



Required State-Level Natural Gas and Hydropower Approvals Threatening Growth

Thomas Russo

The Federal Energy Regulatory Commission's (FERC's) handling of proposed natural gas and hydropower facilities has always been controversial.

Environmentalists and landowners slam FERC for not denying projects, and industry criticizes the agency for not approving them fast enough. Both programs require National Environmental Policy Act reviews and are subject to an alphabet soup of parallel state and other federal agency permit requirements passed by Congress since the 1960s. Most notable among the state permit requirements is the Clean Water Act (CWA) Section 401 permit, often referred to as a water-quality certificate.

Every FERC-approved natural gas project requires a CWA Section 401 permit to begin construction in a given state. Likewise, FERC requires a hydropower applicant to obtain a CWA Section 401 permit before it will issue a license. With the exception of hydropower, historically applicants were able to obtain CWA Section 401 certificates for natural gas facilities without delaying construction.

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And what's different today? For starters, FERC's natural gas program, which has a reputation for getting natural gas facilities approved and built, is beginning to look a lot like FERC's hydropower program. The hydropower program is known for extensive delays and reviews, with few new projects ever built. If natural gas goes the way that hydropower did, that could spell trouble for natural gas producers and purchasers, including Mexico, LNG export terminals, and electric and gas utilities.

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Hydropower is not a growth industry in the United States, and FERC's program is focused mostly on relicensing existing projects. Nevertheless, relicensing can take a minimum of five years, and, in some cases, decades. This caution is rather puzzling because relicensing projects usually results in more environmental benefits to a waterway than under an original license that was issued 30 to 50 years ago.

State agencies with CWA Section 401 authority have literally hijacked FERC's hydropower review process and weaponized it. Now they are going after natural gas facilities, especially interstate pipelines using their CWA Section 401 authority. The hydropower industry fully understands this and even tried to limit the scope of the state's CWA Section 401 authority in the Supreme Court. The industry did not win its case, and it is unlikely that a similar strategy from the natural gas industry will

prevail either. The natural gas and electric industries, Congress, and the administration should really pay attention to this issue if they wish to continue to realize the benefits of the Shale Revolution.

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Trump administration FERC nominees Kevin McIntyre and Richard Glick testified during their Senate confirmation hearing that “FERC does not pick fuels.” However, the hydro program that FERC administers allows the states to do so instead. How can they do that, you ask?

I believe that the states have been using the hydro review process and their CWA Section 401 authority to aggressively pick nonhydropower renewables at the expense of hydropower for many years. This diversion is done under the mantra of environmental protection and the CWA Section 401 process, replete with delays that frustrate new hydropower development. Now New York, which has banned hydraulic fracking, is taking the same approach with natural gas pipelines by denying the CWA Section 401 permits and not allowing these projects to be constructed and go forward. The signal I believe New York is sending is “no need to apply if you want to transport gas to New York or through it.” Despite FERC's efforts to bring order to an unruly review process in its hydropower and natural gas programs, the states have delayed relicensing, stopped and/or discouraged new hydro, and recently have delayed and stopped several natural gas pipelines from being completed.

While the CWA Section 401 permit requirements are largely responsible for hijacking FERC's review process, the requirement for Coastal Zone Management Act (CZMA) determinations for projects located in coastal zones has also been weaponized by New York. Interstate natural gas pipeline projects are especially at risk. Outright denial of CWA Section 401 permits by New York State for the proposed Constitution and Northern Access natural gas pipelines may be the beginning of a trend.

National and local environmental groups and landowners in and outside of New York are pressuring other states to follow New York's lead on

other natural gas pipelines, pending FERC review. These include the proposed Penn East, Atlantic Coast, Mountain Valley Pipeline, and other pipeline proposals that will pass through New Jersey, Ohio, West Virginia, Virginia, and other states. If other states follow New York and thwart and deny CWA Section 401 permits, this will require legislative action to correct. That's assuming that Congress sees the need to do anything at all to restore some balance to both programs. The new administration often advocates transferring infrastructure back to the states.

However, doing so with linear infrastructure like natural gas pipelines would be disastrous in most cases.

HYDROPOWER PROGRAM

According to a recent R Street Institute report,¹ FERC plays an administrative role, while state water-quality agencies have de facto power over permitting approvals, denials, and delays of hydropower licensure. FERC's practice of not issuing a hydropower license until receipt of a CWA Section 401 certificate is largely to blame for the current state of affairs.

Developers who wish to build brand-new hydropower projects, including those at federal dams like the US Army Corps of Engineers are at a severe disadvantage. Investors in new hydropower are often discouraged by the five-year process for FERC to issue a license. It normally takes three years to develop an application and an additional two years for FERC to issue a license. FERC's ability to issue a license in two years depends on whether the CWA Section 401 permit has issued.

The majority of FERC's hydropower work is relicensing existing projects. Existing licensees begin work five years before the expiration of their original license. Not all hydropower licensees are in a hurry to expedite relicensing.

Licensees that are not adding generating capacity and not needing extensive structural modifications have little to gain other than the need to complete the process. Some projects like the Walters Project in North Carolina took decades to relicense. There are few consequences because the projects would continue to operate under an annual license until the new license is issued.

There are exceptions, though. Any licensees wishing to upgrade their hydro turbines and

generators or add additional generating capacity really can't go forward until a new license is issued.

CAN FERC CHANGE THINGS FOR THE BETTER?

Overall, the extensive delays in the hydropower program are a big disincentive for adding hydropower capacity to the grid. A recent US Energy Department study found the potential for hydropower to grow nearly 50 percent beyond its current rate.² Faced with a prolonged and risky review process at multiple levels, investors and developers will support other fuels, such as wind, solar, and electric storage, that have less rigorous reviews and that don't trigger CWA Section 401 and CZMA determinations.

It's easy to blame state agencies with CWA and CZMA authority for everything, but FERC performance requires scrutiny as well. FERC's budget performance goal is to issue a licensing order within 24 months of publishing a notice that it has everything it needs to analyze a project.³ According to its FERC 2018 budget submittal, it only meets that performance goal 75 percent of the time.

FERC's practice of not issuing a hydropower license until the CWA Section 401 or CZMA permit issues does not appear to have a legal basis. FERC could easily improve its own performance and provide more certainty to stakeholders and the investors by issuing "conditioned" licenses for all hydropower projects, not just hydrokinetic projects, as it did in 2007. FERC's Policy Statement on Conditioned Licenses for Hydrokinetic Projects (Docket No. PL08-1-000, issued November 30, 2007) stated the following: "where the Commission has completed its processing of license applications for hydrokinetic projects, but where other authorizations required under federal law have not yet been received, it will issue conditioned licenses for hydrokinetic projects, predicated on the licensee being precluded from commencing construction until the necessary authorizations are received."

FERC could easily issue conditioned licenses on all hydropower projects and dramatically improve its performance. A conditioned license would send a strong signal to hydropower investors and other stakeholders that FERC's review is completed. It would also put pressure on applicants to complete the CWA Section 401 and other permit applications and for states to issue the CWA Section 401

permits. Today, state agencies with CWA Section 401 authority have no incentive to act, even when a developer and stakeholders have signed a comprehensive settlement regarding the project's licensing and mitigation.

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Clearly, brand-new hydropower projects are at a distinct disadvantage under the current practice of FERC waiting for the CWA Section 401 to issue before issuing a licensing order. Even the most pro-hydro investors will begin to look at other electric-generating projects rather than deal with such a burdensome and risky hydropower licensing process.

NATURAL GAS PROGRAM

In contrast, FERC's management of the natural gas program never allowed the CWA Section 401 authority delegated to the states by the US Environmental Protection Agency (EPA) to interfere with approval of a gas facility under the Natural Gas Act. FERC routinely issues "conditional" certificates of public convenience and necessity (CPCNs), thus signaling to investors that its approval of the project is complete for natural gas pipelines, storage, liquefied natural gas (LNG), and peak shaving facilities.

Natural gas applicants face the same regulatory hurdles and inefficiencies at the state and federal levels as hydropower applicants. The problem is significant because new construction is always necessary and extremely important on linear projects such as natural gas pipelines that involve multiple state CWA Section 401 permits to construct the entire project. New natural gas export terminal proposals usually include an interstate natural gas pipeline to ensure adequate gas supplies for the terminal. Hence, LNG projects may be subject to the same delays and challenges in obtaining a timely CWA Section 401 and CZMA determination.

A recent court decision upheld FERC's practice of issuing conditional certificates to natural gas pipelines under Section 7 of the Natural Gas Act, prior to a pipeline applicant's receipt of a CWA Section 401 certification.⁴ States must still issue

these permits before the holder of a CPCN can commence construction in a particular state. While the conditional certificate sends a strong signal to the financial markets, it also puts pressure on the company and shippers who have subscribed to use the pipeline.

That pressure (political and otherwise) can be to redouble efforts to complete their permit applications and for other federal and state regulatory agencies to complete their reviews expeditiously. At least the states and other federal agencies cannot use the lack of FERC review as an excuse for not acting. Independent of FERC, natural gas applicants can also seek relief directly with state agencies or through the courts. While not ideal, the idea of issuing conditional CPCNs acknowledges FERC's limited ability to influence the pace of state CWA Section 401 and CZMA permit requirements but underscores the financial benefits to project developers of issuing conditional project approvals.

HISTORY IS NO PREDICTOR OF THE FUTURE

Conditional CPCNs issued by FERC worked in the past, but beginning last year they have hit a speed bump.

For example, after a prolonged process, New York State denied the water-quality certificates on the Constitution and Northern Access pipelines, because construction would affect stream crossings and violate water-quality standards. Recent court decisions appear to uphold the state's right to request additional information from applicants to process their CWA Section 401 applications. However, I believe that New York State has weaponized the CWA Section 401 and CZMA determination to effectively undermine congressional intent under the Natural Gas Act and other laws.

This is particularly ironic because New York is no stranger to natural gas pipelines (see **Exhibit 1**). Approximately 4,550 miles of natural gas pipelines currently are in service in the state. In addition, 11 interstate pipelines bring natural gas into the state, and New York's legendary steam service relies on natural gas to produce steam that heats and cools some of the city's most iconic buildings.

Besides the recent denials of CWA Section 401 permits, New York also used the CZMA to force Exelon Energy to negotiate the closure of the Indian

Exhibit 1. Natural Gas Infrastructure in New York State


New York State has more than:

- 4,550 miles of natural gas (NG) transmission lines,
- 48,680 miles of NG distribution mains,
- 3,210,800 miles of NG service lines, and
- 1,150 miles of Hazardous Liquid (HL) trunk lines.

New York State has:

- 11 large local distribution companies (LDCs),
- 6 smaller NG LDCs,
- 3 municipal NG LDCs,
- 15 intrastate NG Transmission Line companies,
- 11 interstate NG Transmission Line companies,
- 4 intrastate HL Transmission Line Companies,
- 6 interstate HL Transmission Line Companies,
- 3 intrastate LNG facilities,
- 2 Hydrogen Gas Transmission Line Companies, and
- 1 large Steam LDC.

Source: NY State Department of Pipeline Safety Program.

Point nuclear power plant outside New York City, while allowing several other nuclear facilities upstate to continue operating. Unless Congress, the EPA, and the President's Council for Environmental Quality take action relatively soon, other states may join New York in weaponizing the CWA Section 401 and CZMA. Some states, like New Jersey and Virginia, are already being pressured by national and local environmental groups and landowners to stop natural gas pipelines by denying the CWA Section 401 permits as New York has done. 

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NOTES

1. R Street Institute. (2017, August 24). *Ebbing the flow of hydropower red tape*. Washington, DC: Author. Retrieved from <http://www.rstreet.org/policy-study/ebbing-the-flow-of-hydropower-red-tape>.
2. US Department of Energy. (2016). *Hydropower vision: A new chapter for America's 1st renewable energy source*; p. xvii. Retrieved from https://energy.gov/sites/prod/files/2016/10/f33/Hydropower-Vision-10262016_0.pdf. These numbers are based on current hydropower capacity of 101 gigawatts and potential of 150 gigawatts.
3. Prior to this, hydropower applicants will spend two to three years preparing its application for license and conducting studies.
4. On May 23, 2017, the US Court of Appeals for the District of Columbia Circuit issued *Delaware Riverkeeper Network v. FERC*.