



June 22, 2022

VIA EMAIL

Ms. Doreen M. Harris
President and CEO
New York State Energy Research
and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

Mr. Basil Seggos
Commissioner
New York State Department of
Environmental Conservation
625 Broadway
Albany, NY 12233-1011

Re: Multiple Intervenors' Comments on Draft Scoping Plan

Dear Co-Chairs Harris and Seggos:

Multiple Intervenors, an association of over 50 large industrial, commercial, and institutional energy consumers with manufacturing and other facilities located throughout New York State, hereby submits its attached Comments on the Draft Scoping Plan ("Draft Plan") issued by the Climate Action Council on December 30, 2021. Multiple Intervenors' attached Comments address serious deficiencies in the Draft Plan, all of which should be addressed in the Final Scoping Plan to be issued later this year. A summary of the main points is as follows:

- Multiple Intervenors and its members are supportive of the goals of the CLCPA and appreciate the extraordinary efforts of the CAC and its staff. That said, the Draft Scoping Plan raises serious, unanswered questions about future reliability and affordability of energy in New York.
- Despite requests by numerous parties, including Multiple Intervenors, the Draft Plan lacks detailed information on the specific costs and benefits of individual recommendations, as well as whether New York can afford to implement the recommendations advanced. Contrary to the comments of some CAC members at a recent meeting, this is not a case of the public being misinformed; it is the result of not providing critical information to the public. (*See Point I.*)
- Absent information on the specific costs and benefits of individual recommendations, the Draft Plan simply fails to evaluate which recommendations are the most important and/or most cost-effective recommendations that should be prioritized for implementation. (*See Point II.*)
- It is critically important that any evaluation of the impact of CLCPA compliance costs on New York energy consumers must include the substantial, financial obligations related to the CLCPA that already are being imposed on present and future utility customers by the Public Service Commission and others.

- Funding sources other than already-beleaguered utility customers also should be identified in the Final Plan. (*See Point III.*)
- The Draft Plan utterly fails to: (a) recommend a specific definition of Energy Intensive and Trade Exposed (“EITE”) industries; or (b) advance specific recommendations as to how to minimize the imposition of CLCPA compliance costs on EITE industries in order to prevent economic and emissions leakage. A Plan that does not fully address leakage would be unconscionable and self-defeating, dramatically harming New York’s economy by driving jobs out of state without providing the emission reductions for which it was designed. (*See Point IV.*)
- Unlike the Draft Plan, the Final Plan must provide a comprehensive transition plan for natural gas that simultaneously ensures that: (a) existing gas customers will continue to receive reliable and affordable service during the transition; and (b) customers that depend on natural gas for industrial and other processes for which no viable alternatives to gas exist will continue to receive reliable, affordable, and competitively-priced gas service for the foreseeable future. (*See Point V.*)
- The Draft Plan fails to recognize adequately the enormous challenges that compliance with CLCPA mandates (such as massively-increased reliance on intermittent forms of generation and aggressive electrification efforts that will grow statewide electric demand materially) will impose on maintaining electric grid reliability, which is a priority that must supersede all others. (*See Point VI.*)
- The Draft Plan fails to address – much less achieve – inter-sector equity. For instance, electric utility customers have been funding for many years – and will continue to fund – the decarbonization of the electric generation sector. It would be highly inequitable to expect such customers also to fund the decarbonization efforts of other sectors, such as the buildings/heating sector. (*See Point VII.*)

Multiple Intervenors appreciates this opportunity to comment upon the Draft Plan. Should members of the Climate Action Council have any questions concerning and/or would like to discuss Multiple Intervenors’ attached Comments, please contact me at (518) 320-3409, or via e-mail at mmager@couchwhite.com.

Respectfully submitted,

MULTIPLE INTERVENORS

Michael B. Mager

Michael B. Mager, Esq.
Counsel to Multiple Intervenors

cc: Climate Action Council Members (w/enc.)

**BEFORE THE NEW YORK STATE
CLIMATE ACTION COUNCIL**

**COMMENTS OF MULTIPLE INTERVENORS
ON DRAFT SCOPING PLAN
ISSUED BY CLIMATE ACTION COUNCIL**

JUNE 22, 2022

**MULTIPLE INTERVENORS
540 BROADWAY; P.O. BOX 22222
ALBANY, NEW YORK 12201-2222**

TABLE OF CONTENTS

	Page
PRELIMINARY STATEMENT	1
COMMENTS.....	4
POINT I	
THE CAC SHOULD REQUIRE THAT DETAILED COST AND AFFORDABILITY ANALYSES MISSING FROM THE DRAFT PLAN BE CONDUCTED IMMEDIATELY	4
POINT II	
THE DRAFT PLAN FAILS TO PRIORITIZE – OR PROVIDE ANY BASIS FOR PRIORITIZING – AMONG ITS NUMEROUS RECOMMENDATIONS.....	7
POINT III	
POTENTIAL CLCPA COMPLIANCE COSTS SHOULD NOT BE EVALUATED IN ISOLATION; RATHER, THEY SHOULD BE CONSIDERED IN THE AGGREGATE WITH ALL OF THE OTHER COSTS ALREADY BEING BORNE BY UTILITY CUSTOMERS.....	9
POINT IV	
THE DRAFT PLAN FAILS TO RECOMMEND A SPECIFIC DEFINITION OF EITE INDUSTRIES OR HOW BEST TO MINIMIZE THE IMPOSITION OF CLCPA COMPLIANCE COSTS ON EITE INDUSTRIES IN ORDER TO PREVENT LEAKAGE.....	12
POINT V	
THE DRAFT PLAN LACKS A COMPREHENSIVE STRATEGY FOR REDUCING STATEWIDE RELIANCE ON NATURAL GAS WHILE ALSO PROTECTING GAS CUSTOMERS, INCLUDING CUSTOMERS THAT DEPEND ON NATURAL GAS FOR INDUSTRIAL PROCESSES.....	19

POINT VI

THE DRAFT PLAN ACCORDS INADEQUATE
ATTENTION TO THE ENORMOUS CHALLENGES
THAT CLCPA COMPLIANCE WILL IMPOSE ON
MAINTAINING ELECTRIC GRID RELIABILITY 21

POINT VII

THE FINAL SCOPING PLAN SHOULD STRIVE TO
ACHIEVE INTER-SECTOR EQUITY IN THE
ALLOCATION OF CLCPA COMPLIANCE COSTS 25

CONCLUSION..... 28

PRELIMINARY STATEMENT

Multiple Intervenors, an unincorporated association of over 50 large industrial, commercial, and institutional energy consumers with manufacturing and other facilities located throughout New York State, hereby submits its Comments on the Draft Scoping Plan (“Draft Plan”) issued by the New York State Climate Action Council (“CAC”) on December 30, 2021.

Multiple Intervenors welcomes the opportunity to comment on the Draft Plan. Multiple Intervenors and its members are supportive of international, national, state, and local efforts to reduce greenhouse gas (“GHG”) emissions. For many decades, Multiple Intervenors members have been leaders in energy efficiency, investing untold millions of dollars in order to utilize electricity and natural gas as efficiently as practicable. Its members also have been longtime participants in demand response programs administered by the New York Independent System Operator, Inc. (“NYISO”) and the State’s electric utilities. More recently, an increasing number of Multiple Intervenors members have adopted organization-wide sustainability goals and, in furtherance thereof, have developed and/or contracted to purchase the output of renewable generation facilities.

In addition to preparation and issuance of the Draft Plan, the CAC is responsible for soliciting and evaluating comments thereon, and then preparing a Final Scoping Plan (“Final Plan”).¹ In so doing, it is critically important that the CAC recognize that achievement of Climate Leadership and Community Protection Act (“CLCPA”) mandates and related goals should be pursued in conjunction with other, important objectives, such as ensuring that: (a) electric reliability is maintained (if not improved) to the greatest extent practicable; (b) natural gas service

¹ See generally N.Y. Env. Cons. Law § 75-103.

remains available to customers during a reasonable transition to alternative heating options, and longer for customers that depend on gas for industrial and other processes for which viable alternatives to gas currently do not exist; and (c) energy rates and prices remain as competitive and affordable as possible in furtherance of sustaining the State's economy. With respect to this latter point, the linkage between energy costs and economic activity is exceptionally strong, and such linkage needs to be reflected in the Final Plan to a much greater extent than is apparent from the Draft Plan.

Multiple Intervenors has reviewed the Draft Plan and identified numerous deficiencies with respect thereto. The following deficiencies should be addressed and resolved in the Final Plan:

- Despite requests by numerous parties, the Draft Plan lacks detailed information – and, in many cases, any information – on the specific costs and benefits of individual recommendations, as well as whether New York can afford to implement the recommendations advanced. An analysis of the relative affordability of the recommendations set forth in the Draft Plan is imperative. (*See Point I.*)
- The Draft Plan lacks any analysis as to whether it constitutes the most cost-effective means of satisfying CLCPA mandates. Absent information on the specific costs and benefits of individual recommendations, it is not possible to evaluate which ones are the most important and/or the most cost-effective recommendations that should be prioritized for implementation. (*See Point II.*)
- The Draft Plan does not identify proposed or preferred funding sources for most of its various recommendations. Funding sources other than already-beleaguered utility customers should be identified in the Final Plan. In addition, it is critically

important that any evaluation of the impact of CLCPA compliance costs on New York energy consumers not be conducted in a vacuum; rather, such costs must be considered in the aggregate with the substantial, financial obligations related to the CLCPA that already are being imposed on present and future utility customers by the New York State Public Service Commission (“PSC”). (*See* Point III.)

- The Draft Plan fails to: (a) recommend a specific definition of Energy Intensive and Trade Exposed (“EITE”) industries; or (b) advance specific recommendations as to how to minimize the imposition of CLCPA compliance costs on EITE industries in order to prevent economic and emissions leakage. A Final Plan that does not fully address leakage would be unconscionable and self-defeating, dramatically harming New York’s economy by driving jobs out of state without providing the emission reductions for which it was designed. (*See* Point IV.)
- The Draft Plan lacks a comprehensive strategy for transitioning the State toward reduced reliance on natural gas. The Final Plan must simultaneously ensure that: (a) existing gas customers will continue to receive reliable and affordable service during the transition; and (b) customers that depend on natural gas for industrial and other processes for which no viable alternatives to gas exist will continue to receive reliable, affordable, and competitively-priced gas service for the foreseeable future. (*See* Point V.)
- The Draft Plan fails to recognize adequately the enormous challenges that compliance with CLCPA mandates (such as massively-increased reliance on intermittent forms of generation and aggressive electrification efforts that will grow

statewide electric demand materially) will impose on maintaining electric grid reliability, which is a priority that must supersede all others. (See Point VI.)

- The Draft Plan fails to address – much less achieve – inter-sector equity. For instance, electric utility customers have been funding for many years – and will continue to fund – the decarbonization of the electric generation sector. It would be highly inequitable to expect such customers also to fund the decarbonization efforts of other sectors, such as the buildings/heating sector. (See Point VII.)

COMMENTS

POINT I

THE CAC SHOULD REQUIRE THAT DETAILED COST AND AFFORDABILITY ANALYSES MISSING FROM THE DRAFT PLAN BE CONDUCTED IMMEDIATELY

Prior to issuance of the Draft Plan, Multiple Intervenors and dozens of other entities urged that analyses be conducted on the costs of CLCPA compliance and the impacts of such costs on New York businesses and residents. Such analyses, had they been conducted, would have provided numerous benefits, including, *inter alia*, information as to whether and how the State reasonably could afford to comply with the CLCPA.² To assemble a multi-sector plan for complying with the CLCPA likely to cost in the tens of billions of dollars annually – or more – absent detailed cost analyses for the recommended actions simply cannot result in the optimal use of scarce financial resources. The absence of such analyses from the Draft Plan is an enormous

² As addressed in Point II, *infra*, detailed analyses as to the benefits and the costs of specific recommendations also would allow rational determinations to be made as to the most cost-effective means of achieving compliance, as well as providing a basis for prioritizing amongst competing recommendations in the highly-likely circumstance that available funding is insufficient to implement every recommendation advanced in the Draft Plan.

deficiency. Thus, the CAC immediately should direct that detailed cost and affordability analyses be conducted, in an unbiased and fully-transparent manner, with an opportunity for interested parties to comment on the results of such analyses prior to issuance of the Final Plan.

On November 25, 2020, Multiple Intervenors sent a letter to the CAC's Joint Transition Working Group ("JTWG") requesting that an independent consultant be retained to conduct a quantitative analysis of the potential impacts of compliance with the CLCPA on New York State businesses. On January 20, 2021, two members of the CAC sent a letter to the CAC's co-chairs attaching and endorsing Multiple Intervenors' request for a quantitative analysis of CLCPA compliance costs. That letter asserted that the requested cost study was part of the charge of the CAC, and was supported by a long list of associations, councils, unions, and businesses.³

Notwithstanding widespread support for a cost analysis associated with CLCPA compliance – including support within the CAC itself – such an analysis has yet to be conducted. Consequently, the Draft Plan lacks fundamental information on the specific costs – as well as the specific benefits – of various recommended compliance measures. Without such information, it is not possible to ascertain whether New York and its citizens can afford to implement all, most, or only some of the recommended actions.

For example, Chapter 12 of the Draft Plan addresses the buildings/heating sector. The recommendations advanced in Chapter 12 include, but are by no means limited to, the following:

- Modify existing statutes and regulations to improve energy efficiency and building resilience.

³ Annexed hereto as Appendix 1 is a copy of the January 20, 2021 letter from Donna L. DeCarolis, President, National Fuel Gas Corporation, and Gavin J. Donohue, President, Independent Power Producers of New York, Inc., submitted in their capacity as members of the CAC, which included (i) a list of groups supporting the conducting of a cost study to guide the CAC, and (ii) Multiple Intervenors' request for same dated November 25, 2020.

- Adopt a new State Energy Code governing new construction of residential and commercial buildings to impose numerous new requirements.
- Adopt building resilience features into State codes to require energy storage or onsite renewable generation that is able to disconnect from the grid.
- Adopt new code provisions that prohibit gas/oil equipment for space conditioning, hot water, cooking, and appliances.
- Adopt regulations intended to improve energy efficiency in existing buildings.
- Adopt energy efficiency standards for appliances that are exempt from federal preemption.
- Require certain larger properties to upgrade to energy-efficient lighting in all commercial spaces and common areas.
- Adopt a new energy efficiency performance standard for certain larger properties.
- Adopt zero emissions standards to phase-out fossil fuel combustion equipment.
- Require mandatory statewide energy benchmarking and disclosure program for certain properties.
- Require comprehensive energy assessments (audits) for certain properties.
- Scale-up incentives for building decarbonization; scale up direct cash incentives for energy efficiency, electrification, and electrification-readiness in residential and commercial buildings.
- Support and scale-up financial support for community-scale solutions and community thermal solutions.
- Create dedicated cash incentives and financial support mechanisms for energy efficiency and electrification for low-to-moderate income households, affordable housing, public housing, and Disadvantaged Communities.
- Fund non-energy improvements when necessary and funding energy projects.
- Expand access to public and private low-cost financing.
- Create a revolving loan fund for building decarbonization.

(See Draft Plan at 119-48.) These only are a modest subset of the full gamut of recommendations advanced in Chapter 12, dealing solely with the buildings/heating sector. Other chapters of the Draft Plan advance similarly-lengthy lists of recommended actions focused on other sectors, the vast majority of which would result in unquantified costs and require incremental funding in unknown magnitudes from largely-unidentified sources.

Unfortunately, because the cost analysis requested by Multiple Intervenors and others were apparently never undertaken (or released publicly), the Draft Plan lacks basic information on the specific costs of these recommendations, as well as the ability of businesses

and residents to afford those costs. Multiple Intervenors asserts that the CAC should be focused on ensuring that such compliance is affordable and does not result in unintended economic consequences.⁴

Accordingly, the CAC immediately should retain an independent consultant to conduct a comprehensive, transparent analysis of the likely costs associated with the individual recommendations contained in the Draft Plan, as well as the State's ability to fund such costs. Such analysis – including the underlying models employed and workpapers produced – should be issued for public comment prior to preparation and issuance of the Final Plan.

POINT II

THE DRAFT PLAN FAILS TO PRIORITIZE – OR PROVIDE ANY BASIS FOR PRIORITIZING – AMONG ITS NUMEROUS RECOMMENDATIONS

The Draft Plan advances literally hundreds of different recommendations as to how New York should, or could, comply with CLCPA mandates. Each recommendation, if implemented, could be expected to produce certain benefits that may offset the associated costs in whole or part. Significantly, however, the Draft Plan fails to prioritize among recommendations in the likely event that some of them are not implemented; for instance, because they collectively

⁴ The Draft Plan includes many unsupported assertions. For instance, in discussing energy efficiency programs that electric and gas utility customers currently are required to fund through higher rates, the Draft Plan states, with absolutely no supporting analysis, that: “There is scope for ... some expansion of ratepayer-funded programs.” (Draft Plan at 133.) In addition to lacking justification, such statement simply disregards the significant upward pressure that PSC-mandated programs and initiatives – including but not limited to energy efficiency programs – already have placed and will continue to place on utility rates.

are too costly for the State and its citizens to afford. Relatedly, the Draft Plan also fails to set forth information upon which recommendations should, or could, be prioritized.

Energy costs already are high in New York, especially when compared to other regions. The State is emerging from a pandemic, which wreaked untold economic harms on utility customers of all types. Since the beginning of 2022, electricity and natural gas prices have skyrocketed.⁵ The State, including the CAC, cannot continue imposing ever-increasing costs on businesses and residents without serious economic repercussions.

New York also recently suffered the biggest population decline of any state in the country.⁶ In 2021, Chief Executives ranked New York as the second-worst state in the country in which to conduct business, which was the same ranking awarded in 2020.⁷ New York also recently ranked 48th in the country in terms of state business tax climate.⁸ Thus, the CAC should not assume that New York can afford to undertake all – or even most – of the recommendations contained in

⁵ For instance, the NYISO reported that: (a) the average cost of energy and ancillary services in January 2022 was \$137.49 per MWh, almost triple the comparable average price in 2021 of \$47.59 per MWh; (b) natural gas prices in January 2022 were up 278.6% year-over-year; and (c) natural gas prices for delivery points outside of New York City were up ~325-350% year-over-year. NYISO, *NYISO CEO/COO Report* (February 23, 2022) at Slides 3, 5; available at <https://www.nyiso.com/documents/20142/28607306/03%20NYISO%20CEO-COO%20MC%20Report.pdf/cc4cd6f3-4fae-d725-9480-f5472da8bade>.

⁶ Albany Times Union, *New York had record-breaking population decline during pandemic* (December 24, 2021) (reporting that: “From July 2020 to July 2021, New York’s population fell by 319,020 people, the largest numeric decline of any state in the country, according to Consensus Bureau estimates ... At 1.6 percent, New York also had the largest percentage decrease in population of any state during that period”).

⁷ Chief Executive, *2021 Best & Worst States for Business*, available at <https://chiefexecutive.net/2021-best-worst-for-states-business/>.

⁸ Tax Foundation, *2021 State Business Tax Climate Index*, available at <https://taxfoundation.org/2021-state-business-tax-climate-index/>.

the Draft Plan without conducting detailed cost and affordability analysis and specifying the sources of any necessary funding.

In any event, the recommendations advanced in the Draft Plan that are the most impactful and/or cost-effective should be prioritized over less worthy recommendations. Significantly, however, the Draft Plan fails to reflect any real prioritization among its hundreds of recommendations. Moreover, because the Draft Plan lacks information as to the specific costs and benefits associated with individual recommendations, the document fails to provide the necessary information by which such prioritization potentially could take place on an informed basis. Consequently, if difficult decisions need to be made as how CLCPA compliance should be pursued in the absence of unlimited resources, the Draft Plan would be singularly unhelpful in terms of prioritizing among competing recommendations. These are material flaws in the Draft Plan that should be remedied in the Final Plan.

POINT III

POTENTIAL CLCPA COMPLIANCE COSTS SHOULD NOT BE EVALUATED IN ISOLATION; RATHER, THEY SHOULD BE CONSIDERED IN THE AGGREGATE WITH ALL OF THE OTHER COSTS ALREADY BEING BORNE BY UTILITY CUSTOMERS

Multiple Intervenors recognizes that numerous actions necessitating funding will be undertaken in furtherance of CLCPA compliance and related objectives. For the reasons set forth in Points I and II, *supra*, it is critically important that potential, future CLCPA compliance costs be evaluated. Importantly, such evaluations should not be conducted in isolation. Rather, such evaluations must account for existing financial obligations related to CLCPA compliance. For instance, as detailed, *infra*, the PSC already has mandated that utility customers pay many

billions of dollars in higher rates and prices in furtherance of CLCPA compliance and related objectives. Consequently, the ability of utility customers to bear additional, material CLCPA compliance costs is extremely limited or nonexistent, and other funding sources should be identified and pursued vigorously.

The relationship between energy costs and economic activity is direct and substantial. Previously, state energy policy emphasized that: “Policies that promote a secure, competitive, and reasonably priced energy supply will help attract, retain, and expand businesses in New York. These include policies that support reducing energy costs to consumers, improving the reliability of the State’s energy supplier and infrastructures, and developing energy-related businesses in New York.”⁹ With respect to business siting decisions, the 2002 State Energy Plan recognized, in pertinent part, that:

In a national survey of businesses that primarily included manufacturers, 81% of respondents considered energy cost and availability to be either an important or very important site-selection factor. Given the relative cost of energy in New York, manufacturers in the State regard energy costs as being even more significant than is indicated in the national survey. *** Reducing energy costs, therefore, can have a substantial effect on a business’ profitability. Moreover, facilities in New York compete with other companies within the State and with facilities within the same company located in states with lower operating costs. In some cases, same-company facilities compete for additional capacity and jobs; in other cases, they compete to remain in operation. Corporations routinely favor locations that have the greatest profit potential. Less profitable facilities will, at best, not be expanded. At worst, they will be closed, with a resultant loss of jobs.¹⁰

⁹ 2002 N.Y. State Energy Plan at 2-15.

¹⁰ *Id.* at 2-16. While the above-quoted passage now is approximately two decades old, in Multiple Intervenors’ opinion and experience, it remains as true today as it was when first published by the State.

In preparing the Final Plan, the CAC should take note of the State Energy Plan's warnings about energy costs and evaluate carefully the costs and the benefits of individual recommended actions and provide much greater specificity as to the funding sources for each action. High energy costs, *inter alia*, can: (a) devastate the State's economy, resulting in the relocation of businesses, jobs, and capital investments, especially in energy-intensive sectors of the economy such as manufacturing; (b) result in leakage, as businesses flee the State's high energy costs, thereby potentially also resulting in increased emissions originating from other states and countries with less-stringent environmental regulations; and (c) impede the State's efforts to electrify the heating and transportation sectors, rendering such efforts more expensive and less likely to succeed.

Accordingly, when the CAC evaluates potential CLCPA compliance actions and costs, it should be cognizant of and consider the costs that already are being imposed and/or are scheduled to be imposed on utility customers. Examples of the many PSC-mandated programs and initiatives that utility customers already are funding and/or will be obligated to fund in furtherance of the CLCPA and related objectives are set forth in Appendix 2 annexed hereto. Members of the CAC should review and evaluate the costs identified in Appendix 2 before recommending that even more costs be added to the enormous financial obligations already being imposed on utility customers. In addition, the CAC should minimize the imposition of even more costs on New York's beleaguered energy consumers to the greatest extent possible, including identifying alternative funding sources.

POINT IV

THE DRAFT PLAN FAILS TO RECOMMEND A SPECIFIC DEFINITION OF EITE INDUSTRIES OR HOW BEST TO MINIMIZE THE IMPOSITION OF CLCPA COMPLIANCE COSTS ON EITE INDUSTRIES IN ORDER TO PREVENT LEAKAGE

The CLCPA directed the CAC to: (a) convene advisory panels on, *inter alia*, EITE industries; (b) convene a JTWG that would “identify energy-intensive industries and related trades”; and (c) require the JTWG to prepare and publish to the CAC recommendations on how to address “issues and opportunities related to the [EITE] industries ... [and] measures to minimize the carbon leakage risk and minimize anti-competitiveness impacts of any potential carbon policies and energy sector mandates.” N.Y. Env. Cons. Law §§ 75-0103(7), (8)(b), (8)(f). Notwithstanding these explicit directions, the Draft Plan fails to recommend a specific definition of EITE industries. The Draft Plan also fails to advance recommendations on how best to minimize CLCPA compliance costs on EITE industries in order to prevent economic and emissions leakage related to such industries. In short, the Draft Plan is not compliant with the dictates of the CLCPA.

Chapter 7 of the Draft Plan is entitled, “Just Transition.” (Draft Plan at 41-52.) Although this chapter contains headings such as “Workforce Impacts and Opportunities,” “Targeted Financial Support for Businesses,” and “Measures to Minimize the Carbon Leakage Risk and Minimize Anti-Competitiveness Impacts,” the chapter fails to advance a single, proposed definition for EITE industries. This is a glaring deficiency in the Draft Plan that needs to be remedied in the Final Plan.

Similarly, Appendix C to the Draft Plan is entitled, “JTWG Recommendations to the Council on Measures to Minimize the Carbon Leakage Risk and Minimize Anti-Competitiveness Impacts of Potential Carbon Policies and Energy Sector Mandates.” Appendix

C contains sections that seek to address or provide, *inter alia*: background on the meaning of EITE industries (Draft Plan at C-3-C-6); methods that potentially can be used to identify EITE industries (*id.* at C-6-C-10); methods that potentially can be used to identify related trades (*id.* at C-10-C-11); the results of certain energy, emissions, and trade intensity analyses (*id.* at C-11-C-12); and considerations for a definition of an EITE industry (*id.* at C-12-C-15). Significantly, however, similar to the main body of the Draft Plan, Appendix C is devoid of a single, recommended definition of EITE industries.

In defining what constitutes an EITE industry, the CAC should focus on preventing economic and emissions leakage to the greatest extent possible in order to retain manufacturing jobs, as well as supporting research, development, and engineering jobs, in New York. To that end, as a starting point (and as advocated previously by Multiple Intervenors), the definition of EITE industries should seek to incorporate, at a minimum, all energy-intensive and/or emissions-intensive industries that are trade exposed and would have been included under previously-proposed or enacted regulations that defined EITE industries.

For instance, JTWG Staff identified several sets of legislation from which a definition of EITE industries can be drawn, including: the federal cap-and-trade standard of the 2009 American Clean Energy and Security Act (“ACES”), the Energy Independence and Security Act of 2007, California’s cap-and-trade regulation, the Energy Innovation and Carbon Dividend Act of 2019, and the Climate Action Rebate Act of 2019.¹¹ An EITE industries definition here could use, as a base, the industries covered by these prior pieces of legislation.¹² For example, the

¹¹ See, e.g., H.R. 763 (2019-2020); S.2284 (2019-2020); Public Law 110-140 (2007); CA Assembly Bill No. 32 (2006).

¹² See Environmental Protection Agency (“EPA”) and Energy Information Administration, *The Effects of H.R. 2454 on International Competitiveness and Emission Leakage in Energy-*

preliminary assessment of “presumptively eligible” industries by the U.S. Environmental Protection Agency under ACES captures at least a baseline level of energy-intensive and/or emissions-intensive industries that are trade-exposed within a cap-and-trade framework.¹³

In Multiple Intervenors’ previously-submitted comments to the JTWG, it proposed a draft list of EITE industries that used the list of EITE industries outlined by JTWG Staff in its October 26, 2020 presentation to the Business Issues Subgroup and added three industries (Industrial Ceramics, Major Industrial-Scale Brewing, and Industrial Gas Manufacturing) that are energy-intensive and trade-exposed major employers in New York:

Intensive Trade-Exposed Industries, An Interagency Report Responding to a Request from *Senators Bayh, Specter, Stabenow, McCaskill, and Brown*, (December 2, 2009) (minor corrections made on February 23, 2010).

¹³ *Id.* (the EPA’s list of “presumptively eligible” industries was compiled as follows: “An industry’s energy intensity is defined as its energy expenditures as a share of the value of its domestic production. An industry’s greenhouse gas intensity is defined as its total greenhouse gas emissions [including indirect emissions from electricity consumption] times \$20 per ton of emissions, divided by the value of the industry’s domestic production. An industry’s trade intensity is defined as the combined value of its exports and imports as a share of the value of its domestic production and imports. This paragraph describes the general criteria established for identifying ‘presumptively eligible’ industries and does not address additional, more detailed eligibility considerations set forth in H.R. 2454. However, the preliminary eligibility assessment presented in Table 1 reflects the application of all the criteria and considerations set forth in H.R. 2454.”).

Draft Listing of “EITE” Industries under the CLCPA

Cement, Glass, and other Nonmetallic Mineral Manufacturing
Chemical Manufacturing
Cut and Sew Apparel Manufacturing
Iron, Copper, and Nickel Ore Mining
Oil and Gas Extraction
Petroleum Refineries
Iron, Steel, Aluminum, and Primary Metal Manufacturing
Paper, Pulp, and Newsprint Mills
Semiconductor Manufacturing
Industrial Ceramics
Industrial Gas Manufacturing
Major Industrial-Scale Brewing

This list is not intended to be exhaustive, and additional analysis may be required to determine reasonable and accurate metrics to ensure that only EITE businesses qualify. Moreover, inasmuch as the CLCPA concerns state policy, leakage to competing states that are not pursuing decarbonization is an added threat here that is not a comparable concern under federal legislation. Indeed, given the aggressiveness of New York’s policies relative to most other states, the risks of economic and emissions leakage on an interstate basis due to the costs of CLCPA compliance probably are even greater than similar leakage on an international basis.

Quite simply, in order to be able to address the significant risks associated with economic and emissions leakage from EITE industries in a competent and effective manner, the Final Plan needs to include, at a minimum, a functional – and specific – definition of what constitutes an EITE industry. Multiple Intervenors urges the CAC to remedy this deficiency in the Final Plan.

Additionally, the Final Plan should incorporate specific recommendations for combatting, in an effective manner, the risks of economic and emissions leakage from EITE

industries. These risks are significant and warrant increased attention as the State seeks to comply with the CLCPA. As the CAC recognized in the Draft Plan:

The problems caused by leakage are twofold. First, the state experiences a loss of jobs, investment, and tax revenues (economic leakage). Second, when businesses leave or avoid the state to operate in jurisdictions with less stringent clean energy or GHG emissions policies, the likely end result would be an increase of emissions over the level that would have been allowed had the business remained in New York, thereby actually worsening global emissions.

(*Id.* at C-1; footnote omitted.) New York can ill afford to lose any more EITE industries, which are major employers and economic contributors to the State, due to economic leakage caused by CLCPA compliance actions that render energy costs even less competitive (or non-competitive). Moreover, New York should act aggressively to minimize emissions leakage, which is the antithesis of the emissions reductions that the State is seeking to achieve through enactment and implementation of the CLCPA.

Notably, the Draft Plan fails to advance specific, meaningful recommendations that would combat economic and emissions leakage from EITE industries. The Draft Plan notes that: “To mitigate the risk of economic and emissions leakage, governments that implement large-scale industrial emission-reduction regimes tend to design such systems with special accommodations for EITE industries.” (*Id.* at C-2.) Notwithstanding such statement, the Draft Plan advances no specific definition of what constitutes an EITE industry, nor does it recommend any specific accommodations to combat leakage.

The Draft Plan identifies two types of approaches pursued by other jurisdictions to attempt to combat economic and emissions leakage. The Draft Plan indicates, for instance, that “jurisdictions that otherwise assign a price per ton of carbon-dioxide equivalent emitted (*e.g.*, a cap-and-trade system) might provide special emission allowances to EITE emitters (State of

California, Western Climate Alliance) while other systems may compensate certain industries for some of the cost of their carbon liability (Australia).” (*Id.*; footnote omitted.) It continues that: “In cases where the primary risk of leakage is not an emissions price but the cost of energy, similarly, policies also can be designed to reduce the cost of energy for EITE industries, such as through discounted electricity rates.” (*Id.*; footnote omitted.)

Significantly, however, despite recognizing how other jurisdictions have sought to combat economic and emissions leakage from EITE industries, the Draft Plan fails to advance any specific recommendations on how to do the same in New York. Many EITE industries have defined planning horizons in terms of deciding where to locate future production and capital investments – decisions that may have material, long-term impacts on employment and economic activity within certain regions. The CLCPA and recommendations to comply therewith have created tremendous uncertainty for these industries, which often operate facilities in other states and countries in addition to New York. If, as feared, CLCPA compliance results in increased energy costs, then, absent specific, reliable accommodations, there likely will be material economic and emissions leakage from EITE industries, to the detriment of the State’s economy as well as worldwide emissions.

In referring to potential policies that might reduce the cost of energy for EITE industries, the Draft Plan references New York Power Authority (“NYPA”) hydropower allocations and utility discount programs (*id.*), but fails to recommend any improvements or enhancements to the status quo. To be sure, NYPA is an extremely valuable supplier to many Multiple Intervenors members and its programs are critically important in helping to attract and retain energy-intensive businesses that, but for hydropower allocations, might not conduct business in New York due to high energy costs. That noted, the impacts of the CLCPA and related efforts

are new but already are increasing the present and future costs of non-NYPA load. They are expected to increase the costs of hydropower allocations in the future (*i.e.*, due to NYPA's participation in expanded Clean Energy Standard programs and the flow-through of materially increasing transmission and delivery costs).

Moreover, the usage of utility discount programs to attract and retain electric load has declined precipitously over the past decade. Thus, mere references to long-existing programs – without the advancement of specific, meaningful recommendations to combat economic and emissions leakage from EITE industries – provides no comfort to businesses staring at large energy cost increases of unknown magnitude while having to make decisions as where to site production and make future capital investments.

Accordingly, Multiple Intervenors urges the CAC to substantially strengthen the Draft Plan's treatment of EITE industries in the Final Plan. In particular, the Final Plan should advance: (a) a specific, recommended definition of EITE industries to guide future state policy; and (b) specific recommendations to reduce CLCPA compliance costs to EITE industries in order to combat economic and emissions leakage by such industries.¹⁴ Failure to take concrete steps to reduce or eliminate leakage would be a terrible policy failure – sending jobs out of New York without reducing the worldwide emissions, thereby defeating the primary goal of the CLCPA.

¹⁴ The JTWG included a Business Issues Subgroup that examined how other jurisdictions have defined EITE industries. Although the work of that Subgroup did not result in specific recommendations that were incorporated into the Draft Plan, Multiple Intervenors contends that industry input on EITE issues is critical. For example, Multiple Intervenors members have experience addressing EITE issues in other states and nationally. Accordingly, Multiple Intervenors recommends that the CAC form a small (5-10 members) advisory subgroup whereby energy-intensive businesses with large New York footprints could assist the CAC and state agencies in developing a fair definition of EITE industries and fashioning appropriate relief. To the extent desirable, the advisory subgroup also could provide insights on other aspects of the CLCPA implementation process, such as concerns related to energy cost and reliability.

POINT V

THE DRAFT PLAN LACKS A COMPREHENSIVE STRATEGY FOR REDUCING STATEWIDE RELIANCE ON NATURAL GAS WHILE ALSO PROTECTING GAS CUSTOMERS, INCLUDING CUSTOMERS THAT DEPEND ON NATURAL GAS FOR INDUSTRIAL PROCESSES

Pursuant to the CLCPA, New York will seek to reduce reliance on natural gas, thereby decreasing the GHG emissions associated with its use. Significantly, however, the Draft Plan fails to advance a comprehensive strategy for reducing statewide reliance on natural gas.

The challenges associated with transitioning away from natural gas are massive. Recognizing such challenges does not mean the transition should be delayed unduly, but does argue for the development of a comprehensive plan for managing such transition, with input from all interests, before critical decisions are made on an incomplete and piecemeal basis.

For instance, as is noted in the Draft Plan, the New York Public Service Law imposes an obligation to serve, and to provide safe and adequate service, on the State's gas utilities. *See, e.g.*, N.Y. Pub. Serv. Law §§ 65, 66. Thus, absent a change in the law, utilities are required to provide natural gas service to those existing and new customers desirous of such service, and such obligations necessitate, *inter alia*, a certain amount of continuous investment in the State's existing gas infrastructure.

Second, millions of New Yorkers – both residential and non-residential – seemingly desire natural gas service, and there recently was a huge public outcry when gas moratoria were implemented in certain regions of the State. Consequently, proposals to prohibit or curtail natural gas service to new and/or existing customers are very likely to engender strong public opposition.

Third, certain industrial and other processes depend on natural gas, and there currently are no viable alternatives to gas for many such processes. Thus, until such time that alternatives do become viable, any failure to ensure safe, reliable, and competitively-priced gas supplies and service could lead to a massive exodus of manufacturing and other jobs from the State. Businesses dependent upon natural gas for certain processes will have little choice but to exit New York if State policies jeopardize reliable and competitively-priced gas supplies.

Fourth, the State's gas utilities collectively have tens – if not hundreds – of billions of dollars in gas assets that have been developed over many decades for the purpose of providing safe and reliable service to millions of customers. The planned transition away from natural gas may render some or much of those assets stranded, resulting in potentially-massive economic liabilities that will need to be addressed, but which could render gas service unaffordable for those customers that want or need such service, with material consequences to the State economy.

Fifth, reducing reliance on natural gas will necessitate enormous investments in heat pumps and other technologies. It presently is not clear where the funding for these investments will originate. New York utility customers already pay some of the highest energy rates and prices in the nation. Electric customers are and will be funding the decarbonization of the electric generation sector; it would be inequitable, and unduly burdensome, to require such customers also to fund the decarbonization of other sectors. (*See Point VIII, infra.*) It also is not clear how gas customers potentially could fund enormous investments in new technologies coupled with the potential stranding of billions of dollars' worth of existing assets.

Sixth, a large portion of the State's electric generation fleet – particularly downstate – utilizes natural gas for operation. Moreover, these gas-fired facilities generally are very reliable, operating at high capacity factors and capable of relatively fast response to changes in demand.

Until such time that these generation facilities can cease operations without jeopardizing electric grid reliability, they will require reliable supplies of natural gas. Moreover, if such supplies are not priced competitively, wholesale electricity prices will skyrocket, resulting in severe economic consequences.

The aforementioned challenges represent many – but not all – of the impediments that will need to be addressed in order to reduce existing reliance on natural gas within New York on a meaningful basis. Thus, what is needed is a comprehensive strategy to reduce statewide reliance on natural gas in a manner that protects consumers. Assuming a comprehensive plan for reducing statewide reliance on natural gas will be developed, possibly for the Final Plan, Multiple Intervenors urges the CAC to ensure, at a minimum, that: (a) existing gas customers will continue to receive reliable and affordable service during the transition; and (b) customers that depend on natural gas for industrial and other processes for which no viable alternatives to gas exist will continue to receive reliable, affordable, and competitively-priced service for the foreseeable future.

POINT VI

THE DRAFT PLAN ACCORDS INADEQUATE ATTENTION TO THE ENORMOUS CHALLENGES THAT CLCPA COMPLIANCE WILL IMPOSE ON MAINTAINING ELECTRIC GRID RELIABILITY

Electric reliability is critical to the health and the welfare of New York's citizens and businesses, and enormously impactful on the State's economy. That economy will suffer, as will the well-being of the State's businesses and residents, if the electric grid becomes unreliable. Energy-intensive businesses, for example, will locate and invest in other regions if New York fails to maintain strong grid reliability and power quality. For the reasons set forth herein, Multiple Intervenors recommends that the Final Plan contain a more thorough analysis of the enormous

challenges that CLCPA compliance will impose on maintaining electric grid reliability, as well as advancing specific recommendations to ensure that desired changes to the State’s generation mix will not degrade reliability or power quality.

One reliability concern relates to the highly intermittent nature of certain forms of renewable generation (*e.g.*, wind and solar). Because wind and solar generation are available much less frequently than hydropower, as well as certain forms of fossil fuel-based generation that are being phased-out, concerns about the future reliability of the electric grid are triggered by CLCPA mandates.

For instance, the NYISO recently issued a presentation on the 2021 performance of wind and solar generation in New York.¹⁵ In 2021, the New York Control Area had 2,191 MW of wind capacity on a nameplate basis. (Renewables Presentation at 6.) Significantly, however, the State’s wind generation had an annual capacity factor of only 23% in 2021. (*Id.* at 9.) On a monthly basis, the capacity factor for wind ranged from a high of 38% (in March 2021) to a low of 12% (in July and August 2021, *i.e.*, summer months when the State often experiences its peak electric demand). (*Id.*) The NYISO also reported that at the end of 2021, New York had an estimated 3,265 MW of behind-the-meter solar generation. (*Id.* at 25.) The annual capacity factor for such solar in 2021 only was 13%, ranging on a monthly basis from a high of 18.7% (in June 2021) to a low of 4.1% (in February 2021). (*Id.* at 27.) Thus, on average, the 2,191 MW of nameplate wind capacity produced only 504 MW, and the 3,265 MW of nameplate behind-the-

¹⁵ See NYISO, NY Renewables Overview and YTD Operation, presented to the Market Issues Working Group on March 31, 2022 (hereinafter, “Renewables Presentation”), available at <https://www.nyiso.com/documents/20142/29607069/5%202021%20NYCA%20Renewables%20Presentation%20FINAL.pdf/6aea8337-b7ef-4e10-a4e8-d34dcef54ccf>.

meter solar produced only 424 MW. The Draft Plan does not provide adequate analysis of the impacts of these intermittent resources on grid reliability.

In addition to increased reliance on generation technologies that currently are extremely intermittent, the Draft Plan foresees an increase in statewide electric demand of 65% to 80% by 2050 due to electrification efforts. (Draft Plan at 151.) The Draft Plan further notes that: “The level of electrification needed to achieve the GHG emission reduction requirements will increase overall electric load and shift the system peak demand from the summer to the winter.” (*Id.*) Thus, the State’s future peak demand likely will occur when solar generation output is at or near its lowest levels (although wind generation should be stronger in the winter).

The plan to transition to increased reliance on intermittent generation while, at the same time, promoting electrification efforts expected to increase electric demand substantially presents enormous challenges in terms of maintaining electric grid reliability. Although the Draft Plan discusses the need to maintain reliability at a very-high level (*see, e.g., id.* at 155-58), it accords inadequate attention to this critically-important requirement, and lacks detailed recommendations for ensuring that reliability is not compromised.

On August 2, 2021, the New York State Reliability Council, LLC (“NYSRC”) addressed the CAC and gave a presentation on the electric reliability challenges associated with satisfying CLCPA requirements.¹⁶ The NYSRC is the entity approved by the Federal Energy Regulatory Commission that is responsible for the promulgation of electric reliability standards for New York, which are mandatory requirements for the NYISO. (NYSRC Presentation at 2.)

¹⁶ NYSRC, Reliability Challenges in Meeting CLCPA Requirements, presented to CAC on August 2, 2021 (hereinafter, “NYSRC Presentation”), available at https://www.nysrc.org/PDF/WorkShops_and_Presentations/NYSRC%20CAC%20Presentation%208-2-21%20-%20Reliability%20Challenges%20in%20Meeting%20CLCPA%20Requirements.pdf.

The NYSRC emphasized to the CAC that: “With the intermittency of renewables and the electrification of the economy, substantial clean energy and dispatchable resources, some with yet to be developed technology, over and above the capacity of all existing fossil resources that will be replaced, will be required to maintain reliability in the transition to meeting CLCPA requirements.” (*Id.*) The NYSRC cautioned that: “Limited fuel diversity and over-dependence on energy limited resources is a risk to reliability” and “Recent events (cold snaps, rolling blackouts in California, load shedding for days in Texas) provide a caution to what we might face in the future.” (*Id.* at 4.) Citing a report prepared by the New York State Department of Public Service Staff (“DPS Staff”) and NYSERDA, the NYSRC noted that in order to comply with CLCPA mandates, the State’s reserve margin will need to increase from approximately 6,600 MW today (~ 20%) to approximately 50,000 MW by 2040 (over 100%). (*Id.* at 8-9.) Needless to say, this increase in reserve margins likely will come at a steep cost to customers.

In order to maintain electric grid reliability given increased reliance on very-intermittent generation resources and rapidly-growing electric demand due to electrification efforts, New York will need – in addition to unprecedented development of renewable resources – increased transmission capacity, substantial amounts of long-duration storage, and tens of thousands of MW of to-be-developed, fast-responding, zero-emissions generation. The State is well on its way in terms of developing increased transmission capacity, albeit at an enormous cost to electric customers. Significantly, however, long-duration storage is a nascent technology that may or may not be economically viable (and potentially unaffordable given the magnitude of installations that will be needed), and fast-responding, zero-emissions generation currently does not exist in New York. Moreover, it is uncertain whether one or more technologies with those

characteristics will be technically feasible and economically viable in advance of when needed to comply with CLCPA mandates.

Electric reliability is absolutely paramount and must be maintained at all times. Power quality also must be maintained on the grid, and increased reliance on intermittent generation may present heightened challenges to prevent voltage sags and surges on the system, as more ancillary services almost certainly will be needed in the marketplace. The Draft Plan fails to accord adequate attention to the enormous challenges that the recommendations contained therein will impose on maintaining electric grid reliability. Additionally, the Draft Plan does not advance much, if anything, in the form of new recommendations for maintaining reliability, choosing instead to reference existing reliability planning processes that may – or may not – be sufficient to meet the coming challenges. The Final Plan should focus to a greater extent on ensuring that electric grid reliability is not impaired due to CLCPA compliance efforts.

POINT VII

THE FINAL SCOPING PLAN SHOULD STRIVE TO ACHIEVE INTER-SECTOR EQUITY IN THE ALLOCATION OF CLCPA COMPLIANCE COSTS

The Draft Plan advances numerous recommendations with respect to the major, carbon-emitting sectors of the State's economy (*e.g.*, transportation, buildings/heating, electric, industry, agriculture and forestry, and waste). A clear majority of those recommendations will require incremental funding to implement and, by and large, the Draft Plan does not specify how much funding such implementation would require, nor does it identify the preferred sources of necessary revenues. (*See* Points I and III, *supra.*) For the reasons set forth below, the Final

Scoping Plan should strive to achieve inter-sector equity in the recommended allocation of CLCPA compliance costs.

The electric sector has realized substantial emissions reductions since the advent of competitive wholesale markets. For instance, the NYISO reports that from 2000 to 2020, the New York electric generation sector experienced: (a) a 52% reduction in carbon dioxide emissions; (b) a 99% reduction in sulfur dioxide emissions; and (c) a 93% reduction in nitrogen oxide emissions.¹⁷ Much of those emissions reductions have been funded (directly or indirectly) by electric customers. For instance, for decades electric customers have funded, through higher rates and prices, energy efficiency and renewable generation programs, as well as numerous other initiatives that collectively have cost – and will to continue to cost – billions of dollars annually.¹⁸

Importantly, care must be taken to retain inter-sector equity to the greatest extent practicable. For instance, while it may be appropriate to require electric customers to fund GHG emission reduction efforts associated with the electric generation sector, it is neither appropriate, nor equitable, to require them also to fund – through higher energy rates and prices – emission reduction efforts associated with other sectors, such as the buildings/heating and transportation sectors. Thus, for instance, funding that is needed to decarbonize the building sector should come from that sector, not utility customers, and the same is true with respect to other sectors. The CLCPA requires decarbonization efforts from all major sectors of the economy, and each such sector should bear its fair share of the necessary compliance costs.

¹⁷ NYISO, *Power Trends 2021: New York's Clean Energy Grid of the Future* at 8.

¹⁸ Examples of PSC-mandated programs and initiatives that utility customers are or will be funding in furtherance of the CLCPA and related objectives are set forth in Appendix 2 hereto.

New York State utility customers do not have the capacity to pay ever-increasing amounts for energy. Moreover, continuously recovering the costs of program after program through higher energy rates and prices is enormously damaging to the State's economy, which already has lost large portions of its industrial and manufacturing bases. If energy rates and prices are not competitive, there will be continued (and expanded) leakage, with businesses relocating and/or shifting production at a faster pace to regions with lower energy costs and less-stringent environmental regulations.¹⁹ If that happens, the CLCPA will have failed in a material respect.

Thus, while Multiple Intervenors supports efforts to reduce emissions from the various sectors of the state economy, such efforts should not be funded disproportionately by utility customers through higher energy rates and prices. Rather, the CAC should strive to achieve inter-sector equity, to the greatest extent practicable, with respect to future funding commitments. In this regard, the Draft Plan is utterly lacking; indeed, it fails even to recognize – much less address and resolve – the issue of maintaining equity amongst the sectors of the state economy with respect to the allocation of CLCPA compliance costs. Accordingly, in the Final Plan, the CAC needs to advance recommendations and strategies for achieving CLCPA compliance that are not unduly reliant on incremental funding from electric utility customers.

¹⁹ In contrast, minimizing upward pressure on electric rates and prices would facilitate electrification efforts, and also aid in important economic development efforts. As the 2002 New York State Energy Plan noted: “Policies that promote a secure, competitive, and reasonably priced energy supply will help attract, retain, and expand businesses in New York.” 2002 N.Y.S. Energy Plan at 2-15.

CONCLUSION

For all the foregoing reasons, Multiple Intervenors urges the CAC to adopt the positions espoused herein and reflect them in the Final Plan.

Dated: June 22, 2022
Albany, New York

Respectfully submitted,

MULTIPLE INTERVENORS

Michael B. Mager

Michael B. Mager, Esq.
Counsel to Multiple Intervenors
540 Broadway, P.O. Box 22222
Albany, New York 12201-2222
(518) 320-3409

APPENDIX 1

(January 20, 2021 letter from Donna L. DeCarolus, President, National Fuel Gas Corporation, and Gavin J. Donohue, President, Independent Power Producers of New York, Inc., filed in their capacity as members of the CAC, and including (i) a list of groups supporting a cost study to guide the CAC and (ii) Multiple Intervenors' November 25, 2020 request for same)



National Fuel®



INDEPENDENT
POWER PRODUCERS
OF NEW YORK

January 20, 2021

New York State Climate Action Council (“CAC”) Co-Chairs

Doreen Harris, Acting President and CEO
New York State Energy Research and Development Authority

Basil Seggos, Commissioner
New York State Department of Environmental Conservation (“DEC”)

Re: Letter in Support of Multiple Intervenors’ Request for a Quantitative Analysis of the Costs of CLCPA Compliance

Dear Doreen and Basil:

At our December 15, 2020 CAC meeting, Council members raised the importance of an upfront cost study to inform the feasibility of potential recommendations that the Council would consider in forming the Scoping Plan. The discussion continued at yesterday’s Council meeting and included the need to know the frame of reference for costs and to evaluate such costs in the near-term and the long-term. This letter is a follow-up to that discussion and affirms the importance of understanding energy bill impacts and minimizing consumer energy burden as we prioritize policy pathways for decarbonization.

As members of the CAC, we, along with the other nearly 70 signatories on this letter, believe part of the Council’s critical work is to identify the most cost-effective means for emissions reductions, as required by the New York Climate Leadership and Community Protection Act (“CLCPA”). In the spirit of having a full knowledge and understanding of the costs and benefits of alternative pathways for emissions reductions under the CLCPA, we write to express our support for the November 25, 2020 Multiple Intervenors letter (“MI Letter”) to the Just Transition Working Group, a copy of which is attached, that urges an upfront cost study to be conducted. Additionally, included is the list of groups that also agree with the need for such a cost study.

The MI Letter raises important and timely suggestions, particularly in identifying the need for the CAC to promptly “retain an independent consultant to conduct a **quantitative** analysis of the potential impacts of compliance with the CLCPA on NYS businesses.” (emphasis added) A detailed assessment of such costs is critical for our understanding of the most effective means to achieve the CLCPA’s greenhouse gas reduction targets, and we believe it will be instrumental to the CAC in developing its draft Scoping Plan. This cost study should be commenced as soon as possible in order to guide the work of the CAC, instead of only being performed after the CAC’s recommendations are developed.

Further, we request that such consultant conduct a detailed analysis to estimate the annual and total cost impact on electric and natural gas bills for all customer sectors across the state, including residential, small and large business customers, associated with implementation of the CLCPA’s requirements. This study should include ranges of costs, based upon the selection of various potential decarbonization pathways, so that the CAC may develop a better understanding of the most cost-effective beneficial approaches as we prepare the Scoping Plan. Moreover, this information will be important so that the CAC can recommend least-cost measures that meet the

requirements of the CLCPA and our collective desire for emissions reductions, while also minimizing the financial impacts to the people and businesses of our state.

Such a study is part of the charge of the CAC in developing its Scoping Plan, as described in the CLCPA requirements. ECL § 75-0103 (14)(b) specifically states that “[i]n developing such plan the council shall . . . **[e]valuate, using the best available economic models . . . the total potential costs and potential economic and non-economic benefits of the plan for reducing greenhouse gases, and make such evaluation publicly available.**” (emphasis added). This section further states that, in conducting its evaluation, the CAC shall quantify “[t]he costs of implementing proposed emissions reduction measures, and the emissions reductions that the council anticipates achieving through these measures.” Similarly, Section 3(a) of ECL § 75-0109 requires the DEC to “[d]esign and implement all regulations in a manner that seeks to be equitable, **to minimize costs and to maximize the total benefits to New York**, and encourages early action to reduce greenhouse gas emissions.” (emphasis added).

Finally, ECL § 75-0119, Implementation Reporting, requires the DEC, in consultation with the CAC, to publish a report not less than every four years, which shall include recommendations regarding the implementation of greenhouse gas reduction measures. (ECL § 75-0119 (1)). The report must address, among other things, “[w]hether regulations or other greenhouse gas reduction measures undertaken are equitable, **minimize costs** and maximize the total benefits to the state, and encourage early action.” (ECL § 75-0119 (2)(e), emphasis added).

The CLCPA fully envisions the type of cost study suggested in the MI Letter and a study to further include other sectors of the New York economy. We fully support efforts to reduce greenhouse gas emissions and meet the CLCPA targets while maintaining reliable, resilient, affordable, and efficient energy and related infrastructure in New York State. A well-reasoned quantitative analysis of the costs associated with various emissions reduction strategies will be essential in enabling the state’s transition to a decarbonized energy future. For this reason, we respectfully request the CAC commence this study immediately, since the recommendations of the various CAC Advisory Panels are due to be delivered in March of 2021. The cost study is essential to evaluating the viability of those recommendations.

Thank you again for your consideration of this critical matter. Please do not hesitate to contact us for assistance as you consider the development of a detailed analysis of the costs of compliance with the CLCPA.

Sincerely,



Donna L. DeCarolis
President
National Fuel Gas Distribution Corporation



Gavin J. Donohue
President
Independent Power Producers of NY

(Filed in capacity as Members of the Climate Action Council)

Attachments:

- List of Groups Supporting a Cost Study
- MI Letter

ATTACHMENT 1: List of Groups Supporting a Cost Study to Guide Climate Action
Council's Scoping Plan Development
(in alphabetical order)

Alcoa Corp.
American Petroleum Institute, Northeast Region
Amherst Chamber of Commerce
Arconic Corp.
Aurubis Buffalo, Inc.
Association of General Contractors of NYS
Boilermakers Local 5
Bricklayers & Allied Craftworkers Local #3
Buffalo Niagara Partnership
Business Council of New York State
Business Council of Westchester
Cement Masons Local 111
Central Hudson Gas & Electric Corporation
Consumer Energy Alliance
Construction Contractors Association
Council of Industry (of the Hudson Valley)
Dutchess County Regional Chamber of Commerce
Empire State Forest Products Association
Engineers Labor-Employer Cooperative
Engineers Labor-Employer Cooperative (ELEC) 825
GLOBALFOUNDRIES, U.S.
Hudson Valley Building Trades
International Association of Bridge, Structural, Ornamental, and Reinforcing Ironworkers Local 6
International Association of Heat and Frost Insulators and Allied Workers Local #4
International Brotherhood of Boilermakers Union Local #7
International Brotherhood of Electrical (I.B.E.W) Workers Local #41
I.B.E.W. Local 237
I.B.E.W Local 320
International Union of Elevator Constructors Local #14
International Union of Operating Engineers Local #17
International Union of Operating Engineers 825
International Union of Painters and Allied Trades Painters District Council #4
Iron Workers Local No. 9

Laborers-Employers Cooperation and Education Trust
Laborers Local #91
Laborers Local #210
Liuna Local 17 Laborers
MACNY & the Manufacturers Alliance of New York State
Millwrights Local 1163
National Biodiesel Board
National Federation of Independent Business
New Paltz Regional Chamber of Commerce
New York Affordable Reliable Electricity Alliance, Inc.
New York Construction Materials Association
New Yorkers for Affordable Energy
New York Propane Gas Association
New York State Association of Convenience Stores
New York State Energy Coalition
New Paltz Chamber of Commerce
North Atlantic States Regional Council of Carpenters Local 276
Olin Corporation
Operative Plasterers' & Cement Masons' International Association Local #9
Orange County Chamber of Commerce
Orange County Partnership
Power for Economic Prosperity
RED-Rochester, LLC
Revere Copper Products, Inc.
Sheet Metal, Air, Rail and Transportation Workers Local #71
Teamsters Local 449
The Buffalo Building Trades Council
The Niagara Building Trades Council
Ulster County Chamber of Commerce
United Association of Plumbers & Steamfitters Local #22
United Association of Road Sprinkler Fitters Local #669 JATC District 34
United Union of Roofers, Waterproofers and Allied Workers Local #74
Unshackle Upstate
Utility Workers Union of America (UWUA) Local 1-2



November 25, 2020

Commissioner Roberta Reardon
New York State Department of Labor
Doreen Harris, Acting President and CEO
New York State Energy Research and Development Authority
Co-Chairs, Just Transition Working Group (“JTWG”)
New York State Climate Action Council

Re: **Request for a Quantitative Analysis of the Costs of
CLCPA Compliance on New York State Businesses**

Dear JTWG Co-Chairs:

Multiple Intervenors is an unincorporated association of approximately 57 large industrial, commercial and institutional energy consumers with manufacturing and other facilities located throughout New York State. As large end-use consumers of electricity in New York, Multiple Intervenors’ members are subject to state decarbonization policies, and pay substantial energy-related costs. The outcome of the Just Transition Working Group’s (“JTWG”) work, especially regarding energy and/or emissions-intensive and trade-exposed (“EITE”) industries, may have a significant impact on the electricity and regulatory compliance costs then incurred by Multiple Intervenors’ members. Accordingly, Multiple Intervenors has a substantial interest in the matter, and its members will be directly affected by the recommendations from the JTWG to the Climate Action Council (“CAC”).

Among other things, the JTWG is tasked with advising on the impact of any potential carbon reduction measures on the competitiveness of NYS businesses and industry. In order to complete that task, Multiple Intervenors submits that it is critical that the JTWG, or a subgroup operating under its direction, retain an independent consultant to conduct a **quantitative** analysis of the potential impacts of compliance with the CLCPA on NYS businesses. Such a quantitative analysis of the potential impacts of the CLCPA is long overdue and will provide fundamental information that will allow the JTWG to understand the magnitude of the impacts on businesses so that it can recommend appropriate strategies. The quantitative analysis should include, at a minimum:

- The impact of CLCPA compliance on electricity wholesale prices, delivery rates and total bills that NYS businesses will pay, including indirect energy costs. This would include the impacts of subsidies to site land-based and off-shore renewable energy projects, the build out of the electric infrastructure to receive and transmit renewable power, subsidies of energy storage projects, and the addition of new loads associated with deep electrification efforts in the heating and transportation sectors. It also would include the potential need to continue subsidizing nuclear

generating units beyond 2029 if needed to maintain reliability. The analysis should address long-term maintenance costs, not just upfront costs.

- The impact of CLCPA compliance on the reliability of the electric system in the State and its ability to support increasingly sensitive manufacturing processes that are critical to a new economy. The analysis should include a power quality study that assesses whether power reliability (on both the generation and transmission sides) will be diminished (24/365) as intermittent resources become a greater percentage of the generation mix and electric loads grow exponentially. Among other things, the study should address voltage sags and how reliability will be maintained when solar and wind resources are not generating power. It also should address how reliability will be maintained when fast-ramping gas-fired generation is phased-out.
- The impact of CLCPA compliance on natural gas market prices, delivery rates and total bills that NYS businesses will pay. This would include the impacts of potential accelerated depreciation of natural gas assets, stranded gas costs, subsidies of non-pipeline alternatives and depleting gas supplies. The analysis should address long-term maintenance costs, not just upfront costs.
- The impact of CLCPA compliance on the reliability of the natural gas system in the State and its ability to support manufacturing processes for which today there are not any known replacement fuels. For instance, many manufacturers utilize and depend upon natural gas for process purposes; it is not clear how reliable and affordable gas service will be maintained for these customers if gas use is phased-out in New York.
- Clarification of the impact of CLCPA compliance on industrial use of fossil fuels (for emergency generators, environmental emissions abatement, boilers etc.). Will there be caps on use, exemptions for certain uses, etc.?
- Clarification on the impact to manufacturing uses of GHGs (both fossil fuels and other non-fossil fuel based chemicals and gases). The E3 study seemed to assume a growth rate of 0, which could then act as a "cap", though the E3 presenter admitted that they need to get into that area in more detail. Some industries use specific GHGs as part of the manufacturing process, for which today there are no known alternatives.
- Finally, the analysis should include sensitivities for major assumptions. For instance, the cost of different initiatives may vary substantially depending on the amount of statewide electric demand and/or the level of wholesale energy prices. Thus, exclusive reliance on single assumptions for such key inputs – without, at a minimum, “high” and “low” scenarios – may provide misleading outcomes. In addition to including different sensitivities, the requested analyses should be updated periodically for changes in circumstances.

November 25, 2020
Page 3

In closing, we appreciate the efforts of the JTWG and all of the advisory panels, and we understand the hard tasks and aggressive schedules you face. The study requested herein will provide vital information that JTWG members, and ultimately the CAC members, need to protect NYS businesses and the hundreds of thousands people they employ. Thank you for your attention to this request.

Very truly yours,

MULTIPLE INTERVENORS

APPENDIX 2

EXAMPLES OF PSC-MANDATED PROGRAMS AND INITIATIVES THAT UTILITY CUSTOMERS ARE OR WILL BE FUNDING IN FURTHERANCE OF THE CLCPA AND RELATED OBJECTIVES

Set forth below are examples of some – but not all – of the programs and initiatives mandated by the PSC in furtherance of the CLCPA and related objectives that utility customers are and/or will be funding through higher electric and gas rates and prices. While Multiple Intervenors recognizes that each of these programs and initiatives are intended to produce certain benefits, the financial impacts of these programs and initiatives are significant, both individually and collectively. Accordingly, when the CAC evaluates potential CLCPA compliance actions and costs, it should not do so in a vacuum. The CAC instead should be cognizant of and consider the costs that already are being imposed and/or are scheduled to be imposed on utility customers, including, but not limited to, the following:

- Utility customers are and will be funding out-of-market payments of an indeterminate amount (believed to be in the many billions of dollars) to incentivize the development of new, large-scale renewable generation facilities under Tier 1 of the Clean Energy Standard (“CES”).¹

¹ See generally PSC Case 15-E-0302, *Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard*, Order Adopting a Clean Energy Standard (issued August 1, 2016) at 78-115 (establishing a CES Tier 1 program for new renewable generating resources). The most recently-published prices for CES Tier 1 Renewable Energy Credits (“REC”) is \$22.47 per REC, available at: <https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/LSE-Obligations/2021-Compliance-Year>. Inasmuch as renewable generation penetration in New York recently has been under 30%, and must climb to 70% by 2030 under the CLCPA, it is anticipated that CES Tier 1 RECs will have a cost well into the billions of dollars during the coming decade.

- Utility customers are and will be funding out-of-market payments of an indeterminate amount (believed to be in the hundreds of millions of dollars) to incentivize the continued operation of existing renewable generation facilities under Tier 2 of the CES.²
- Utility customers are and will be funding out-of-market payments of an indeterminate amount (believed to be many billions of dollars) to incentivize the continued operation of existing nuclear generation facilities under Tier 3 of the CES.³
- Utility customers will be funding out-of-market payments of an indetermined amount (believed to be many billions of dollars) to incentivize the development of incremental transmission and renewable generation to serve New York City under Tier 4 of the CES.⁴

² See generally PSC Case 15-E-0302, *supra*, Order Adopting a Clean Energy Standard at 17-18, 115-19 (establishing a CES Tier 2 maintenance program for existing renewable generation facilities demonstrating financial need), and Order Adopting Modifications to the Clean Energy Standard (issued October 15, 2020) at 49-77 (establishing an additional, competitive solicitation component to CES Tier 2 at a maximum incremental cost of \$200 million through 2026).

³ See generally PSC Case 15-E-0302, *supra*, Order Adopting a Clean Energy Standard at 119-153 (establishing a CES Tier 3 for existing nuclear generating facilities). The first two-year tranche of the 12-year Tier 3 program (encompassing April 1, 2017 through March 31, 2029) relied upon a zero-emission credit (“ZEC”) price of \$17.48 per ZEC, with ZECs applied to an annual maximum of 27,618,000 MWh (*see id.* at App. E), for a maximum annualized cost of \$482,762,640. Thus, the existing, 12-year ZEC program is expected to cost between \$5 billion and \$7 billion, depending upon the cost of ZECs (which fluctuate) and the output of the State’s existing nuclear generation facilities. Moreover, to the extent the CLCPA necessitates the continued operation of those facilities beyond March 31, 2029, the total Tier 3 costs may rise further, possibly significantly.

⁴ See generally PSC Case 15-E-0302, *supra*, Order Adopting Modifications to the Clear Energy Standard (issued October 15, 2020) (approving CES Tier 4), Petition filed by DPS Staff and NYSERDA (dated November 30, 2021) (seeking approval of two proposed CES Tier 4 contracts), Notice Soliciting Comments (dated December 2, 2021) (soliciting comments on the DPS Staff/NYSERDA Petition). The aggregate cost impacts of the two proposed CES Tier 4 contracts are enormous. According to analyses conducted by DPS Staff and NYSERDA, the contracts could raise electricity costs by as much as 5.7% on a statewide basis, and as high as 9.9% on customers of Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid”). *Id.* DPS Staff/NYSERDA Petition, Appendix C at 26. DPS Staff and NYSERDA also indicate that “impacts on large commercial customers may be up to twice the utility-wide averages.” *Id.* Thus,

- Utility customers will be funding out-of-market payments of an indeterminate amount (believed to be many billions of dollars) to incentivize the development of new, offshore wind generation facilities.⁵
- Utility customers previously were committed to funding a Clean Energy Fund (“CEF”) at a cost of over \$6 billion.⁶ Recently, however, the PSC approved a petition filed by DPS Staff and NYSERDA to increase the CEF budget by \$1.474 billion to fund additional incentives for distributed solar.⁷
- Utility customers are and will be funding utility-administered electric energy efficiency programs at a cost of close to \$1.9 billion through 2025, and potentially more thereafter.⁸

the proposed CES Tier 4 contracts could increase electricity costs for large commercial customers by as much as 11.4% on a statewide basis, and as much as 19.8% within the National Grid service territory. *See id.* In April, the PSC approved the proposed CES Tier 4 contracts. *Id.*, Order Approving Contract for the Purchase of Tier 4 Renewable Energy Certificates (issued April 14, 2022).

⁵ *See generally* PSC Case 18-E-0071, *In the Matter of Offshore Wind Energy*. *See also id.*, Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement (issued July 12, 2018) at 15-64 (establishing an offshore wind generation target of 2.4 GW by 2030 and authorizing an initial procurement process in support thereof). The CLCPA increased the offshore wind generation target from 2.4 GW by 2030 to 9 GW by 2035. N.Y. Env. Cons. Law § 75-0103(13)(E).

⁶ *See generally* PSC Case 14-M-0094, *Proceeding on Motion of the Commission to Consider a Clean Energy Fund*. *See also id.*, Order Authorizing the Clean Energy Fund Framework (issued January 21, 2016) at Appendix H (authorizing customer collections of \$6,001,000); and Order Approving Clean Energy Fund Modifications (issued September 9, 2021) at Appendix E (authorizing \$3,165,800 in collections from customers from 2021-2029).

⁷ *See generally* PSC Case 21-E-0629, *In the Matter of the Advancement of Distributed Solar*, Order Expanding NY-Sun Program (issued April 14, 2022). Thus, separate and apart from all other PSC programs and initiatives, the CEF now has an authorized cost to customers of approximately \$7.5 billion.

⁸ *See generally* PSC Case 18-M-0084, *In the Matter of a Comprehensive Energy Efficiency Initiative*. *See also id.*, Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios Through 2025 (issued January 16, 2020) (hereinafter, “NE:NY Order”) at App. A, Table

- Utility customers are and will be funding utility-administered gas energy efficiency programs at a cost of close to \$900 million through 2025, and potentially more thereafter.⁹
- Utility customers are and will be funding utility-administered electric heat pump programs at a cost of over \$450 million through 2025, and potentially more thereafter.¹⁰
- Utility customers are and will be funding incentives to promote electric vehicle infrastructure investments at a cost of over \$700 million through 2025, and potentially more thereafter.¹¹
- Utility customers are and will be funding an Electric Generation Facility Cessation Mitigation Program, to compensate municipalities that lose tax base when generation facilities retire due to the transition to a cleaner electric system, at a cost of \$112.5 million through 2030.¹²

A3 (authorizing statewide spending on utility-administered electric energy efficiency programs of \$1,879,114,825 from 2021-2025).

⁹ *See id.*, NE:NY Order at App. A, Table A4 (authorizing statewide spending on utility-administered gas energy efficiency programs of \$878,716,819 from 2021-2025).

¹⁰ *See id.* NE:NY Order at App. C, Table C1 (authorizing statewide spending on utility-administered electric heat pump programs of \$454,318,220 from 2020-2025).

¹¹ *See generally* PSC Case 18-E-0138, *Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure*. *See also id.*, Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs (issued July 16, 2020) at 68-76 and Appendix B (authorizing statewide spending on EV infrastructure incentives of \$700,994,850 through 2025).

¹² *See* PSC Case 20-E-0473, *In the Matter of Developing a Funding Mechanism for the Electric Generation Facility Cessation Mitigation Program*, Order Authorizing Funding for Electric Generation Facility Cessation Mitigation Program (issued February 11, 2021) (establishing a budget of \$12.5 million per year through 2030 to be funded by electric customers statewide).

- Utility customers are and will be funding out-of-market payments and utility cost recovery of an indeterminate amount (believed to be substantial) to incentivize the development of new electric storage facilities.¹³
- Utility customers are and will be funding multiple, large-scale transmission projects at an indeterminate cost (believed to be many billions of dollars) whose primary purpose is to increase the deliverability of renewable energy to different regions of the State.¹⁴
- Utility customers are likely to be required to fund utility local transmission and distribution projects and upgrades on a widespread basis (believed to be in the many billions of dollars) in furtherance of CLCPA targets.¹⁵

¹³ See generally PSC Case 18-E-0130, *In the Matter of Energy Storage Deployment Program*. See also *id.*, Order Establishing Energy Storage Goal and Deployment Policy (issued December 13, 2018) at 1-5 (establishing a target of 3,000 MW of qualified storage energy systems by 2030, with an interim objective of 1,500 MW of energy storage systems by 2025). The CLCPA incorporates the electric storage target of 3,000 MW by 2030. N.Y. Env. Cons. Law § 75-0103(13)(E).

¹⁴ See, e.g., PSC Case 12-T-0502, *Proceeding on Motion of the Commission to Examine Alternating Current Transmission Upgrades*, Order Addressing Public Policy Transmission Need for AC Transmission Upgrades (issued January 24, 2017) at 18-19 (justifying the “AC Transmission” projects on a need to increase transmission capacity to allow renewable generation facilities to deliver their energy to downstate load centers); PSC Case 14-T-0454, *In the Matter of New York Independent System Operator, Inc.’s Proposed Public Policy Transmission Needs for Consideration*, Order Addressing Policy Requirements for Transmission Planning Purposes (issued July 20, 2015) at 27 (justifying the “Western New York” transmission project on increasing deliverability in the region to maximize output from the New York Power Authority’s Niagara hydroelectric generation facility and additional imports of renewable energy from the Ontario region); and PSC Case 20-E-0497, *In the Matter of New York Independent System Operator, Inc.’s Proposed Public Policy Transmission Needs for Consideration for 2020*, Order Addressing Public Policy Requirements for Transmission Planning Purposes (issued March 19, 2021) at 1-4 (justifying future transmission projects in and between Long Island and New York City to facilitate deliverability of offshore wind generation).

¹⁵ See generally PSC Case 20-E-0197, *Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act*, Order on Phase 1 Local Transmission and Distribution Project Proposals (issued February 11, 2021). See also *id.*, Filing by New York State Electric & Gas Corporation

- Utility customers are and will be funding Earnings Adjustment Mechanisms (“EAMs”) for the benefit of utility shareholders at an indeterminate cost (believed to be in the hundreds of millions of dollars) for the purpose of incentivizing utilities to help achieve certain State clean energy objectives.¹⁶
- Utility customers are and will be funding out-of-market payments at an indeterminate cost (believed to be substantial) to incentivize Distributed Energy Resources (“DER”) through net energy metering arrangements and “value stack” compensation.¹⁷

(dated December 23, 2021) (proposing \$1.944 billion in compliance projects incremental to its PSC-approved capital expenditure budgets), Filing National Grid (dated November 8, 2021) (proposing \$718.945 million in compliance projects incremental to its PSC-approved capital expenditure budgets).

¹⁶ See generally PSC Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision*, Order Adopting a Ratemaking and Utility Revenue Model Policy Framework (issued May 19, 2016) at 53-93 (discussing and then mandating the use of EAMs).

¹⁷ See generally PSC Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources*. See also *id.*, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017) (addressing, and providing exemptions to, an eventual transition from net energy metering, and also establishing value stack compensation for certain DERs).