminated their common stock dividends" (OCA St. No. 1,p. 8). [27] Dr. Marcus utilized a large group because he is of the view that there is no agreement for identifying utilities which can be deemed of equal risk and, as a consequence, selection criteria which are formulated for a particular proceeding may produce a biased group.

2. Discounted Cash Flow

In this proceeding all three analysts have performed analyses utilizing the discounted cash flow methodolgy. The basic formula is: [*194] $k = D / p + g$, where k is the investors capitalization rate (or cost of capital), D is the current dividend, P is the current market price, and g is the anticipated future growth rate of dividends.

The DCF analysis is a market-based technique which is founded upon the principle that the amount an investor will pay for a share of common stock is based upon the present value of anticipated future dividends and appreciation in market price. Pa. P.U.C. v. Dauphin Consolidated Water Supply, 55 Pa. P.U.C. 44 (1981); Pa. P.U.C. v. Pennsylvania Power Company, 55 Pa. P.U.C. 552 (1982). In theroy, the DCF method analyzes what an investor expects to receive, as opposed to what he would like to receive, as a return on the investment made.

The DCF methodology is not without its infirmities. The Market price of a stock reflects both the current and future investor expectations regarding growth in earnings, and, hence dividends. Therefore, a separate consideration of growth rates, either in earnings, dividends, or book value (reflective of earnings retention) could result in the duplication of a growth estimate which is already reflected, in part at least, in market price. Moreover, normally [*195] market price will also reflect present inflation and an assumption regarding future inflation. Pa. P.U.C. v. Pennsylvania Power Company, supra.

It should also be noted at the outset that there are a number of implicit assumptions in this methodology. First, that the payout ratio will remain constant over time, in order that the rate of growth of dividends will track or equal the growth of earnings. Second, that the price/earnings ratios will remain constant, or at least be the same at the time of sale as the time of purchase.

a. Mr. Moul

Mr. Moul developed a five year (1982-1986) average dividend yield for his barometer group of 12.1%. The 12 month yield for the period ending June 1987 was 9.8%. Mr. Moul adjusted this yield by one-half of his derived growth rate (or 2%) and derived an adjusted yield of 10.0% (9.8 x 1.02 = 10.0%). [28]

[*196]

In order to develop a growth rate Mr. Moul looked to Value Line and the Institutional Brokers Estimate System ("IBES") a service of Lynch, James & Ryan, a New York Stock Exchange member securities broker service. IBES provides data on consensus earnings per share forecasts and five year earnings growth rate estimates. Mr. Moul's growth rate estimates appear in his Schedule 11 and the averages for his barometer group are as follows: (1) IBES mean (1.15%), median (1.98%); and (2) Value Line's dividends per share average of (-0.7%) and percentage retained to common equity of +2.8%. With regard to his barometer group Mr. Moul also looked at five-year average compound growth rates in dividends per share of +4.1% (Schedule 12).

By a process which is far from clear to us, Mr. Moul settled upon a 4% growth rate to use in his DCF analysis, for a DCF indicated cost of capital of 14.0%.

Mr. Moul, however, was not finished. He advocated an upward adjustment of his 14.0% result, by 25 basis points to account for Penn Power's substantially lower common equity ratio and, hence, its significantly greater financial risk. Thus the result of his DCF analysis was, in fact, 14.25%.

Mr. [*197] Moul later stated that, between the time that his direct testimony was prepared in July 1987, and the time of his cross examination in October 1987, the cost of capital increased substantially, and that if conditions remained the same he would be inclined to raise his original equity recommendation by a full percentage point (TR., p. 7).

During the rebuttal phase, by merely updating his dividend yield to reflect the then most recent 12 month period for the barometer group, he produced a DCF indicated cost of common equity of 15.0%, before the 25 basis point adjustment for the cost associated with Penn Power's lower equity rates. This resulted in a 15.25% DCF indicated cost of common equity determination by Mr. Moul.

b. Mr. Steslow

Mr. Steslow developed dividend yields for the 12 months ending September 30, 1987 and a spot yield as of the date for both his barometer group and for Ohio Edison. These were as follows:

	12 months	**Spot**
Barometer Group Average	10.3	10.08
Ohio Edison	9.4	9.5

Mr. Steslow utilized the 12 month average yields in his DCF analysis. When adjusted by one-half of his adopted growth rate, the yields for the barometer group and Ohio Edison [*198] became 10.4% and 9.5%, respectively.

Mr. Steslow also adjusted the dividend yields by 1.5% to reflect market pressure and selling expense and the yields, thus, became 10.56% (10.40 divided by .985 = 10.56%) and 9.64% (9.50 divided by .985 = 9.64%), respectively.

In order to determine an appropriate growth rate Mr. Steslow looked to Value Line for both historic and projected growth rates for the barometer companies and for Ohio Edison. He also looked at the five year growth forecasts of earnings by IBES. With regard to future growth, Value Line estimates that the average earnings of the barometer group will grow at a negative 1.4% rate and the average dividends will grow at a negative 1.5% rate for the period 1984-86 to 1990-92. Similar data for Ohio Edison is an earnings growth rate of 1.5% and a dividend growth rate of 2.0%. The IBES estimates an average growth in earnings for the barometer group of 1.07% and for Ohio Edison of 1.55%. [2]9

Based upon an average forecast of an IBES growth rate in earnings of 1.07% for the barometer group, and an average historic 10 year growth rate in earnings of 3.7% and an average historic [*199] 10 year growth rate in dividends of 3.9%, he settled upon a growth in divided rate of 2.0%. [3]0

Combining his adjusted dividend yield of 10.56% for the barometer group with his adopted growth in dividend rate of 2.0%, yielded a DCF indicated cost of common equity for the barometer group of 12.56%.

Using Ohio Edison as a proxy for Penn Power, Mr. Steslow combined his adjusted dividend yield of 9.64% with a growth in dividend rate of 2.0%, resulting in a DCF indicated cost of common equity for Ohio Edison of 11.64%.

c. Dr. Marcus

With regard to Ohio Edison Dr. Marcus found a 9.4% dividend yield for the 12 months ending September 1987. He also indicated that the yield could increase by 0.1% if the October 1987 dividend yield were included. He adjusted this yield by one-half of his adopted growth rate to 9.62% (9.5% x 1.013 = 9.62%), in order to reflect the projected increase in dividends in the first year.

With respect to an appropriate growth rate Dr. Marcus chose not to rely upon historic trends but, rather, focused upon retained [*200] earnings growth and industry analysts' growth projections. Based upon the period 1981-1986, Dr. Marcus found an average earnings on common equity of 14.7% for Ohio Edison. Combining this with an average retention rate of 0.22, yielded a retained earnings indicated growth rate of 3.23%. During the same period, the average earnings, on common equity for the industry as a whole was 14.2%, which, when comined with a retention rate of 0.29, resulted in a retained earnings indicated growth rate of 4.12% (Schedule MM-16). The 1986 growth rates for Ohio Edison and the industry were 3.28% and 3.95%, respectively.

Turning to analysts' growth projections for Ohio Edison, Dr. Marcus found that IBES consensus forecast for September 1987 was 1.5%, which reflects the estimates of 14 individual analysts.

Considering the retained earnings growth rate range of 3.2% to 3.8% and the IBES projection of 1.5%, Dr. Marcus settled upon a growth rate of 2.6%. Combining his adjusted dividend yield of 9.62% and his adopted growth rate of 2.6%, resulted in a DCF indicated cost of common equity of 12.22%, which Dr. Marcus rounded to 12.25%.

Dr. Marcus conducted a similar analysis for the electric industry [*201] as a whole and determined at a cost of 12.0%. In doing so, he utilized an adjusted dividend yield for the 12 months ending September 1987 of 7.5%. Using the same methodology employed for Ohio Edison, he settled upon a growth rate of 4.5%. The combination of these two inputs total 12.0%.

Giving Penn Power the benefit of the highest of his two inputs, Dr. Marcus recommended a common equity cost rate of 12.25%.

3. Risk Premium

There are a variety of methods of conducting a risk premium analysis. Some analysts attempt to quantify a risk premium associated with an equity investment, over a risk free investment, such as a Treasury Bond. Other analysts quantify a risk premium associated with an equity investment over and above a fixed income security such as a utility bond. Mr. Moul, the witness for the Company, used the latter approach. He observed that for the 12 month and 1 month periods ending June 30, 1987, the yields on A-rated public utility bonds were 9.31% and 10.02% respectively. Mr. Moul also states that the forecast yield on A-rated public utility bonds for the 3rd and 4th quarter 1987 and the first three quarters of 1988 was approximately 10.0%, according to the [*202] July 1, 1987 Blue Chip Finanical Forecasts. Mr. Moul also demonstrated (Exhibit 4A, Schedule 8, page 5) that the 12 month average bond yield of his barometer group for the period ending June 1987, was 9.72%.

Mr. Moul concludes that the long term borrowing rate for Penn Power would be about 50 basis points higher, taking into consideration its lower bond rating (S&P -- BBB, Moody's -- Baaa3). [3]1 Accordingly, he selected a bond yield of 10.5% to use in his risk premium analysis.

In order to determine the risk premium, Mr. Moul examined studies performed by Ibbotson and Singuefield. This review revealed that the spread between the return on electric utility common stocks and long term public utility bonds was 3.42%, on a geometric mean [*203] basis; 6.34% on a median basis; with the mid-point of that range

being 4.88%. This analysis encompassed the years 1928 through 1985. Utilizing a shorter period, that is, the years 1952-1985, the differential is 5.52%, on a geometric mean basis; 6.68% on a median basis; with a mid-point of that range of 6.60%. After looking at the S&P 40 Public Utilities, whose premium, on an arithmetic mean basis, is 5.37%, and electric utilities whose premium, on an arithmetic mean basis, is 5.78% [32], Mr. Moul concluded that an appropirate risk premium for Penn Power is 4.75%. Combining this risk premium with a prospective bond yield of 10.50%, determined as indicated above, Mr. Moul arrived at his 15.25% risk premium determined cost of common equity for Penn Power.

Subsequently, in his rebuttal testimony (PP St. 4-R, pp. 22-23), Mr. Moul noted that if more recent debt cost projections were used, i.e., December 1987, the comparable risk analysis would yield a cost of common equity for Penn Power of approximately 15.75%.

4. Capital Asset Pricing Model ("CAPM").

An additional analysis performance by OTS witness Steslow utilized the Capital Asset [*204] Pricing Model. Reduced to simple terms, the theory states that the expected return on equity is equal to the risk-free return, plus a premium for bearing risk. This description sounds almost identical to the theory underlying Mr. Moul's risk premium method. However, there is a difference in approach in determining the risk premium. First, rather than utilizing a segment of the market in measuring the premium of an equity return over a fixed income security such as a corporate bond, the risk premium under the CAPM method measures the risk premium of a well diversified portfolio (consisting of at least one share of all stocks traded in the market) over and above a risk free return (Treasury security), rather than a corporate bond. The second step is to adjust the result by the beta of the firm under consideration. [33]

The formula for CAPM may be stated as follows: COEC = N + (BxRP), [*205] where "N" is the riskless rate of return, B is the beta (in Mr. Steslow's presentation the average beta of his comparison group is .75), [34] and RP is the risk premium (in Mr. Steslow's analysis, the risk premium developed in the Ibbotson-Singuefield studies for the period 1926-1986).

Mr. Steslow chose not to use long term treasury bonds of 20 years as the riskless rate, because to do so suggests that the investment horizon for most investors is 20 years. Noting that Ibbotson's yearbook designates the U.S. Treasury bill return as the risk free rate, he used the highest projected interest rate of six quarters of T-Bills ending with the December 1988 quarter, as projected by Standard & Poor's in their Outlook, dated August 1987. This rate is 6.60%. Mr. Steslow then developed a risk premium of 8.6% by subtracting the 3.5% arithmetic mean annual return for U.S. Treasury Bills from the 12.1% arithmetic mean annual return on common stocks (S&P 500) for the period 1926-1986. The CAPM formula is then solved as follows: 6.6% + .75 (8.6%) = 13.05%, resulting in Mr. Steslow's [*206] CAPM derived cost of common equity for Penn Power of that level.

5. Earnings/ Price Ratios

It has been a long time since we have had a cost of capital witness present an earnings/ price ratio analysis. Mr. Steslow quoted from an article in the March 12, 1979 issue of Fortune titled, "The Stock Market Should Be Twice As High As It Is", by way of explantion of the theory of earnings/ price ratios.

The market price of any stock is supposed to be equal to the present value of the future stream of the company's earnings. In essence, present value is determined by dividing current earnings by the capitalization rate -- or rate of return -- that seems appropirate. In effect, the capitalization rate is the reciprocal of the earnings multiple. A company that has a record of highly stable earnings may succeed in getting investors to accept a capitalization rate of, say, 8 percent. If that company earned a dollar a share, its stock would then sell at around $12.50 -- twelve and a half times earnings. Another company whose earnings outlook was riskier might find investors investing on a capitalization rate of, say, 20 percent. Its earnings would therefore command a multiple of only [*207] five in the marketplace.

Mr. Steslow set forth on his Schedule 7, p. 2, of OTS Ex. No .1-A, a ten year historical comparison of the earnings price ratios of Ohio Edison and the six company barometer group for the years 1977 to 1986. He concluded from

the earnings/ price ratios shown there that investors have capitalized Ohio Edison somewhat more favorably than the barometer group (average), except for the years 1984 and 1985, where the barometer group average was 17.2% in 1984, and 15.5% in 1985, contrasted with 20.8% and 16.4% for Ohio Edison for those years. In 1986 the average was 12.6%, contrasted with 12.8% for Ohio Edison.

Mr. Steslow then prepared a schedule in which he undertook to discern the direction with investors have taken in their assessment of electric utility investments, as reflected in the barometer group and Ohio Edison (OTS Ex. No. 1-A, Sch. 7, p. 7). There he demonstrated that the 1986 earnings/ price ratios varied, on average, from 17.6 to 10.6% for the barometer group, based on the 1986 price range and earnings. For Ohio Edison the range of earnings/ price ratios was 15.5 to 11.0%. Based upon September 30, 1987 closing price and earnings for the 12 months [*208] ending June 30, 1987, the barometer group average price/earnings ratio was 15.4%, while that of Ohio Edison was 12.5%. A similar calculation using the September 30, 1987, closing price, and the 1987 earnings estimate of Salomon Brothers produced an average price/earnings ratio for the barometer group of 12.1%.

From his array of data Mr. Steslow arrives at a price/earnings ratio indicated cost of common equity, although he has not provided a rationale between his data and his conclusion.

Mr. Steslow advocated an adjustment to his earnings/ price ration conclusion, one percent for market pressure and one-half for selling expenses, even though knowledge of a new issue year in advance. [3]5 This allowance has already been included by Mr. Steslow in his 12.5% to 13.5% earnings/ price ratio conclusion.

Having reached the following indication of the cost of common equity:

DCF	11.65 - 12.50%
CAPM	13.05%
E/P Ratio	12.50 - 13.50

Mr. Steslow arrived at a cost of common equity [*209] conclusion for Ohio Edison of 12.50-13.00%.

6. Discussion

Much of the briefing of the parties as well as the direct (in some instances) and the rebuttal testimony of the witnesses is devoted to critiques and criticisms of the evidentiary presentations of other parties. Based upon our review of these critiques, both as to the inherent flaws of various analytical methodologies, as well as to the particular method of application by a witness, we conclude that many of the criticisms are valid. We do not find it necessary, however, to review and comment upon these criticisms; if we were to do so, and reject all the evidence with is flawed in some manner, we could well find ourselves with no "unflawed evidence" to consider. We do assure the parties, however, that criticisms and critiques, whether contained in the briefs of the parties or in witness tesimony have been reviewed in great detail, and where found to have merit, we have accorded the evidence in question only such weight as we deem it deserving.

a. Discounted Cash Flow

The ALJ provided a table which summarized the DCF conclusions reached by Mr. Moul, Mr. Steslow and Dr. Marcus. We shall set forth this table below. [*210]

	Penn Power [1]	**OCA [2]**	**OTS [3]**
	%	%	%
Dividend Yield	9.8	9.5	9.4-10.3
Growth Rate	4.0	2.6	2.0
DCF Finding	13.8	12.1	11.4-12.2

The dividend yields set forth by the ALJ are the yields calculated by each analyst, without adjustment for one-half of his determined growth rate. All three analysts adjusted [*211] the dividend yield by one-half of his individually determined growth rate, to reflect the investor's anticipation of an increase in dividends and also to recognize the periodicity of dividends. In most, if not all, recent general rate increase proceedings, we have routinely adjusted dividend yields. This adjustment is, in effect, a refinement of the basic DCF formula, which we have set forth and described above, which is referred to as the "Gordon" model, so named for Myron J. Gordon, one of its ardent proponents in the mid-1950's.

The adjusted dividend yields determined by the analysts are: (1) Mr. Moul -- 10.0%; Mr. Steslow -- 9.5%-10.4%; and Dr. Marcus -- 9.62%. Dr. Marcus' 9.62% and Mr. Steslow's lower 9.5% figure, were both derived from data pertaining to Ohio Edison. We are inclined here to rely more upon a broader segment of the market as represented by Mr. Moul and Mr. Steslow's barometer groups, since there is a degree of circularity in determining a cost of common equity for Penn Power by only relying upon cost data applicable to its parent. We believe that an appropriately adjusted dividend yield to utilize in this proceeding, is in the range of 10.0%-10.4%. [*212]

For a growth factor we have a wide range from Mr. Steslow's 2.0% to Mr. Moul's 4.0% with Dr. Marcus toward the lower end of that range at 2.6%.

All of the analysts looked at historic growth rates and either IBES or Value Line projections, or both. In the case of Dr. Marcus, he calculated historic growth rates as indicated by retained earnings.

From an array of figures it seems that each analyst leaped to a growth rate conclusion, since no rationale leading from the data to a conclusion has been provided. Perhaps they were as confused as we, as to why, with historic growth approaching 4.0%, the IBES and Value Line forecasts reflect negative growth. We conclude that the forecasts reflect problems which the barometer group companies are expected to encounter, which is not apparent from the data furnished. With regard to Penn Power, with its nuclear construction program completed and the expectation that its future construction will be accomplished entirely with internally generated funds, we believe that an investor growth expectation in the range of 2.4%-2.6% is reasonable.

Accordingly, we find a DCF indicated cost of common equity in the range of 12.4%-13.0% to be reasonable. [*213] [3]6

b. Risk Premium & CAPM

Although Mr. Moul's risk premium and Mr. Steslow's CAPM analyses are different, they do have similarities, in that they both quantify the premium earned [*214] by an equity investment, over a fixed income investment, during an historic period, and then add that premium to the current return on a similar fixed income investment. In the instance of Mr. Moul, the fixed income investment was an A-rated utility bond. In the instance of Mr. Steslow, the fixed income investment was a T-Bill. Because of the difference in risk involved in these two fixed income investments, the premiums derived varied greatly, Mr. Moul's was 4.75%, while that of Mr. Steslow was 8.6%. The CAPM method does have the added attribute of adjusting the risk by the beta of the enterprise for which one is attempting to determine a cost of capital.

However, there are two objections which are shared by each methodology which we find to be an insurmountable impediment to placing much, if any, weight upon the results. They are: first, we cannot accept that historic experienced earnings reflect the cost of capital. We know of no reputable analyst who would seriously argue that experienced earnings represent the cost of capital, except by pure happenstance. But, such is the inherent assumption of each methodology. Second, we cannot accept, even assuming that historic [*215] experienced earnings represented the cost of capital, that the average premium of an equity investment over a fixed income investment, over a period as long as 50 years, represents the investor required premium in today's and tomorrow's market.

Accordingly, we conclude that we can place little credence in the results of these methodologies.

c. Earnings/ Price Ratios

As noted above, it has been quite some time since we have been presented with an earnings/ price ratio analysis. We do find some conflict in theory between it and the DCF method. The DCF theory tells us that the investor is influenced by his expectation of appreciation in his investment, which is quantified by the growth in dividend element in the DCF formula. The earnings/ price ratio analysis suggests that we can determine investor's expectation without attempting to directly quantify the investor's appreciation expectation. This aside, it does seem that the earnings/ price ratio analysis has some value.

In this instance, Mr. Steslow's conclusion was an earnings requirement in the range of 12.5% to 13.5%. Since this range is somewhat broader and somewhat higher than our DCF indicated result, we are inclined [*216] toward a somewhat higher conclusion than we might reach, relying upon the DCF analysis alone.

We note that although the ALJ analyzed the evidence before him significantly differently than we have done, he arrived at a conclusion of 12.91%. This is toward the upper end of our DCF range and near the mid-point of our earnings/ price ratio conclusion. Accordingly, we shall adopt his conclusion of 12.91%.

F. Conclusion

Based upon the foregoing, our allowable rate of return determination in this proceedings is 11.14%, as illustrated in the following table:

Capital Structure	Ratios	Cost Rates	Weighted Cost
	%	%	%
Debt	48.4	10.15	4.91
Preferred	14.2	9.89	1.40
Equity	37.4	12.91	4.83
Total	100		11.14

VIII. RATE STRUCTURE

The Company has stated that the rates set forth in its Supplement No. 69 were designed to: (1) reflect, to the maximum extent practical, the cost of providing service; and (2) avoid any disruptive changes in the design of rates, which would unduly affect any customer or customer class.

A. Cost of Service

The OCA took issue with the Company's cost of service studies. The ALJ reported upon that dispute and recommended as [*217] follows:

The Company conducted its cost of service studies to allocate or directly assign plant investment and expenses in a manner which reflects each class' contribution to the incurrence of those costs. In preparing his cost of service studies, Mr. Harris employed the same methods and procedures involved in the functionalization, classification, and allocation of costs which have been reviewed and repeatedly approved by the Commission in prior Company rate proceedings. Those methods are also consistent with the standards set forth in the NARUC Electric Utility Cost Allocation Manual, and with generally accepted industry standards. The development of the Company's cost of service studies is described in detail in Mr. Harris' direct testimony (Penn Power Statement No. 7).

Exhibit 38

Met-Ed/Penelec/Penn Power/West Penn
Statement No. 10

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

METROPOLITAN EDISON COMPANY
DOCKET NO. R-2014-2428745

PENNSYLVANIA ELECTRIC COMPANY
DOCKET NO. R-2014-2428743

PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2014-2428744

WEST PENN POWER COMPANY
DOCKET NO. R-2014-2428742

Direct Testimony
of
Steven R. Staub

List of Topics Addressed

Capital Structure
Cost of Long Term Debt
Cost of Common Equity
Weighted Average Cost of Capital

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Page

DIRECT TESTIMONY
OF
STEVEN R. STAUB

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. My name is Steven R. Staub and my business address is 76 South Main Street, Akron, Ohio 44308.

Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company as Vice President and Treasurer.

Q. What are your current responsibilities?

A. I am responsible for Treasury activities including capital markets, cash management, derivatives, investment management, and debt compliance. I am also responsible for Business Planning activities including budgeting, forecasting, and financial planning. My responsibilities extend to each of the companies owned by FirstEnergy Corp., including its distribution operating companies.

Q. What is your educational and professional background?

A. I am a graduate of the University of Pittsburgh with undergraduate degrees in Business/Accounting and Political Science. I received an MBA from the University of Pittsburgh and a Master of Taxation from Robert Morris University. I have over twenty years of professional experience in finance related-positions,

including fifteen years with the regulated utility industry. My work and testimonial experience is more fully outlined in Appendix A.

Q. On whose behalf are you testifying in this matter?

A. I am testifying on behalf of Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec"), Pennsylvania Power Company ("Penn Power"), and West Penn Power Company ("West Penn") (collectively, the "Companies"). My testimony applies to all of the Companies, unless otherwise stated.

Q. What is the purpose of your direct testimony?

A. My testimony describes and supports the capital structure, embedded cost of long-term debt and overall weighted average cost of capital claimed by each of the four Companies. In addition, I explain why the Companies have requested that their authorized return on common equity be set at the high end of the range of values developed by their outside consultant on the cost of capital, Dr. Michael J. Vilbert of The Brattle Group.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring responses to various standard filing requirements dealing with financial matters, which responses are sequentially numbered as Exhibits SRS-1 through SRS-21 for each of the Companies. In addition, I am sponsoring the following summary schedules for each of the four Companies, which will be discussed further in this testimony:

Exhibits SRS-22: Capitalization and Capitalization Ratios

Exhibits SRS-23: Schedule of Long-Term Debt Outstanding Projected at April 30, 2016

Exhibits SRS-24: Capital Cost Rates April 30, 2016

Each of these exhibits were prepared by me or under my supervision.

II. CAPITAL STRUCTURE

Q. What capital structure ratios are you proposing be utilized for purposes of determining the Companies' overall weighted average costs of capital?

A. I recommend use of each Company's projected capital structure at April 30, 2016, exclusive of short-term debt. That date corresponds to the end of the fully projected future test year in these proceedings and, accordingly, reflects the mix of long-term debt and common equity capital that will support the Companies' claimed rate bases.

Q. Why have you excluded short-term debt from your proposed capital structure ratios?

A. Short-term borrowings typically are sources of liquidity and are not utilized to finance long-lived assets, such as those included in the Companies' claimed rate bases. In addition, it is my understanding that the Pennsylvania Public Utility Commission typically excludes short-term debt from a utility's capital structure in base rate cases.

Q. How did you derive the Companies' anticipated capital structure ratios at April 30, 2016?

A. As set forth in Exhibits SRS-22, the starting point was the actual capital structure in place at March 31, 2014, which represents the end of the historic test year. Then, based on recent financial forecasts, the respective amounts of long-term debt and common equity[1] were adjusted forward to March 31, 2015, the end of the future test year, and to April 30, 2016, the end of the fully projected future test year, to capture: (1) consummated and planned issuances of long-term debt (Met-Ed and Penelec in 2014 and Penn Power and West Penn prior to April 30, 2016); (2) the pay down of long-term debt; (3) the amortization of long-term debt discount and, in the case of West Penn, certain fair value adjustments booked in accordance with the FirstEnergy / Allegheny Energy merger; and (4) anticipated increases in retained earnings.

Q. What specific capital structure ratios do you recommend be adopted for rate of return purposes in this case?

A. Since rate setting is prospective, the rate of return should reflect a utility's expected capital structure at the end of the test year. I therefore recommend the adoption of the projected April 30, 2016 capital structure ratios set forth below:

Company	Long-Term Debt	Common Equity
Met-Ed	50.0%	50.0%
Penelec	50.1%	49.9%
Penn Power	49.9%	50.1%
West Penn	49.9%	50.1%

[1] None of the four Companies has any preferred or preference stock outstanding.

III. COST OF LONG-TERM DEBT

Q. What cost rates have you assigned to the long-term debt component of the Companies' capital structures?

A. The determination of a utility's weighted average long-term debt cost rate is essentially an arithmetic exercise due to the fact that the utility has contracted for the use of the capital in question for a defined period of time at a specified cost rate. The necessary calculations, which take into account issuance expense and, in the case of Penn Power, annual sinking fund requirements, are provided in Exhibits SRS-23.

Q. Please describe what is shown in Exhibits SRS-23.

A. Exhibits SRS-23 itemize each series of debt, the date of issuance, maturity, original amount issued and projected amount outstanding as of April 30, 2016. The Premium/Discount and Issuance Expenses column represents legal, underwriting and other miscellaneous costs associated with each issuance. The principal amount issued, adjusted for any premium or discount, less any issuance expenses equals the Net Proceeds. The effective rate is calculated by taking the Net Proceeds at the time of issuance and calculating the Internal Rate of Return based on the interest rate and the years to maturity. After the effective rate is calculated for each individual series, the rates are weighted by taking the effective rate multiplied by each respective amount outstanding divided by the total adjusted amount of long-term debt outstanding.

Q. What long-term debt cost rates do you recommend be utilized in developing the Companies' overall costs of capital?

A. As indicated in Exhibits SRS-23 and as summarized below, the Companies' weighted average long-term debt cost rates range from 5.21% (Met-Ed) to 6.12% (Penn Power):

Company	Long-Term Debt Cost Rate
Met-Ed	5.21%
Penelec	5.72%
Penn Power	6.12%
West Penn	5.38%

IV. COST OF COMMON EQUITY

Q. What rate of return on common equity ("ROE") are the Companies requesting authorization to earn?

A. The Companies seek a reasonable opportunity to earn an ROE of 10.9%. As noted previously, this represents the upper end of the cost of equity range determined by Dr. Vilbert, and is more fully explained in Met-Ed/Penelec/Penn Power/West Penn Statement No. 9.

Q. Why do you believe that the Companies should be provided an ROE at the high end of Dr. Vilbert's range?

A. For several reasons. First, the Companies project the need to make very significant capital investments over the next five to ten years as they install smart meters and replace and rehabilitate aging infrastructure to ensure reliability. To

that end, it is critically important that they maintain a healthy financial profile so they can access the capital markets on reasonable terms.

Second, and as pointed out by Dr. Vilbert, capital-intensive entities such as the Companies face considerable uncertainty as to the future course of the capital markets. In my view, short and medium term interest rates will likely not go any lower than they are today and, in all probability, will begin to trend upwards in 2015. Consequently, my proposed 10.9% equity allowance reflects, in part, my expectation that capital costs are far more likely to increase than they are to decrease or remain flat during the period that the new rates are in effect. Furthermore, setting rates with a ROE that is below that of other investment opportunities of corresponding risk will imperil the Companies' ability to maintain their financial integrity and continue to attract capital at reasonable rates and terms.

Third, the Companies have taken a number of positive steps over the past several years to control costs, improve customer service, and promote retail electric competition, as described by Mr. Fullem in Met-Ed/Penelec/Penn Power/West Penn Statement No. 1. I believe all of these efforts should be considered as favorable factors in setting the Companies' authorized ROE.

V. OVERALL COST OF CAPITAL

Q. How did you calculate the Companies' overall costs of capital?

A. As set forth in the respective Exhibits SRS-24, I quantified, and then combined, each Company's weighted average costs of long-term debt and common equity by

multiplying the projected April 30, 2016 capitalization ratios presented in Exhibit SRS-22 by: (1) the average cost of debt developed on Exhibits SRS-23; and (2) the recommended ROE of 10.9%. The results are as follows:

Company	Overall Weighted Cost of Capital
Met-Ed	8.05%
Penelec	8.31%
Penn Power	8.51%
West Penn	8.14%

Q. Does that conclude your direct testimony at this time?

A. Yes, it does.

METROPOLITAN EDISON COMPANY

FILING REQUIREMENT III-A-2:

"Provide a schedule in the same format as Schedule 1, except for the omission of the descriptive statement, for the most immediate comparable annual historical period prior to the test year and the two calendar years most immediately preceding the rate of return claim period. Irrespective of whether the capitalization claimed on Schedule 1 includes short-term debt, Schedule 2 should reflect capital ratios with and without short-term debt."

RESPONSE:

See ME Exhibit SRS-4 Attachment A

Metropolitan Edison Company
Capitalization & Capitalization Ratios
($000)

	Actuals at March 31, 2013			Actuals at March 31, 2014			Forecast at March 31, 2015			Forecast at April 30, 2016		
	Amount Outstanding	Ratios Excl. S-T-Debt	Ratios Incl. S-T-Debt	Amount Outstanding	Ratios Excl. S-T-Debt	Ratios Incl. S-T-Debt	Amount Outstanding	Ratios Excl. S-T-Debt	Ratios Incl. S-T-Debt	Amount Outstanding	Ratios Excl. S-T-Debt	Ratios Incl. S-T-Debt
Long Term Debt [1]	877,999	52.7%	49.9%	778,118 [2]	48.8%	44.9%	849,661 [2]	50.4%	49.3%	849,707 [2]	50.0%	48.5%
Preferred Stock	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Common Equity	788,885	47.3%	44.9%	817,892	51.2%	47.2%	834,704	49.6%	48.4%	848,489	50.0%	48.5%
Total Permanent Capital	1,666,884	100.0%	94.8%	1,596,010	100.0%	92.1%	1,684,365	100.0%	97.7%	1,698,196	100.0%	97.0%
Short-term Debt	91,306		5.2%	136,845		7.9%	39,888		2.3%	52,077		3.0%
Total Capital	1,758,190		100.0%	1,732,855		100.0%	1,724,253		100.0%	1,750,273		100.0%

Notes: [1] Includes current portion of long-term debt

[2] Reflects changes in long-term debt of:

new long-term debt issues	0	250,000	issued in June 2014
long-term debt paydown	(100,000)	(178,500)	
Unamort Discount on long-term debt	119	43	

	0
	0
	46

Exhibit 39

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Public Meeting held October 22, 2015

Docket Number: M-2015-2505842

BUREAU OF TECHNICAL UTILITY SERVICES

REPORT ON THE QUARTERLY EARNINGS

OF JURISDICTIONAL UTILITIES

FOR THE YEAR ENDED

June 30, 2015

Gladys M. Brown, Chairman
John F. Coleman, Jr., Vice Chairman
Pamela A. Witmer
Robert F. Powelson
Andrew G. Place

PUBLIC VERSION

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Page No.

VZ00763

Introduction:

On September 20, 1991, the Commission initiated a rulemaking at L-00910061 pertaining to earnings disclosures by the public utilities subject to its jurisdiction. At that docket, the Commission stated that the submission of accurate, reliable and complete earnings disclosure reports, at regular intervals, is essential to the fulfillment of the broad regulatory oversight responsibilities entrusted to the Commission by the Legislature in the Public Utility Code. The earnings disclosure regulations promulgated by the Commission were adopted October 1, 1992, and published January 23, 1993, at 23 Pa.B. 463. Based upon those regulations, codified at 52 Pa. Code, Chapter 71, a reporting format was developed and distributed to the jurisdictional fixed utilities of Pennsylvania.

All fixed utilities having jurisdictional revenues of $1,000,000 or more, for a calendar year, are required to file the report by March 31 of each year. Such reports are to be based upon the results of operations for the 12-month period ending December 31 of the prior year. Utilities having more than $10,000,000 in jurisdictional revenues are also required to file reports for the 12 months ending on March 31, June 30, and September 30 of each year. On November 30, 2004, however, the Pennsylvania General Assembly signed into law Act 183 concerning alternative telecommunications regulation and broadband deployment. As a result of Act 183, the reporting requirements for the PUC jurisdictional telecommunications companies of Pennsylvania have been streamlined at section 3015(e) of the Public Utility Code. A quarterly earnings report is not listed among those reports now required of PUC jurisdictional telecommunications utilities in Pennsylvania and, therefore, this report does not address telephone company earnings.

The reports have been filed for the period ended June 30, 2015.[1] The Finance Staff of the Bureau of Technical Utility Services has reviewed the reports and has prepared this summary report for public release. This report sets forth the achieved return on equity for each company, the last allowed return for that utility, a market return as determined through the analysis of the barometer group data and the most recent returns allowed, per industry, by the Pennsylvania Public Utility Commission and by other regulatory bodies. Where a utility has not filed a report, the reasons for not filing are indicated.

Questions pertaining to the preparation and contents of this Report should be directed to Ms. Erin Laudenslager, Manager - Finance, Bureau of Technical Utility Services, at (717) 705-4364.

[1] West Penn Power Company, Pennsylvania Power Company, Pennsylvania Electric Company, Metropolitan Edison Company, PPL Electric Utilities Corporation, PECO Energy-Electric, and Columbia Gas had a pending rate filing at Docket Nos. R-2014-2428742, R-2014-2428744, R-2014-2428743, R-2014-2428745, R-2015-2469275, R-2015-2468981, and R-2015-2468056, respectively, and filed a letter with the Secretary in place of a report in accordance with 52 Pa. Code § 71.4.

The market indicated common equity cost rate range consists of data used from the barometer groups and is based on a series of calculations to average the DCF methods.

Market Based Returns on Common Equity (1)	
September 23, 2015	
Electric Company Barometer Group	
	Cost Rates
	%
(1) Current DCF	8.59
(2) 52-Week Average DCF	8.31
(3) Overall DCF (1) + (2) / 2	8.45
(4) Market Indicated Common Equity Cost Rate Range @ 1 standard deviation around the mean.[2]	7-9.89
(5) CAPM Check of DCF Reasonableness	9.00
(6) Recent Commission Approved ROEs[3]: None within last two years	
(7) Distribution System Improvement Charge (DSIC) Return	**9.90%**
Barometer Group Companies	
Consolidated Edison	
Dominion Resources	
PPL Corporation	
Public Service Enterprise Group	
Pepco Holdings	
Eversource Energy	
[1] As calculated by the Bureau of Technical Utility Services	
[2] Standard Deviation of 12 DCF observations	
[3] ROEs from base rate cases within last two years, fully litigated or stipulated for DSIC purposes	
Any questions concerning DSIC should be directed to Andrew Herster of the Bureau of Technical Utility Services at (717) 783-5392.	

Barometer electric companies are used to calculate a current DCF in the first chart. The second chart demonstrates the companies 52 week average DCF. A final average of the two calculations is also shown at the bottom.

Electric Company Barometer Group
Calculation of a Current Dividend Yield

	Closing Market Price (Po) 9/21/2015 ($)	Latest Indicated Dividend Do ($)	Ind. Div. Plus 1/2 Div. Growth Rate (D1) ($)	Current Dividend Yield(D1/Po) (%)	DCF (%)
Consolidated Edison	65.03	2.60	2.63	4.05	6.90
Dominion Resources	69.32	2.59	2.69	3.88	10.24
PPL Corporation	31.33	1.51	1.52	4.86	7.26
Public Service Enterprise Group	40.61	1.56	1.60	3.93	7.38
Duke Energy Corporation	70.05	3.30	3.36	4.79	9.47
Eversource Energy	47.51	1.67	1.72	3.63	10.23
Group Average D1/Po				4.19	
Group Average G				4.40	
DCF				**8.59**	

Electric Company Barometer Group
52-week Average Dividend Yield Calculation

	High ($)	Low ($)	Average (Pa) ($)	Latest Indicated Dividend (Do) ($)	Average Dividend Yield (Do/Pa) (%)	DCF (%)
Consolidated Edison	72.25	55.80	64.03	2.60	4.06	6.91
Dominion Resources	80.89	65.53	73.21	2.59	3.54	9.90
PPL Corporation	38.14	29.18	33.66	1.51	4.49	6.89
Public Service Enterprise Group	44.45	36.37	40.41	1.56	3.86	7.31
Duke Energy Corporation	89.97	67.27	78.62	3.30	4.20	8.87
Eversource Energy	56.83	43.88	50.36	1.67	3.32	9.92
Group Average Do / Pa					3.91	
Group Average G					4.40	
DCF					**8.31**	
		Average of Current and 52-Week			**8.45**	

Multiple sources of the Barometer companies projected 5 year Earnings Per Share are used to calculate the Group Average Dividend Growth Estimate.

Development of a Representative Dividend Growth Rate
for the Barometer Group of Six Electric Companies

	5 Year Forecast						
	Value Line DPS (%)	Value Line EPS (%)	Zack's EPS (%)	Yahoo EPS (%)	Morningstar EPS (%)	Avgerage Earnings Growth (%)	Growth Estimate (%)
Consolidated Edison	2.50	3.00	2.70	2.72	2.00	2.61	2.85
Dominion Resources	7.50	8.00	6.30	5.38	7.40	6.77	6.36
PPL Corporation	1.50		2.40	1.85	0.30	1.52	2.40
Public Service Enterprise Group	4.50	3.50	3.40	2.18	7.50	4.15	3.45
Duke Energy Corporation	3.50	5.00	4.70	4.33	10.00	6.01	4.68
Eversource Energy	6.50	8.50	6.80	6.21	6.80	7.08	6.60
Group Average	4.33	5.60	4.38	3.78	5.67	4.86	4.39
USE							**4.40**

Sources: Morningstar, September 23, 2015 (http://financials.morningstar.com)
Value Line Investment Survey,September 23, 2015
Zacks, September 23, 2015 (www.zacks.com)
Yahoo!, September 22, 2015 (http://finance.yahoo.com/)

The Common Equity Ratios of Electric Utility Barometer Companies table depicts each company's quarterly common equity ratio. The range of Reasonable Equity Ratios consists of the lowest and highest common equity ratio for the barometer group companies.

Common Equity Ratios of Electric Utility Barometer Groups (2)	
Company	2015 Common Equity Ratio (1)
Consolidated Edison	51.50%
Dominion Resources	36.50%
PPL Corporation	41.50%
Public Service Enterprise Group	59.50%
Duke Energy Corporation	51.00%
Eversource Energy	53.00%
Average	**48.83%**
Range of Reasonable Equity Ratios	**36.50-59.50%**
(1) Source: Value Line Investment Survey September 23, 2015	
(2) The common equity ratios reported by Value Line exclude short-term debt and current maturities of long-term debt.	

The Capital Structure and Cost of Debt and Preferred Stock table shows the Schedule E and Schedule F of each company's quarterly earnings report.

Capital Structure and Cost of Debt and Preferred Stock for Pennsylvania Electrics - Twelve months ended June 30, 2015 [1]								
	PPL Electric	Duquesne Light Company	UGI Utilities Inc.	West Penn Power Co.	PECO Electric	Metropolitan Edison Company	PA Electric Company	PA Power Company
Schedule E								
Total Debt		46.82%	38.72%					
Total Preferred & Preference Stock		1.46%	0.00%					
Total Common Equity		51.72%	61.28%					
Schedule F								
Cost of Debt		4.93%	5.92%					
Cost of Preferred Stock		4.09%	0.00%					

[1] Source: Company supplied quarterly earnings report, Schedules E & F

Exhibit 40

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

METROPOLITAN EDISON COMPANY
DOCKET NO. R-2016-2537349

2016 GENERAL BASE RATE FILING

(Volume III of III)

FILED: April 28, 2016

Met-Ed Statement No. 9

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

METROPOLITAN EDISON COMPANY
DOCKET NO. R-2016-2537349

Direct Testimony
of
Joseph Dipre

List of Topics Addressed

Capital Structure
Cost of Long-Term Debt
Weighted Average Cost of Capital

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DIRECT TESTIMONY
OF
JOSEPH DIPRE

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. My name is Joseph Dipre and my business address is 76 South Main Street, Akron, Ohio 44308.

Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company. My title is Sr. Advisor, Strategy & Long-Term Planning.

Q. What are your current responsibilities?

A. I am responsible for supporting finance-related activities, including budgeting, forecasting, and financial planning. My responsibilities primarily focus on the regulated companies owned by FirstEnergy Corp. ("FirstEnergy") and its subsidiaries, including its Pennsylvania distribution operating companies.

Q. Please describe your educational and professional experience.

A. I am a graduate of Defiance College with undergraduate degrees in Business/Accounting and Mathematics. I earned my CPA status from the State of Ohio in February 1994. I began my professional career at Ducato and Kline, CPA, performing in various accounting-related roles between 1986 and 1989. My utility industry career began with Centerior Energy Corporation (a predecessor to FirstEnergy) in 1989 as a Tax Analyst in

the Tax Department. In 2004, I moved over to FirstEnergy's Strategic Planning Department as a Financial Analyst and served in a similar role in the Business Planning Department. I was promoted to Sr. Financial Analyst, Staff Business Analyst, and Consultant over time. In 2005, I was promoted as Manager of Financial Studies and Capital Planning. In 2007, I was assigned to the Business Development Department as Manager of Business Development and Performance Management and in 2009 was promoted as Sr. Business Development Advisor. I maintained the Sr. Advisor title when I moved to the Treasury Department in 2011 and to my current department, Strategy & Long-Term Planning, in 2015.

Q. On whose behalf are you testifying in this matter?

A. I am testifying on behalf of Metropolitan Edison Company ("Met-Ed").

Q. What is the purpose of your direct testimony?

A. My testimony describes and supports the capital structure, embedded cost of long-term debt and overall weighted average cost of capital claimed by Met-Ed.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring responses to various standard filing requirements dealing with financial matters, which responses are sequentially numbered as Exhibits JD-1 through JD-21 for Met-Ed. In addition, I am sponsoring the following summary schedules for Met-Ed, which will be discussed further in this testimony:

Exhibit JD-22: Capitalization & Capitalization Ratios

Exhibit JD-23: Schedule of Long-Term Debt Outstanding at 12/31/2017

Exhibit JD-24: Capital Cost Rates 12/31/2017

Each of these exhibits was prepared by me or under my supervision.

II. CAPITAL STRUCTURE

Q. What capital structure ratios are you proposing be utilized for purposes of determining Met-Ed's overall weighted average cost of capital?

A. I recommend use of Met-Ed's projected capital structure at December 31, 2017, exclusive of short-term debt. That date corresponds to the end of the fully projected future test year in these proceedings and, accordingly, reflects the mix of long-term debt and common equity capital that will support Met-Ed's claimed rate base.

Q. Why have you excluded short-term debt from your proposed capital structure ratios?

A. Short-term borrowings typically are sources of liquidity and are not utilized to finance long-lived assets, such as those included in Met-Ed's claimed rate base. In addition, it is my understanding that the Pennsylvania Public Utility Commission typically excludes short-term debt from a utility's capital structure in base rate cases.

Q. How did you derive Met-Ed's anticipated capital structure ratios at December 31, 2017?

A. As set forth in Exhibit JD-22, the starting point was the actual capital structure in place at December 31, 2015, which represents the end of the historic test year. Then, based on

recent financial forecasts, the respective amounts of long-term debt and common equity[1] were adjusted forward to December 31, 2016, the end of the future test year, and to December 31, 2017, the end of the fully projected future test year, to capture: (1) consummated and planned issuances of long-term debt; (2) the pay down of long-term debt; (3) the amortization of long-term debt discount; (4) planned equity infusions; and (5) anticipated increases in retained earnings.

Q. What specific capital structure ratios do you recommend be adopted for rate of return purposes in this case?

A. Since rate setting is prospective, the rate of return should reflect a utility's expected capital structure at the end of the fully projected future test year. I therefore recommend the adoption of the projected December 31, 2017 capital structure ratios of 48.8% long-term debt and 51.2% common equity.

III. COST OF LONG-TERM DEBT

Q. What cost rate have you assigned to the long-term debt component of Met-Ed's capital structure?

A. The determination of a utility's weighted average long-term debt cost rate is essentially an arithmetic exercise due to the fact that the utility has contracted for the use of the capital in question for a defined period of time at a specified cost rate. The necessary calculations, which take into account issuance expense, are provided in Exhibit JD-23.

Q. Please describe what is shown in Exhibit JD-23.

[1] Met-Ed has no preferred or preference stock outstanding.

A. Exhibit JD-23 itemizes each series of debt, the date of issuance, maturity, original amount issued and projected amount outstanding as of December 31, 2017. The Premium/Discount and Issuance Expenses column represents legal, underwriting and other miscellaneous costs associated with each issuance. The principal amount issued, adjusted for any premium or discount, less any issuance expenses equals the Net Proceeds. The effective rate is calculated by taking the Net Proceeds at the time of issuance and calculating the Internal Rate of Return based on the interest rate and the years to maturity. After the effective rate is calculated for each individual series, the rates are weighted by taking the effective rate multiplied by each respective amount outstanding divided by the total adjusted amount of long-term debt outstanding.

Q. What long-term debt cost rate do you recommend be utilized in developing Met-Ed's overall cost of capital?

A. As indicated in Exhibit JD-23, Met-Ed's projected weighted average long-term debt cost rate is 5.25%.

IV. OVERALL COST OF CAPITAL

Q. How did you calculate Met-Ed's overall cost of capital?

A. As set forth in Exhibit JD-24, I quantified, and then combined, Met-Ed's weighted average cost of long-term debt and cost of common equity by multiplying the projected December 31, 2017 capitalization ratios presented in Exhibit JD-22 by: (1) the average cost of debt developed on Exhibit JD-23; and (2) Met-Ed's requested return on common

equity of 10.90%. The proposed cost of equity is supported by Ms. Pauline Ahern in Met-Ed Statement No. 8. Met-Ed's overall weighted cost of capital is 8.14%.

Q. Does that conclude your direct testimony at this time?

A. Yes, it does.

DB1/ 87345853.2

Exhibit 41

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA ELECTRIC COMPANY
DOCKET NO. R-2016-2537352

2016 GENERAL BASE RATE FILING

(Volume III of III)

FILED: April 28, 2016

Penelec Statement No. 9

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA ELECTRIC COMPANY
DOCKET NO. R-2016-2537352

Direct Testimony
of
Joseph Dipre

List of Topics Addressed

Capital Structure
Cost of Long-Term Debt
Weighted Average Cost of Capital

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DIRECT TESTIMONY
OF
JOSEPH DIPRE

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. My name is Joseph Dipre and my business address is 76 South Main Street, Akron, Ohio 44308.

Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company. My title is Sr. Advisor, Strategy & Long-Term Planning.

Q. What are your current responsibilities?

A. I am responsible for supporting finance-related activities, including budgeting, forecasting, and financial planning. My responsibilities primarily focus on the regulated companies owned by FirstEnergy Corp. ("FirstEnergy") and its subsidiaries, including its Pennsylvania distribution operating companies.

Q. Please describe your educational and professional experience.

A. I am a graduate of Defiance College with undergraduate degrees in Business/Accounting and Mathematics. I earned my CPA status from the State of Ohio in February 1994. I began my professional career at Ducato and Kline, CPA, performing in various accounting-related roles between 1986 and 1989. My utility industry career began with Centerior Energy Corporation (a predecessor to FirstEnergy) in 1989 as a Tax Analyst in

the Tax Department. In 2004, I moved over to FirstEnergy's Strategic Planning Department as a Financial Analyst and served in a similar role in the Business Planning Department. I was promoted to Sr. Financial Analyst, Staff Business Analyst, and Consultant over time. In 2005, I was promoted as Manager of Financial Studies and Capital Planning. In 2007, I was assigned to the Business Development Department as Manager of Business Development and Performance Management and in 2009 was promoted as Sr. Business Development Advisor. I maintained the Sr. Advisor title when I moved to the Treasury Department in 2011 and to my current department, Strategy & Long-Term Planning, in 2015.

Q. On whose behalf are you testifying in this matter?

A. I am testifying on behalf of Pennsylvania Electric Company ("Penelec").

Q. What is the purpose of your direct testimony?

A. My testimony describes and supports the capital structure, embedded cost of long-term debt and overall weighted average cost of capital claimed by Penelec.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring responses to various standard filing requirements dealing with financial matters, which responses are sequentially numbered as Exhibits JD-1 through JD-21 for Penelec. In addition, I am sponsoring the following summary schedules for Penelec, which will be discussed further in this testimony:

Exhibit JD-22: Capitalization & Capitalization Ratios

Exhibit JD-23: Schedule of Long-Term Debt Outstanding at 12/ 31/2017

Exhibit JD-24: Capital Cost Rates 12/31/2017

Each of these exhibits was prepared by me or under my supervision.

II. CAPITAL STRUCTURE

Q. What capital structure ratios are you proposing be utilized for purposes of determining Penelec's overall weighted average cost of capital?

A. I recommend use of Penelec's projected capital structure at December 31, 2017, exclusive of short-term debt. That date corresponds to the end of the fully projected future test year in these proceedings and, accordingly, reflects the mix of long-term debt and common equity capital that will support Penelec's claimed rate base.

Q. Why have you excluded short-term debt from your proposed capital structure ratios?

A. Short-term borrowings typically are sources of liquidity and are not utilized to finance long-lived assets, such as those included in Penelec's claimed rate base. In addition, it is my understanding that the Pennsylvania Public Utility Commission typically excludes short-term debt from a utility's capital structure in base rate cases.

Q. How did you derive Penelec's anticipated capital structure ratios at December 31, 2017?

A. As set forth in Exhibit JD-22, the starting point was the actual capital structure in place at December 31, 2015, which represents the end of the historic test year. Then, based on

recent financial forecasts, the respective amounts of long-term debt and common equity[1] were adjusted forward to December 31, 2016, the end of the future test year, and to December 31, 2017, the end of the fully projected future test year, to capture: (1) consummated and planned issuances of long-term debt; (2) the pay down of long-term debt; (3) the amortization of long-term debt discount; (4) planned equity infusions; and (5) anticipated increases in retained earnings.

Q. What specific capital structure ratios do you recommend be adopted for rate of return purposes in this case?

A. Since rate setting is prospective, the rate of return should reflect a utility's expected capital structure at the end of the fully projected future test year. I therefore recommend the adoption of the projected December 31, 2017 capital structure ratios of 47.4% long-term debt and 52.6% common equity.

III. COST OF LONG-TERM DEBT

Q. What cost rate have you assigned to the long-term debt component of Penelec's capital structure?

A. The determination of a utility's weighted average long-term debt cost rate is essentially an arithmetic exercise due to the fact that the utility has contracted for the use of the capital in question for a defined period of time at a specified cost rate. The necessary calculations, which take into account issuance expense, are provided in Exhibit JD-23.

Q. Please describe what is shown in Exhibit JD-23.

[1] Penelec has no preferred or preference stock outstanding.

A. Exhibit JD-23 itemizes each series of debt, the date of issuance, maturity, original amount issued and projected amount outstanding as of December 31, 2017. The Premium/Discount and Issuance Expenses column represents legal, underwriting and other miscellaneous costs associated with each issuance. The principal amount issued, adjusted for any premium or discount, less any issuance expenses equals the Net Proceeds. The effective rate is calculated by taking the Net Proceeds at the time of issuance and calculating the Internal Rate of Return based on the interest rate and the years to maturity. After the effective rate is calculated for each individual series, the rates are weighted by taking the effective rate multiplied by each respective amount outstanding divided by the total adjusted amount of long-term debt outstanding.

Q. What long-term debt cost rate do you recommend be utilized in developing Penelec's overall cost of capital?

A. As indicated in Exhibit JD-23, Penelec's projected weighted average long-term debt cost rate is 5.56%.

IV. OVERALL COST OF CAPITAL

Q. How did you calculate Penelec's overall cost of capital?

A. As set forth in Exhibit JD-24, I quantified and then combined Penelec's weighted average cost of long-term debt and cost of common equity by multiplying the projected December 31, 2017 capitalization ratios presented in Exhibit JD-22 by: (1) the average cost of debt developed in Exhibit JD-23; and (2) Penelec's requested return on common equity of

11.30%. The proposed cost of equity is supported by Ms. Pauline Ahern in Penelec Statement No. 8. Penelec's overall weighted cost of capital is 8.58%.

Q. Does that conclude your direct testimony at this time?

A. Yes, it does.

Exhibit 42

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355

2016 GENERAL BASE RATE FILING

(Volume III of III)

FILED: April 28, 2016

Penn Power Statement No. 9

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA POWER COMPANY
DOCKET NO. R-2016-2537355

Direct Testimony
of
Joseph Dipre

List of Topics Addressed

Capital Structure
Cost of Long-Term Debt
Weighted Average Cost of Capital

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DIRECT TESTIMONY
OF
JOSEPH DIPRE

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. My name is Joseph Dipre and my business address is 76 South Main Street, Akron, Ohio 44308.

Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company. My title is Sr. Advisor, Strategy & Long-Term Planning.

Q. What are your current responsibilities?

A. I am responsible for supporting finance-related activities, including budgeting, forecasting, and financial planning. My responsibilities primarily focus on the regulated companies owned by FirstEnergy Corp. ("FirstEnergy") and its subsidiaries, including its Pennsylvania distribution operating companies.

Q. Please describe your educational and professional experience.

I am a graduate of Defiance College with undergraduate degrees in Business/Accounting and Mathematics. I earned my CPA status from the State of Ohio in February 1994. I began my professional career at Ducato and Kline, CPA, performing in various accounting-related roles between 1986 and 1989. My utility industry career began with Centerior Energy Corporation (a predecessor to FirstEnergy) in 1989 as a Tax Analyst in

the Tax Department. In 2004, I moved over to FirstEnergy's Strategic Planning Department as a Financial Analyst and served in a similar role in the Business Planning Department. I was promoted to Sr. Financial Analyst, Staff Business Analyst, and Consultant over time. In 2005, I was promoted as Manager of Financial Studies and Capital Planning. In 2007, I was assigned to the Business Development Department as Manager of Business Development and Performance Management and in 2009 was promoted as Sr. Business Development Advisor. I maintained the Sr. Advisor title when I moved to the Treasury Department in 2011 and to my current department, Strategy & Long-Term Planning, in 2015.

Q. On whose behalf are you testifying in this matter?

A. I am testifying on behalf of Pennsylvania Power Company ("Penn Power").

Q. What is the purpose of your direct testimony?

A. My testimony describes and supports the capital structure, embedded cost of long-term debt and overall weighted average cost of capital claimed by Penn Power.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring responses to various standard filing requirements dealing with financial matters, which responses are sequentially numbered as Exhibits JD-1 through JD-21 for Penn Power. In addition, I am sponsoring the following summary schedules for Penn Power, which will be discussed further in this testimony:

Exhibit JD-22: Capitalization & Capitalization Ratios

Exhibit JD-23: Schedule of Long-Term Debt Outstanding at 12/31/2017

Exhibit JD-24: Capital Cost Rates 12/31/2017

Each of these exhibits was prepared by me or under my supervision.

II. CAPITAL STRUCTURE

Q. What capital structure ratios are you proposing be utilized for purposes of determining Penn Power's overall weighted average cost of capital?

A. I recommend use of Penn Power's projected capital structure at December 31, 2017, exclusive of short-term debt. That date corresponds to the end of the fully projected future test year in these proceedings and, accordingly, reflects the mix of long-term debt and common equity capital that will support Penn Power's claimed rate base.

Q. Why have you excluded short-term debt from your proposed capital structure ratios?

A. Short-term borrowings typically are sources of liquidity and are not utilized to finance long-lived assets, such as those included in Penn Power's claimed rate base. In addition, it is my understanding that the Pennsylvania Public Utility Commission typically excludes short-term debt from a utility's capital structure in base rate cases.

Q. How did you derive Penn Power's anticipated capital structure ratios at December 31, 2017?

A. As set forth in Exhibit JD-22, the starting point was the actual capital structure in place at December 31, 2015, which represents the end of the historic test year. Then, based on

recent financial forecasts, the respective amounts of long-term debt and common equity[1] were adjusted forward to December 31, 2016, the end of the future test year, and to December 31, 2017, the end of the fully projected future test year, to capture: (1) consummated and planned issuances of long-term debt; (2) the pay down of long-term debt; (3) the amortization of long-term debt discount; (4) planned equity infusions; and (5) anticipated increases in retained earnings.

Q. What specific capital structure ratios do you recommend be adopted for rate of return purposes in this case?

A. Since rate setting is prospective, the rate of return should reflect a utility's expected capital structure at the end of the fully projected future test year. I therefore recommend the adoption of the projected December 31, 2017 capital structure ratios of 49.9% long-term debt and 50.1% common equity.

III. COST OF LONG-TERM DEBT

Q. What cost rate have you assigned to the long-term debt component of Penn Power's capital structure?

A. The determination of a utility's weighted average long-term debt cost rate is essentially an arithmetic exercise due to the fact that the utility has contracted for the use of the capital in question for a defined period of time at a specified cost rate. The necessary calculations, which take into account issuance expense, are provided in Exhibit JD-23.

Q. Please describe what is shown in Exhibit JD-23.

[1] Penn Power has no preferred or preference stock outstanding.

A. Exhibit JD-23 itemizes each series of debt, the date of issuance, maturity, original amount issued and projected amount outstanding as of December 31, 2017. The Premium/Discount and Issuance Expenses column represents legal, underwriting and other miscellaneous costs associated with each issuance. The principal amount issued, adjusted for any premium or discount, less any issuance expenses equals the Net Proceeds. The effective rate is calculated by taking the Net Proceeds at the time of issuance and calculating the Internal Rate of Return based on the interest rate and the years to maturity. After the effective rate is calculated for each individual series, the rates are weighted by taking the effective rate multiplied by each respective amount outstanding divided by the total adjusted amount of long-term debt outstanding.

Q. What long-term debt cost rate do you recommend be utilized in developing Penn Power's overall cost of capital?

A. As indicated in Exhibit JD-23, Penn Power's projected weighted average long-term debt cost rate is 5.88%.

IV. OVERALL COST OF CAPITAL

Q. How did you calculate Penn Power's overall cost of capital?

A. As set forth in Exhibit JD-24, I quantified and then combined Penn Power's weighted average cost of long-term debt and cost of common equity by multiplying the projected December 31, 2017 capitalization ratios presented in Exhibit JD-22 by: (1) the average cost of debt developed in Exhibit JD-23; and (2) Penn Power's requested return on common equity of 11.50%. The proposed cost of equity is supported by Ms. Pauline

Ahern in Penn Power Statement No. 8. Penn Power's overall weighted cost of capital is 8.70%.

Q. Does that conclude your direct testimony at this time?

A. Yes, it does.

DB1/ 87347215.2

Exhibit 43

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Public Meeting held October 26, 2017

Docket Number: M-2017-2626454

BUREAU OF TECHNICAL UTILITY SERVICES

REPORT ON THE QUARTERLY EARNINGS

OF JURISDICTIONAL UTILITIES

FOR THE YEAR ENDED

June 30, 2017

Gladys M. Brown, Chairman
Andrew G. Place, Vice Chairman: Statement, Dissenting

David W. Sweet, Commissioner
John F. Coleman, Jr., Commissioner

PUBLIC VERSION

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VZ00803

Introduction:

On September 20, 1991, the Commission initiated a rulemaking at L-00910061 pertaining to earnings disclosures by the public utilities subject to its jurisdiction. At that docket, the Commission stated that the submission of accurate, reliable and complete earnings disclosure reports, at regular intervals, is essential to the fulfillment of the broad regulatory oversight responsibilities entrusted to the Commission by the Legislature in the Public Utility Code. The earnings disclosure regulations promulgated by the Commission were adopted October 1, 1992, and published January 23, 1993, at 23 Pa.B. 463. Based upon those regulations, codified at 52 Pa. Code, Chapter 71, a reporting format was developed and distributed to the jurisdictional fixed utilities of Pennsylvania.

All fixed utilities having jurisdictional revenues of $1,000,000 or more, for a calendar year, are required to file the report by March 31 of each year. Such reports are to be based upon the results of operations for the 12-month period ending December 31 of the prior year. Utilities having more than $10,000,000 in jurisdictional revenues are also required to file reports for the 12 months ending on March 31, June 30, and September 30 of each year. On November 30, 2004, however, the Pennsylvania General Assembly signed into law Act 183 concerning alternative telecommunications regulation and broadband deployment. As a result of Act 183, the reporting requirements for the PUC jurisdictional telecommunications companies of Pennsylvania have been streamlined at section 3015(e) of the Public Utility Code. A quarterly earnings report is not listed among those reports now required of PUC jurisdictional telecommunications utilities in Pennsylvania and, therefore, this report does not address telephone company earnings.

The reports have been filed for the period ended June 30, 2017.[1] The Finance Staff of the Bureau of Technical Utility Services has reviewed the reports and has prepared this summary report for public release. This report sets forth the achieved return on equity for each company, the last allowed return for that utility, a market return as determined through the analysis of the barometer group data and the most recent returns allowed, per industry, by the Pennsylvania Public Utility Commission and by other regulatory bodies. Where a utility has not filed a report, the reasons for not filing are indicated.

Questions pertaining to the preparation and contents of this Report should be directed to Ms. Erin Laudenslager, Manager - Finance, Bureau of Technical Utility Services, at (717) 705-4364.

[1] UGI Penn Natural Gas, Inc., and Pennsylvania American Water Company have pending rate filings at Docket Nos. R-2016-2580030, and R-2017-2595853, respectively, and filed a letter with the Secretary in place of a report in accordance with 52 Pa. Code § 71.4.

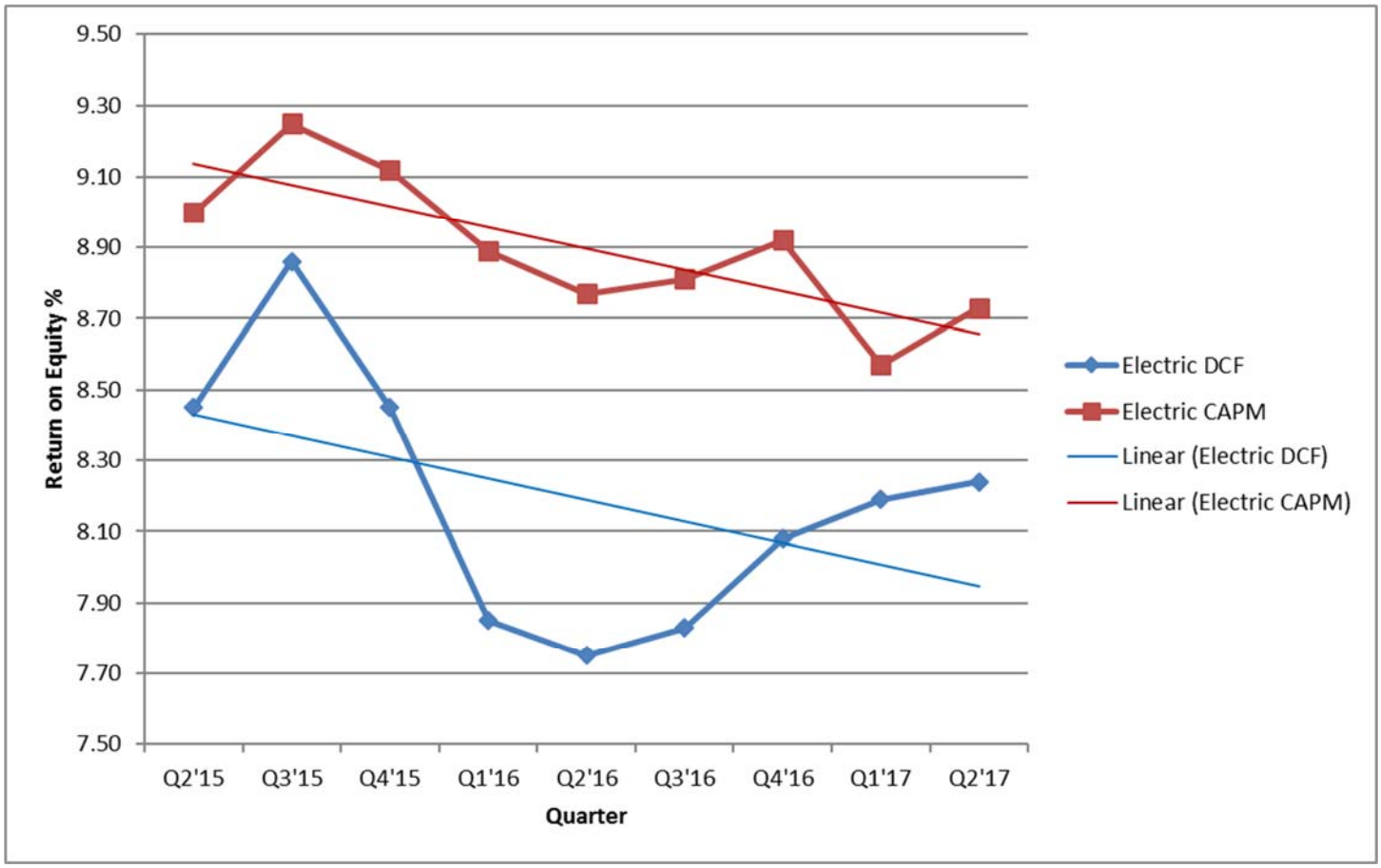
The market indicated common equity cost rate range consists of data used from the barometer groups and is based on a series of calculations to average the DCF methods.

Market Based Returns on Common Equity[1]	
September 14, 2017	
Electric Company Barometer Group	
	Cost Rates
	%
(1) Current DCF:	8.20
(2) 52-Week Average DCF:	8.28
(3) Overall DCF ((1) + (2)) / 2 :	8.24
(4) Market Indicated Common Equity Cost Rate Range:	7.24-9.25
@ 1 standard deviation around the mean.[2]	
(5) CAPM Check of DCF Reasonableness:	8.73
(6) Recent Commission Approved ROEs[3]:	*
*None within last two years	
(7) Distribution System Improvement Charge (DSIC) Return[4]:	**9.55%**
Barometer Group Companies	
Consolidated Edison	
Exelon Corp.	
PPL Corporation	
Public Service Enterprise Group	
SCANA Corp.	
Eversource Energy	
[1] As calculated by the Bureau of Technical Utility Services	
[2] Standard Deviation of 12 DCF observations	
[3] Base rate case ROEs within last two years, fully litigated or stipulated for DSIC purposes	
[4] Commission authorized Return on Equity (ROE) for DSIC purposes	
Any questions concerning DSIC should be directed to Andrew Herster	
of the Bureau of Technical Utility Services at (717) 783-5392.	

Historic Electric Industry Barometer Group DCF and CAPM Average ROEs

	Electric	
	DCF	CAPM
Q2'15	8.45	9.00
Q3'15	8.86	9.25
Q4'15	8.45	9.12
Q1'16	7.85	8.89
Q2'16	7.75	8.77
Q3'16	7.83	8.81
Q4'16	8.08	8.92
Q1'17	8.19	8.57
Q2'17	8.24	8.73

Linear Trend Line Chart of Historic Electric Industry DCF and CAPM Average ROEs



Barometer electric companies are used to calculate a current DCF in the first chart. The second chart demonstrates the companies 52 week average DCF. A final average of the two calculations is also shown at the bottom.

Electric Company Barometer Group

Calculation of a Current Dividend Yield

	Closing Market Price (Po) 9/13/2017 ($)	Latest Indicated Dividend Do ($)	Ind. Div. Plus 1/2 Div. Growth Rate (D1) ($)	Current Dividend Yield(D1/Po) (%)	DCF (%)
Consolidated Edison	84.21	2.76	2.80	3.33	6.77
Exelon Corp.	37.88	1.31	1.35	3.55	8.55
PPL Corporation	39.07	1.58	1.61	4.11	9.11
Public Service Enterprise Group	45.84	1.72	1.76	3.85	6.95
SCANA Corp.	59.06	2.45	2.51	4.25	8.76
Eversource Energy	62.37	1.90	1.95	3.13	9.04
Group Average D1/Po				3.70	
Group Average G				4.50	
DCF				**8.20**	

Electric Company Barometer Group

52-week Average Dividend Yield Calculation

	High ($)	Low ($)	Average (Pa) ($)	Latest Indicated Dividend (Do) ($)	Average Dividend Yield (Do/Pa) (%)	DCF (%)
Consolidated Edison	86.16	68.76	77.46	2.76	3.56	7.01
Exelon Corp.	38.78	29.82	34.30	1.31	3.82	8.82
PPL Corporation	40.20	32.08	36.14	1.58	4.37	9.37
Public Service Enterprise Group	47.47	39.28	43.38	1.72	3.97	7.07
SCANA Corp.	75.92	58.55	67.24	2.45	3.64	8.16
Eversource Energy	64.19	50.56	57.38	1.90	3.31	9.22
Group Average Do / Pa					3.78	
Group Average G					4.50	
DCF					**8.28**	
		Average of Current and 52-Week			**8.24**	

Multiple sources of the Barometer companies projected 5 year Earnings Per Share are used to calculate the Group Average Dividend Growth Estimate.

Development of a Representative Dividend Growth Rate for the Barometer Group of Six Electric Companies							
		5 Year Forecast					
						Avgerage	
	Value Line	Value Line	Zack's	Yahoo	Morningstar	Earnings	Growth
	DPS	EPS	EPS	EPS	EPS	Growth	Estimate
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Consolidated Edison	3.00	2.50	3.50	3.97	3.80	3.44	3.44
Exelon Corp.	5.50	7.00	5.00	1.49	6.70	5.05	5.00
PPL Corporation	3.50		5.00	0.04	0.40	1.81	5.00
Public Service Enterprise Group	5.00	1.00	2.40	0.57	3.80	1.94	3.10
SCANA Corp.	5.00	4.00	4.70	4.75	4.60	4.51	4.51
Eversource Energy	5.50	6.50	6.00	5.81	6.10	6.10	5.91
Group Average	4.58	4.20	4.43	2.77	4.23	3.91	4.49
USE							4.50
Sources:	Morningstar, September 14, 2017 (http://financials.morningstar.com)						
	Value Line Investment Survey, September 14, 2017						
	Zacks, September 14, 2017 (www.zacks.com)						
	Yahoo!, September 14, 2017 (http://finance.yahoo.com/)						