



scenarios studied.<sup>5</sup> The Commission accepted this analysis as conclusive evidence that the project would result in a net reduction in emissions, and thus did not further assess the project's climate impacts.<sup>6</sup>

The Commission's order fails to independently scrutinize the Lifecycle Analysis and its conclusions. These comments highlight several flaws in the Lifecycle Analysis, some of which the Commission inadequately discusses or incorrectly explains away. While these analytical flaws are important in and of themselves, they also emphasize that the Commission must thoroughly and independently review climate impact analyses put forward by applicants before crediting proposals with net emission reductions. This is particularly important because the Commission's draft policy statements ask applicants and stakeholders to provide detailed information about climate impacts,<sup>7</sup> encouraging lifecycle emissions analysis that Iroquois and some other applicants are already providing.<sup>8</sup> As the Commission moves forward with implementing the new policy statements, FERC must be diligent in assessing reports from applicants, and should neither defer to the applicants' assessment nor leave the task of reviewing it solely to the public.

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<sup>5</sup> *Id.* at 9.

<sup>6</sup> Iroquois Certificate Order, *supra* note 1, at P 56.

<sup>7</sup> Consideration of Greenhouse Gas Emissions in Natural Gas Infrastructure Project Reviews, 178 FERC ¶ 61,108, at P 52 (2022) (explaining the Commission will consider “evidence of a net-reduction in GHG emissions where the use of transported gas displaces the use of a higher emitting alternative fuel; evidence of anticipated changes in downstream usage rates over time; evidence of any real, verifiable, and measurable reduction efforts taken by the pipeline or downstream users to reduce their GHG emissions or offset their impacts; and evidence that a project would displace zero-emissions electric generation”); Certification of New Interstate Natural Gas Facilities, 178 FERC ¶ 61,107, at P 97 (2022) (explaining the Commission will consider evidence of benefits, including “evidence that the project will displace more pollution-heavy generation sources, [and/or] facilitate the integration of renewable energy sources”).

<sup>8</sup> *See, e.g.*, Greenhouse Gas Emissions Supplemental Information: Delta Lateral Project, Kern River Gas Transmission Co., Docket No. CP21-197 (June 2, 2021) [hereinafter Kern GHG Analysis].

## **I. The Commission Must Independently Review and Scrutinize Lifecycle GHG Emissions Reports from Applicants**

Both the draft policy statement on “Consideration of Greenhouse Gas Emissions in Natural Gas Infrastructure Project Reviews” (Draft GHG Policy Statement) and the Draft Updated Certificate Policy Statement explain that the Commission will consider a variety of information surrounding questions of displacement and substitution.<sup>9</sup> As the Commission begins to implement these new policy statements, developers will increasingly provide the kind of emissions information that Iroquois has submitted as part of its application packages. In order to properly effectuate the policy statements, FERC will have to carefully consider these reports before accepting them as evidence that a project will not have insignificant or beneficial climate impacts. And, even before these policy statements take effect, the Commission should be cautious in relying on applicant reports on climate impacts without thorough review.<sup>10</sup>

Like the Lifecycle Analysis, future reports will make a variety of assumptions about, for example, future demand, electrification, renewable resource supply, state laws, integration of cleaner gases like green hydrogen (including the technological feasibility of blending), conversion from coal or oil to natural gas. Assumptions about baseline scenarios, changes in market trends, and changes in local, state and federal law can alter conclusions dramatically. Currently, the applicant makes those assumptions. But it has an incentive to make assumptions that would lead to higher potential public benefits of its project and minimize potential adverse

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<sup>9</sup> See *supra* note 7.

<sup>10</sup> While this comment letter focuses specifically on the report put forward by Iroquois for the ExC project, similar concerns have already arisen with Kern River’s analysis for the Delta Lateral Project, where the developer has argued that project will result in significant emissions reductions because the project will help to close a coal facility and replace it with a new natural gas plant. See Kern GHG Analysis, *supra* note 8. However, as EPA has already argued, there are several flaws in that analysis that suggest reductions are overstated. Comments of U.S. Env’t Prot. Agency at 2–3, Delta Lateral Project Draft Environmental Impact Statement, Kern River Gas Transmission Co., CP21-197 (Dec. 27, 2021).

impacts. Accordingly, the Commission must scrutinize materials submitted to the record to ensure studies reflect reasonable assumptions.

In doing so, the Commission may want to keep in mind that a proper analysis of net emissions should include for features: (1) natural gas demand should not be treated as exogenous;<sup>11</sup> (2) the analysis should include a proper substitution analysis to account for and compare emissions from energy substitutes;<sup>12</sup> (3) the analysis must recognize existing state laws and treat them as binding; and (4) there should be an analysis of potential future climate policies, including how they will change supply and demand and incentivize alternatives.<sup>13</sup>

The Commission has its own obligation to affirmatively conclude that a proposed project is in the public interest,<sup>14</sup> and cannot simply credit applicant reports without an independent review. As discussed below, the Commission’s decision relies on inappropriate or unsupported assumptions, and improperly defers to the applicant’s analysis of lifecycle emissions. This certificate order is the first of many decisions the Commission will issue in which it will have to review a lifecycle analysis. FERC may often be asked to assess whether this kind of information should be credited as evidence that a project will have limited adverse or even beneficial climate impacts. While stakeholders and the public can submit their own evidence and raise issues to the

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<sup>11</sup> Cf. Inst. for Pol’y Integrity at N.Y.U. School of Law, Comment Letter on Revised Draft Environmental Impact Statement for Proposed Cook Inlet Lease Sale 258 at 13–16 (Dec. 13, 2021), <https://perma.cc/QE3D-VA2H> [hereinafter Policy Integrity Cook Inlet Comments] (explaining that Department of Interior’s MarketSim model inappropriately assumes near constant demand (i.e., demand is exogenous to the model) in the face of considerable evidence that future demand for oil and gas will decline considerably as renewables, electric vehicles and building electrification continues).

<sup>12</sup> RACHEL ROTHSCHILD & MAX SARINSKY, INST. FOR POL’Y INTEGRITY, TOWARD RATIONALITY IN OIL AND GAS LEASING: BUILDING A TOOLKIT FOR PROGRAMMATIC REFORMS 12–13 (2021), <https://perma.cc/TG2T-H875> (explaining the advantages of using an energy substitution model, including that it “provides the most accurate and legally sound picture” of climate impacts). This is discussed in greater detail in the next section.

<sup>13</sup> See Policy Integrity Cook Inlet Comments, *supra* note 11, at 14 (challenging the assumption that there will be no future changes in law or policies because that is unlikely given the realities of climate change, and noting that the National Academies of Science has suggested agencies account for uncertainty of long-term energy policies).

<sup>14</sup> 15 U.S.C. § 717f.

Commission, they may lack the time, money, expertise, or information to properly evaluate and challenge reports put forward by applicants with significant resources for technical analysis. As many stakeholders explained and the Commission has recognized in its Office of Public Participation proceedings, it can be particularly difficult for the public to participate in these highly technical proceedings.<sup>15</sup> FERC should not place the burden entirely on the public to challenge these reports.

## **II. Iroquois' Analysis Contains Several Flaws the Commission Overlooks and Thus Does Not Definitively Establish the Project Will Result in Net Emission Reductions**

In previous comments, Policy Integrity highlighted several flaws in the Lifecycle Analysis that would undermine the conclusion that the project will result in a decrease in emissions.<sup>16</sup> Those comments challenged the use of the perfect substitution assumption, which assumes that increasing energy supply has no aggregate greenhouse gas impacts because it entirely offsets substitute production. This assumption ignores that an outward shift in the supply curve will lead to lower prices, and hence the quantity demanded for energy will increase. In addition, the assessed scenarios ignore regulatory realities in New York City and underestimate compliance measures that are likely to be taken to meet local law.<sup>17</sup> Having again reviewed the Lifecycle Analysis, there remain a litany of issues that suggest the Commission should not rely

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<sup>15</sup> FED. ENERGY REGUL. COMM'N, THE OFFICE OF PUBLIC PARTICIPATION 22 (2021) (summarizing comments explaining the technical complexity of issues presented in Commission proceedings and the need for the Commission to provide technical assistance); *id.* at 10 (listing providing technical assistance as one of OPP's functions). FERC also held a workshop on technical assistance in response to comments submitted in the OPP docket. While that workshop focused on electricity proceedings, panelists recognized the lack of financial resources and technical assistance that prevented effective participation by the public. *See generally* Memorandum from Rebecca O'Neil et al, to Off. of Pub. Participation, Fed. Energy Regul. Comm'n, on October 7 Technical Assistance Workshop Summary (Nov. 3, 2021).

<sup>16</sup> Comments of the Inst. for Pol'y Integrity at N.Y.U. School of Law at 4–5, Iroquois Enhancement by Compression Project Draft Environmental Assessment, Iroquois Gas Transmission Sys., L.P., Docket No. CP20-48 (Oct. 30, 2020) [hereinafter Policy Integrity EA Comments].

<sup>17</sup> *Id.*

on it to definitively conclude that the project will result in a net reduction in GHG emissions. The Commission’s Certificate Order does not adequately respond to or incorrectly explains away the issues previously raised, and disregards additional issues with the Lifecycle Analysis highlighted below.

To begin, the Commission is incorrect that Iroquois’s perfect substitution assumption “is not unreasonable given that the study is based on long-term forecasts for the project and corresponding scenarios that are driven by statewide GHG emissions limits established by the Climate Leadership and Community Protection Act as opposed to being based upon supply and demand principles.”<sup>18</sup> As Policy Integrity has detailed in prior comments, the notion of perfect substitution violates basic supply-and-demand economics and has been widely rebuked by courts.<sup>19</sup> The fact that the scenarios, drawn from interested private entities, incorporate state projections does not change the implications of supply-and-demand principles, and so the scenarios should have accounted for substitution effects. Instead, the scenarios assume the gas from the project would perfectly displace oil rather than locking-in and potentially increasing natural gas use in the future, which contradicts fundamental market principles.

The use of scenarios that ignore this interaction undermines the validity of the results. In essence, the Lifecycle Analysis assumes that the New York City market for gas for use in buildings is unconnected to the broader energy market, and emphasizes statements from the local distribution companies that increased demand is unlikely to be met without the project.<sup>20</sup> Yet, if the project is not built, the market will reallocate existing supplies within the broader market to

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<sup>18</sup> Iroquois Certificate Order, *supra* note 1, at P 56.

<sup>19</sup> See Comments of the Inst. for Pol’y Integrity at N.Y.U. School of Law at 38–43, *Certification of New Interstate Natural Gas Facilities*, Docket No. PL18-1 (July 25, 2018); Comments of the Inst. for Pol’y Integrity at N.Y.U. School of Law at 9–12, *Certification of New Interstate Pipeline Facilities*, Docket No. PL18-1 (May 26, 2021).

<sup>20</sup> Iroquois Lifecycle Analysis, *supra* note 3, at 3.

meet demand in order to efficiently respond to the lack of natural gas.<sup>21</sup> Existing supplies will become more valuable and alternative technologies and efficiency measures are likely to be used in response, including outside of the building sector where the cost of switching energy sources is relatively cheaper. As a result, emissions under the no-action scenarios are likely to be lower than the Lifecycle Analysis assumes, thereby increasing the net emissions from the project. Again, even if the scenarios attempt to account for state projections, they must recognize these market dynamics. Instead, supply and demand are exogenous to the analysis here, ignoring how the broader market will react if the project is not built.

The Commission’s analysis also inappropriately disregards measures that will be undertaken to comply with New York City laws, which raise questions about the need for the project and further suggest that emissions under the no-action scenarios are lower than forecasted in the Lifecycle Analysis. As Policy Integrity explained in its prior comment letter, New York City laws call for drastic emission reductions from existing buildings, which will require heating oil to be phased out relatively quickly and for buildings to adopt energy efficiency measures.<sup>22</sup> And, while Iroquois’s application was pending, New York City effectively banned the use of natural gas in new and gut-renovated buildings beginning in 2024.<sup>23</sup> These regulatory requirements in New York City undermine the purported need for the project: to meet demand from new construction.<sup>24</sup> New York State has also committed to economy-wide emissions

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<sup>21</sup> See ROTHSCHILD & SARINSKY, *supra* note 12, at 11 (discussing substitution analysis and the economic reasoning underlying inclusion of such an analysis).

<sup>22</sup> Policy Integrity EA Comments, *supra* note 16, at 4–5.

<sup>23</sup> N.Y.C. Local Law 154 (2021), <https://perma.cc/3V5L-3JGK>. Notably, this law was introduced in May 2021 and could have been accounted for in an update to the analysis. The law was also passed before the Commission approved the project and could have been accounted for.

<sup>24</sup> Iroquois Lifecycle Analysis, *supra* note 3, at 3 (“Long-term gas plans from both National Grid and CECONY forecast growing natural gas demand due to new construction in the commercial and single- and multi-family residential sectors, as well as requests from owners of existing buildings to convert their energy source from heating oil to natural gas.”). Furthermore, National Grid recently announced its plans to eliminate fossil fuels from its

reductions of 85% by 2050 from a 1990 baseline, and to reach net-zero emissions at that time.<sup>25</sup>

Regulations to implement that commitment are still being developed, but it is plainly incompatible with assets designed to deliver large volumes of fossil fuels for consumption over a useful life that extends beyond 2050. Yet the Lifecycle Analysis did not meaningfully incorporate these regulatory realities, nor did the Commission question the validity of the analysis in light of this critical oversight.

Without going into extensive detail about every issue, there are several other additional flaws worth highlighting that further suggest the project may not result in a net reduction in GHG emissions:

- While both the Lifecycle Analysis and the Commission conclude that the “Heat Pumps and Oil” Scenario is more reasonable than the “No Infrastructure” Scenario, these two scenarios should be used as the bounding scenarios to represent the upper and lower bounds of the no-action baseline. The other no-action scenarios (100% Oil and 100% Heat Pumps) are highly unlikely and do not reflect market or policy trends; as such they should not be viewed as the upper and lower bounds scenarios. According to the Lifecycle Analysis, the proposed project increases GHG emissions by 26% to 30% relative to the “No Infrastructure” Scenario and only reduces emissions by 3% to 7% relative to the “Heat Pumps and Oil” Scenarios. **Interpreted as bounds, the most likely scenario is somewhere in the middle. It therefore appears more likely that the project would increase, not decrease, emissions, particularly given that the results are highly sensitive to the heat pump assumptions.** Framed this way, the Lifecycle Analysis suggests a general increase in building emissions if the ExC project is completed.
- **The alternative analysis both is too limited and ignores potential improvements in alternatives over time.** The Lifecycle Analysis assumes that the only alternatives available to meet energy demand for heating and cooking will be oil and heat pumps, even though other options exist, including electric and solar water heaters, electric

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heating system in New York by 2050, by using 100% fossil-free gas by 2050 and deeply accelerating heat pump installations. Press Release, National Grid, National Grid Announces Historic Fossil-Free Plan, Launching Bold Clean Energy Vision for Massachusetts and New York (Apr. 19, 2022), <https://perma.cc/XFJ2-68B8>; see also Laura Sanicola, *National Grid Announces Plan to Decarbonize by 2050*, REUTERS (Apr. 19, 2022). This commitment significantly undermines National Grid’s and Iroquois’ stated need for the project. Outside undermining demand assumptions underlying the Lifecycle Analysis, the Commission should consider how this commitment affects future utilization of the project and the risk of stranded assets.

<sup>25</sup> N.Y. ENV’T CONSERV. LAW § 75-0107(1)(b).



stoves,<sup>26</sup> and alternatives to gas and oil boilers. It also assumes that there will be no adoption of alternative technologies based on higher energy prices that might result from the lack of the project. Yet, as time goes on, technology will improve and alternatives will be developed.<sup>27</sup> Proper analysis should expect improvement in the energy efficiency of appliances over time. In particular, given that heat pumps are a relatively new technology, they are likely to become more efficient and cheaper over time. Such improvements can make rapid adoption in line with the “No Infrastructure” Scenario possible.

- The Lifecycle Analysis assumes the feasibility of renewable natural gas and hydrogen at 15% and 10% blend, respectively.<sup>28</sup> Blending cleaner fuels is one potential way to reduce emissions associated with a project; fuels like hydrogen do not release GHGs when burned.<sup>29</sup> **Yet, these options are still being studied for feasibility.**<sup>30</sup> Additionally, new reports suggest that such blends may be a “non-starter” for building usage, finding that hydrogen blends for use in buildings is “highly inefficient and does little to reduce GHG emissions” and could exacerbate indoor air pollution.<sup>31</sup> Notably, while the Lifecycle Analysis is skeptical of the potential upscaling of heat pumps, which are already a more established technology, it expresses no such skepticism for the rapid adoption of alternative fuel blends that are further behind in the development process. Without this assumed blending, the ExC Scenario would likely have higher emissions.

These are just some of the flaws in the analysis that suggest the Commission should not rely on its findings conclude that the project will necessarily result in a reduction of emissions. The Commission’s perfunctory reliance on this analysis is particularly problematic because the analysis was not conducted by independent entities, and the assumptions are drawn from the applicant and private stakeholders with an interest in the outcome of this certificate proceeding.

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<sup>26</sup> These demand side options may be unconsidered because demand is exogenous to the analysis. However, as discussed above, in a proper lifecycle analysis demand should not be exogenous because it will change in response to a variety of factors.

<sup>27</sup> There are well established models that can incorporate a learning function, which have been used by other federal agencies. *See, e.g.*, ENV’T PROT. AGENCY, EPA-420-D-22-001, CONTROL OF AIR POLLUTION FROM NEW MOTOR VEHICLES: HEAVY-DUTY ENGINE AND VEHICLE STANDARDS – DRAFT REGULATORY IMPACT STATEMENT 320–321 (2022).

<sup>28</sup> Iroquois Lifecycle Analysis, *supra* note 3, at 8.

<sup>29</sup> SARA BALDWIN ET AL., ENERGY INNOVATION, ASSESSING THE VIABILITY OF HYDROGEN PROPOSALS: CONSIDERATIONS FOR STATE UTILITY REGULATORS AND POLICYMAKERS 2 (2022).

<sup>30</sup> The report acknowledges as much. Iroquois Lifecycle Analysis, *supra* note 3, at 8 (noting gas utilities are *currently* studying the feasibility of blending alternative gas fuels).

<sup>31</sup> BALDWIN ET AL., *supra* note 29, at 2, 7–9.

When faced with an applicant’s lifecycle analysis, the Commission should carefully assess the scenarios presented for their relative likelihood and scrutinize all modeling assumptions carefully before crediting them in certificate decisions. The Commission should strongly consider undertaking a net emissions analysis for each project itself rather than leaving the task to the applicant.<sup>32</sup> If the Commission continues to entrust applicants with conducting this analysis, FERC must be more searching in its assessment. The Commission is obligated to review and verify findings before approving projects, and must be careful to do so here and in the future.

Respectfully submitted,

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<sup>32</sup> Comments of the Sabin Ctr. for Climate Change Law at Columb. Univ. Law School at 22–23 & n.59, *Certification of New Interstate Pipeline Facilities*, Docket No. PL18-1 (May 26, 2021) (“Given the complexity of net emissions analysis, and opportunities for manipulation of the results, we recommend that the analysis be performed by the Commission and not delegated to the applicant.”).

**CERTIFICATE OF SERVICE**

In accordance with Rule 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served by electronic mail a copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 25th day of April 2022.

Respectfully Submitted,

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