#### Witness: Andrew J. Bazinet

## **Question CSC-1**:

Summarize which work, if any, such as clearing, that has been performed at the site since the approval of the Development and Management Plan.

## **Response:**

Since the approval of the Development and Management Plan, a minimal amount of work has been performed. In 2010, prior to CPV's involvement in the project, there was an attempt to fill the wetlands located on the original 20-acre parcel. No other activities are known to have occurred on the original 20-acre parcel.

Although not covered by the original Certificate issued by the Council in 1999, or the Development and Management Plan approved in 2001, Lot 9A has since been incorporated as a part of the site. This property was reportedly used as laydown during construction of Spectra's compressor station project, located adjacent to the Facility Site. This required bringing temporary construction power to Lot 9A and minimal site preparation work. Infrastructure, such as drainage features, was also constructed at this time to accommodate the improvement of nearby roadways.

Interrogatories CSC-1 Dated: 12/12/2014 Q-CSC-2 Page 1 of 1

## Witness: Andrew J. Bazinet

## **Question CSC-2:**

Would the CPV Towantic, LLC (CPV) facility be a baseload, intermediate, or peaking unit? Could the facility provide spinning reserves?

## **Response:**

CPV anticipates initially operating as a baseload facility with an annual capacity factor of approximately 75-85%. Upon achieving commercial operation, CPV Towantic will be one of the most efficient natural gas-fired combined-cycle facilities in New England and, as a result, will be dispatched more frequently than older, less efficient facilities. Traditionally, combined-cycle facilities tend to operate as baseload facilities early in their useful life (i.e. when they are most efficient relative to their peers) and as intermediate facilities later in their useful life.

CPV Towantic is capable of providing spinning reserves but, based on the current market conditions, it is not economical to do so.

Interrogatories CSC-1 Dated: 12/12/2014 Q-CSC-3 Page 1 of 1

# Witness: Andrew J. Bazinet

# **Question CSC-3**:

Would the generating facility have black start capability?

# **Response:**

No. The current facility design does not include black start capability.

# Witness: Andrew J. Bazinet

# **Question CSC-4**:

How was a 6.5 percent improvement in efficiency calculated on page 6 of the "Environmental Overview in Support of Petition for Changed Conditions" (EOSPCC) dated October 2014?

## **Response:**

The 6.5% improvement in efficiency calculated on page 6 of the EOSPCC is a typographical error. The value should be 5.4% and is calculated as (6770 - 6,402)/6,770 = 5.44%.

# Witness: Andrew J. Bazinet

# **Question CSC-5**:

Provide the estimated start-up time for the steam turbines.

## **Response:**

Below are the estimated start-up times for the D602 GE steam turbine:

Hot start (startup at 8 hours after shutdown or less) – 35 minutes Warm start (startup at 48 hours after shutdown) – 92 minutes Cold start (startup at 72 hours after shutdown or more) - 138 minutes

## Witness: Andrew J. Bazinet

## **Question CSC-6:**

When would duct firing be operated, e.g. under peak load conditions?

## **Response:**

CPV Towantic will bid its incremental duct firing capacity into the ISO New England (ISO-NE) energy market based on its associated incremental heat rate on a daily basis.

CPV Towantic's duct firing capacity will be dispatched by ISO-NE when market conditions dictate that additional capacity is required. At the aforementioned incremental heat rate, CPV Towantic's duct firing capacity is the most efficient form of peaking/intermediate capacity available.

# Witness: Andrew J. Bazinet

# **Question CSC-7:**

How long would it take to switch the GE Frame 7HA.01 turbines from ultra-low sulfur distillate fuel (ULSD) operation back to natural gas-fueled operation?

# **Response:**

The 7HA.01 gas turbine can transfer from full load operation on ULSD to full load operation on natural gas in about 26 minutes.

## Witness: Andrew J. Bazinet

## **Question CSC-8**:

How much run time would the ULSD fuel storage provide assuming that the plant was running continuously on ULSD? Besides fuel consumption, given the additional water consumption noted on page 26 of the EOSPCC, would on-site water storage be a limiting factor for run time on ULSD?

## **Response:**

The plant is expected to be able to operate at its maximum output (713 megawatts at 0 degrees F) for 52 continuous hours using ULSD. On-site water storage and the maximum daily water quantities provided by Heritage Village Water Company (HVWC) will be the limiting factors. HVWC has indicated that if additional water supply is available (which is more likely in the winter months than summer months), it would be willing to sell the additional water to CPV Towantic, enabling additional continuous hours of ULSD firing.

If water supply is not the limiting factor, the on-site ULSD storage would allow 68 hours of operation at maximum output prior to the need to refill the ULSD tanks.

Interrogatories CSC-1 Dated: 12/12/2014 Q-CSC-9 Page 1 of 1

Witness: Andrew J. Bazinet

# **Question CSC-9**:

Provide cost estimates for the project.

# **Response:**

The cost estimate for the project is approximately \$1.0 billion.

Interrogatories CSC-1 Dated: 12/12/2014 Q-CSC-10 Page 1 of 1

## Witness: Lynn Gresock

## **Question CSC-10:**

Provide the most current status of the FAA review.

## **Response:**

Detailed information regarding facility structure heights (utilizing the most precise 1A level survey accuracy), including the relocated 150-foot stacks, was submitted to the FAA for review in August and September 2014.<sup>1</sup> On November 17, 2014, the FAA issued Notices of Presumed Hazard that, as expected, indicated the Visual Flight Rule (VFR) Horizontal Surface<sup>2</sup> will be penetrated by taller facility elements, the tallest of them being the facility stacks (proposed at 980 feet AMSL). No material changes in rule or airport surface areas have occurred since a Determination of No Hazard was issued for the project (including 150-foot stacks) in March 2009 following a similar Presumed Hazard notice and additional review through a circularization process. CPV Towantic, LLC anticipates requesting the FAA to circularize review of the project by January 16, 2015 in order to allow for additional review towards an ultimate Determination of No Hazard.

<sup>&</sup>lt;sup>1</sup> August 26, 2014 for the stacks; September 9, 2014 for the majority of other taller structures; and September 12, 2014 for the air cooled condenser

<sup>&</sup>lt;sup>2</sup> The VFR Horizontal Surface extends 5,000 feet from the airport at a height of 876 feet AMSL

Interrogatories CSC-1 Dated: 12/12/2014 Q-CSC-11 Page 1 of 1

#### Witness: Dean E. Gustafson

#### **Question CSC-11:**

Provide the most current status of the United States Army Corps of Engineers wetland review process.

#### **Response:**

The U.S. Army Corps of Engineers ("ACOE") has completed its review of the Connecticut General Permit Category 2 application and does not have any comments. The ACOE has verbally approved the project under the Connecticut In Lieu Fee Program to mitigate for the project's unavoidable impact to wetlands. The Connecticut Department of Energy and Environmental Protection ("DEEP") has completed its review of the Category 2 application and has issued three minor comments relating to the stormwater management system. The project team is currently analyzing stormwater data and will be responding shortly to DEEP.

## Witness: Dean E. Gustafson

#### **Question CSC-12:**

Has CPV received a response from the Mohegan Tribal Historic Preservation Office? Provide the current status of such consultations.

## **Response:**

The Mohegan Tribe responded on December 22, 2014 (see attached) that "it is the opinion of the Mohegan Tribal Historic Preservation Office that 'No Properties' of historic, cultural, or religious significance to the Tribe will be affected by this project as it is proposed."

From: James Quinn [mailto:jquinn@moheganmail.com]
Sent: Monday, December 22, 2014 3:08 PM
To: Nicole Castro
Cc: Susan Kobyluck; Elaine Thomas
Subject: CPV Towantic Energy Center Project Review

Dear Ms. Castro,

I do apologize for the mix up on our end. I have reviewed the information you sent regarding the above referenced project and it is the opinion of the Mohegan Tribal Historic Preservation Office that "No Properties" of historic, cultural, or religious significance to the Tribe will be affected by this project as it is proposed. If you have any questions please feel free to contact me.

Best regards, James

James Quinn The Mohegan Tribe Mohegan Tribal Historic Preservation Officer & Archaeology Department Manager 13 Crow Hill Rd. Uncasville, CT Office: 860-862-6893 Cell: 860-367-1573

## Witness: Lynn Gresock

#### **Question CSC-13:**

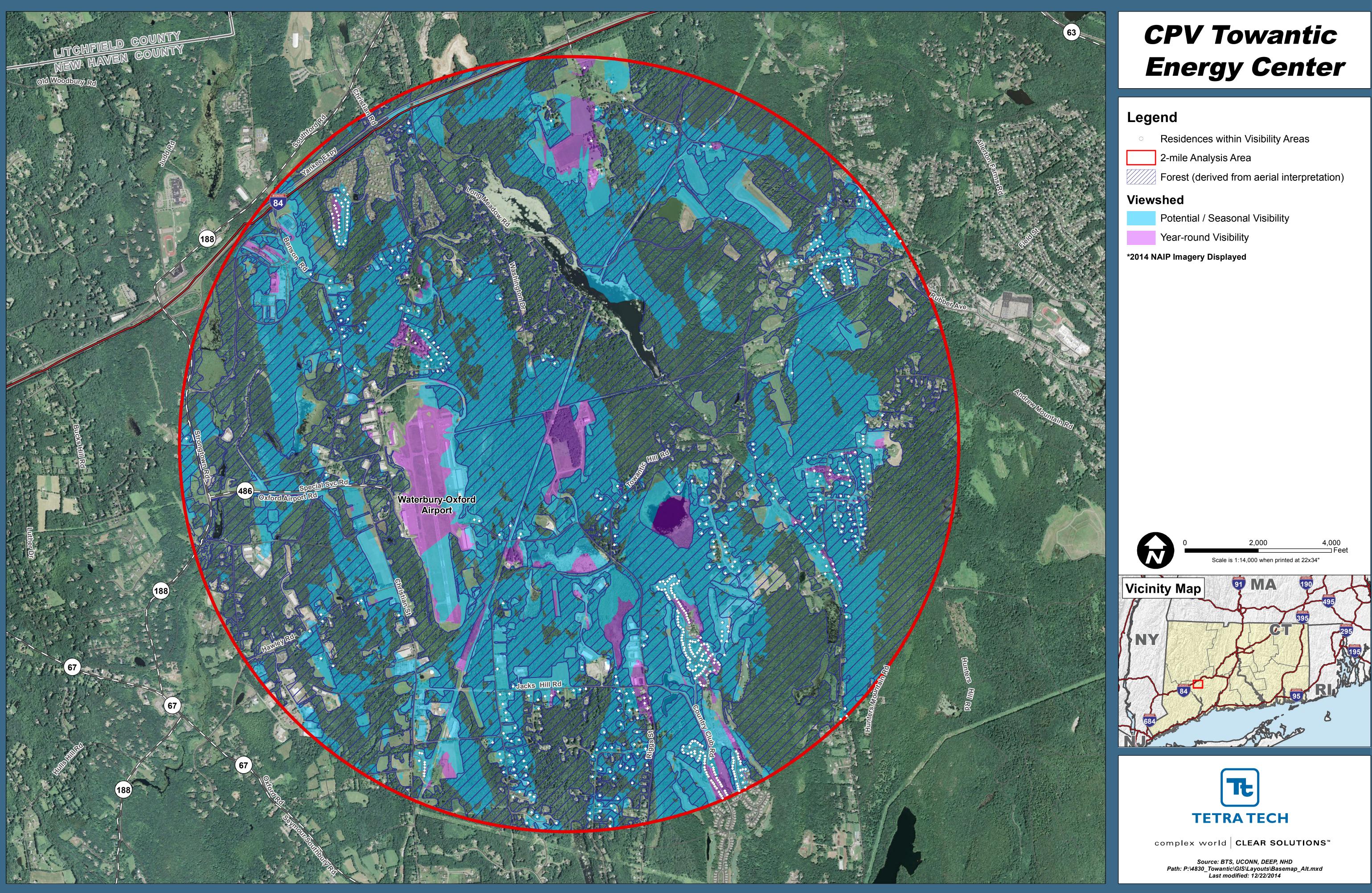
Provide a viewshed map depicting the year-round and seasonal visibility areas for the stacks within a two-mile radius. Approximately how many homes within a two-mile radius would have seasonal and year-round views of the stacks?

## **Response:**

The attached figure depicts potential project visibility within a two-mile radius around the two project stacks, proposed at a height of 980 feet AMSL. Visibility of the project will be constrained by both terrain and intervening vegetation. Areas on the figure that are shaded purple or blue indicate areas that will have year-round or seasonal visibility, respectively. Areas on the figure that are not shaded either purple or blue will have no view of the project due to intervening terrain (even without consideration of additional screening by vegetation).

Given the dense vegetation that occurs throughout the area, only the limited areas shaded in purple have been identified with the potential for year-round visibility based on visibility modeling (assuming a conservative average tree height of 50 feet). Only 90 residences are located within the year-round visibility areas; the project site itself, airport property, and open water comprise a large portion of this area.

The blue shading indicates locations from which seasonal visibility could conservatively be possible, based on a bare-earth model that only takes credit for intervening terrain. A total of 538 residences are located within this area, with some scattered residences and the majority clustered within distinct neighborhoods. Dark blue cross-hatching has been added to the figure to depict areas of dense forest that occur throughout the 2-mile radius. As a practical matter, it can be seen that the vast majority of residences occurring within the area of potential seasonal visibility would have line-of-sight obstructed by surrounding vegetation during most, if not all of the year, as the density of the forest would block most views even during leaf-off conditions.



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## Witness: Andrew J. Bazinet

## **Question CSC-14:**

Provide the latest approved Heritage Water Company Supply Plan. When is the next scheduled review for this plan?

# **Response:**

Heritage Village Water Company's (HVWC) 2009 Water Supply Plan, its most recent plan filed with state agencies, is attached as a bulk exhibit. HWC's 2009 Plan was reviewed by the Connecticut Public Utilities Regulatory Authority (PURA) in its November 26, 2009 Decision in Docket No. 09-10-14. Also, CPV Towantic understands that the Department of Public Health (DPH) has reviewed and provided comments on HVWC's 2009 plan, but has not approved it. DPH will require HVWC to file a new Water Supply Plan by December 31, 2015.

Witness: Curtis C. Jones

# **Question CSC-15:**

Provide an aerial image of the location for E-Commerce Drive.

# **Response:**

An aerial image of the location of E-Commerce Drive is attached.

