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FERC Proposes New Treatment of Fuel Cells Under PURPA

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Comments for FERC's ***Notice of Proposed Rulemaking on Fuel Cell Energy Output*** ("NOPR") are due tomorrow, November 25, 2020.***[1]*** In the NOPR, FERC proposes to modify its regulations for qualifying facility ("QF") status under the Public Utility Regulatory Policies Act of 1978, as amended, ("PURPA") to allow Solid Oxide Fuel Cell systems with integrated natural gas reformation equipment to be eligible for PURPA QF status. This post provides an overview of the NOPR itself. The Bracewell team will follow up next week with an overview of the comments that are posted in this docket.

QF owners enjoy three primary benefits, among a variety of others. First, the energy output of a QF may be "put" to the interconnected utility at the utility's avoided cost unless the utility has been relieved of its PURPA purchase obligation. With certain limited exceptions, utilities have not been relieved of that obligation for small QFs. Second, the owners of QFs are subject to very light-handed regulation by FERC and are exempt from most FERC regulation even if they sell electricity at wholesale. Third, many states lightly regulate the owners of QFs so QF status can relieve its owner of regulation at the state level. As an aside, FERC's rules implementing PURPA also apply in ERCOT, unlike many other FERC requirements.

There are two types of QFs – small power production facilities that rely on renewable energy input such as solar, wind or hydro. The second type of QFs are cogeneration facilities. Cogeneration facilities are very efficient and are required to satisfy stringent PURPA operating and efficiency standards. Most typically, a FERC cogeneration QF has an on-site thermal host that relies on its steam output for an industrial purpose (i.e., the steam is useful thermal energy).

In the NOPR, FERC explains that the by-product of a fuel cell's production of electricity is heat and steam, some of which is then used in the steam-methane reformation process to convert more methane into hydrogen, which a fuel cell uses, in combination with oxygen from the air, to produce electricity.***[2]*** FERC also points out that similar to more "traditional" cogeneration QFs, Solid Oxide Fuel Cell systems with integrated natural gas reformation equipment generate two forms of useful energy: thermal energy used to produce hydrogen and electricity.***[3]*** FERC proposes to modify its regulations to provide that the production of heat/steam by a Solid

Oxide Fuel Cell system for use in an integrated natural gas formation process is an industrial process that yields useful thermal energy output.[4]

Notably, throughout the order the Commission discusses favorably the potential benefits of fuel cells. For example, FERC expressly recognizes the efficiency of fuel cells and emphasizes their ability to convert chemical energy in hydrogen to electric energy without combustion.[5]

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[1] *Fuel Cell Thermal Energy Output; Bloom Energy Corp.*, Notice of Proposed Rulemaking, 173 FERC ¶ 61,050 (2020).

[2] *Id.* at P 16.

[3] *Id.* at P 14.

[4] *Id.* at P 18.

[5] *Id.* at P 11.