ConnectGEN

Connecting Power, Projects & People

ConnectGen NY Solar Portfolio

A Response to NYSERDA's 2021 Tier 4 RFP Solicitation

May 12, 2021

ConnectGen NY Solar LLC
1001 McKinney St, Suite 700, Houston, TX 77002

Table of Contents

I. Executive Summary

ConnectGen NY Solar LLC ("ConnectGen") is pleased to submit a bid package in response to Request for Proposals (RFP) No. T4RFP21-1 released on January 13, 2021 by the New York State Energy Research and Development Authority ("NYSERDA"). ConnectGen's proposal is conditioned on the success of the **Québec Hydropower and New York Solar Via the Champlain Hudson Power Express Project**, the Required Alternate Bid put forth by Hydro-Québec ("HQ") and Transmission Developers Inc. (a member of the Blackstone Group) ("TDI"). The potential to deliver carbon-free energy directly to New York's largest load center via the Champlain Hudson Power Express ("CHPE") is compelling to assist the State of New York in achieving the Climate Leadership and Community Protection Act ("CLCPA") goal of obtaining 70% electricity from clean energy sources by 2030, as ConnectGen seeks to maximize the environmental and economic impact of its maturing New York solar Resource portfolio.

The ConnectGen portfolio detailed in this bid consists of three in-state utility-scale solar Resources ("Portfolio", "Portfolio Resources"), including the South Ripley Solar Project ("SRS") (270MW), the Mill Point Solar Project ("MPS") (250MW), and the Harvest Hills Solar Project ("HHS") (formerly Milliken Solar) (200MW). ConnectGen's Portfolio consists of "Renewable Energy Systems" that produce electricity that are Eligible Resources not otherwise excluded under the NYSERDA Tier 4 RFP eligibility requirements. Photovoltaic generating components fully align with the New York State CLCPA's definition of a "Renewable Energy System," ensuring carbon free energy production through the operating life of the Portfolio. South Ripley Solar received an award in NYSERDA's RESRFP19-1 solicitation and signed a fixed Tier 1 REC contract in the Spring 2020. Mill Point Solar and Harvest Hills Solar both received Tier 1 Index REC awards in NYSERDA's recent RESRFP20-1 solicitation. All Portfolio Resources align with Tier 4 RFP vintage requirements, given that all will reach commercial operations after October 15th, 2020, the earliest eligible COD for non-hydro resources.

ConnectGen Portfolio will interconnect to the NYISO grid at three separate Injection Points: (1) South Ripley Solar - National Grid's existing 230 kV South Ripley substation in Zone A; (2) Mill Point Solar - a new three-breaker ring bus station along National Grid's existing Marcy to New Scotland 345kV transmission line in Zone E; and (3) Harvest Hills Solar - a new three-breaker ring bus station along NYSEG's existing Wright Avenue to Cayuga/Milliken 115kV transmission line in Zone C. From the Injection Points, the Portfolio Resources will deliver power to a planned high voltage direct current (HVDC) converter station located near the 345 kV New Scotland substation in NYISO Zone F ("Withdrawal Point" or "NS Converter") [redacted] This delivery plan effectively moves the energy from the ConnectGen Portfolio Resources to the New Scotland Converter which provides direct access to the final delivery path via CHPE into Zone J. [redacted]

CHPE is shovel-ready today and will deliver clean, renewable energy (and associated Tier 4 RECs) from HQ's hydropower generation system and solar power from the ConnectGen Portfolio over a new intertie (New Transmission) to be constructed between the HQ system and the New York Control Area (NYCA). [redacted]

[redacted]

II. Impacts of Covid 19

To prioritize the health and safety of employees, ConnectGen instituted a mandatory work-from-home restriction following the initial COVID-19 outbreak and implemented a comprehensive COVID-19 Policy beginning June 1,2020. This policy restricts in-office work and travel and remains in effect.

Through safety and adaptive measures, ConnectGen has maintained desktop and collaborative productivity amid the pandemic. Ongoing in-office restrictions include the following: employees are required to sign up for in-office days and screen for COVID-19 symptoms before office entry, admissible office capacity is considerably reduced to 25%, face coverings and social distancing are enforced, and sanitation practices are enhanced. ConnectGen is taking additional precautions to provide the safest working environment possible, encompassing extended daily cleaning services, frequent common area sanitation, readily available hand sanitizer and soap, provision of masks, and visible COVID-19 safety signage around the office. Notably, office attendance is voluntary - prioritizing flexibility, comfort, and mental health during this difficult period. While COVID-19 has not significantly impacted desktop productivity, ConnectGen has adapted to maximize collaboration among employees shifting between at-home and in-office work. Adaptations include a greater emphasis on transparent communication and video conferencing through Microsoft Teams, as well as virtual events, meetings, and check-ins. Ultimately, the COVID-19 pandemic has not significantly disturbed the intended development processes for the Portfolio Resources, with the exclusion of normal travel and community outreach which is an important component of ConnectGen's development strategy and activities.

As ConnectGen is a Houston-based company developing renewable energy facilities in New York State, the COVID-19 pandemic has impacted travel capabilities based on strict adherence to New York State's travel restrictions and COVID-19 policy. ConnectGen's COVID-19 Travel Policy was recently updated to permit fully vaccinated employees to travel without restriction provided they sign and place on file with Human Resources a written certification of vaccination before commencing travel. All non-critical travel outside the Houston area for non-vaccinated employees is suspended barring written consent from the CEO. For the past year, only a select few ConnectGen representatives who live in New York have been on the ground engaged in development activities. However, with greater reliance on third party agents and consultants, travel limitations have not materially altered development activities and project advancement. ConnectGen has been well positioned to engage local communities, acquire land, conduct preliminary due diligence, and continue environmental field surveys and technical studies. In light of COVID-19 safety concerns, ConnectGen began initial outreach to local officials through virtual meetings, whereas such interaction would occur in-person under normal conditions. ConnectGen also elected to shift from in-person stakeholder open houses to virtual venues. Despite this transition to virtual outreach,

pre-pandemic development trajectories have been maintained and ConnectGen has seen continued success in meeting development milestones. As restrictions continue to be relaxed, ConnectGen has begun to shift back to in-person outreach with stakeholders and the community.

In response to this solicitation, ConnectGen is committed to complying with New York State, Federal, and local guidance. ConnectGen Operating LLC, an affiliate of the proposing entity, successfully completed the New York Forward Business Affirmation document on June 2, 2020. Currently, ConnectGen is coordinating with third-party consultants to initiate environmental and technical field surveys. Any third-party undertaking surveying or construction activities will be required to add a Resource-specific COVID-19 Safety Precautions section to any existing Health and Safety Plan, in close coordination with ConnectGen. New York Forward Business Affirmation documents have been and will be required for all consultants and contractors, prior to performing onsite activities. ConnectGen will monitor field activities to ensure ongoing compliance with existing protocols and any changes moving forward.

While construction mobilization for the Portfolio will not commence until 2022 for South Ripley Solar, ConnectGen has prepared a preliminary COVID-19 Health and Safety plan related to construction – generally adhering to the NYS DOH Interim Guidance for Construction Activities during the COVID-19 Public Health Emergency. This plan includes, but is not limited to, safety protocols on proper PPE use, social distancing, symptomatic individuals, wellness verification, sanitation, COVID-19 training and signage, and worker accountability. Once an Engineering, Procurement and Construction ("EPC") contractor has been selected, ConnectGen will coordinate with the EPC to implement relevant COVID-19 safety commitments that may be in place at the time, if any.

ConnectGen continues to monitor the potential impact of COVID-19 on procurement and construction activities. ConnectGen's EPC team has identified near-term supply chain constraints from global PV panel manufacturers and is monitoring the market closely to identify any forward-looking procurement risks. The internal EPC team believes it is unlikely procurement activities will be materially impacted, as these supply chain constraints are pandemic related. The COVID-19 pandemic has also resulted in construction delays across the renewable energy industry. Thus, large construction backlogs may spill over into 2022, potentially reducing contractor availability. Despite this concern, ConnectGen's EPC team does not foresee significant risk in identifying a construction partner and mobilizing in alignment with Portfolio Resource schedules.

III. Proposer Experience

ConnectGen Company Overview

Founded in 2018, ConnectGen is an independent renewable energy company focused on greenfield development of high-quality wind, solar and energy storage projects across North America. Based in Houston, Texas, our experienced team has developed, built, and operated thousands of megawatts of generating assets and hundreds of miles of transmission lines. ConnectGen is backed by Quantum Energy Partners. Founded in 1998, Quantum Energy Partners is a leading provider of private equity capital to the global energy industry, having managed together with its affiliates more than $17 billion in equity commitments since inception. [redacted]

[redacted]

ConnectGen's current team consists of 40 employees encompassing development, GIS, origination, transmission, EPC, legal, finance, and permitting skillsets. ConnectGen's senior management team brings a wealth of experience from industry leading companies including EDP Renewables, E.ON/RWE, NextEra, Clean Line Energy Partners, Shell New Energies, Calpine, and RES Americas. Collectively, ConnectGen's senior management team has developed, commercialized, financed, constructed, and operated well over 14 GW of renewable energy projects across North America. For a management chart listing key Proposer personnel, please refer to Attachment 7.6.3.2.

New York Development Experience

In addition to the Portfolio Resources, the ConnectGen management team has previously led the greenfield development and permitting of six utility-scale wind farms across New York, four of which are in operation; the details of which are outlined below. These six large-scale renewable energy projects amount to nearly 1 GW, of which around 700 MW is operational.

[redacted]

[redacted]

ConnectGen Key Personnel

Derek Rieman Vice President *Development East* 	Derek Rieman is the Vice President of Development for the Eastern Region and ERCOT, overseeing a team actively developing a portfolio of wind, solar and battery storage projects. Prior to joining ConnectGen, Derek was the Director of Development at Calpine, one of the nation's largest generators of electricity, where he led the renewable energy development efforts in PJM and MISO. Derek previously held similar development positions at BlueWave Solar and EDP Renewables (formerly Horizon Wind Energy) where he focused on developing wind and solar projects throughout various markets in the Midwest and Northeast. Before entering the renewable energy industry, Derek was an attorney involved in Superfund/CERCLA and plaintiff's class action litigation in Chicago. Derek holds a Juris Doctor from the University of Oregon with a specialization in Natural Resources and Environmental Law and BA in Political Science with minors in Business and Spanish from Indiana University.
Colleen Nash Director *Development and Energy Storage* 	Colleen Nash is a Director, Development and Energy Storage at ConnectGen. She is focused on ConnectGen's wind and solar development efforts in the Eastern United States, as well as creating and implementing ConnectGen's energy storage strategy across the company's development footprint. Prior to ConnectGen, Colleen was a Manager at Clean Line Energy Partners, where she focused on originating long term commercial arrangements with load serving entities in the Western Interconnect. Prior to Clean Line, Colleen spent approximately three years at BP's onshore natural gas business unit as a Completions Engineer developing onshore natural gas assets. Colleen holds a Bachelor of Science in Mechanical Engineering from the University of Texas at Austin.

Eddie Barry Manager *Development* 	Eddie Barry is a Manager, Development focused on solar project development in the eastern United States. Before joining ConnectGen, Eddie led the development of utility-scale solar projects in PJM for Invenergy as a Senior Manager of Renewable Development. His prior experience also includes a decade of working on the land and business development ends of the upstream oil and gas industry. Eddie holds a Juris Doctor from Tulane University and a Bachelor of Arts in Political Science from University of Louisiana at Lafayette.
Isaac Phillips Manager *Development* 	Isaac Phillips supports development of ConnectGen's wind, solar, and energy storage projects in the Eastern Interconnect. In this role, Isaac's responsibilities include market analysis, project management, permitting, and stakeholder outreach. Prior to joining ConnectGen, Isaac served as an analyst at Clean Line Energy. While at Clean Line, Isaac focused on both the development of the Grain Belt Express transmission project and the origination of long term commercial arrangements with load serving entities across all of Clean Line's project areas. Isaac graduated from Rice University with a Bachelor of Science in Mechanical Engineering.
Caton Fenz CEO 	Caton Fenz is Chief Executive Officer at ConnectGen. Caton leads ConnectGen's efforts to identify and develop a portfolio of wind, solar and energy storage projects across North America. Caton has over two decades of experience in renewable energy and public policy. Before joining ConnectGen, Caton served as Vice President of Development for Calpine, one of the country's largest generators of electricity, and as Director of Project Management and Director of Development at EDP Renewables North America. He has also worked for McKinsey & Co., the Texas State Legislature, and serves on the Board of Directors of Houston's Midtown Redevelopment Authority and the Houston Parks Board. Caton holds an MA and BA from the University of Texas at Austin.

Andrew Kushner CFO 	Andrew Kushner is Chief Financial Officer at ConnectGen. Andrew leads ConnectGen's finance functions, including capital raising, investment analysis, mergers and acquisitions, accounting, compliance, tax, and financial reporting. Prior to joining ConnectGen, Andrew spent more than twenty years at NextEra Energy. Andrew served in several leadership roles at NextEra including Executive Director of Origination, Vice President of Asset Management, Assistant Treasurer, and Director of Corporate Development. He also has prior experience in public accounting as a senior auditor at RSM US, LLP. Andrew holds an MBA from the University of South Florida, a BS in Finance from the University of Florida, and is a licensed CPA in the State of Florida.
Chris Hills Vice President *EPC* 	Chris Hills is the Vice President, Engineering, Procurement & Construction at ConnectGen. Chris leads all aspects of wind, solar and energy storage project execution, from late-stage development through engineering, procurement, construction and handover to operations. Chris has over two decades of experience in the engineering, procurement and construction (EPC) of renewable energy projects across the United States. Prior to joining ConnectGen, Chris served as the Senior Vice President of Construction for Renewable Energy Systems America, one of the largest independent renewable energy companies globally, where he successfully managed and directed EPC of over 3.5 gigawatts of wind energy projects. Chris previously served in interim roles as Managing Director of KranWind and General Manager of BMS Heavy Cranes, specializing in wind turbine installation services. Chris holds a Bachelor of Civil Engineering with Honors degree from the University of Bristol in the United Kingdom.
Maddie Knowland Vice President *Origination* 	Maddie Knowland is Vice President of Origination at ConnectGen and is responsible for securing offtake for the portfolio across North America. Maddie has over 13 years of experience in renewable energy. Before joining ConnectGen, Maddie served as Head of Energy Marketing for E.ON Climate & Renewables North America. Prior to E.ON, Maddie served as Director of Origination at BrightSource Energy and, prior to that, as a Vice President at Evolution Markets brokering renewable PPAs as well as carbon credit transactions. Ms. Knowland holds a Bachelor in the Science of Foreign Service degree from Georgetown University.

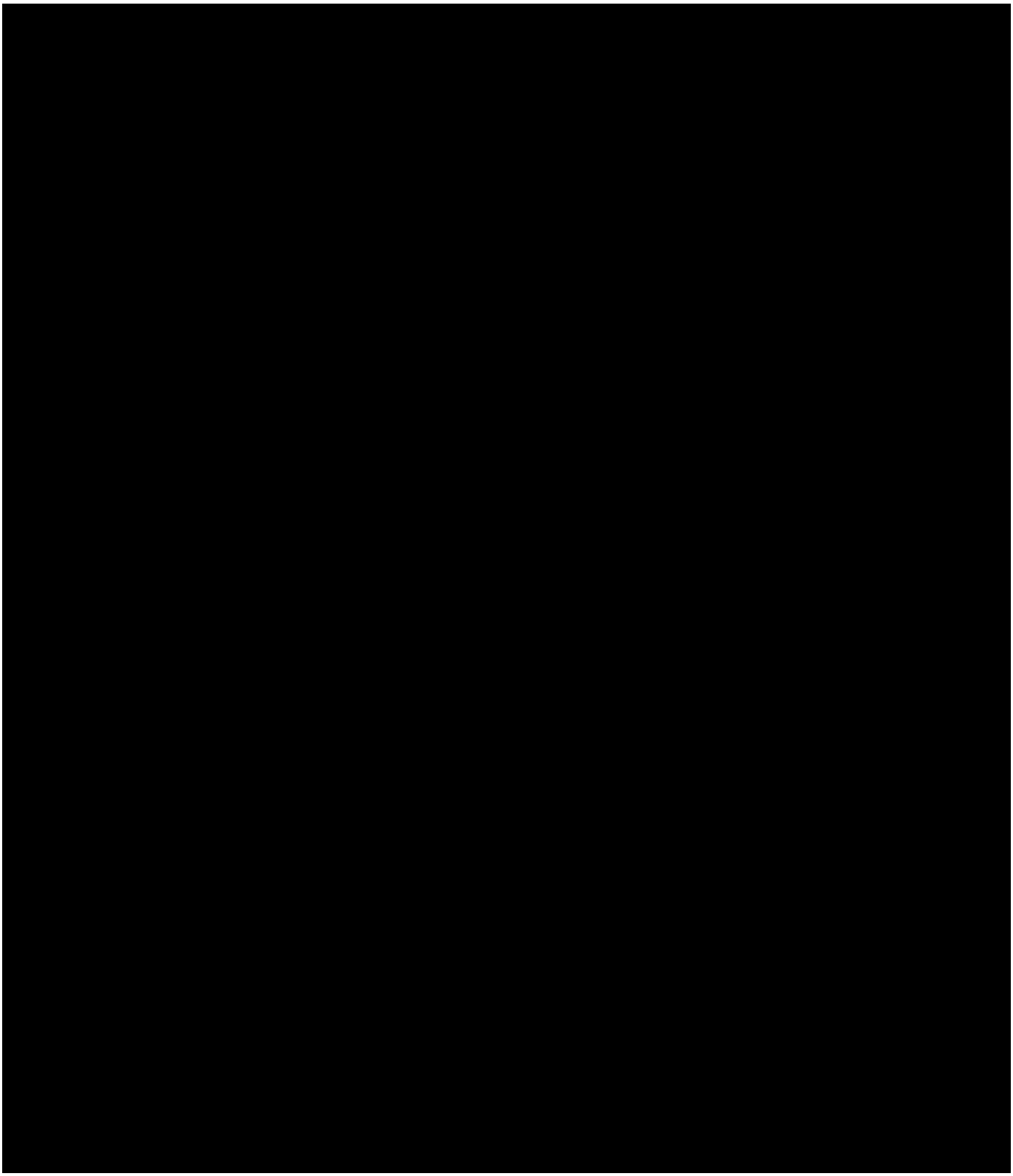
Stephany LeGrand General Counsel 	Stephany LeGrand is General Counsel, supporting all legal aspects of ConnectGen's operations, governance, and wind, solar, and energy storage development. Prior to joining ConnectGen, Stephany acted as the global legal focal point for onshore renewable power and storage at a Fortune 5 oil & gas and energy company, providing legal support for mergers & acquisitions, project development, operations, and strategic development in the Americas, Europe, Middle East, and Asia. Previously, Stephany practiced law at the international law firm of Eversheds Sutherland, where she initially specialized in complex commercial litigation and crisis management and later in mergers & acquisitions, project development, and corporate governance matters in the renewable power industry. After law school, Stephany served as a judicial law clerk to the Honorable Gray Miller, U.S. District Court Judge, Southern District of Texas. Stephany holds a Bachelor of Business Administration from Texas A&M University and a Juris Doctorate, magna cum laude, from the University of Houston Law Center.
Deral Danis Director *Engineering and Transmission* 	Deral's experience spans power system operations and planning as well as modeling and simulating power system economics and grid reliability under both regulated and unregulated (ISO/RTO) paradigms. His experience also includes program and project management of engineering design work associated with new grid infrastructure. Deral plays a pivotal role in identification and vetting of new opportunities to add to ConnectGen's asset portfolio across the U.S. as well as managing grid interconnection and integration plans for ConnectGen's development assets. Prior to joining ConnectGen, Deral was Director of Engineering and Transmission at Clean Line Energy Partners where he oversaw technical evaluation and interconnection of several of Clean Line's transmission development assets as well as development of the strategic operational plans accounting for the merchant-nature of Clean Line's transmission assets. Before his time at Clean Line, Deral was a Manager at Constellation Energy Commodities Group, where he analyzed deliverability, transmission strategy and real-time bilateral market opportunities using a host of power system simulation tools including production simulations for both new business opportunities and real-time operations for Constellation's generation and load service businesses in the southeastern United States. Deral also previously worked as a NERC-certified Shift Operations Engineer at Southwest Power Pool (SPP), where he provided real-time and offline transmission analyses to assist SPP reliability coordination and market operation personnel with daily planning and decision-making. Deral assisted in the testing and design of the congestion management process for SPP's Energy Imbalance Service (EIS) market; the bridge between grid reliability and market-based optimization for the SPP region. Deral holds a Bachelor of Science in Electrical and Computer Engineering Technology from Purdue University and a Master of Science in Electrical and Computer Engineering from Kansas State University.

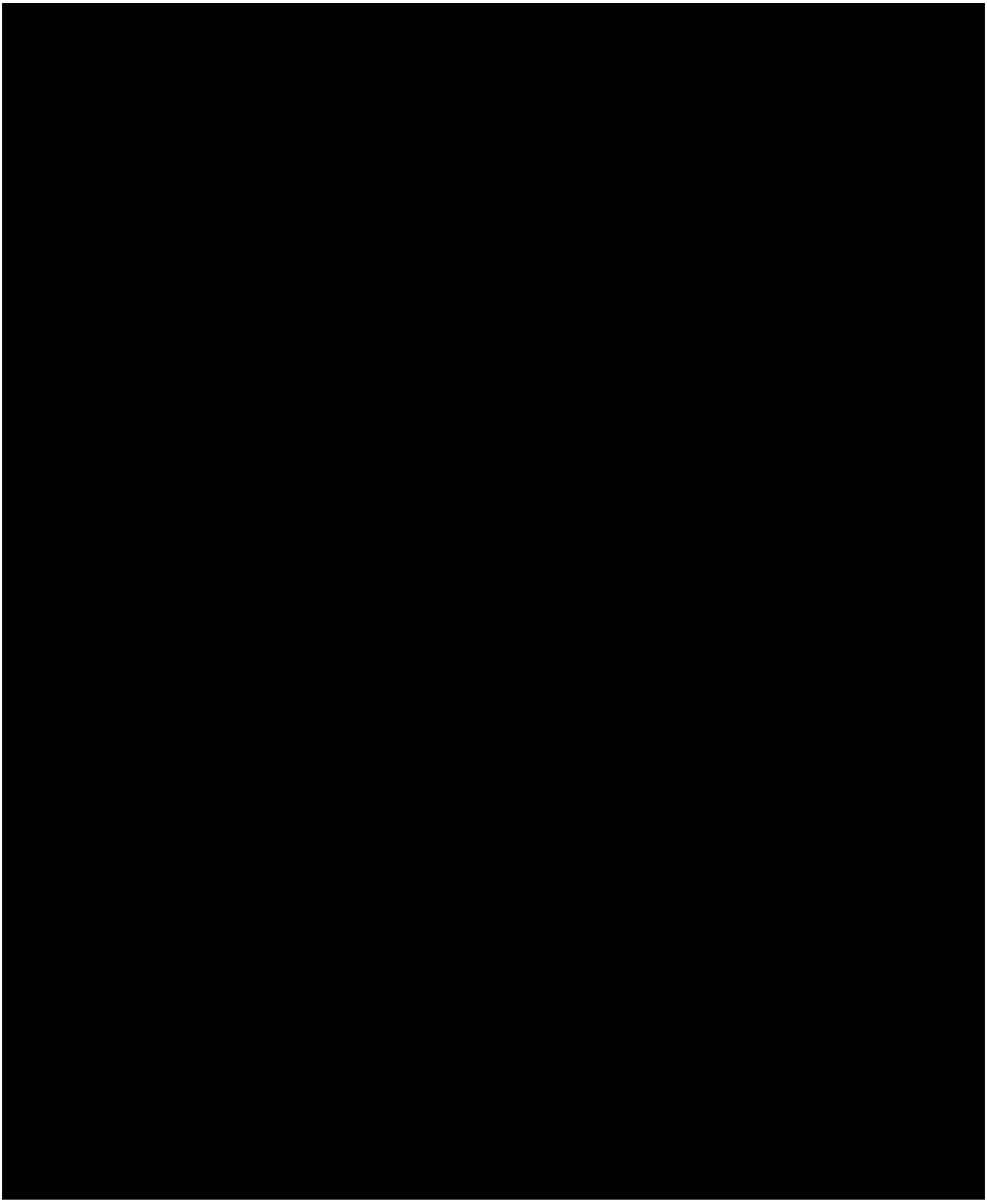
John Kuba
Director
Environmental Affairs

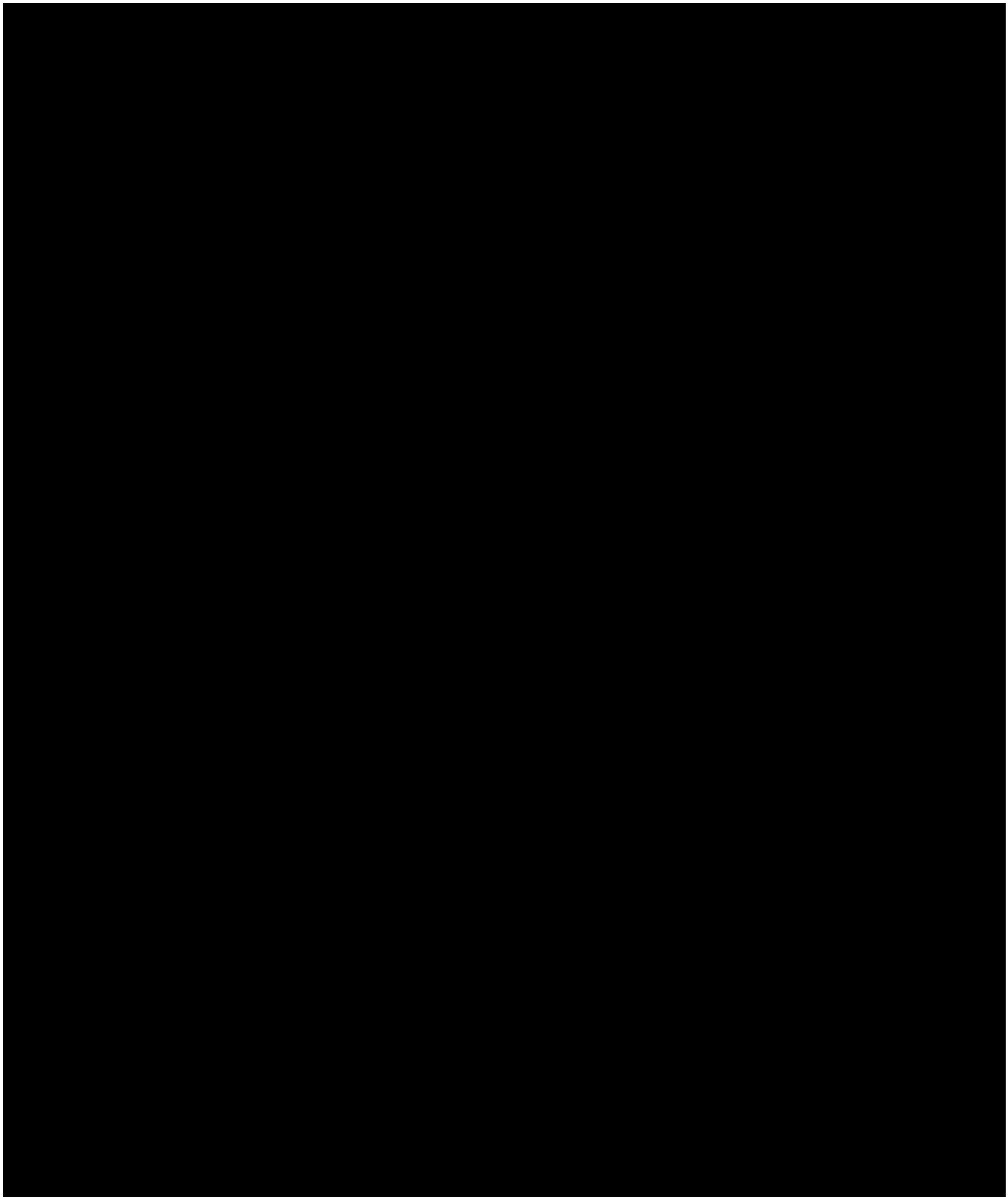
As Director, Environmental Affairs, John is responsible for environmental policy and practice considerations for ConnectGen's renewable generation portfolio, including commercial wind and solar generation, and battery storage projects. John leverages experience and expertise in natural resources, land use, environmental policy and permitting to support ConnectGen's development goals and maintains principal responsibility of corporate and project-level compliance with environmental laws and regulations.

Previously, John was the Director of Environmental Affairs at Clean Line Energy Partners, where he provided siting and permitting oversight for multiple long haul transmission lines and renewable generation projects. Prior to joining Clean Line, John was a Project Manager and Lead Biologist for Turner Biological Consulting, where he managed environmental permitting and conservation programs for various projects in the Southwest, including industrial-scale wind and solar, pipelines, transmission lines, as well as various private, state, and federal land management projects. Throughout his career, John has provided environmental and development support for more than 2,500 miles of electric transmission infrastructure and for renewable energy projects representing five gigawatts of proposed or operating generation. John holds a Bachelor of Science in Animal Science, emphasis in wildlife science, with a minor in biology from Tarleton State University.

ConnectGen Senior Management Team Development Experience





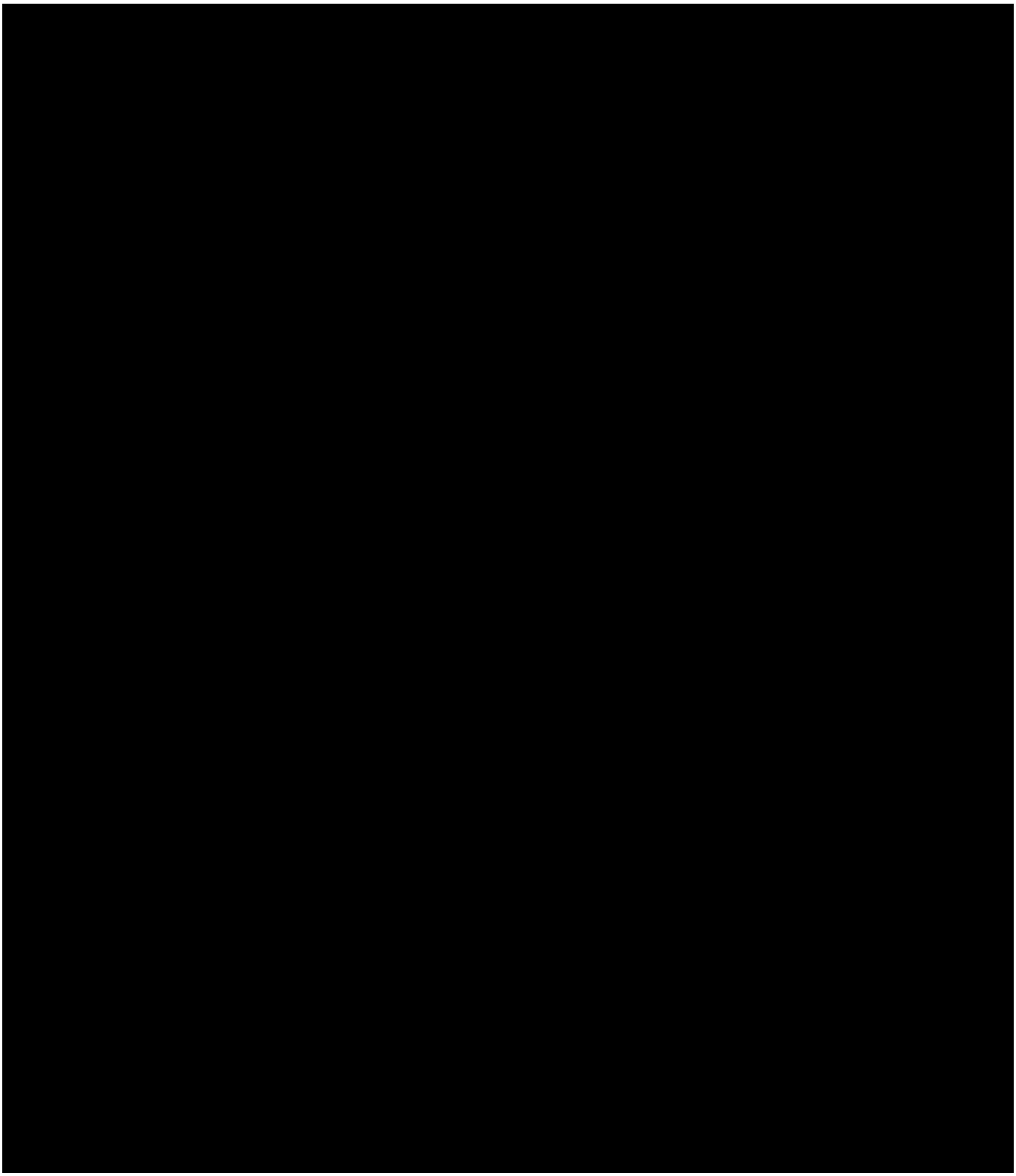


[redacted]

ConnectGen Operating Projects and Projects under Construction

(a) Project Name	**Sun Streams 1 Solar**	**Windhub A Solar**	**Sunshine Valley Solar**	**Sandy Branch Solar**
(b) Location	36807 W Elliot Rd, Arlington, AZ 85322, Maricopa County	13900 90th Street West, Mojave, CA 93501, Kern County	1520 S Power Line Rd, Amargosa Valley, NV 89020, Nye County	3264 CR 207 RD, Hungerford TX, Wharton County
(c) Project type, size, and technology	Large-FERC, 154MW, Solar Photovoltaic	Small-FERC, 20MW, Solar Photovoltaic	Large-FERC, 103MW, Solar Photovoltaic	Large-FERC, 298MWp, Solar Photovoltaic
(d) Commercial Operation Date	**Jan 1, 2020**	**Dec 23, 2019**	**Jan 1, 2020**	[redacted]

[redacted]



[redacted]

IV. Resource Description and Site Control

The ConnectGen NY Solar, LLC ("ConnectGen") Portfolio includes three utility-scale solar Resources currently under development: South Ripley Solar, Mill Point Solar, and Harvest Hills Solar. [redacted]

[redacted]

South Ripley Solar, Resource Description and Site Control

The South Ripley Solar Project ("SRS Project") is a planned 270 MW solar facility that will generate hundreds of thousands of MWh of in-state carbon-free energy each year. The SRS Project facilities inside of the SRS Project fence will be sited on approximate 1,500 acres wholly located within the Town of Ripley, Chautauqua County. [redacted] The SRS Project will interconnect directly into an existing bus on the NYISO grid at the existing National Grid 230kV South Ripley substation along National Grid's Erie to Dunkirk 230kV transmission line. [redacted] ConnectGen identified the SRS Project area as suitable for solar development due to Chautauqua County's historic interest in renewable energy and economic development, proximity to the existing underutilized substation and transmission system with available capacity, site suitability with existing land use, and minimal anticipated environmental impacts.

The SRS Project is located in a rural setting with limited residential or commercial development. Formally, the area was predominantly dedicated to dairy production; however, agricultural production in the area has transitioned to limited cultivated row crops, hay fields and pastures, fallow fields, and forest stands. While in the Chautauqua County grape belt, the SRS Project includes no vineyards and will not impact any vineyard production and operations. [redacted]

[redacted]

ConnectGen has completed significant on-site environmental field studies and will institute industry best practices to mitigate potential impacts to the local environment and community. Completed studies include an on-site wetland delineation with associated New York State jurisdictional determination, Winter Raptor Study, Spring Breeding Bird Survey, site-wide Geotechnical evaluation, Phase 1A and 1B surveys, and ambient noise monitoring. ConnectGen has not encountered significant environmental risks that would inhibit the successful development and commercial operation of the SRS Project.

The zoning designation of the SRS Project area is predominantly Rural Residential, with one electrical crossing of a Recreational Zoned area. The Town of Ripley zoning ordinance, last revised in 2017, provides for the development of large-scale solar facilities within areas zoned as Rural-Residential. The Town of Ripley Planning Board proposed a draft amendment to the solar section of the zoning law to the Town Board of Ripley in early 2021. ConnectGen has engaged Town Board members in several discussions regarding the draft local solar law and submitted written public comments to the Town Board to ensure that the proposed amendments are consistent with industry siting standards and support the development of a commercial-scale solar project consistent with NYSERDA solar guidebook. [redacted] As described above, ConnectGen has completed or will complete all major environmental studies and surveys required for the New York State 94-c Environmental Permitting process in the second quarter of 2021. In tandem with the described development activities, ConnectGen implemented a Public Involvement Program Plan pursuant to the previous Article 10 process to thoroughly engage the local community in the development process. This community engagement has included multiple in-person and virtual open houses, frequent mailers and newspaper postings to the local community, ConnectGen representative attendance at most Town Board and Planning Board meetings over the last two years, and multiple consultations with local Town Officials including a pre-Application meeting on April 1, 2021. [redacted]

Major components of the planned solar facility include the following: solar panels and racking systems, 34.5kV medium voltage inverter and transformer blocks, 34.5 kV underground and overhead collection facilities, and a collection substation with a 230/34.5 /13.8 kV main power transformer. [redacted]

[redacted]

Mill Point Solar, Resource Description and Site Control

The Mill Point Solar Project ("MPS Project") is a planned 250 MW solar facility [redacted] that will generate hundreds of thousands of MWh of carbon-free energy each year. [redacted] ConnectGen identified the MPS Project location in the Town of Glen as suitable for solar development due to Montgomery County's historic interest in renewable energy and economic development, proximity to the existing transmission system with available capacity, site suitability with existing land use, and minimal anticipated environmental impacts. [redacted] The MPS Project will interconnect to the NYISO grid with a new three-breaker ring bus station along National Grid's Marcy to New Scotland 345kV transmission line. [redacted]

The MPS Project is located in a predominantly rural setting largely encompassed by cultivated crops, hay fields/pastures and dairy operations with limited residential or commercial development and encompasses cultivated crops, hay fields/pastures. ConnectGen is committed to conducting recommended environmental field studies and instituting industry best practices to mitigate potential impacts to the local environment. [redacted]

[redacted]

The zoning designation of the MPS Project area is entirely Rural Residential. The Town of Glen zoning ordinance, last revised in December of 2017, provides for the approval of private utility facilities through the issuance of a Special Use Permit within areas zoned as Rural-Residential. The Town Board of Glen adopted a local solar law in November 2020, and ConnectGen is committed to designing, constructing, and operating the MPS Project in compliance with the recently adopted local solar law.

[redacted] ConnectGen advanced community-wide outreach by holding a virtual public information session for the MPS Project in April 2021 and has plans to hold a second, in-person community meeting in the Summer 2021 (COVID-19 permitting). To date, ConnectGen has completed several environmental studies and surveys, including Winter Raptor Surveys, Cultural Resources Phase IA Archaeological survey, and delineations of aquatic resources [redacted]

Major components of the planned solar facility include the following: solar panels and racking systems, medium voltage inverter and transformer blocks, 34.5 kV underground collection facilities, and a 345/34.5/13.8 kV main power transformer and 34.5kV/345 kV bus work and switchgear. [redacted]

[redacted]

Harvest Hills Solar, Resource Description and Site Control

The Harvest Hills Solar Project ("HHS Project") is a planned 200 MW solar facility [redacted] that will generate hundreds of thousands of MWh of in-state carbon-free energy each year. The HHS Project was bid into NYSERDA's RESRFP 20-1 as the Milliken Solar Project, and

ConnectGen changed [redacted] name to Harvest Hills Solar to better reflect the nature of the local community hosting the HHS Project location. ConnectGen identified the HHS Project area as suitable for solar development due to its proximity to the existing transmission system and preliminary environmental analysis suggesting compatible site suitability with limited environmental impact and development constraints.

The HHS Project [redacted] located in the Towns of Genoa and Venice in Cayuga County. [redacted] The HHS Project will interconnect to the NYISO grid with a new three-breaker ring bus station along NYSEG's existing Wright Avenue-Cayuga/Milliken 115kV transmission line [redacted]

The HHS Project area is primarily comprised of agricultural land with associated rural residences and limited forested lands. Agricultural activity in the HHS Project area includes row crops, hayfields, and fallow fields, and cattle grazing, and several dairy operations are located near the proposed HHS Project area. The forested land consists of primarily mixed deciduous stands adjacent to agricultural fields. [redacted]

The Town of Venice is in the process of drafting a local solar law, and the Town of Genoa recently adopted a local solar law in May 2021. While the HHS Project will obtain a state-level Siting Permit from the New York State Office of Renewable Energy Siting ("ORES"), ConnectGen intends to design, construct, and operate the HHS Project in compliance with the final, adopted local solar laws for the Towns of Venice and Genoa to the greatest extent practicable. [redacted]

[redacted]

Major components of the planned solar facility include the following: solar panels and racking systems, medium voltage inverter and transformer blocks, 34.5 kV underground collection facilities, a 115/34.5 kV main power transformer and 115 kV switchgear. [redacted]

[redacted]

V. Delivery Plan

From the Injection Points, the Portfolio Resources will deliver power to a planned high voltage direct current (HVDC) converter station located near the 345 kV New Scotland substation in NYISO Zone F ("Withdrawal Point" or "NS Converter") [redacted] This delivery plan effectively moves the energy from the ConnectGen Portfolio Resources to the New Scotland Converter which provides direct access to the final delivery path via CHPE into Zone J. [redacted]

[redacted]

[redacted]

VI. Baseline Verification Plan

VII. Interconnection Plan

South Ripley Solar, Interconnection Plan

The South Ripley Solar Project ("SRS Project") will interconnect to the NYISO grid at a line position at the existing National Grid South Ripley 230kV substation located on the Erie to Dunkirk 230 kV transmission line, which traverses the SRS Project area. [redacted]

[redacted]

Mill Point Solar, Interconnection Plan

The Mill Point Solar Project ("MPS Project") will interconnect to the NYISO grid into a new three-breaker ring bus interconnection switching station (along with associated switches, metering, and control and protection circuits) along National Grid's existing Marcy to New Scotland 345 kV transmission line [redacted]

[redacted]

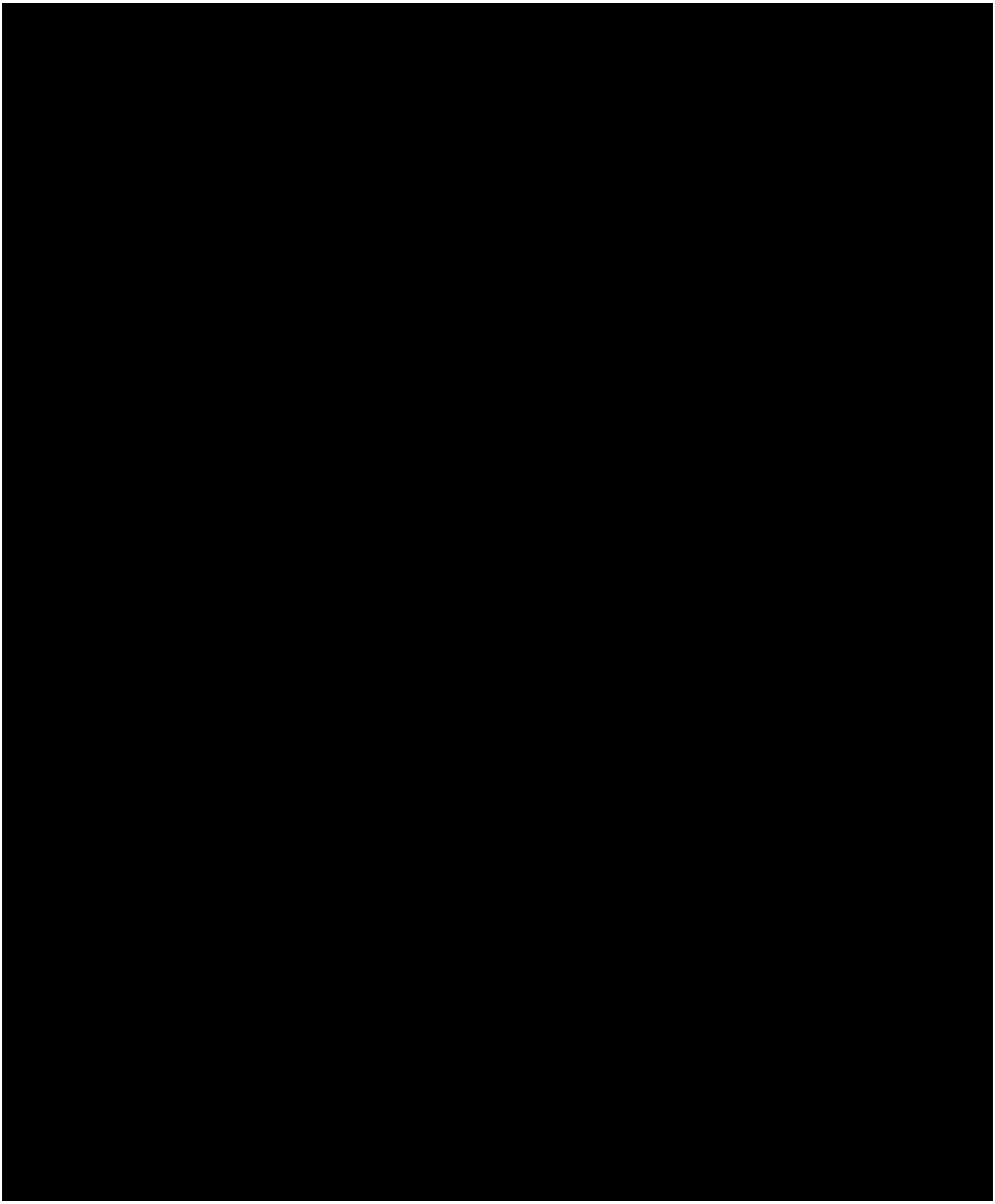
Harvest Hills Solar, Interconnection Plan

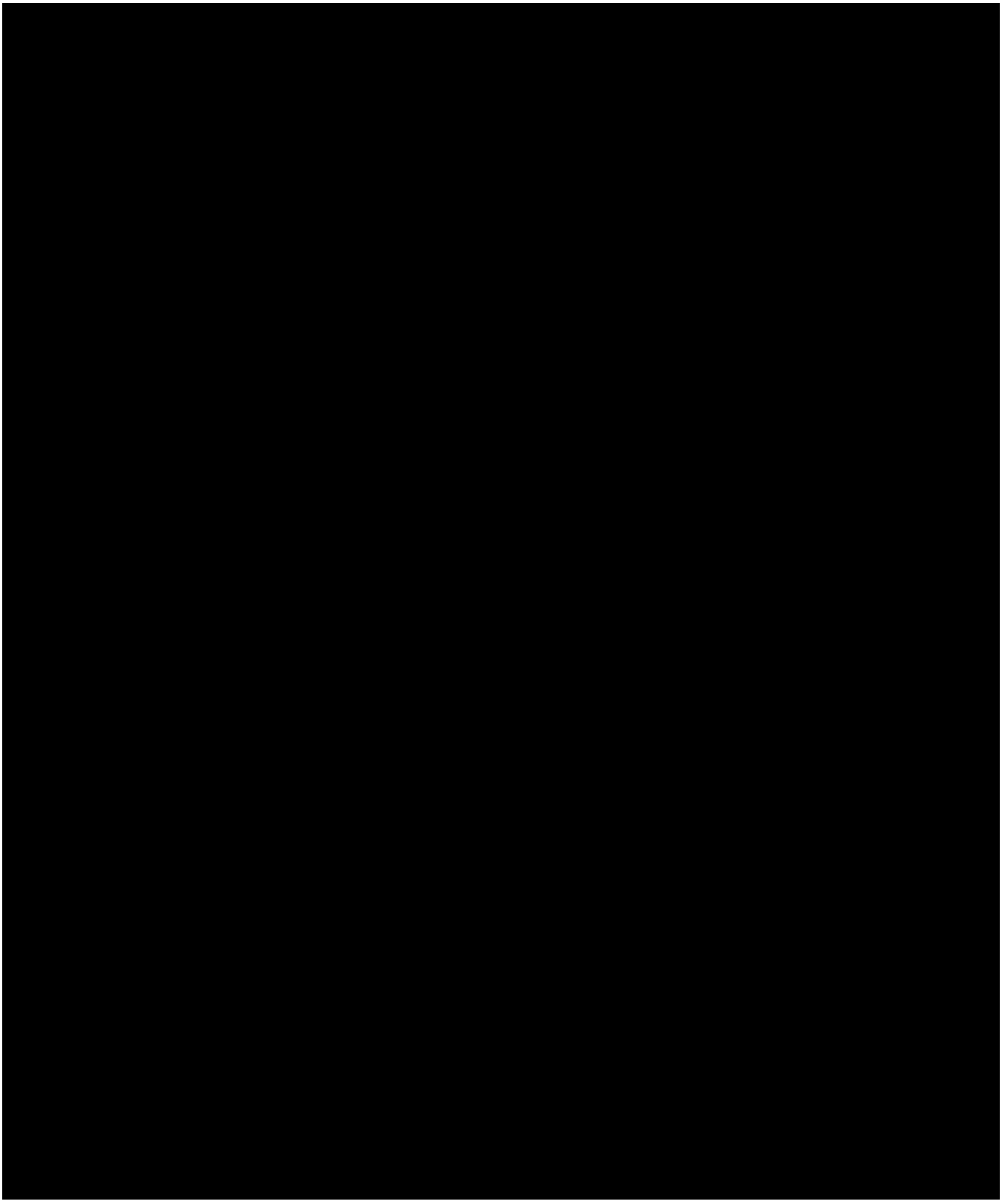
The Harvest Hills Solar Project ("HHS Project") will interconnect to the NYISO grid into a new three-breaker ring bus interconnection switching station (along with associated switches, metering, and control and protection circuits) along NYSEG's existing Wright Ave to Cayuga/Milliken 115kV transmission line [redacted]

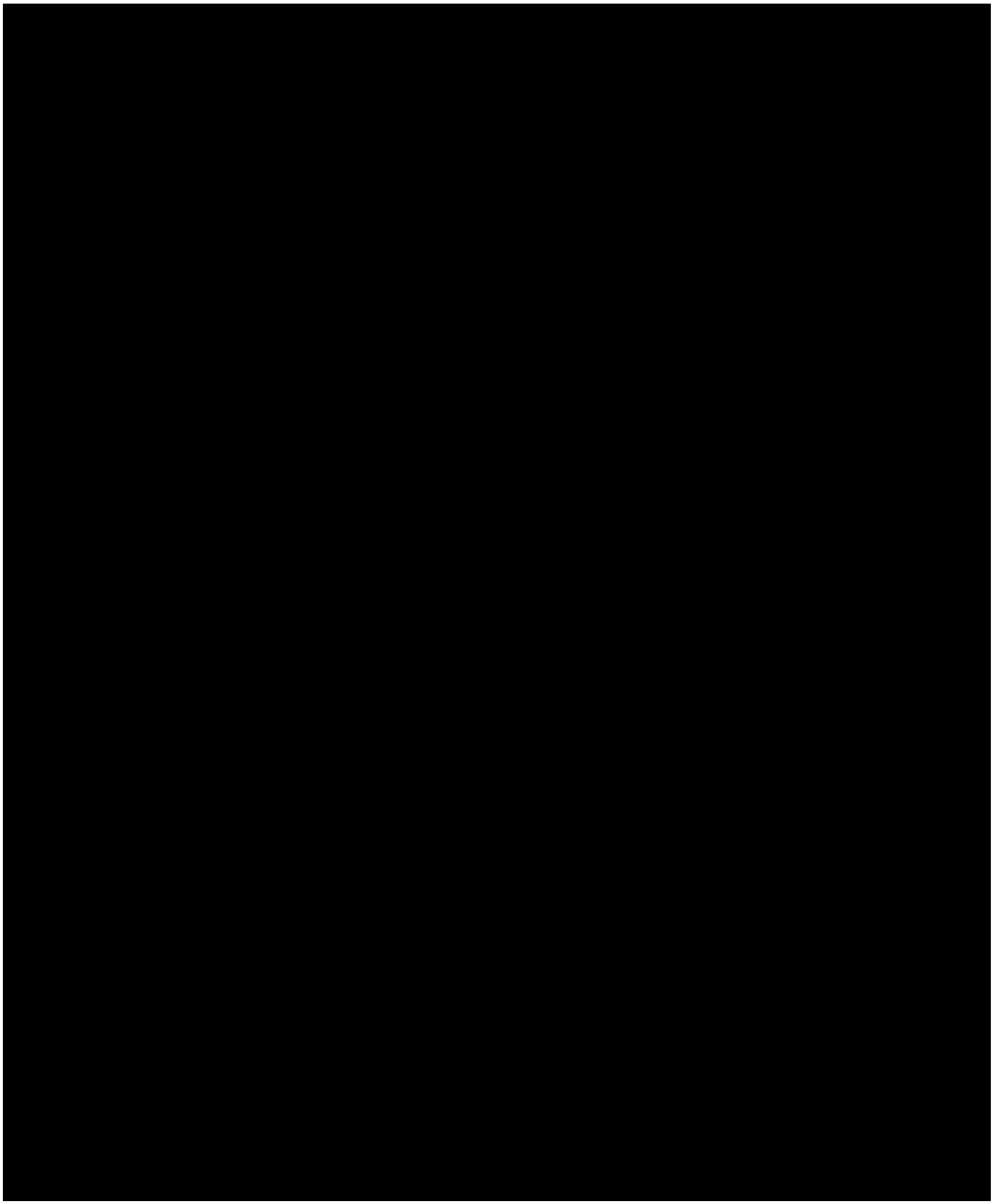
[redacted]

VIII. Energy Resource Assessment

[redacted]

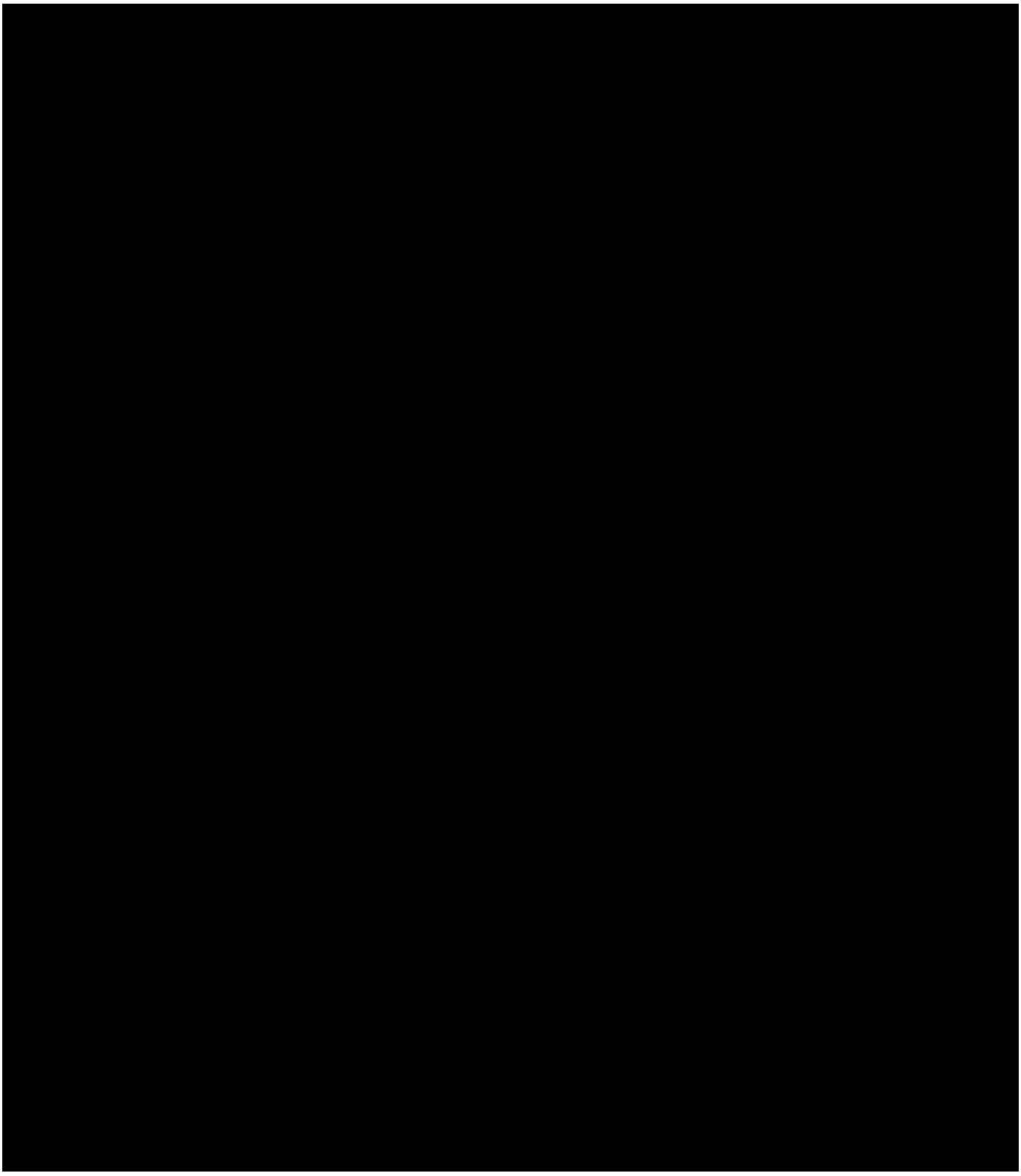


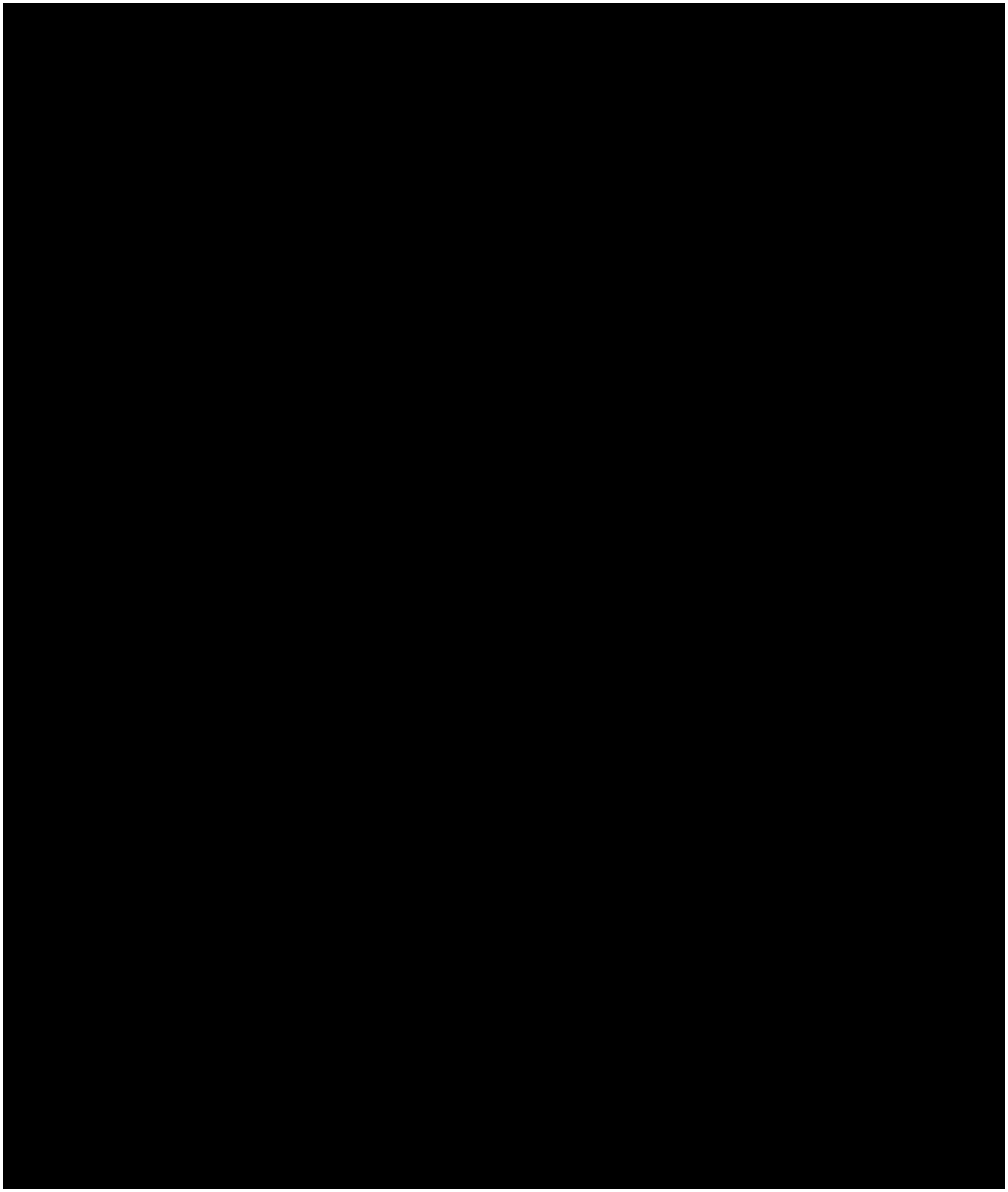


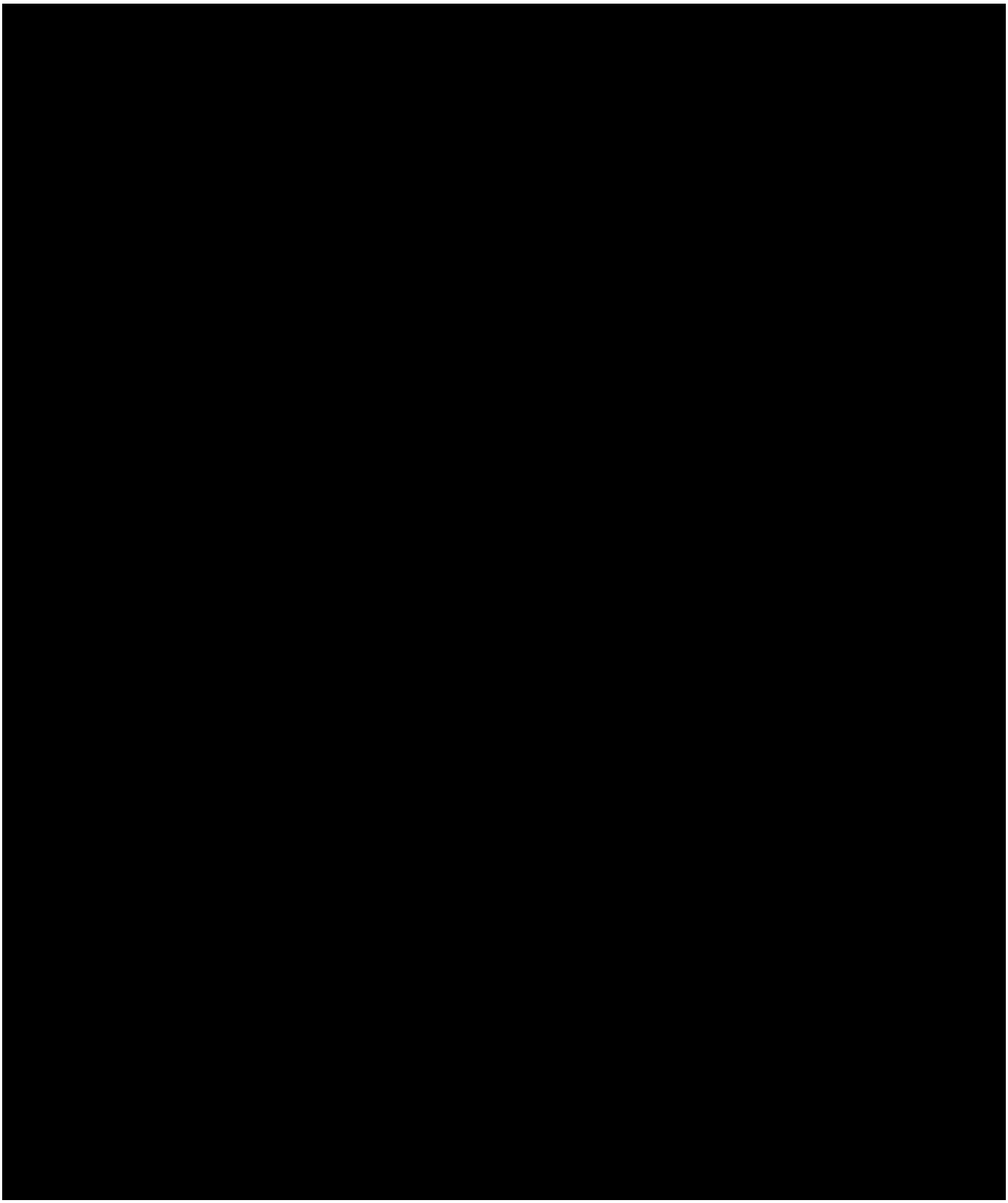


IX. Energy Storage Operation Plan

X. Business Entity and Financing Plan







XI. Permitting Plan

On April 3, 2020, the New York State Legislature enacted a budget bill which includes the Accelerated Renewable Energy Growth and Community Benefit Act to assist the State in achieving renewable energy and greenhouse gas emission reduction goals. The Act establishes an expedited process for the State's review of renewable energy projects to replace the previous review process pursuant to Article 10 of the Public Service Law. The new Executive Law, Article 94-c, has consolidated environmental review and permitting of major electric energy generation facilities through an expedited 'siting permit' program implemented by the newly established Office of Renewable Energy Siting (ORES) within the New York State DOS. The ORES will consider all pertinent social, economic, and environmental factors over facilities with a nameplate generating capacity of 25MW or more. This new permit review process extends to generating facilities, co-located energy storage, and transmission facilities that are less than 10 miles in length.

Finalized uniform standards and conditions for siting, design, construction and operation of utility-scale solar facilities were released on March 3, 2021, in consultation with public input, and other state agencies including NYSERDA, NYSDEC, NYSDPS, and NYSDAM. The 94-c permit aims to retain the substantive content experienced under Article 10, or even SEQRA standards, but procedurally it will be reviewed in an expedited manner. ConnectGen is currently performing environmental studies and engineering design work to meet Section 94-c requirements for all Portfolio Resources. Application development and submittal for Portfolio Resources will be staggered based on the differing commercial online dates, as outlined on a Resource-specific basis in **Section XIII. Schedule** of this proposal. Additionally, for all Portfolio Resources, the anticipated timeline for seeking and receiving required permits, licenses, and environmental assessments/impact statements can be found in **Section XIII. Schedule**.

Other federal, state, and local permits, not supplanted by 94-c, will be pursued in parallel with the ORES process for all Portfolio Resources. The survey activity, reporting, and design requirements associated with the ORES process is consistent with requirements for other permits, including ministerial construction permits; therefore, ConnectGen will have other permit applications available at the time of ORES application submittals. For instance, ConnectGen will begin pre-construction notification expeditiously with the USACE to ensure ample time to receive Nationwide Permit verification. For those state and local entities that traditionally have permitting requirements for solar facilities, the substantive requirements of those permitting entities would still be applied but would be procedurally supplanted by a 94-c permit.

The following attachments summarize permits, consultations, and authorizations that may be needed to advance each Portfolio Resource to construction or would be substantively reviewed as a part of 94-c. The Resource-specific permitting matrices found in these attachments provide the type of potential or expected permit, clearance, or authorization, along with additional information regarding studies and application requirements and estimated agency review timeframes, where applicable.

- **Attachment 7.6.11.1_ Mill Point Solar Permitting Matrix**
- **Attachment 7.6.11.2_ Harvest Hills Solar Permitting Matrix**
- **Attachment 7.6.11.3_ South Ripley Solar Permitting Matrix**

Please refer to the Required Alternate Bid package, "Québec Hydropower and New York Solar Via the Champlain Hudson Power Express Project," which includes comprehensive permitting information for the New Transmission participant.

XII. Environmental Mitigation Plan

Introduction

As a developer, ConnectGen is focused on the deployment of new, clean energy generation that is responsibly sited, constructed, and operated. ConnectGen employs an open and transparent development process remaining conscious and dedicated to addressing potential social, cultural, or

environmental concerns associated with its projects – with specific consideration given to land use and sensitive resources at each stage of development. ConnectGen reviews each site for opportunities not only to reduce impacts but also to provide benefits additional to the production of renewable energy, such as carbon sequestration, habitat management, and co-located land uses and identifies opportunities to collaborate with landowners, communities, and other stakeholders on implementation options.

Construction and operation of Portfolio Resources: the South Ripley Solar Project, the Mill Point Solar Project, and the Harvest Hills Solar Project (formerly Milliken Solar) could result in potential temporary and long-term impacts to the natural, cultural, and human environment. ConnectGen's approach to development focuses on studying resources, coordinating with stakeholders, and designing the Portfolio Resources to avoid or minimize adverse effects. This process starts with the review of a larger study area so that resource sensitivities may be identified and ultimately addressed through an iterative siting and design process. Although the Portfolio will adhere to all applicable permit requirements, and federal and state regulations, mitigation may be necessary for unavoidable resource impacts.

As outlined in previous NYSERDA solicitations, ConnectGen utilizes the Mitigation Hierarchy to address potential impacts of Portfolio Resource development: avoidance, minimization, remediation, and offsetting. ConnectGen has applied various standard and non-traditional approaches to minimize environmental and agricultural effects as outlined and discussed below.

Across the Portfolio, ConnectGen is performing and/or will perform resource-specific studies in accordance with ORES regulations and in consideration of ORES uniform standard and conditions which will result in a detailed analysis of impacts and mitigation measures, as applicable, for each Section 94-c application. ConnectGen is implementing an adaptive mitigation hierarchy in which each of four mitigation methods, avoidance, minimization, remediation, and offsetting, are reviewed and assessed for each Portfolio Resource as new information is obtained from resource-specific studies to inform siting of Portfolio Resource infrastructure and to ensure the minimization of adverse impacts.

Avoidance, minimization, remediation, and offsetting measures for key potential environmental and agricultural impacts are outlined below, including descriptions of ConnectGen's approach to working with stakeholders and relevant State and federal agencies to identify potential impacts and subsequent implementation of the Mitigation Hierarchy, as applicable.

This Environmental Mitigation plan also details the Portfolio's CLCPA contribution as well as ConnectGen's perspective on the assessment of carbon intensity across design, sourcing, construction, operation, and maintenance at solar facilities.

Please refer to the Required Alternate Bid package: "Québec Hydropower and New York Solar Via the Champlain Hudson Power Express Project." This Required Alternate Bid includes a separate Environmental Mitigation plan from the relevant New Transmission participant.

Land Use and Topography

For all Portfolio Resources, **avoidance** of State and federal managed land is implemented in preliminary siting and planning. Any local private conservation easements or resource management areas within the

Portfolio Resource Study Areas will also be avoided during siting and design efforts. Given that all protected areas will be avoided, no impacts to these resources are anticipated as a result of Portfolio Resource construction and operation and no mitigation is planned.

The specific acreage of anticipated tree clearing for the construction and operation of the solar facility has yet to be determined across all Portfolio Resources; however, impacts to the majority of forested areas are **avoided** through siting activities. ConnectGen typically seeks to avoid siting solar photovoltaic facilities within unmanaged forested lands; however, some facilities may need to cross through forested lands, such as electric collection lines. Any disturbance of forest habitats would be **minimized** by limiting tree clearing to areas around the perimeter of solar arrays, electric collection lines, and access roads. To the extent practicable, facilities are sited along existing disturbed landscapes, such as improving existing private roads for use as access roads and siting electric collection lines along disturbed landscapes like roads or other existing rights-of-way. Impacts to forested areas are anticipated to be *de minimus*, therefore, remediation and offsetting are not anticipated to be needed. Across the Portfolio, existing trees will be retained as a component of vegetative visual screening for panel arrays, partly **offsetting** tree clearing that may occur.

ConnectGen is committed to implementing vegetation management practices that will remediate the land to allow for productive land use during and at the conclusion of the Portfolio's operating life. Across the Portfolio, Resource-specific vegetation management will aim to reduce the amount of grassland conversion, support wildlife and ecosystem function, restore soil health, and provide long-term agriculture preservation, ultimately resulting in greater synergy between energy production and the rural environment. Accordingly, ConnectGen is assessing emerging solar restoration and agricultural co-utilization technologies and practices, in coordination with interested stakeholders, that may be feasible and conducive to its overall restoration goals, including native plant species to encourage wildlife and pollinators, the use of ungulates to meet mowing needs, and other agrivoltaic practices. These methods can provide additional economic benefit to the community and reduce carbon impacts associated with conventional mowing.

Given that the Portfolio Resource Study Areas are adjacent to several State Agricultural District parcels, completion of an Agricultural Data Statement may be required if a final facility is sited within 500 ft. of an active farm operation. Additionally, the NYSDAM (2019) has published guidelines for implementing agricultural mitigation for solar energy projects involving agricultural land. Implementation of the NYSDAM guidelines are consistent with ConnectGen's approach to avoiding and minimizing impacts to agricultural lands. Although operation of the Portfolio Resources would temporarily remove lands from traditional agricultural use, the Portfolio would use a combination of industry best practices and emerging restoration science, as described above, during operation, decommissioning, and restoration that would ensure the land is consistent with future intended land use, ultimately allowing for continued agricultural production at the end of Resource operations.

ConnectGen recognizes that concern for visual impacts may exist. In accordance with 94-c, visual assessments of areas within 5 miles of Portfolio Resource boundaries will be performed in consultation with stakeholders, including participating and non-participating landowners and local governing bodies,

to evaluate culturally important visual resources that could be impacted by development of the Portfolio Resources. Findings from the visual studies will trigger ConnectGen's adaptive review of the mitigation hierarchy. In Resource-specific cases where significant visual/aesthetic impacts are identified, visual minimization measures would be implemented to the maximum extent practicable. ConnectGen collaborates with stakeholders to evaluate effective implementation of avoidance and minimization measures, which may include an increased setback distance from Portfolio Resource infrastructure, planting vegetative screening buffers, vegetation management practices, and facility component micrositing. Additionally, the Portfolio will follow NYSDEC issued guidelines for conducting visual assessments and implementing mitigation as outlined in the document "Assessing and Mitigating Visual Impacts. Program Policy, Department ID: DEP-00-2" (NYSDEC, 2019).

Aquatic Resources and Water Bodies

ConnectGen's approach to the development of renewable energy generation facilities is to **avoid** wetland and waterbody impacts to the greatest extent practicable during the initial project planning and layout design phase of Portfolio Resource development. Particular attention is given to the avoidance of NYSDEC state-regulated wetlands and streams, which may have comparably high ecological value.

As part of the 94-c process, all Portfolio Resources have or will complete comprehensive wetland and waterbody delineations, the results of which trigger ConnectGen's adaptive mitigation hierarchy, wherein avoidance is prioritized. Results of these studies will be provided to NYSDEC and ORES to review for completeness and accuracy, including a jurisdictional determination from NYSDEC and USACE, as applicable. If complete avoidance is not feasible, ConnectGen will **minimize** impacts to the greatest extent practicable and work with NYSDEC and USACE, as applicable, to seek required permits and implement post-construction **remediation** to ensure impacted areas retain the same function and value after construction. Additionally, **compensatory mitigation offsets**, in the form of permittee responsible mitigation, in-lieu fee, or purchase of mitigation banking credits may be required. All applicable wetland impact **minimization** measures identified in the 94-c Uniform Standards and Conditions or USACE permit conditions will be implemented.

Soils

For all Portfolio Resources, impacts to soils would be limited to those areas where ground-disturbing activities take place, such as underground electric collector lines, temporary access roads, and limited grading areas within the solar field. Various protection measures will be implemented to minimize impacts to soils in accordance with NYSDAM Guidelines and draft 94-c Uniform Standards and Conditions, including, but not limited to the following:

- All topsoil removed during construction will be preserved and restored to its original location and thickness in order to avoid the loss of productive soil onsite;
- Prior to topsoil disturbance, soil samples will be collected and tested for PH, percent organic material, cation exchange capacity, Phosphorus/Phosphate (P), and Potassium/Potash (K) to determine a standard for future soil restoration. Any changes over the life of the Portfolio to existing soil quality that require further mitigation will be reviewed and addressed, as necessary;

- Stripping and stockpiling of topsoil on site for grading areas. Topsoil will be re-spread following grading activities. Topsoil is to remain in areas where grading is not proposed;
- Erosion control best management practices (BMPs) to be incorporated and implemented in the Stormwater Pollution Prevention Plan based on guidance from the New York State Standards and Specifications for Erosion and Sediment Control;
- Soil restoration (decompaction) to recover the original properties and porosity of the soil, providing a sustainable growth medium for vegetation, reduction of runoff, and filtering of pollutants from stormwater runoff;
- Soil stabilization (seeding and mulching) to prevent erosion of topsoil; and
- Monitoring of vegetation management practices throughout the life of the Portfolio to identify areas prone to erosion. These areas will be stabilized through targeted vegetation management applications.

Stormwater Runoff

Prevention of stormwater runoff for all Portfolio Resources will occur at all phases of development; especially for the duration of construction and post-disturbance. Generally, methods to **minimize** and **remediate** include reducing grading, treating runoff, restoring disturbed topsoil, and conducting periodic assessments of site conditions to fine-tune mitigation efforts, as outlined below. Portfolio Resource-specific Stormwater Pollution Prevention Plans (SWPPP) meeting the requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity will be developed across the Portfolio. Operation and Maintenance of the erosion and sediment control and stormwater treatment facilities will utilize guidance from the NYS Stormwater Design Manual and New York State Standards and Specifications for Erosion and Sediment Control. The following NYSDEC guidelines would be incorporated into SWPPPs specific to each Portfolio Resource:

1. Solar panels are constructed on post or rack systems and elevated off the ground surface;
2. Panels are spaced apart to allow rainwater to flow off the down gradient side of the panel and continue as sheet flow across the ground surface;
3. For solar panels constructed on slopes, the individual rows of solar panels are generally installed along the contour so rainwater sheet flows down slope;
4. The ground surface below the panels consists of a well-established vegetative cover; and
5. Construction of the solar panels will not alter the hydrology from pre- to post-development conditions.

Additional avoidance, minimization, and remediation measures that would be further evaluated and incorporated as appropriate, Portfolio-wide, include:

- Stormwater quantity and quality BMP controls would be implemented. The BMP's should be installed inside Portfolio Resource fences adjacent to constructed impervious areas. Smaller stormwater treatment facilities closer to point sources provide more ideal treatment, and take up less potential agricultural land, than a large facility at the very downstream end of projects;
- Geoweb product filled with "clean" stone fill can be utilized to remove impervious areas from proposed designs, eliminating the need for stormwater management facilities;

- Planting of low-growing meadow vegetation cover to reduce post-construction erosion and maintenance;
- Minimize land disturbance and removal of vegetation by siting facility in open areas; and
- Solar arrays would be installed at existing grades, where feasible, to minimize grading extents and maintain existing drainage patterns.

Loss of Agricultural Land and Food Production

Please refer to **Section III** of this proposal for Resource-specific information on each Portfolio Resource's Study Area overlap with mineral soil groups (MSG) 1-4, per a review of the NYSDAM 2020 Master List of Agricultural Soils.

Mitigation measures to avoid impacts to MSG 1-4 will include documentation of their location and avoidance to the greatest extent practicable. Pursuant to this RFP, ConnectGen has completed the Agricultural Mitigation Fund Calculation for all Portfolio Resources, as outlined in Section III, Part 7 of this proposal. MSG 1-4 soils are anticipated to be unavoidable across the entire Portfolio, therefore, ConnectGen will consult with NYSDAM to review and implement **mitigation** measures, as necessary, including potential compensatory payments and co-location of agricultural practice measures. Listed below, in order of importance, are areas that ConnectGen considers when siting project infrastructure (NYSDAM, 2017).

1. Active Rotational Farmland
2. Permanent Hayland
3. Improved Pasture
4. Unimproved Pasture
5. Other Support Lands
6. Fallow/Inactive Farmland

Farm and Field Fragmentation and Co-location of Agricultural Practices

Farm and field fragmentation through the placement of large-scale renewable energy facilities could significantly reduce the potential for agricultural activities across all participating properties hosting Portfolio Resource infrastructure. Should Resource infrastructure overlap with active farming activities, infrastructure will be sited in a way that minimizes the loss of available farmland and designed to allow for existing farms to co-exist, to the maximum extent practicable. In leasing land to support the Portfolio Resources, ConnectGen is working with landowners to identify and target less productive portions of their agricultural land for the placement of infrastructure. In doing so, landowners will be able to diversify the use of their agricultural land while generating a stable, long-term revenue stream in the form of lease payments that will support ongoing agricultural operations on land excluded from Portfolio Resource footprints.

Furthermore, ConnectGen will continue coordination with landowners to ensure construction and long-term operation of the Portfolio is compatible with existing and continued agricultural operations. In considering potential for indirect impacts to surrounding farmland, the Portfolio Resources will be microsited to ensure farm infrastructure such as access points, drainage, or irrigation features are not

adversely affected. Additionally, ConnectGen is exploring emerging solar operations practices, including agrivoltaics, to allow for continued agriculture production, or to provide secondary benefits to surrounding agricultural lands. For instance, ungulate grazing could provide vegetation management services, while pollinator-friendly practices could provide sustainable pollinator services for surrounding farmland on a Resource-specific basis.

The New York State Department of Agriculture and Markets has developed the "Guidelines for Agricultural Mitigation for Solar Energy Project" (NYSDAM, 2017) and the "Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands" (NYSDAM, 2019) outlining measures to reduce overall impacts presented by solar energy development. ConnectGen intends to comply, to the maximum extent practicable, with these guidelines such that the Portfolio Resource Study Areas could be readily reverted to agricultural production at the end of solar operations. Additionally, ConnectGen will consider relevant aspects of the New York State Solar Guidebook (NYSERDA, 2020) and the NYSDAM Pollinator Habitat Guideline (NYSDAM, 2020b).

Specific guidelines to be applied to the Portfolio in an effort to mitigate potential impacts are listed below.

General

- Structures for overhead collection lines will be placed in nonagricultural areas and along field edges, as possible. If not feasible, the lines should be aligned with existing crop rows. Considering the existing use of the Property, line placement is not anticipated to occur within active agricultural fields, as possible.
- Review of drainage patterns will be assessed to eliminate the potential risk of creating drainage problems for agricultural land. More specifically, access roads onsite will be placed along field contours and on ridge tops, as possible.
- Access roads onsite will be 16 ft or less in width to reduce the loss of agricultural and nonagricultural land onsite. In an effort to further limit field fragmentation, access roads for facility equipment will be placed along the edge of agricultural fields, in nonagricultural areas, as possible.
- Existing drainage and erosion control structures will be avoided unless they are to be replaced by new structures as part of facility design. Any potential impacts to these existing structures will be assessed and repaired to original condition, as possible.
- Access roads will be level with the adjacent field surface when constructed through agricultural fields.

Construction

- Topsoil that is stripped during construction will be staged and stockpiled separately from other excavated materials, as close to the area where it was initially removed from. Upon completion of the construction phase, stripped soil will be used in the restoration process of that particular area. All topsoil stockpile areas will be clearly designated both in the field and on construction drawings.
    - All topsoil stockpiles left in place will be seeded and/or mulched accordingly, as distinguished by the NYSDAM.

- The surface of all access roads located outside of the facility's security fence will be level with the adjacent field surface if construction through agricultural fields is necessary. If a level road design is not feasible, access roads will be constructed to both allow a farm crossing and to maintain natural drainage patterns.
- The existing condition of site-specific natural drainage patterns will be evaluated and, if necessary, culverts and/or waterbars will be installed to maintain these patterns.
- Interconnect conductors outside of the security fence will be buried in agricultural fields wherever practicable. All necessary overhead utility lines will be located outside of field boundaries and/or along permanent access road(s) wherever possible. If overhead utilities must cross farmland, ConnectGen may minimize agricultural impacts through the use of taller structures and locating poles along field edges.
- All buried utilities within Portfolio Resource Study Areas in a conduit will have a minimum depth of 18- inches of cover. Any buried utilities without conduit will have a minimum depth of 24-inches of cover.

Restoration

Any impacts to agricultural areas during or immediately following the construction of Portfolio Resources will be addressed outside of the months of October through May and when favorable soil conditions are present. This will include:

- The restoration of original drainage patterns onsite and repaid all surface or subsurface drainage structures damaged during the construction phase;
- Regrading existing access roads for farm equipment access; and
- Temporarily disturbed agricultural areas will be decompacted, as necessary.

Decommissioning

Upon the discontinuation of the Portfolio Resources' solar arrays, all ground structures will be removed, and the site will be restored to agricultural land or relevant land use, as applicable.

Wildlife and Wildlife Habitat

As it relates to wildlife and habitat, there is the potential for adverse impacts to occur as a result of the construction and operation of solar energy facilities:

- Loss or change of habitat for wildlife;
- Land clearing of habitat or possible fragmentation;
- Increased human activity and altered ecological interactions; and
- Portfolio Resource location in relation to ecological resources.

In accordance with the 94-c permitting process, each of the Portfolio Resources works closely with NYS Department of Conservation ("NYSDEC") to understand use of project sites by wintering grassland raptors and breeding birds, including state or federally protected species, by designing and conducting field surveys and reviewing study findings. Findings from each study are provided to NYSDEC and ORES, followed by a meeting to understand state agency feedback, considerations, and recommendations, as

applicable. Portfolio Resource infrastructure would be sited to **avoid** development within occupied grassland habitats to the maximum extent practicable. Any Portfolio Resource that impacts occupied grassland habitat, would be reviewed to identify Resource-specific **minimization** opportunities, including further micro-siting of solar facilities. Minimization and remediation measures would include those outlined in the NYSDEC 'Best Management Practices for Grassland Birds', such as the prevention of habitat fragmentation during the months of August to November and implementing a regimented mowing schedule (https://www.dec.ny.gov/pubs/86582.html). If impacts to grassland or breeding bird essential habitat occupied by threatened or endangered species occur, impacts would be **remediated** in a way that maintains or improves existing conditions, or **offsets impacts**. Remediation and offset measures would be described in detail in a Net Conservation Benefit Plan in consultation with NYSDEC and ORES, such that the overall impact to the species of interest is a net benefit. Evaluation of payment into the state Endangered and Threatened Mitigation Fund or permittee-responsible mitigation would be assessed on a Resource-specific basis.

Given the nature of the proposed development for the Portfolio, it is not anticipated that the temporary construction of solar panels and associated equipment, or long-term operation will significantly impact migratory birds and bats. ConnectGen will continue gathering information related to threatened and endangered species through consultation with ORES, NYSDEC, and USFWS and resource-specific studies, including wintering grassland species and breeding bird habitat. ConnectGen will continue to consult with the aforementioned agencies to evaluate potential impacts to protected species and subsequent mitigation measures, as applicable, in accordance with both the 94-c regulations and to ensure compliance with the 94-c Uniform Standards and Conditions.

CLCPA Contribution

ConnectGen Portfolio Resources will generate millions of MWh of electricity annually exclusively via solar energy – an emission-free process. No carbon dioxide or other greenhouse gases will be produced during the electricity generation process. Solar has the benefit of being both a marginal cost resource, and one that delivers during peak load periods, indicating that most of the generation produced by the Portfolio Resources may displace existing fossil fuel-fired generation on the system. This displacement will contribute to New York's goal of 80% greenhouse gas emissions reductions by 2050. Further, any displacement of existing fossil generation will reduce emissions of greenhouse gases and other particulate matter that contribute to climate change and degrade public health in the communities that surround the thermal generation facilities, which is particularly acute in New York City where many fossil fuel peaker plants are adjacent to Disadvantaged Communities.

ConnectGen is committed to ensuring that the communities that host and surround the Portfolio Resource locations both realize significant benefits from the Portfolio Resources and are not burdened with environmental costs. At the end of their useful life, Portfolio Resources will be decommissioned, and the areas hosting facility components will be restored. No adverse impacts to the future use of parcels hosting the Portfolio Resources are expected because of facility construction or operation. Upon decommissioning of Portfolio Resources, open agricultural or fallow lands where facility components were sited will again be available for agricultural or other use. Some tree clearing on timber lots and other

forested land will be required for placement of solar panels and other components. Any forested areas cleared during construction could be reclaimed following decommissioning of the Facility and returned to active timberlands.

All ConnectGen Portfolio Resources will implement a Site Restoration and Decommissioning Plan following NYSDAM guidelines on agricultural lands and all applicable local, state, and federal regulations, including provisions requiring/demonstrating:

- Removal of all above-ground structures, and removal of underground structures to the extent required by permitting activities or lease agreements,
- Removal of access roads within agricultural areas, unless otherwise agreed by the landowner,
- Minimization of ground disturbance during decommissioning, to the extent practicable,
- Site restoration activities including re-seeding soil areas with native and/or suitable plant species, where appropriate,
- Recycling and disposal of solid and hazardous wastes generated during decommissioning in accordance with applicable local, state, and federal regulations, and
- Provision of adequate financial assurance in order to ensure proper decommissioning.

[redacted]

While the respective footprints of Portfolio Resources do not include any Disadvantaged Communities, ConnectGen remains committed to ensuring that the local community and county residents more broadly receive benefits from the development of the Portfolio and have ample opportunity to engage in the development process – see XV. Community Engagement Plan for more details regarding ConnectGen's approach to community engagement.

The Portfolio is going to bring significant local revenue to the host communities, school districts, and stakeholders via local tax agreements, payments to landowners, and construction activities. This economic inflow will directly and indirectly benefit numerous local businesses while driving revenues for regional and local entities directly involved in the development, construction, operation, and maintenance of the Portfolio. Additionally, at the peak of construction for each Portfolio Resource, ConnectGen anticipates the creation of hundreds of FTE jobs. These benefits are described in more detail in Section XVI of this Proposal.

Carbon Intensity

ConnectGen has not yet endeavored to calculate the anticipated carbon intensity of the Portfolio considering the stage of development for the Portfolio Resources – major factors affecting this calculation, such as equipment selection and final engineering design, have yet to be completed. However, ConnectGen has compiled industry data regarding the estimated carbon intensity of a generic solar facility and has identified steps that may be taken in future engineering, procurement, and operations and maintenance activities to assist in an accurate calculation of embodied carbon for this Portfolio.

Firstly, it is important to note the life-cycle carbon emissions broadly anticipated from solar facilities, and how that compares with life-cycle carbon emissions from other sources of power generation. A study

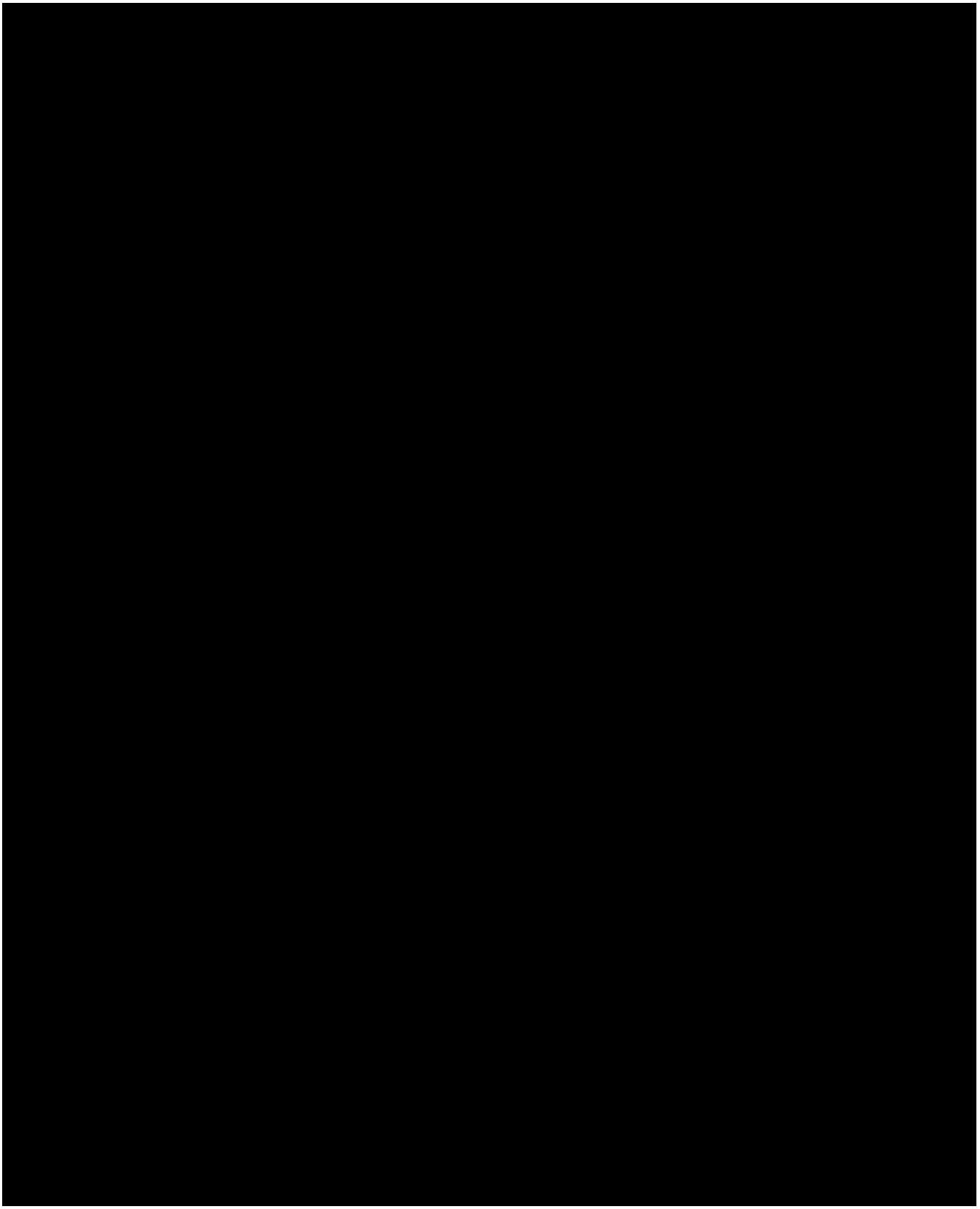
published in Nature Energy in 2017 titled "Understanding future emissions from low-carbon power systems by integration of life-cycle assessment and integrated energy modeling", evaluated the average lifetime emissions of various sources of power generation built out in 2050 considering a future generation mix consistent with an overall emissions trajectory leading to a 2-degree Celsius warmer world. This study found that solar energy production results in average lifetime emissions of approximately 6 gCO2eq/kWh, inclusive of direct and indirect emissions. On a similar spectrum were nuclear and wind energy, at 3.5 and 4.4 gCO2eq/kWh respectively. Diverging from nuclear and wind, bioenergy resulted in 98.4 gCO2eq/kWh.

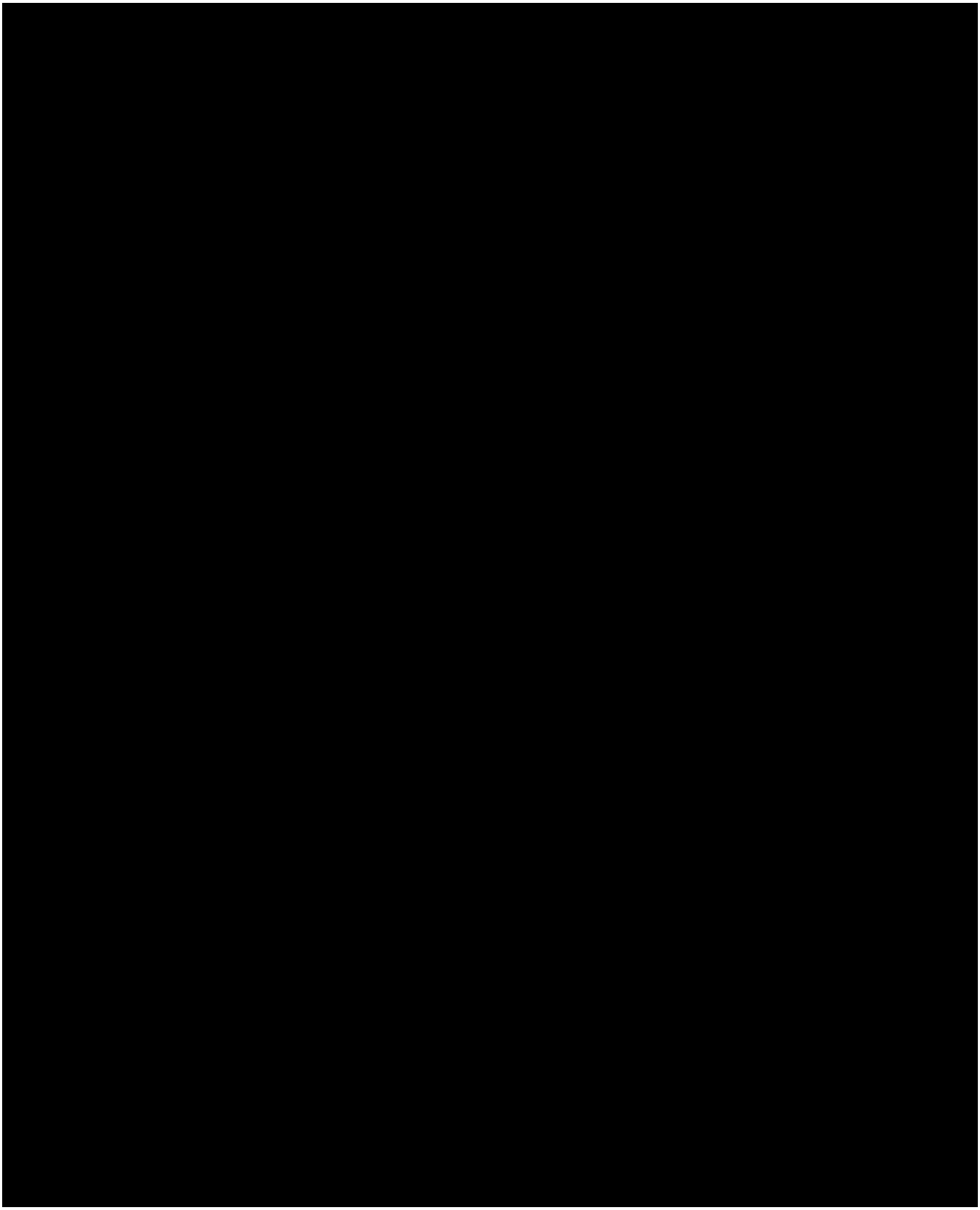
To further understand the sources of lifecycle emissions in a solar facility, ConnectGen referred to a National Renewable Energy Laboratory ("NREL") paper published in 2012 titled "Life Cycle Greenhouse Gas Emissions from Solar Photovoltaics". This study identified a higher lifecycle emissions expectation of approximately 40 gCO2eq/kWh for solar facilities, with wind at 126 gCO2eq/kWh and nuclear at 99 gCO2eq/kWh. Notably, for solar facilities NREL estimates 60-70% of emissions results from raw materials extraction, module and other component manufacture, and facility installation. 21-26% of emissions were expected to come from power generation and O&M activities, and 5-20% were anticipated to come from decommissioning and component disposal. While this is a more dated study than the one described in Nature Energy, it does indicate that a solar facility constructed in the early to mid-2020s is likely to have a life-time emissions expectation above 6 gCO2eq/kWh.

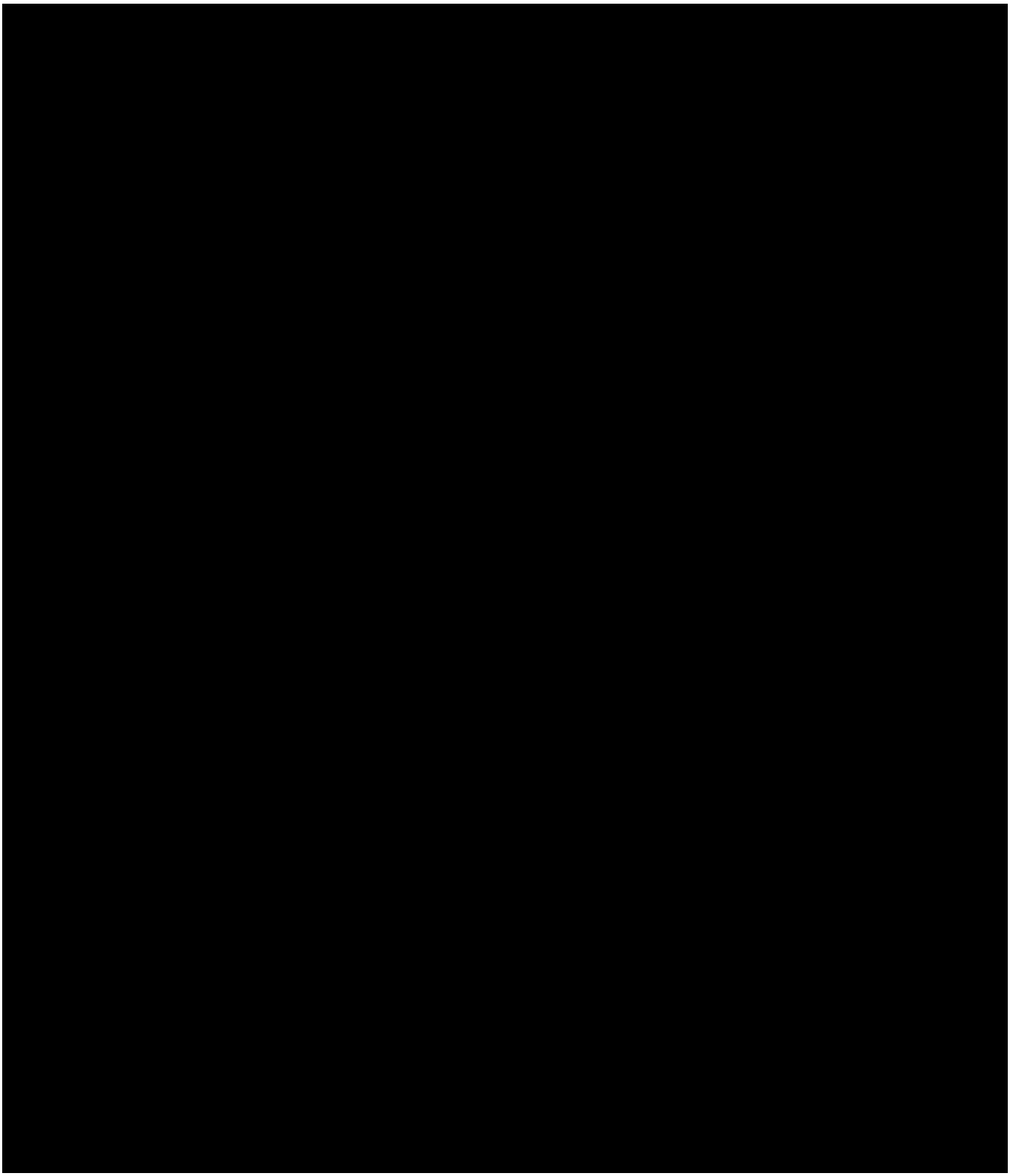
[redacted]

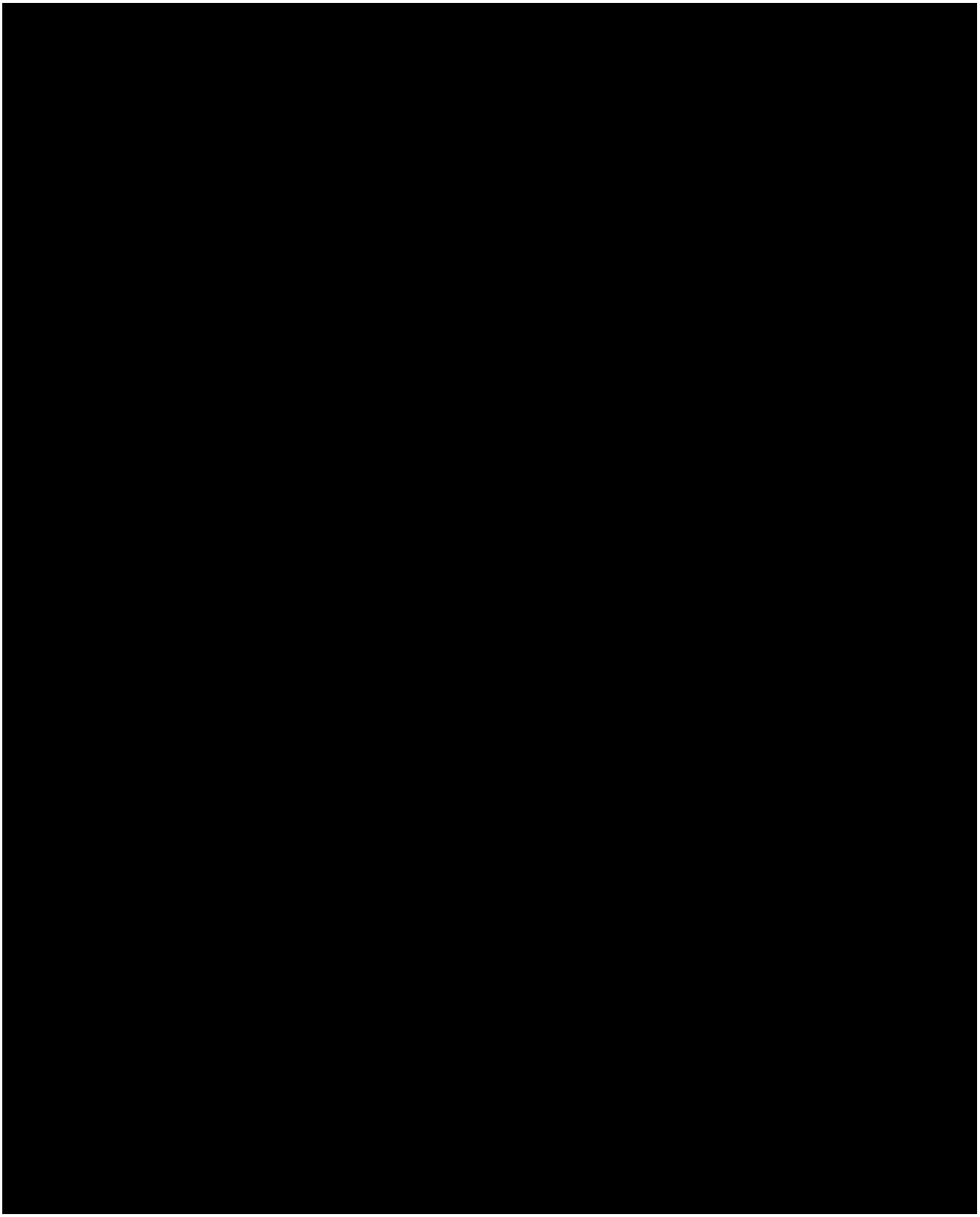
XIII. Schedule

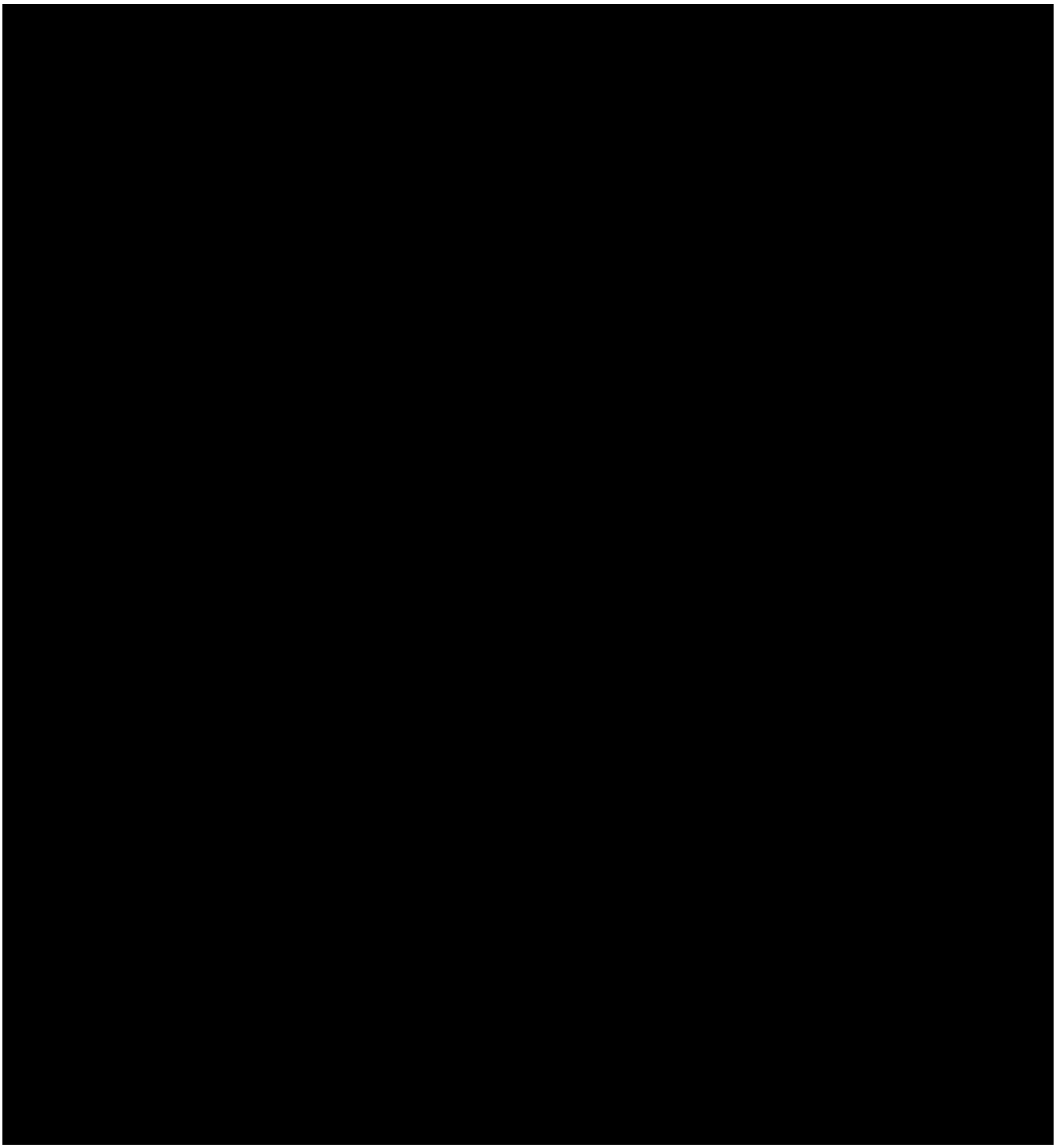
[redacted]











XIV. Operational Flexibility and Peak Coincidence

The ConnectGen Portfolio Resources, as solar-based resources, provide a significant contribution to meet peak energy demand in both their local zone as well as Zone J. [redacted]

[redacted]

XV. Community Engagement Plan

[redacted] ConnectGen prepared Community Engagement Plans for the MPS Project and HHS Project (formerly known as the Milliken Solar Project). These plans were originally submitted for NYSERDA's RESRFP20-1 [redacted]. They are attached:

- **Attachment 7.6.15.1_ Mill Point Solar Community Engagement Plan**
- **Attachment 7.6.15.2_ Harvest Hills Solar Community Engagement Plan**

ConnectGen provides a Public Involvement Program Plan (PIP) in lieu of a Community Engagement Plan, for the SRS Project, which was developed consistent with Article 10, the relevant permitting regime at the time. This PIP was prepared by Environmental Design & Research Landscape Architecture, Engineering & Environmental Services (EDR), a consultant for the SRS Project. The PIP is provided as **Attachment 7.6.15.3_ South Ripley Public Involvement Program Plan (CEP substitute)**.

The following language addresses the SRS Project's alignment with the CLCPA around disadvantaged communities, as such is not explicitly discussed in the PIP:

The Climate Leadership and Community Protection Act includes several environmental justice provisions, including setting a target for disadvantaged communities to receive 40 percent of the overall benefits from the state's climate programs and at a minimum, to receive no less than 35 percent of those benefits. The SRS Project Study Area is not within a Potential Environmental Justice Area; therefore, no direct or indirect effects are anticipated. ConnectGen applies a community-focused approach to development, with the intent to ensure the community is informed of the SRS Project and aware of potential socioeconomic benefits associated with the long-term operation of the SRS Project. Although no negative impacts to disadvantaged communities are expected, ConnectGen expects the local communities, including nearby disadvantaged communities, may benefit from jobs and economic opportunities associated with the construction and operation of the SRS Project.

[redacted]

XVI. Incremental Economic Benefits Plan

[redacted]