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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 18-E-0067 - Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Orange and Rockland Utilities, Inc. for Electric Service.

CASE 18-G-0068 - Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Orange and Rockland Utilities, Inc. for Gas Service.

RESPONSE IN SUPPORT OF MOTION FOR ISSUANCE OF SUBPOENA DUCES TECUM

I. Anything that pertains to costs is eligible for review in this proceeding; notwithstanding claims that functionality has been determined, any functionality and/or service life issues that provide facts that shed light on the depreciation schedule and/or any costs that will be incurred to fix glitches in the meters should be reviewed.

Grassroots Environmental Education supports the motion for issuance of a subpoena duces tecum to Aclara Meters LLC, Aclara Smart Grid Solutions, LLC, and Aclara Technologies LLC – together or individually ("Aclara"). If signed, the subpoena is likely to yield valuable information from the meter manufacturer directly relevant to these proceedings. Aclara and its various corporate entities are likely to have knowledge about meter obsolescence rates from the field and having sold them for use are likely to have data about what conditions interfere with their ability to meter electricity properly.

Now is the time to get this information so that meter depreciation rates are accurately set so that the ratepayers are not overcharged in the short term pending an "adjustment" *ex post facto*. While Grassroots is cognizant of the October 18, 2018 ruling in this matter which states

> In terms of Ms. Kopald's IRs that inquire about the societal costs and benefits of the AMI program and the health, safety, functionality, security, and privacy issues associated with

> smart meters, all of these issues are outside the scope of these proceedings. Only the issue of O&R's capital costs and expenses related to the AMI program and the design of the proposed rates, including AMI costs and opt-out fees, are appropriately raised in discovery requests.
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> Page 14, ¶2 Ruling Granting in Part and Denying in Part Kopald Motions to Compel O&R and DPS Staff Responses to Information Requests

in this instance, the issues bearing on functionality have to do with the October 18, 2018 ruling should not be taken as a blanket ban on any question having to do with functionality if the issue about functionality and/or service life and/or the need for retrofits to correct errors bear upon a proper calculation of depreciation and amortization and appropriate budgeting of costs by O&R. The ruling does not say that issues of functionality that relate to costs, which are allowed to be reviewed in this proceeding must be ignored. In any case the "functionality" questions relate to costs and these specific "functionality" questions have not necessarily been determined; they are based on evidence that has come in from the field since and that should be looked at by the tribunal as they relate to the assessment of costs, which is supposed to occur in this proceeding.

To ignore the mountain of evidence that continues to develop that the meters do not perform as stated and require a different obsolescence schedule would be to shirk responsibility. It is the position of Grassroots, that we would be remiss if we did not actively seek to review this issue during this proceeding. It is a question of proper accounting and proper attribution of costs to the ratepayer. The alternative argument is that since the meters were proved and deemed to function, the ratepayers should not be allowed to have adjustments made for new information `that manifests in the interim and/or any information that relates to a cost analysis, which was understood to occur in this proceeding pursuant to the ruling in 17-M-0178. We reject this argument. Depreciation is a cost and it is used in the calculation of what is passed on to the ratepayers.

Furthermore, intervenors have the right to question staff's depreciation panel; its assumptions should not be treated as *diktat*. See: *In re: Rochester Gas and Elec. Corp.* 1993 WL 499864 (N.Y.P.S.C.):

> CPB also challenges staff's claim that consideration of Empire State Pipeline costs supports the gas settlement provisions….

In terms of the issue of our right in this proceeding to review costs, any previous determinations about meter life and functionality would impinge upon our right to conduct a cost review in this proceeding. Past rulings that the meters are functional and approved for use, impinge upon our right to review costs in this proceeding, which includes depreciation, which is part of the expense in the numerator of the formula governing rate increases (Net Operating Income Before Tax (which includes a deduction for expenses) divided by Net Regulatory Assets=Rate of Return.) Furthermore, the application does not say that the meters don't function at all; it asks about known factors which affect their ability to bill with precision. Any information that has come from the field on this topic must be made known to the intervenors so we can argue in a final briefing as to whether the depreciation rate should be adjusted as per CPB's claim in *In re: Rochester Gas and Elec. Corp.*:

> More generally, CPB is opposed to any utility's achieved earnings serving as the measure for regulatory action to extract it from adverse circumstances. CPB considers the provision here an unwarranted and unprecedented limitation on its ability to challenge company actions that have caused its earnings to fall.

We are saying that the DPS and O&R cannot use a ruling about functionality as both a shield and a sword; it should not be used to obfuscate a proper analysis of meter life and costs. It would be conclusory to assert otherwise. Past depreciation studies, too, are meaningless in light of evidence in the field that they are incorrect. Since smart meters have not been in existence very long, estimates are really "guestimates" and do not incorporate the latest up-to-date facts. Grassroots questions how survivor curves presented by staff purporting to go back to 1975 are in

any way relevant to smart meters which have not been in existence that long (See: Staff Depreciation Exhibits).

In terms of the stated rationale in the application that there could be a cost to the utilities to address billing disputes and that information should be preserved with the understanding that this is likely to occur. *In re New York State Elec. & Gas Corp,* 2005 WL 2358150 (N.Y.P.S.C.) specifically, while the claim is not that the meters are performing properly, but that data should be collected, where it can, to resolve billing disputes in the future. If Aclara has information that the meters are creating billing disputes because of performance, then that information, if it exists, now, should be preserved, especially since O&R will require any software fixes to correct for errors so that the ratepayers are not overbilled. Since Aclara is denying the results of the Leferink study referred to in the subpoena, it would be helpful if they explained why they think the meters are not subject to the glitch detected therein to resolve this issue. Aclara should also explain field observations that are not consistent with the assumed 20 year life of meters and they should identify any internal aspects to the meters and external aspects (environmental conditions and the influence of other devices on the premises) that they have since learned affect the ability of the meters to meter electricity properly. This is necessary to assess meter life and any costs/retrofits that are necessary to make the meter functional. If Aclara has no information that affects the ability of the meters to function, then the intervenors will have further confidence that Aclara is not in possession of information that would affect a proper calculation of meter life. The existence of the Leferink study concomitant with Aclara's failure to document their claims to O&R opens the door to this issue. If they have such information, it will help the tribunal assess proper costs, depreciation rates and the rate hike. There is no reason to prevent Aclara from providing this information and there is no prejudice to providing it; it is a matter of public interest to have information that documents the actual performance of the meters.

II. New evidence suggests smart meters do not bill properly and do not last anywhere near as long as advertised. Inasmuch as this information can pertain to the depreciation schedule, it should be considered in rate design. The ratepayers should not have to pay extra if information is available now.

The thinking of the DPS appears to be that if information comes to light later that affects depreciation, it can be adjusted at a later date. Why adjust then when information is known now? Why stymie the possibility to get such information now when it is likely to exist? Exhibit 1 is the September 25, 2018 article by Sky Visions consultant K.T Weaver, "Security Risks and Technology Obsolescence Reduce Smart Meter Expected Lifetimes". The article makes the case that the service life is driven *by both technology obsolescence and security issues* and suggests that meter life will not exceed 10 years. It refers to testimony before Congress by Bennett Gaines, a FirstEnergy executive, that the service life of smart meters should be regarded as being between 5-7 years. (View time stamp 1:40:56 in the hearing's video minutes, here: https://science.house.gov/legislation/hearings/subcommittee-energy-and-subcommittee-research-and-technology-hearing (Click on "Cybersecurity for Power Systems") The Weaver article cites the European consumer organization, BEUC, which believes meters would need to be replaced in as little as 8 years and at most 15 years. The U.S. consultancy Accenture believes the meter life is between 5 and 15 years and the Edison Electric Institute, which is sponsored by industry believes they are 10-15 years. The article cites many other international bodies, including the Ontario Energy Board and they all agree the meter life is much less than 20 years. The article cites to a report by the UK Institute of Directors that one meter component can wear out in 4 years. Any data that Aclara has about the rate at which its current meters fail would be instructive both to estimate costs of retrofits and to assess a proper depreciation rate.

The article goes on to refer to emerging cybersecurity threats and how the inability of meters to deal with them will affect their obsolescence. While the tribunal has declined to

address the disturbing news that the Department Homeland Security will be holding three upcoming hearings on cybersecurity (this issue has been preserved for review[1]), how smart meters are able to cope with these threats is relevant and if there is information that they cannot and/or need a retrofit, this will affect an assessment of costs. (The application asked for information about how "devices" affect the meters' ability to bill; certainly any security threats may affect billing as well as hacking- these two issues could be inextricably linked). The point is the issues affecting meter life are multifactorial; the proposed subpoena asks for information in Aclara's possession that could answer questions about what Aclara knows about factors that affect billing accuracy (and meter life). Any retrofits to fix problems that they know will need to be sold to O&R (or ConEd) in the near future should be disclosed at this time- it affects depreciation rate as well as costs that O&R should figure in to the AMI program.

Most significantly, the consultancy Price Waterhouse Coopers ("PwC") documents Internal Revenue Service ("IRS") guidance that certain meters should be depreciated over five years. Exhibit 2 consists of the PwC summary as well as IRS Taxpayer Advice Memorandum 201244015 itself which cites to relevant case law as well as portions of the code. The IRS also determined that the meters were computers under asset class 00.12 of Rev. Proc. 87-56 because it has the attributes of a computer: it is programmable, it has a central processing unit with storage and other logic functions. The IRS further said that exceptions to computing devices did not apply under class 00.12 because the meters do not perform a distribution function. The IRS does have a definition of a qualified electric meter (§ 168(e)(3)(D)(iii))., but even those are subject to a 10 year depreciation schedule. The IRS depreciation schedule is at odds with staff's

[1] The article also refers to a critique by Nick Hunn of the British Infrastructure Group report (another set of evidence preserved for review) which claims that it shows that smart metering is no longer financially viable and refers to civil servants "pulling the wool over the eyes of various Parliamentary Committees". This appears to be a ubiquitous critique across jurisdictions. Grassroots asserts that sunlight is the best disinfectant and in any case, there is no legal reason to prevent a cost assessment that intersects with issues regarding previous approvals.

depreciation schedule; in any event, it suggests that any information that can sharpen this analysis is warranted.

The IRS definition should be considered concomitant with 18 CFR Part 101- Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act; namely:

> 22. *Depreciation Accounting.*
>
> > A. *Method.* Utilities must use a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property over the service life of the property.
> >
> > B. *Service lives.* Estimated useful service lives of depreciable property must be supported by engineering, economic, or other depreciation studies.
> >
> > C. *Rate.* Utilities must use percentage rates of depreciation that are based on a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property to the service life of the property. Where composite depreciation rates are used, they should be based on the weighted average estimated useful service lives of the depreciable property comprising the composite group.

The composite group comprises computers, which has parts that can wear out and be subject to interference from external sources which can cause them to wear out. Thus, any information that would sharpen this analysis would provide a more accurate depreciation charge.

Also of note is the fact that Duke Energy has filed with the Ohio Public Utilities Commission ("PUCO") to replace the 717,000 AMI meters installed from 2010-2015 with new AMI meters in case # 17-0032-EL-AIR (consolidated with case # 17-1263-EL-SSO). According to the June 1 2017 testimony of Donald L. Schneider, Jr., a general manager at Duke Energy, (on behalf of Duke Energy Ohio), Duke Energy wanted to replace one smart meter system that had only been in place with yet another smart meter system to have enhanced billing. (See Exhibit 3). The technology is changing rapidly and challenges to the old technology manifest with time, which is something that Aclara should disclose if it has information about any such challenges and the effects on metering and billing so we can make an educated

assessment as to whether O&R will go the way of Duke and file for an entire new system, or a substantial retrofit to the existing system to remedy issues in the next few years. Certainly O&R, which is now going through its second change in less than a decade never explained why it bothered to invest in AMR's in the first place only to switch them out for AMI's within a decade. Now that they have been given approval to do so, it is important that any new information be provided that would suggest the likelihood of a third rollout of new metering technology in short order.

CONCLUSION

Technology obsolescence, metering/billing performance and service life are issues that must continually be evaluated as they bear upon costs. Aclara has sold their meters into the market for a while now and should be made to report back any information that would help to properly assess meter life and any dysfunctions from external or internal sources that would necessitate meter retrofits and/or software retrofits for billing in case it is known at this time that O&R will be having to spend money to fix glitches. The ratepayers should have the appropriate rate based upon an accurate estimate of meter life and depreciation charge.

For all the aforementioned reasons, Grassroots supports the application for issuance of the requested subpoena duces tecum

Respectfully submitted,

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