

JOHN A. NICHOLS
406 Meadow Lane
Middletown, DE 19709
(302) 378-0683

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Environmental Appeals Board
89 Kings Highway
Dover, DE 19901

Attention: Administrative Assistant to the Environmental Appeals Board.

Statement of Appeal from Secretary's Order No. 2019-A-0019, which was issued (and became effective) on April 22, 2019.

I. Interest that has been substantially affected - Like other Delmarva Power customers in Delaware, I am subject to the Qualified Fuel Cell Provider (QFCP) tariff, which is charged on monthly electric power bills to cover the "excess cost" involved in operating two fuel cell facilities (Red Lion, 26.8 MW, and Brookside, 3 MW) where – pursuant to Bloom Energy's contract with Delmarva Power - electric power is being generated and sold to the power grid.

Bloom Energy (BE) and/or assignees were to construct and operate the Red Lion and Brookside power plants. BE would supply the fuel cells, purchase natural gas to power the fuel cells from Delmarva Power (DP), and receive the QFCP tariff (billed to ratepayers and collected by DP) at a rate calculated on a monthly basis to provide the agreed level of cost reimbursement (including recovery of capital costs).

This arrangement was proposed in 2011, with active sponsorship by the Department of Natural Resources and Environmental Control (DNREC), as an inducement for BE to locate a fuel cell manufacturing facility in Delaware.

The QFCP tariff was approved on a binary (yes or no) basis by the Delaware Public Service Commission (PSC) with the understanding that it would remain in effect for 21 years unless BE's contract with DP was modified in the meantime.

The fuel cell generation project has proven very costly for DP ratepayers, with the amount of the QFCP tariff running substantially higher than 2011 projections.

The QFCP tariff was initially forecast as less than 70¢ per month for the typical DP ratepayer. Press release package, 6/10/11.

Several months later, when the QFCP tariff was being reviewed by the PSC, the estimated cost had risen to \$1.00 per month (Delmarva Power) or \$1.34 per month (New Energy Opportunities, Inc., a consultant retained by the PSC). Order 8079, 12/1/11. There is no fixed cap on the tariff, and it is now running some four or five dollars per month for a typical ratepayer (much higher for business customers).

To date, DP ratepayers have been billed over \$200 million for the QFCP tariff, net of proceeds from selling all electric power produced to the grid (in competition with the other energy sources being used to generate electric power). The cumulative tariff is increasing by about \$3 million per month, and if this pattern continues the payments will total nearly \$700 million through 2033.

I filed a petition with the PSC on September 20, 2018 urging the commission to investigate possible ways of mitigating the ongoing financial penalty for DP ratepayers.

The PSC dismissed my petition on October 9, 2018; the basis of their decision was that they would have no legal authority to adjust the QFCP tariff unless and until the underlying BE/DP contract was voluntarily modified.

It was originally contemplated that BE would periodically (e.g., every 5 to 6 years) replace the “stacks” in each of BE’s generation boxes due to performance degradation over time. Such maintenance was to be done at BE’s expense. BE’s monthly operation metrics (publicly available) have demonstrated a progressive rate of degradation, apparently due to deferred maintenance.

In November 2018, BE proposed to replace all of the fuel cells at Red Lion and Brookside with a different layout of more advanced fuel cells.

Action	Red Lion (coastal zone)	Brookside (Newark)
Remove	134 servers/ 26.8 MW	15 servers/ 3 MW
Replace with	110 servers/ 24.9 MW	13 servers/ 2.6 MW
Pads left vacant	24	2

This would represent a total replacement of the facilities, not maintenance, which would presumably achieve cost reductions and qualify for 30% federal investment tax credit (ballpark estimate of \$100 million) on the new fuel cell investment.

The proposed actions appear to represent a de facto amendment of the existing business arrangement, such as would enable the PSC to reopen the QFCP tariff and seek adjustments for the benefit of DP ratepayers.

Another DP ratepayer (William Whipple III) specifically raised this point in his 1/21/19 letter of comment to the hearing officer re BE’s construction permit application to DNREC.
<https://bit.ly/2ASvXni>

From the standpoint of Delmarva Power ratepayers, the Qualified Fuel Cell Provider tariff that was approved by the Delaware Public Service Commission in 2011 has represented an extraordinary burden (the “excess cost” borne by ratepayers is over \$200 million to date, the total is growing by about \$3 million per month, and by its terms the tariff will remain in effect until 2033). Given this background, it seems imperative that the proposed replacement of fuel cells be reviewed in depth by the PSC to ensure that an equitable portion of the economic savings from installing new and technologically improved fuel cells would be applied to reduce the amount of the QFCP tariff that will otherwise be payable by the ratepayers between now and 2033.

It is known that this letter of comment was received since a snippet (re: decoking) of one of Mr. Whipple’s other comments was noted in the hearing officer’s report, but the comment about the need for PSC was ignored. By taking the position that the matter was none of its concern and purporting to provide all necessary state approvals for the BE proposal, DNREC materially and adversely affected the financial interests of all DP ratepayers.

In addition, although the amounts involved cannot be so readily quantified, the undersigned and other Delawareans have an interest in a proper determination of the environmental issues

that were raised on the BE construction permit. Several deficiencies in the DNREC review of environmental issues are noted in point 2 and explained in point 3.

2. Decisions that are alleged to have been improper – (A) Failure to involve the PSC in the review to protect the interests of DP ratepayers – see point 1. (B) Failure to review disposal plans for the old fuel cells, potentially representing some 6 million pounds of electronic waste. (C) Failure to review disposal procedures for toxic sulfur canisters, the majority of which are created in the Coastal Zone at the Red Lion facility and disposed of in a manner that was not disclosed in the original Coastal Zone application. (D) Failure to evaluate air quality issues associated with decoking of the BE fuel cells.

3. Reasons why said decisions were improper – (A) Failure to involve the PSC, etc. was improper for the reasons stated in point 1. (B) It's not apparent from the hearing officer's report that the disposal of the old fuel cells was recognized as an issue, let alone being appropriately reviewed. (C) **It** appears that the reviewing staff within DNREC limited their review to air quality issues, which presumably means that the handling of solid waste, e.g., toxic sulfur cannisters was ignored. See 2/22/19 memo per Angela Marconi, PE and Karen Mattio, PE, under "comments and DAQ responses." Given the Coastal Zone Application history, this omission is particularly egregious. (D) Emissions during the decoking process represent a readily foreseeable part of the overall performance of the BE fuel cells and should therefore not be ignored.

4. Scope of hearing – I would anticipate calling approximately six witnesses, and requiring a minimum of two days to present our case. Time would also be needed for the DNREC (and perhaps Bloom Energy) response, so let's say the hearing would take 4-5 days in total.

5. Deposit for costs - A check for \$50 is enclosed.

Respectfully,

John A. Nichols