

Just Transition Working Group

Meeting #5

December 3, 2020
1:00-3:00 pm



Department
of Labor



NYSERDA



Climate Action
Council

Just Transition Working Group (JTWG)

Meeting #5 Agenda

1. Introduction / Roll Call
2. Member Updates
3. Power Plants Subgroup Updates
 - A. Agency Efforts
 - B. Overview of Work-Products and Approach
4. Discussion: Draft Just Transition Principles
5. Preview: JTWG Report-Out to CAC on 12/15
6. Other Updates
7. Next Steps

Member Updates

Recent highlights from Working Group / Advisory Panel Members

- > Any activities/announcements to highlight from working group members?
- > Reminder: opportunity for updates and comments to be submitted to jtwg@nyserda.ny.gov

Power Plants Subgroup

Power Plants Subgroup

> Subgroup Membership

- John Rhodes, Chair, New York State Public Service Commission
- James (Jim) Shillitto, President, Utilities Workers Union of America Local 1-2
- Theodore (Ted) Skerpon, President, International Brotherhood of Electrical Workers Local 97 and Chair, Utility Labor Council of New York

> Supporting Agency Staff

- NYSERDA: John Williams, Jamie Dickerson, Chris Hall, Kara Allen, Mark Coleman
- DPS: Alicia Sullivan, Vijay Puran, Sarah Osgood
- With support from other team members and colleagues at NYPA and LIPA

> Cross Panel Engagement – joining us today from other Advisory Panels are:

- Power Generation: Betta Broad (New Yorkers for Clean Power), Darren Suarez (Boralex), Bill Acker (NY-BEST), Lisa Dix (Sierra Club), Cecilio Aponte (sPower), Emilie Nelson (NYISO)
- Also expect to engage with Land Use & Local Government (conflicting local officials session today)

Agency Efforts: NYSERDA Just Transition RFP

Updates on agency efforts to gather information, provide planning resources

- > **State of the State 2020** (*this past January*): Gov. Cuomo directed NYSERDA to make available \$5m in funding to support power plant host communities around site planning and reuse
- > **Summer 2020**: NYSERDA released [Just Transition Request for Information \(RFI\) for Site Reuse Planning Resources](#), soliciting feedback and information on retired or soon to be retired fossil fuel facility redevelopment opportunities and needs
- > **Fall 2020**: NYSERDA released this week [Request for Proposals \(RFP\) 4563 “Just Transition Technical Assistance and Planning Services”](#) to qualify contractors / consultants to conduct site reuse planning studies and develop statewide site reuse toolkit:
 - Site reuse studies – technical assistance to municipalities who apply (\$4,750,000 available, multiple)
 - Site reuse toolkit – resource to be developed to assist any/all communities statewide (\$250,000 available)
 - Deadline for RFP responses: January 13, 2021; bidders’ conference: December 15, 2020 (10 AM)
- > **Q1 2021 (est.)**: NYSERDA to develop and release Program Opportunity Notice (PON) allowing communities to submit applications to receive funding and assistance from qualified contractors

Agency Efforts: NYSDOL Rapid Response

NYSDOL has provided rapid response resources and support for facility closure

- > **Overview:** Service provided to businesses and workers affected by cutbacks and site closings
- > **What the rapid response entails:**
 - Résumé development
 - Customized job leads & search assistance
 - Recruitment and job fairs
 - Connection to businesses
 - Job seeker advocacy
 - Interview preparation
 - Priority services for veterans

Agency Efforts: NYSDOL Rapid Response

NYSDOL has provided rapid response resources and support for facility closure

> Recent Examples: Somerset Operating and Indian Point

- Rapid Response team worked hand-in-hand with unions to ensure employees were provided services
- Orientations to impacted employees – provided an overview of services that could be offered
- Individual appointments to discuss career planning and training opportunities
- Interview and resume prep
- Connected impacted employees to other resources such as healthcare options, unemployment insurance and training opportunities

Agency Efforts: Exploring Power Plant Jobs Assessment

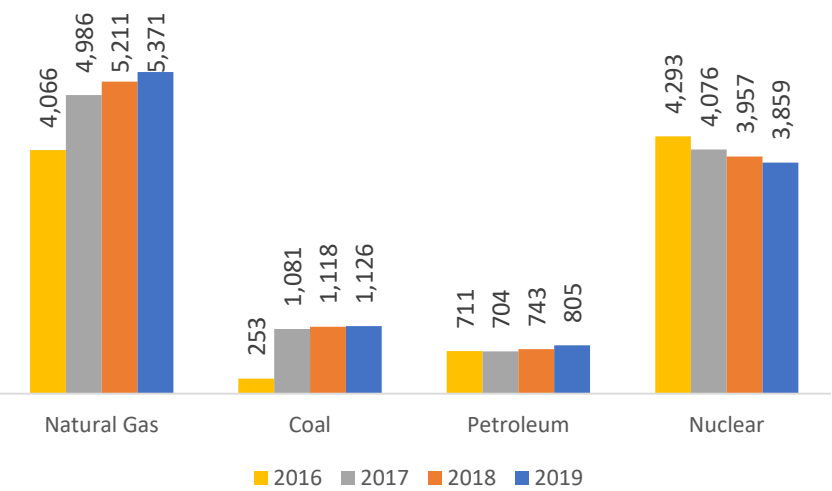
Approach: provide similar resources/support for skills-mapping for power plant workforce

- > **Question:** how best can granular data be assembled about current power plant workforce? Can existing or new analyses help tailor/identify opportunity spaces for existing plant worker skillsets?
- > **Concept:** 'Workforce redeploy' assessment with consultant(s) to conduct skills/occupation inventorying, matchmaking, identify re-training/re-skilling paths - analogous to 'site reuse' program
 - Still in preliminary formation – would likely require only limited funding
 - Could include matchmaking/mapping with a priority in clean energy but expansive beyond energy sector opportunities as well
 - Could help with economic development spotting: i.e., what types of companies should we be looking at attracting to NY, given the skills levels of NY workers and where they are located?
- > **Relevant analyses/data** – this assessment could complement or be integrated within:
 - Just Transition Working Group jobs study
 - Future Clean Energy Industry Reports (NYSERDA)
 - NYSDOL jobs, occupational databases, business survey data

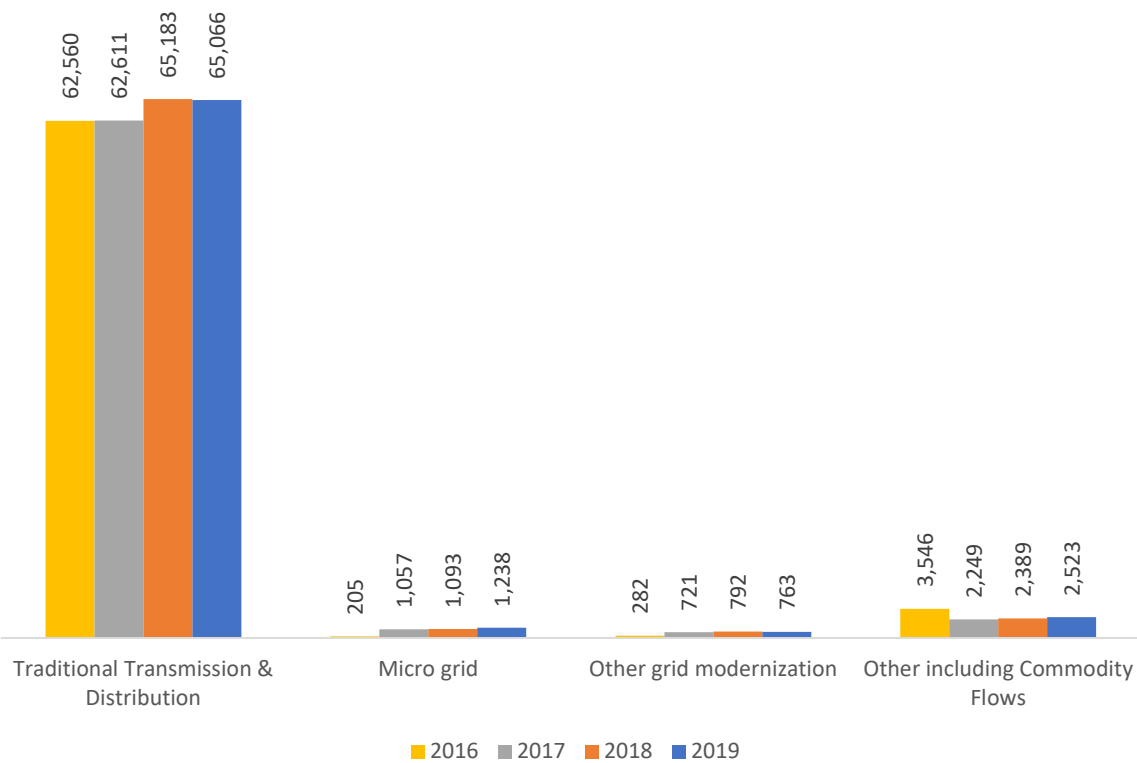
Power Plant Workforce

Understanding current energy workforces (traditional)

Traditional Electric Power Generation (2016-2019)



Traditional Transmission, Distribution, and Storage in NYS (2016-2019)



Spotlight: Power Plant Workforce

Pursuing a just transition for affected power plant workers

- > Existing power plant workforce is a true jewel of New York State and asset for the future of the energy system, being highly skilled and trainable
- > Subgroup acknowledges the uncertainty and apprehension facing workers at fossil fuel facilities, and emphasizes the importance of getting this element of a just transition right
 - Site reuse/redevelopment may pose challenges, but ultimately may not be as involved/difficult as the workforce transition
 - Recommend focus be on where the impacts/concerns will be most acute – e.g., for the 35 y/o worker with a young family and mortgage
 - Strong desire to find job placement opportunities within New York State as first preference
 - Also recognition of the indirect economic/employment impacts in/around plant communities

Overview of Power Plant Work-Products

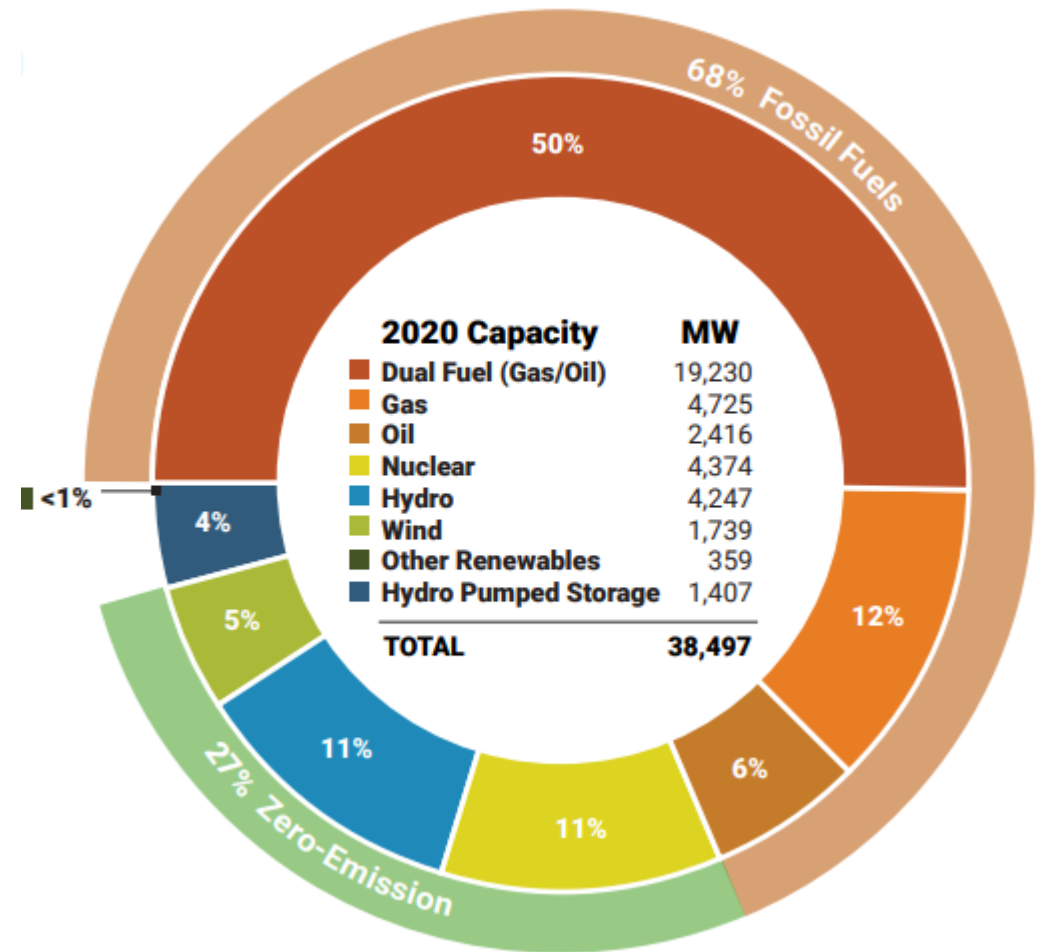
Subgroup helping lead on two power-plant deliverables for Just Transition Working Group

- > Language from CLCPA:
 - “[the Just Transition Working Group shall] ... identify sites of electric generating facilities that may be closed as a result of a transition to a clean energy sector and the issues and opportunities presented by reuse of those sites”
- > Two main deliverables:
 - **Power Plant Inventory**
 - **Identification of Issues and Opportunities Presented by Site Reuse**

Power Plant Subgroup: Grid Overview

New York State generation fleet basics

- > 38,497 MW installed summer capacity
 - 26,371 MW fossil fuel-based generation
- > Approx. 500 discrete generation *facilities* serving bulk power system, ~150 of which are emitting resources
- > 53% of generation *units* older than 1980
 - Common thresholds for capacity “nearing retirement”:
 - gas turbines older than 47 years old (1973); steam turbines older than 62 years old (1958)
 - Gas Turbines – 76 out of 106 units (72%)
 - Steam Turbines – 11 out of 46 units (24%), +12 in next decade
- > 84% of transmission facilities older than 1980 (by mileage)



Power Plant Subgroup: Age of the Power Plant Fleet

Gas Turbines & Steam Turbines “Nearing Retirement” (Fossil Fuel resources)

- > NYISO, 2018 Power Trends Report – growing amount of gas- and steam-turbine capacity reaching age threshold
 - In 2018, 866 MW of steam-turbine generating capacity in New York State was 62.5 years or older — an age at which, nationally, 95% of such capacity has ceased operations.
 - For gas turbines, 2,356 MW of capacity in New York State was 46 years or older. Nationally, 95% of capacity using this technology has deactivated by this age.
 - By 2028, more than 8,300 MW of gas-turbine and steam-turbine based capacity in New York will reach an age beyond which 95% of these types of capacity have deactivated.
- > But: 35% of New York’s current generating capacity has been added since 2000

“While there have been significant additions to New York’s generating capacity since 2000, power plants age like all physical infrastructure. The need to maintain, upgrade, or replace aging generation infrastructure requires attention.”

Aging Fossil Fuel Nameplate Capacity: Gas Turbines & Steam Turbines Nearing Retirement



Sources: 2018 NYISO Power Trends

Power Plant Subgroup: Public Policy Drivers

Key policies and regulations

- > **CLCPA** – 70% of load supplied by renewable resources by 2030, 100% of load supplied by zero-emissions resources by 2040; future sector-specific GHG emissions regulations to be promulgated by NYSDEC
 - NYISO on CLCPA: *“Transformation of the power grid, necessitating examination of market structures, planning processes, flexible load, and investment in bulk power system infrastructure.”*
- > **CO2 Performance Standards** for Major Electric Generating Facilities (NYSDEC)
 - As of April 2020, all coal-fired generation facilities deactivated; no reliability needs associated with these deactivations
- > **Regional Greenhouse Gas Initiative (RGGI) Regulations** – adopted 12/1/2020
 - Program updates will reduce carbon dioxide emissions cap by 30% from 2020 to 2030, expand applicability to currently exempt peaking units below current 25 MW threshold (down to 15 MW)
- > DEC **“Peaker Rule”** Ozone Season Regulations
 - Compliance obligations phased in between 2023 and 2025, affecting 3,300 MWs of peaking unit capacity
 - 2020 NYISO Reliability Needs Assessment (RNA) identified resource adequacy needs starting in 2027 and transmission security needs starting in 2024. Additionally, the NYISO’s first quarterly short-term assessment of reliability (STAR) report (Q3 2020) identified an additional transmission security need in New York City starting in 2023.
- > New York City – **Residual Oil Elimination**
 - Eliminate combustion of fuel oil numbers 6 and 4 in New York City by 2020 and 2025, respectively (2,946 MW affected)

Power Plant Inventory: Objectives and Approach

CLCPA: facilities that “may be closed as a result of a transition to a clean energy sector”

> Objectives

- Fulfill requirements of the statute, inform CAC/AP deliberations and actions
- Compile key information about existing generation fleet, useful to range of stakeholders
- Communicate clearly about what inventory is/is not
- Help identify issues and opportunities, including those related to workforce, local economic/tax impacts
- Assist in ongoing and future planning efforts at local and state level

> Proposed Approach

- Inventory will be informational rather than predictive
 - Will not opine in any way on State or JTWG’s view of which plants may close or the cause(s) of any future closures
- Focus on objective plant metrics/data most salient in transition
 - Age, capacity factor, fuel type, environmental/emission compliance, etc.
- Inventory to rely on publicly available information
 - NYISO Gold Book, public filings to NYISO/state agencies, press releases, media reports, etc.
- Would distinguish between private (IPP, IOU) and public (NYPA, LIPA, municipal) facilities

Power Plant Inventory: Overview of Initial Data Categories

Inventory would provide available information in the following categories:

- > Plant Name
- > Owner/Operator
- > City/Town
- > GIS Coordinates
- > NYISO Zone
- > Plant Vintage (Age)
- > Primary Fuel
- > Nameplate Rating
- > Capacity Factor (2018, 2019, 2020)
- > Jobs/Employment
- > Local Property Taxes
- > Located in Environmental Justice Area
- > Grid Infrastructure (CRIS, substation voltage, local TO substation)
- > Proposing Clean Energy?
- > Site Information (Acreage, zoning, assets)

Power Plant Inventory – Illustrative Examples

Announced/In-Progress Retirements (since passage of CLCPA)

Simple Power Plant Name	Owner / Operator	City / town	NYISO Zone	GIS Coordinates	Plant Vintage (Oldest Unit)	Fuel	Name-plate Rating	2018 Capacity Factor	2019 Capacity Factor	Jobs	Local Property Taxes	Located in EJ Area?	Grid Infrastructure	Pursuing Clean Energy?	Site Information
Cayuga (officially retired Oct. 2019)	Cayuga Operating Company, LLC	Lansing	C	42.603333, -76.63555	1955-09-01	BIT	322.5 MW	3.5%	5.9%	70	\$2.2m prior to retirement	No	<u>CRIS (S/W):</u> 308 MW <u>Voltage at substation:</u> <u>Local TO substation:</u>	Solar	<u>Acreage:</u> 400 <u>Parcel zoning:</u> IR <u>Assets (Buildings, Rail, Roads, Water):</u> Road, water
Indian Point (Unit 3 retiring April 2021)	Entergy	Buchanan	H	41.26872, -73.95214	1973-08-01	UR	2,311 MW	42.8%	82.5%	950	~\$32m PILOT negotiated in 2015 ramping down over 10 years	No (adjacent to)	<u>CRIS (S/W):</u> 2,067 MW <u>Voltage at substation:</u> <u>Local TO substation:</u>	No	<u>Acreage:</u> 240 <u>Parcel zoning:</u> M-2, MD, R-15, others <u>Assets (Buildings, Rail, Roads, Water):</u> Marine access, gas lines, etc.
Somerset (retired spring 2020)	Somerset Operating Company, LLC	Somerset	A	43.35889, -78.60472	1984-08-01	BIT	655.1 MW	10.3%	6.0%	99	~\$5m	No	<u>CRIS (S/W):</u> 686.5 MW <u>Voltage at substation:</u> <u>Local TO substation:</u>	Solar	<u>Acreage:</u> 1,800 <u>Parcel zoning:</u> PUD <u>Assets (Buildings, Rail, Roads, Water):</u> Rail
West Babylon 4 (retiring Dec. 2020)	National Grid/LIPA	West Babylon	K	40.68, -73.33	1971-08-01	FO2	52.4 MW	0.4%	0.7%		\$1.2k	No	<u>CRIS (S/W):</u> 49/64 MW <u>Voltage at substation:</u> <u>Local TO substation:</u>	Storage	<u>Acreage:</u> ~5 acres <u>Parcel zoning:</u> Ind. <u>Assets (Buildings, Rail, Roads, Water):</u> Road

Power Plant Inventory – Recent Retirements

Recent Retirements (via NYISO Generator Status Update report)

Generating Unit	Owner	Zone	MW(2)	Status(3)	Date(4)
AES Greenidge Unit 3	AES Eastern Energy, LP	C	52.8 R		12/31/2009
AES Westover Unit 7	AES Eastern Energy, LP	C	43.5 R		12/31/2009
Astoria GT 05	NRG Power Marketing, LLC	J	16.0 R		1/1/2019
Astoria GT 07	NRG Power Marketing, LLC	J	15.5 R		1/1/2019
Astoria GT 12	NRG Power Marketing, LLC	J	22.7 R		1/1/2019
Astoria GT 13	NRG Power Marketing, LLC	J	24.0 R		1/1/2019
Auburn LFG	Innovative Energy Systems, Inc	C	0.0 R		3/16/2017
Baldwinsville 2	Erie Blvd. Hydro - Seneca Oswego	C	0.2 R		7/3/2012
Barrett 07	National Grid Generation LLC	K	17.3 R		10/11/2011
Beebee GT	Rochester Gas & Electric Corp.	B	15.0 R		2/18/2012
Binghamton Cogen Plant	Binghamton BOP, LLC	C	43.8 R		2/17/2012
Danskammer 5	Dynegy Danskammer, LLC	G	2.5 R		1/3/2013
Danskammer 6	Dynegy Danskammer, LLC	G	2.5 R		1/3/2013
Energy Systems NE	Energy Systems North East LLC	A	82.0 R		11/1/2010
Far Rockaway ST 04	National Grid Generation LLC	K	110.6 R		7/1/2012
Freeport 1-1	Freeport Electric Municipality	K	0.0 R		5/1/2013
Glenwood ST 04	National Grid Generation LLC	K	118.7 R		7/1/2012
Glenwood ST 05	National Grid Generation LLC	K	122.0 R		7/1/2012
Hogansburg	Erie Blvd. Hydro - North Salmond	D	0.3 R		3/17/2015
Huntley 67	NRG Power Marketing, LLC	A	196.5 R		3/1/2016
Huntley 68	NRG Power Marketing, LLC	A	198.0 R		3/1/2016
Johnsonville 2	Erie Blvd. Hydro - Lower Hudson	F	0.0 R		5/1/2010
Kensico 1	New York Power Authority	I	1.0 R		9/25/2012
Kensico 2	New York Power Authority	I	1.0 R		9/25/2012
Kensico 3	New York Power Authority	I	1.0 R		9/25/2012

Generating Unit	Owner	Zone	MW(2)	Status(3)	Date(4)
Montauk 02	National Grid Generation LLC	K	2.0 R		5/4/2013
Montauk 03	National Grid Generation LLC	K	2.0 R		5/4/2013
Montauk 04	National Grid Generation LLC	K	2.0 R		5/4/2013
Poletti 1	New York Power Authority	J	891.0 R		1/31/2010
Project Orange 1	Project Orange Associates	C	43.6 R		11/12/2010
Project Orange 2	Project Orange Associates	C	44.0 R		11/12/2010
Chateaugay Power	ReEnergy Chateaugay LLC	D	18.6 R		5/31/2016
Station 9	Rochester Gas & Electric	B	15.8 R		3/3/2014
Fulton 1	Erie Blvd. Hydro - Seneca Oswego	C	0.7 R		8/1/2013
Fulton 2	Erie Blvd. Hydro - Seneca Oswego	C	0.3 R		8/1/2013
Syracuse Energy ST1	Syracuse Energy Corporation	C	11.0 R		9/25/2013
Syracuse Energy ST2	Syracuse Energy Corporation	C	58.9 R		9/25/2013
Westover LESR	AES ES Westover LLC	C	0.0 R		8/20/2013
Binghamton	Binghamton BOP, LLC	C	43.8 R		1/9/2018
Cayuga 2	Cayuga Operating Company, LLC	C	154.7 R		6/4/2020
HUDSON AVE_GT_4	Consolidated Edison Co. of NY	J	13.9 R		9/10/2019
Lyonsdale	Lyonsdale Biomass, LLC	E	20.2 R		7/18/2019
Monroe Livingston	WM Renewable Energy, LLC	B	2.4 R		9/1/2019
Steuben County LF	Steuben Rural Electric Cooperative	C	3.2 R		9/1/2019
Auburn-State St.	New York State Electric and Gas	C	5.8 R		10/1/2019
Cayuga 1	Cayuga Operating Company, LLC	C	154.1 R		6/4/2020
KINTIGH	Somerset Operating Company	A	686.5 R		3/31/2020
INDIAN POINT_2	Entergy Nuclear Power Market	H	1,026.5 R		4/30/2020
Danskammer 1	Dynegy Danskammer, LLC	G	67.0 R(5)		1/3/2013
Danskammer 2	Dynegy Danskammer, LLC	G	62.7 R(5)		1/3/2013
Danskammer 3	Dynegy Danskammer, LLC	G	137.2 R(5)		1/3/2013
Danskammer 4	Dynegy Danskammer, LLC	G	236.2 R(5)		1/3/2013

Power Plant Inventory Emission Compliance

Proposed generator status changes to comply with DEC peaker rule (via NY-ISO)

OWNER / OPERATOR	STATION	UNIT	ZONE	DATE	PTID	CRIS (MW)		CAPABILITY (MW)		Notes
						SUMMER	WINTER	SUMMER	WINTER	
Central Hudson Gas & Elec. Corp.	Coxsackie GT		G	05/01/2023	23611	19.9	26.0	20.2	23.9	2
Central Hudson Gas & Elec. Corp.	South Cairo		G	05/01/2023	23612	19.8	25.9	18.1	22.5	2
Consolidated Edison Co. of NY, Inc.	74 St. GT 1 & 2		J	05/01/2023	24260-24261	39.1	49.2	35.2	40.9	2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 5		J	05/01/2023	23657	15.1	19.7	14.2	20.2	2
Helix Ravenswood, LLC	Ravenswood 01		J	05/01/2023	23729	8.8	11.5	8.1	10.1	2
Helix Ravenswood, LLC	Ravenswood 10		J	05/01/2023	24258	21.2	27.0	16.5	24.4	2
Helix Ravenswood, LLC	Ravenswood 11		J	05/01/2023	24259	20.2	25.7	16.4	22.4	2
National Grid	Glenwood GT 1		K	05/01/2023	23712	14.6	19.1	11.4	14.5	2
National Grid	Northport GT		K	05/01/2023	23718	13.8	18.0	11.7	15.1	2
National Grid	Port Jefferson GT 01		K	05/01/2023	23713	14.1	18.4	12.9	16.6	2
NRG Power Marketing, LLC	Astoria GT 2-1, 2-2, 2-3, 2-4		J	05/01/2023	24094-24097	165.8	204.1	141.8	185.4	2
NRG Power Marketing, LLC	Astoria GT 3-1, 3-2, 3-3, 3-4		J	05/01/2023	24098-24101	170.7	210.0	140.8	181.8	2
NRG Power Marketing, LLC	Astoria GT 4-1, 4-2, 4-3, 4-4		J	05/01/2023	24102-24105	167.9	206.7	132.8	176.2	2
Consolidated Edison Co. of NY, Inc.	59 St. GT 1		J	05/01/2025	24138	15.4	20.1	15.6	20.3	2
NRG Power Marketing, LLC	Arthur Kill GT1		J	05/01/2025	23520	16.5	21.6	12.0	15.0	2
Astoria Generating Company, L.P.	Gowanus 1-1 through 1-8		J	05/01/2023	24077-24080, 24084, 24111-24113	138.7	181.1	138.2	180.6	3
Astoria Generating Company, L.P.	Gowanus 4-1 through 4-8		J	05/01/2023	24130-24137	140.1	182.9	135.3	184.8	3
Astoria Generating Company, L.P.	Astoria GT 01		J	05/01/2025	23523	15.7	20.5	14.1	19.1	3
Astoria Generating Company, L.P.	Gowanus 2-1 through 2-8		J	05/01/2025	24114-24121	152.8	199.6	142.3	190.0	3
Astoria Generating Company, L.P.	Gowanus 3-1 through 3-8		J	05/01/2025	24122-24129	146.8	191.7	135.5	182.8	3
Astoria Generating Company, L.P.	Narrows 1-1 through 2-8		J	05/01/2025	24228-24243	309.1	403.6	286.5	379.9	3
Total						1,626.1	2,082.4	1,459.6	1,926.5	

Source: 2020 NY-
ISO Gold Book

Power Plants: Issues and Opportunities Presented by Site Reuse

JTWG to identify issues and opportunities presented by site reuse

- > What form should this identification take? Subgroup proposing that it be a simple list of issues and opportunities.
- > **Issues presented by site reuse:**
 - Displaced workforce, and local economic effects
 - Reduced property tax revenues (County, Municipality, School District)
 - Site ownership / transfer / subdivision / zoning; including willing cooperation of adjacent landowners
 - Local planning resources and expertise; ensuring appropriate local/community voice in planning efforts
 - Impacts caused by a dormant site being left unattended/unmanaged
 - Asbestos abatement, waste removal, other environmental remediation and restoration, demolition
 - Reliability impacts (current reliability role/contribution)
 - Stranded assets, including infrastructure serving the plant (e.g., fuel transportation)

Power Plants: Issues and Opportunities Presented by Site Reuse

JTWG to identify issues and opportunities presented by site reuse

> Opportunities presented by site reuse:

- Repurposing with onsite clean energy resources: solar, wind, energy storage, EV charging, etc. (both private, and via Build Ready)
- Interconnection points for offsite renewable resources: offshore wind, upstate renewables, etc.
- Commercial redevelopment – residential, commercial, mixed-use, etc.
- Marina/entertainment; port/marine transport infrastructure for plants with water, rail, highway access
- Information Technology/data centers, manufacturing, other energy intensive applications – including water access for cooling processes
- Green-space, park infrastructure – especially for waterfront locations
- Diversify/extend property tax revenues

Site Reuse Issues and Opportunities: Case Studies

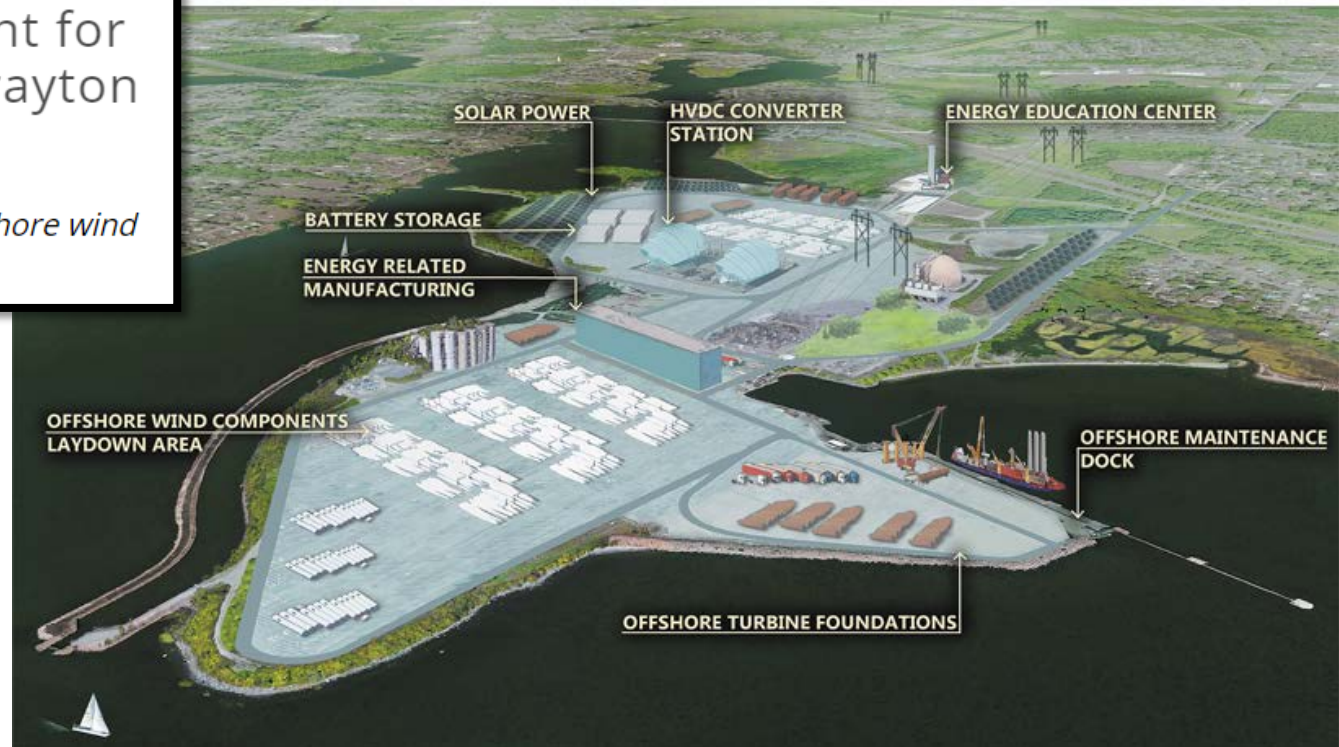
Brayton Point – Retired Coal Facility, Somerset, MA

Press Release: CDC, Anbaric sign agreement for \$650M renewable energy investment at Brayton Point

The Anbaric Renewable Energy Center will optimize Massachusetts' offshore wind industry on the site of a demolished coal-fired power plant



The South Coast's Energy Future



Site Reuse Issues and Opportunities: Case Studies

State Line Energy Plant – Retired Coal Facility, Hammond, Indiana (15 miles from Chicago)

Northwest Indiana defunct coal plant site slated for massive data center

- > Campus to be anchored by data centers, feature technology hub and incubator, smart greenhouse, renewable energy, and more.
- > Phase 1 of the campus scheduled to open on 10/31/2020



The “21st century” development will include a tech incubator, renewable energy, and greenhouse warmed by waste heat.

Site Reuse Issues and Opportunities: Case Studies

Widows Creek Plant – Retired Coal Facility, Jackson County, Alabama

Google to convert Alabama coal plant into renewable-powered data centre

Technology company says it will open 14th data centre at Widows Creek site in Jackson County that will be powered with 100% renewable energy

- > *“At Widows Creek, we can use the plants’ many electric transmission lines to bring in lots of renewable energy to power our new data center”*
- > The company said the center will create between 75 and 100 highly technical jobs, with potential for growth in the future.
- > Construction for the \$600m project began in 2018



▲ Google is building a data centre on the grounds of the Widows Creek coal power plant in Jackson County, which has been scheduled for shutdown. Photograph: Google

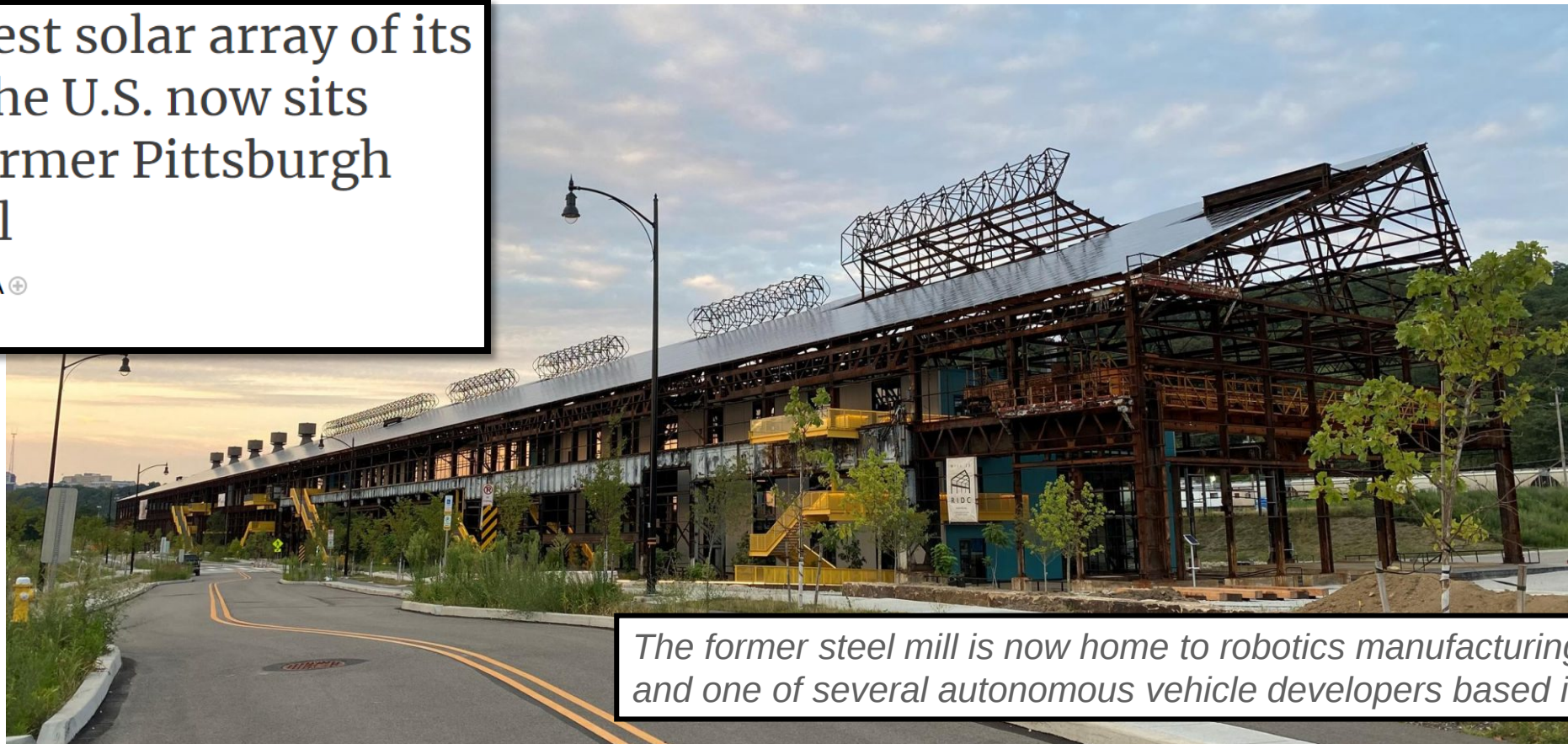
Power Plants Site Reuse: Case Studies

LTV Coke Works – Former Steel Mill, Pittsburgh, PA

The largest solar array of its kind in the U.S. now sits atop a former Pittsburgh steel mill

Kiley Koscinski/WESA

AUGUST 24, 2020 | 2:21 PM



The former steel mill is now home to robotics manufacturing nonprofits and one of several autonomous vehicle developers based in Pittsburgh

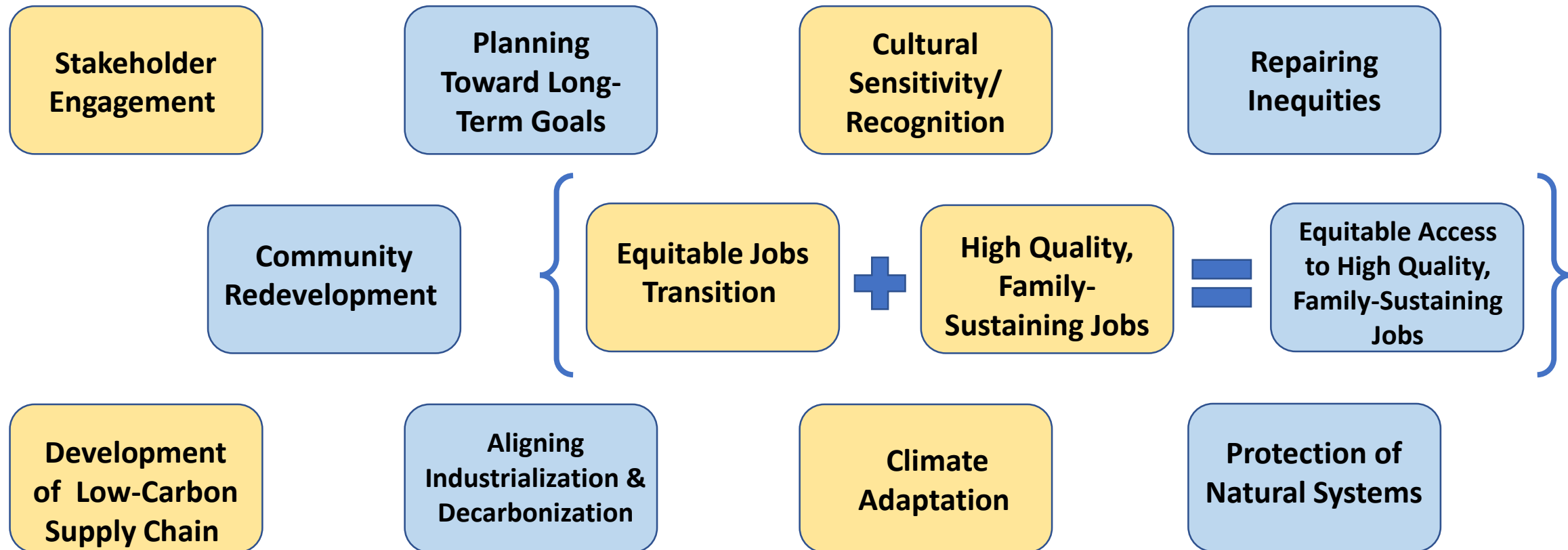
Questions & Discussion

- > Please share your feedback and questions on the two work-products, their proposed approaches, and other preliminary information shared today.

Discussion: Just Transition Principles

Just Transition Principles

Reminder of the categories we discussed on November 4th



Just Transition Principles

Draft/Straw Proposal Principle language for review (1 of 2)

Category	Draft Principle Language
<i>Stakeholder-Engaged Transition Planning</i>	Engage a diverse range of stakeholders via early, inclusive engagement in communities' transitions to local low-carbon economies, including New York's workforce and the State's disadvantaged communities.
<i>Collaborative Planning for a Measured Transition Toward Long-Term Goals</i>	Encourage collaborative state and community-based long-term planning, capacity building, and robust social dialogue in order to ensure a gradual and supported transition
<i>Preservation of Culture and Tradition</i>	Ensure that transition plans, policies, and programs reflect and respect local wisdoms, cultures, and traditions, including recognition of indigenous sovereignty.
<i>Realize Vibrant, Healthy Communities through Repair of Structural Inequalities</i>	Leave no New Yorkers behind in the transition to a low-carbon economy by implementing transition policies and programs that promote cross-generational prosperity and gender and racial equity, in recognition of the disproportionate burden of environmental pollution and climate change on disadvantaged communities.
<i>Equitable Access to High Quality, Family-Sustaining Jobs</i>	Promote the creation of high-quality, family-sustaining jobs, including union jobs, and ensure that new jobs are created in transitioning and disadvantaged communities, connecting workers to employment opportunities through career services, skills training, and infrastructure investments

Just Transition Principles

Draft/Straw Proposal Principle language for review (2 of 2)

Category	Draft Principle Language
<i>Redevelopment of Industrial Communities</i>	Promote diversified, strengthened economies, examine opportunities for community-centered ownership structures, and promote industry recovery, retention, and growth for regions and sectors in transition.
<i>Development of Robust In-State Low-Carbon Energy and Manufacturing Supply Chain</i>	Develop a robust in-state low-carbon supply chain, spanning full product lifecycles, to increase focus on exporting low- and no-carbon products and to ensure that jobs in these emerging sectors become more accessible to the local workforce and to disadvantaged communities.
<i>Climate Adaptation Planning and Investment for a Resilient Future</i>	Integrate climate adaptation into transition planning, including through promotion of community resilience and investment in sustainable infrastructure.
<i>Protection and Restoration of Natural Systems & Resources</i>	Promote the restoration, conservation, and resiliency of the State's natural systems, particularly on impacted industrial sites, through re-cultivating land and promoting sustainable resource use.
<i>Mutually-Affirming Targets for State Industrialization & Decarbonization</i>	Implement decarbonization policies that simultaneously bolster industry retention and sustainable economic development and growth, and ensure that economy-wide programs and policies address the social, environmental, and economic challenges of workers and communities in transition.

Preview: JTWG Report- Out to CAC

Just Transition Workstream, slide 1 of 5

Scope workstream: Just Transition Principles [DRAFT]

Description and objective(s)	• Draft research-based, New York-specific principles of a just transition for purposes of guiding WG/AP recommendations to the CAC • Principles address community, business, workforce needs, equity considerations and disadvantaged communities
Status	• Preliminary categories identified • First draft of corresponding principles language under discussion with JTWG
Issues to explore	• Timing of delivery to advisory panels
Additional thoughts	• Share across all advisory panels in advance of their final recommendations

Just Transition Workstream, slide 2 of 5

Scope workstream: Power Plant Inventory and Site Reuse [DRAFT]

Description and objective(s)	• Subgroup formed to lead development of two main work-products: • Inventory – identifying generation facilities that “may be closed as a result of a transition...” • Issues & Opportunities – identifying issues and opportunities presented by site reuse • Objectives: 1) create informational inventory collecting objective data on relevant plant characteristics; 2) highlight prominent issues and objectives that attend plant site reuse • Emphasis on understanding and managing for workforce transition impacts and priorities
Status	• Preliminary data categories identified for inventory, research efforts underway to collect data • Preliminary list of issues and opportunities presented by site reuse identified • NYSERDA’s RFP released to provide site reuse planning resources for power plant host communities; similar resources being explored for power plant workforce assessment and support
Issues to explore	• How wide to cast the net in populating the inventory with facilities based on salient characteristics
Additional thoughts	• December discussion featured cross-panel engagement with interested representatives from the Power Gen. and Land Use & Local Government Advisory Panels; planning further engagement

Just Transition Workstream, slide 3 of 5

Scope workstream: Business Impacts [DRAFT]

Description and objective(s)	• Subgroup of 10 JTWG (6) and EITE (4) members to support JTWG • Identify energy-intensive industries and related trades • Advise on the potential impacts of carbon leakage risk on New York state industries and local host communities • Develop recommendations on how to address issues and opportunities related to energy-intensive and trade-exposed industries and measures to minimize the carbon leakage risk and minimize anti-competitiveness impacts of any potential carbon policies and energy sector mandates
Status	• Presented existing methods of identifying EITE • Preliminary EITE definitional approach identified • Beginning assessment of NYS EITE • Begin initial issues and opportunities identification
Issues to explore	• What thresholds will be used to identify EITE? • What are the implications of EITE designation? • Who are the EITE related trades and workers? • What are the business opportunities and how can New York seize? • What are some measures that can prevent emissions and business leakage? • What research is available on the effectiveness of these measures?
Additional thoughts	• Continuing coordination and collaboration with EITE members on solutions

Just Transition Workstream, slide 4 of 5

Scope workstream: Jobs Study [DRAFT]

Description and objective(s)	• CLCPA explicitly requires the JTWG to execute a study to analyze a broad set of employment impact questions related to achieving the statute's goals • Particular attention to employment in the state's disadvantaged communities
Status	• Contractor selected by scoring committee from Request for Proposal • Scope of work [initiated]
Issues to explore	• The number of jobs created to counter climate change, which shall include but not be limited to the energy sector, building sector, transportation sector, and working lands sector • The projection of the inventory of jobs needed and the skills and training required to meet the demand of jobs to counter climate change • Workforce disruption potential due to community transition from a low carbon economy
Additional thoughts	• Methodology to focus on macroeconomic analysis and modeling and workforce development and labor economics. A broader set of employment impact issues will be developed as needed to support JTWG recommendations.

Just Transition Workstream, slide 5 of 5

Scope workstream: Workforce [DRAFT]

Description and objective(s)	• Make recommendations on how to build talent pipelines that focus on the trades, disadvantaged communities and underrepresented segments of the population, and transitioning power plant workers, and public sector employees, including with respect to the transferability of skills
Status	• Collected examples of workforce development programs and initiatives from WG members • Leveraging training inventories being developed by the Workforce Development Institute and clean energy training programs identified in the Clean Energy Industry Report • Identifying lessons learned from current programs to support talent pipeline programs such as NYSERDA's Heat Pump career pathway program focusing on disadvantaged workers and NYSDOL and NYSERDA's unique partnership in implementing clean energy OJT and Internship programs • NYSERDA partnering with DOL and SUNY to develop the OSW Training Institute and, in the near-term, to develop an offshore wind training solicitation focused on supply chain needs and career pathways for entry-level workers from disadvantaged communities
Issues to explore	• Impacts of COVID on employment & training, opportunities for innovation (e.g., virtual training) • Coordination and leveraging across state agencies workforce training programs through the Governor's Office of Workforce Development
Additional thoughts	• Targeted engagement with sector-based panels to discuss major workforce needs, opportunities • Use results of Jobs Study to refine current programs, make recommendations for new programs

Other Updates

- > Jobs Study
 - Contractor selected, to be under contract by 2nd week of December
 - Jobs Study approach to macroeconomic analysis and modeling and workforce development and labor economics currently slated to be presented at the January 6 JTWG Meeting
- > Acknowledging receipt of requests for additional analysis, including from WG members and Multiple Intervenors (MI) – regarding energy/economic analyses related to CAC, JTWG processes
 - Requests being reviewed by agency staff
 - Business Impacts Subgroup suggested as initial forum for engagement regarding the requests in close detail, understanding context of other analytical efforts underway and planned
- > Business Impacts Subgroup
- > Climate Justice Working Group coordination/engagement

Next Steps

- > Next JTWG meeting: January 6 from 1 – 3 pm
- > Please note: NYSERDA and NYSDEC will be hosting a ‘Deep Decarbonization Workshop’ on December 8, 2020, from 2:00pm to 6:00pm
 - The workshop is open to the public and participants are encouraged to ask questions to help facilitate a lively and informative dialogue. Advance registration is requested, but not required. You may register [here](#).
- > In addition: The Climate Action Council (CAC) meets on Tuesday, December 15, from 2-5pm