BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 17M-0694E

IN THE MATTER OF THE COMMISSION'S REVIEW OF ITS RULES GOVERNING ELECTRIC RESOURCE PLANNING, IMPLEMENTING COLORADO'S RENEWABLE ENERGY STANDARD, AND ENABLING NEW TECHNOLOGY INTEGRATION

ENERGY FREEDOM COLORADO

THE CASE TO STUDY RETAIL ELECTRICITY CHOICE

OVERVIEW

Proceeding No. 17M-0694E initiates a review of Colorado energy regulations by requesting input in five areas: rule change suggestions concerning Electric Resource Planning; the Renewable Energy Standard; Federal Public Utility Regulatory Policies Act of 1978 (PURPA) Qualifying Facilities; input on the general topic of Distribution Resource Planning; and a general opening for "*discussion of additional information that may be useful in the course of a future rulemaking proceeding*" and "*suggestions as to topics the Commission should explore through workshops, as part of this proceeding*." **[1]** This submission is responsive to the latter area of interest.

This is a good time for the Commission to conduct workshops and/or initiate a docket to study the idea of retail electricity restructuring in Colorado (also called "retail choice" or "retail competition"), where individuals, businesses, and communities can choose between electricity providers who compete for customers on the basis of cost and energy source, in contrast to our current regulated monopoly system and cost-of-service utility model. Restructuring involves "unbundling" vertically integrated utilities into separate electricity generation and delivery ("wires") companies. The generation is divested to a separate company that competes with other generators and power marketers, while the transmission and distribution systems remain regulated monopolies.

We would expect retail competition to bring ratepayers cheaper and cleaner electricity, and to set Colorado on a course to prosper in the more distributed, innovative, dynamic, complex, renewable, and efficient electricity system of the future. While retail competition and consumer choice of electricity provider are foreign concepts in Colorado, restructuring has a proven record in many states (figure, **[2]**). We therefore have the opportunity to learn the lessons and best practices of successful restructuring programs **[3]**, and design a system that would best serve Colorado. We can also learn from Nevada's on-going process of implementing both retail and wholesale competition **[4]**. It is also good timing that the Public Utilities Commission (PUC) is already investigating a Regional Transmission Organization (RTO) and wholesale markets **[5,6],** a necessary precursor to retail restructuring.

Competition: Wholesale (poles), Retail (stars)

THE FOREST AND THE TREES

Important "big picture" questions often go unasked; for example: "Should Colorado still allow monopolies on electrical generation when competition is obviously successful in many states?" "Why do we accept the "perverse incentives" inherent in the cost-of-service utility model – where utilities are motivated to maximize capital expenditure and largely ignore pass-through fuel costs – when competition and consumer choice could reduce these risks to ratepayers?" ***Good questions!***

"If a problem cannot be solved, enlarge it" – Dwight Eisenhower

As the quote suggests, we often cannot see big-picture solutions when focusing on many individual and seemingly disconnected issues. The aim of this Comment is to broaden the energy discussion to include "the other way" that people in this country receive their electricity, through competitive retail markets and choice of electricity provider.

The actions of monopoly investor-owned utilities (IOUs) are primarily driven by the goal of maximizing returns for shareholders, subject to PUC constraints concerning the effects on ratepayers, society, and state policy goals. This is not because utilities are evil; it is because they are doing what they were designed to do. However, a regulatory framework that worked well to expand the grid across the country now fails us due to misaligned incentives between utilities and ratepayers. Utilities seek to build ever-more infrastructure to maintain profitability, while ratepayers want smarter, cleaner, cost-effective, customer-centered electrical service **[7]**. By updating the monopoly utility model to harness the forces of competition, many misaligned incentives become aligned at once, in contrast to the impossible task of trying to address individual perverse incentives in the context of the cost-of-service model.

SOME RESTRUCTURING BASICS

States vary in how they have implemented restructuring. Texas has retail choice for individuals only **[8]**; California has community choice aggregation (CCA) **[9,10]**; Illinois **[11]** and Massachusetts **[12]** have individual choice as well as community-level choice with an individual opt-out provision. Community-level choice is an important element of retail competition for individuals and small businesses, who in its absence are likely to just accept the default provider rather than conduct "due diligence" to choose a competitive supplier. In contrast, community leaders and/or the local electorate, as with large commercial or industrial energy users, have the resources and motivation to conduct research and make an informed decision.

Restructuring generally applies only to IOUs and does not impact electric co-ops and municipal utilities, although some states allow them to participate in retail choice on an opt-in basis **[13]**.

To promote true competition, most restructured states have required their IOUs to divest their generation to either a subsidiary, a wholly independent company, or independent power producers. The IOU still retains a regulated monopoly over their distribution system, and can focus on optimizing the system for customers. Restructuring also opens up more opportunity for a "performance-based" business model, where some utility revenue is based on their performance of distribution system management rather than on capital expenditure **[14]**.

WHY CONSIDER RETAIL ELECTRICITY RESTRUCTURING IN COLORADO? [15]

- Competition will lower costs for consumers **[16,17,18]**.
- Competition and consumer choice will lead to cleaner electricity, especially as the cost of renewable energy and energy storage continue to decline **[19,20]**. Many retail providers offer a high-renewables option.
- Corporations want to contract directly for low-cost renewables **[21,22]**, without the additional costs added by monopoly utilities. States without corporate choice may have difficulty attracting and keeping energy intensive businesses **[23]**.
- Electricity generation is no longer a "natural monopoly." Monopolies can no longer be justified given thriving competition in other states.
- Competition shifts the risk of generation investment from consumers to the private sector, where it belongs.
- The cost-of-service utility model, where utilities earn returns only on invested capital, tends to inflate costs by encouraging overbuilding, stifling innovation, and disincentivizing energy efficiency.
- Competition will likely accelerate innovation if third parties are allowed to propose better solutions for grid needs. Innovative solutions include the following: "Non-wires alternatives"; energy storage; demand-side management; and other distributed energy resources. These are more flexible alternatives to new transmission, upgraded substations, and centralized baseload generation.
- Now is the time to act, as retail markets will take at least 3 to 6 years to implement. It is also good timing because wholesale markets for Colorado are currently being investigated.

WHO MIGHT FAVOR RETAIL COMPETITION AND CHOICE OVER MONOPOLIES?

- Large commercial and industrial energy users
- Independent power producers and power marketers
- Renewable project developers
- Communities in IOU territory that want cheaper and/or cleaner electricity
- Conservative groups that prefer free markets and consumer choice over monopolies
- Environmental groups that realize competition will bring more renewables online
- Any ratepayer in IOU territory who wants choice and cheaper or cleaner electricity
- Consumer advocates
- CEOs of monopoly utilities who want to reduce the risk exposure of their business

That is, ***almost everyone would want retail choice*** if only they knew what it was, and that it exists in many other states and could exist here. However, the above groups do not typically communicate with each other or with Legislators or Commissioners about retail choice, so it is difficult for a broad and informed consensus on restructuring to arise.

A growing number of Colorado cities want more renewable energy **[24]**, and many have pledged to procure 100% renewable energy. But in the current monopoly system, this choice is not an option.

In Massachusetts, restructuring was strongly supported by the CEO of one of the state's largest monopoly IOUs, after he concluded that divesting generation and recovering "stranded costs" would reduce risk exposure for the company **[25]**. Today, we are again in a situation where generation is the riskiest part of an IOU's business, as we transition to a more distributed, high-renewables grid that emphasizes innovations such as non-wires alternatives over centralized baseload generation and more transmission.

There are very few venues, besides Energy Freedom Colorado, where interested parties can learn about retail restructuring and collaborate. The Commissioners would be doing a great service for all the above groups by accepting the responsibility of facilitating public discussion and education about restructuring in Colorado.

LESSONS FROM NEVADA'S ON-GOING RESTRUCTURING PROCESS

Nevada voters overwhelmingly passed an amendment in 2016 that eliminates energy monopolies and establishes retail choice **[26]**. In response, Nevada's Governor formed the Committee on Energy Choice (CEC) to study restructuring and how best to implement it in Nevada **[4]**. The CEC is simultaneously also evaluating Nevada's options for an RTO and competitive wholesale markets.

Colorado could learn a great deal from Nevada's detailed and thorough investigation of both retail and wholesale competition. We should also note their transparent stakeholder process, where all presentations and meeting recordings are posted on the CEC website. This includes presentations by utilities, RTOs and market operators, other states' Commissioners, business representatives, environmental groups, the Nevada Public Utilities Commission (PUCN), and the public. A small fraction of noteworthy presentations includes:

- The CEC's request for the PUCN to open a parallel Investigatory docket with hearings and workshops to produce "*a comprehensive product that has been developed from a wide array of diverse perspectives.*" **[27]**
- A detailed "to do list" of topics to investigate and questions to be answered by the CEC working groups **[28]**.
- Lessons from Nevada's restructuring attempt in the 1990s **[29]** (related article: **[30]**).
- A former Pennsylvania Commissioner's letter to the CEC about why Pennsylvania restructured its electricity system **[31]**.

It is relevant and good timing that both Nevada and Colorado are currently investigating RTOs and wholesale markets. In addition to a utility proposal to join the Southwest Power Pool **[32]**, there are several other wholesale market options that

Colorado utilities could investigate **[33]**, including joining forces with Nevada utilities and others to stand up a new Western RTO or joining the existing RTO in the Western Interconnection (California ISO). Although Colorado can consider wholesale and retail competition separately, it may be more productive and optimal to consider them together because one affects the other.

PROPOSAL TO THE COMMISSIONERS

Restructuring is a proven idea. However, it is a big idea that will take time and effort to study and understand its full potential. Energy Freedom Colorado suggests that a solid first step would be a serious investigation of restructuring at the PUC, with hearings, invited presenters, and workshops, perhaps similar to the on-going investigation in Nevada.

Skepticism and questions would be only natural: "What if...?" "How would...?" "But what about...?". Such questions would indicate that a thoughtful, transparent, and broadly participatory docket including expert and stakeholder presentations and workshops is exactly what is needed to understand the high-level idea of competitive vs monopoly retail electricity provision.

There is a great deal of learning to do and groundwork to lay among many stakeholders (Legislators, the Executive, Commissioners, business interests, advocacy groups, citizens, and utilities). The Commissioners could perform an important service for all Coloradans by taking a first step in the educational process and open an investigatory docket or other means of exploring restructuring in Colorado.

CONCLUSION

The monopoly utility model has served us well as a practical and effective way to expand the U.S. electricity system, but in the modern context it may have become a hindrance to progress on grid modernization, economic efficiency, and cheaper and cleaner electricity for ratepayers. It is a good time to consider the future of Colorado's electricity system by learning from other states and from energy thought leaders about what a 21st century electricity system in Colorado could be. Stakeholders and society would benefit from a thoughtful conversation about restructuring and its possibilities and promise; one way to begin the conversation is with workshops and/or a docket at the PUC.

To be clear, this document is ***not*** an appeal to implement restructuring, but only to study and consider it, perhaps in advance of a next step where retail competition and consumer choice is compared to the existing vertically integrated monopoly system, which surely has its merits too.

REFERENCES AND RECOMMENDED READING

1. *Commission Decision No. C17-0878 to open Repository Proceeding 17M-0694E*. https://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=874888

2. *States with Electricity Competition*. EFCO website. http://energyfreedomco.org/f2-markets.php

3. *Key characteristics of successful state retail restructuring programs*. EFCO website. http://energyfreedomco.org/colorado-retail.php#sec4

4. *Nevada Governor's Committee on Energy Choice (CEC)*. http://energy.nv.gov/Programs/TaskForces/2017/EnergyChoice/

5. *Docket No. 16I-0816E*. https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=16I-0816E

6. *Wholesale electricity markets, and a proposal to bring them to Colorado*. EFCO website. http://energyfreedomco.org/wholesale.php

7. *The simple reason most power utilities suck*. David Roberts - Vox (Sept. 2017). https://www.vox.com/2016/6/29/12038074/power-utilities-suck

8. *Electricity competition and consumer choice in Texas*. EFCO website. http://energyfreedomco.org/texas.php

9. *California PUC staff: Non-utility suppliers could serve 85% of load by mid-2020s*. Robert Walton - Utility Dive (May 2017). https://www.utilitydive.com/news/california-puc-staff-non-utility-suppliers-could-serve-85-of-load-by-mid-/442897/

10. *Consumer and Retail Choice, the Role of the Utility, and an Evolving Regulatory Framework.* California PUC Staff white paper (May 2017). http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/Retail Choice White Paper 5 8 17.pdf

11. *Electricity competition and consumer choice in Illinois*. EFCO website. http://energyfreedomco.org/illinois.php

12. *Municipal aggregation - Massachusetts*. Mass.gov website. https://www.mass.gov/service-details/municipal-aggregation

13. *What would retail electricity competition mean for Colorado?* EFCO website. http://energyfreedomco.org/colorado-retail.php#sec2

14. *You get what you pay for: Moving toward value in utility compensation. Part 2 - Regulatory alternatives*. Dan Aas and Michael O'Boyle - America's Power Plan (June 2016). http://americaspowerplan.com/wp-content/uploads/2016/06/2016_Aas-OBoyle_Reg-Alternatives.pdf

15. *Restructuring a monopoly state: What, Why and How*. EFCO website. http://energyfreedomco.org/why-restructure.php

16. *Electricity competition excels in the Midwest*. Devin Hartman - R Street (Oct. 2017). http://www.rstreet.org/wp-content/uploads/2017/10/RSTREETSHORT50.pdf

17. *White paper finds customers are better off with competitive energy markets*. Darrin Pfannensteil - Utility Dive (June 2017). Summary of this white paper by Philip O'Connor - Retail Energy Supply Association. https://www.utilitydive.com/news/white-paper-finds-customers-are-better-off-with-competitive-energy-markets/445319/

18. *Electricity reform and retail pricing in Texas*. Hartley, Medlock and Jankovska - Rice University (June 2017). [Executive summary] [Full study] http://www.bakerinstitute.org/research/electricity-reform-and-retail-pricing-texas/

19. *Levelized cost of energy from fossil and renewable sources*. Lazard (2016). EFCO website. http://energyfreedomco.org/f3-LCOE.php

20. *Xcel solicitation returns 'incredible' renewable energy, storage bids*. Robert Walton - Utility Dive (Jan. 2018). https://www.utilitydive.com/news/xcel-solicitation-returns-incredible-renewable-energy-storage-bids/514287/

21. *Expanding the western electricity grid*. Constanti and Abbott - RMI (Jan. 2018). https://rmi.org/news/expanding-western-electricity-grid/

22. *Corporate renewable energy buyers' principles*. World Resources Institute and World Wildlife Fund. http://buyersprinciples.org/principles/

23. *Utilities squeezed as corporations seek renewable energy elsewhere*. Karen Uhlenhuth - Nation of Change (Oct. 2016). https://www.nationofchange.org/2016/10/13/utilities-squeezed-corporations-seek-renewable-energy-elsewhere/

24. *Colorado Cities for Climate Action (CC4CA)*. http://cc4ca.org/who-we-are/

25. *How one utility CEO stopped worrying and learned to love restructuring: The Massachusetts Electric story*. EFCO website. http://energyfreedomco.org/mass-restructuring.php

26. *Nevada: 72% for retail choice*. EFCO website. http://energyfreedomco.org/nevada.php

27. *Nevada Energy Choice Committee – Request for PUCN Investigatory Docket*.
http://energy.nv.gov/uploadedFiles/energynvgov/content/Programs/TaskForces/2017/EC Request For Investigatory Docket.pdf

28. *Open Energy Market Design & Policy: Commercial and Residential*. Nevada Energy Choice Committee's "to do" list.
http://energy.nv.gov/uploadedFiles/energynvgov/content/Programs/TaskForces/2017/Technical Advisory Committee Workstreams_ Issues Assigned by Chairman(1).pdf

29. *Historic Overview: Nevada Deregulation 1990's*. PUCN presentation to the Nevada Energy Choice Committee.
http://energy.nv.gov/uploadedFiles/energynvgov/content/Programs/TaskForces/2017/11-07-2017_EnergyChoice_Agenda6_PUCN Presentation.pdf

30. *What Nevada can learn from its attempt (and failure) to deregulate the energy market in the 1990s*. Riley Snyder - The Nevada Independent (June 2016).
https://thenevadaindependent.com/article/what-nevada-can-learn-from-its-attempt-and-failure-to-deregulate-its-energy-market-in-the-1990s

31. *Pennsylvania letter to the Nevada CEC - reasons that Pennsylvania restructured*.
http://energy.nv.gov/uploadedFiles/energynvgov/content/Programs/TaskForces/2017/Agenda item 5 - Pennsylvania Presentation.pdf

32. *Wholesale electricity markets, and a proposal to bring them to Colorado*. EFCO website.
http://energyfreedomco.org/wholesale.php

33. *Recommendation to communicate with the Nevada CEC on this matter*. Public comment on docket no. 16I-0816E.
https://www.dora.state.co.us/pls/efi/efi.show_document?p_dms_document_id=877682&p_session_id=

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