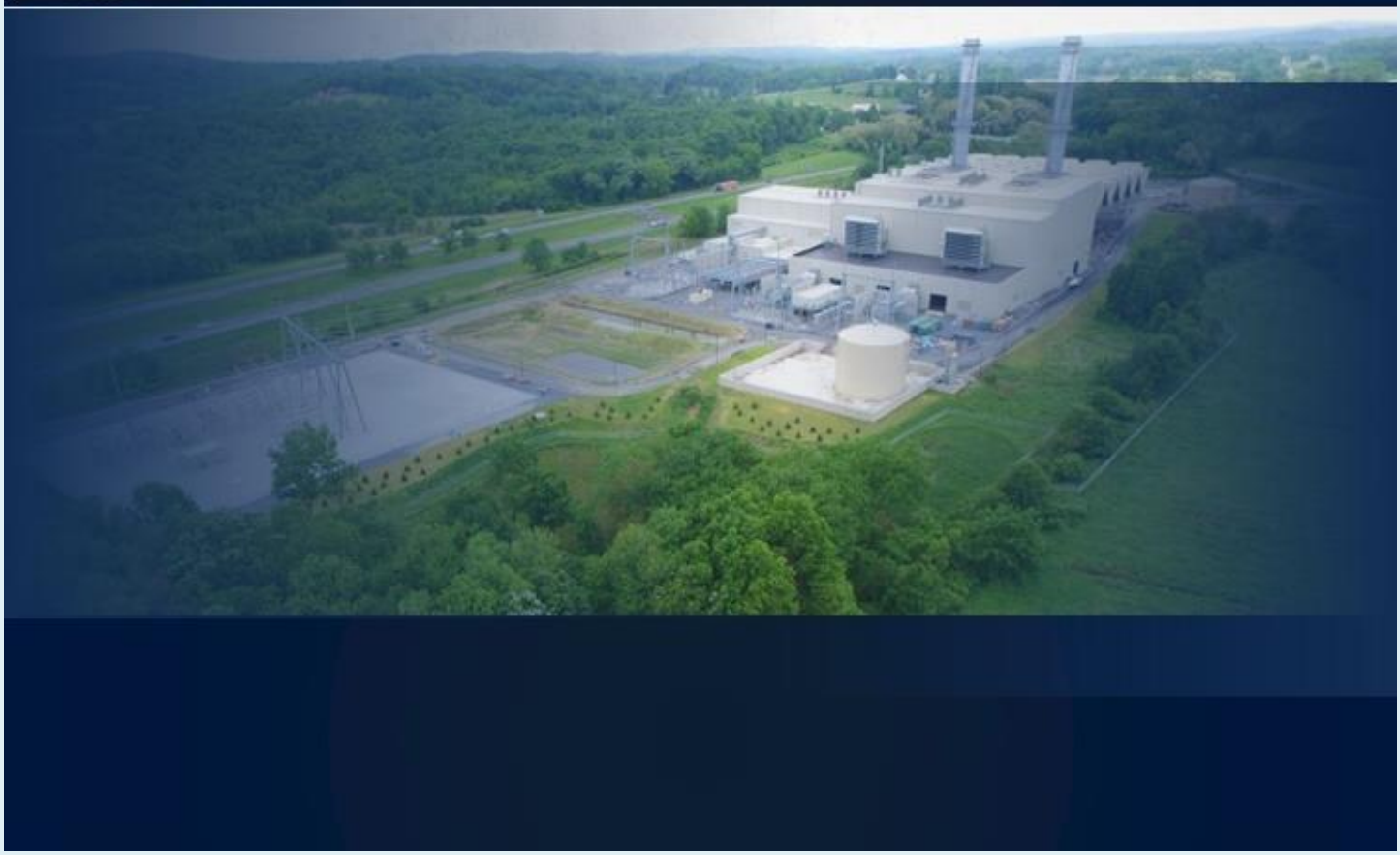
CPV Valley Energy Center

Responsible Energy Starts With Us



Disadvantaged Communities (DAC) Burden Analysis

June 25, 2024

Rev. November 22, 2024

CPV Valley, LLC

DEC ID 3-3356-00136/000010 & 00009

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SECTION 1: INTRODUCTION, OBJECTIVE, AND OVERVIEW

This Disadvantaged Communities (DAC) Evaluation has been prepared by CPV Valley, LLC (hereinafter referred to as Applicant or Valley) to comply with the requirements of 6 NYCRR § 621.3(a)(13) and the New York State Department of Environmental Conservation (NYSDEC) Program Policy DEP 24-1, Permitting and Disadvantaged Communities (DEP 24-1) for the Valley Energy Center permit applications under Title V (Air) and Title IV (Acid Rain) of the Clean Air Act.

This report has been developed in accordance with the guidance and procedures established in DEP 24-1 to evaluate potential impacts associated with continued operation of the Valley Energy Center, in or likely to affect a DAC, that result in greenhouse gas (GHG), or co-pollutant emissions regulated pursuant to the Climate Leadership and Community Protection Act (Chapter 106 of the Laws of 2019) (the CLCPA), Article 75 of the Environmental Conservation Law (ECL). This DAC Evaluation provides the following:

Section 2: provides a project location and facility overview, a description of the proposed action, and relevant procedural history related to the Clean Air Act Title IV/V applications.

Section 3: discusses Valley Energy Center's compliance with CLCPA § 7(2) GHG emissions limits, project design, project justification, and project alternatives.

Section 4: provides spatial data and identifies surrounding DAC baseline risk indicators for Census Tracts 36071011801, 36071001500, and 36071001600.

Section 5: sets forth a DAC Burden Analysis, including GHG emissions data, co-pollutant emissions data, an evaluation of GHG co-pollutant emissions impacts to DACs, and analyzes other relevant existing burdens to DACs.

Section 6: discusses existing project benefits and additional immediately employable mitigation measures and benefits to nearby DACs in accordance with CLCPA § 7(3).

Section 7: discusses Applicant's Enhanced Public Participation efforts under 6 NYCRR 621.3(a)(13) and NYSDEC's CP-29.

Section 8: provides DAC Evaluation conclusions.

[*section 2 follows*]

SECTION 2: DESCRIPTION OF THE PROPOSED ACTION

A. Overview

Valley currently operates the Valley Energy Center, a nominal net 680-megawatt (MW) combined-cycle gas turbine electric generating facility, on a site located at 3330 Route 6, Middletown, NY 10940 - Town of Wawayanda, Orange County Tax Parcels 4-1-38.32, 4-1-38.3, and 4-1-40.22.

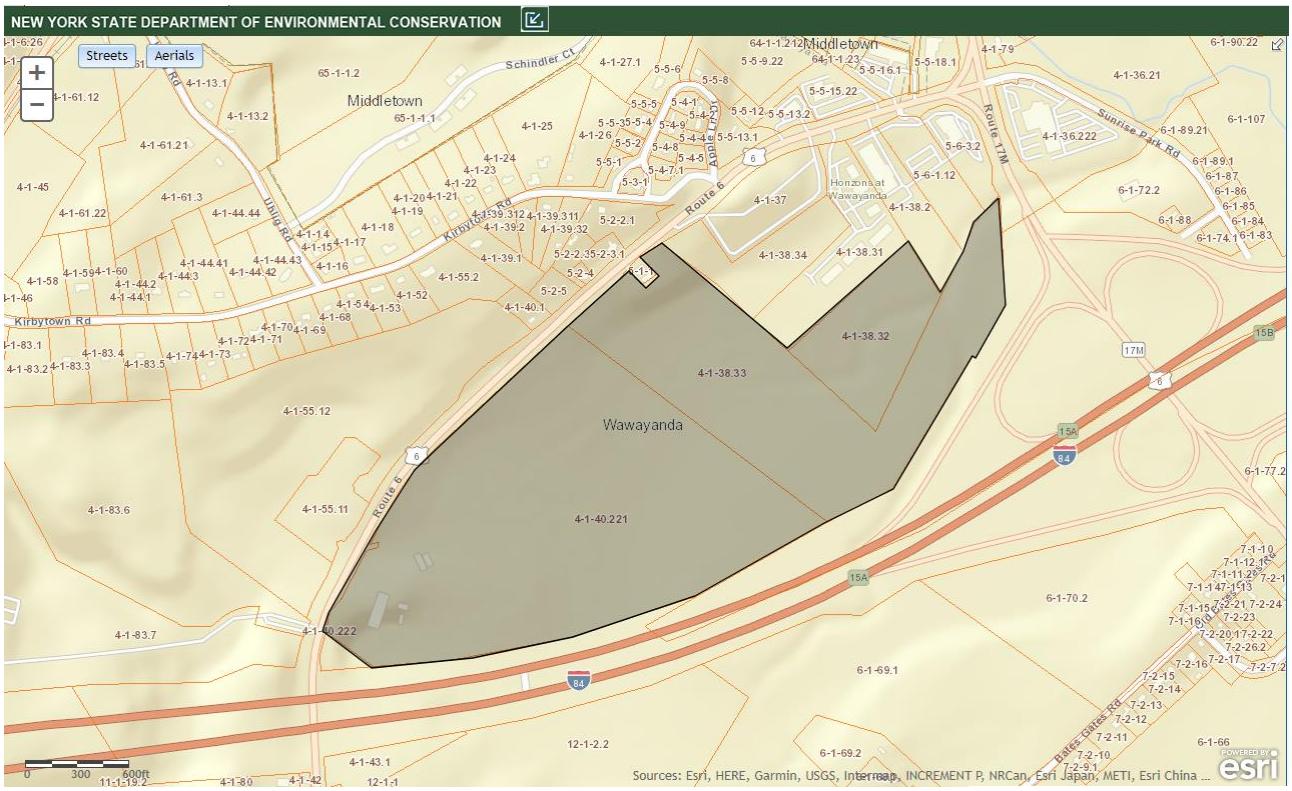

Figure 1: Project Location

The Valley Energy Center commenced operation in 2018 under an air state facility permit (ASF) (ASF Permit ID: 3-3356-00136/00001) and a pre-construction Prevention of Significant Deterioration (PSD) permit issued by the NYSDEC and continues to operate under the automatic permit extension provision in the State Administrative Procedure Act (SAPA) § 401 (2).

The Valley Energy Center was approved by the Town of Wawayanda Planning Board, acting as the lead agency under the State Environmental Quality Review Act (SEQRA) after a full environmental review and preparation of an environmental impact statement (EIS), including an enhanced public participation plan under the Commission's CP-29. The initial ASF permit for the Valley Energy Center was issued on August 1, 2013 and required Valley to apply for a Title V permit. Valley submitted applications for Title V and Title IV Acid Rain air permits to NYSDEC under to 6 NYCRR Part 201.

As one of the state's documented newest, most efficient, and highly flexible generating units, the Valley Energy Center is an important part of the New York State

electric generation and transmission system and will play an important part to reliably transition the State of New York to the increased use of intermittent renewable generation and energy storage in furtherance of state energy policy.

The Valley Energy Center's design features highly efficient technology and state-of-the-art emissions controls, making it one of New York's documented cleanest natural gas energy facilities in existence. The Valley Energy Center has enough electricity to power more than 650,000 homes, helping to meet the demand for local, affordable and reliable power in the lower Hudson Valley.

Figure 2. Existing Facility

B. Nature of Proposed Action

The proposed action is for the approval of an application for permits under Title V (Air) and Title IV (Acid Rain) of the Clean Air Act. (NYSDEC Application Id. No. 3-3356-00136/000010 & 00009) submitted on or about August 24, 2018 for the Valley Energy Center.

The Facility is a nominal net 680-megawatt (MW) combined-cycle gas turbine electric generating facility consisting of two Siemens F-class combustion turbine generators operating in combined-cycle mode with supplemental firing of the heat recovery steam generators. The Facility includes a natural gas-fired auxiliary boiler and an ultra-low-sulfur diesel fired emergency fire pump engine. The auxiliary boiler and emergency fire pump

engine have the same rating and emissions as those contained in the original ASF permit issued by NYS DEC. In addition to the air emitting equipment, the Facility has one steam turbine generator, an air-cooled condenser and associated auxiliary equipment and systems. Each combined cycle generating unit is exhausted through its own stack.

After a full environmental review, including the preparation of an environmental impact statement (EIS), the initial ASF permit for the Facility was issued on August 1, 2013 and required Valley to apply for a Title V permit within 1 year from start of operations. The Facility commenced operations in January 2018. Valley submitted applications for Title V and Title IV Acid Rain air permits to NYS DEC under to 6 NYCRR Part 201 in August 2018 as per the ASF permit condition and continued operations under SAPA § 401. Valley's application was deemed complete by the Department on May 27, 2019 commencing an 18-month technical review period under Part 201.

NYSDEC revoked its initial completeness determination and issued a Notice of Incomplete Application (NOIA) on November 29, 2020, in part, due to new requirements under Section 7 of the CLCPA. Since then, Valley has provided NYSDEC the following additional information showing compliance and consistency with the CLCPA:

1. March 8, 2021: Valley's response to NYSDEC's NOIA demonstrating that Valley's Application, if approved, would not interfere with the attainment of the CLCPA GHG emission limits established under ECL Article 75 and the Part 496 regulations along with a Greenhouse Gas Analysis[1]; demonstrating consistency with the state's long-term energy targets of a zero-emissions statewide electric system by 2040; and an assessment on how future physical climate risk has been considered in accordance with the Community Risk and Resiliency Act (CRRA).

2. March 30, 2021: Valley's response to NYSDEC's NOIA along with an Alternative Fuels analysis demonstrating the technical feasibility of using renewable natural gas (RNG) and hydrogen sourced using renewable energy at the Facility.

3. October 7, 2021: Valley's response to NYSDEC's August 20, 2021 Request for Information (RFI) along with a Supplemental Greenhouse Gas Analysis[2] regarding (1) methane assumptions, (2) individual GHG calculations displayed in carbon dioxide equivalents (CO2e), (3) upstream emission factors and calculations, (4) environmental justice considerations, and (5) additional technical and environmental feasibility of utilizing RNG or hydrogen at Valley's Facility.

4. April 22, 2022: Valley's response to NYSDEC's August 20, 2021 RFI along with an

[1] *Greenhouse Gas Analysis for CPV Valley Energy Center Title V Application* (ICF, Mar. 8, 2021, last revised January 6, 2023) (GHG Report) (attached as **Appendix 1**).

[2] *Supplement to March 8, 2021 Report - Greenhouse Gas Analysis for CPV Valley Energy Center Title V Application* (ICF, Oct. 7, 2021) (October 2021 Supplement) (attached as **Appendix 2**).

Additional Reliability Study[3] prepared by the New York Independent System Operator (NYISO) for the Facility and a Consultant Analysis[4] prepared by Hudson Energy Economics, LLC regarding the NYISO Study.

5. January 9, 2023: Valley's response to NYSDEC's August 24, 2022 RFI providing an analysis under Program Policy DAR-21 § V (E) of immediately employable mitigation, as well as longer-term options to achieve economywide GHG reductions consistent with the CLCPA along with (1) a second Supplemental GHG Analysis[5] using 2021/2022 statewide emission factors; (2) a Feasibility Report[6] providing an analysis of incorporating operational limits as a potential mitigation measure for consistency with the requirements of the CLCPA; and (3) Co-Pollutant Emissions Analysis[7] from each GHG source at the Facility including alternatives or mitigation measures to reduce the impact of those emissions on potential environmental justice (EJ) communities.

6. March 13, 2023: Valley's response to NYSDEC's August 24, 2022 RFI providing an assessment of alternative or additional immediately employable mitigation measures that prioritize reductions of GHG emissions and co-pollutants within Census Tract 36071011801 identified as a DAC; and an updated SEQRA Environmental Assessment Form (EAF) Part 1.

7. May 31, 2023: Valley's Revised Public Participation Plan in accordance with Commissioner Policy 29, Environmental Justice and Permitting (CP-29).

8. August 15, 2023: Revised SEQRA EAF Part 1 with corrections to methane emission calculations.

[*section 3 follows*]

[3] *Additional Reliability Study: CPV Valley* (NYISO, Mar. 09, 2022) (Reliability Study) (attached as **Appendix 3**).

[4] *CLCPA Project Justification - Grid Reliability* (Hudson Energy Economics, LLC, Apr. 21, 2022) (Reliability Study Analysis) (attached as **Appendix 4**).

[5] *Supplemental Greenhouse Gas Analysis for CPV Valley Energy Center Title V Application* (ICF, Jan. 6, 2023) (GHG Report Update) (attached as **Appendix 5**).

[6] *Supplemental Emissions Analysis for CPV Valley Energy Center Title V Application* (ICF, Jan. 6, 2023) (Feasibility Report) (attached as **Appendix 6**).

[7] *Measures and Alternatives to Mitigate the Impacts of Co-Pollutant Emissions from Greenhouse Gas Emission Sources*, (TRC Companies, Dec. 2022) (2022 Co-pollutant Report) (attached as **Appendix 7**).

SECTION 3: CLCPA § 7(2) CONSIDERATIONS

A. GHG Emissions Limits

CLCPA § 7(2) states, in part, that "[i]n considering and issuing permits . . . agencies . . . shall consider whether such decisions are inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits established in article 75 of the environmental conservation law." As discussed below in Section 5(A), and in Valley's prior submissions,[8] Valley has established that continuing its operations under a Title V permit is not inconsistent with and will not interfere with the attainment of the statewide GHG emissions limits. Indeed, the Valley Energy Center is precisely the type of highly efficient and dispatchable generation that is required to reliably transition the State of New York to the increased use of intermittent renewable generation and energy storage to meet the CLCPA.

B. Project Design

As an existing generation facility in operation, opportunities for design measures that ensure that the project will not disproportionately burden the disadvantaged community are limited. However, Valley Energy Center has been designed with state-of-the-art control technology which exceed regulatory requirements and is among the most efficient electric generating facilities in the state.[9]

The 2022 Co-pollutant Report details the mitigation measures already implemented at the Facility. These include use of more expensive but thermally efficient combined cycle combustion units that minimizes fuel use resulting in reduced / more efficient project heat rates[10] (meaning less GHG and co-pollutants emitted per unit of electricity generated), and reduced carbon dioxide equivalents released.[11] Each combined-cycle unit is equipped with an oxidation catalyst reducing products of incomplete hydrocarbon combustion, trace metals, CO, and VOC. The combined-cycle unit also utilizes dry low emission combustors and a selective catalytic reduction resulting in overall decreased NO_x formation and emission. The Facility also includes an auxiliary boiler to pre-heat steam plant reducing start-up duration where the combined-cycle units are less efficient.

In sum, Valley Energy Center's project design already incorporates these mitigation measures, requiring increased capital investment and ongoing additional operating and maintenance costs, but which results in quantifiable reductions in GHGs and its co-

[8] GHG Report (Appendix 1, Appendix 5).

[9] *See* Valley's January 9, 2023 response to NYSDEC's August 24, 2022 RFI.

[10] Project heat rates (in Btu/kWh) equal to 6,659 (2019); 6,938 (2020); 6,934 (2021); and 6,917 (2022) as compared to Valley's current permit limit of 7,605 Btu/kWh and a heat rate of 7,599 Btu/kWh for all Northeast Power Coordinating Council (NPCC) upstate New York subregion combustion generation plants.

[11] Project emitted 822 pounds of carbon dioxide equivalents released to generate one megawatt-hour of electricity (lb. CO2e/MWh) in 2020 as compared to Valley's current permit limit of 925 lb CO2e/MWh and other combustion generation plants, fossil fuel generation plants, and non-baseload generation plants located in the NPCC upstate New York subregion emitted, respectively, 836, 852, and 881 lb CO2e/MWh.

pollutants (*see* Section 5 (A) [discussing GHG emissions] and Section 5 (B) [discussing co-pollutant emissions]) when compared to both Valley's allowable permit limits and other non-baseload combustion generation plants in the NPCC upstate New York subregion.

The mitigation measures Valley has already implemented at the Facility results in "avoidance of impacts to any identified EJ areas" (Findings Statement at 38) and DACs, and the additional proposed mitigation measures discussed herein further confirms that Valley's continued operation does not disproportionately burden DACs and is consistent with the CLCPA.

C. Justification Statement

CLCPA § 7(2) also states, in part, that "[w]here such decisions are deemed to be inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits, each agency . . . shall provide a detailed statement of justification as to why such limits/criteria may not be met, and identify alternatives or greenhouse gas mitigation measures to be required where such project is located."

While there is no support that Valley's continued operation under a new Title V permit would be inconsistent with or would interfere with the attainment of the Statewide GHG emission limits, Valley previously submitted the NYISO) Reliability Study (Appendix 3), and the Reliability Study Analysis (Appendix 4) in support of Valley's Application. As detailed in the Reliability Study Analysis, without the Valley Energy Center as a generation resource (i) the loss of load expectation increases significantly and would exceed the resource adequacy criterion in 2031 and barely meet targets in 2030; (ii) a Transmission Security Analysis assuming no forced outages on generating units shows insufficient resources to meet the peak load plus operating reserve requirement in 2030; (iii) recognizing the risk of historic unit outage rates the NYISO will have insufficient resources to meet peak load plus reserves in every year from 2023 through 2031; (iv) assuming no forced outages on generating units the system will be 845 MW short of meeting 90/10 heatwave peak plus reserves in 2023 and more than 1,400 MW short in 2031; and (v) assuming historic generating unit outage rates the system would have insufficient resources to meet the 90/10 peak load in 2025 and would fail to meet the peak load by 540 MW in 2031.

NYISO's Study prepared for the Valley Energy Center is consistent with NYISO's recently released 2022 Reliability Needs Assessment[12] for the 2026-2032 study period, which in summary concludes amongst other findings that (i) with increased renewable intermittent generation for achievement of the CLCPA goal of 70% renewable energy by 2030, at least 17,000 MW of existing fossil generating units must be retained to continue to reliably serve forecasted demand; (ii) resource adequacy and transmission security margins are tightening over time across the New York State Bulk Power Transmission Facilities; (iii) demand forecast uncertainty or potential heatwaves of various degrees pose risks throughout the next ten years, especially in 2025; (iv) New York's current reliance on

[12] 2022 Reliability Needs Assessment (NYISO, 2022) accessible at https://www.nyiso.com/documents/20142/32940528/2022RNA_Draft1Report_forAug23ESPWG_v2.pdf/6289c7ab-ad8b-5531-a050-37a00c8024f0 (last accessed June 25, 2024).

neighboring electric systems is expected to continue through the next ten years and without emergency assistance from neighboring regions New York would not have adequate resources throughout the next ten years; and (v) extreme events such as heatwaves or storms could result in deficiencies to serve demand statewide, especially in New York City.

D. Project Alternatives

The Valley Energy Center is an operating electric generation facility contributing 680 MW of power to NYISO Zone G. The only alternative to allowing continued operations under a Title V permit is to deny the application, thereby forcing a plant closure, or imposing operational limits to reduce power output.

Given NYISO's resource adequacy concerns and forecast uncertainly discussed above, a forced shutdown would adversely impact reliability and transmission security and would result in an overall increase in state-wide or aggregate GHG emissions. This is because while such mitigation measures may result in onsite GHG emissions reductions, total state-wide or aggregate GHG emissions would actually increase, defeating the purpose of mitigation efforts. As one of the state's documented newest, most efficient, and highly flexible generating units, closure of Valley Energy Center would necessarily require older, dirtier, and less efficient plants go online to make up for any resource shortfalls. In such a scenario, there would be a significant resulting increase in economy-wide GHG emissions.

Similarly, operational limits could potentially cause Valley Energy Center to be unavailable during peak load periods leaving the grid operator with inadequate resources to meet peak load plus requirements. Not only would such limitations adversely impact reliability and transmission security, operational limitations on the Valley Energy Center intended as a GHG mitigation measure would also likely result in an overall increase in state-wide or aggregate GHG emissions. In such a scenario, there would be a resulting increase in GHG emissions when compared to a scenario where the Valley Energy Center did not have operational limits and was able to provide the same resource but with less GHG and co-pollutant emissions.

Such a result is not rational because it would have the exact opposite effect intended by the mitigation measure. A full analysis on why operational limits as a GHG mitigation measure is set forth in the Feasibility Report (Appendix 6).

[*section 4 follows*]

SECTION 4: DAC LOCATIONS

A. Spatial data

As background, CLCPA § 7(3) requires, in part, that in considering or issuing permits, State agencies shall not disproportionately burden DACs, which includes consideration of GHG co-pollutants. The CLCPA Climate Council's Climate Justice Working Group (CJWG) has developed a list identifying DACs to ensure that underserved communities benefit from the state's GHG reduction initiative. The CJWG has identified the following DACs in the Mid-Hudson region:

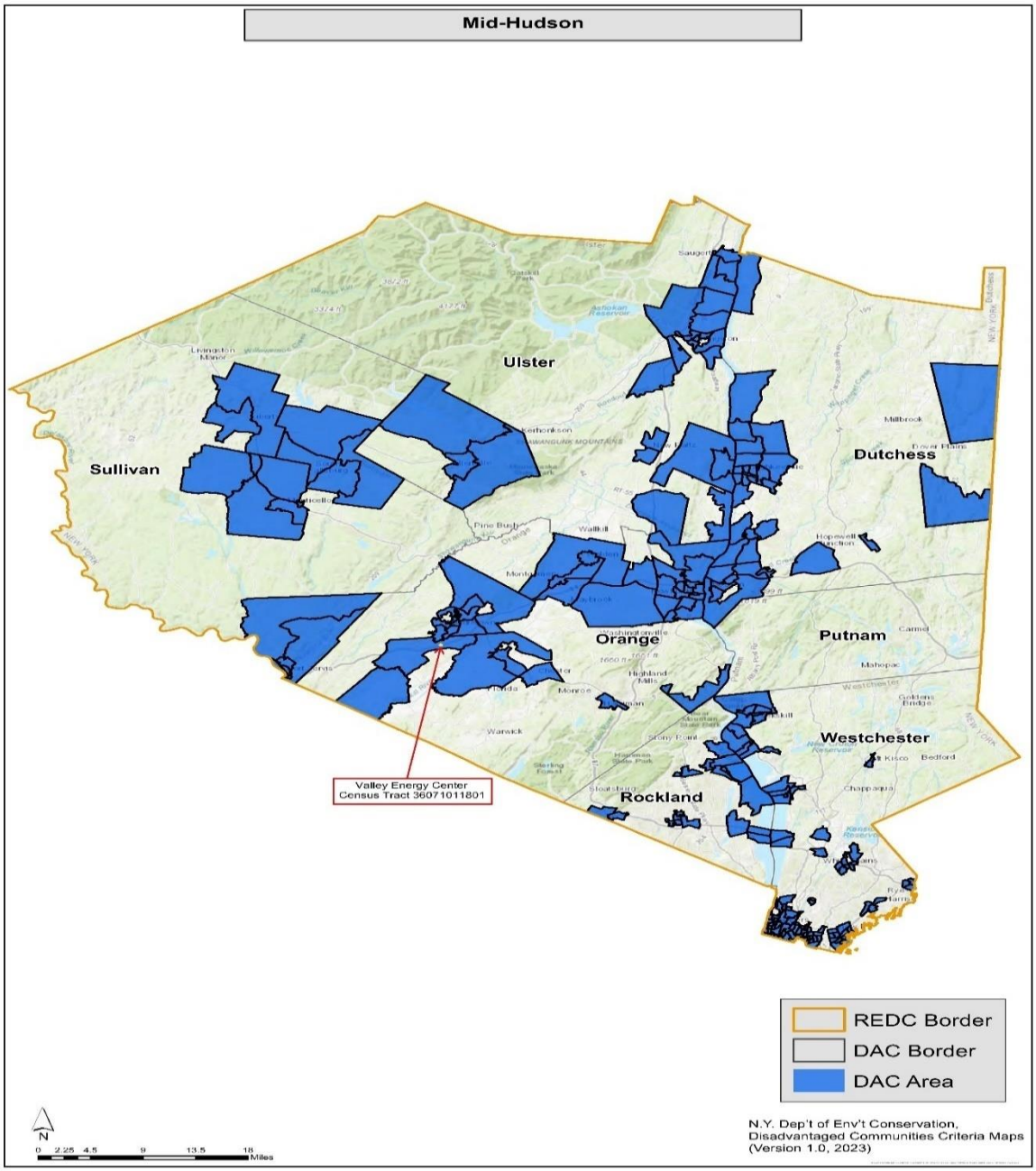

Figure 3. Mid-Hudson Region DACs

The Valley Energy Center is located within Census Tract 36071011801 (population 4,162) and is on the CJWG's list of DACs.[13]

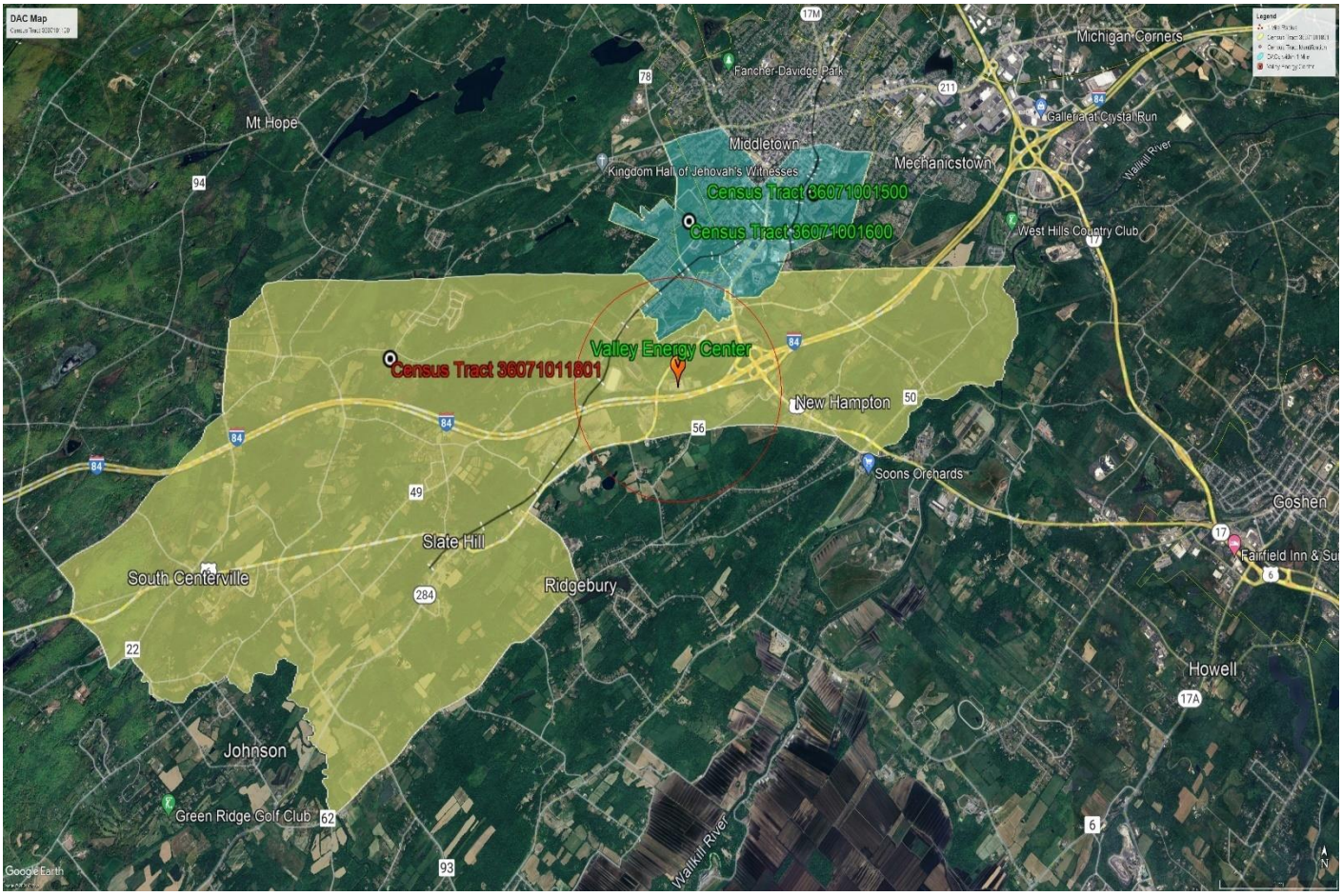

Figure 4. Spatial Data

In addition, the CJWG has identified Census Tracts 36071001500 (population 4,537) and 36071001600 (population 7,377) as DACs located within a one-mile radius of the Facility. CJWG DAC baseline data and risk indicators for Census Tracts 36071011801, 36071001500, and 36071001600 is discussed below.

[13] CJWG List of Disadvantaged Communities, *accessible at:* https://climate.ny.gov/-/media/Project/Climate/Files/Disadvantaged-Communities-Criteria/List-of-Disadvantaged-Communities.pdf (last accessed June 11, 2024).

B. Census Tract 36071011801 Baseline Data on Existing Burdens

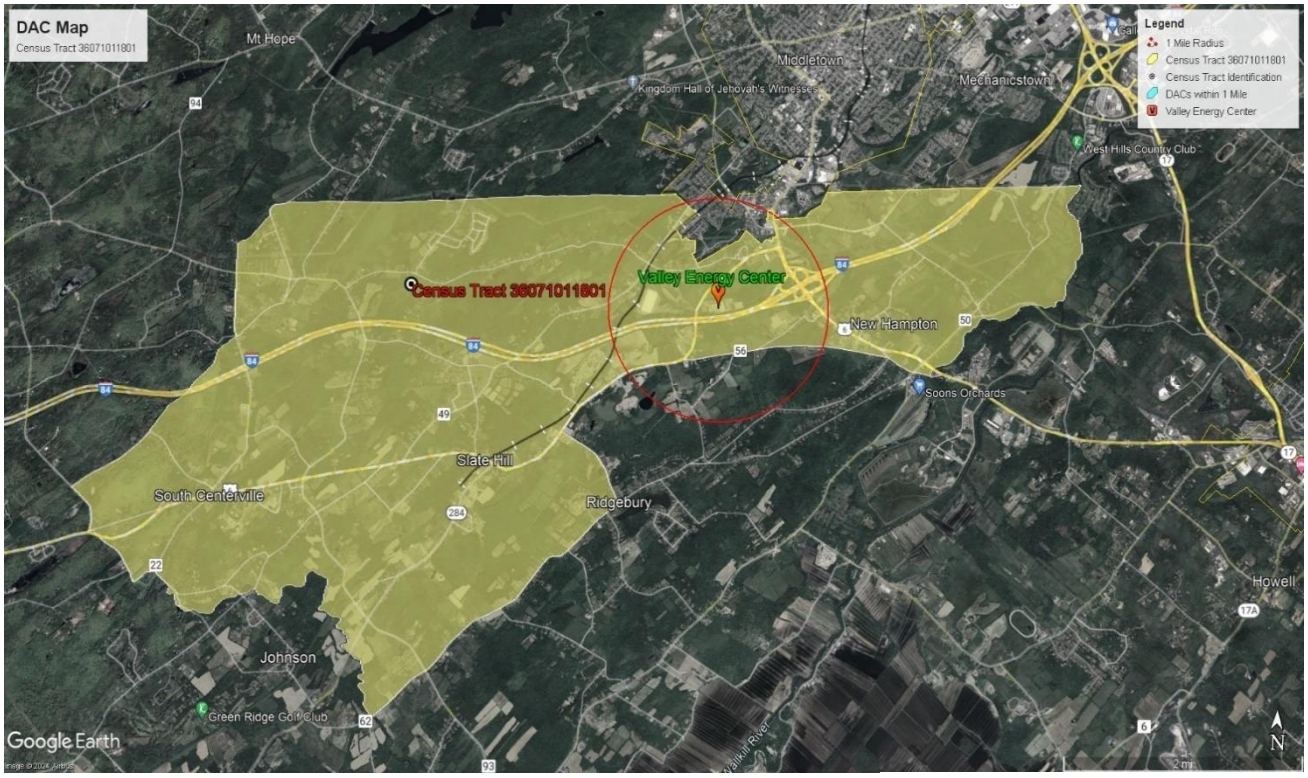

Figure 5. Census Tract 36071011801

Population Characteristics & Vulnerability

Health Impacts & Burdens	Asthma ED visits	24%
	COPD ED visits	31%
	Heart attack (MI) Hospitalization	56%
	Low Birthweight	68%
	Pct Adults Age 65+	26%
	Pct w/ Disabilities	61%
	Pct w/o Health Insurance	70%
	Premature Deaths	63%
Housing, Mobility, Communications	Energy Poverty / Cost Burden	83%
	Homes Built Before 1960	19%
	Housing Cost Burden (Rental C..	65%
	Manufactured Homes	65%
	Pct Renter-Occupied Homes	40%
	Pct w/o Internet (home or cellul..	30%
Income	Pct <100% of Federal Poverty ..	69%
	Pct <80% Area Median Income	15%
	Pct Single-Parent Households	84%
	Pct w/o BachelorÆs Degree	38%
	Unemployment Rate	54%
Race/Ethnicity	Limited English Proficiency	9%
	Pct Asian	47%
	Pct Black or African American	62%
	Pct Latino/a or Hispanic	66%
	Pct Native American or Indigen..	85%

Environmental Burden & Climate Change Risk

Land Use & Historic Discrimination	Active Landfills	0%
	Housing Vacancy Rate	42%
	Industrial/Manufacturing/Mining La..	12%
	Major Oil Storage Facilities	27%
	Municipal Waste Combustors	0%
	Power Generation Facilities	29%
	Regulated Management Plan (Ch..	70%
	Remediation Sites	0%
	Scrap Metal Processing	75%
Potential Climate Change Risk	Agricultural Land Use	80%
	Coastal Flooding and Storm Risk ..	0%
	Driving Time to Urgent/Critical Care	92%
	Extreme Heat Projections (>90? d..	63%
	Inland Flooding Risk Areas	40%
	Low Vegetative Land Cover	16%
Potential Pollution Exposure	Benzene Concentration (Modeled)	23%
	Particulate Matter (PM2.5)	39%
	Traffic: Diesel Trucks	92%
	Traffic: Number of Vehicles	27%
	Wastewater Discharge	52%

Figure 6. DAC Indicators for Census Tract 36071011801

C. Census Tract 36071001500 Baseline Data on Existing Burdens

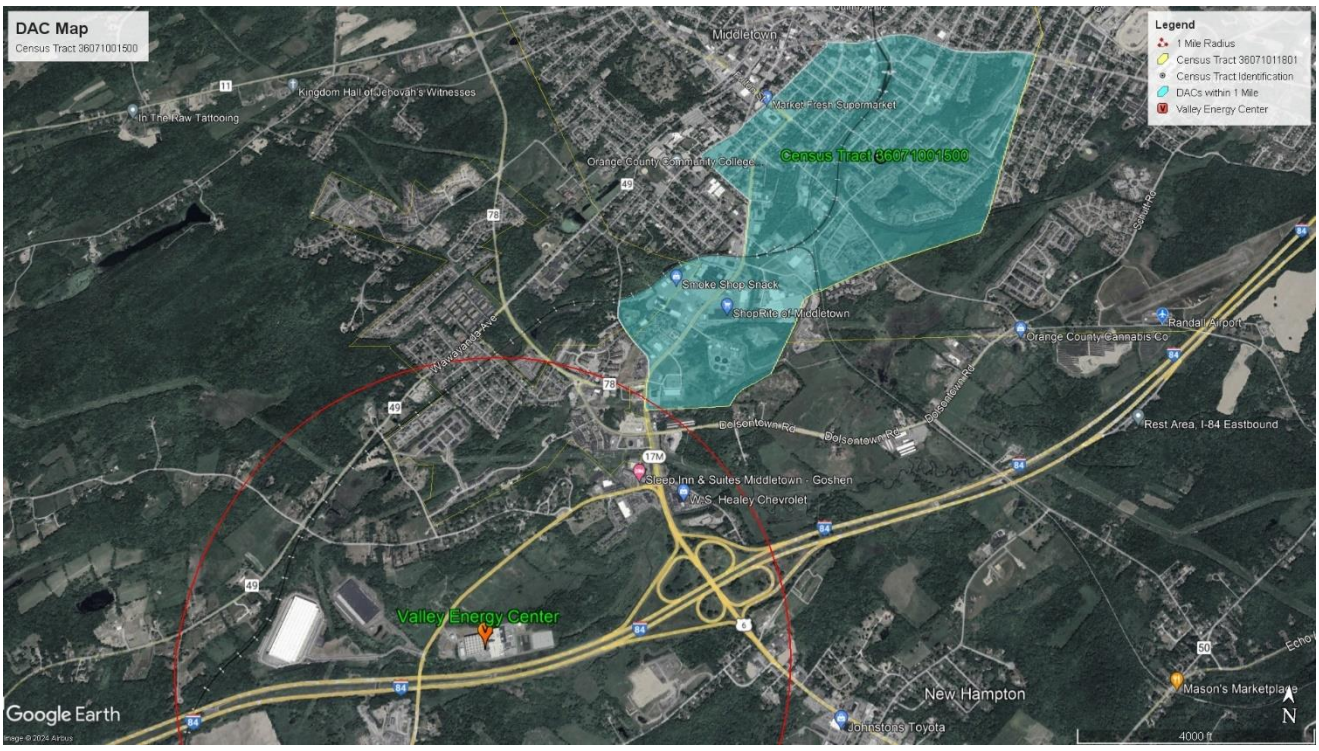

Figure 7. Census Tract 36071001500

Population Characteristics & Vulnerability

Health Impacts & Burdens	Asthma ED visits	73%
	COPD ED visits	86%
	Heart attack (MI) Hospitalization	63%
	Low Birthweight	48%
	Pct Adults Age 65+	35%
	Pct w/ Disabilities	75%
	Pct w/o Health Insurance	83%
	Premature Deaths	70%
Housing, Mobility, Communications	Energy Poverty / Cost Burden	83%
	Homes Built Before 1960	36%
	Housing Cost Burden (Rental C..	36%
	Manufactured Homes	14%
	Pct Renter-Occupied Homes	61%
	Pct w/o Internet (home or cellul..	87%
Income	Pct <100% of Federal Poverty ..	73%
	Pct <80% Area Median Income	85%
	Pct Single-Parent Households	79%
	Pct w/o Bachelor/Æs Degree	80%
	Unemployment Rate	6%
Race/Ethnicity	Limited English Proficiency	60%
	Pct Asian	65%
	Pct Black or African American	74%
	Pct Latino/a or Hispanic	89%
	Pct Native American or Indigen..	97%

Environmental Burden & Climate Change Risk

Land Use & Historic Discrimination	Active Landfills	0%
	Housing Vacancy Rate	69%
	Industrial/Manufacturing/Mining La..	84%
	Major Oil Storage Facilities	0%
	Municipal Waste Combustors	0%
	Power Generation Facilities	54%
	Regulated Management Plan (Ch..	88%
	Remediation Sites	87%
	Scrap Metal Processing	0%
Potential Climate Change Risk	Agricultural Land Use	43%
	Coastal Flooding and Storm Risk ..	0%
	Driving Time to Urgent/Critical Care	79%
	Extreme Heat Projections (>90? d..	63%
	Inland Flooding Risk Areas	81%
	Low Vegetative Land Cover	45%
Potential Pollution Exposure	Benzene Concentration (Modeled)	37%
	Particulate Matter (PM2.5)	38%
	Traffic: Diesel Trucks	24%
	Traffic: Number of Vehicles	30%
	Wastewater Discharge	75%

Figure 8. DAC Indicators for Census Tract 36071001500

D. Census Tract 36071001600 Baseline Data on Existing Burdens

Figure 9. Census Tract 36071001600

Population Characteristics & Vulnerability

Health Impacts & Burdens	Asthma ED visits	73%
	COPD ED visits	86%
	Heart attack (MI) Hospitalization	63%
	Low Birthweight	48%
	Pct Adults Age 65+	50%
	Pct w/ Disabilities	75%
	Pct w/o Health Insurance	39%
	Premature Deaths	70%
Housing, Mobility, Communications	Energy Poverty / Cost Burden	83%
	Homes Built Before 1960	14%
	Housing Cost Burden (Rental C..	80%
	Manufactured Homes	0%
	Pct Renter-Occupied Homes	57%
	Pct w/o Internet (home or cellul..	24%
Income	Pct <100% of Federal Poverty ..	56%
	Pct <80% Area Median Income	51%
	Pct Single-Parent Households	72%
	Pct w/o BachelorÆs Degree	78%
	Unemployment Rate	68%
Race/Ethnicity	Limited English Proficiency	39%
	Pct Asian	47%
	Pct Black or African American	80%
	Pct Latino/a or Hispanic	86%
	Pct Native American or Indigen..	11%

Environmental Burden & Climate Change Risk

Land Use & Historic Discrimination	Active Landfills	0%
	Housing Vacancy Rate	31%
	Industrial/Manufacturing/Mining La..	0%
	Major Oil Storage Facilities	0%
	Municipal Waste Combustors	0%
	Power Generation Facilities	46%
	Regulated Management Plan (Ch..	77%
	Remediation Sites	0%
	Scrap Metal Processing	0%
Potential Climate Change Risk	Agricultural Land Use	50%
	Coastal Flooding and Storm Risk ..	0%
	Driving Time to Urgent/Critical Care	82%
	Extreme Heat Projections (>90? d..	63%
	Inland Flooding Risk Areas	35%
	Low Vegetative Land Cover	33%
Potential Pollution Exposure	Benzene Concentration (Modeled)	33%
	Particulate Matter (PM2.5)	38%
	Traffic: Diesel Trucks	28%
	Traffic: Number of Vehicles	25%
	Wastewater Discharge	67%

Figure 10. DAC Indicators for Census Tract 36071001600

SECION 5: DAC BURDEN ANALYSIS

A. GHG Emissions

In support of its Applications, Valley submitted the GHG Report (Appendix 1) in response to NYSDEC's November 29, 2020 NOIA The GHG Report was updated by October 2021 Supplement (Appendix 2) providing data for each individual GHG emitted in CO_2e using the Global Warming Potential-20 (GW20); and the January 6, 2023 GHG Report Update (Appendix 5) providing updated GHG calculations based on new emissions factors set forth in Appendix A of the Department's 2021 Statewide GHG Emissions Report and the 2022 Statewide GHG Emissions Report (GHG Report, October 2021 Supplement, and GHG Report Update, collectively referred to as GHG Report). In addition, Valley submitted the Feasibility Report (Appendix 6) providing an analysis of incorporating operational limits as a potential mitigation measure for consistency with the requirements of the CLCPA.

The GHG Report demonstrates that Valley's Application, if approved, would not interfere with the attainment of the CLCPA GHG emission limits established under ECL Article 75 and the Part 496 regulations. The GHG Report analyzed the impact on both direct and indirect (upstream) GHG emissions associated with the operation of the Facility. The analysis shows that between 2025 and 2040, operation of the Facility results in a significant reduction of direct and upstream GHG emissions in NYS (GHG Report § 2.3). These net annual reductions in GHG emissions are attributed to the fact that the Facility is one of the most efficient thermal generators in NYS, displacing less efficient (and higher emitting) generation sources, without any negative impact to renewable generation (GHG Report § 2.2). The analysis of the Facility's GHG emission impacts are fully set forth in section 4.2. This section shows the GHG emissions from less efficient NYS generators anticipated to be displaced (GHG Report § 4.2, Supplemental Table 4-8b), impact of the Facility on GHG emissions (GHG Report § 4.2, Table 4-9b), and net reduction on statewide GHG emissions from the Facility's operation (GHG Report § 4.2, Supplemental Table 4-10b).

B. Co-Pollutant Emissions

The CLCPA defines co-pollutants as hazardous air pollutants (HAPs) that are emitted by a sources that emits GHG. These criteria co-pollutants include nitrogen oxides (NO_X), carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO_2), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and ozone (O_3) and its precursors.

Valley commissioned TRC Environmental Corp. to undertake and update co-pollutant calculations in 2022 set forth in the 2022 Co-pollutant Report (Appendix 7).

Since Valley has now been in operation for over four years under an ASF permit, the 2022 Co-pollutant Report is based, in part, on actual reported emissions data for each of its six emission sources, rather than projected data that was used in the EIS. The 2022 Co-

pollutant Report provides emissions data on all HAPs. A summary of the criteria co-pollutant calculations set forth in the 2022 Co-pollutant Report is as follows:

***Table 1**: Co-pollutant Potential to Emit (PTE) calculations for the two combustion turbines and their associated duct-burners*

Co-Pollutant	Emissions for Two Units (ton/yr)		
	Case 1 8,760 hr/yr Nat Gas	Case 2 8,760 hr/yr Nat Gas	Maximum of Cases 1 & 2
Criteria Pollutants			
NOx	146	171	171
CO	115	113	115
VOC	28.0	28.1	28.1
SO_2	42.1	40.9	42.1
PM2.5 / PM10	108	137	137
Total HAPs	10.1	11.4	11.4

***Table 2**: Co-pollutant PTE calculations for the auxiliary boiler*

Co-Pollutant	Emission Factor (lb/MMbtu)	Hourly Emission (lb/hr)	Annual Emission (ton/yr)
Criteria Pollutants			
NOx	0.05	2.29	2.29
CO	0.08	3.85	3.85
VOC	5.39E-3	0.25	0.25
SO_2	5.88E-4	0.03	0.03
PM2.5 / PM10	7.45E-3	0.35	0.35
Total HAPs			0.09

***Table 3**: Co-pollutant PTE calculations for the emergency diesel generator*

Co-Pollutant	Emission Factor (lb/MMbtu)		Hourly Emission (lb/hr)	Annual Emission (ton/yr)
	(lb/MMbtu)	(g/kWh)		
Criteria Pollutants				
NOx		5.42	13.3	3.33
CO		0.80	1.97	0.49
VOC		0.23	0.57	0.14
SO_2	1.53E-03		2.36E-02	5.90E-03
PM2.5 / PM10		0.80	1.97	0.49
Total HAPs				5.34E-03

***Table 4**: Co-pollutant PTE calculations for the firewater pump engines*

Co-Pollutant	Emission Factor (lb/MMbtu)	Hourly Emission (lb/hr)	Annual Emission (ton/yr)
Criteria Pollutants			
NOx	0.0364	0.46	2.00
CO	0.073	0.92	4.02
VOC	0.005	0.06	0.28
SO_2	5.88E-4	7.39E-3	0.03
PM2.5 / PM10	7.45E-3	0.09	0.41
Total HAPs			1.94E-03

***Table 5**: Co-pollutant PTE calculations for the two fuel gas heaters*

Co-Pollutant	Emission Factor (lb/MMbtu)	Hourly Emission (lb/hr)	Annual Emission (ton/yr)
Criteria Pollutants			
NOx	0.0364	0.46	2.00
CO	0.073	0.92	4.02
VOC	0.005	0.06	0.28
SO_2	5.88E-4	7.39E-3	0.03
PM2.5 / PM10	7.45E-3	0.09	0.41
Total HAPs			2.17E-01

***Table 6**: Total Annual PTE (pounds / year)*

Co-Pollutant	Potential to Emit (lb/yr)					
	EU 1 & 2	EU 3	EU 4	EU 5	EU 6	Total
Criteria Pollutants						
NOx	341,758	4,578	6,662	683	4,008	357,689
CO	230,148	7,692	983	440	8,032	247,295
VOC	56,125	504	283	38.2	550	57,499
SO_2	84,104	54.9	11.8	1.54	64.7	84,237
PM2.5 / PM10	273,114	696	983	36.6	820	275,649
Total HAPs	22,767	173	10.7	3.87	435	23,389

Co-pollutant impacts on EJ communities were also evaluated in the Draft Environmental Impact Statement (DEIS) at § 7.5 (**Appendix 8**), Final Environmental Impact Statement (FEIS) at § 4.1.16 **(Appendix 9**), and the SEQRA Findings Statement (**Appendix 10**).

The EJ analysis considered disproportionate adverse human health and environmental impacts on minority and low-income populations using methodologies based upon the NYSDEC EJ Policy (CP-29, Environmental Justice and Permitting, Mar. 19, 2003) and federal guidance documents prepared by the United States Environmental Protection Agency (USEPA) for use in preparing a National Environmental Policy Act environmental justice analysis.

The DEIS also includes a substantive EJ analysis evaluating relevant data showing the maximum predicted impacts of CO, SO_2, PM_{10}, and NO_2 (DEIS § 7.5.4.1) for comparison with significant impact levels (SILs), as well as the sum of maximum Project impacts with conservative background air quality levels so that total predicted concentrations can be compared to the corresponding National Ambient Air Quality Standards (NAAQS) as set forth in DEIS Table 7-16 (Appendix 8).

Table 7*: DEIS Maximum Modeled Concentrations*

Pollutant	**Averaging Period**	**SIL ($\mu g/m^3$)**	**NAAQS ($\mu g/m3$)**	**Background Concentration b/ ($\mu g/m^3$)**	**Maximum Ground-Level Project Impact ($\mu g/m^3$)**	**Total Ground-Level Concentration c/ ($\mu g/m^3$)**
CO	1-Hour	2,000	40,000	3,898	563	4,456
	8-Hour	500	10,000	3,206	182	3,382
SO_2	3-Hour	25	1,300	55.0	3.3	58
	24-Hour	5	365	28.8	0.6	29
	Annual	1	80	5.2	0.04	5.2
PM_{10}	24-Hour	5	150	78	9.9	88
	Annual	1	50	35	0.2	35
NO_2	Annual	1	100	41.4	0.8	42

Notes:

a/ Maximum modeled ground-level concentration due to the worst case overall facility operating scenario (i.e., the facility operating scenario that resulted in the maximum modeled air quality impact) for each pollutant.

b/ Background concentrations are the highest second highest short term (1-, 3-, 8-, and 24-hour) and maximum annual concentrations.

c/ Total concentration = background concentration + maximum modeled (i.e., ground-level) concentration.

Source: TRC Environmental Corp.

As concluded in the EJ analysis, (1) the Facility "is not considered to have any adverse air quality impacts"; the study area "will not receive a disproportionate share of the maximum short-term Project Impacts"; and that "the maximum predicted annual impacts are always below the corresponding SIL, so there will be no adverse impact from the Project. (DEIS § 7.5.4.1) (Appendix 8).

The EJ analysis also considered and found no adverse / disproportionate impacts throughout the EJ area regarding traffic and transportation impacts, noise impacts; visual impacts, and impacts on water resources.

In the SEQRA Findings Statement, the Town of Wawayanda Planning Board, serving as the SEQRA Lead Agency, concluded that "[b]ased on the EIS Documents, the Planning Board's findings are that positive socioeconomic impacts will result from the project with no adverse EJ impacts" (Appendix 9, Findings Statement at 34). The Lead Agency's conclusion was first based on its finding that the Valley Energy Center EJ analysis was conducted "consistent with the principles set forth in Executive Order 12898, entitled 'Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations' and NYSDEC Policy CP-29" (Appendix 9, Findings Statement at 37).

Further, the Lead Agency determined that the EJ analysis demonstrated that (1) the "potential air emission concentrations did not cause violations of the National Ambient Air Quality Standards (NAAQS) within the EJ study area, and therefore are not adverse"; (2) that the use of hazardous materials such as "oil, aqueous ammonia, and other chemicals at the project site would not result in a disproportionate or adverse impact to the identified potential EJ area"; and (3) that noise and visual impacts within the study area "are not considered adverse or disproportionate" (Appendix 9, Findings Statement at 37-38).

As a result, the Lead Agency determined that "[b]ecause of the socioeconomic benefits arising from the project, and the avoidance of impacts to any identified EJ areas, no specific mitigation measures are warranted" (Appendix 9, Findings Statement at 38). The Lead Agency's findings and conclusions are supported by the SEQRA record, which fully addresses any questions regarding potential impacts to EJ areas or DACs.

C. Evaluation of GHG Co-Pollutant Emissions Impacts to DACs

The CJWG identified certain environmental burdens and climate change risk indicators calculated by percentile rank[14] for Census Tract 36071011801 (*see* Section 4 (B), *above*).

Relevant baseline data on existing burdens, including the DAC risk indicators used to designate the disadvantaged community that are related to electricity generation, air quality, and air-related health effects have been identified and include: (1) benzene concentrations; (2) $PM_{2.5}$; (3) truck traffic on highways; (4) traffic volume; (5) wastewater discharge; (6) industrial land use; (7) landfills; (8) oil storage; (9) municipal waste

[14] Meaning percent of populations, households, or tract area exposed to a particular environmental burden or risk factor.

combustors; (10) power generation facilities; and (11) scrap metal processing. The relevant DAC risk indicators for Census Tract 36071011801 is as follows:

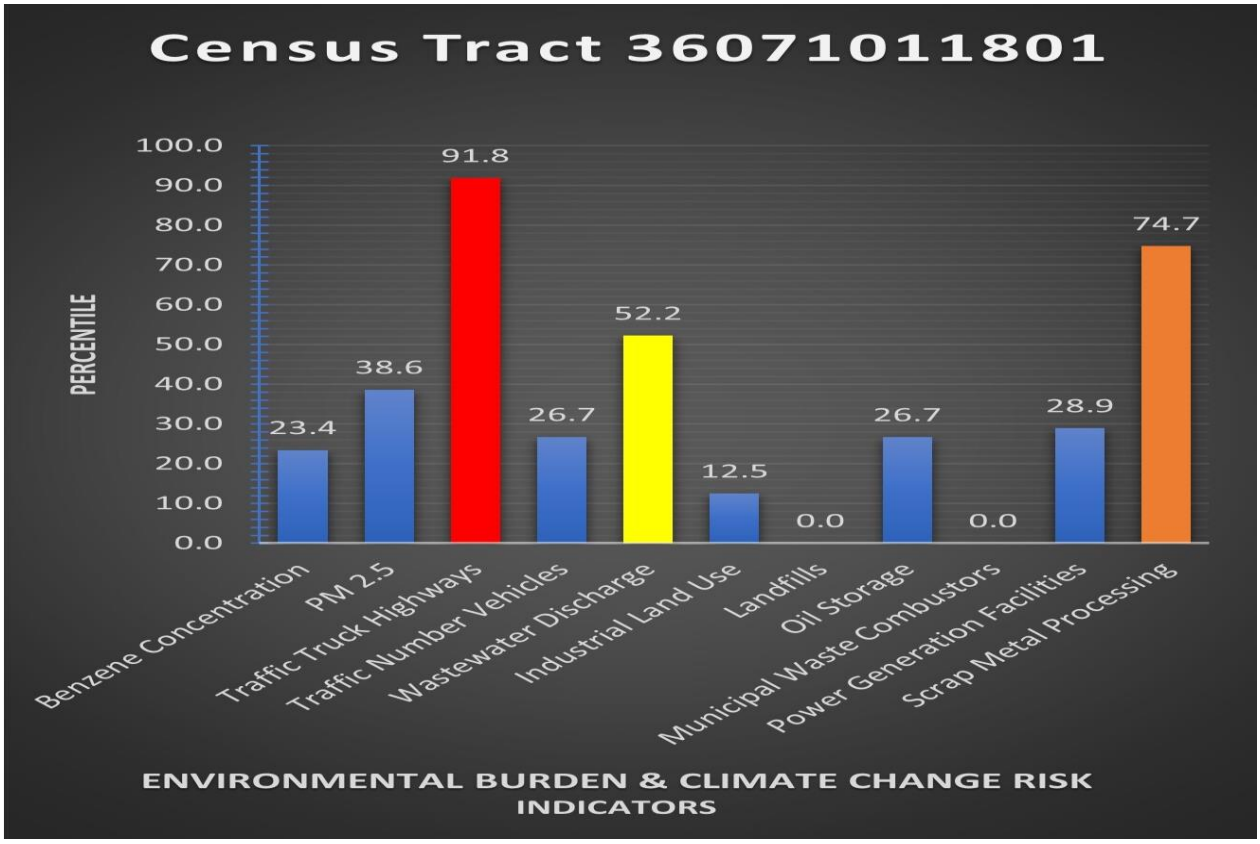

Figure 11: Census Tract 36071011801 Risk Indicators

GHG co-pollutants were calculated and impacts fully analyzed in Valley's EIS, and appropriate mitigation was considered and implemented through the SEQRA Findings Statement. A full air quality analysis is set forth in DEIS § 9.0. In addition, DEIS § 9.6 provides additional air quality analysis regarding fine particulates ($PM_{2.5}$); acid deposition; toxic air pollutants; accidental releases; visible plumes; local source cumulative analysis; impacts at nearby sensitive receptors; and global warming. With respect to fine particulate matter, the air quality analysis concluded that Facility "impacts for PM_{25}, when added to background levels, would be below the associated NAAQS" and that "the Project would not have any significant adverse public health impacts with regard to PM_{25}" (DEIS § 9.6.1).

In addition to the SEQRA record showing no disproportionate impacts to EJ areas (which includes Census Tract 36071011801 and nearby DACs), the 2022 Co-pollutant Report (Appendix 7) makes clear that Valley's continued operation does not disproportionately burden DACs with respect to benzene concentrations and $PM_{2.5}$ and other HAPs. As set forth in Table 6 of the 2022 Co-pollutant Report, total $PM_{2.5}$ and PM_{10} emissions is far below than the calculated potential emission rates relied on in the DEIS (DEIS Table 9-3). Similarly, benzene emissions in the 2022 Co-pollutant Report are

consistent with the values relied on in the DEIS, which were found to "not result in any significant adverse impacts to air quality" (Finding Statement at pg. 41) (Appendix 9).

With respect to impacts on DACs, Census Tract 36071011801 is well below the state median DAC indicator for benzene concentration (23.4%) and $PM_{2.5}$ (38.6%), environmental burdens and risk generally associated with natural gas-powered electric generation facilities. Benzene concentration and $PM_{2.5}$ DAC indicators for Census Tract 36071001500 are 37.2% and 38.4% respectively. Similarly, Census Tract 36071001600 has a DAC indicator of 33.3 % for benzene concentration and 38.4 % for $PM_{2.5.}$

As the CJWG DAC indicators for these environmental burdens were developed after Valley Energy Center went into operation, the indicated values presumedly already include any impacts from the Facility. As such, CJWG own data confirms that Valley's operation is not impacting the identified DACS with respect the indicators for benzene concentration and $PM_{2.5.}$

D. Evaluation of Other Relevant Existing Burdens to DACs

Based on CJWG's data and analysis, Census Tract 36071011801 is above the NY state median for the following other relevant risk indicators: highway truck traffic[15] (91.8%); proximity to wastewater discharge[16] (52.2%); and scrap metal processing[17] (74.7%). The relevant environmental burdens and risk indicators in Census Tract 36071011801 that are above the NY state median for which the Facility has the potential to impact (*e.g.* truck and bus traffic, wastewater discharge, etc.) have been considered in the EIS and SEQRA Findings Statement and are discussed below.

(1) Traffic

A full traffic and transportation analysis is set forth in DEIS § 8.0. The traffic analysis consisted of a detailed review of existing land-use, roadway, and traffic conditions near the Facility site and an analysis of future conditions. The results of the traffic study were summarized in DEIS Table 8-22. The traffic impact analysis concludes that vehicle traffic generated by the Valley Energy Center is negligible in that no Level of Service determined for the No Build condition would change as a result of the traffic generated by the proposed Facility (DEIS § 8.9.2, § 8.12) and that vehicle trips "would not impact traffic flow conditions throughout the environmental justice area" (DEIS § 7.5.4.2). These conclusions were also adopted in the SEQRA Findings Statement (Findings Statement at pgs. 39-41 [discussing traffic impacts]; Findings Statement at 34-38 [discussing impacts to EJ areas]) (Appendix

[15] Census Tract is in the 91.8 percentile for annual average daily count of diesel trucks and buses occurring on the roads within the census tract.

[16] Census Tract is in the 52.2 percentile for population within 500 meters of toxicity-weighted wastewater discharges or stream concentrations.

[17] Census Tract is in the 74.7 percentile for the number of scrap metal processing and vehicle dismantler facilities.

10). As the Valley Energy Center has been in operation since 2018, Valley can confirm that actual and existing traffic volumes are consistent with the DEIS impact analysis.

(2) Wastewater Discharge

Valley Energy Center uses an air cooled condenser for heat dissipation to minimize both water supply and wastewater discharge requirements. The Facility's innovative design incorporates advanced dry cooling, which utilizes air instead of water for cooling and reduces water use by approximately 85%, as compared to an equivalent facility using wet cooled technology. In addition, as part of the effort to minimize the use of water resources, the Facility's process makeup water uses tertiary treated effluent from the City of Middletown Sewage Treatment Plant. After receipt of the greywater from the City of Middletown, additional on-site treatment of the greywater is conducted before use at the Facility. Process wastewater is then discharged back to the City of Middletown Sewage Treatment Plant. Wastewater discharge data is provided to the City of Middletown as required under Valley's Industrial Pretreatment Program Wastewater Discharge Permit with the City of Middletown to ensure compliance with local sewer use regulations. Sanitary wastewater is discharged to the City of Middletown Sewage Treatment Plant via the town sewer system (*see* DEIS § 12.3). Stormwater runoff is discharged to on-site wetlands. The Facility's use of greywater from the City of Middletown Sewage Treatment Plant and discharge back to the plant generates approximately $ 615,000.00 of additional revenues to the City of Middletown.

Accordingly, Valley Energy Center's continued operation does not contribute to the wastewater discharge burden identified in Census Tract 36071011801 and the additional revenues directly benefit the DAC.

(3) Scrap Metal Recycling

Solid waste generated at the Facility is limited to small quantities of office waste and general plant refuse. All solid waste is loaded into on-site dumpsters and removed from the site under a contract with a local private vendor. Newspapers, corrugated cardboard and metals used at the Facility during operation is recycled to the maximum extent practicable. Over the last five years, the Facility has exported approximately 48.64 tons of scrap metal for recycling, which is sent to Marangi Disposal in Middletown, NY. Other wastes typical of power generation activities include oils collected in the oil/water separator, spent lubricating oils, oil filters from the combustion turbines and air filters. These wastes are transported off-site by an outside contractor and properly recycled or disposed (DEIS § 12.1).

[*section 6 follows*]

SECTION 6. CLCPA § 7(3) CONSIDERATIONS- DAC BENEFITS

CLCPA § 7(3) states, in part, that "[i]n considering and issuing permits . . . agencies . . .shall not disproportionately burden disadvantaged communities [and] shall also prioritize reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities. . ." As discussed in Section 5, issuance of the Title V permit would not disproportionately burden any disadvantaged communities. Moreover, continued operation of the Valley Energy Center provides significant benefits to the local host community and surrounding DACs.

A. Existing DAC Benefits

The community benefits and positive economic impacts of Valley cannot be understated. During its three-year construction phase, Valley created approximately 900 jobs and currently provides 23 full time jobs to workers who have been employed since the plant began operations in 2018. Valley also is a significant contributor to the local tax base and is projected to contribute in excess of $41 million over its first 20 years of operation.

In addition, pursuant to a March 22, 2013 Host Community Agreement (HCA) by and between Valley and the Town of Wawayanda Local Development Corporation (subsequently assigned to the Town of Wawayanda), Valley has committed to contributing $11 million in HCA payments as additional compensation to the community for impacts from the Project over the approximate twenty two-year term of the agreement. HCA payments are made directly to the Town and intended to benefit the host community, including the DAC where the facility is located. Valley has already paid $3,721,596.00 in HCA payments as follows:

- $927,300.00 paid during the construction period;
- $361,989.00 paid during Operation Year 1 (August 2019 - July 2020);
- $370,187.00 paid during Operation Year 2 (August 2020 - July 2021);
- $378,631.00 paid during Operation Year 3 (August 2021 - July 2022);
- $387,328.00 paid during Operation Year 4 (August 2022 - July 2023);
- $396,286.00 paid during Operation Year 5 (August 2023 - July 2024); and
- $449,875.00 paid during Operation Year 6 (August 2024 - July 2025).

To date, $7,728,404.00 remains to be paid. Valley will continue to make annual HCA payments for each operational year until 2039 totaling $11,000,000.00.

The positive economic impacts, and specifically the host community agreement payments directly benefit Census Tract 36071011801 and nearby DACs.

B. Additional Mitigation - Grant Program

Should NYSDEC determine that continued operation under a new Title V permit would disproportionately burden disadvantaged communities and that additional mitigation is required, Valley proposes to establish a disadvantaged community benefits grant program ("DAC Grant Program Fund") for programs and/or projects that prioritize reductions

of GHG / co-pollutants emissions and provide direct benefits within the DACs identified in Section 4 of this report ("Identified Communities").

Valley's proposed total DAC Grant Program fund commitment would be $1,000,000.00 to be used over a 5 year period with each of the identified Communities with the Town of Wawayanda (Census Tract 36071011801), the City of Middletown (Census Tracts 36071001500 and 36071001600) receiving a proportional share based on the DAC census tract population as follows: 27% to Census Tract 36071011801 (population 4,162) located in Town of Wawayanda, 28% to Census Tract 36071001500 (population 4,537) located in the City of Middletown, and 45% to Census Tract 36071001600 (population 7,377) located in the City of Middletown.

Valley's DAC Grant Program Fund would be available to local and county governments serving the Identified Communities, tax-exempt, not-for-profit environmental organizations and land trusts, and private tax-exempt organizations under IRS Section 501(c)(3). The DAC Grant Program funds are intended to support programs and/or projects that demonstrate quantifiable reductions in GHG and its co-pollutants or that reduce or eliminate environmental burdens within the Identified Communities. For examples, DAC Grant Program funds would be available to the Town of Wawayanda and the City of Middletown to provide financial assistance focused on the electrification of public transportation and buildings, publicly available electric vehicle charging stations, local decarbonization efforts, green spaces, or other similar programs that would benefit the surrounding DACs. Funding will not, however, be available to individuals, religious or political organizations, paid solicitors, or for program advertising.

A portion of the DAC Grant Program fund, up to 25% would be allocated to New York State Clean Heat Program through the local electric distribution company Orange & Rockland ("O&R"). The New York State Clean Heat Program helps utility customers cover the cost of replacing gas, oil, or electric baseboard heating with heat pumps, the most efficient heating and cooling technology available. Valley would match the current heat pump rebate programs offered by O&R to property owners within the identified Communities. Valley will request that the local electric distribution company programs utilize heat pumps that are consistent with the then best current technology intended to reduce GHG emissions. Valley will coordinate with O&R to assess the requirements for implementation of this program following the issuance of a notice of complete application.

Regarding implementation of the DAC Grant Program Fund, Valley would establish an internal committee to receive, review and process applications for funding under the grant program. Valley's DAC benefit committee would be responsible for ensuring that funding under the program would help to reduce or eliminate environmental burdens within the Proximate DACs and ensure applicants meet the aforementioned criteria. Grant programs and/or funded projects would be required to demonstrate that they would help to reduce or eliminate environmental burdens within the Identified Communities. Once Valley's application is complete, Valley is committed to continued coordinating with its local municipal partners, interested stakeholders, and Department Staff to further refine specific programs. Valley will also provide compliance reporting to the NYSDEC for its review of

the grant program operations. Additional guidelines and eligibility criteria regarding Valley's proposed DAC Grant Fund Program is set forth in **Appendix 11**.

Should it be required as a condition of approval, Valley would fully fund the proposed DAC Grant Program programs immediately following issuance of the Title V Application. The funding for the programs would be made available until the funds are exhausted or until the 5 year period expires.

[*section 7 follows*]

SECTION 7: ENHANCED PUBLIC PARTICIPATION

Valley prepared a Public Participation Plan (PPP) to fulfill and comply with the requirements of NYSDEC's Commissioner Policy 29, Environmental Justice and Permitting (CP-29) for the Valley Energy Center (https://cpv.com/wp-content/uploads/2023/07/1.-CPV-Valley-Public-Participation-Plan-w-appxs.pdf). This PPP was developed in accordance with the procedures established in CP-29 Section V.D to and reviewed by NYSDEC to ensure meaningful and effective public participation throughout the NYSDEC environmental permit review process.

Valley held two virtual public information meetings on August 1, 2023 to keep the public informed about the proposed action and the environmental permit review process. The meetings were facilitated by Valley representatives during which they presented a brief overview of the project, including background information, details on the permitting action, scope of work, schedule, and community impacts. The meetings also included a question-and answer-portion where the floor will be open for attendees to ask questions, make remarks, and/or express concerns. A total of 8 speakers provided comments in the morning session and 7 speakers during the evening session. Topics and issues raised to date included:

- How environmental justice communities were identified;
- How the study area was defined;
- Public notice protocols;
- Timeline of CLCPA mitigation implementation;
- Efficiency of the facility;
- Need for additional generation capacity;
- Co-pollutant analysis and dispersion modelling;
- Impact of NYISO studies on Valley's continued operations;
- Emissions monitoring and reporting;
- Localized public health impacts;
- Impacts and data for use of grey water

Valley documented a record of comments and questions raised in the meeting and respective answers were provided during each session and in a post-meeting written response to comments.

A digest of all oral and written comments, along with Valley's responses were prepared and made publicly available (https://cpv.com/wp-content/uploads/2023/12/Valley-Response-to-Public-Hearing-Comments.pdf). Other relevant application documents are also publicly available for the community and interested stakeholders on Valley's online document repository accessible at https://cpv.com/our-projects/cpv-valley-energy-center/archive-documents/.

With respect to public participation during future public comment periods or public hearings, Valley will continue to engage with the community on the proposed mitigation detailed in this report. Valley will utilize a range of engagement strategies and outreach

activities to facilitate participation, involvement, and direct communication with the affected community during the permit application review process as detailed in the PPP.

Valley has prepared a stakeholder identification and contact list of individuals and organizations with a direct stake in the Application or who have expressed interest in the Valley Energy Center. The stakeholder list was developed in consultation with NYSDEC and includes stakeholders from the following categories: local government and elected officials; business owners, residents, and occupants; local civic, community, environmental and religious organizations; local news media; administrator/operator of any school or day care that live, work and/or represent a neighborhood or community within a 1-mile radius of the Valley Energy Center. Valley will periodically review and update the stakeholder list as appropriate throughout the permit application review process.

Once NYSDEC determines the application(s) for the proposed Action is complete and issues the Notice of Complete Application (NOCA), Valley will distribute the NOCA and draft permit, if applicable, to the meeting attendees and identified interested parties in the stakeholder list by mail or email. The notice will provide information regarding the start of the NYSDEC public comment period and to announce the deadline for submission of written comments to NYSDEC. Valley will also post notice on its publicly available project website and publish in the Times Herald-Record, which is a weekly newspaper printed and circulated in the City of Middletown and Town of Wawayanda. These outreach efforts will be in addition to any notice and publication requirements required by law.

[*section 8 follows*]

SECTION 8: CONCLUSIONS

The Valley Energy Center has demonstrated a consistent commitment to complying with the requirements of the CLCPA and other regulatory frameworks. Throughout this evaluation, several key findings underscore the Facility's adherence to environmental standards and its proactive approach to mitigating potential impacts on DACs.

1. **Regulatory Compliance and Environmental Impact**: The facility has been designed with state-of-the-art emissions control technologies, which exceed regulatory requirements and contribute to its status as one of New York's most efficient natural gas energy facilities. The Valley Energy Center's operational practices have ensured that it does not disproportionately burden DACs with GHG emissions or co-pollutants. The comprehensive environmental reviews have consistently shown that the Facility's emissions are well within regulatory standards and will not interfere with the CLCPA's GHG emissions limits and reduction requirements.

2. **Public Participation and Transparency**: Valley Energy Center has actively engaged with the community through its Enhanced Public Participation Plan. Multiple public meetings and ongoing communications have ensured that stakeholders are informed and have opportunities to voice concerns. This transparency aligns with NYSDEC's Commissioner Policy 29 requirements, fostering transparency and cooperation between the Facility and the community.

3. **Socioeconomic Benefits**: The continued operation of the Valley Energy Center provides significant socioeconomic benefits to the local community, including employment opportunities, significant tax benefits, and economic contributions. The Facility's innovative use of greywater from the City of Middletown Sewage Treatment Plant for cooling purposes further exemplifies its commitment to sustainable practices and community benefits. Valley is a significant contributor to the local tax base and is projected to pay over $41 million over its first 20 years of operation. Valley has also committed to contributing an additional $11 million in host community agreement payments.

4. **Additional Future Mitigation and DAC Benefits**: Should NYSDEC determine that continued operation under a new Title V permit would disproportionately burden nearby DACS, Valley proposes to establish a DAC Grant Program Fund with a commitment of $1,000,000.00 for programs and/or projects that would benefit the identified disadvantaged communities located in the Town of Wawayanda and the City of Middletown.

In conclusion, the Valley Energy Center stands as a model for balancing the critical need for reliable energy production with the equally important imperative of environmental stewardship and social responsibility. The findings of this DAC Evaluation affirm that the facility's operations align with the principles of the CLCPA, ensuring that disadvantaged communities are protected, and that the state's environmental and public health goals are advanced.

APPENDIX 1-15

Due to file size limitations, Appendices are accessible at:

https://harrisbeach.sharefile.com/d-s09381937c3ba46f69294024878f5e1ad