

New York State Climate Action Council

October 25, 2022
Meeting 27



**Climate Action
Council**

Agenda

- > Welcome and Roll Call
- > Consideration of September 29, 2022, Minutes
- > Consideration of October 13, 2022, Minutes
- > Co-Chair Remarks and Reflections
- > Code Adoption Process
- > Integration Analysis Update
- > Discussion of Feedback by Topic:
 - Electricity
 - Climate Justice
- > Next Steps

Consideration of September 29, 2022, Minutes

Consideration of October 13, 2022, Minutes

Co-Chair Remarks and Reflections

Recent Announcements

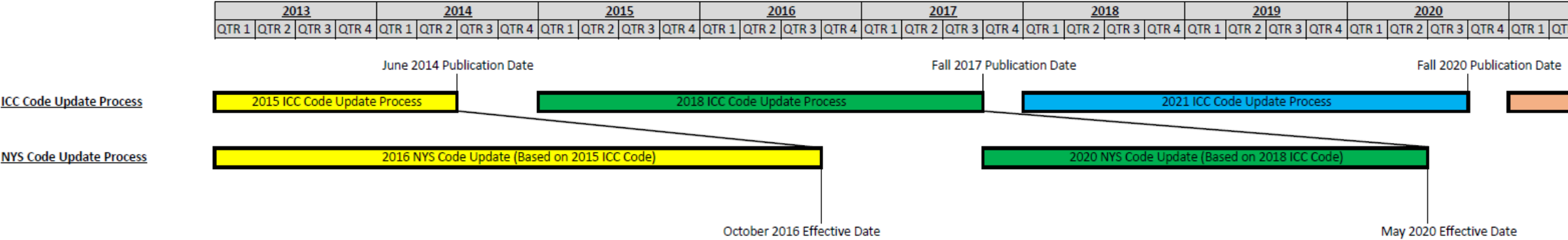
Recent Activity from New York State

- Attorney General James and NYSERDA Announce Groundbreaking Energy Efficiency Project in Albany's South End - NYSERDA
- NYSERDA and National Grid Announce Round One Results of Community Solar Program Offering for Underserved New Yorkers
- Governor Hochul and Suffolk County Executive Bellone Announce Land Transfer to Bring National Offshore Wind Training Center to Suffolk County and Train New Yorkers for Green Jobs | Governor Kathy Hochul (ny.gov)
- Governor Hochul Announces Over \$13 Million to Protect Clean Water and Support New York Farmers in the Fight Against Climate Change



Code Adoption Process

NYS Code Adoption History



Code Integration, Adoption, & Enactment

Tasks	22-Jul	22-Aug	22-Sep	22-Oct	22-Nov	22-Dec	23-Jan	23-Feb	23-Mar	23-Apr	23-May	23-Jun	23-Jul	23-Aug	23-Sep	
Integration of 2020 NYS Codes with ICC 2024, Provisions of NYStretch 2023, and Uniform Code Changes			█													
Develop and propose Energy Code Stringency Targets																
Compile, organize, assess the proposed changes			█													
Present summary of significant changes and recommendations to the Code Council						█										
Code Council reviews and agrees and approves changes						█										
Develop 1st draft of compiled documents								█								
Energy Code Stringency Analysis														█		
Modify 1st draft of State Energy Code based on Stringency Analysis														█		
Notice of Rule in Development published for 60 days (All Codes/Standards), Assessment, and Change (Requires ICC Approval) NEED FINAL RULE TEXT BY 9/23															█★	

Code Integration, Adoption, & Enactment (cont'd)

Tasks	23-Sep	23-Oct	23-Nov	23-Dec	24-Jan	24-Feb	24-Mar	24-Apr	24-May	24-Jun	24-Jul	24-Aug	24-Sep	24-Oct	24-Nov	24-Dec
Notice of Rule in Development published for 60 days (All Codes/Standards), Assessment, and Change (Requires ICC Approval) NEED FINAL RULE TEXT BY 9/23	★															
Compile, organize, assess the Notice of Rule in Development comments																
Present a summary of comments to the Code Council																
Prepare 2nd draft of State Energy Code and Uniform Code based on Code Council's decision on comments																
Notice of Proposed Rulemaking published for 60 day PC.																
Compile, organize, assess the Notice of Proposed Rule Making public comments																
Present a summary of public comment and proposal responses to the Code Council																
Prepare 3rd draft of the Energy Code and Uniform Code based on Code Council decision on public comments																
Work to Gain Approvals for Notice of Adoption																
Notice of Adoption																
Purchase books and/or website licences from ICC																
State Environmental Quality Review Act (SEQR) (Timeline TBD)																
NY 2024 CODES LIVE FOR ALL OF NEW YORK																★

Integration Analysis Update

NYISO Outlook and Integration Analysis Comparison

> Cases Compared:

- Integration Analysis Scenario 2 (IA S2) – super-zonal capacity expansion model
- NYISO Outlook S2 Capacity Expansion (CE) – zonal capacity expansion model
- NYISO Outlook S2 Production Cost Model (PCM) – nodal production cost model for detailed generation

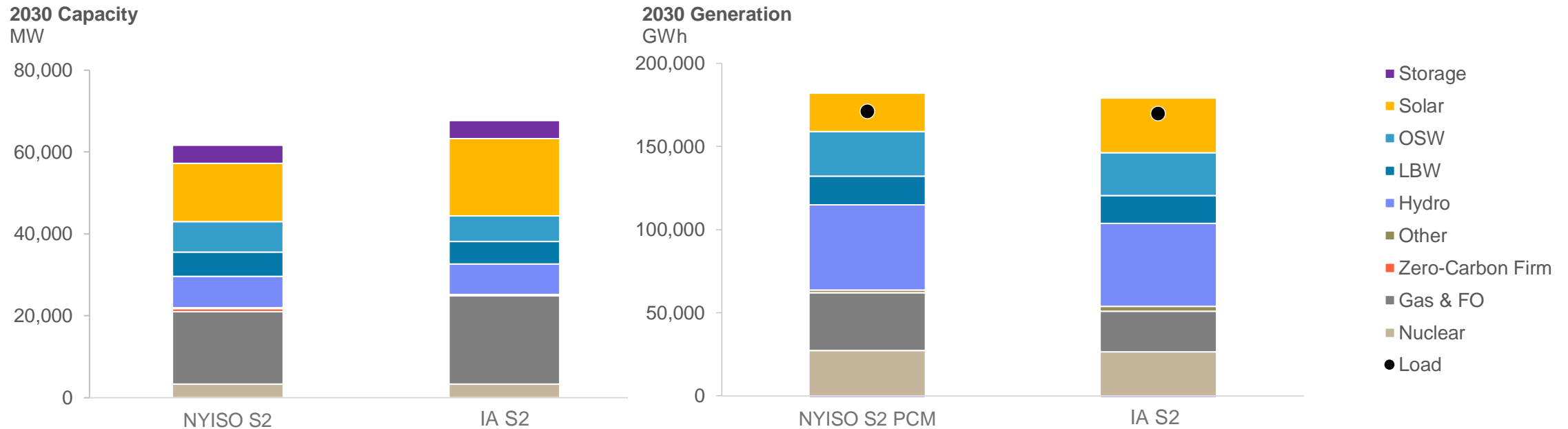
> Key Similarities in Inputs and Assumptions

- Electrified load shape from IA S2
- CLCPA electric sector requirements, i.e. 70X30, 100X40, resource requirements

> Key Model Differences

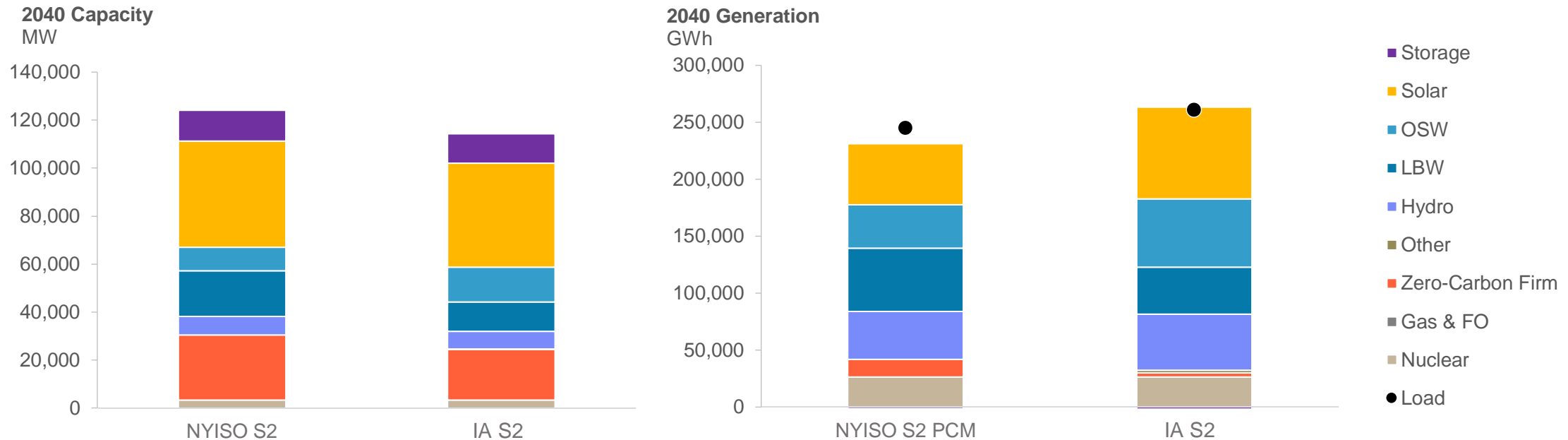
- Different models with different assumptions for resource cost and performance
- Different model granularity
- IA and NYISO Outlook include different treatment of imports/exports. NYISO PCM allows for net imports in 2040; NYISO CE does not allow for imports or exports; IA allows for imports and exports but solves for zero net imports in 2040
- IA modeling treats CHPE as incremental to resources required to meet 70X30
- IA includes incremental hydrogen electrolysis load as well as electric vehicle charging flexibility

Comparison of 2030 Results



- > NYISO Scenarios and IA are overall well-aligned. Both studies see substantial buildouts of offshore and onshore wind, solar, and storage by 2030. Load is primarily met by zero carbon resources
- > IA treatment of CHPE as incremental to 70x30 leads to more solar capacity than NYISO
- > IA modeling includes opportunity for gas resources to convert to zero carbon firm by 2040. This leads to slightly higher 2030 gas capacity in the IA compared to the NYISO cases

Comparison of 2040 Results



- > NYISO Scenarios and IA remain similar. By 2040, both build substantial wind, solar, and storage, as well as over 20 GW of zero carbon firm resources
- > NYISO S2 has a slightly higher overall resource build, which is a function of:
 - No peak reductions from flexible EV charging
 - Lower resource capacity factors
 - NYISO Scenarios have a lower solar output, despite a similar buildout
 - NYISO Scenarios have a higher share of land-based wind compared to offshore, due to different resource cost assumptions
 - Higher renewable curtailment in NYISO cases contributes to need for additional zero-carbon firm resource capacity and generation
- > Allowing net imports in the NYISO S2 PCM case reduces in-state generation compared to other cases

Discussion of Feedback by Topic

Discussion of Feedback: Electricity

Summary Themes

Renewable Energy Siting & Interconnection

- > Broad support for high-value projects that contribute to equity, resilience, and smart land use.
- > Commenters proposed streamlining and speeding up timelines for permitting and interconnection processes across authorities having jurisdiction and at the utilities.
- > Commenters support an evaluation of the role of utilities in building and owning renewable energy projects.
- > Several commenters support maximizing the use of built environments (parking lots, warehouse/box store roofs, landfills, thruway medians and adjacent grassy areas, toll plazas, etc.) to minimize impact on farmland and rural areas.
- > Specific comments to consider the preservation of culture and tradition, including indigenous resources when siting renewable energy projects.
- > Several commenters expressed concern about impacts of renewable energy development on farmland and forests and encouraged mitigation strategies such as the development of a comprehensive agrivoltaics program.

Renewable Energy Procurement and Goals

- > General concerns that the renewable energy procurement goals are too fast or too slow.
- > Recommendation to set year-by-year targets for wind, solar, and battery permitting and an RFP schedule for procurement.
- > Prioritize energy efficiency and demand side management, especially in the near term.
- > Support development of long duration energy storage, distributed energy generation, and other demand-side solutions.
- > Many commenters support strong labor standards, workforce development, and targeted training programs.

Summary Themes

Phasing out Fossil Fuel Power Generation Infrastructure

- > Strong support for coordinating gas and electricity transitions and ensure energy affordability and overall energy system reliability is maintained.
- > Support a schedule to phase out fossil fuel power plants, prioritizing those located in disadvantaged communities.
- > Support for using the "peaker rule" model (Subpart 227-3) to phase down fossil fuel power plants.
- > Support and opposition for a moratorium on new or repowered fossil fuel power plants.
- > Support for a ban on bitcoin mining operations.
- > Broad support for reuse of existing fossil fuel power plant sites for battery storage or to leverage existing networks for low-carbon fuels to existing fossil generation units to for reliable electric supply.

Nuclear Energy/Existing Renewables

- > Some commenters expressed a concern for loss of baseline renewable generation including existing renewables, hydropower, and nuclear.
- > Support and opposition for continuing, and investing in, nuclear generation in the State.
- > Support for extending the Tier 2 Program through 2030 and raising the price cap to reflect operating and opportunity costs for baseline renewable generation.
- > Complete a barrier's analysis for repowering of solar, wind, and hydropower facilities.

Summary Themes

Reliability and Resiliency

- > Commenters expressed strong concerns about the reliability of the grid, including black start capability, as we transition to intermittent renewables.
- > Several commenters stressed the importance of increasing the resiliency of the grid to extreme weather and other events.
- > Commenters called for the need to prioritize firm and dispatchable generation, emission free resources such as battery storage, demand-side solutions, and adequate reserve margins to reduce peak demand and increase grid reliability.
- > Commenters stressed the importance of the NYS Reliability Council and the NYISO reliability planning process being included in the analysis of the reliability of transmission and distribution system.

Community Engagement & Disadvantages Communities

- > Specific call to prioritize renewable energy development, microgrids, and fossil fuel power plant closure in Disadvantaged Communities.
- > Several commenters support prioritizing climate education and awareness-raising about the benefits of renewable energy, including providing local governments and indigenous populations support to actively participate in the energy transition.
- > Commenters urged a need for better coordination of HEAP, NYSERDA's EmPower Program, and the Heating Equipment Repair and Replacement Program, as well as expanding bill payment assistance programs to deliver benefits low-to-moderate income (LMI) consumers.
- > Commenters prefer grants vs. tax credits as they provide better support for clean energy benefits to LMI consumers.
- > Commenters support opt-out community solar to prioritize Disadvantaged Communities by automatically enrolling LMI residents and allowing them to benefit from the guaranteed electric bill savings that community solar brings.

Summary Themes

Transmission Development and Renewable Energy Integration

- > Many commenters expressed support for improved and better coordinated transmission planning and renewables integration, including recognizing the roles of both the PSC and utilities.
- > Specifically, commenters urged that transmission planning must improve both local and bulk transmission infrastructure in order to achieve the Climate Act goals. Additionally, commenters support the prioritization of improving the local grid and development of local renewable resources.
- > Commenters expressed support for the PSC Coordinated Grid Planning Process and Public Policy Transmission Need processes to streamline renewables integration.

Market-Based Strategies

- > Strong support for zero-emission dispatchable generation including the examination of using Clean Dispatch Credits.
- > Support for redesigning incentives for renewable energy development including support for added incentives for greyfield sites, as well as support for multi-technology projects, energy storage, and demand-side solutions.
- > Commenters noted the need to evaluate the potential for extreme price volatility in the electricity market during the clean energy transition.
- > Strong support for a comprehensive cost analysis study that includes the cost of construction for renewables and other zero emission energy sources, a regional cost analysis, and provides enhanced transparency on customer bill impacts.
- > Commenters expressed support for advocacy to the NYISO and FERC for energy market reforms, specifically noting expansion of the team at DPS that focuses on this advocacy.

Unresolved CJWG Feedback

Topic (Location in Draft Scoping Plan)	CJWG input as reflected in the Draft Scoping Plan	Draft Scoping Plan recommendations
Retirement of Fossil Fuel Fired Facilities (pp. 155-156)	The CJWG is supportive of strategies to facilitate retirement of fossil fuel fired generation facilities and recommends the Council take the additional step of placing a moratorium on the permitting of new fossil fuel plants until the final Scoping Plan is in place, or until there is a demonstrated system reliability need that can only be addressed with fossil fuel generation.	The Draft Scoping Plan recommends a comprehensive planning process to support the retirement of fossil fuel fired generation facilities. It stopped short of recommending a moratorium on permitting fossil fuel plants as the Power Generation Advisory Panel was not in consensus on this position.
Invest in Transmission and Distribution Infrastructure Upgrades (p. 168)	The CJWG is supportive of this strategy, seeing it as key to building out renewables. It suggests the inclusion of additional actions, including to pro-actively identify key transmission and distribution upgrades, improvements, and new line construction needed to deliver renewable energy across the State and maximize the retirement of fossil fired resources. Furthermore, it suggests interconnection be approached through a justice-oriented lens where community-led and community-supported clean energy projects are facilitated and exempt from the sometimes costly interconnection fees that have proved some such projects uneconomic.	The Draft Scoping Plan calls for expansion of electricity transmission and distribution systems to support continued integration of additional renewable energy resources. It also calls for (p. 161) speeding up the pace of processing interconnection applications.
Improve Reliability Planning and Markets (p. 170)	The CJWG generally supports the call for continued efforts to improve reliability and resiliency to extreme weather events and climate change but suggests that the NYISO and its processes should be more transparent, and information better disseminated with local energy advocates. It also suggests that there is a need to address extreme heat vulnerabilities beyond overcapacity to the grid, such as the increased water demand for cooling of power plant systems and the expansion of metal in power lines as a result of extreme heat resulting in sagging power lines leading to an increased risk of tree strike related fires. Furthermore, the group posits that storm hardening infrastructure investments must be first implemented in historically burdened Black and brown communities, since these communities have less access to cooling for summer storms, heating for winter storms, transportation, or savings.	The Draft Scoping Plan recommends (p. 171) that power system studies and planning should consider analyses to integrate climate change impacts as needed for reliability and resiliency and that (p. 171) infrastructure investments should continue to improve reliability and resiliency to extreme weather events.
Explore Technology Solutions (p. 177)	The CJWG supports the near-term focus on achievement of 70x30 via deployment of currently available solutions. However, it expresses strong concern about the promotion of some emerging technologies, including green hydrogen, RNG, biofuels, biomass, and waste-to-energy, which it claims can add more GHGs to the environment rather than less, and also leads to more localized pollution which is concentrated in environmental justice communities. The CJWG highlights the need for further research and consideration of lifecycle GHG accounting and potential air quality and health impacts of these technologies prior to supporting demonstration projects. The CJWG also recommends a lifecycle analysis of the environmental, health, safety, emissions, and environmental justice impacts of nuclear fuel be conducted and the State proactively plan for the scheduled shutdown of the four reactors upstate.	The Draft Scoping Plan specifically calls out (pp. 176-177) the need to ensure historically Disadvantaged Communities do not see an increase in co-pollutants or reduction in air quality as a result of the use of advanced fuels, and suggests that further analysis, technical development, and research is needed in order to determine the feasibility and climate and health impacts of advanced fuels to ensure they provide net benefit.

Staff Recommendations

Responsible and Equitable Phase Out of Fossil Fuel Generation Facilities

- > Add additional detail regarding the potential to repurpose these facilities for clean energy alternative uses (e.g., storage).
- > Clarify that any retirement or repurposing of existing fossil fuel generation is done in coordination with the NYS Reliability Council and NYISO reliability planning process.
- > Include text about prioritizing the retirement and/or repurposing of facilities located in Disadvantaged Communities.
- > Clarify the need to maintain energy affordability and system reliability during the transition away from fossil fuel generation and build out of the electric grid to accommodate increased renewable energy generation.

Streamlined Siting, Permitting, and Interconnection

- > Include text about enhanced coordination among state agencies having jurisdiction for permitting in addition to utilities
- > Add text to prioritize use of existing developed land to minimize impact on farmland, forests, and other cultural resources.
- > Expand language on agrivoltaics to include a study on developing a comprehensive agrivoltaics program.

Enhanced Community Engagement and Education

- > Recommend that PSC assess, through its transparent process, mechanisms to minimize rate impacts in the context of other related policies.
- > Include language on the need for enhanced coordination on the various State bill payment assistance and energy efficiency incentive programs.
- > Strengthen language regarding community education including education to indigenous populations, and the need for a statewide education and awareness campaign to educate consumers about the benefits of a clean energy economy.

Staff Recommendations

Coordinated Transmission Planning

- > Ensure there is an emphasis on the importance of cost-effective local transmission and distribution electric system upgrades.
- > Add detail on coordinated transmission planning processes including the strategic role energy storage can play.

Importance of Maintaining Energy System Safety and Reliability

- > Clarify the importance of increasing the resiliency of the grid to be able to withstand extreme weather and other events.
- > Include language about evaluating the barriers and level of support needed for repowering and maintaining existing renewables including solar, wind, and hydropower facilities.
- > Add detail on the need for DPS and NYSERDA to identify, develop, and evaluate the zero-emission dispatchable generation technologies necessary to meet the 100 x 2040 CLCPA requirement.

Renewable Energy Procurement, Costs, and Standards

- > Include a recommendation for a more detailed cost and benefits analysis of renewable energy investments that includes a regional cost analysis, detailed benefits assessment, and customer bill impacts.
- > Add language about including labor standards, workforce development, and targeted training programs as part of clean energy infrastructure development.

Discussion of Feedback: Climate Justice

Summary Themes

1. Incorporate Environmental Justice in air quality and energy policy
2. Create an inclusive, living wage earning green workforce
3. Avoid wasteful consumption of natural resources
4. Consultation process with Indigenous Nations

Many of the proposed policies in response to these themes were better suited for the sectoral chapters on the given topic and thus shared with the appropriate staff team for incorporation

Staff Recommendations

- > Further clarify need for Climate Justice
- > Demonstrate the intent and ability of New York State to address hotspots and achieve clean air through a multi-faceted government approach for inclusive engagement that leverages regulatory procedures, such as the DEC air quality regulation, or energy and environmental programs, such as the Community Air Monitoring program or the Clean Energy HUBS, or other strategies designed to equitably and effectively reduce local sources of GHGs and co-pollutants.
- > Agency or Authority leading implementation of Scoping Plan strategy would engage in meaningful consultation with sovereign Indigenous Nations in accordance with their consultation processes, which would include the implementation of rulemakings, planning, and investment strategies.

Next Steps

Next Steps

Tentative Council Meetings and Topics

Date and Time	Topic
Monday, November 7, 2 – 5 pm	Discuss redlines of interest
Monday, November 21, 9 am – noon	Discuss redlines of interest
Monday, December 5, 2 – 5 pm	Final resolution of outstanding items
Monday, December 19, 2 – 5 pm	Vote on Final Scoping Plan, member statements

Proposed Schedule for Distribution of Draft Edits

Plan Chapters	Redline text provided to CAC	Small group feedback session	Discussed at CAC meeting
Local Gov, Transportation, Waste	26-Oct	1-Nov	7-Nov
Land Use, A&F, Just Transition, A&R	28-Oct	3-Nov	7-Nov
Gas Transition, Buildings, Health, Industry	9-Nov	14-Nov	21-Nov
Economywide, Electricity, Climate Justice	14-Nov	17-Nov	21-Nov

Appendix

NPV of IRA Benefits by Sector

Scenario 2



Scenario 3



Scenario 4

